



January 8, 2024

Ms. Jennifer Stiles
Orange County Environmental Protection Division
3165 McCrory Place, Suite 200
Orlando, FL 32803

**Re: Supplemental Site Assessment Report
Former Cumberland Farms Store #0963
3400 Edgewater Drive
Orlando, Florida 32804
FDEP Facility ID No.: 48/8512797
FDEP MFMP PO#C1DC28 (Task 3)
Discharge Date: September 19, 1990
Site Priority Ranking Score: 10**

Dear Ms. Stiles,

Handex Consulting & Remediation – Southeast, LLC (HCR) is pleased to provide you with this Supplemental Site Assessment Report documenting the site assessment activities completed at the Former Cumberland Farms #0963 facility located at 3400 Edgewater Drive in Orlando, Florida. The work is authorized under the Florida Department of Environmental Protection (FDEP) My Florida Market Place (MFMP) Purchase Order Number (PO#) C1DC28. A site plan of the facility is depicted on **Figure 1**.

1.0 SITE HISTORY

The former Cumberland Farms, Inc. (CFI) Store #0963 site is located at 3400 Edgewater Dr. in Orlando, Florida. The facility is currently owned by Mr. Roy Zimmer and Mrs. Cynthia Zimmer and operates under a lease agreement as a retail restaurant (Ollie's Public House) facility.

The CFI Store #0963 facility site has a current priority score of 10, per the most recent FDEP scoring review dated September 25, 2012. Historic information obtained from the FDEP-OCULUS database indicates the CFI Store #0963 facility, originally a convenience store/retail gasoline station, had three 8,000-gallon Underground Storage Tanks (UST's) for unleaded gasoline installed in 1976. The facility ceased operations as a retail gasoline station circa 1986.

An Inspection Report Form (IRF) from the Florida Department of Environmental Regulation (FDER) dated September 19, 1990 determined the facility had been closed since March 1988. The IRF indicates UST's were designated out of service, a total of four existing wells were sampled and "showed a positive odor of gas" and no Discharge Notification Form (DNF) existed on file for this facility. As a result of the 9/19/1990 inspection a DNF dated 9/21/1990 was submitted to the FDER.

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Subsequent Notice of Violations were issued by the Orange County Environmental Protection Department (OCEPD) in October 18, 1991 and April 1, 1991, respectively, indicating the UST's had been out of service since March 1988 and for not being properly abandoned per the requirements of Chapter 17-761.800 of the Florida Administrative Code (F.A.C.). A Closure Assessment Report Form (CARF) dated August 1, 1991 was submitted to the OCEPD on September 12, 1991 indicating the removal of three 8,000-gallon UST's from the CFI Store #0963.

The UST's were removed on May 30 through 31, 1991. The CARF indicates soils from the excavation were screened for Organic Vapor Analysis (OVA's) and yielded results greater than 500 parts per million (ppm), the report also indicates groundwater samples were collected with analytical results greater than the allowable state target levels at the time. In a letter dated September 23, 1991 the OCEPD approved the CARF and requested a Contamination Assessment Report (CAR) to be initiated to further define the nature and extent of the contamination as a result of the UST removal from the subject facility.

In a letter dated January 31, 1992 the FDER informed CFI the CFI Store #0963 had been found to be eligible for state cleanup assistance referenced to the September 19, 1990 discharge. In February 10, 1992, CFI applied for state cleanup assistance under the Petroleum Liability Insurance Restoration Program (PLIRP).

On June 11, 1992 the OCEPD received the CAR requested back in September 23, 1991. The CAR was prepared by Leggette, Brashears & Graham, Inc. (LBGI) on behalf of CFI for CFI Store #0963. Among other aspects listed in the "Summary of Results and Conclusions" section, the CAR indicates: No free product observed during soil boring advancement and monitoring well installation; soil and groundwater analysis indicate contamination appears to be concentrated near the former dispenser area; no horizontal migration of contaminants appear to have occurred since no impact was detected in down-gradient monitoring wells MW-4 and MW-5; no vertical migration of contaminants appear to have occurred since no impact was detected in deep monitoring well MW-7D. The OCEPD requested additional information to complete the CAR and after three CAR Addenda were submitted in February, May and September of the year 1993, the CAR was finally approved in a letter dated September 16, 1993. As part of this letter, a Remedial Action Plan (RAP) was also requested to be prepared and submitted to the OCEPD.

A RAP dated January 6, 1994 and prepared by LBGI was submitted to the OCEPD in January 14, 1994. After two RAP Addenda, submitted in March and August of the year 1994, the Florida Department of Environmental Protection (FDEP) issued an approval letter dated September 8, 1994.

On January 25, 1995 CFI contracted with Evans Environmental & Geological Science and Management, Inc. (EE&G), to implement the approved RAP as a direct reimbursement project. Since groundwater quality data was determined to be in excess of six months old, groundwater samples were collected on February 6, 1995 from specified monitoring wells and analyzed for by EPA Method 602. Based on the results from this sampling event, there was an indication the contamination plume might have migrated to the south and southeast past the down-gradient monitoring wells, resulting the plume no longer being defined in the down-gradient direction, as indicated in a letter from EE&G dated August 21, 1995.

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In March 1995, the Florida Senate passed Senate Bill 1290, whereby all remediation work at reimbursement sites assigned priority ranking scores of less than 25 was to be suspended on/or by March 26, 1995. At that time the CFI Store #0963 score was listed as eight (8).

Site assessment activities were resumed in 2018 under the FDEP Low Score Site Initiative program. HCR submitted a LSSI Site Assessment Report (SAR) to the FDEP on January 17, 2019 detailing the results of groundwater samples collected in April and October of 2018, the installation of monitoring wells, and the advancement of soil borings and collection of soil samples for laboratory analysis. The following bulleted items summarize the results of the site assessment detailed in the January 17, 2019 LSSI SAR:

- HCR mobilized to the facility on April 26, 2018 to collect groundwater samples from seven designated monitoring wells (MW-1 through MW-6, MW-7D) for laboratory analysis by EPA Method 8260 (benzene, toluene, ethylbenzene, total xylenes [BTEX] and methyl tert-butyl ether [MTBE]), EPA Method 8270 (polycyclic aromatic hydrocarbons [PAHs]), and Florida Petroleum Range Organics (FL-PRO) method for total recoverable petroleum hydrocarbons (TRPH). The laboratory analysis from the groundwater samples collected indicated several constituents concentrations that were detected above their respective Chapter 62-777 Florida Administrative Code (FAC) Table V Natural Attenuation Default Source Concentrations (NADSCs) and several constituent concentrations that were detected below their respective NADSCs but were detected above their respective Chapter 62-777 FAC Table I Groundwater Cleanup Target Levels (GCTLs).
- HCR was on-site from October 22 through October 25, 2018 to oversee the advancement of 28 soil borings (SB-18 through SB-41, SB-43, SB-W, SB-X, SB-Y, and SB-Z to an approximate terminal depth ranging from six to 10 feet below land surface (ft bls).
- Based on the OVA results from the soils collected and with agreement from the FDEP Case Manager, HCR collected soil samples from four locations (SB-X at 3 ft bls, SB-18 at 3 ft bls, SB-20 at 2 ft bls, and SB-30 at 3 ft bls) for laboratory analysis by EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TRPH). Additional aliquots for contingent Synthetic Precipitation Leaching Procedure (SPLP) for leachate analysis by EPA Method 8260 (BTEX/MTBE) and EPA Method 8270 (PAHs) were collected.
- The laboratory analytical results from the soil samples collected indicated several constituent concentrations detected above their respective Chapter 62-777 FAC Table II Soil Cleanup Target Levels (SCTLs).
- In addition to the soil boring advancement and soil samples completed from October 22 through 25, 2018, HCR oversaw the installation of four shallow monitoring wells (MW-8, MW-9, MW-10, and MW-11) and one deep monitoring well (DW-1).
 - The Deep monitoring well (DW-1) includes a 4-inch Schedule 40 polyvinyl chloride (SCH 40 PVC) outer casing set to a terminal depth of 22 ft bls. The monitoring well is constructed with 5-feet of 1-inch diameter 0.010-inch slotted SCH 40 PVC well screen threaded to 25 feet of 1-inch diameter SCH 40 PVC riser.
 - The four shallow monitoring wells (MW-8 through MW-11) are set to a terminal depth of 12 ft bls and constructed with 10 feet of 2-inch diameter 0.010-inch slotted SCH 40 PVC well screen threaded to 2-feet of 2-inch diameter SCH 40 PVC riser.
- Based on the soil samples collected during the soil boring installation, the lithology at the facility is poorly graded sands and silts from land surface to the terminal depth of each boring/monitoring well.

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- HCR was on-site on October 29 through 30, 2018 to collect groundwater samples from eight monitoring wells (MW-4, MW-5, MW-6, MW-8 through MW-11, and DW-1) for laboratory analysis. The laboratory analytical results from the groundwater samples collected on October 29 through 30, 2018 indicated several constituent concentrations that were detected above their respective NADSCs and several constituent concentrations that were detected below their respective NADSCs but were detected above their respective GCTLs.

The Soil Screening Summary is presented as **Table 1**. The Soil Boring Location Map is depicted on **Figure 2** and the Net OVA Summary Map is presented as **Figure 3**. The Soil Analytical Summary (VOA/TRPH/Metals) is presented in **Table 2**, the Soil Analytical Summary (Non-Carcinogenic PAHs) is presented in **Table 3**, the Soil Analytical Summary (Carcinogenic PAHs) is presented in **Table 4**. The Soil Analytical Summary Map is depicted on **Figure 4**.

The Groundwater Monitoring Well Analytical Summary (Volatile Organic Carbons [VOC] and Metals) is presented in **Table 5**, the Groundwater Monitoring Well Analytical Summary (PAH/TRPH) is presented in **Table 6**, and the Groundwater Monitoring Well Analytical Summary (Other Contaminants) is presented in **Table 7**. The Dissolved Hydrocarbon Summary Map is depicted on **Figure 5**. The depth-to-water and monitoring well construction data including top-of-casing data is presented in **Table 8**.

Based on the results of the site assessment activities the site was not eligible for a LSSA No Further Action (NFA). Site assessment activities were parked in queue depending funding eligibility based on site priority score.

The site was eligible for funding in 2023 and the FDEP issued MFMP PO#C1DC28 on June 27, 2023. The following sections detail the results of the groundwater sampling event conducted under Task 2 of the current PO.

2.0 GROUNDWATER SAMPLING – AUGUST 2023

HCR was on-site on August 8, 2023 to collect groundwater samples from 12 designated monitoring wells (DW-1, MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7D, MW8, MW-9, MW-10, and MW-11). The groundwater samples were shipped to Advanced Environmental Laboratories, Inc. (AEL) for analysis by EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TRPH). The laboratory analysis from the groundwater samples collected on August 8, 2023 indicated several constituent concentrations detected above their respective NADSCs and several constituents detected below their respective NADSCs but constituent concentrations that were detected above their respective GCTLs. The following bulleted items detail the laboratory analytical results from the groundwater samples collected on August 8, 2023:

- The NADSC for benzene (100 micrograms per liter [µg/L]) was exceeded in the groundwater sample collected from mW-9 (1,100 µg/L).
- The NADSC for ethylbenzene (300 µg/L) was exceeded in the groundwater sample collected from MW-9 (5,000 µg/L).
- The NADSC for naphthalene was exceeded in the groundwater samples collected from MW-6 (280 µg/L) and MW-9 (990 µg/L).
- The GCTL for naphthalene (14 µg/L) was exceeded in the groundwater sample collected from MW-1 (16 µg/L).

- The GCTL for 1-methylnaphthalene (28 µg/L) was exceeded in the groundwater samples collected from MW-6 (53 µg/L) and MW-9 (130 µg/L).
- The GCTL for 2-methylnaphthalene (28 µg/L) was exceeded in the groundwater sample collected from MW-6 (97 µg/L) and MW-9 (230 µg/L).
- The GCTL for TRPH (5,000 µg/L) was exceeded in the groundwater sample collected from MW-9 (15,000 µg/L).
- No constituent was exceeded in the groundwater samples collected from MW-2, MW-3, MW-4, MW-5, MW-7D, MW-8, MW-10, MW-11, or DW-1.

The Groundwater Monitoring Well Analytical Summary (Volatile Organic Carbons [VOC] and Metals) is presented in **Table 5**, the Groundwater Monitoring Well Analytical Summary (PAH/TRPH) is presented in **Table 6**, and the Groundwater Monitoring Well Analytical Summary (Other Contaminants) is presented in **Table 7**. The Dissolved Hydrocarbon Summary Map is depicted on **Figure 5**.

The HCR field notes from the August 8, 2023 groundwater sampling event along with the FDEP Field Equipment Calibration and Groundwater Sampling Logs and laboratory analytical report is included as **Appendix A**.

The depth-to-water from the August 8, 2023 groundwater sampling event along with the relative top-of-casing data from the monitoring well network was utilized to construct the Groundwater Elevation Contour Map depicted on **Figure 6**. The groundwater flow in the surficial aquifer beneath the facility is in the eastern direction. The depth-to-water and monitoring well construction data including top-of-casing data is presented in **Table 8**.

3.0 SOIL AND GROUNDWATER ASSESSMENT – NOVEMBER 2023

HCR was on-site on November 14, 2023 to advance seven soil borings (SB-44, SB-45, SB-46, SB-19R, SB-35R, SB-WR, and SB-ZR) to a terminal depth of five ft bls, the collection of soil samples at 3-ft bls from each soil boring location for laboratory analysis, and the collection of groundwater samples from five designated monitoring wells (DW-1, MW-1, MW-6, MW-9, and MW-9) for laboratory analysis.

3.1 SOIL ASSESSMENT

HCR advanced seven soil borings (SB-44, SB-45, SB-46, SB-19R, SB-35R, SB-WR, and SB-ZR) to a terminal depth of 5 ft bls. Soil samples were collected at one foot intervals to the terminal depth of the boring to be screened with an OVA and the lithology recorded. A soil sample was collected at each location at three ft bls for laboratory analysis. The soil samples collected were shipped to AEL for analysis by EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TRPH). Additional aliquots were collected for contingent Synthetic Preparation Leaching Procedure (SPLP) leachate analysis by EPA Method 8260 (BTEX/MTBE) and EPA Method 8270 (PAHs) and TRPH speciation.

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The laboratory analytical results indicated several constituent concentrations detected above their respective SCTLs. The following bulleted items detail the laboratory analytical results from the soil samples collected on November 14, 2023:

- The SCTL for benzene (0.007 milligrams per kilogram [mg/kg]) was exceeded in the soil sample collected from SB-45 at 3-ft bls (0.028 mg/kg U* (U*= the laboratory method detection limit (MDL) was above the SCTL) and SB-19R at 3-ft bls (0.027 mg/kg U*).
- The SCTL for ethylbenzene (0.6 mg/kg) was exceeded in the soil sample collected from SB-45 at 3-ft bls (8.3 mg/kg).
 - The SPLP leachate analysis was completed for both SB-19R at 3-ft bls and SB-45 at 3-ft bls. Constituent concentrations were detected above their respective GCTLs in the leachate analysis by EPA Method 8260 (BTEX/MTBE).
- The SCTL for TRPH (340 mg/kg) was exceeded in the groundwater sample collected from SB-45 at 3-ft bls (970 mg/kg).
 - TRPH speciation was requested from the laboratory for SB-45 at 3-ft bls; due to a laboratory error the hold time expired on the sample and results are unavailable.
- The SCTL for naphthalene (1.2 mg/kg) was exceeded in the soil sample collected from SB-45 at 3-ft bls (18 mg/kg).
- The SCTL for 1-methylnaphthalene (3.1 mg/kg) was exceeded in the soil sample collected from SB-45 at 3-ft bls (21 mg/kg).
- The SCTL for 2-methylnaphthalene (8.5 mg/kg) was exceeded in the soil sample collected from SB-45 at 3-ft bls (42 mg/kg).
- The benzo(a)pyrene equivalent (BAPE [0.1 mg/kg]) was exceeded in the soil sample collected from SB-45 at 3-ft bls (0.2 mg/kg)
 - HCR inadvertently requested SPLP leachate analysis on the soil sample collected from SB-45 at 3-ft bls. The leachate analysis detected constituents above their respective SCTLs and are reported; however, the cost for the SPLP preparation and leachate analysis will not be included when submitting the invoice.

The Soil Screening Summary is presented as **Table 1**. The Soil Boring Location Map is depicted on **Figure 2** and the Net OVA Summary Map is presented as **Figure 3**. The Soil Analytical Summary (VOA/TRPH/Metals) is presented in **Table 2**, the Soil Analytical Summary (Non-Carcinogenic PAHs) is presented in **Table 3**, the Soil Analytical Summary (Carcinogenic PAHs) is presented in **Table 4**. The Soil Analytical Summary Map is depicted on **Figure 4**.

3.2 GROUNDWATER SAMPLING

In conjunction with the soil assessment on November 14, 2023, HCR collected groundwater samples from five designated monitoring wells (DW-1, MW-1, MW-6, MW-9, and MW-9) for laboratory analysis. The groundwater samples collected were shipped to AEL for analysis by EPA Method 8260 (BTEX/MTBE), EPA Method 8270 (PAHs), and FL-PRO (TPRH).

The laboratory analytical results indicate several constituent concentrations in the groundwater samples collected were detected above their respective NADSCs and several

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constituent concentrations were detected below their respective NADSCs but were detected above their respective GCTLs. The following bulleted items detail the laboratory analytical results from the groundwater samples collected on November 14, 2023:

- The NADSC for benzene (100 µg/L) was exceeded the groundwater samples collected from MW-6 (310 µg/L) and MW-9 (810 µg/L).
- The NADSC for ethylbenzene (300 µg/L) was exceeded in the groundwater samples collected from MW-6 (2,200 µg/L) and MW-9 (3,500 µg/L).
- The NADSC for naphthalene (140 µg/L) was exceeded in the groundwater samples collected from MW-6 (300 µg/L) and MW-9 (930 µg/L).
- The GCTL for benzene (1 µg/L) was exceeded in the groundwater sample collected from MW-1 (7.5 µg/L).
- The GCTL for ethylbenzene (30 µg/L) was exceeded in the groundwater sample collected from MW-1 (110 µg/L).
- The GCTL for total xylenes (20 µg/L) was exceeded in the groundwater samples collected from MW-6 (67 µg/L) and MW-9 (66 µg/L U*).
- The GCTL for MTBE (20 µg/L) was exceeded in the groundwater sample collected from MW-9 (35 µg/L U*).
- The GCTL for naphthalene (14 µg/L) was exceeded in the groundwater sample collected from MW-1 (25 µg/L).
- The GCTL for 1-methylnaphthalene (28 µg/L) was exceeded in the groundwater samples collected from MW-6 (63 µg/L) and MW-9 (140 µg/L).
- The GCTL for 2-methylnaphthalene (28 µg/L) was exceeded in the groundwater samples collected from MW-6 (120 µg/L) and MW-9 (230 µg/L).
- The GCTL for TRPH (5,000 µg/L) was exceeded in the groundwater samples collected from MW-6 (5,200 µg/L) and MW-9 (19,000 µg/L).
- The GCTL for benzo(b)fluoranthene (0.05 µg/L) was exceeded in the groundwater sample collected from DW-1 (0.080 µg/L I).
- No constituent concentration from the groundwater sample collected from MW-8 were detected above their respective GCTLs.

The Groundwater Monitoring Well Analytical Summary (Volatile Organic Carbons [VOC] and Metals) is presented in **Table 5**, the Groundwater Monitoring Well Analytical Summary (PAH/TRPH) is presented in **Table 6**, and the Groundwater Monitoring Well Analytical Summary (Other Contaminants) is presented in **Table 7**. The Dissolved Hydrocarbon Summary Map is depicted on **Figure 5**. The depth-to-water and monitoring well construction data including top-of-casing data is presented in **Table 8**.

The depth-to-water from the November 14, 2023 groundwater sampling event along with the relative top-of-casing data from the monitoring well network was utilized to construct the Groundwater Elevation Contour Map depicted on **Figure 7**. The groundwater flow in the surficial aquifer beneath the facility is in the northeastern direction. The depth-to-water and monitoring well construction data including top-of-casing data is presented in **Table 8**.

The HCR field notes from the November 14, 2023 site assessment event along with the corresponding FDEP Boring Logs, OVA Calibration Logs, and the soil laboratory analytical report are included as Appendix B. The corresponding November 14, 2023 FDEP field equipment

calibration and groundwater sampling logs and groundwater laboratory analytical report are included as **Appendix C**.

3.0 SOIL QUALITY & LITHOLOGY

Soil contamination associated with the September 19, 1990 discharge exists at the facility. Soil samples were collected on October 24, 2018 and November 14, 2023 for laboratory analysis. The laboratory analytical results indicate exceedances in soil samples collected from SB-19R at 3 ft bls, SB-29 at 2-ft bls, SB-30 at 3-ft bls, SB-45 at 3-ft bls, and SB-X at 3 ft bls. The soil impact plume is delineated in the north, east, and west directions; however, soil delineation to the east has not been completed (off-site assessment). HCR believes that the soil impact zone is delineated in the vertical direction as the vadose zone is determined to be land surface to approximately 4-ft bls; therefore, delineation from current 3-ft bls to 4-ft bls is not required.

The Soil Screening Summary is presented as **Table 1**. The Soil Boring Location Map is depicted on **Figure 2** and the Net OVA Summary Map is presented as **Figure 3**. The Soil Analytical Summary (VOA/TRPH/Metals) is presented in **Table 2**, the Soil Analytical Summary (Non-Carcinogenic PAHs) is presented in **Table 3**, the Soil Analytical Summary (Carcinogenic PAHs) is presented in **Table 4**. The Soil Analytical Summary Map is depicted on **Figure 4**.

Based on the soil samples collected during the soil boring installation, the lithology at the facility is poorly graded sands and silts from land surface to the terminal depth of each boring/monitoring well. The depth to water at the facility ranges from approximately 3.95 ft bls to 5.32 ft bl; therefore, the vadose zone is from land surface to approximately 4-ft bls.

4.0 GROUNDWATER QUALITY

Groundwater contamination associated with the September 19, 1990 discharge exist at the facility. The dissolved hydrocarbon impact is delineated in the horizontal directions. Currently, there is an exceedance of benzo(b)fluoranthene in the groundwater sample collected from DW-1 on November 14, 2023. HCR does not believe that an additional vertical extent well is required for vertical delineation, but further groundwater samples should be collected for laboratory analysis by EPA Method 8270 (PAHs).

The most recent groundwater sampling events were conducted on August 8, 2023 (**Section 2.0, Section 3.2**) and the laboratory analytical results indicated several constituent concentrations that were detected above their respective NADSCs and several constituent concentrations that were detected below their respective NADSCs but were detected above their respective GCTLs.

The groundwater contamination is located primarily in the area of the former dispenser islands along the right of way (MW-9) of Edgewater Drive. There is an off-site monitoring well on the property east of Edgewater Drive (MW-11) and no constituent concentration from groundwater samples collected (October 29, 2018, August 8, 2023) were detected above its respective GCTL.

The Groundwater Monitoring Well Analytical Summary (Volatile Organic Carbons [VOC] and Metals) is presented in **Table 5**, the Groundwater Monitoring Well Analytical Summary (PAH/TRPH) is presented in **Table 6**, and the Groundwater Monitoring Well Analytical Summary (Other Contaminants) is presented in **Table 7**. The Dissolved Hydrocarbon Summary Map is depicted on **Figure 5**.

6.0 SUMMARY AND RECOMMENDATIONS

HCR was on-site on August 8, 2023 to collect groundwater samples from 12 designated monitoring wells (DW-1, MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, and MW-11) for laboratory analysis.

HCR was on-site on November 14, 2023 to advance seven soil borings (SB-44, SB-45, SB-46, SB-19R, SB-35R, SB-WR, and SB-ZR) to a terminal depth of five ft bls, the collection of soil samples at 3-ft bls from each soil boring location for laboratory analysis, and the collection of groundwater samples from five designated monitoring wells (DW-1, MW-1, MW-6, MW-9, and MW-9) for laboratory analysis.

Laboratory analytical results from the groundwater samples collected August 8, 2023 and November 14, 2023 detect several constituent concentrations above their respective NADSCs and several constituent concentrations below their respective NADSCs but above their respective GCTLs.

Laboratory analytical results from the soil samples collected on November 14, 2023 detected several constituent concentrations detected above their respective SCTLs.

Both soil and groundwater contamination associated with the September 19, 1990 discharge exist at the facility. HCR does not believe that additional monitoring well installations are required for further delineation in the horizontal or vertical direction. The primary area of concern is the along the eastern edge of the property along Edgewater Drive (MW-9 and MW-6). There is a slight amount of impact in MW-1 which is located at the north-eastern corner of the former UST location.

Soil impacts have been delineated to the eastern property border. Additional soil borings/samples may not be feasible in the right-of-way due to the location of a water, sewer, and cable tv utility in the right-of-way.

HCR recommends proceeding with remediation at the facility with the goal of attaining a No Further Action (NFA) without conditions via Risk Management Option I (RMO I) pursuant to Chapter 62-780.680 (1) FAC for the September 19, 1990 discharge.

Based on the groundwater concentrations and soil impacts natural attenuation is not considered a viable strategy. Neither conventional excavation or large diameter auger excavation are considered cleanup strategies due to the business interruption concerns at the active restaurant as well as the exceedances of NADSCs in the dissolved phase.

Based on the site lithology, no presence of free product, and the adequate surface cover, HCR believes that air sparging with soil vapor extraction (AS/SVE) would be an appropriate cleanup strategy at the facility. Biological and/or chemical injections may also be considered for remediation.

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If you have any questions or require further information, please feel free to contact the undersigned at (813) 774-6879 or at skinsella@handexmail.com.

Sincerely,

HANDEX CONSULTING & REMEDIATION – SOUTHEAST, LLC

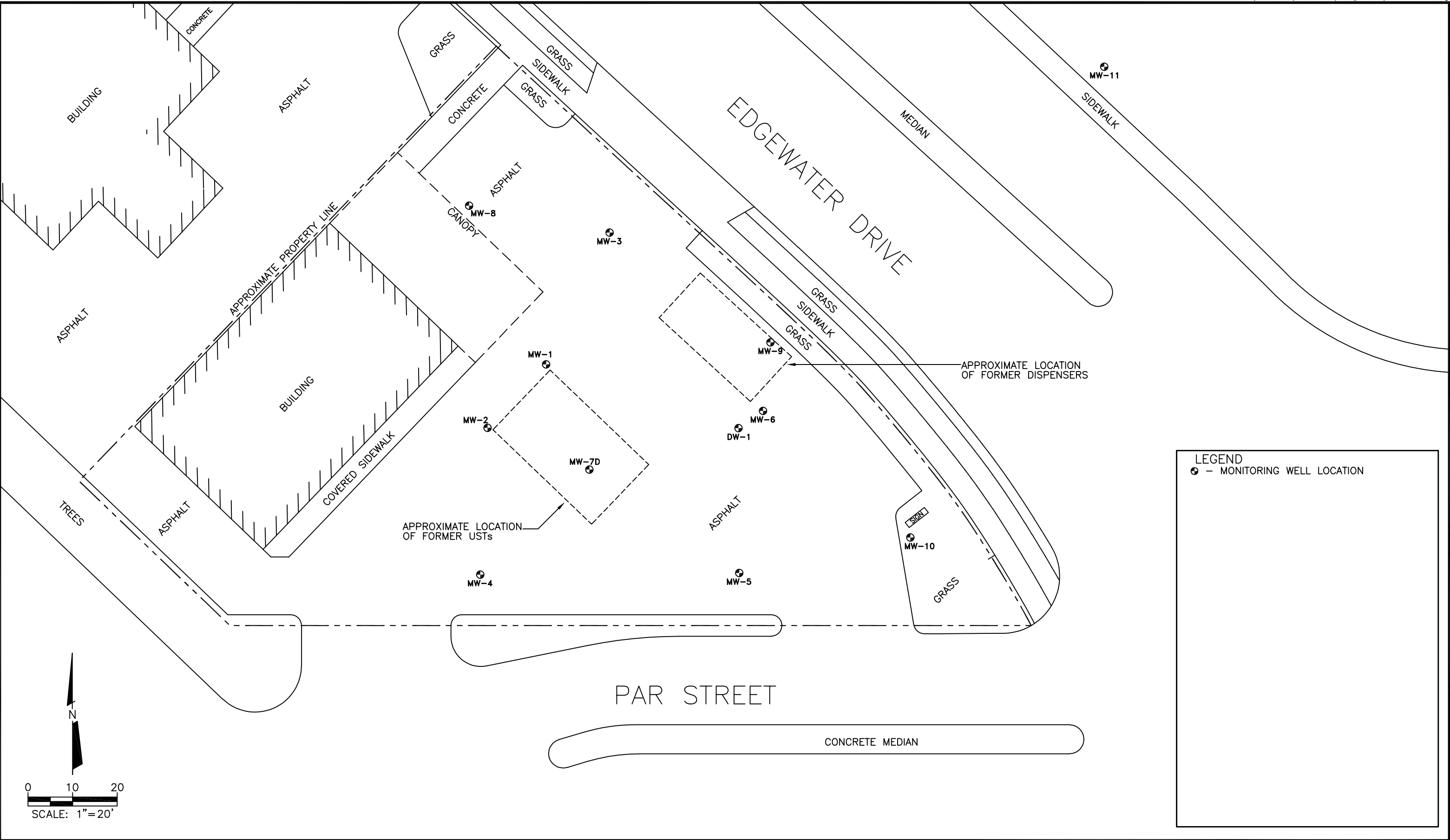


Steve Kinsella, P.E.
Project Manager
FL License #66587

This item has been electronically signed and sealed by Steve Kinsella, P.E. on 1/8/24 using a Digital Signature.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

FIGURES



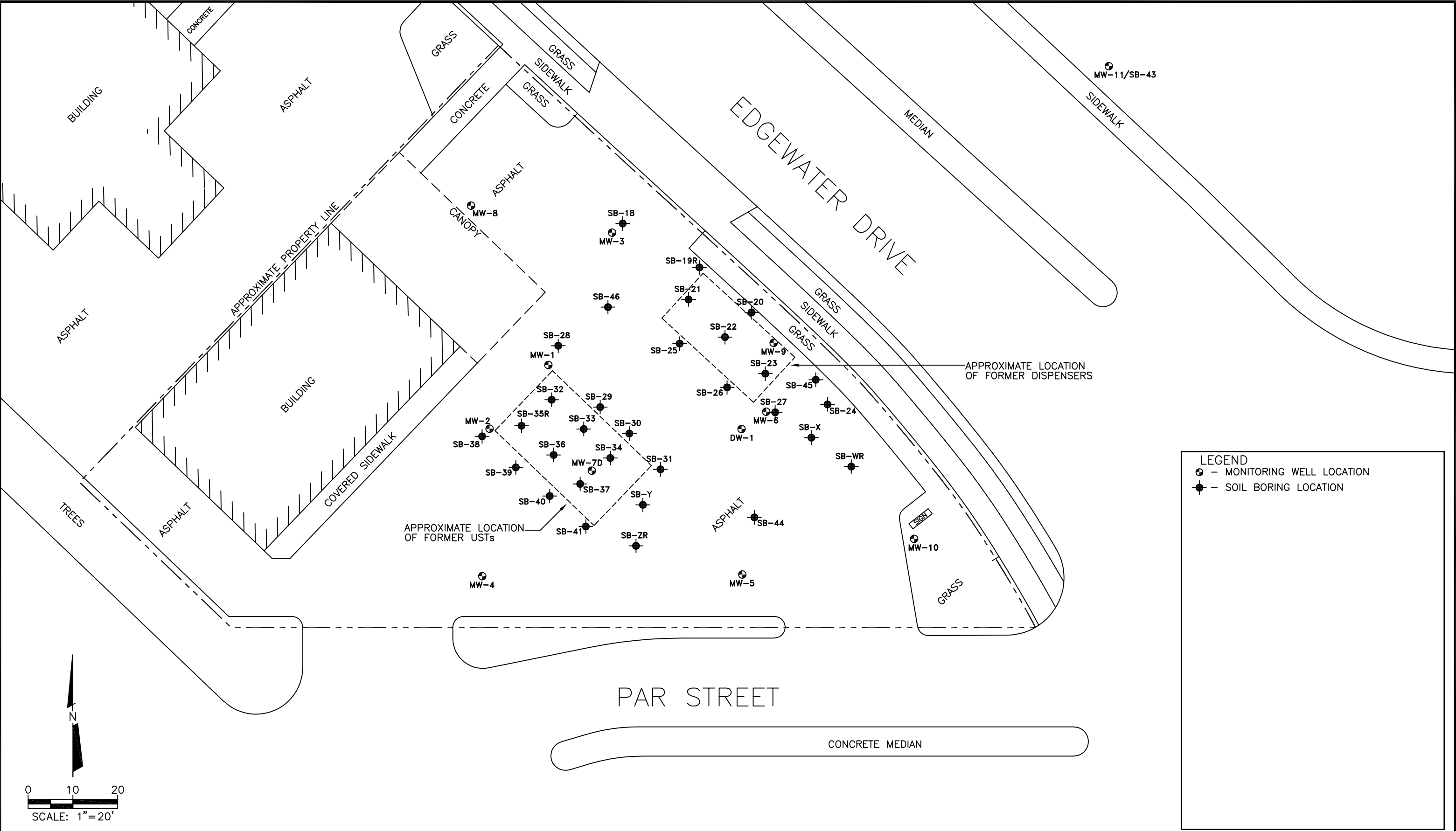
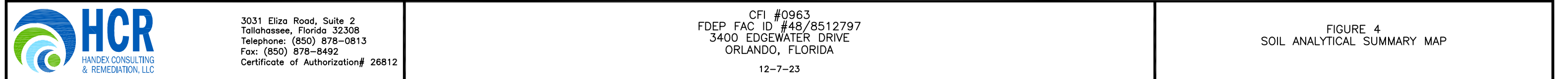
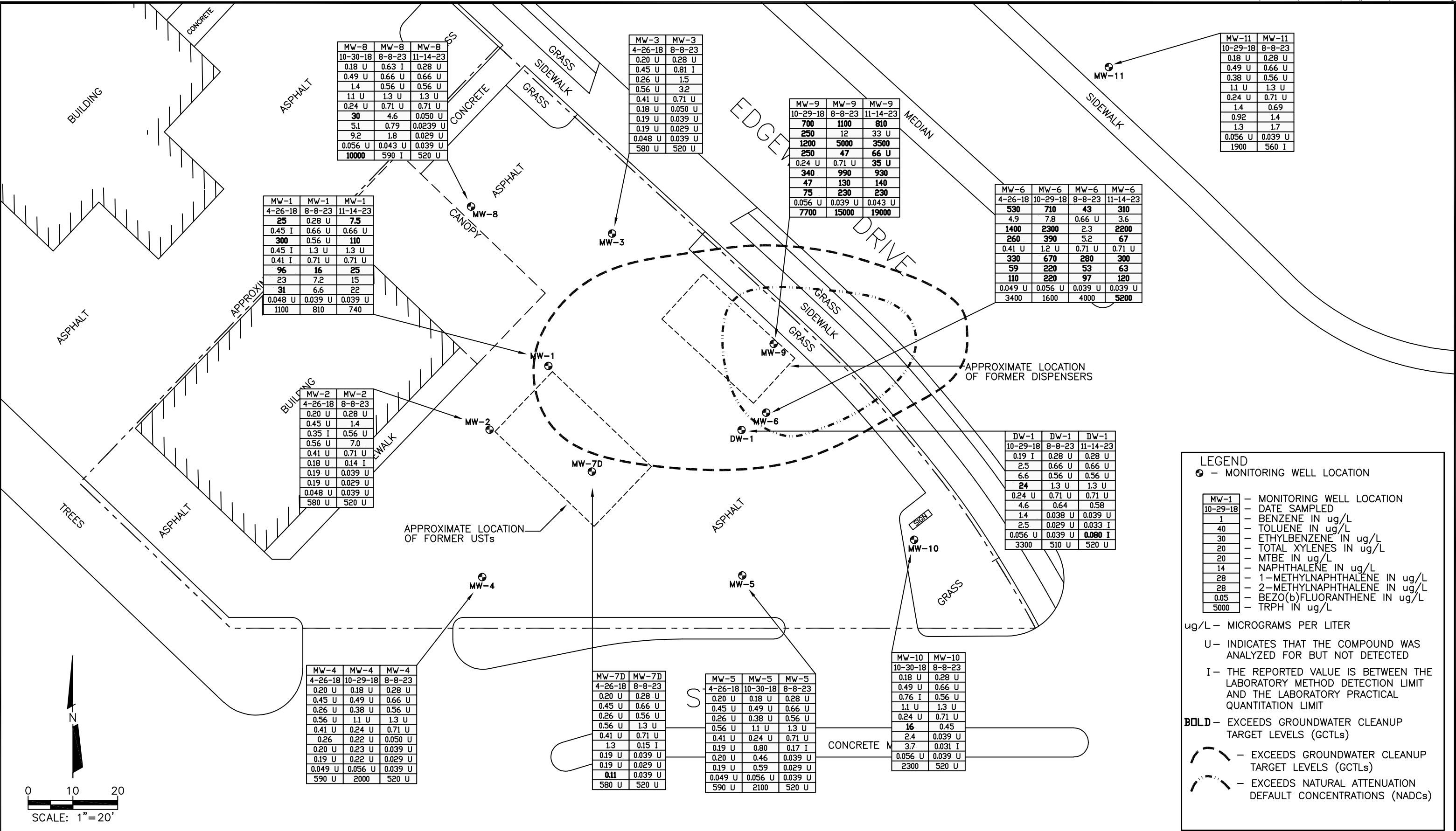
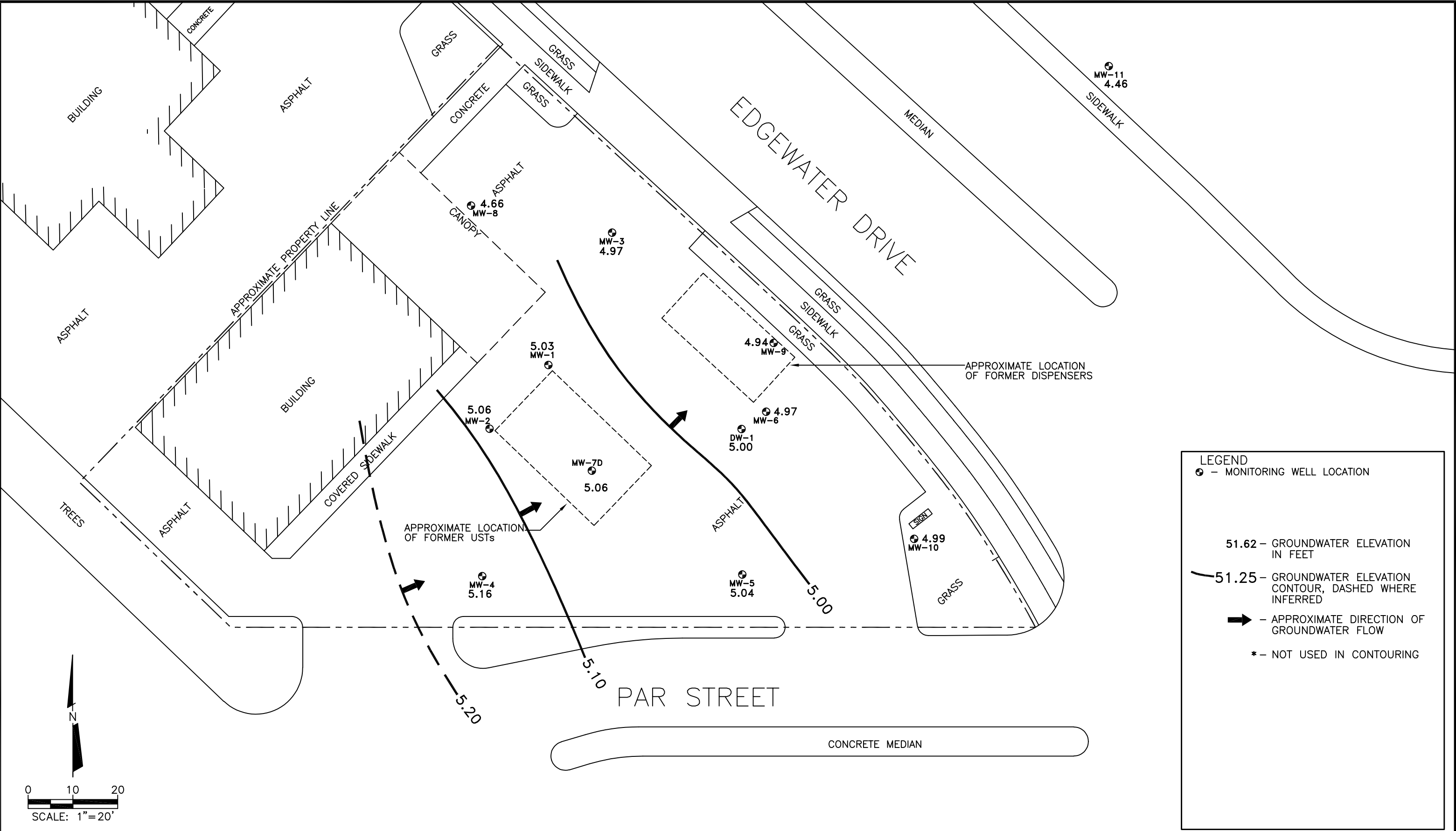


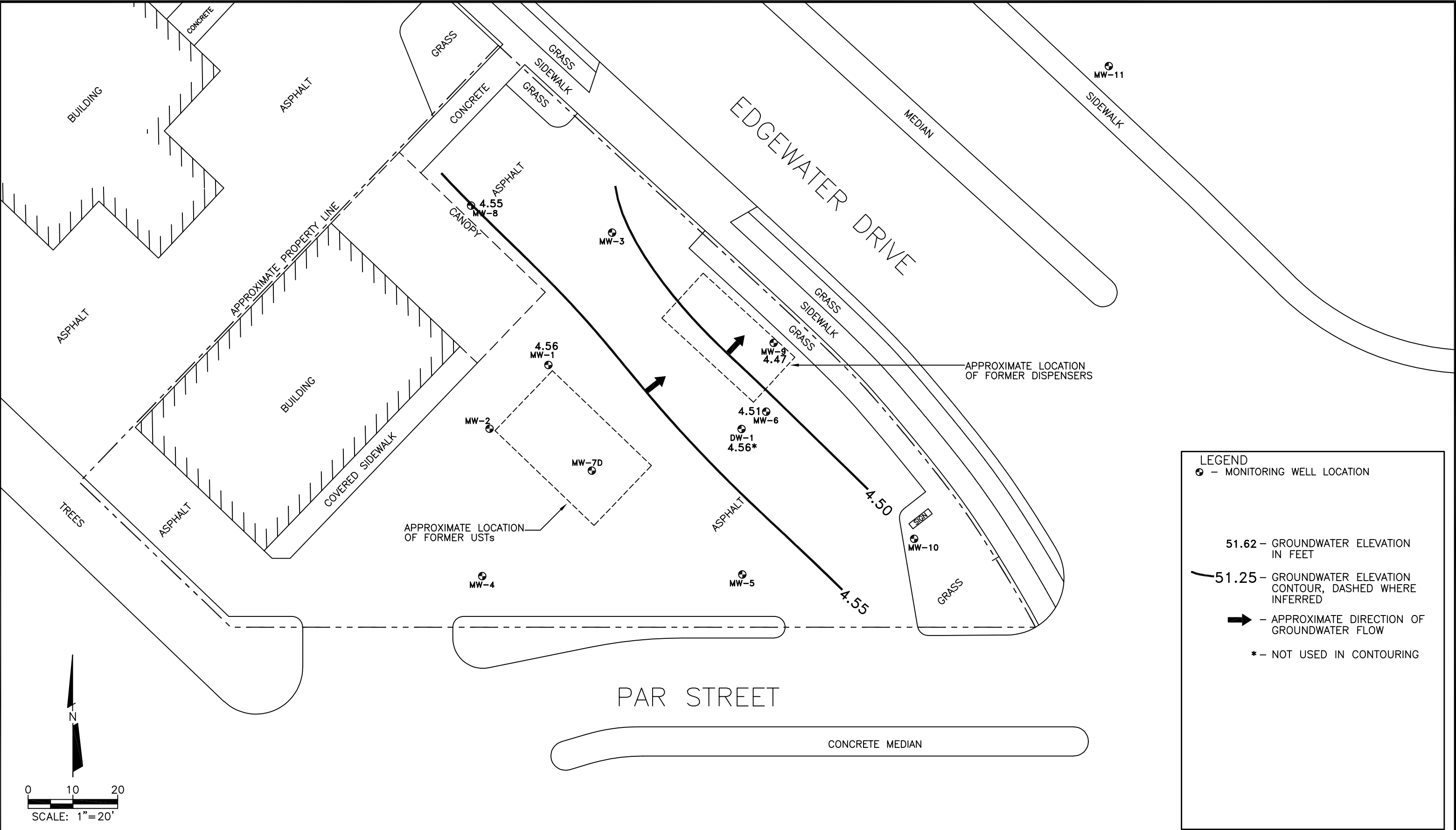


FIGURE 3
NET OVA SUMMARY MAP









TABLES

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Cumberland Farms #0963
Facility ID No: 48/8512797

ND = No Data Unk. = unknown
NS= Not Sampled
BDL = Below Detection Limit
FBLS = Feet Below Land Surface
ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-1	3/6/1992	Unk.	0-2	1000	--	1000	
			2-4	1000	--	1000	
			4-5	1500	--	1500	
SB-2	3/6/1992	Unk.	0-2	>10,000	--	>10,000	
			2-4	>10,000	--	>10,000	
			4-5	>10,000	--	>10,000	
SB-3	3/6/1992	Unk.	0-2	>10,000	--	>10,000	
			2-4	>10,000	--	>10,000	
			43195	>10,000	--	>10,000	
SB-4	3/6/1992	Unk.	0-2	BDL	--	BDL	
			2-4	20	--	20	
			4-5	45	--	45	
SB-5	3/6/1992	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	
SB-6	3/26/1992	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	
SB-7/MW-3	3/5/1992	Unk.	0-2	220	--	220	
			2-4	85	--	85	
			4-5	150	--	150	
SB-8/MW-4	3/5/1992	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	
SB-9/MW-5	3/5/1992	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	
SB-10/MW-6	8/1/2017	Unk.	0-2	1600	--	1600	
			2-4	>10,000	--	>10,000	
			4-5	>10,000	-'	>10,000	
SB-11/MW-7D	3/5/1992	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Cumberland Farms #0963
Facility ID No: 48/8512797

ND = No Data Unk. = unknown
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 BDL = Below Detection Limit
 FBLS = Feet Below Land Surface
 ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-12/TW-1	1/11/1993	Unk.	0-2	BDL	--	BDL	
			2-4	BDL	--	BDL	
			4-5	BDL	--	BDL	
SB-13	1/11/1993	Unk.	0-1.5	BDL	--	BDL	
			1.5-2.5	BDL	--	BDL	
			2.5-3.5	BDL	--	BDL	
			3.5-4.5	BDL	--	BDL	
SB-14	1/11/1993	Unk.	0-1.5	BDL	--	BDL	
			1.5-2.5	BDL	--	BDL	
			2.5-3.5	BDL	--	BDL	
			3.5-4.5	BDL	--	BDL	
SB-15	1/11/1993	Unk.	0-1.5	BDL	--	BDL	
			1.5-2.5	BDL	--	BDL	
			2.5-3.5	BDL	--	BDL	
			3.5-4.5	BDL	--	BDL	
SB-16	1/11/1993	Unk.	0-1.5	BDL	--	BDL	
			1.5-2.5	BDL	--	BDL	
			2.5-3.5	BDL	--	BDL	
			3.5-4.5	BDL	--	BDL	
SB-17	1/11/1993	Unk.	0-1.5	BDL	--	BDL	
			1.5-2.5	BDL	--	BDL	
			2.5-3.5	BDL	--	BDL	
			3.5-4.5	BDL	--	BDL	
SB-18	10/22/2018	~5	1	7.70	--	7.70	
			2	199.70	--	199.70	petrol odor
			3	210.20	--	210.20	lab sample/petrol odor
			4	96.10	--	96.10	petrol odor
			5	40.10	--	40.10	petrol odor
			6	1.10	--	1.10	
			8	0.20	--	0.20	
			10	0.60	--	0.60	

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Cumberland Farms #0963
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ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-19	10/22/2018	~5	1	88.30	--	88.30	
			2	2170.00	--	2170.00	petrol odor
			3	1573.00	--	1573.00	petrol odor
			4	1384.00	--	1384.00	petrol odor
			5	1725.00	--	1725.00	petrol odor
			8	335.70	--	335.70	
			10	94.50	--	94.50	
SB-20	10/22/2018	~5	1	253.20	--	253.20	
			2	357.10	--	357.10	lab sample/petrol odor
			3	2564.00	--	2564.00	petrol odor
			4	1571.00	--	1571.00	petrol oder
			5	1564.00	--	1564.00	petrol odor
			6	1321.00	--	1321.00	petrol odor
			8	8605.00	--	8605.00	petrol odor
			10	249.60	--	249.60	
SB-21	10/22/2018	~5	1	4.80	--	4.80	
			2	387.10	--	387.10	petrol odor
			3	1329.00	--	1329.00	petrol odor
			4	1919.00	--	1919.00	petrol odor
			5	1517.00	--	1517.00	petrol odor
			6	2703.00	--	2703.00	petrol odor
			8	1841.00	--	1841.00	petrol odor
			10	343.50	--	343.50	petrol odor
SB-22	10/22/2018	~4	1	7150.00	--	7150.00	petrol odor
			2	1817.00	--	1817.00	petrol odor
			3	1353.00	--	1353.00	petrol odor
			4	1580.00	--	1580.00	petrol odor
			5	1760.00	--	1760.00	petrol odor
			6	1322.00	--	1322.00	petrol odor
			8	1880.00	--	1880.00	petrol odor
			10	218.00	--	218.00	petrol odor
SB-23	10/22/2018	~5	1	654.10	--	654.10	petrol odor
			2	1366.00	--	1366.00	petrol odor
			3	1610.00	--	1610.00	petrol odor
			4	2364.00	--	2364.00	petrol odor
			5	1506.00	--	1506.00	petrol odor
			6	1358.00	--	1358.00	petrol odor
			8	209.50	--	209.50	petrol odor
			10	124.70	--	124.70	

TABLE 1: SOIL SCREENING SUMMARY

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ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-24	10/22/2018	~5	1	1354.00	--	1354.00	petrol odor
			2	1469.00	--	1469.00	petrol odor
			3	1013.00	--	1013.00	petrol odor
			4	1620.00	--	1620.00	petrol odor
			5	1546.00	--	1546.00	petrol odor
			6	371.50	--	371.50	petrol odor
			8	218.10	--	218.10	petrol odor
			10	26.80	--	26.80	
SB-25	10/22/2018	~5	1	1555.00	--	1555.00	petrol odor
			2	1771.00	--	1771.00	petrol odor
			3	1494.00	--	1494.00	petrol odor
			4	1561.00	--	1561.00	petrol odor
			5	1570.00	--	1570.00	petrol odor
			6	1863.00	--	1863.00	petrol odor
			8	252.50	--	252.50	petrol odor
			10	100.60	--	100.60	
SB-26	10/22/2018	~5	1	776.20	--	776.20	petrol odor
			2	1794.00	--	1794.00	petrol odor
			3	1001.00	--	1001.00	petrol odor
			4	1808.00	--	1808.00	petrol odor
			5	1860.00	--	1860.00	petrol odor
			6	1436.00	--	1436.00	petrol odor
			8	1402.00	--	1402.00	petrol odor
			10	59.80	--	59.80	
SB-27	10/22/2018	~5	1	1424.00	--	1424.00	petrol odor
			2	1528.00	--	1528.00	petrol odor
			3	1542.00	--	1542.00	petrol odor
			4	1585.00	--	1585.00	petrol odor
			5	2127.00	--	2127.00	petrol odor
			6	1714.00	--	1714.00	petrol odor
			8	2337.00	--	2337.00	petrol odor
			10	856.20	--	856.20	petrol odor
SB-28	10/22/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	5.50	--	5.50	
			4	2.90	--	2.90	
			5	8.00	--	8.00	
			6	1.30	--	1.30	
			8	9.10	--	9.10	
			10	4.60	--	4.60	

TABLE 1: SOIL SCREENING SUMMARY

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ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-29	10/22/2018	~6	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	5.30	--	5.30	
			5	28.60	--	28.60	
			6	2262.00	--	2262.00	petrol odor
			8	1833.00	--	1833.00	petrol odor
			10	712.70	--	712.70	petrol odor
SB-30	10/22/2018	~5	1	690.10	--	690.10	petrol odor
			2	1148.00	--	1148.00	petrol odor
			3	1534.00	--	1534.00	lab sample/petrol odor
			4	1473.00	--	1473.00	petrol odor
			5	1441.00	--	1441.00	petrol odor
			6	1574.00	--	1574.00	petrol odor
			8	287.60	--	287.60	petrol odor
			10	120.10	--	120.10	
SB-31	10/22/2018	~4	1	943.80	--	943.80	petrol odor
			2	1404.00	--	1404.00	petrol odor
			3	1192.00	--	1192.00	petrol odor
			4	1067.00	--	1067.00	petrol odor
			5	1010.00	--	1010.00	petrol odor
			6	1601.00	--	1601.00	petrol odor
			8	95.00	--	95.00	petrol odor
			10	13.00	--	13.00	
SB-32	10/22/2018	~3	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	36.80	--	36.80	
			6	--	--	--	No Recovery
			8	--	--	--	No Recovery
			10	1933.00	--	1933.00	petrol odor
SB-33	10/23/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	36.80	--	36.80	
			5	--	--	--	No Recovery
			6	--	--	--	No Recovery
			8		--	0.00	
			10	336.70	--	336.70	petrol odor

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ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-34	10/23/2018	~5	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	--	--	--	No Recovery
			8	629.60	--	629.60	petrol odor
			10	2006.00	--	2006.00	Petrol odor
SB-35	10/22/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	9.20	--	9.20	
			6	--	--	--	No Recovery
			8	--	--	--	No Recovery
			10	1384.00	--	1384.00	petrol odor
SB-36	10/23/2018	~6	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			7	1015.00	--	1015.00	
			8	--	--	--	Refusal
			10	--	--	--	Refusal
SB-37	10/23/2018	~5	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	0.00	--	0.00	
			8	5.40	--	5.40	
			10	2.60	--	2.60	
SB-38	10/22/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	--	--	--	No Recovery
			8	10.90	--	10.90	
			10	19.80	--	19.80	

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ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-39	10/23/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	--	--	--	No Recovery
			8	53.60	--	53.60	
			10	0.00	--	0.00	
SB-40	10/23/2018	~5	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	1190.00	--	1190.00	petrol odor
			8	39.20	--	39.20	
			10	16.90	--	16.90	
SB-41	10/23/2018	~4	1	0.00	--	0.00	
			2	2.40	--	2.40	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	1.60	--	1.60	
			8	1.10	--	1.10	
			10	8.40	--	8.40	
SB-W	10/23/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	0.00	--	0.00	
			8	0.00	--	0.00	
			10	0.00	--	0.00	
SB-X	10/23/2018	~4	1	972.30	--	972.30	petrol odor
			2	846.10	--	846.10	petrol odor
			3	1521.00	--	1521.00	petrol odor
			4	1418.00	--	1418.00	petrol odor
			5	1394.00	--	1394.00	petrol odor
			6	988.10	--	988.10	petrol odor
			8	31.80	--	31.80	
			10	13.70	--	13.70	

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FBLS = Feet Below Land Surface
ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-Y	10/23/2018	~4	1	0.00	--	0.00	
			2	639.60	--	639.60	petrol odor
			3	977.30	--	977.30	petrol odor
			4	757.00	--	757.00	petrol odor
			5	118.60	--	118.60	
SB-Z	10/23/2018	~3	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	0.00	--	0.00	
			8	3.90	--	3.90	
			10	0.70	--	0.70	
SB-43/MW-11	10/24/2018	~4	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	--	--	--	No Recovery
			8	491.90	--	491.90	petrol odor
			10	21.70	--	21.70	
			12	1.40	--	1.40	
MW-8	10/25/2018	~3	1	9.20	--	9.20	
			2	28.70	--	28.70	
			3	23.70	--	23.70	
			4	2.20	--	2.20	
			5	6.60	--	6.60	
			6	0.00	--	0.00	
			8	0.00	--	0.00	
			10	0.00	--	0.00	
			12	0.00	--	0.00	
MW-9	10/25/2018	~3	1	387.70	--	387.70	petrol odor
			2	1466.00	--	1466.00	petrol odor
			3	2422.00	--	2422.00	petrol odor
			4	2405.00	--	2405.00	petrol odor
			5	2378.00	--	2378.00	petrol odor
			6	2083.00	--	2083.00	petrol odor
			8	130.10	--	130.10	petrol odor
			10	368.40	--	368.40	petrol odor
			12	182.10	--	182.10	petrol odor

TABLE 1: SOIL SCREENING SUMMARY

Facility Name: Cumberland Farms #0963
Facility ID No: 48/8512797

ND = No Data Unk. = unknown
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FBLS = Feet Below Land Surface
ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
MW-10	10/25/2018	~3	1	0.00	--	0.00	
			2	0.00	--	0.00	
			3	0.00	--	0.00	
			4	0.00	--	0.00	
			5	0.00	--	0.00	
			6	2.10	--	2.10	
			8	0.00	--	0.00	
			10	0.00	--	0.00	
			12	0.00	--	0.00	
DW-1	10/23/2018	~5	1	2487.00	--	2487.00	
			2	1951.00	--	1951.00	petrol odor
			3	3435.00	--	3435.00	petrol odor
			4	3265.00	--	3265.00	petrol odor
			5	4472.00	--	4472.00	petrol odor
			6	4054.00	--	4054.00	petrol odor
			8	3257.00	--	3257.00	petrol odor
			10	136.70	--	136.70	petrol odor
			12	30.80	--	30.80	petrol odor
			14	18.60	--	18.60	
			16	25.30	--	25.30	
			18	20.10	--	20.10	
			20	9.60	--	9.60	
			24	4.30	--	4.30	
			29	0.00	--	0.00	

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Facility Name: Cumberland Farms #0963
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BDL = Below Detection Limit
FBLS = Feet Below Land Surface
ppm = parts per million

SAMPLE				OVA SCREENING RESULTS			
BORING NO.	DATE COLLECTED	DEPTH TO WATER	SAMPLE INTERVAL (FBLS)	TOTAL READING (ppm)	CARBON FILTERED (ppm)	NET READING (ppm)	COMMENTS
SB-44	11/6/2023	~5.5	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	Lab Sample
			4	0.0	--	0.0	
			5	0.0	--	0.0	
SB-45	11/14/2023	~5.5	1	0.0	--	0.0	petrol odor
			2	0.0	--	0.0	petrol odor
			3	0.0	--	0.0	Lab Sample/petrol odor
			4	0.0	--	0.0	petrol odor
			5	0.0	--	0.0	petrol odor (heavy)
SB-46	11/14/2023	~5.5	1	5.9	--	5.9	petrol odor
			2	21.4	--	21.4	petrol odor
			3	65.5	--	65.5	Lab Sample/petrol odor
			4	223.4	--	223.4	petrol odor
			5	108.4	--	108.4	petrol odor (heavy)
SB-19R	11/14/2023	~5.5	1	21.2	--	21.2	light petrol odor
			2	22.7	--	22.7	light petrol odor
			3	426.0	--	426.0	Lab Sample/heavy petrol odor
			4	406.2	--	406.2	heavy petrol odor
			5	269.8	--	269.8	heavy petrol odor
SB-35R	11/14/2023	~5.5	1	0.0	--	0.0	
			2	0.2	--	0.2	
			3	0.2	--	0.2	Lab Sample
			4	0.0	--	0.0	
			5	0.0	--	0.0	
SB-WR	11/14/2023	~5.5	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	Lab Sample
			4	0.0	--	0.0	
			5	0.0	--	0.0	
SB-ZR	11/14/2023	~5.5	1	0.0	--	0.0	
			2	0.0	--	0.0	
			3	0.0	--	0.0	Lab Sample
			4	0.0	--	0.0	
			5	0.0	--	0.0	

TABLE 2: SOIL ANALYTICAL SUMMARY - VOAs, TRPHs and Metals

48/8512797

Facility Name: Cumberland Farms #0963

See notes at end of table.

Sample				OVA	Laboratory Analyses										Comments
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TRPHs (mg/kg)	Arsenic (mg/kg)	Cad-mium (mg/kg)	Chro-mium (mg/kg)	Lead (mg/kg)	
SB-X	10/24/2018	~4	3	1521.0	0.017 U	0.026 U	1.3	0.26 I	0.024 U	56	NS	NS	NS	NS	
SB-18	10/24/2018	~5	3	210.20	0.00032 U	0.00048 U	0.00040 U	0.0011 U	0.00045 U	28	NS	NS	NS	NS	
SB-20	10/24/2018	~5	2	357.10	0.12 I	0.028 U	3.8	0.22 I	0.026 U	49	NS	NS	NS	NS	
SB-30	10/24/2018	~5	3	1534.00	0.042	0.030 U	3	0.071 U	0.028 U	65	NS	NS	NS	NS	
SB-44	11/14/2023	~5.5	3	0.0	0.00054 U	0.0040 U	0.00039 U	0.0014 U	0.0011 U	10 I	NS	NS	NS	NS	
SB-45	11/14/2023	~5.5	3	431.2	0.028 U (dx50)	0.021 U (dx50)	8.3 (dx100)	0.074 U (dx50)	0.056 U (dx50)	970 (dx10)	NS	NS	NS	NS	SPLP/SPEC COMPLETED
SB-46	11/14/2023	~5.5	3	65.5	0.00057 U	0.00042 U	0.00095 I	0.0015 U	0.0011 U	44	NS	NS	NS	NS	
SB-19R	11/14/2023	~5.5	3	426.0	0.027 U (dx50)	0.020 U (dx50)	0.18 (dx50)	0.072 U (dx50)	0.054 U (dx50)	14 I	NS	NS	NS	NS	SPLP COMPLETED
SB-35R	11/14/2023	~5.5	3	0.0	0.00052 U	0.00039 U	0.00037 U	0.0014 U	0.0010 U	4.9 U	NS	NS	NS	NS	
SB-WR	11/14/2023	~5.5	3	0.0	0.00054 U	0.00040 U	0.00039 U	0.0014 U	0.0011 U	17	NS	NS	NS	NS	
SB-ZR	11/14/2023	~5.5	3	0.0	0.00054 U	0.00040 U	0.00038 U	0.0014 U	0.0011 U	5.1 U	NS	NS	NS	NS	
ed on Groundwater Criteria (mg/kg)					0.007	0.5	0.6	0.2	0.09	340	*	7.5	38	*	
posure Residential (mg/kg)					1.2	7,500	1,500	130	4,400	460	2.1	82	210	400	

Notes:

All concentrations in milligrams per kilogram (mg/kg)

NS = Not Sampled. NA = Not Available.

* = Leachability value may be determined using TCLP.

V = Method blank contamination

I = The reported value is between the laboratory method detection limit and the laboratory practical quantification limit.

ft = feet

fbls = feet below land surface

J4 = Estimated Result

ction limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

TABLE 3: SOIL ANALYTICAL SUMMARY - Non-Carcinogenic PAHs

Facility ID#: 48/8512797

Facility Name: Cumberland Farms #0963

See notes at end of table.

Sample				OVA	Laboratory Analyses											Comments
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbls)	Net OVA Reading (ppm)	Naph- thalene (mg/kg)	1-Methyl- naph- thalene (mg/kg)	2-Methyl- naph- thalene (mg/kg)	Acen- aph- thene (mg/kg)	Acen- aph- thylene (mg/kg)	Anthra- cene (mg/kg)	Benzo (g,h,i) perylene (mg/kg)	Fluoran- thene (mg/kg)	Fluor- ene (mg/kg)	Phenan- threne (mg/kg)	Pyrene (mg/kg)	
SB-X	10/24/2018	~4	3	1521.0	1.8	1.3	2.5	0.0084 I	0.0038 I	0.0032 U	0.0062 U	0.0022 U	0.014	0.015	0.0026 I	
SB-18	10/24/2018	~5	3	210.20	0.0056 U	0.0032 U	0.0032 U	0.0027 U	0.0026 U	0.0022 U	0.0060 U	0.0083 I	0.0027 U	0.0022 U	0.0069 I	
SB-20	10/24/2018	~5	2	357.10	0.52	0.12	0.26	0.0027 U	0.046	0.018	0.052	0.032	0.0028 U	0.011	0.037	
SB-30	10/24/2018	~5	3	1534.00	2.1	0.89	1.7	0.0067 I	0.0084 I	0.0026 I	0.0065 U	0.0059 I	0.0059 I	0.0082 I	0.0062 I	
SB-44	11/14/2023	~5.5	3	0.0	0.0018 U	0.0016 U	0.0021 U	0.0016 U	0.0019 U	0.0026 U	0.0022 I	0.0029 U	0.0023 U	0.0023 U	0.0025 U	
SB-45	11/14/2023	~5.5	3	431.2	18 (dx20)	21 (dx20)	42 (dx20)	0.15	0.066	0.075	0.16	0.081	0.12	0.14	0.11	
SB-46	11/14/2023	~5.5	3	65.5	0.0076 I	0.0017 U	0.0022 U	0.0017 U	0.0020 U	0.0028 U	0.0021 U	0.0031 U	0.0024 U	0.0024 U	0.0026 U	
SB-19R	11/14/2023	~5.5	3	426.0	0.50	0.19	0.43	0.0016 U	0.0031 I	0.0026 U	0.0051 I	0.0053 I	0.0023 U	0.0023 U	0.0066 I	
SB-35R	11/14/2023	~5.5	3	0.0	0.0017 U	0.0016 U	0.0020 U	0.0015 U	0.0018 U	0.0025 U	0.0019 U	0.0028 U	0.0021 U	0.0021 U	0.0023 U	
SB-WR	11/14/2023	~5.5	3	0.0	0.0020 I	0.0019 I	0.0034 I	0.0016 U	0.012	0.015	0.036	0.054	0.0022 U	0.0062 I	0.083	
SB-ZR	11/14/2023	~5.5	3	0.0	0.0018 U	0.0016 U	0.0021 U	0.0016 U	0.0018 U	0.0026 U	0.0020 U	0.0030 I	0.0022 U	0.0022 U	0.0047 I	
Leachability Based on Groundwater Criteria (mg/kg)					1.2	3.1	8.5	2.1	27	2,500	32,000	1,200	160	250	880	
Direct Exposure Residential (mg/kg)					55	200	210	2,400	1,800	21,000	2,500	3,200	2,600	2,200	2,400	

Notes: All concentrations in milligrams per kilogram (mg/kg) ft = feet
 NS = Not Sampled. NA = Not Available. fbfs = feet below land surface
 V = Method blank contamination ppm = parts per million J4 = Estimated Result
 I = The reported value is between the laboratory method detection limit and the laboratory practical quantification limit.

TABLE 4: SOIL ANALYTICAL SUMMARY - Carcinogenic PAHs**Facility ID#:** 48/8512797**Facility Name:** Cumberland Farms #0963

See notes at end of table.

Sample				OVA	Laboratory Analyses								Comments
Boring/ Well No.	Date Collected	Depth to Water (ft)	Sample Interval (fbis)	Net OVA Reading (ppm)	Benzo (a) pyrene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	Benzo (a) pyrene equivalent (mg/kg)	
SB-X	10/24/2018	~4	3	1521.0	0.0025 U	0.0025 U	0.0025 U	0.0022 U	0.0025 U	0.0070 U	0.0040 U	--	
SB-18	10/24/2018	~5	3	210.20	0.0023 U	0.0030 I	0.0031 I	0.0021 U	0.0033 I	0.0069 U	0.0040 U	0.0	
SB-20	10/24/2018	~5	2	357.10	0.035	0.020	0.052	0.018	0.027	0.0070 U	0.040	0.0	
SB-30	10/24/2018	~5	3	1534.00	0.0025 U	0.0026 U	0.0036 I	0.0023 U	0.0026 U	0.0075 U	0.0055 I	0.0	
SB-44	11/14/2023	~5.5	3	0.0	0.0022 I	0.0021 U	0.0035 I	0.0025 U	0.0031 U	0.0018 U	0.0025 U	0.0	
SB-45	11/14/2023	~5.5	3	431.2	0.14	0.051	0.18	0.059	0.040	0.032	0.12	0.2	
SB-46	11/14/2023	~5.5	3	65.5	0.0018 U	0.0022 U	0.0023 I	0.0026 U	0.0032 U	0.0018 U	0.0026 U	0.0	
SB-19R	11/14/2023	~5.5	3	426.0	0.0051 I	0.0028 I	0.0077 I	0.0030 I	0.0048 I	0.0018 U	0.0043 I	0.0	
SB-35R	11/14/2023	~5.5	3	0.0	0.0017 U	0.0020 U	0.0016 U	0.0023 U	0.0029 U	0.0017 U	0.0024 U	--	
SB-WR	11/14/2023	~5.5	3	0.0	0.053	0.031	0.081	0.030	0.048	0.0098	0.036	0.1	
SB-ZR	11/14/2023	~5.5	3	0.0	0.0025 I	0.0021 U	0.0039 I	0.0024 U	0.0030 U	0.0017 U	0.0025 U	0.0	
Leachability Based on Groundwater Criteria (mg/kg)					8	0.8	2.4	24	77	0.7	6.6	**	
Direct Exposure Residential (mg/kg)					0.1	#	#	#	#	#	#	0.1	

Notes:

All concentrations in milligrams per kilogram (mg/kg)

NS = Not Sampled. NA = Not Available.

** = Leachability value not applicable.

= Direct Exposure value not applicable except as part of the Benzo(a)pyrene equivalent.

I = The reported value is between the laboratory method detection limit and the laboratory practical quantification limit.

V = Method blank contamination

TABLE 5: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: **48/8512797** Facility Name: See notes at end of table.

Sample		Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	1,2-Di- chloro- ethane	Total Arsenic	Total Cad- mium	Total Chro- mium	Total Lead
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-1	11/1993	283	28	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	34	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	09/1991	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	25	0.45 I	300	0.45 I	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
	08/08/2023	0.26 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
	11/14/2023	7.5	0.66 U	110	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
MW-2	11/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	03/1992	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	0.20 U	0.45 U	0.35 I	0.56 U	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
	08/08/2023	0.28 U	1.4	0.56 U	7.0	0.71 U	NS	NS	NS	NS	NS	NS
MW-3	11/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	03/1992	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
	08/08/2023	0.28 U	0.81 I	1.5	3.2	0.71 U	NS	NS	NS	NS	NS	NS
MW-4	11/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	BDI	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	03/1992	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
	10/30/2018	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
	08/08/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
MW-5	11/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	03/1992	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
	10/30/2018	0.18 U	0.49 U	0.38 U	1.1 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
	08/08/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
MW-6	11/1993	13600	22400	2050	9090	BDL	NS	NS	NS	NS	NS	NS
	01/1993	18400	30600	3070	15000	BDL	NS	NS	NS	NS	NS	NS
	03/1992	13300	18400	2320	9250	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	530	4.9	1400	260	0.41 U	0.020 U	NS	NS	NS	NS	3.3 I
	10/29/2018	710	7.8	2300	390	1.2 U	NS	NS	NS	NS	NS	6.5 I
	08/08/2023	43	0.66 U	2.3	5.2	0.71 U	NS	NS	NS	NS	NS	NS
MW-7D	11/14/2023	310 (dx20)	3.6	2200 (dx20)	67	0.71 U	NS	NS	NS	NS	NS	NS
	11/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	01/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	03/1992	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	BDL
	04/26/2018	0.20 U	0.45 U	0.26 U	0.56 U	0.41 U	0.020 U	NS	NS	NS	NS	3.2 U
DW-1	08/08/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
	10/29/2018	0.19 I	2.5	6.6	24	0.24 U	NS	NS	NS	NS	NS	1.1 U
	11/14/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
MW-8	10/30/2018	0.18 U	0.49 U	1.4	1.1 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
	08/08/2023	0.63 I	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
	11/14/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS
MW-9												
	10/29/2018	700	250	1200	250	0.24 U	NS	NS	NS	NS	NS	3.0 I
	08/08/2023	1100	12	5000	47	0.71 U	NS	NS	NS	NS	NS	NS
MW-10	11/14/2023	810 (dx50)	33 U (dx50)	3500 (dx50)	66 U (dx100)	35 U (dx50)	NS	NS	NS	NS	NS	NS
MW-11	10/30/2018	0.18 U	0.49 U	0.76 I	1.1 U	0.24 U	NS	NS	NS	NS	NS	1.1 U
	08/08/2023	0.28 U	0.66 U	0.56 U	1.3 U	0.71 U	NS	NS	NS	NS	NS	NS

TABLE 5: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - VOCs and Metals

Facility ID#: 48/8512797 Facility Name: See notes at end of table.

Sample		Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	EDB	1,2-Di- chloro- ethane	Total Arsenic	Total Cad- mium	Total Chro- mium	Total Lead
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
SB-20@2'	10/2018	0.28 I	0.49 U	28	1.1 U	7.2 U	NS	NS	NS	NS	NS	NS
SB-30@3'	10/2018	2.8	2.5	28	1.1 U	0.24 U	NS	NS	NS	NS	NS	NS
TW-1	01/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
	02/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	NS
TW-2	04/1993	8630	171	2840	788	BDL	NS	NS	NS	NS	NS	NS
TW-3	06/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	0.205
TW-4	06/1993	BDL	BDL	BDL	BDL	BDL	NS	NS	NS	NS	NS	0.051
SB-19R at 3'	11/2023	2.8 U	6.6 U	5.6 U	13 U	7.1 U	NS	NS	NS	NS	NS	NS
SB-45 at 3'	11/2023	2.8 U (dx10)	6.6 U (dx10)	180 (dx10)	13 U (dx10)	7.1 U (dx10)	NS	NS	NS	NS	NS	NS
GCTLs		1**	40**	30**	20**	20	0.02**	3**	10**	5**	100**	15**
NADCs		100	400	300	200	200	2	300	100	50	1,000	150

Notes: All concentrations in micrograms per liter (µg/L)
NS = Not Sampled. NA = Not Available.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
** = As provided in Chapter 62-550, F.A.C.
I = The reported value is between the laboratory method limit and the laboratory practical quantitation limit.
If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#:		48/8512797		Facility Name:		Cumberland Farms #0963														See notes at end of table.			
Sample		TRPHs	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (g,h,i) perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo (a) pyrene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene			
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)			
MW-1	4/26/2018	1100	96	23	31	0.15 U	0.16 U	0.14 U	0.047 U	0.14 U	0.15 U	0.15 U	0.14 U	0.14 U	0.047 U	0.048 U	0.18 U	0.13 U	0.092 U	0.043 U			
	8/8/2023	810	16	7.2	6.6	0.067 I	0.029 U	0.048 U	0.041 U	0.034 U	0.038 I	0.042 I	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
	11/14/2023	740	25	15	22	0.10 I	0.029 U	0.048 U	0.038 U	0.038 I	0.065 I	0.065 I	0.040 I	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-2	4/26/2018	580 U	0.18 U	0.19 U	0.19 U	0.15 U	0.16 U	0.14 U	0.18 U	0.14 U	0.15 U	0.15 U	0.14 U	0.14 U	0.047 U	0.048 U	0.18 U	0.13 U	0.092 U	0.043 U			
	8/8/2023	520 U	0.14 I	0.039 U	0.029 U	0.025 U	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.049 I	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-3	4/26/2018	580 U	0.18 U	0.19 U	0.19 U	0.15 U	0.16 U	0.14 U	0.18 U	0.14 U	0.15 U	0.15 U	0.14 U	0.14 U	0.047 U	0.048 U	0.18 U	0.13 U	0.092 U	0.043 U			
	8/8/2023	520 U	0.050 U	0.039 U	0.029 U	0.025 U	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-4	4/26/2018	590 U	0.26	0.20 U	0.19 U	0.29	0.16 U	0.14 U	0.19 U	0.14 U	0.15 U	0.16 U	0.14 U	0.14 U	0.048 U	0.049 U	0.19 U	0.13 U	0.093 U	0.044 U			
	10/30/2018	2000	0.22 U	0.23 U	0.22 U	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	520 U	0.050 U	0.039 U	0.029 U	0.086 I	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-5	4/26/2018	590 U	0.19 U	0.20 U	0.19 U	0.16 U	0.16 U	0.14 U	0.19 U	0.19 U	0.15 U	0.16 U	0.14 U	0.14 U	0.048 U	0.049 U	0.19 U	0.13 U	0.093 U	0.044 U			
	10/30/2018	2100	0.80	0.46	0.59	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	520 U	0.17 I	0.039 U	0.029 U	0.025 U	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-6	4/26/2018	3400	330	59	110	0.19 I	0.16 U	0.14 U	0.19 U	0.14 U	0.15 U	0.16 U	0.14 U	0.14 U	0.048 U	0.049 U	0.19 U	0.13 U	0.093 U	0.044 U			
	10/29/2018	1600	670	110	200	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	4000	280	53	97	0.15 I	0.029 U	0.048 U	0.041 U	0.034 U	0.11 I	0.050 I	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
	11/14/2023	5200	300	63	120	0.18 I	0.029 U	0.048 U	0.041 U	0.034 U	0.11 I	0.058 I	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-7D	4/26/2018	580 U	1.3	0.19 U	0.19 U	0.15 U	0.16 U	0.14 U	0.18 U	0.14 I	0.15 U	0.15 U	0.14 U	0.14 U	0.047 U	0.11	0.18 U	0.13 I	0.092 U	0.054 I			
	8/8/2023	520 U	0.15 I	0.039 U	0.029 U	0.10 I	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.043 I	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
DW-1	10/29/2018	3300	4.6	1.4	2.5	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.26	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	510 U	0.64	0.038 U	0.029 U	0.15 I	0.029 U	0.047 U	0.040 U	0.034 U	0.034 U	0.032 U	0.033 U	0.032 U	0.038 U	0.039 U	0.024 U	0.028 U	0.048 U	0.038 U			
	11/14/2023	520 U	0.58	0.039 U	0.033 I	0.16 I	0.029 U	0.048 U	0.057 I	0.054 I	0.035 U	0.033 U	0.049 I	0.043 I	0.038 U	0.080 I	0.026 I	0.048 I	0.048 U	0.040 I			
MW-8	10/30/2018	10000	30	5.1	9.2	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	590 I	4.6	0.79	1.8	0.028 U	0.032 U	0.053 U	0.045 U	0.038 U	0.038 U	0.036 U	0.037 U	0.036 U	0.042 U	0.043 U	0.027 U	0.031 U	0.053 U	0.042 U			
	11/14/2023	520 U	0.050 U	0.039 U	0.029 U	0.025 U	0.029 U	0.048 U	0.041 U	0.039 I	0.035 U	0.034 I	0.046 I	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U			
MW-9	10/29/2018	7700	340	47	75	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.29	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U			
	8/8/2023	15000	990	130	230	0.34	0.029 U	0.048 U	0.41 U	0.045 I	0.25	0.15 I	0.037 I	0.033 U	0.041 I	0.039 U	0.025 U	0.034 I	0.048 U	0.039 U			
	11/14/2023	19000	930 (dx5)	140	230	0.41	0.032 U	0.092 I	0.045 U	0.058 I	0.27	0.17 I	0.045 I	0.036 U	0.042 U	0.043 U	0.027 U	0.031 U	0.053 U	0.042 U			

TABLE 6: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY - PAHs and TRPHs

Facility ID#: 48/8512797 Facility Name: Cumberland Farms #0963 See notes at end of table.

Sample		TRPHs	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo (g,h,i) perylene	Fluoranthene	Fluorene	Phenanthrene	Pyrene	Benzo (a) pyrene	Benzo (a) anthracene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-10	10/30/2018	2300	16	2.4	3.7	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U
	8/8/2023	520 U	0.45	0.039 U	0.031 I	0.032 I	0.029 U	0.048 U	0.041 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U
MW-11	10/29/2018	1900	1.4	0.92	1.3	0.18 U	0.19 U	0.16 U	0.22 U	0.17 U	0.18 U	0.18 U	0.16 U	0.17 U	0.056 U	0.056 U	0.22 U	0.15 U	0.11 U	0.051 U
	8/8/2023	560 I	0.69	1.4	1.7	0.033 I	0.029 U	0.048 U	0.41 U	0.034 U	0.035 U	0.033 U	0.034 U	0.033 U	0.038 U	0.039 U	0.025 U	0.028 U	0.048 U	0.039 U
SB-X at 3'	10/24/2018	NS	88	35	63	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
SB-30 at 3'	10/24/2018	NS	0.96	0.51	0.94	0.16 U	0.17 U	0.14 U	0.19 U	0.15 U	0.15 U	0.16 U	0.14 U	0.15 U	0.049 U	0.050 U	0.19 U	0.13 U	0.095 U	0.045 U
SB-45 at 3'	11/14/2023	NS	60	37	42	0.32	0.14	0.15	0.29	0.11	0.23	0.032 I	0.48	0.32	0.17	0.46	0.15	0.16	0.076	0.24
GCTLs		5,000	14	28	28	20	210	2,100	210	280	280	210	210	0.2**	0.05 ^a	0.05 ^a	0.5	4.8	0.005 ^a	0.05 ^a
NADCs		50,000	140	280	280	200	2,100	21,000	2,100	2,800	2,800	2,100	2,100	20	5	5	50	480	0.5	5

Notes: All concentrations in micrograms per liter (µg/L)

NS = Not Sampled. NA = Not Available.

GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.

NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.

** = As provided in Chapter 62-550, F.A.C.

^a = See the October 12, 2004 "Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits" to determine how to evaluate data when the CTL is lower than the PQL.

I = The reported value is between the laboratory method limit and the laboratory practical quantitation limit.

If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].

Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

**TABLE 7: GROUNDWATER MONITORING WELL ANALYTICAL SUMMARY -
^Other Contaminants not listed in Chapter 62-770, F.A.C.**

Facility ID#: 48/8512797 Facility Name: Cumberland Farms #0963 See notes at end of table.

Sample		1,1,1- TRICHLOROETHANE	1,1,2,2- TETRACHLOROETHANE	1,1,2- TRICHLOROETHANE	1,1-DICHLOROETHANE	1,1-DICHLOROETHENE	1,2-DICHLOROBENZENE	1,2-DICHLOROETHANE	1,2-DICHLOROPROPANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	2-CHLOROETHYL VINYL ETHER	BROMODICHLOROMETH ANE	BROMOFORM	BROMOMETHANE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	DIBROMOCHLOROMETH ANE	DICHLORODIFLUOROME THANE	TETRACHLOROETHENE	TRICHLOROETHYLENE	TRICHLOROFLUOROME THANE	VINYL CHLORIDE	cis-1,2- DICHLOROETHENE	cis-1,3- DICHLOROPROPENE	trans-1,2- DICHLOROETHENE	trans-1,3- DICHLOROPROPENE	[other]	[other]
Location	Date	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
MW-13	8/7/2017	0.55 U	0.16 U	0.61 U	0.37 U	0.47 U	0.87 U	0.49 U	0.57 U	0.59 U	0.48 U	1.5 U	0.42 U	0.73 U	0.64 U	0.43 U	0.69 U	0.64 U	0.51 U	0.42 U	0.37 U	0.40 U	0.48 U	0.46 U	0.40 U	0.12 U	0.48 U	0.19 U	0.59 U	0.15 U		
GCTLs		200	0.2	5	70	7	600	3	5	N/A	75	N/A	0.6	4.4	9.8	3	100	12	70	2.7	0.4	1400	3	3	2100	1	70	0	100	N/A		

Notes: NA = Not Available.
NS = Not Sampled.
GCTLs = Groundwater Cleanup Target Levels specified in Table I of Chapter 62-777, F.A.C.
NADCs = Natural Attenuation Default Source Concentrations specified in Table V of Chapter 62-777, F.A.C.
^ = These chemicals may be present in petroleum fuels but are not currently included in Table A of Chapter 62-770, F.A.C. (list of Petroleum Products' Contaminants of Concern), and therefore it is not required by rule that samples be analyzed for these chemicals. Summary columns have been provided for the circumstances in which these chemicals and others reported by the laboratory are detected, to comply with subparagraph 62-770.600(8)(a)25., F.A.C.
I = The reported value is between the laboratory method limit and the laboratory practical quantitation limit.
If an analyte is not detected, report the method detection limit [i.e., 0.01 U or ND(0.01); BDL or <0.01 are not acceptable].
Freshwater Surface Water (FSW), Marine Surface Water (MSW) and Groundwater of Low Yield/Poor Quality (LY/PQ) CTLs should be added to the base of the table as applicable.

TABLE 8: GROUNDWATER ELEVATION SUMMARY

Site Name: Cumberland Farms #0963

FDEP Facility ID No.: 48/8512797

WELL NO.	MW-1			MW-2			MW-3			MW-4			MW-5		
DIAMETER	2			2			2			2			2		
WELL DEPTH	12			12			12			12			12		
SCREEN INTERVAL	2-12			2-12			2-12			2-12			2-12		
TOC ELEVATION	9.99			10.04			10.03			9.27			9.62		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
4/26/2018	5.16	4.83		5.31	4.73		5.12	4.91		5.32	3.95		5.19	4.43	
10/29/2018										5.09	4.18		4.99	4.63	
8/8/2023	5.03	4.96		5.06	4.98		4.97	5.06		5.16	4.11		5.04	4.58	
11/14/2023	4.56	5.43													

TABLE 8: GROUNDWATER ELEVATION SUMMARY

Site Name: Cumberland Farms #0963

FDEP Facility ID No.: 48/8512797

WELL NO.	MW-6			MW-7D			MW-8			MW-9			MW-10		
DIAMETER	2			2			2			2			2		
WELL DEPTH	12			28			12			12			12		
SCREEN INTERVAL	2-12			23-28			2-12			2-12			2-12		
TOC ELEVATION	10.03			10.00			9.70			9.95			10.10		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
4/26/2018	5.12	4.91		5.54	4.46										
10/29/2018	4.90	5.13					4.90	4.80		4.86	5.09		4.92	5.18	
8/8/2023	4.97	5.06		5.06	4.94		5.04	4.66		4.94	5.01		4.99	5.11	
11/14/2023	4.51	5.52					4.55	5.15		4.47	5.48				

TABLE 8: GROUNDWATER ELEVATION SUMMARY

Site Name: Cumberland Farms #0963

FDEP Facility ID No.: 48/8512797

WELL NO.	MW-11			DW-1											
DIAMETER	2			1											
WELL DEPTH	12			30											
SCREEN INTERVAL	2-12			25-30											
TOC ELEVATION	9.61			10.19											
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
4/26/2018															
10/29/2018	4.44	5.17		4.93	5.26										
8/8/2023	4.46	5.15		5.00	5.19										
11/14/2023				4.56	5.63										

All Measurements = Feet (ft)

Elev = Elevation

DTW = Depth to Water

TOC = Top of Casing FP = Liquid Phase Hydrocarbon Thickness

APPENDIX A

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Cumberland Farms # 0963
 Location 3400 Edgewater Drive Date 8/18/23
 Project / Client Orlando, FL
 (GWS)

F.

FAK ID# 4818512797

HC

HCR #129478.02.31

7:

5:45 - Michael Troeller (MT) & Dylan Bern (DB)
 of Handex mob to site w/
 Nissan Truck #1018.

8:0

10:

10:

10:3

10:4

10:5

10:5

10:5

10:5

10:5

10:5

10:5

10:5

10:5

10:5

10:5

10:5

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10:5

10:5

10:5

10:5

10:5

10:5

10:5

8:00 - MT & DB arrive on site, review
 HASP & SOW. Sign HASP

Weather: 85°, sunny, rising to high 90s

8:10 - Open wells

8:15 - Calibrate equipment

8:40 - Gauge wells

Well	DTW
MW-1	4.96
MW-2	4.98
MW-3	5.06
MW-4	4.11
MW-5	4.58
MW-6	5.06
MW-7D	4.94
MW-8	4.66
MW-9	5.01
MW-10	5.11
MW-11	5.15
DW-1	5.19

Continued to page 21 →

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8/18/23

Cumberland Farms #0963

Location 3400 Edgewater Drive Date 8/18/23

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Project / Client
Orlando, FL
(GWS)

FAC ID #48/85/2797

HCR #129478.02.31

← Continued from page 20

9:10 - begin purging DW-1

9:30 - sample DW-1

9:44 - begin purging MW-70

10:25 - sample MW-70

10:41 - begin purging MW-8

11:03 - sample MW-8

11:17 - begin purging MW-2

11:36 - sample MW-2

11:59 - begin purging MW-5

12:17 - sample MW-5

12:40 - begin purging MW-4

13:03 - sample MW-4

13:10 - calibrate YSI turbidity meter

13:45 - mob, offsite to office

15:5 - arrive at office, EOD

EOD

MO 8/18/23

1/23

Putnam

MOB

1 of 2

Location Orlando, FL

Date 8/8/23 27

Project / Client

6:00 Depart TPA office. MOB to
Orlando, FL to CFI Site
8:00 Arrive at CFI Site
9:12 Begin purging MW-6
9:47 Begin Purging MW-9
10:00 Stop Purging MW-9
10:29 Collect Sample for MW-9
10:40 Begin Purging MW-3
11:00 Stop purging MW-3
11:01 Collect Samples for MW-3
11:20 Begin Purging MW-1
11:41 Stop purging MW-1
11:42 Collect sample for MW-1
11:59 Begin Purging MW-10
12:20 Stop purging MW-10
12:41 Collect Samples for MW-10
12:47 Begin purging MW-11
13:00 stop purging MW-11
13:01 Collect Samples for MW-11
13:15 - calibrate equipment
13:45 - mob to office.
15:15 - arrive at tampa office, EOD

EOD

~~8/8/23~~

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-1		DATE: 8/8/23	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 4.96	PURGE PUMP TYPE OR BAILER: P.P
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\text{12} \text{ feet} - \text{4.96} \text{ feet}) \times \text{0.16} \text{ gallons/foot} = \text{1.13} \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Dylan B...		SAMPLER(S) SIGNATURE(S): HCR [Signature]			SAMPLING INITIATED AT: 11:42		SAMPLING ENDED AT: 11:45		
PUMP OR TUBING DEPTH IN WELL (feet): 7.00		TUBING MATERIAL CODE: HDPE, S			FIELD-FILTERED: Y (N)		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N) (replaced)			DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-1	3	CG	40	HCl	-	-	BTEX-MTB	APP	150
MW-1	1	AG	250	H2SO4	-	-	E.PRO-PAH	APP	280
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: $\pm 0.2^{\circ}\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater) Revision Date: February 12, 2009
Form FD 9000-24

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: + 0.2 units Temperature: + 0.2 °C Specific Conductance: + 5% Dissolved Oxygen: all readings < 20% saturation (see Table FS 2200-2); optionally, + 0.2 mg/L or + 10% (whichever is greater) Turbidity: all readings < 20 NTU; optionally + 5 NTU or + 10% (whichever is greater) Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-3	SAMPLE ID: MW-3		DATE: 8/8/23

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-4		SAMPLE ID: MW-4	
		DATE: 8/8/22	

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1 1/4"	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 4 11	PURGE PUMP TYPE OR BAILER: 00
-------------------------------------	--	--	--	---

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

(only fill out if applicable)

$= (12 \text{ feet} - 4.1 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.26 \text{ gallons}$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

$$= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.00	PURGING INITIATED AT: 12:40	PURGING ENDED AT: 13:02	TOTAL VOLUME PURGED (gallons): 220
---	---	-----------------------------	-------------------------	------------------------------------

WELL CAPACITY (Gallons Per Foot): **0.75" = 0.02;** **1" = 0.04;** **1.25" = 0.06;** **2" = 0.16;** **3" = 0.37;** **4" = 0.65;** **5" = 1.02;** **6" = 1.47;** **12" = 5.88**
TUBING INSIDE DIA. CAPACITY (Gal./FT.): **1/8" = 0.0006;** **3/16" = 0.0014;** **1/4" = 0.0026;** **5/16" = 0.004;** **3/8" = 0.006;** **1/2" = 0.010;** **5/8" = 0.016**

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA	
SAMPLED BY (PRINT) / AFFILIATION: Michael Trueller HCR	SAMPLER(S) SIGNATURE(S):
SAMPLING INITIATED AT: 13:05	SAMPLING ENDED AT: 13:20

PUMP OR TUBING DEPTH IN WELL (feet): 6.00	TUBING MATERIAL CODE: HDPE, 5	FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type: ☒ 1 ☐ 2	FILTER SIZE: _____ μ m
--	----------------------------------	---	----------------------------

FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
------------------------	------	---	---	--------	---	--------------	------------	---	---

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-5	SAMPLE ID: MW-5		DATE: 8/8/23

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-6		DATE: 9/8/23	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-7D		SAMPLE ID: MW-7D	
		DATE: 8/8/23	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: M. chael Troellier				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 10:25		SAMPLING ENDED AT: 10:30	
PUMP OR TUBING DEPTH IN WELL (feet): 6.50				TUBING MATERIAL CODE: HDPE, S			FIELD-FILTERED: Y ☒ N ☐		Filtration Equipment Type:	
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)							DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
MW-7d	3	CG	40 mL	HCL	—	—	BTEX/mToc	APP	150	
MW-7d	1	AG	250 mL	H ₂ SO ₄	—	—	PAHs/FLPro	APP	200	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-8	SAMPLE ID: MW-8		DATE: 8/8/23

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-9	SAMPLE ID: MW-9	DATE: 8/8/23	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:	SAMPLING ENDED AT:	
<i>Dylan Barr HCR</i>				<i>[Signature]</i>			<i>10:09</i>	<i>10:13</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>7.00</i>				TUBING MATERIAL CODE: <i>HDPE-S</i>	FIELD-FILTERED: Y ☒ N ☐		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N ☐ (replaced)						DUPLICATE: Y ☒ N ☐			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
<i>MW-9</i>	<i>3</i>	<i>CG</i>	<i>40</i>	<i>HCl</i>	-	-	<i>BTEX-MIBE</i>	<i>APP</i>	<i>150</i>
<i>MW-9</i>	<i>1</i>	<i>AG</i>	<i>250</i>	<i>H₂SO₄</i>	-	-	<i>PAH-FLPRO</i>	<i>APP</i>	<i>200</i>
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-10		DATE: 8/8/23	

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 4 1/4"	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 5.11	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (12 \text{ feet} - 5.11 \text{ feet}) \times 0.64 \text{ gallons/foot} = 1.10 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

[illegible]

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-11		DATE: 8/8/23	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: DW-1		SAMPLE ID: DW-1	
		DATE: 8/8/23	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Michael Troeller HCR				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 9:30		SAMPLING ENDED AT: 9:35	
PUMP OR TUBING DEPTH IN WELL (feet): 8.00				TUBING MATERIAL CODE: HDPE, S			FIELD-FILTERED: Y ☒ N		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP Y ☒ N							TUBING Y ☒ N (replaced)		DUPLICATE: Y ☒ N	
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
DW-1	3	CG	40 mL	HCl	-	-	BTEX/M+be	APP	150	
DW-1	1	AG	250 mL	H ₂ SO ₄	-	-	PAHs/FL#o	APP	200	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

CALIBRATION LOG

Project Name: Cumberland Farms #0963 Project Number: 129478.02.31
 Sampler(s) Name: Michael Troeller Date: 8/8/23
 Multi-Meter: WT Pro Control HCR Equip: WT Pro Control
 Make/Model: 210101764 Number: 19092194

Boxed "X" this box if there is qualified data on this page
 Created: 2/17/2010

pH	Initials	Date	Time	Standard SU	Exp. Date	Lot #	Reading SU	Pass or Fail
(circle) CAL (ICV) CCV	MT	8/7/23	8:15	4.00	5/25	36E0156	3.91	(circle) P F
CAL (CV) CCV	MT	8/7/23	8:20	7.00	4/25	3601087	7.01	(circle) P F
CAL (ICV) CCV	MT	8/7/23	8:25	10.00	12/24	36L654	10.03	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:10	4.00	5/25	36E0156	4.02	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:15	7.00	4/25	3601087	7.03	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:20	10.00	12/24	36L654	10.01	(circle) P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 0.2 SU

Specific Conductance	Initials	Date	Time	Standard µS/cm	Exp. Date	Lot #	Reading µS/cm	Pass or Fail
(circle) CAL (ICV) CCV	MT	8/7/23	8:30	1413	6/24	36F0205	1415	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:25	1413	6/24	36F0205	1412	(circle) P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 5%

Dissolved Oxygen	Initials	Date	Time	mg/L	Temp °C	% DO	Saturation mg/L	Pass or Fail
(circle) CAL (ICV) CCV	MT	8/7/23	8:35	7.85	28.1	100	(from chart) 7.814	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:30	7.77	28.6	100	7.745	(circle) P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 0.3 mg/L

Turbidity	Initials	Date	Time	Standard NTU	Exp. Date	Lot #	Reading NTU	Pass or Fail
(circle) CAL (ICV) CCV	MT	8/7/23	8:17	40.10	08/24	530	0.02	(circle) P F
CAL (ICV) CCV	MT	8/7/23	8:22	20			20.1	(circle) P F
CAL (ICV) CCV	MT	8/7/23	8:27	100			100	(circle) P F
CAL (ICV) CCV	MT	8/7/23	8:33	800			801	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:12	40.10			0.02	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:17	20			20.2	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:22	100			99.8	(circle) P F
CAL ICV (CCV)	MT	8/7/23	13:27	800			809	(circle) P F
CAL ICV CCV								P F

Acceptance Criteria: 0.1-10 NTU: +/-10% 11-40 NTU: +/- 8% 41-100 NTU: +/- 6.5% >100 NTU: +/- 5% of Standard Value

Codes: CAL = Calibration (Calibration Mode) ICV = Initial Calibration Verification (Run Mode) CCV = Continuing Calibration Verification (Run Mode)

Maintenance: Conductivity Probe Cleaned? Yes No (circle)

DO Membrane Changed? Yes No (circle)

Notes/Comments:

CALIBRATION LOG

Project Name: CFI 0943

Project Number: 129478.02.31

Sampler(s) Name: Dylan Barl

Date: 8/8/23

Multi-Meter PDO 9043 HCR Equip
Make/Model: 22510437 Number: _____

Turbidimeter 6044 HCR Equip
Make/Model: 22114400 Number: _____

Boldly "X" this box if there is qualified data on this page

Created: 2/17/2010

pH	Initials	Date	Time	Standard SU	Exp. Date	Lot #	Reading SU	Pass or Fail
CAL ☒ CCV	DB	8/8/23	8:15	4.00	5/25	3650156	4.04	☒ F
CAL ☒ CCV	DB		8:20	7.00	4/25	3601087	7.03	☒ F
CAL ☒ CCV	DB		8:25	10.00	4/25	3601219	10.06	☒ F
CAL ☒ CCV	DB		13:15	4.00	5/25	3650156	4.01	☒ F
CAL ☒ CCV	DB		13:20	7.00	4/25	3601087	7.01	☒ F
CAL ☒ CCV	DB		13:25	10.00	4/25	3601219	10.04	☒ F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 0.2 SU

Specific Conductance	Initials	Date	Time	Standard μ S/cm	Exp. Date	Lot #	Reading μ S/cm	Pass or Fail
CAL ☒ CCV	DB	8/8/23	8:30	1413	6/24	36F0205	1414	☒ F
CAL ☒ CCV	DB	8/8/23	13:30	1413	6/24	36F0205	1415	☒ F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 5%

Dissolved Oxygen	Initials	Date	Time	mg/L	Temp $^{\circ}$ C	% DO	Saturation mg/L	Pass or Fail
CAL ☒ CCV	DB	8/8/23	8:35	7.82	28.2	100	7.800	☒ F
CAL ☒ CCV	DB	8/8/23	13:35	7.74	28.7	100	7.782	☒ F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 0.3 mg/L

Turbidity	Initials	Date	Time	Standard NTU	Exp. Date	Lot #	Reading NTU	Pass or Fail
CAL ☒ CCV	DB	8/8/23	8:17	20.10	11/24	550	0.02	☒ F
CAL ☒ CCV	DB		8:24	20			89.8	☒ F
CAL ☒ CCV	DB		8:27	100			99.7	☒ F
CAL ☒ CCV	DB		8:32	800			799	☒ F
CAL ☒ CCV	DB		13:17	20.10			0.02	☒ F
CAL ☒ CCV	DB		13:22	20			80.0	☒ F
CAL ☒ CCV	DB		13:27	100			100.2	☒ F
CAL ☒ CCV	DB		13:32	800			803	☒ F
CAL ICV CCV								P F

Acceptance Criteria: 0.1-10 NTU: +/-10% 11-40 NTU: +/- 8% 41-100 NTU: +/- 6.5% >100 NTU: +/- 5% of Standard Value

Codes: CAL = Calibration (Calibration Mode) ICV = Initial Calibration Verification (Run Mode) CCV = Continuing Calibration Verification (Run Mode)

Maintenance: Conductivity Probe Cleaned? Yes No (circle)

DO Membrane Changed? Yes No (circle)

Notes/Comments: _____



Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813) 630-9616
Fax: (813) 630-4327

FINAL

Workorder: Cumberland Farms #0963 (T2315574)

August 30, 2023

Steve Kinsella
Handex Consulting & Remediation, LLC
1202 Tech Blvd., Suite 204
Tampa, FL 33619

RE: Workorder: T2315574 Cumberland Farms #0963

Dear Steve Kinsella:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday August 8, 2023. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sue Bell, Sr Project Manager
SBell@aellab.com

Certificate of Analysis

This report shall not be reproduced, except in full,
without the written consent of Advanced Environmental Laboratories, Inc.



NELAP Accredited E84589



FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2315574001	MW-1	WA	FL-PRO	08/08/2023 11:42	08/08/2023 14:43	1	NA
T2315574001	MW-1	WA	SW-846 8260D	08/08/2023 11:42	08/08/2023 14:43	5	NA
T2315574001	MW-1	WA	SW-846 8270C (SIM)	08/08/2023 11:42	08/08/2023 14:43	18	NA
T2315574002	MW-2	WA	FL-PRO	08/08/2023 11:36	08/08/2023 14:43	1	NA
T2315574002	MW-2	WA	SW-846 8260D	08/08/2023 11:36	08/08/2023 14:43	5	NA
T2315574002	MW-2	WA	SW-846 8270C (SIM)	08/08/2023 11:36	08/08/2023 14:43	18	NA
T2315574003	MW-3	WA	FL-PRO	08/08/2023 11:01	08/08/2023 14:43	1	NA
T2315574003	MW-3	WA	SW-846 8260D	08/08/2023 11:01	08/08/2023 14:43	5	NA
T2315574003	MW-3	WA	SW-846 8270C (SIM)	08/08/2023 11:01	08/08/2023 14:43	18	NA
T2315574004	MW-4	WA	FL-PRO	08/08/2023 13:03	08/08/2023 14:43	1	NA
T2315574004	MW-4	WA	SW-846 8260D	08/08/2023 13:03	08/08/2023 14:43	5	NA
T2315574004	MW-4	WA	SW-846 8270C (SIM)	08/08/2023 13:03	08/08/2023 14:43	18	NA
T2315574005	MW-5	WA	FL-PRO	08/08/2023 12:17	08/08/2023 14:43	1	NA
T2315574005	MW-5	WA	SW-846 8260D	08/08/2023 12:17	08/08/2023 14:43	5	NA
T2315574005	MW-5	WA	SW-846 8270C (SIM)	08/08/2023 12:17	08/08/2023 14:43	18	NA
T2315574006	MW-6	WA	FL-PRO	08/08/2023 09:33	08/08/2023 14:43	1	NA
T2315574006	MW-6	WA	SW-846 8260D	08/08/2023 09:33	08/08/2023 14:43	5	NA
T2315574006	MW-6	WA	SW-846 8270C (SIM)	08/08/2023 09:33	08/08/2023 14:43	18	NA
T2315574007	MW-7D	WA	FL-PRO	08/08/2023 10:25	08/08/2023 14:43	1	NA
T2315574007	MW-7D	WA	SW-846 8260D	08/08/2023 10:25	08/08/2023 14:43	5	NA
T2315574007	MW-7D	WA	SW-846 8270C (SIM)	08/08/2023 10:25	08/08/2023 14:43	18	NA
T2315574008	MW-8	WA	FL-PRO	08/08/2023 11:03	08/08/2023 14:43	1	NA
T2315574008	MW-8	WA	SW-846 8260D	08/08/2023 11:03	08/08/2023 14:43	5	NA
T2315574008	MW-8	WA	SW-846 8270C (SIM)	08/08/2023 11:03	08/08/2023 14:43	18	NA
T2315574009	MW-9	WA	FL-PRO	08/08/2023 10:09	08/08/2023 14:43	1	NA
T2315574009	MW-9	WA	SW-846 8260D	08/08/2023 10:09	08/08/2023 14:43	5	NA
T2315574009	MW-9	WA	SW-846 8270C (SIM)	08/08/2023 10:09	08/08/2023 14:43	18	NA
T2315574010	MW-10	WA	FL-PRO	08/08/2023 12:21	08/08/2023 14:43	1	NA
T2315574010	MW-10	WA	SW-846 8260D	08/08/2023 12:21	08/08/2023 14:43	5	NA
T2315574010	MW-10	WA	SW-846 8270C (SIM)	08/08/2023 12:21	08/08/2023 14:43	18	NA
T2315574011	MW-11	WA	FL-PRO	08/08/2023 13:09	08/08/2023 14:43	1	NA
T2315574011	MW-11	WA	SW-846 8260D	08/08/2023 13:09	08/08/2023 14:43	5	NA
T2315574011	MW-11	WA	SW-846 8270C (SIM)	08/08/2023 13:09	08/08/2023 14:43	18	NA
T2315574012	DW-1	WA	FL-PRO	08/08/2023 09:30	08/08/2023 14:43	1	NA
T2315574012	DW-1	WA	SW-846 8260D	08/08/2023 09:30	08/08/2023 14:43	5	NA

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2315574012	DW-1	WA	SW-846 8270C (SIM)	08/08/2023 09:30	08/08/2023 14:43	18	NA

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Workorder Summary

Batch Comments

MSVt/7234 - 8260D Analysis, Water

The following sample was run at dilution due to turbidity: T2315450001. The dilution was required to prevent sedimentation and matrix interference from effecting accurate analyte detection and quantification.

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results Qualifiers

Parameter Qualifiers

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Lab Qualifiers

- T DOH Certification #E84589 (FL NELAC) AEL-Tampa

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574001
Sample ID: MW-1

Date Collected: 08/08/2023 11:42
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	810	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 15:37	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	7.2	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 11:06	T
2-Methylnaphthalene	6.6	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 11:06	T
Acenaphthene	0.067 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 11:06	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 11:06	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 11:06	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 11:06	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 11:06	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 11:06	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 11:06	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 11:06	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 11:06	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 11:06	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 11:06	T
Fluorene	0.038 I	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 11:06	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 11:06	T
Naphthalene	16	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 11:06	T
Phenanthrene	0.042 I	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 11:06	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 11:06	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 22:08	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 22:08	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 22:08	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 22:08	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 22:08	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	25	69	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	26	71	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	29	79	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	390	71	40 - 129	T
o-Terphenyl (S)	ug/L	180	230	127	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	61	123	70 - 128	T
Toluene-d8 (S)	ug/L	50	56	113	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	60	120	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574002
Sample ID: MW-2

Date Collected: 08/08/2023 11:36
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 16:07	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 11:35	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 11:35	T
Acenaphthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 11:35	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 11:35	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 11:35	T
Benzo[a]anthracene	0.049 I	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 11:35	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 11:35	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 11:35	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 11:35	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 11:35	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 11:35	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 11:35	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 11:35	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 11:35	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 11:35	T
Naphthalene	0.14 I	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 11:35	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 11:35	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 11:35	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 19:34	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 19:34	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 19:34	T
Toluene	1.4	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 19:34	T
Xylene (Total)	7.0	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 19:34	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	27	75	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	28	76	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	30	81	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	350	65	40 - 129	T
o-Terphenyl (S)	ug/L	180	170	93	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	56	113	70 - 128	T
Toluene-d8 (S)	ug/L	50	55	110	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	48	96	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574003
Sample ID: MW-3

Date Collected: 08/08/2023 11:01
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 16:36	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 02:59	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 02:59	T
Acenaphthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 02:59	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 02:59	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 02:59	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 02:59	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 02:59	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 02:59	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 02:59	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 02:59	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 02:59	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 02:59	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 02:59	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 02:59	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 02:59	T
Naphthalene	0.050 U	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 02:59	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 02:59	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 02:59	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 20:26	T
Ethylbenzene	1.5	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 20:26	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 20:26	T
Toluene	0.81 I	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 20:26	T
Xylene (Total)	3.2	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 20:26	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	26	73	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	28	76	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	32	87	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	380	69	40 - 129	T
o-Terphenyl (S)	ug/L	180	230	126	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	55	110	70 - 128	T
Toluene-d8 (S)	ug/L	50	59	117	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	51	103	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574004
Sample ID: MW-4

Date Collected: 08/08/2023 13:03
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 17:06	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 03:27	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 03:27	T
Acenaphthene	0.086 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 03:27	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 03:27	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 03:27	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 03:27	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 03:27	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 03:27	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 03:27	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 03:27	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 03:27	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 03:27	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 03:27	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 03:27	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 03:27	T
Naphthalene	0.050 U	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 03:27	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 03:27	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 03:27	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 20:51	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 20:51	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 20:51	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 20:51	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 20:51	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	24	65	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	26	73	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	29	80	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	420	77	40 - 129	T
o-Terphenyl (S)	ug/L	180	240	131	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	45	90	70 - 128	T
Toluene-d8 (S)	ug/L	50	56	112	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	54	109	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574005
Sample ID: MW-5

Date Collected: 08/08/2023 12:17
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 17:35	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 03:56	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 03:56	T
Acenaphthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 03:56	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 03:56	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 03:56	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 03:56	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 03:56	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 03:56	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 03:56	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 03:56	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 03:56	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 03:56	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 03:56	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 03:56	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 03:56	T
Naphthalene	0.17 I	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 03:56	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 03:56	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 03:56	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 21:17	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 21:17	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 21:17	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 21:17	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 21:17	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	27	74	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	30	82	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	31	86	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	360	65	40 - 129	T
o-Terphenyl (S)	ug/L	180	240	133	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	58	117	70 - 128	T
Toluene-d8 (S)	ug/L	50	59	118	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	58	115	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574006	Date Collected: 08/08/2023 09:33			Matrix: Water				
Sample ID: MW-6	Date Received: 08/08/2023 14:43							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	4000	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 18:04	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	53	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 04:25	T
2-Methylnaphthalene	97	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 04:25	T
Acenaphthene	0.15 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 04:25	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 04:25	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 04:25	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 04:25	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 04:25	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 04:25	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 04:25	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 04:25	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 04:25	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 04:25	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 04:25	T
Fluorene	0.11 I	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 04:25	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 04:25	T
Naphthalene	280	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 04:25	T
Phenanthrene	0.050 I	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 04:25	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 04:25	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	43	ug/L	1.0	0.28	1	08/14/2023 12:15	08/14/2023 21:43	T
Ethylbenzene	2.3	ug/L	1.0	0.56	1	08/14/2023 12:15	08/14/2023 21:43	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 12:15	08/14/2023 21:43	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 12:15	08/14/2023 21:43	T
Xylene (Total)	5.2	ug/L	2.0	1.3	1	08/14/2023 12:15	08/14/2023 21:43	T





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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	27	73	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	28	77	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	28	76	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	340	62	40 - 129	T
o-Terphenyl (S)	ug/L	180	220	119	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	50	99	70 - 128	T
Toluene-d8 (S)	ug/L	50	47	95	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	51	102	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574007
Sample ID: MW-7D

Date Collected: 08/08/2023 10:25
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 18:33	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 04:53	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 04:53	T
Acenaphthene	0.10 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 04:53	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 04:53	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 04:53	T
Benzo[a]anthracene	0.043 I	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 04:53	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 04:53	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 04:53	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 04:53	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 04:53	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 04:53	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 04:53	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 04:53	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 04:53	T
Indeno[1,2,3-cd]pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 04:53	T
Naphthalene	0.15 I	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 04:53	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 04:53	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 04:53	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 23:26	08/15/2023 07:58	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 23:26	08/15/2023 07:58	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 23:26	08/15/2023 07:58	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 23:26	08/15/2023 07:58	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 23:26	08/15/2023 07:58	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	28	77	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	29	81	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	32	89	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	360	66	40 - 129	T
o-Terphenyl (S)	ug/L	180	230	126	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	52	103	70 - 128	T
Toluene-d8 (S)	ug/L	50	50	100	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	55	110	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574008
Sample ID: MW-8

Date Collected: 08/08/2023 11:03
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	590 I	ug/L	680	570	1	08/11/2023 13:15	08/14/2023 19:04	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.79	ug/L	0.20	0.043	1	08/11/2023 13:15	08/12/2023 01:33	T
2-Methylnaphthalene	1.8	ug/L	0.20	0.032	1	08/11/2023 13:15	08/12/2023 01:33	T
Acenaphthene	0.028 U	ug/L	0.20	0.028	1	08/11/2023 13:15	08/12/2023 01:33	T
Acenaphthylene	0.032 U	ug/L	0.20	0.032	1	08/11/2023 13:15	08/12/2023 01:33	T
Anthracene	0.053 U	ug/L	0.20	0.053	1	08/11/2023 13:15	08/12/2023 01:33	T
Benzo[a]anthracene	0.042 U	ug/L	0.20	0.042	1	08/11/2023 13:15	08/12/2023 01:33	T
Benzo[a]pyrene	0.036 U	ug/L	0.20	0.036	1	08/11/2023 13:15	08/12/2023 01:33	T
Benzo[b]fluoranthene	0.043 U	ug/L	0.10	0.043	1	08/11/2023 13:15	08/12/2023 01:33	T
Benzo[g,h,i]perylene	0.045 U	ug/L	0.20	0.045	1	08/11/2023 13:15	08/12/2023 01:33	T
Benzo[k]fluoranthene	0.027 U	ug/L	0.20	0.027	1	08/11/2023 13:15	08/12/2023 01:33	T
Chrysene	0.031 U	ug/L	0.20	0.031	1	08/11/2023 13:15	08/12/2023 01:33	T
Dibenzo[a,h]anthracene	0.053 U	ug/L	0.20	0.053	1	08/11/2023 13:15	08/12/2023 01:33	T
Fluoranthene	0.038 U	ug/L	0.20	0.038	1	08/11/2023 13:15	08/12/2023 01:33	T
Fluorene	0.038 U	ug/L	0.20	0.038	1	08/11/2023 13:15	08/12/2023 01:33	T
Indeno(1,2,3-cd)pyrene	0.042 U	ug/L	0.20	0.042	1	08/11/2023 13:15	08/12/2023 01:33	T
Naphthalene	4.6	ug/L	0.20	0.055	1	08/11/2023 13:15	08/12/2023 01:33	T
Phenanthrene	0.036 U	ug/L	0.20	0.036	1	08/11/2023 13:15	08/12/2023 01:33	T
Pyrene	0.037 U	ug/L	0.20	0.037	1	08/11/2023 13:15	08/12/2023 01:33	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.63 I	ug/L	1.0	0.28	1	08/14/2023 23:26	08/15/2023 08:50	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 23:26	08/15/2023 08:50	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 23:26	08/15/2023 08:50	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 23:26	08/15/2023 08:50	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 23:26	08/15/2023 08:50	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	40	26	65	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	40	29	71	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	40	33	83	41 - 138	T
Nonatricontane-C39 (S)	ug/L	600	390	66	40 - 129	T
o-Terphenyl (S)	ug/L	200	250	123	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	50	99	70 - 128	T
Toluene-d8 (S)	ug/L	50	50	99	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	50	99	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574009	Date Collected: 08/08/2023 10:09			Matrix: Water				
Sample ID: MW-9	Date Received: 08/08/2023 14:43							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	15000	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 23:27	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	130	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 05:22	T
2-Methylnaphthalene	230	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 05:22	T
Acenaphthene	0.34	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 05:22	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 05:22	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 05:22	T
Benzo[a]anthracene	0.041 I	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 05:22	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 05:22	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 05:22	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 05:22	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 05:22	T
Chrysene	0.034 I	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 05:22	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 05:22	T
Fluoranthene	0.045 I	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 05:22	T
Fluorene	0.25	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 05:22	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 05:22	T
Naphthalene	990	ug/L	0.91	0.25	5	08/11/2023 13:15	08/29/2023 00:03	T
Phenanthrene	0.15 I	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 05:22	T
Pyrene	0.037 I	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 05:22	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	1100	ug/L	100	28	100	08/15/2023 15:16	08/16/2023 19:41	T
Ethylbenzene	5000	ug/L	100	56	100	08/15/2023 15:16	08/16/2023 19:41	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/15/2023 15:16	08/15/2023 21:18	T
Toluene	12	ug/L	1.0	0.66	1	08/15/2023 15:16	08/15/2023 21:18	T
Xylene (Total)	47	ug/L	2.0	1.3	1	08/15/2023 15:16	08/15/2023 21:18	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	29	80	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	38	104	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	30	83	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	380	70	40 - 129	T
o-Terphenyl (S)	ug/L	180	240	134	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	41	81	70 - 128	T
Toluene-d8 (S)	ug/L	50	50	100	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	48	96	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574010
Sample ID: MW-10

Date Collected: 08/08/2023 12:21
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 20:32	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 05:51	T
2-Methylnaphthalene	0.031 I	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 05:51	T
Acenaphthene	0.032 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 05:51	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 05:51	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 05:51	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 05:51	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 05:51	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 05:51	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 05:51	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 05:51	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 05:51	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 05:51	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 05:51	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 05:51	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 05:51	T
Naphthalene	0.45	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 05:51	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 05:51	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 05:51	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 23:26	08/15/2023 07:33	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 23:26	08/15/2023 07:33	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 23:26	08/15/2023 07:33	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 23:26	08/15/2023 07:33	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 23:26	08/15/2023 07:33	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	25	69	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	25	69	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	21	58	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	380	69	40 - 129	T
o-Terphenyl (S)	ug/L	180	210	117	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	54	109	70 - 128	T
Toluene-d8 (S)	ug/L	50	48	97	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	56	112	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574011
Sample ID: MW-11

Date Collected: 08/08/2023 13:09
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	560 I	ug/L	620	520	1	08/11/2023 13:15	08/14/2023 22:29	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	1.4	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 06:19	T
2-Methylnaphthalene	1.7	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 06:19	T
Acenaphthene	0.033 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 06:19	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 06:19	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 06:19	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 06:19	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 06:19	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	08/11/2023 13:15	08/12/2023 06:19	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	08/11/2023 13:15	08/12/2023 06:19	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 06:19	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 06:19	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 06:19	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 06:19	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	08/11/2023 13:15	08/12/2023 06:19	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	08/11/2023 13:15	08/12/2023 06:19	T
Naphthalene	0.69	ug/L	0.18	0.050	1	08/11/2023 13:15	08/12/2023 06:19	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 06:19	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 06:19	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 23:26	08/15/2023 07:07	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 23:26	08/15/2023 07:07	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 23:26	08/15/2023 07:07	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 23:26	08/15/2023 07:07	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 23:26	08/15/2023 07:07	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	26	72	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	26	72	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	28	78	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	330	61	40 - 129	T
o-Terphenyl (S)	ug/L	180	230	125	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	53	105	70 - 128	T
Toluene-d8 (S)	ug/L	50	50	99	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	57	114	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Lab ID: T2315574012
Sample ID: DW-1

Date Collected: 08/08/2023 09:30
Date Received: 08/08/2023 14:43

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	510 U	ug/L	610	510	1	08/11/2023 13:15	08/14/2023 22:58	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 06:48	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 06:48	T
Acenaphthene	0.15 I	ug/L	0.18	0.025	1	08/11/2023 13:15	08/12/2023 06:48	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	08/11/2023 13:15	08/12/2023 06:48	T
Anthracene	0.047 U	ug/L	0.18	0.047	1	08/11/2023 13:15	08/12/2023 06:48	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 06:48	T
Benzo[a]pyrene	0.032 U	ug/L	0.18	0.032	1	08/11/2023 13:15	08/12/2023 06:48	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.089	0.039	1	08/11/2023 13:15	08/12/2023 06:48	T
Benzo[g,h,i]perylene	0.040 U	ug/L	0.18	0.040	1	08/11/2023 13:15	08/12/2023 06:48	T
Benzo[k]fluoranthene	0.024 U	ug/L	0.18	0.024	1	08/11/2023 13:15	08/12/2023 06:48	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	08/11/2023 13:15	08/12/2023 06:48	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	08/11/2023 13:15	08/12/2023 06:48	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 06:48	T
Fluorene	0.034 U	ug/L	0.18	0.034	1	08/11/2023 13:15	08/12/2023 06:48	T
Indeno(1,2,3-cd)pyrene	0.038 U	ug/L	0.18	0.038	1	08/11/2023 13:15	08/12/2023 06:48	T
Naphthalene	0.64	ug/L	0.18	0.049	1	08/11/2023 13:15	08/12/2023 06:48	T
Phenanthrene	0.032 U	ug/L	0.18	0.032	1	08/11/2023 13:15	08/12/2023 06:48	T
Pyrene	0.033 U	ug/L	0.18	0.033	1	08/11/2023 13:15	08/12/2023 06:48	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	08/14/2023 23:26	08/15/2023 08:24	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	08/14/2023 23:26	08/15/2023 08:24	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	08/14/2023 23:26	08/15/2023 08:24	T
Toluene	0.66 U	ug/L	1.0	0.66	1	08/14/2023 23:26	08/15/2023 08:24	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	08/14/2023 23:26	08/15/2023 08:24	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	24	67	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	23	66	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	26	72	41 - 138	T
Nonatricontane-C39 (S)	ug/L	540	300	56	40 - 129	T
o-Terphenyl (S)	ug/L	180	210	115	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	50	101	70 - 128	T
Toluene-d8 (S)	ug/L	50	51	103	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	52	104	86 - 123	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Results

QC Batch: GCST/3682 Analysis Method: FL-PRO
Preparation Method: FL-PRO
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006, T2315574007, T2315574008, T2315574009, T2315574010, T2315574011, T2315574012

Method Blank(4911147)

Parameter	Results	Units	PQL	MDL	Lab
TPH	570 U	ug/L	680	570	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.45	75	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.22	112	66 - 139	T

Lab Control Sample (4911148)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	ug/L	3400	3200	94	53 - 121	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.40	66	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.24	118	66 - 139	T

Matrix Spike (4911149); Matrix Spike Duplicate (4911150); Original (T2315574008); Parent Lab Sample (T2315574008)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	ug/L	3400	3600	90	53 - 121	3700	92	2	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.45	75	40 - 129	0.44	74	1	20	T
o-Terphenyl (S)	mg/L	0.20	0.26	129	66 - 139	0.27	137	6	20	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Results

QC Batch: MSS1/2654 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006, T2315574007, T2315574008, T2315574009, T2315574010, T2315574011, T2315574012

Method Blank(4911143)

Parameter	Results	Units	PQL	MDL	Lab
Naphthalene	0.055 U	ug/L	0.20	0.055	T
2-Methylnaphthalene	0.032 U	ug/L	0.20	0.032	T
1-Methylnaphthalene	0.043 U	ug/L	0.20	0.043	T
Acenaphthylene	0.032 U	ug/L	0.20	0.032	T
Acenaphthene	0.028 U	ug/L	0.20	0.028	T
Fluorene	0.038 U	ug/L	0.20	0.038	T
Phenanthrene	0.036 U	ug/L	0.20	0.036	T
Anthracene	0.053 U	ug/L	0.20	0.053	T
Fluoranthene	0.038 U	ug/L	0.20	0.038	T
Pyrene	0.037 U	ug/L	0.20	0.037	T
Benzo[a]anthracene	0.042 U	ug/L	0.20	0.042	T
Chrysene	0.031 U	ug/L	0.20	0.031	T
Benzo[b]fluoranthene	0.043 U	ug/L	0.10	0.043	T
Benzo[k]fluoranthene	0.027 U	ug/L	0.20	0.027	T
Benzo[a]pyrene	0.036 U	ug/L	0.20	0.036	T
Indeno(1,2,3-cd)pyrene	0.042 U	ug/L	0.20	0.042	T
Dibenzo[a,h]anthracene	0.053 U	ug/L	0.20	0.053	T
Benzo[g,h,i]perylene	0.045 U	ug/L	0.20	0.045	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0310	76	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0340	86	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0330	82	41 - 138	T

Lab Control Sample (4911144)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Naphthalene	ug/L	20	14	72	43 - 120	T
2-Methylnaphthalene	ug/L	20	16	79	39 - 123	T
1-Methylnaphthalene	ug/L	20	15	75	41 - 123	T
Acenaphthylene	ug/L	20	14	70	35 - 121	T
Acenaphthene	ug/L	20	15	73	46 - 120	T
Fluorene	ug/L	20	15	76	48 - 124	T

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Dates and times are displayed using (-04:00)
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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Batch: MSS1/2654 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006, T2315574007, T2315574008, T2315574009, T2315574010, T2315574011, T2315574012

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Phenanthrene	ug/L	20	15	76	49 - 125	T
Anthracene	ug/L	20	17	87	49 - 127	T
Fluoranthene	ug/L	20	15	73	48 - 130	T
Pyrene	ug/L	20	16	80	48 - 131	T
Benzo[a]anthracene	ug/L	20	14	71	49 - 130	T
Chrysene	ug/L	20	15	73	49 - 130	T
Benzo[b]fluoranthene	ug/L	20	14	69	43 - 134	T
Benzo[k]fluoranthene	ug/L	20	11	56	44 - 134	T
Benzo[a]pyrene	ug/L	20	12	58	43 - 130	T
Indeno(1,2,3-cd)pyrene	ug/L	20	11	54	38 - 137	T
Dibenzo[a,h]anthracene	ug/L	20	10	52	34 - 141	T
Benzo[g,h,i]perylene	ug/L	20	11	56	34 - 138	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0250	63	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0290	71	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0270	69	41 - 138	T

Matrix Spike (4911145); Matrix Spike Duplicate (4911146); Original (T2315574008); Parent Lab Sample (T2315574008)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	ug/L	20	14	45	43 - 120	13	43	3	30	T
2-Methylnaphthalene	ug/L	20	13	54	39 - 123	12	52	2	30	T
1-Methylnaphthalene	ug/L	20	11	52	41 - 123	11	51	1	30	T
Acenaphthylene	ug/L	20	10	50	35 - 121	10	51	2	30	T
Acenaphthene	ug/L	20	11	53	46 - 120	11	53	1	30	T
Fluorene	ug/L	20	11	55	48 - 124	11	55	1	30	T
Phenanthrene	ug/L	20	12	59	49 - 125	12	58	2	30	T
Anthracene	ug/L	20	13	67	49 - 127	13	65	3	30	T
Fluoranthene	ug/L	20	12	62	48 - 130	12	59	5	30	T
Pyrene	ug/L	20	13	67	48 - 131	13	65	4	30	T
Benzo[a]anthracene	ug/L	20	12	61	49 - 130	12	58	5	30	T
Chrysene	ug/L	20	13	64	49 - 130	12	61	5	30	T
Benzo[b]fluoranthene	ug/L	20	13	63	43 - 134	12	60	6	30	T
Benzo[k]fluoranthene	ug/L	20	12	58	44 - 134	11	57	3	30	T

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Workorder: Cumberland Farms #0963 (T2315574)

QC Batch: MSS1/2654 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006, T2315574007, T2315574008, T2315574009, T2315574010, T2315574011, T2315574012

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[a]pyrene	ug/L	20	11	57	43 - 130	11	53	7	30	T
Indeno(1,2,3-cd)pyrene	ug/L	20	13	65	38 - 137	12	59	10	30	T
Dibenzo[a,h]anthracene	ug/L	20	12	60	34 - 141	11	55	9	30	T
Benzo[g,h,i]perylene	ug/L	20	13	64	34 - 138	11	57	11	30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0180	44	36 - 125	0.0180	45	1	30	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.02	50	34 - 139	0.02	51	3	30	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0260	64	41 - 138	0.0240	61	5	30	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Results

QC Batch: MSVt/7234 Analysis Method: SW-846 8260D
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006

Method Blank(4914260)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Benzene	0.28 U	ug/L	1.0	0.28	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	52	104	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	57	113	86 - 123	T
Toluene-d8 (S)	ug/L	50	56	112	77 - 119	T

Lab Control Sample (4914261); Lab Control Sample Duplicate (4914262); Parent Lab Sample (T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	ug/L	20	22	110	71 - 124	22	111	1	20	T
Benzene	ug/L	20	18	92	79 - 120	18	90	2	20	T
Toluene	ug/L	20	20	100	80 - 121	21	104	4	20	T
Ethylbenzene	ug/L	20	20	101	79 - 121	21	105	3	20	T
Xylene (Total)	ug/L	60	62	103	79 - 121	62	104	1	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	49	98	70 - 128	50	100	2		T
Bromofluorobenzene (S)	ug/L	50	49	98	86 - 123	48	96	2		T
Toluene-d8 (S)	ug/L	50	46	92	77 - 119	49	98	6		T

Matrix Spike (4914263); Original (T2315508005); Parent Lab Sample (T2315508005)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	ug/L	20	22	109	71 - 124	T
Benzene	ug/L	20	19	95	79 - 120	T
Toluene	ug/L	20	20	101	80 - 121	T
Ethylbenzene	ug/L	20	20	101	79 - 121	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Batch: MSVt/7234 **Analysis Method:** SW-846 8260D
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574001, T2315574002, T2315574003, T2315574004, T2315574005, T2315574006

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Xylene (Total)	ug/L	60	61	101	79 - 121	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	55	110	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	50	99	86 - 123	T
Toluene-d8 (S)	ug/L	50	52	104	77 - 119	T

QC Result Comments

Lab Control Sample - 4914261 - Xylene (Total)

J3|Lab QC Failure

Matrix Spike - 4914263 - Xylene (Total)

J4|Estimated Result

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Results

QC Batch: MSVt/7236 Analysis Method: SW-846 8260D
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574007, T2315574008, T2315574010, T2315574011, T2315574012

Method Blank(4914319)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Benzene	0.28 U	ug/L	1.0	0.28	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	48	95	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	53	105	86 - 123	T
Toluene-d8 (S)	ug/L	50	46	93	77 - 119	T

Lab Control Sample (4914320); Lab Control Sample Duplicate (4914321); Parent Lab Sample (T2315574007, T2315574008, T2315574010, T2315574011, T2315574012)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	ug/L	20	21	107	71 - 124	22	110	3	20	T
Benzene	ug/L	20	20	101	79 - 120	21	103	1	20	T
Toluene	ug/L	20	21	103	80 - 121	21	104	1	20	T
Ethylbenzene	ug/L	20	21	103	79 - 121	21	104	1	20	T
Xylene (Total)	ug/L	60	61	102	79 - 121	62	103	0	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	50	100	70 - 128	53	106	6		T
Bromofluorobenzene (S)	ug/L	50	50	100	86 - 123	50	100	1		T
Toluene-d8 (S)	ug/L	50	50	100	77 - 119	51	101	1		T

Matrix Spike (4914322); Original (T2315858006); Parent Lab Sample (T2315858006)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	ug/L	20	22	110	71 - 124	T
Benzene	ug/L	20	21	103	79 - 120	T
Toluene	ug/L	20	21	103	80 - 121	T
Ethylbenzene	ug/L	20	20	101	79 - 121	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Batch: MSVt/7236
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574007, T2315574008, T2315574010, T2315574011, T2315574012

Analysis Method: SW-846 8260D

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Xylene (Total)	ug/L	60	62	103	79 - 121	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	55	111	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	51	102	86 - 123	T
Toluene-d8 (S)	ug/L	50	51	102	77 - 119	T

QC Result Comments

Lab Control Sample - 4914320 - Xylene (Total)

J3|Lab QC Failure

Matrix Spike - 4914322 - Xylene (Total)

J4|Estimated Result

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Workorder: Cumberland Farms #0963 (T2315574)

QC Results

QC Batch: MSVt/7252
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574009

Analysis Method: SW-846 8260D

Method Blank(4917724)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Benzene	0.28 U	ug/L	1.0	0.28	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	47	94	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	59	117	86 - 123	T
Toluene-d8 (S)	ug/L	50	51	102	77 - 119	T

Lab Control Sample (4917725); Lab Control Sample Duplicate (4917726); Parent Lab Sample (T2315574009)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	ug/L	20	20	98	71 - 124	19	97	0	20	T
Benzene	ug/L	20	22	111	79 - 120	22	111	0	20	T
Toluene	ug/L	20	21	107	80 - 121	21	107	0	20	T
Ethylbenzene	ug/L	20	20	102	79 - 121	20	102	0	20	T
Xylene (Total)	ug/L	60	62	103	79 - 121	62	103	0	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	57	115	70 - 128	57	114	0		T
Bromofluorobenzene (S)	ug/L	50	51	102	86 - 123	53	106	4		T
Toluene-d8 (S)	ug/L	50	57	114	77 - 119	57	114	0		T

Matrix Spike (4917727); Original (T2315850004); Parent Lab Sample (T2315850004)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	ug/L	20	18	92	71 - 124	T
Benzene	ug/L	20	21	105	79 - 120	T
Toluene	ug/L	20	22	109	80 - 121	T
Ethylbenzene	ug/L	20	21	104	79 - 121	T
Xylene (Total)	ug/L	60	63	105	79 - 121	T

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FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Batch: MSVt/7252
Preparation Method: SW-846 5030B
Associated Lab IDs: T2315574009

Analysis Method: SW-846 8260D

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	54	108	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	51	102	86 - 123	T
Toluene-d8 (S)	ug/L	50	58	116	77 - 119	T





FINAL

Workorder: Cumberland Farms #0963 (T2315574)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSt/3682 - FL-PRO			
T2315574001	MW-1	EXTt/4609	FL-PRO
T2315574002	MW-2	EXTt/4609	FL-PRO
T2315574003	MW-3	EXTt/4609	FL-PRO
T2315574004	MW-4	EXTt/4609	FL-PRO
T2315574005	MW-5	EXTt/4609	FL-PRO
T2315574006	MW-6	EXTt/4609	FL-PRO
T2315574007	MW-7D	EXTt/4609	FL-PRO
T2315574008	MW-8	EXTt/4609	FL-PRO
T2315574009	MW-9	EXTt/4609	FL-PRO
T2315574010	MW-10	EXTt/4609	FL-PRO
T2315574011	MW-11	EXTt/4609	FL-PRO
T2315574012	DW-1	EXTt/4609	FL-PRO
MSSt/2654 - SW-846 8270C (SIM)			
T2315574001	MW-1	EXTt/4608	SW-846 3510C
T2315574002	MW-2	EXTt/4608	SW-846 3510C
T2315574003	MW-3	EXTt/4608	SW-846 3510C
T2315574004	MW-4	EXTt/4608	SW-846 3510C
T2315574005	MW-5	EXTt/4608	SW-846 3510C
T2315574006	MW-6	EXTt/4608	SW-846 3510C
T2315574007	MW-7D	EXTt/4608	SW-846 3510C
T2315574008	MW-8	EXTt/4608	SW-846 3510C
T2315574009	MW-9	EXTt/4608	SW-846 3510C
T2315574010	MW-10	EXTt/4608	SW-846 3510C
T2315574011	MW-11	EXTt/4608	SW-846 3510C
T2315574012	DW-1	EXTt/4608	SW-846 3510C
MSVt/7234 - SW-846 8260D			
T2315574001	MW-1	MSVt/7233	SW-846 5030B
T2315574002	MW-2	MSVt/7233	SW-846 5030B
T2315574003	MW-3	MSVt/7233	SW-846 5030B
T2315574004	MW-4	MSVt/7233	SW-846 5030B
T2315574005	MW-5	MSVt/7233	SW-846 5030B
T2315574006	MW-6	MSVt/7233	SW-846 5030B





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Workorder: Cumberland Farms #0963 (T2315574)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
MSVt/7236 - SW-846 8260D			
T2315574007	MW-7D	MSVt/7235	SW-846 5030B
T2315574008	MW-8	MSVt/7235	SW-846 5030B
T2315574010	MW-10	MSVt/7235	SW-846 5030B
T2315574011	MW-11	MSVt/7235	SW-846 5030B
T2315574012	DW-1	MSVt/7235	SW-846 5030B
MSVt/7252 - SW-846 8260D			
T2315574009	MW-9	MSVt/7251	SW-846 5030B

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Workorder: Cumberland Farms #0963 (T2315574)

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☐ Miramar: 10200 USA Today Way, FL 32025 • 850.889.2288 • Lab ID: E82025
☐ Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: E84589

☐ Altamonte Springs: 360 Northline Blvd., Ste. 1548, FL 32714 • 407.527.1594 • Lab ID: E83078
☐ Fort Myers: 13100 Versailles Terrace, Ste. 10, FL 33703 • 239.574.8730 • Lab ID: E84462
☐ Jacksonville: 6881 Southport Pkwy., FL 32216 • 904.363.8550 • Lab ID: E82974
☐ Tallahassee: 2625 North Meade St., Suite D, FL 32303 • 904.739.6274 • Lab ID: E81706



Client Name: HCR		Project Name: CUMBERLAND FARMS #0963						
Address: 1202 Tech Blvd., Suite 204								
Tampa, FL 33619								
Phone: 813.906.2994		Project Number: 129487.02.31						
FAX:		FACID# 8412797						
Contact: Steve Kinsella								
Sampled By: Michael Troeller/Dylan Barr		Special Instructions:						
Turn Around Time: ☐ STANDARD ☐ RUSH								
AEL Profile: 74775								
SAMPLE ID	SAMPLE DESCRIPTION	Grab Cont'd	SAMPLING DATE	TIME	MATRIX	NO. COUNT	ANALYSIS REQUIRED	LABORATORY
MW-1	MW-1	6	8/23	11:42	GW	4	FL-PRO / MTH	001
MW-2	MW-2	6		11:36	GW	4	PAHs	002
MW-3	MW-3	6		11:01	GW	4	Btc / MTH	003
MW-4	MW-4	6		13:03	GW	4		004
MW-5	MW-5	6		12:17	GW	4		005
MW-6	MW-6	6		9:33	GW	4		006
MW-7	MW-7	6		10:25	GW	4		007
MW-8	MW-8	6		11:03	GW	4		008
MW-9	MW-9	6		10:04	GW	4		009
MW-10	MW-10	6		12:21	GW	4		010

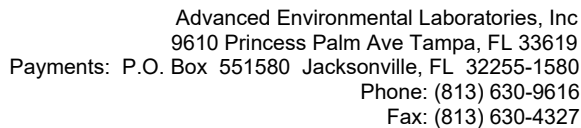
Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge
Received on Ice ☒ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked
DCN: AD-0051 Form last revised 08/07/2019

Requisitioned by: Steve Kinsella Date: 8/23/2023 Time: 14:43
Received by: Michael Troeller Date: 8/23/2023 Time: 14:43

Temp. when received (observed) 10 °C Temp. when received (corrected) 10 °C
Temp. when received (corrected) 10 °C Temp. when received (corrected) 10 °C
Temp. when received (corrected) 10 °C Temp. when received (corrected) 10 °C

FOR DRINKING WATER USE:
(When PWS information not otherwise supplied)
PWS ID: _____
Contact Person: _____ Phone: _____
Supplier of Water: _____
Site Address: _____





Workorder: Cumberland Farms #0963 (T2315574)

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APPENDIX B

Camberland Farms #0963

Location 3400 Edgewater Drive

Date 11/14/23

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Project / Client Orlando, FL

(GWS/SB's)

FAC ID #48/8512797

HER #129478.02.31

4:45 - Michael Trepper (MT) of Handex mob to site

7:00 - MT arrive on site. Meet with Hugo Chavez + Chris Buras of Handex.

7:05 ~~PRO~~VIEW SOW + HASP. Sign HASP. Weather 75° + drizzling rain

7:30 - Drill holes of all 7 SB's w/ core drill

8:45 - Sample SB-46

9:25 - Sample SB-WR

9:55 - Sample SB-45

10:35 - Sample SB-19R

11:05 - Sample SB-35R

11:35 - Sample SB-44

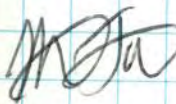
12:05 - Sample SB-ZR

12:30 - Offsite, mob to AEC to drop off samples

14:15 - Drop off samples, mob to home

15:30 - Arrive at home, EOD

EOD

 11/14/23

BORING LOG

Page 1 of 1

Boring/Well Number: SB-44		Permit Number:		FDEP Facility Identification Number: 48/8512797	
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 11:30 ☒ AM ☐ PM	End Date: 11/14/23	
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: Michael Troelle	
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5	
Drilling Method(s): Hand Auger	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID		
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):					
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"					1	light brown fine sand w/ pebbles, no odor		M	SB-44 at 3-ft @ 11:35
HA	1-2	6"				2	brown fine sand w/ rocks, no odor		M		
HA	2-3	6"				3	dark brown sand w/ small pieces of clay, no odor		M		
HA	3-4	6"				4	dark brown fine sand		M		
HA	4-5	6"				5	" " "		W		
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB-45		Permit Number:		FDEP Facility Identification Number: 48/8512797							
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 9:45 ☒ AM ☐ PM	End Date: 11/14/23							
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: Michael Trodler							
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5							
Drilling Method(s): Hand Auger		Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID							
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):											
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				792.2	1	light brown fine sand w/ petroleum odor		D	
HA	1-2	6"				146.8	2	" ↓ "		D	
HA	2-3	6"				436.2	3	Brown/black fine loamy sand w/ petroleum odor		D	SB-45 at 3-ft @ 9:55
HA	3-4	6"				599.9	4	" ↓ "		M	
HA	4-5	6"				625	5	light brown fine sand w/ heavy odor		S	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB-46		Permit Number:		FDEP Facility Identification Number: 48/8512797	
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 4:35 AM ☒ PM ☐	End Date: 11/14/23	
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		End Time: 8:50 AM ☒ PM ☐	
Environmental Technician's Name: Michael Trovian		Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5
Borehole Depth (feet): 5		Drilling Method(s): Hand Auger		Apparent Borehole DTW (in feet from soil moisture content): 5+	Measured Well DTW (in feet after water recharges in well): NA
OVA (list model and check type): ☐ FID ☒ PID		Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):			
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				5.9	1	light grey clayey sand w/ odor petroleum		C	SB-46 at 3-ft 08:45
HA	1-2	6"				21.4	2	ii ↓		↓	
HA	2-3	6"				65.5	3	grey fine sand w/clay w/ odor petroleum		↓	
HA	3-4	6"				223.4	4	dark brown fine sand w/ heavy odor petroleum		M	
HA	4-5	6"				105.4	5	ii		W	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB-19R		Permit Number:		FDEP Facility Identification Number: 48/8512797							
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 10:25 ☒ AM ☐ PM	End Date: 11/14/23							
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: <i>Michel Trucker</i>							
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5							
Drilling Method(s): Hand Auger	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID								
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):											
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				21.2	1	light grey w/red fine sand frocks. light petrol odor		M	SB-19R at 3-ft @10:35
HA	1-2	6"				22.7	2	light grey fine sand/wracks lt. petrol odor		M	
HA	2-3	6"				44.6	3	dark brown fine sand/wracks; heavy petrol odor		D	
HA	3-4	6"				406.2	4	brown fine sand heavy petrol odor		D	
HA	4-5	6"				26.8	5	" " "		W	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB- 2 3.5R		Permit Number:		FDEP Facility Identification Number: 48/8512797							
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 11:00	☒ AM ☐ PM							
		End Date: 11/14/23	End Time: 11:15	☒ AM ☐ PM							
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: Michael Traylor							
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5							
Drilling Method(s): Hand Auger	Apparent Borehole DTW (in feet from soil moisture content):	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID								
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):											
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)											
Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				0	1	fine red sand w/ some rocks, no odor		M	35% SB-2 at 3-ft @ 11:05
HA	1-2	6"			0.2	2	"			M	
HA	2-3	6"			0.2	3	"			M	
HA	3-4	6"			0	4	"			M	
HA	4-5	6"			0	5	"			M	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB-WR		Permit Number:		FDEP Facility Identification Number: 48/8512797	
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 9:15 ☒ AM ☐ PM		
		End Date: 11/14/23	End Time: 9:30 ☒ AM ☐ PM		
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: Michael Troeller	
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5	
Drilling Method(s): Hand Auger		Apparent Borehole DTW (in feet from soil moisture content): 5'	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID	
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):					
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				○	1	dark brown loamy sand		D	
HA	1-2	6"				○	2	brown fine sand w/ rocks		M	
HA	2-3	6"				○	3	brownish red sand/clay w/ fine sand bits		M	SB-WR at 3-ft @ 9:25
HA	3-4	6"				○	4	dark brown fine sand		M	
HA	4-5	6"				○	5	" " "		W	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

BORING LOG

Page 1 of 1

Boring/Well Number: SB-ZR		Permit Number:		FDEP Facility Identification Number: 48/8512797	
Site Name: CFI #0963		Borehole Start Date: 11/14/23	Borehole Start Time: 7:00	AM ☒ PM	
		End Date: 11/14/23	End Time: 12:15	AM ☐ PM ☒	
Environmental Contractor: HCR Southeast - LLC		Geologist's Name:		Environmental Technician's Name: Michael Troeller	
Drilling Company: NA		Pavement Thickness (inches): 3"	Borehole Diameter (inches): 3.5	Borehole Depth (feet): 5	
Drilling Method(s): Hand Auger	Apparent Borehole DTW (in feet from soil moisture content): 5'	Measured Well DTW (in feet after water recharges in well): NA	OVA (list model and check type): ☐ FID ☒ PID		
Disposition of Drill Cuttings [check method(s)]: ☐ Drum ☐ Spread ☒ Backfill ☐ Stockpile ☐ Other (describe if other or multiple items are checked):					
Borehole Completion (check one): ☐ Well ☐ Grout ☐ Bentonite ☒ Backfill ☐ Other (describe)					

Sample Type	Sample Depth Interval (feet)	Sample Recovery (inches)	SPT Blows (per six inches)	Unfiltered OVA	Filtered OVA	Net OVA	Depth (feet)	Sample Description (include grain size based on USCS, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample number and depth or temporary screen interval)
HA	0-1	6"				0	1	brown fine sand w/ some pebbles, no odor		M	
HA	1-2	6"				0	2	" "		M	
HA	2-3	6"				0	3	fine light brown sand no odor		M	SB-35R at 3-ft @ 12:05
HA	3-4	6"				0	4	fine dark brown sand no odor		M	
HA	4-5	6"				0	5	" "		W	
							6				
							7				
							8				
							9				
							10				
							11				
							12				

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings
 Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated



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Order No.: 111666

Date: 11/10/2023

Technician: JL

Company: Handex Consulting& Remediation

Contact: Michael Troeller

Phone #:

Packing List

Item	Serial Number	Included	QC
Ion Science Tiger	T-115953	✓	
Manual		✓	
Charger		✓	
Probe Tip		✓	
Alkaline Battery Pack		✓	
External Filters		✓	
Software			
Comm. Cable			
Regulator		✓	
Tedlar Bag		✓	
Calibration Gas		✓	
Tube Holder			
Zero Tubes		✓	

Calibration Report

Item	Information
Ion Science Tiger	T-115953
Calibration Gas:	Isobutylene
Lot Number:	
Span Setting:	100.00 ppm
Correction Factor:	1.00
Zero Reading:	100.20 ppm
Span Reading:	0.00 ppm
Post-Cal Bump Test:	100.30 ppm
Lamp	10.6

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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

January 03, 2024

Steve Kinsella
Handex Consulting & Remediation, LLC
1202 Tech Blvd., Suite 204
Tampa, FL 33619

RE: Workorder: T2322923 Cumberland Farms #0963

Dear Steve Kinsella:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday November 14, 2023. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sue Bell, Sr Project Manager
SBell@aellab.com

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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2322923001	SB-19R	SO	FL-PRO	11/14/2023 10:35	11/14/2023 14:16	1	Dry
T2322923001	SB-19R	SO	SM 2540G	11/14/2023 10:35	11/14/2023 14:16	1	Dry
T2322923001	SB-19R	SO	SW-846 8260D	11/14/2023 10:35	11/14/2023 14:16	10	Dry
T2322923001	SB-19R	SO	SW-846 8270C (SIM)	11/14/2023 10:35	11/14/2023 14:16	18	Dry
T2322923002	SB-45	SO	FL-PRO	11/14/2023 09:55	11/14/2023 14:16	1	Dry
T2322923002	SB-45	SO	SM 2540G	11/14/2023 09:55	11/14/2023 14:16	1	Dry
T2322923002	SB-45	SO	SW-846 8260D	11/14/2023 09:55	11/14/2023 14:16	10	Dry
T2322923002	SB-45	SO	SW-846 8270C (SIM)	11/14/2023 09:55	11/14/2023 14:16	36	Dry
T2322923003	SB-WR	SO	FL-PRO	11/14/2023 09:25	11/14/2023 14:16	1	Dry
T2322923003	SB-WR	SO	SM 2540G	11/14/2023 09:25	11/14/2023 14:16	1	Dry
T2322923003	SB-WR	SO	SW-846 8260D	11/14/2023 09:25	11/14/2023 14:16	5	Dry
T2322923003	SB-WR	SO	SW-846 8270C (SIM)	11/14/2023 09:25	11/14/2023 14:16	18	Dry
T2322923004	SB-44	SO	FL-PRO	11/14/2023 11:35	11/14/2023 14:16	1	Dry
T2322923004	SB-44	SO	SM 2540G	11/14/2023 11:35	11/14/2023 14:16	1	Dry
T2322923004	SB-44	SO	SW-846 8260D	11/14/2023 11:35	11/14/2023 14:16	5	Dry
T2322923004	SB-44	SO	SW-846 8270C (SIM)	11/14/2023 11:35	11/14/2023 14:16	18	Dry
T2322923005	SB-35R	SO	FL-PRO	11/14/2023 11:05	11/14/2023 14:16	1	Dry
T2322923005	SB-35R	SO	SM 2540G	11/14/2023 11:05	11/14/2023 14:16	1	Dry
T2322923005	SB-35R	SO	SW-846 8260D	11/14/2023 11:05	11/14/2023 14:16	5	Dry
T2322923005	SB-35R	SO	SW-846 8270C (SIM)	11/14/2023 11:05	11/14/2023 14:16	18	Dry
T2322923006	SB-2R	SO	FL-PRO	11/14/2023 12:05	11/14/2023 14:16	1	Dry
T2322923006	SB-2R	SO	SM 2540G	11/14/2023 12:05	11/14/2023 14:16	1	Dry
T2322923006	SB-2R	SO	SW-846 8260D	11/14/2023 12:05	11/14/2023 14:16	5	Dry
T2322923006	SB-2R	SO	SW-846 8270C (SIM)	11/14/2023 12:05	11/14/2023 14:16	18	Dry
T2322923007	SB-46	SO	FL-PRO	11/14/2023 08:45	11/14/2023 14:16	1	Dry
T2322923007	SB-46	SO	SM 2540G	11/14/2023 08:45	11/14/2023 14:16	1	Dry
T2322923007	SB-46	SO	SW-846 8260D	11/14/2023 08:45	11/14/2023 14:16	5	Dry
T2322923007	SB-46	SO	SW-846 8270C (SIM)	11/14/2023 08:45	11/14/2023 14:16	18	Dry

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Workorder: Cumberland Farms #0963 (T2322923)

Workorder Summary

Workorder Comments

Contingent Workorder

This revised report replaces reports previously issued and contains the following updated information. Per Christian Holstrom at HCR via email 11.21.2023 run

For SB-19R (T2322923001) – Run SPLP for BTEX

For SB-45 (T2322923002) – Run SPLP for BTEX and PAHs, and run EPH/VPH

Sample Comments

T2322923002 (SB-45) - Paying sample

Sample SB-45 was not done within holding time for EPH, thus per Steve Kinsella at HCR via email 01.03.2024 do not report the VPH.

Batch Comments

GCSt/4033 - FL-PRO Analysis,Soil

The matrix spike (MS) recoveries in o-Terphenyl and Nonatricontane-C39 for the Matrix Spike (5050287) and the Matrix Spike Duplicate (5050288) were outside the control criteria. Recoveries in the Laboratory Control Sample (LCS) were acceptable, which indicates the analytical batch was in control. The matrix outlier suggests a potential bias in this matrix. No further corrective action is required.

The control criterion was exceeded for the following surrogate in G2311057003, T2322923001, and T2322923007: o-Terphenyl. Recoveries in the laboratory control sample (LCS) were acceptable, indicating that the analytical batch was in control. The affected surrogate is qualified to indicate suspected matrix interference.

GCVj/1750 - MADEP VPH Analysis,Soil

The Method Detection Limit (MDL) for all analytes for T2323729002 were elevated due to difficult sample matrix. Due to matrix interferences, the sample was run at a dilution of 500x, instead of the standard 50x dilution. As a result, the reported MDL is elevated on the final report.

MSSt/2880 - 8270C Analysis,Water,SIM Only

The control criteria for matrix spike recoveries of Naphthalene, 2-Methylnaphthalene, and 1-Methylnaphthalene for the matrix spike (5059642) are not applicable. The analyte concentration in the sample was greater than 4 times the added spike concentrations, preventing accurate evaluation of the spike recovery. No further corrective action was required.

The extractionist noted that sample T2322923002 and 5059642 exhibited very high emulsions, which is known to adversely affect the recoveries in a negative fashion. The affected analytes have been qualified to indicate matrix interference.

MSVt/7979 - 8260D Analysis,Soil

The following samples were originally run at a dilution factor of 50X due to strong odor detected from the samples by the analyst during sample preparation: T2322923001 & T2322923002. The dilution performed on sample T2322923001 was validated by the following non-reported analyte concentration recovered at dilution: 37.97457 ug/L naphthalene. The dilution performed on sample T2322923002 was validated by the following analyte concentration recovered at dilution: 245.29395 ug/L ethylbenzene.

MSVt/8040 - 8260D Analysis,Water

The following SPLP extracts were initially run at dilution by a factor of 10X due to matrix turbidity: T2322923001 & T2322923002. The dilutions performed were necessary allow accurate analyte detection and quantification.

Analysis Results Comments

T2322923001 (SB-19R) - o-Terphenyl

J4|Estimated Result

T2322923007 (SB-46) - o-Terphenyl

J4|Estimated Result

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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results Qualifiers

Parameter Qualifiers

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Lab Qualifiers

- T DOH Certification #E84589 (FL NELAC) AEL-Tampa

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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID:	T2322923001		Date Collected:	11/14/2023 10:35		Matrix:	Soil		
Sample ID:	SB-19R		Date Received:	11/14/2023 14:16					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
SEMIVOLATILES (FL-PRO)									
TPH	14 I	mg/Kg	15	5.2	1	11/18/2023 11:15	11/19/2023 15:55	T	
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))									
1-Methylnaphthalene	0.19	mg/Kg	0.0087	0.0016	1	11/18/2023 11:15	11/19/2023 19:39	T	
2-Methylnaphthalene	0.43	mg/Kg	0.0087	0.0021	1	11/18/2023 11:15	11/19/2023 19:39	T	
Acenaphthene	0.0016 U	mg/Kg	0.0087	0.0016	1	11/18/2023 11:15	11/19/2023 19:39	T	
Acenaphthylene	0.0031 I	mg/Kg	0.0087	0.0019	1	11/18/2023 11:15	11/19/2023 19:39	T	
Anthracene	0.0026 U	mg/Kg	0.0087	0.0026	1	11/18/2023 11:15	11/19/2023 19:39	T	
Benzo[a]anthracene	0.0028 I	mg/Kg	0.0087	0.0021	1	11/18/2023 11:15	11/19/2023 19:39	T	
Benzo[a]pyrene	0.0051 I	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 19:39	T	
Benzo[b]fluoranthene	0.0077 I	mg/Kg	0.0087	0.0017	1	11/18/2023 11:15	11/19/2023 19:39	T	
Benzo[g,h,i]perylene	0.0051 I	mg/Kg	0.0087	0.0020	1	11/18/2023 11:15	11/19/2023 19:39	T	
Benzo[k]fluoranthene	0.0030 I	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 19:39	T	
Chrysene	0.0048 I	mg/Kg	0.0087	0.0031	1	11/18/2023 11:15	11/19/2023 19:39	T	
Dibenzo[a,h]anthracene	0.0018 U	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 19:39	T	
Fluoranthene	0.0053 I	mg/Kg	0.0087	0.0029	1	11/18/2023 11:15	11/19/2023 19:39	T	
Fluorene	0.0023 U	mg/Kg	0.0087	0.0023	1	11/18/2023 11:15	11/19/2023 19:39	T	
Indeno(1,2,3-cd)pyrene	0.0043 I	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 19:39	T	
Naphthalene	0.50	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 19:39	T	
Phenanthrene	0.0023 U	mg/Kg	0.0087	0.0023	1	11/18/2023 11:15	11/19/2023 19:39	T	
Pyrene	0.0066 I	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 19:39	T	
(SM 2540G)									
Percent Moisture	9.6	%	0.0010	0.0010	1	11/16/2023 09:30	11/16/2023 09:30	T	
VOLATILES (SW-846 5035/SW-846 8260D)									
Benzene	0.027 U	mg/Kg	0.17	0.027	50	11/15/2023 11:06	11/15/2023 14:37	T	
Ethylbenzene	0.18	mg/Kg	0.17	0.020	50	11/15/2023 11:06	11/15/2023 14:37	T	
Methyl tert-butyl Ether (MTBE)	0.054 U	mg/Kg	0.17	0.054	50	11/15/2023 11:06	11/15/2023 14:37	T	
Toluene	0.020 U	mg/Kg	0.17	0.020	50	11/15/2023 11:06	11/15/2023 14:37	T	





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923001
Sample ID: SB-19R

Date Collected: 11/14/2023 10:35
Date Received: 11/14/2023 14:16

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Xylene (Total)	0.072 U	mg/Kg	0.33	0.072	50	11/15/2023 11:06	11/15/2023 14:37	T
VOLATILES, SPLP (SW-846 5030B/SW-846 8260D)								
Methyl tert-butyl Ether (MTBE)	7.1 U	ug/L	10	7.1	10	11/27/2023 11:16	11/27/2023 13:52	T
Benzene	2.8 U	ug/L	10	2.8	10	11/27/2023 11:16	11/27/2023 13:52	T
Toluene	6.6 U	ug/L	10	6.6	10	11/27/2023 11:16	11/27/2023 13:52	T
Ethylbenzene	5.6 U	ug/L	10	5.6	10	11/27/2023 11:16	11/27/2023 13:52	T
Xylene (Total)	13 U	ug/L	20	13	10	11/27/2023 11:16	11/27/2023 13:52	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.39	0.16	42	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.39	0.18	45	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.39	0.19	48	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	5.90	3.60	61	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.10	54	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	2500	2900	114	69 - 134	T
Toluene-d8 (S)	ug/Kg	2500	2600	106	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	2500	2900	118	79 - 126	T
1,2-Dichloroethane-d4 (S)	ug/L	500	610	123	70 - 128	T
Toluene-d8 (S)	ug/L	500	500	100	77 - 119	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Bromofluorobenzene (S)	ug/L	500	520	103	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923002	Date Collected: 11/14/2023 09:55			Matrix: Soil				
Sample ID: SB-45	Date Received: 11/14/2023 14:16							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	970	mg/Kg	150	54	10	11/18/2023 11:15	11/20/2023 12:29	T
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))								
1-Methylnaphthalene	21	mg/Kg	0.18	0.034	20	11/18/2023 11:15	11/20/2023 15:37	T
2-Methylnaphthalene	42	mg/Kg	0.18	0.044	20	11/18/2023 11:15	11/20/2023 15:37	T
Acenaphthene	0.15	mg/Kg	0.0091	0.0017	1	11/18/2023 11:15	11/20/2023 13:43	T
Acenaphthylene	0.066	mg/Kg	0.0091	0.0019	1	11/18/2023 11:15	11/20/2023 13:43	T
Anthracene	0.075	mg/Kg	0.0091	0.0027	1	11/18/2023 11:15	11/20/2023 13:43	T
Benzo[a]anthracene	0.051	mg/Kg	0.0091	0.0022	1	11/18/2023 11:15	11/20/2023 13:43	T
Benzo[a]pyrene	0.14	mg/Kg	0.0091	0.0018	1	11/18/2023 11:15	11/20/2023 13:43	T
Benzo[b]fluoranthene	0.18	mg/Kg	0.0091	0.0017	1	11/18/2023 11:15	11/20/2023 13:43	T
Benzo[g,h,i]perylene	0.16	mg/Kg	0.0091	0.0021	1	11/18/2023 11:15	11/20/2023 13:43	T
Benzo[k]fluoranthene	0.059	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:43	T
Chrysene	0.040	mg/Kg	0.0091	0.0032	1	11/18/2023 11:15	11/20/2023 13:43	T
Dibenzo[a,h]anthracene	0.032	mg/Kg	0.0091	0.0018	1	11/18/2023 11:15	11/20/2023 13:43	T
Fluoranthene	0.081	mg/Kg	0.0091	0.0030	1	11/18/2023 11:15	11/20/2023 13:43	T
Fluorene	0.12	mg/Kg	0.0091	0.0024	1	11/18/2023 11:15	11/20/2023 13:43	T
Indeno(1,2,3-cd)pyrene	0.12	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:43	T
Naphthalene	18	mg/Kg	0.18	0.037	20	11/18/2023 11:15	11/20/2023 15:37	T
Phenanthrene	0.14	mg/Kg	0.0091	0.0024	1	11/18/2023 11:15	11/20/2023 13:43	T
Pyrene	0.11	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:43	T
SEMIVOLATILES, SPLP (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	37	ug/L	0.051	0.011	1	11/29/2023 11:30	11/30/2023 11:01	T
2-Methylnaphthalene	42	ug/L	0.051	0.0082	1	11/29/2023 11:30	11/30/2023 11:01	T
Acenaphthene	0.32	ug/L	0.051	0.0071	1	11/29/2023 11:30	11/30/2023 11:01	T
Acenaphthylene	0.14	ug/L	0.051	0.0081	1	11/29/2023 11:30	11/30/2023 11:01	T
Anthracene	0.15	ug/L	0.051	0.013	1	11/29/2023 11:30	11/30/2023 11:01	T
Benzo[a]anthracene	0.17	ug/L	0.051	0.011	1	11/29/2023 11:30	11/30/2023 11:01	T

Wednesday, January 3, 2024 4:19:34 PM
Dates and times are displayed using (-05:00)
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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923002
Sample ID: SB-45

Date Collected: 11/14/2023 09:55
Date Received: 11/14/2023 14:16

Matrix: Soil

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Benzo[a]pyrene	0.32	ug/L	0.051	0.0092	1	11/29/2023 11:30	11/30/2023 11:01	T
Benzo[b]fluoranthene	0.46	ug/L	0.025	0.011	1	11/29/2023 11:30	11/30/2023 11:01	T
Benzo[g,h,i]perylene	0.29	ug/L	0.051	0.011	1	11/29/2023 11:30	11/30/2023 11:01	T
Benzo[k]fluoranthene	0.15	ug/L	0.051	0.0069	1	11/29/2023 11:30	11/30/2023 11:01	T
Chrysene	0.16	ug/L	0.051	0.0078	1	11/29/2023 11:30	11/30/2023 11:01	T
Dibenzo[a,h]anthracene	0.076	ug/L	0.051	0.013	1	11/29/2023 11:30	11/30/2023 11:01	T
Fluoranthene	0.11	ug/L	0.051	0.0095	1	11/29/2023 11:30	11/30/2023 11:01	T
Fluorene	0.23	ug/L	0.051	0.0097	1	11/29/2023 11:30	11/30/2023 11:01	T
Indeno(1,2,3-cd)pyrene	0.24	ug/L	0.051	0.011	1	11/29/2023 11:30	11/30/2023 11:01	T
Naphthalene	60	ug/L	0.051	0.014	1	11/29/2023 11:30	11/30/2023 11:01	T
Phenanthrene	0.032 I	ug/L	0.051	0.0092	1	11/29/2023 11:30	11/30/2023 11:01	T
Pyrene	0.48	ug/L	0.051	0.0094	1	11/29/2023 11:30	11/30/2023 11:01	T
(SM 2540G)								
Percent Moisture	12	%	0.0010	0.0010	1	11/16/2023 09:30	11/16/2023 09:30	T
VOLATILES (SW-846 5035/SW-846 8260D)								
Benzene	0.028 U	mg/Kg	0.17	0.028	50	11/15/2023 11:06	11/15/2023 15:04	T
Ethylbenzene	8.3	mg/Kg	0.34	0.041	100	11/15/2023 11:06	11/16/2023 19:00	T
Methyl tert-butyl Ether (MTBE)	0.056 U	mg/Kg	0.17	0.056	50	11/15/2023 11:06	11/15/2023 15:04	T
Toluene	0.021 U	mg/Kg	0.17	0.021	50	11/15/2023 11:06	11/15/2023 15:04	T
Xylene (Total)	0.074 U	mg/Kg	0.34	0.074	50	11/15/2023 11:06	11/15/2023 15:04	T
VOLATILES, SPLP (SW-846 5030B/SW-846 8260D)								
Methyl tert-butyl Ether (MTBE)	7.1 U	ug/L	10	7.1	10	11/27/2023 11:16	11/27/2023 13:26	T
Benzene	2.8 U	ug/L	10	2.8	10	11/27/2023 11:16	11/27/2023 13:26	T
Toluene	6.6 U	ug/L	10	6.6	10	11/27/2023 11:16	11/27/2023 13:26	T
Ethylbenzene	180	ug/L	10	5.6	10	11/27/2023 11:16	11/27/2023 13:26	T
Xylene (Total)	13 U	ug/L	20	13	10	11/27/2023 11:16	11/27/2023 13:26	T





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.23	59	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.38	96	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.20	50	42 - 141	T
2-Fluorobiphenyl (S)	ug/L	10	4.40	44	37 - 127	T
Nitrobenzene-d5 (S)	ug/L	10	5	50	33 - 134	T
p-Terphenyl-d14 (S)	ug/L	10	7	69	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	6	5.90	99	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	2.20	111	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	2500	2800	112	69 - 134	T
Toluene-d8 (S)	ug/Kg	2500	2600	106	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	2500	2700	109	79 - 126	T
1,2-Dichloroethane-d4 (S)	ug/L	500	600	120	70 - 128	T
Toluene-d8 (S)	ug/L	500	510	102	77 - 119	T
Bromofluorobenzene (S)	ug/L	500	510	102	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID:	T2322923003		Date Collected:	11/14/2023 09:25		Matrix:	Soil		
Sample ID:	SB-WR		Date Received:	11/14/2023 14:16					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
SEMIVOLATILES (FL-PRO)									
TPH	17	mg/Kg	15	5.2	1	11/18/2023 11:15	11/19/2023 19:16	T	
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))									
1-Methylnaphthalene	0.0019 I	mg/Kg	0.0086	0.0016	1	11/18/2023 11:15	11/19/2023 20:08	T	
2-Methylnaphthalene	0.0034 I	mg/Kg	0.0086	0.0021	1	11/18/2023 11:15	11/19/2023 20:08	T	
Acenaphthene	0.0016 U	mg/Kg	0.0086	0.0016	1	11/18/2023 11:15	11/19/2023 20:08	T	
Acenaphthylene	0.012	mg/Kg	0.0086	0.0019	1	11/18/2023 11:15	11/19/2023 20:08	T	
Anthracene	0.015	mg/Kg	0.0086	0.0026	1	11/18/2023 11:15	11/19/2023 20:08	T	
Benzo[a]anthracene	0.031	mg/Kg	0.0086	0.0021	1	11/18/2023 11:15	11/19/2023 20:08	T	
Benzo[a]pyrene	0.053	mg/Kg	0.0086	0.0018	1	11/18/2023 11:15	11/19/2023 20:08	T	
Benzo[b]fluoranthene	0.081	mg/Kg	0.0086	0.0017	1	11/18/2023 11:15	11/19/2023 20:08	T	
Benzo[g,h,i]perylene	0.036	mg/Kg	0.0086	0.0020	1	11/18/2023 11:15	11/19/2023 20:08	T	
Benzo[k]fluoranthene	0.030	mg/Kg	0.0086	0.0025	1	11/18/2023 11:15	11/19/2023 20:08	T	
Chrysene	0.048	mg/Kg	0.0086	0.0031	1	11/18/2023 11:15	11/19/2023 20:08	T	
Dibenzo[a,h]anthracene	0.0098	mg/Kg	0.0086	0.0017	1	11/18/2023 11:15	11/19/2023 20:08	T	
Fluoranthene	0.054	mg/Kg	0.0086	0.0029	1	11/18/2023 11:15	11/19/2023 20:08	T	
Fluorene	0.0022 U	mg/Kg	0.0086	0.0022	1	11/18/2023 11:15	11/19/2023 20:08	T	
Indeno(1,2,3-cd)pyrene	0.036	mg/Kg	0.0086	0.0025	1	11/18/2023 11:15	11/19/2023 20:08	T	
Naphthalene	0.0020 I	mg/Kg	0.0086	0.0018	1	11/18/2023 11:15	11/19/2023 20:08	T	
Phenanthrene	0.0062 I	mg/Kg	0.0086	0.0022	1	11/18/2023 11:15	11/19/2023 20:08	T	
Pyrene	0.083	mg/Kg	0.0086	0.0025	1	11/18/2023 11:15	11/19/2023 20:08	T	
(SM 2540G)									
Percent Moisture	8.1	%	0.0010	0.0010	1	11/16/2023 09:30	11/16/2023 09:30	T	
VOLATILES (SW-846 5035/SW-846 8260D)									
Benzene	0.00054 U	mg/Kg	0.0033	0.00054	1	11/15/2023 11:06	11/15/2023 16:49	T	
Ethylbenzene	0.00039 U	mg/Kg	0.0033	0.00039	1	11/15/2023 11:06	11/15/2023 16:49	T	
Methyl tert-butyl Ether (MTBE)	0.0011 U	mg/Kg	0.0033	0.0011	1	11/15/2023 11:06	11/15/2023 16:49	T	





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923003	Date Collected: 11/14/2023 09:25	Matrix: Soil
Sample ID: SB-WR	Date Received: 11/14/2023 14:16	

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Toluene	0.00040 U	mg/Kg	0.0033	0.00040	1	11/15/2023 11:06	11/15/2023 16:49	T
Xylene (Total)	0.0014 U	mg/Kg	0.0065	0.0014	1	11/15/2023 11:06	11/15/2023 16:49	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.22	56	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.24	60	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.26	64	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	6	5.20	87	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.50	76	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	50	55	110	69 - 134	T
Toluene-d8 (S)	ug/Kg	50	52	103	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	50	54	108	79 - 126	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923004	Date Collected: 11/14/2023 11:35			Matrix: Soil				
Sample ID: SB-44	Date Received: 11/14/2023 14:16							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	10 I	mg/Kg	15	5.2	1	11/18/2023 11:15	11/19/2023 18:18	T
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.0016 U	mg/Kg	0.0087	0.0016	1	11/18/2023 11:15	11/19/2023 20:36	T
2-Methylnaphthalene	0.0021 U	mg/Kg	0.0087	0.0021	1	11/18/2023 11:15	11/19/2023 20:36	T
Acenaphthene	0.0016 U	mg/Kg	0.0087	0.0016	1	11/18/2023 11:15	11/19/2023 20:36	T
Acenaphthylene	0.0019 U	mg/Kg	0.0087	0.0019	1	11/18/2023 11:15	11/19/2023 20:36	T
Anthracene	0.0026 U	mg/Kg	0.0087	0.0026	1	11/18/2023 11:15	11/19/2023 20:36	T
Benzo[a]anthracene	0.0021 U	mg/Kg	0.0087	0.0021	1	11/18/2023 11:15	11/19/2023 20:36	T
Benzo[a]pyrene	0.0022 I	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 20:36	T
Benzo[b]fluoranthene	0.0035 I	mg/Kg	0.0087	0.0017	1	11/18/2023 11:15	11/19/2023 20:36	T
Benzo[g,h,i]perylene	0.0022 I	mg/Kg	0.0087	0.0020	1	11/18/2023 11:15	11/19/2023 20:36	T
Benzo[k]fluoranthene	0.0025 U	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 20:36	T
Chrysene	0.0031 U	mg/Kg	0.0087	0.0031	1	11/18/2023 11:15	11/19/2023 20:36	T
Dibenzo[a,h]anthracene	0.0018 U	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 20:36	T
Fluoranthene	0.0029 U	mg/Kg	0.0087	0.0029	1	11/18/2023 11:15	11/19/2023 20:36	T
Fluorene	0.0023 U	mg/Kg	0.0087	0.0023	1	11/18/2023 11:15	11/19/2023 20:36	T
Indeno(1,2,3-cd)pyrene	0.0025 U	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 20:36	T
Naphthalene	0.0018 U	mg/Kg	0.0087	0.0018	1	11/18/2023 11:15	11/19/2023 20:36	T
Phenanthrene	0.0023 U	mg/Kg	0.0087	0.0023	1	11/18/2023 11:15	11/19/2023 20:36	T
Pyrene	0.0025 U	mg/Kg	0.0087	0.0025	1	11/18/2023 11:15	11/19/2023 20:36	T
(SM 2540G)								
Percent Moisture	8.6	%	0.0010	0.0010	1	11/16/2023 09:30	11/16/2023 09:30	T
VOLATILES (SW-846 5035/SW-846 8260D)								
Benzene	0.00054 U	mg/Kg	0.0033	0.00054	1	11/15/2023 11:06	11/15/2023 17:16	T
Ethylbenzene	0.00039 U	mg/Kg	0.0033	0.00039	1	11/15/2023 11:06	11/15/2023 17:16	T
Methyl tert-butyl Ether (MTBE)	0.0011 U	mg/Kg	0.0033	0.0011	1	11/15/2023 11:06	11/15/2023 17:16	T





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923004	Date Collected: 11/14/2023 11:35	Matrix: Soil
Sample ID: SB-44	Date Received: 11/14/2023 14:16	

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Toluene	0.00040 U	mg/Kg	0.0033	0.00040	1	11/15/2023 11:06	11/15/2023 17:16	T
Xylene (Total)	0.0014 U	mg/Kg	0.0066	0.0014	1	11/15/2023 11:06	11/15/2023 17:16	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.21	53	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	52	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.28	69	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	6	4.90	81	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.60	81	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	50	55	110	69 - 134	T
Toluene-d8 (S)	ug/Kg	50	53	106	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	50	56	113	79 - 126	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923005	Date Collected: 11/14/2023 11:05			Matrix: Soil				
Sample ID: SB-35R	Date Received: 11/14/2023 14:16							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	4.9 U	mg/Kg	14	4.9	1	11/18/2023 11:15	11/19/2023 16:23	T
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.0016 U	mg/Kg	0.0082	0.0016	1	11/18/2023 11:15	11/20/2023 11:19	T
2-Methylnaphthalene	0.0020 U	mg/Kg	0.0082	0.0020	1	11/18/2023 11:15	11/20/2023 11:19	T
Acenaphthene	0.0015 U	mg/Kg	0.0082	0.0015	1	11/18/2023 11:15	11/20/2023 11:19	T
Acenaphthylene	0.0018 U	mg/Kg	0.0082	0.0018	1	11/18/2023 11:15	11/20/2023 11:19	T
Anthracene	0.0025 U	mg/Kg	0.0082	0.0025	1	11/18/2023 11:15	11/20/2023 11:19	T
Benzo[a]anthracene	0.0020 U	mg/Kg	0.0082	0.0020	1	11/18/2023 11:15	11/20/2023 11:19	T
Benzo[a]pyrene	0.0017 U	mg/Kg	0.0082	0.0017	1	11/18/2023 11:15	11/20/2023 11:19	T
Benzo[b]fluoranthene	0.0016 U	mg/Kg	0.0082	0.0016	1	11/18/2023 11:15	11/20/2023 11:19	T
Benzo[g,h,i]perylene	0.0019 U	mg/Kg	0.0082	0.0019	1	11/18/2023 11:15	11/20/2023 11:19	T
Benzo[k]fluoranthene	0.0023 U	mg/Kg	0.0082	0.0023	1	11/18/2023 11:15	11/20/2023 11:19	T
Chrysene	0.0029 U	mg/Kg	0.0082	0.0029	1	11/18/2023 11:15	11/20/2023 11:19	T
Dibenzo[a,h]anthracene	0.0017 U	mg/Kg	0.0082	0.0017	1	11/18/2023 11:15	11/20/2023 11:19	T
Fluoranthene	0.0028 U	mg/Kg	0.0082	0.0028	1	11/18/2023 11:15	11/20/2023 11:19	T
Fluorene	0.0021 U	mg/Kg	0.0082	0.0021	1	11/18/2023 11:15	11/20/2023 11:19	T
Indeno(1,2,3-cd)pyrene	0.0024 U	mg/Kg	0.0082	0.0024	1	11/18/2023 11:15	11/20/2023 11:19	T
Naphthalene	0.0017 U	mg/Kg	0.0082	0.0017	1	11/18/2023 11:15	11/20/2023 11:19	T
Phenanthrene	0.0021 U	mg/Kg	0.0082	0.0021	1	11/18/2023 11:15	11/20/2023 11:19	T
Pyrene	0.0023 U	mg/Kg	0.0082	0.0023	1	11/18/2023 11:15	11/20/2023 11:19	T
(SM 2540G)								
Percent Moisture	3.9	%	0.0010	0.0010	1	11/17/2023 19:00	11/17/2023 19:00	T
VOLATILES (SW-846 5035/SW-846 8260D)								
Benzene	0.00052 U	mg/Kg	0.0031	0.00052	1	11/15/2023 11:06	11/15/2023 15:30	T
Ethylbenzene	0.00037 U	mg/Kg	0.0031	0.00037	1	11/15/2023 11:06	11/15/2023 15:30	T
Methyl tert-butyl Ether (MTBE)	0.0010 U	mg/Kg	0.0031	0.0010	1	11/15/2023 11:06	11/15/2023 15:30	T





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923005	Date Collected: 11/14/2023 11:05	Matrix: Soil
Sample ID: SB-35R	Date Received: 11/14/2023 14:16	

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Toluene	0.00039 U	mg/Kg	0.0031	0.00039	1	11/15/2023 11:06	11/15/2023 15:30	T
Xylene (Total)	0.0014 U	mg/Kg	0.0062	0.0014	1	11/15/2023 11:06	11/15/2023 15:30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.18	44	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.19	49	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.22	57	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	5.90	4.40	74	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.30	68	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	50	53	107	69 - 134	T
Toluene-d8 (S)	ug/Kg	50	51	102	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	50	53	106	79 - 126	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID:	T2322923006		Date Collected:	11/14/2023 12:05		Matrix:	Soil		
Sample ID:	SB-2R		Date Received:	11/14/2023 14:16					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
SEMIVOLATILES (FL-PRO)									
TPH	5.1 U	mg/Kg	15	5.1	1	11/18/2023 11:15	11/19/2023 16:53	T	
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))									
1-Methylnaphthalene	0.0016 U	mg/Kg	0.0086	0.0016	1	11/18/2023 11:15	11/20/2023 11:48	T	
2-Methylnaphthalene	0.0021 U	mg/Kg	0.0086	0.0021	1	11/18/2023 11:15	11/20/2023 11:48	T	
Acenaphthene	0.0016 U	mg/Kg	0.0086	0.0016	1	11/18/2023 11:15	11/20/2023 11:48	T	
Acenaphthylene	0.0018 U	mg/Kg	0.0086	0.0018	1	11/18/2023 11:15	11/20/2023 11:48	T	
Anthracene	0.0026 U	mg/Kg	0.0086	0.0026	1	11/18/2023 11:15	11/20/2023 11:48	T	
Benzo[a]anthracene	0.0021 U	mg/Kg	0.0086	0.0021	1	11/18/2023 11:15	11/20/2023 11:48	T	
Benzo[a]pyrene	0.0025 I	mg/Kg	0.0086	0.0017	1	11/18/2023 11:15	11/20/2023 11:48	T	
Benzo[b]fluoranthene	0.0039 I	mg/Kg	0.0086	0.0016	1	11/18/2023 11:15	11/20/2023 11:48	T	
Benzo[g,h,i]perylene	0.0020 U	mg/Kg	0.0086	0.0020	1	11/18/2023 11:15	11/20/2023 11:48	T	
Benzo[k]fluoranthene	0.0024 U	mg/Kg	0.0086	0.0024	1	11/18/2023 11:15	11/20/2023 11:48	T	
Chrysene	0.0030 U	mg/Kg	0.0086	0.0030	1	11/18/2023 11:15	11/20/2023 11:48	T	
Dibenzo[a,h]anthracene	0.0017 U	mg/Kg	0.0086	0.0017	1	11/18/2023 11:15	11/20/2023 11:48	T	
Fluoranthene	0.0030 I	mg/Kg	0.0086	0.0029	1	11/18/2023 11:15	11/20/2023 11:48	T	
Fluorene	0.0022 U	mg/Kg	0.0086	0.0022	1	11/18/2023 11:15	11/20/2023 11:48	T	
Indeno(1,2,3-cd)pyrene	0.0025 U	mg/Kg	0.0086	0.0025	1	11/18/2023 11:15	11/20/2023 11:48	T	
Naphthalene	0.0018 U	mg/Kg	0.0086	0.0018	1	11/18/2023 11:15	11/20/2023 11:48	T	
Phenanthrene	0.0022 U	mg/Kg	0.0086	0.0022	1	11/18/2023 11:15	11/20/2023 11:48	T	
Pyrene	0.0047 I	mg/Kg	0.0086	0.0024	1	11/18/2023 11:15	11/20/2023 11:48	T	
(SM 2540G)									
Percent Moisture	7.2	%	0.0010	0.0010	1	11/17/2023 19:00	11/17/2023 19:00	T	
VOLATILES (SW-846 5035/SW-846 8260D)									
Benzene	0.00054 U	mg/Kg	0.0032	0.00054	1	11/15/2023 11:06	11/15/2023 15:57	T	
Ethylbenzene	0.00038 U	mg/Kg	0.0032	0.00038	1	11/15/2023 11:06	11/15/2023 15:57	T	
Methyl tert-butyl Ether (MTBE)	0.0011 U	mg/Kg	0.0032	0.0011	1	11/15/2023 11:06	11/15/2023 15:57	T	





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923006	Date Collected: 11/14/2023 12:05	Matrix: Soil
Sample ID: SB-2R	Date Received: 11/14/2023 14:16	

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Toluene	0.00040 U	mg/Kg	0.0032	0.00040	1	11/15/2023 11:06	11/15/2023 15:57	T
Xylene (Total)	0.0014 U	mg/Kg	0.0065	0.0014	1	11/15/2023 11:06	11/15/2023 15:57	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.19	48	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.21	52	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.23	57	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	6	4	67	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.30	67	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	50	54	108	69 - 134	T
Toluene-d8 (S)	ug/Kg	50	51	102	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	50	53	106	79 - 126	T

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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923007				Date Collected: 11/14/2023 08:45					Matrix: Soil
Sample ID: SB-46				Date Received: 11/14/2023 14:16					
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab	
SEMIVOLATILES (FL-PRO)									
TPH	44	mg/Kg	15	5.5	1	11/18/2023 11:15	11/19/2023 18:46	T	
SEMIVOLATILES (SW-846 3550B/SW-846 8270C (SIM))									
1-Methylnaphthalene	0.0017 U	mg/Kg	0.0091	0.0017	1	11/18/2023 11:15	11/20/2023 13:14	T	
2-Methylnaphthalene	0.0022 U	mg/Kg	0.0091	0.0022	1	11/18/2023 11:15	11/20/2023 13:14	T	
Acenaphthene	0.0017 U	mg/Kg	0.0091	0.0017	1	11/18/2023 11:15	11/20/2023 13:14	T	
Acenaphthylene	0.0020 U	mg/Kg	0.0091	0.0020	1	11/18/2023 11:15	11/20/2023 13:14	T	
Anthracene	0.0028 U	mg/Kg	0.0091	0.0028	1	11/18/2023 11:15	11/20/2023 13:14	T	
Benzo[a]anthracene	0.0022 U	mg/Kg	0.0091	0.0022	1	11/18/2023 11:15	11/20/2023 13:14	T	
Benzo[a]pyrene	0.0018 U	mg/Kg	0.0091	0.0018	1	11/18/2023 11:15	11/20/2023 13:14	T	
Benzo[b]fluoranthene	0.0023 I	mg/Kg	0.0091	0.0017	1	11/18/2023 11:15	11/20/2023 13:14	T	
Benzo[g,h,i]perylene	0.0021 U	mg/Kg	0.0091	0.0021	1	11/18/2023 11:15	11/20/2023 13:14	T	
Benzo[k]fluoranthene	0.0026 U	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:14	T	
Chrysene	0.0032 U	mg/Kg	0.0091	0.0032	1	11/18/2023 11:15	11/20/2023 13:14	T	
Dibenzo[a,h]anthracene	0.0018 U	mg/Kg	0.0091	0.0018	1	11/18/2023 11:15	11/20/2023 13:14	T	
Fluoranthene	0.0031 U	mg/Kg	0.0091	0.0031	1	11/18/2023 11:15	11/20/2023 13:14	T	
Fluorene	0.0024 U	mg/Kg	0.0091	0.0024	1	11/18/2023 11:15	11/20/2023 13:14	T	
Indeno(1,2,3-cd)pyrene	0.0026 U	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:14	T	
Naphthalene	0.0076 I	mg/Kg	0.0091	0.0019	1	11/18/2023 11:15	11/20/2023 13:14	T	
Phenanthrene	0.0024 U	mg/Kg	0.0091	0.0024	1	11/18/2023 11:15	11/20/2023 13:14	T	
Pyrene	0.0026 U	mg/Kg	0.0091	0.0026	1	11/18/2023 11:15	11/20/2023 13:14	T	
(SM 2540G)									
Percent Moisture	13	%	0.0010	0.0010	1	11/17/2023 19:00	11/17/2023 19:00	T	
VOLATILES (SW-846 5035/SW-846 8260D)									
Benzene	0.00057 U	mg/Kg	0.0034	0.00057	1	11/15/2023 11:06	11/15/2023 16:23	T	
Ethylbenzene	0.00095 I	mg/Kg	0.0034	0.00041	1	11/15/2023 11:06	11/15/2023 16:23	T	
Methyl tert-butyl Ether (MTBE)	0.0011 U	mg/Kg	0.0034	0.0011	1	11/15/2023 11:06	11/15/2023 16:23	T	





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Workorder: Cumberland Farms #0963 (T2322923)

Analytical Results

Lab ID: T2322923007	Date Collected: 11/14/2023 08:45	Matrix: Soil
Sample ID: SB-46	Date Received: 11/14/2023 14:16	

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
Toluene	0.00042 U	mg/Kg	0.0034	0.0004 2	1	11/15/2023 11:06	11/15/2023 16:23	T
Xylene (Total)	0.0015 U	mg/Kg	0.0069	0.0015	1	11/15/2023 11:06	11/15/2023 16:23	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/Kg	0.40	0.18	46	37 - 127	T
Nitrobenzene-d5 (S)	mg/Kg	0.40	0.20	50	33 - 134	T
p-Terphenyl-d14 (S)	mg/Kg	0.40	0.19	48	42 - 141	T
Nonatricontane-C39 (S)	mg/Kg	6	4.10	69	36 - 132	T
o-Terphenyl (S)	mg/Kg	2	1.20	59	66 - 136	T
1,2-Dichloroethane-d4 (S)	ug/Kg	50	54	108	69 - 134	T
Toluene-d8 (S)	ug/Kg	50	51	102	72 - 122	T
Bromofluorobenzene (S)	ug/Kg	50	54	107	79 - 126	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: GCST/4033 Analysis Method: FL-PRO
Preparation Method: FL-PRO
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007

Method Blank(5050285)

Parameter	Results	Units	PQL	MDL	Lab
TPH	4.8 U	mg/Kg	14	4.8	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	3.10	51	36 - 132	T
o-Terphenyl (S)	mg/L	2	1.60	79	66 - 136	T

Lab Control Sample (5050286)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	mg/Kg	34	38	112	49 - 128	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	6	5.90	98	36 - 132	T
o-Terphenyl (S)	mg/L	2	2.20	110	66 - 136	T

Matrix Spike (5050287); Matrix Spike Duplicate (5050288); Original (T2322923006); Parent Lab Sample (T2322923006)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	mg/Kg	34	20	58	49 - 128	22	64	11	25	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	6	2.70	45	36 - 132	3.70	62	31	25	T
o-Terphenyl (S)	mg/L	2	1.20	61	66 - 136	1.20	63	3	25	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: GCVJ/1750
Preparation Method: MADEP VPH
Associated Lab IDs: T2322923002

Analysis Method: MADEP VPH

Method Blank(5080051)

Parameter	Results	Units	PQL	MDL	Lab
C5-C8 ALIPHATICS	0.38 U	mg/Kg	1.5	0.38	J
C9-C12 ALIPHATICS	0.38 U	mg/Kg	1.5	0.38	J
C9-C10 AROMATICS	0.16 U	mg/Kg	0.75	0.16	J

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: MSS1/2864 **Analysis Method:** SW-846 8270C (SIM)
Preparation Method: SW-846 3550B
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007

Method Blank(5050281)

Parameter	Results	Units	PQL	MDL	Lab
Naphthalene	0.0016 U	mg/Kg	0.0080	0.0016	T
2-Methylnaphthalene	0.0020 U	mg/Kg	0.0080	0.0020	T
1-Methylnaphthalene	0.0015 U	mg/Kg	0.0080	0.0015	T
Acenaphthylene	0.0017 U	mg/Kg	0.0080	0.0017	T
Acenaphthene	0.0015 U	mg/Kg	0.0080	0.0015	T
Fluorene	0.0021 U	mg/Kg	0.0080	0.0021	T
Phenanthrene	0.0021 U	mg/Kg	0.0080	0.0021	T
Anthracene	0.0024 U	mg/Kg	0.0080	0.0024	T
Fluoranthene	0.0027 U	mg/Kg	0.0080	0.0027	T
Pyrene	0.0023 U	mg/Kg	0.0080	0.0023	T
Benzo[a]anthracene	0.0019 U	mg/Kg	0.0080	0.0019	T
Chrysene	0.0028 U	mg/Kg	0.0080	0.0028	T
Benzo[b]fluoranthene	0.0015 U	mg/Kg	0.0080	0.0015	T
Benzo[k]fluoranthene	0.0023 U	mg/Kg	0.0080	0.0023	T
Benzo[a]pyrene	0.0016 U	mg/Kg	0.0080	0.0016	T
Indeno(1,2,3-cd)pyrene	0.0023 U	mg/Kg	0.0080	0.0023	T
Dibenzo[a,h]anthracene	0.0016 U	mg/Kg	0.0080	0.0016	T
Benzo[g,h,i]perylene	0.0019 U	mg/Kg	0.0080	0.0019	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.30	74	37 - 127	T
Nitrobenzene-d5 (S)	mg/L	0.40	0.33	83	33 - 134	T
p-Terphenyl-d14 (S)	mg/L	0.40	0.33	84	42 - 141	T

Lab Control Sample (5050282)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Naphthalene	mg/Kg	0.20	.13	64	38 - 120	T
2-Methylnaphthalene	mg/Kg	0.20	.15	74	39 - 120	T
1-Methylnaphthalene	mg/Kg	0.20	.16	81	43 - 120	T
Acenaphthylene	mg/Kg	0.20	.16	78	39 - 118	T
Acenaphthene	mg/Kg	0.20	.15	76	44 - 117	T
Fluorene	mg/Kg	0.20	.14	69	47 - 121	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSS1/2864
Preparation Method: SW-846 3550B
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007
Analysis Method: SW-846 8270C (SIM)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Phenanthrene	mg/Kg	0.20	.14	68	49 - 122	T
Anthracene	mg/Kg	0.20	.15	75	50 - 123	T
Fluoranthene	mg/Kg	0.20	.16	81	51 - 126	T
Pyrene	mg/Kg	0.20	.19	97	51 - 127	T
Benzo[a]anthracene	mg/Kg	0.20	.13	67	52 - 126	T
Chrysene	mg/Kg	0.20	.19	93	52 - 128	T
Benzo[b]fluoranthene	mg/Kg	0.20	.16	81	43 - 132	T
Benzo[k]fluoranthene	mg/Kg	0.20	.18	91	46 - 133	T
Benzo[a]pyrene	mg/Kg	0.20	.17	83	42 - 129	T
Indeno(1,2,3-cd)pyrene	mg/Kg	0.20	.12	61	39 - 135	T
Dibenzo[a,h]anthracene	mg/Kg	0.20	.15	73	40 - 139	T
Benzo[g,h,i]perylene	mg/Kg	0.20	.15	73	41 - 133	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.24	60	37 - 127	T
Nitrobenzene-d5 (S)	mg/L	0.40	0.27	67	33 - 134	T
p-Terphenyl-d14 (S)	mg/L	0.40	0.28	70	42 - 141	T

Matrix Spike (5050283); Matrix Spike Duplicate (5050284); Original (T2322923006); Parent Lab Sample (T2322923006)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	mg/Kg	0.20	.097	49	38 - 120	.12	58	18	30	T
2-Methylnaphthalene	mg/Kg	0.20	.11	58	39 - 120	.14	68	17	30	T
1-Methylnaphthalene	mg/Kg	0.20	.12	63	43 - 120	.15	73	17	30	T
Acenaphthylene	mg/Kg	0.20	.12	63	39 - 118	.15	74	17	30	T
Acenaphthene	mg/Kg	0.20	.12	60	44 - 117	.14	71	17	30	T
Fluorene	mg/Kg	0.20	.11	56	47 - 121	.13	64	15	30	T
Phenanthrene	mg/Kg	0.20	.11	56	49 - 122	.13	66	17	30	T
Anthracene	mg/Kg	0.20	.12	60	50 - 123	.14	72	19	30	T
Fluoranthene	mg/Kg	0.20	.14	69	51 - 126	.17	82	17	30	T
Pyrene	mg/Kg	0.20	.15	76	51 - 127	.18	88	15	30	T
Benzo[a]anthracene	mg/Kg	0.20	.11	56	52 - 126	.13	64	15	30	T
Chrysene	mg/Kg	0.20	.15	74	52 - 128	.17	85	14	30	T
Benzo[b]fluoranthene	mg/Kg	0.20	.14	67	43 - 132	.16	79	17	30	T
Benzo[k]fluoranthene	mg/Kg	0.20	.15	76	46 - 133	.18	90	16	30	T

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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSS1/2864 **Analysis Method:** SW-846 8270C (SIM)
Preparation Method: SW-846 3550B
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[a]pyrene	mg/Kg	0.20	.13	66	42 - 129	.16	78	16	30	T
Indeno(1,2,3-cd)pyrene	mg/Kg	0.20	.1	53	39 - 135	.12	61	16	30	T
Dibenzo[a,h]anthracene	mg/Kg	0.20	.12	61	40 - 139	.14	70	14	30	T
Benzo[g,h,i]perylene	mg/Kg	0.20	.13	64	41 - 133	.15	73	15	30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.40	0.19	48	37 - 127	0.22	56	17	30	T
Nitrobenzene-d5 (S)	mg/L	0.40	0.20	51	33 - 134	0.24	60	18	30	T
p-Terphenyl-d14 (S)	mg/L	0.40	0.20	51	42 - 141	0.25	64	22	30	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: MSS1/2880
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322923002

Analysis Method: SW-846 8270C (SIM)

Method Blank(5059639)

Parameter	Results	Units	PQL	MDL	Lab
1-Methylnaphthalene	0.011 U	ug/L	0.050	0.011	T
2-Methylnaphthalene	0.0081 U	ug/L	0.050	0.0081	T
Acenaphthene	0.0070 U	ug/L	0.050	0.0070	T
Acenaphthylene	0.0080 U	ug/L	0.050	0.0080	T
Anthracene	0.013 U	ug/L	0.050	0.013	T
Benzo[a]anthracene	0.010 U	ug/L	0.050	0.010	T
Benzo[a]pyrene	0.0091 U	ug/L	0.050	0.0091	T
Benzo[b]fluoranthene	0.011 U	ug/L	0.025	0.011	T
Benzo[g,h,i]perylene	0.011 U	ug/L	0.050	0.011	T
Benzo[k]fluoranthene	0.0068 U	ug/L	0.050	0.0068	T
Chrysene	0.0077 U	ug/L	0.050	0.0077	T
Dibenzo[a,h]anthracene	0.013 U	ug/L	0.050	0.013	T
Fluoranthene	0.0094 U	ug/L	0.050	0.0094	T
Fluorene	0.0096 U	ug/L	0.050	0.0096	T
Indeno(1,2,3-cd)pyrene	0.011 U	ug/L	0.050	0.011	T
Naphthalene	0.014 U	ug/L	0.050	0.014	T
Phenanthrene	0.0091 U	ug/L	0.050	0.0091	T
Pyrene	0.0093 U	ug/L	0.050	0.0093	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.01	0.0071	71	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.01	0.0074	74	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.01	0.0085	85	41 - 138	T

Lab Control Sample (5059640); Lab Control Sample Duplicate (5059641); Parent Lab Sample (T2322923002)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1-Methylnaphthalene	ug/L	5	4.1	81	41 - 123	4	81	1	30	T
2-Methylnaphthalene	ug/L	5	3.7	75	39 - 123	3.7	74	1	30	T
Acenaphthene	ug/L	5	3.6	72	46 - 120	3.6	72	0	30	T
Acenaphthylene	ug/L	5	3.6	72	35 - 121	3.7	73	1	30	T
Anthracene	ug/L	5	3.7	73	49 - 127	3.6	73	0	30	T





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Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSS1/2880
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322923002

Analysis Method: SW-846 8270C (SIM)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[a]anthracene	ug/L	5	3.3	66	49 - 130	3.4	67	2	30	T
Benzo[a]pyrene	ug/L	5	4	80	43 - 130	3.9	78	2	30	T
Benzo[b]fluoranthene	ug/L	5	4	80	43 - 134	4	79	1	30	T
Benzo[g,h,i]perylene	ug/L	5	4.1	82	34 - 138	3.9	77	6	30	T
Benzo[k]fluoranthene	ug/L	5	4.2	85	44 - 134	4.1	82	3	30	T
Chrysene	ug/L	5	4.1	83	49 - 130	4.1	81	1	30	T
Dibenzo[a,h]anthracene	ug/L	5	4	79	34 - 141	3.7	73	8	30	T
Fluoranthene	ug/L	5	4	80	48 - 130	4	80	1	30	T
Fluorene	ug/L	5	3.4	67	48 - 124	3.4	68	1	30	T
Indeno[1,2,3-cd]pyrene	ug/L	5	3.6	72	38 - 137	3.4	68	6	30	T
Naphthalene	ug/L	5	3.1	61	43 - 120	3	60	1	30	T
Phenanthrene	ug/L	5	3.4	67	49 - 125	3.4	67	1	30	T
Pyrene	ug/L	5	4.5	90	48 - 131	4.4	89	2	30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.01	0.0059	59	36 - 125	0.0059	59	1	30	T
Nitrobenzene-d5 (S)	mg/L	0.01	0.0061	61	34 - 139	0.0061	61	0	30	T
p-Terphenyl-d14 (S)	mg/L	0.01	0.0076	76	41 - 138	0.0075	75	1	30	T

Matrix Spike (5059642); Original (T2322923002); Parent Lab Sample (T2322923002)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1-Methylnaphthalene	ug/L	5.10	6.3	-603	43 - 120	T
2-Methylnaphthalene	ug/L	5.10	4.1	-747	39 - 120	T
Acenaphthene	ug/L	5.10	3.7	67	44 - 117	T
Acenaphthylene	ug/L	5.10	3.7	70	39 - 118	T
Anthracene	ug/L	5.10	3.8	72	50 - 123	T
Benzo[a]anthracene	ug/L	5.10	2.8	52	52 - 126	T
Benzo[a]pyrene	ug/L	5.10	2.9	51	42 - 129	T
Benzo[b]fluoranthene	ug/L	5.10	3.2	54	43 - 132	T
Benzo[g,h,i]perylene	ug/L	5.10	2.3	41	41 - 133	T
Benzo[k]fluoranthene	ug/L	5.10	3.1	58	46 - 133	T
Chrysene	ug/L	5.10	3.1	58	52 - 128	T
Dibenzo[a,h]anthracene	ug/L	5.10	2.6	50	40 - 139	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSS1/2880
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322923002

Analysis Method: SW-846 8270C (SIM)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Fluoranthene	ug/L	5.10	3.6	68	51 - 126	T
Fluorene	ug/L	5.10	3.6	67	47 - 121	T
Indeno(1,2,3-cd)pyrene	ug/L	5.10	2.3	40	39 - 135	T
Naphthalene	ug/L	5.10	3.3	-1110	38 - 120	T
Phenanthrene	ug/L	5.10	3.3	64	49 - 122	T
Pyrene	ug/L	5.10	4	70	51 - 127	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.01	0.0055	55	37 - 127	T
Nitrobenzene-d5 (S)	mg/L	0.01	0.0054	54	33 - 134	T
p-Terphenyl-d14 (S)	mg/L	0.01	0.0066	66	42 - 141	T

QC Result Comments

Matrix Spike - 5059642 - 1-Methylnaphthalene

J4|Estimated Result

Matrix Spike - 5059642 - 2-Methylnaphthalene

J4|Estimated Result

Matrix Spike - 5059642 - Naphthalene

J4|Estimated Result

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: MSVt/7979 Analysis Method: SW-846 8260D
Preparation Method: SW-846 5035
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007

Method Blank(5048925)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.00098 U	mg/Kg	0.0030	0.00098	T
Benzene	0.00050 U	mg/Kg	0.0030	0.00050	T
Toluene	0.00037 U	mg/Kg	0.0030	0.00037	T
Ethylbenzene	0.00036 U	mg/Kg	0.0030	0.00036	T
Xylene (Total)	0.0013 U	mg/Kg	0.0060	0.0013	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	61	123	69 - 134	T
Bromofluorobenzene (S)	ug/L	50	62	124	79 - 126	T
Toluene-d8 (S)	ug/L	50	52	104	72 - 122	T

Lab Control Sample (5048926); Lab Control Sample Duplicate (5048927); Parent Lab Sample (T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	mg/Kg	0.02	.022	108	73 - 125	.02	102	6	20	T
Benzene	mg/Kg	0.02	.022	110	77 - 121	.021	105	4	20	T
Toluene	mg/Kg	0.02	.022	108	77 - 121	.022	109	1	20	T
Ethylbenzene	mg/Kg	0.02	.022	109	76 - 122	.022	110	0	20	T
Xylene (Total)	mg/Kg	0.06	.063	105	78 - 124	.062	104	1	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	54	107	69 - 134	51	103	4		T
Bromofluorobenzene (S)	ug/L	50	55	110	79 - 126	54	107	2		T
Toluene-d8 (S)	ug/L	50	52	103	72 - 122	52	105	1		T

Matrix Spike (5048928); Original (T2322923006); Parent Lab Sample (T2322923006)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	mg/Kg	0.02	.02	102	73 - 125	T
Benzene	mg/Kg	0.02	.021	103	77 - 121	T
Toluene	mg/Kg	0.02	.022	110	77 - 121	T
Ethylbenzene	mg/Kg	0.02	.022	110	76 - 122	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSVt/7979 **Analysis Method:** SW-846 8260D
Preparation Method: SW-846 5035
Associated Lab IDs: T2322923001, T2322923002, T2322923003, T2322923004, T2322923005, T2322923006, T2322923007

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Xylene (Total)	mg/Kg	0.06	.062	104	78 - 124	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	51	101	69 - 134	T
Bromofluorobenzene (S)	ug/L	50	55	109	79 - 126	T
Toluene-d8 (S)	ug/L	50	51	102	72 - 122	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Results

QC Batch: MSVt/8040
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322923001, T2322923002

Analysis Method: SW-846 8260D

Method Blank(5060282)

Parameter	Results	Units	PQL	MDL	Lab
Benzene	0.28 U	ug/L	1.0	0.28	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	60	121	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	52	104	86 - 123	T
Toluene-d8 (S)	ug/L	50	50	101	77 - 119	T

Lab Control Sample (5060283); Lab Control Sample Duplicate (5060284); Parent Lab Sample (T2322923001, T2322923002)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzene	ug/L	20	18	88	79 - 120	17	83	6	20	T
Ethylbenzene	ug/L	20	17	86	79 - 121	18	90	4	20	T
Methyl tert-butyl Ether (MT)	ug/L	20	20	100	71 - 124	19	94	7	20	T
Toluene	ug/L	20	17	83	80 - 121	17	86	4	20	T
Xylene (Total)	ug/L	60	53	88	79 - 121	55	91	4	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	58	116	70 - 128	52	104	10		T
Bromofluorobenzene (S)	ug/L	50	51	102	86 - 123	59	117	14		T
Toluene-d8 (S)	ug/L	50	57	115	77 - 119	58	115	1		T

Matrix Spike (5060285); Original (T2322923001); Parent Lab Sample (T2322923001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Benzene	ug/L	20	19	95	79 - 120	T
Ethylbenzene	ug/L	20	18	90	79 - 121	T
Methyl tert-butyl Ether (MTBE)	ug/L	20	18	91	71 - 124	T
Toluene	ug/L	20	18	88	80 - 121	T
Xylene (Total)	ug/L	60	56	93	79 - 121	T

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Workorder: Cumberland Farms #0963 (T2322923)

QC Batch: MSVt/8040
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322923001, T2322923002

Analysis Method: SW-846 8260D

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	59	118	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	58	117	86 - 123	T
Toluene-d8 (S)	ug/L	50	54	107	77 - 119	T





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Workorder: Cumberland Farms #0963 (T2322923)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSt/4033 - FL-PRO			
T2322923001	SB-19R	EXTt/5056	FL-PRO
T2322923002	SB-45	EXTt/5056	FL-PRO
T2322923003	SB-WR	EXTt/5056	FL-PRO
T2322923004	SB-44	EXTt/5056	FL-PRO
T2322923005	SB-35R	EXTt/5056	FL-PRO
T2322923006	SB-2R	EXTt/5056	FL-PRO
T2322923007	SB-46	EXTt/5056	FL-PRO
MSSt/2864 - SW-846 8270C (SIM)			
T2322923001	SB-19R	EXTt/5055	SW-846 3550B
T2322923002	SB-45	EXTt/5055	SW-846 3550B
T2322923003	SB-WR	EXTt/5055	SW-846 3550B
T2322923004	SB-44	EXTt/5055	SW-846 3550B
T2322923005	SB-35R	EXTt/5055	SW-846 3550B
T2322923006	SB-2R	EXTt/5055	SW-846 3550B
T2322923007	SB-46	EXTt/5055	SW-846 3550B
MSSt/2880 - SW-846 8270C (SIM)			
T2322923002	SB-45	EXTt/5087	SW-846 3510C
MSVt/7979 - SW-846 8260D			
T2322923001	SB-19R	MSVt/7978	SW-846 5035
T2322923002	SB-45	MSVt/7978	SW-846 5035
T2322923003	SB-WR	MSVt/7978	SW-846 5035
T2322923004	SB-44	MSVt/7978	SW-846 5035
T2322923005	SB-35R	MSVt/7978	SW-846 5035
T2322923006	SB-2R	MSVt/7978	SW-846 5035
T2322923007	SB-46	MSVt/7978	SW-846 5035
MSVt/8040 - SW-846 8260D			
T2322923001	SB-19R	MSVt/8039	SW-846 5030B
T2322923002	SB-45	MSVt/8039	SW-846 5030B





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FINAL - REVISION

Workorder: Cumberland Farms #0963 (T2322923)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
WCAI/25338 - SM 2540G			
T2322923001	SB-19R		
T2322923002	SB-45		
T2322923003	SB-WR		
T2322923004	SB-44		
WCAI/25380 - SM 2540G			
T2322923005	SB-35R		
T2322923006	SB-2R		
T2322923007	SB-46		

Certificate of Analysis

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☐ Jacksonville: 6851 Southpoint Pkwy., FL 32216 • 904.361.6301 • Lab ID: E52574
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☐ Miramar: 10200 USA Today Way, FL 33075 • 954.382.2288 • Lab ID: E2553
☐ Tampa: 9610 Pinellas Palm Ave., FL 33619 • 813.630.9516 • Lab ID: E24581

Client Name: HCR		Project Name: CUMBERLAND FARMS #0963			
Address: 1202 Tech Blvd., Suite 204					
Tampa, FL 33619					
Phone: 813.906.2994		Project Number: 129487.02.31			
FAX:		FACID# 8412797			
Contact: Steve Kinsella		Special Instructions:			
Sampled By:		Analyses Required			
Turn Around Time: ☐ STANDARD ☐ RUSH		BOTTLE SIZE & TYPE			
AEL Profile: 74775		ADAPT ☐ EQUIS ☐ Other ☐			
SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	MATRIX	NO. COUNT
SB-19R		G	11/14/23	10:35	50
SB-45		G	11/14/23	9:55	50
SB-WR		G	11/14/23	9:25	50
SB-44		G	11/14/23	11:35	50
SB-35R		G	11/14/23	11:05	50
SB-2R		G	11/14/23	12:05	50
SB-46		G	11/14/23	8:45	50

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge		Preservation Code: I = ITC H=(HCl) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)	
Received on Ice ☒ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked		Temp. when received (observed) _____ °C Temp. when received (corrected) _____ °C	
DCN: A2-D051 Form last revised 08/07/2013		Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 5A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A	
Relinquished by: M. Hall 11/14/23 14:15		FOR DRINKING WATER USE: (When PWS Information not otherwise supplied) PWS ID: _____ Contact Person: _____ Phone: _____ Supplier of Water: _____ Site Address: _____	



Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Instructions can be found below the table

Facility/Site Name:	Cumberland Farms #0963
Site Location:	
Facility/Site ID No.:	

SCTL Type	Value	Units
Residential Direct Exposure SCTL	0.1	mg/kg
Industrial Direct Exposure SCTL	0.7	mg/kg
Alternative SCTL (Optional)		mg/kg
Site Specific Background (Optional)		mg/kg

TEF = Toxic Equivalency Factor

	Soil Sample #	SB-19R	SB-45	SB-WR	SB-44	SB-35R	SB-2R	SB-46	
	Sample Date	11/14/2023	11/14/2023	11/14/2023	11/14/2023	11/14/2023	11/14/2023	11/14/2023	
	Sample Location:								
	Depth (ft):								
Contaminant Concentrations									
Contaminant	TEF	SB-19R (mg/kg)	SB-45 (mg/kg)	SB-WR (mg/kg)	SB-44 (mg/kg)	SB-35R (mg/kg)	SB-2R (mg/kg)	SB-46 (mg/kg)	
Benzo(a)pyrene	1.0	0.0051	0.14	0.053	0.0022	0.00085	0.0025	0.0009	
Benzo(a)anthracene	0.1	0.0028	0.051	0.031	0.00105	0.001	0.00105	0.0011	
Benzo(b)fluoranthene	0.1	0.0077	0.18	0.081	0.0035	0.0008	0.0039	0.0023	
Benzo(k)fluoranthene	0.01	0.003	0.059	0.03	0.00125	0.00115	0.0012	0.0013	
Chrysene	0.001	0.0048	0.04	0.048	0.00155	0.00145	0.0015	0.0016	
Dibenz(a,h)anthracene	1.0	0.0009	0.032	0.0098	0.0009	0.00085	0.00085	0.0009	
Indeno(1,2,3-cd)pyrene	0.1	0.0043	0.12	0.036	0.00125	0.0012	0.00125	0.0013	
Benzo(a)pyrene Equivalents									
Contaminant	TEF	SB-19R (mg/kg)	SB-45 (mg/kg)	SB-WR (mg/kg)	SB-44 (mg/kg)	SB-35R (mg/kg)	SB-2R (mg/kg)	SB-46 (mg/kg)	
Benzo(a)pyrene	1.0	0.0051	0.1400	0.0530	0.0022	0.0009	0.0025	0.0009	0.0000
Benzo(a)anthracene	0.1	0.0003	0.0051	0.0031	0.0001	0.0001	0.0001	0.0000	0.0000
Benzo(b)fluoranthene	0.1	0.0008	0.0180	0.0081	0.0004	0.0001	0.0004	0.0000	0.0000
Benzo(k)fluoranthene	0.01	0.0000	0.0006	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000
Chrysene	0.001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Dibenz(a,h)anthracene	1.0	0.0009	0.0320	0.0098	0.0009	0.0009	0.0009	0.0000	0.0000
Indeno(1,2,3-cd)pyrene	0.1	0.0004	0.0120	0.0036	0.0001	0.0001	0.0001	0.0000	0.0000
Total Equivalents									
Total Benzo(a)pyrene Equivalents		0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Comparisons to SCTLs									
Does This Sample Exceed:	SB-19R (mg/kg)	SB-45 (mg/kg)	SB-WR (mg/kg)	SB-44 (mg/kg)	SB-35R (mg/kg)	SB-2R (mg/kg)	SB-46 (mg/kg)		
The Residential Direct Exposure SCTL of 0.1 mg/kg?	OK	EXCEEDS	OK	OK	OK	OK	OK	OK	OK
The Industrial Direct Exposure SCTL of 0.7 mg/kg?	OK	OK	OK	OK	OK	OK	OK	OK	OK
No Alternative SCTL Given	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
No Site Specific Background Given	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

APPENDIX C

- 06:55 HCR left the hotel and heading to the site.
 07:15 HCR arrived to the site.
 07:16 H. Troeller is already on site.

Weather: 71°F, Drizzle.

Equipment: YSI DTW meter, Turbidity meter, Peristaltic Pump, Calibration kit, Sampling kit, umbrella, umbrella base, HDPE & Silicone tubing, buckets (x2), and gloves.

Scope: 5 Hws ^{MC} Sample 5 Hws

Analysis: DTEX/MTBE, PAHs and TPH.

- 07:35 Began Gauging.
 07:50 Finished Gauging.

Hw DTW

Hw-9 5.48

Hw-6 5.52

Dw-1 5.63

Hw-1 5.43

Hw-8 5.15

- 08:00 Began calibration of equipment.

- 08:45 Calibration of equipment completed.
 08:46 Set up for Hw-8
 09:49 Purging Hw-8
 09:10 Sampling Hw-8
 09:22 Set up for Hw-1
 09:28 Purging Hw-1
 09:50 Sampling Hw-1
 10:10 Set up for Hw-9 ^{MC} Dw-1
 10:20 Purging Hw-9 ^{MC} Dw-1
 10:35 Sampling Hw-9 ^{MC} Dw-1
 10:45 Set up for Hw-6
 10:52 Purging Hw-6
 11:10 Sampling Hw-6
 11:25 Set up for Hw-9
 11:31 Purging Hw-9
 11:50 Sampling Hw-9
 12:05 Began Post-Cal of equipment
 12:20 Post-Cal completed.
 12:25 Began decantamination of equipment and site clean up.
 12:45 H. Chavez and C. Boas off site.

3400 Edgewater Dr
Location Oslando, FL

Date 11-14-23

Project / Client 129478-02-31 / HER FDEP FAC ID#48/85(2797)

17:00 H. Chavez dropped off C. Bries
at his house in Boynton
Beach.

18:00 H. Chavez arrived to the office
to drop off equipment / End
of field day.

~~H. Chavez~~

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-9		SAMPLE ID: MW-9	
		DATE: 11-14-23	

WELL DIAMETER (inches): 2		TUBING DIAMETER (inches): 0.25		WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet		STATIC DEPTH TO WATER (feet): 5.48		PURGE PUMP TYPE OR BAILER: PP			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (12 \text{ feet} - 5.48 \text{ feet}) \times 0.16 \text{ gallons/foot} = 1.04 \text{ gallons}$											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0			FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0			PURGING INITIATED AT: 11:31		PURGING ENDED AT: 11:50		TOTAL VOLUME PURGED (gallons): 2.00	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:44	1.25	1.25	0.10	5.82	6.08	29.6	722	0.61	2.35	colorless	petroleum
11:46	0.25	1.50	0.10	5.82	6.06	29.7	723	0.58	2.55	"	"
11:48	0.25	1.75	0.10	5.82	6.06	29.6	722	0.59	2.93	"	"
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLED BY (PRINT) / AFFILIATION: H. Chavez/HCR	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: 11:50	SAMPLING ENDED AT: 11:58						
PUMP OR TUBING DEPTH IN WELL (feet): 7.0	TUBING MATERIAL CODE: HDPE S	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: _____ µm						
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	Duplicate: Y N							
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION							
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
-	3	CG	40ml	ICE	-	-	BTEX/MIBE	APP	974
-	1	AG	250ml	HQSOY	-	-	PAH/TRPH	APP	379
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-6	SAMPLE ID: MW-6	DATE: 11-14-23	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>H. Chavez/HCR</i>	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: <i>6:00</i>	SAMPLING ENDED AT: <i>11:15</i>					
PUMP OR TUBING DEPTH IN WELL (feet): <i>7.0</i>	TUBING MATERIAL CODE: <i>HDPE, S</i>	FIELD-FILTERED: Y ☒ N Filtration Equipment Type:	FILTER SIZE: _____ µm						
FIELD DECONTAMINATION: PUMP Y ☒ N		TUBING Y ☒ N (replaced)	DUPLICATE: Y ☒ N						
SAMPLE CONTAINER SPECIFICATION		SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED				TOTAL VOL ADDED IN FIELD (mL)	FINAL pH
-	8	CG	40ml	ICG	-	-	BTEX/MDE	APP	240
-	1	AG	250ml	H2SO4	-	-	PAH/TRPH	APP	379
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: DW-1	SAMPLE ID: DW-1	DATE: 11-14-23	

SAMPLING DATA									
SAMPLED BY (PRINT) / AFFILIATION: H. Chavez / HCR			SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 10:35		SAMPLING ENDED AT: 10:40	
PUMP OR TUBING DEPTH IN WELL (feet): 22.0			TUBING MATERIAL CODE: HDPE, S		FIELD-FILTERED: Y ☒ N ☒ Filtration Equipment Type:		FILTER SIZE: _____ µm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☒			TUBING Y ☒ N (replaced) ☒			DUPLICATE: Y ☒ N ☒			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
-	3	CG	40 mL	ICE	-	-	BTEX/HCB	APP	200
-	1	AG	250 mL	12504	-	-	PAH/TRPH	APP	303
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-1	SAMPLE ID: MW-1		DATE: 11-14-23

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: H. Conway / HCR				SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>			SAMPLING INITIATED AT: 09:50	SAMPLING ENDED AT: 09:55	
PUMP OR TUBING DEPTH IN WELL (feet): 7.0				TUBING MATERIAL CODE: HDPE, S		FIELD-FILTERED Y N Filtration Equipment Type:	FILTER SIZE: _____ µm		
FIELD DECONTAMINATION:		PUMP	Y N	TUBING		Y N (replaced)	DUPLICATE: Y N		
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
-	5	CG	40~1	ICE	-	-	BTEX/HCBF	APP	240
-	1	AG	250 mL	H2SO4	-	-	PAH/TRAH	APP	486
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater) Revision Date: February 12, 2009
Form FD 9000-24

SITE NAME: Cumberland Farms #0963		SITE LOCATION: Orlando, FL (48/8512797)	
WELL NO: MW-8		SAMPLE ID: MW-8	
		DATE: 11-14-23	

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 5-15	PURGE PUMP TYPE OR BAILER: PP
------------------------------	-----------------------------------	---	---------------------------------------	----------------------------------

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)									
=	gallons + (	gallons/foot X	feet) +	gallons =	gallons				

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: H. Chavez / UCA		SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>		SAMPLING INITIATED AT: 09:10	SAMPLING ENDED AT: 09:15
PUMP OR TUBING DEPTH IN WELL (feet): 7-0		TUBING MATERIAL CODE: HDPE, S		FIELD-FILTERED: Y N	FILTER SIZE: _____ µm
FIELD DECONTAMINATION: PUMP Y N		TUBING Y N (replaced)		DUPLICATE: Y N	

[illegible]

REMARKS:	
MATERIAL CODES:	AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES:	APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

CALIBRATION LOG

Project Name: Cumberland Farms #0963

Project Number: 129487-02-31

Sampler(s) Name: Hugo Chavez

Date: 11-14-23

Multi-Meter

HCR Equip

Turbidimeter

HCR Equip

Make/Model: YSI Pro Plus

Number: RET#1

Make/Model: HACH 2100Q

Number: RET#2

Boldly "X" this box if there is qualified data on this page:

Created: 2/17/2010

PH	Initials	Date	Time	Standard SU	Exp. Date	Lot #	Reading SU	Pass or Fail
(circle)								(circle)
CAL ICV CCV	<u>HC</u>	<u>11-14-23</u>	<u>08:14</u>	<u>7.00</u>	<u>03/25</u>	<u>3GC004</u>	<u>7.00</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>09:16</u>	<u>4.00</u>	<u>07/25</u>	<u>3GG0502</u>	<u>3.96</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:18</u>	<u>10.00</u>	<u>03/25</u>	<u>3GC006</u>	<u>9.97</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:33</u>	<u>7.00</u>	<u>03/25</u>	<u>3GC004</u>	<u>7.00</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:34</u>	<u>4.00</u>	<u>07/25</u>	<u>3GG0502</u>	<u>4.01</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:35</u>	<u>10.00</u>	<u>03/25</u>	<u>3GC006</u>	<u>9.98</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:07</u>	<u>7.00</u>	<u>03/25</u>	<u>3GC004</u>	<u>6.99</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:08</u>	<u>4.00</u>	<u>07/25</u>	<u>3GG0502</u>	<u>4.01</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:09</u>	<u>10.00</u>	<u>03/25</u>	<u>3GC006</u>	<u>10.01</u>	<u>P</u> F

Acceptance Criteria: +/- 0.2 SU

Specific Conductance	Initials	Date	Time	Standard μ S/cm	Exp. Date	Lot #	Reading μ S/cm	Pass or Fail
(circle)								(circle)
CAL ICV CCV	<u>HC</u>	<u>11-14-23</u>	<u>09:12</u>	<u>1413</u>	<u>07/24</u>	<u>3GG8695</u>	<u>1413</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:32</u>	<u>I</u>	<u>I</u>	<u>I</u>	<u>1410</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:05</u>	<u>I</u>	<u>I</u>	<u>I</u>	<u>1411</u>	<u>P</u> F
CAL ICV CCV								P F
CAL ICV CCV								P F
CAL ICV CCV								P F

Acceptance Criteria: +/- 5%

Dissolved Oxygen	Initials	Date	Time	mg/L	Temp $^{\circ}$ C	% DO	Saturation mg/L	Pass or Fail
(circle)							(from chart)	(circle)
CAL ICV CCV	<u>HC</u>	<u>11-14-23</u>	<u>08:29</u>	<u>8.41</u>	<u>23.1</u>	<u>100</u>	<u>8.562</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:45</u>	<u>8.45</u>	<u>23.4</u>	<u>100</u>	<u>8.514</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:20</u>	<u>7.39</u>	<u>30.0</u>	<u>100</u>	<u>7.559</u>	<u>P</u> F
CAL ICV CCV								P F

Acceptance Criteria: +/- 0.3 mg/L

Turbidity	Initials	Date	Time	Standard NTU	Exp. Date	Lot #	Reading NTU	Pass or Fail
(circle)								(circle)
CAL ICV CCV	<u>HC</u>	<u>11-14-23</u>	<u>08:24</u>	<u>10</u>	<u>10/24</u>	<u>A3178</u>	<u>10.3</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:24</u>	<u>20</u>	<u>10/24</u>	<u>A3189</u>	<u>20.5</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:25</u>	<u>100</u>	<u>09/24</u>	<u>A3171</u>	<u>101</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>08:25</u>	<u>800</u>	<u>10/24</u>	<u>A3196</u>	<u>811</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:10</u>	<u>10</u>	<u>10/24</u>	<u>A3178</u>	<u>10.2</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:10</u>	<u>20</u>	<u>10/24</u>	<u>A3189</u>	<u>20.3</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:11</u>	<u>100</u>	<u>09/24</u>	<u>A3171</u>	<u>102</u>	<u>P</u> F
CAL ICV CCV	<u>I</u>	<u>I</u>	<u>12:11</u>	<u>800</u>	<u>10/24</u>	<u>A3186</u>	<u>815</u>	<u>P</u> F

Acceptance Criteria: 0.1-10 NTU: +/-10% 11-40 NTU: +/- 8% 41-100 NTU: +/- 6.5% >100 NTU: +/- 5% of Standard Value.

Codes: CAL = Calibration (Calibration Mode) ICV = Initial Calibration Verification (Run Mode) CCV = Continuing Calibration Verification (Run Mode)

Maintenance: Conductivity Probe Cleaned? Yes No (circle)

DO Membrane Changed? Yes No (circle)

Notes/Comments:



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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

November 28, 2023

Steve Kinsella
Handex Consulting & Remediation, LLC
1202 Tech Blvd., Suite 204
Tampa, FL 33619

RE: Workorder: T2322921 Cumberland Farms #0963

Dear Steve Kinsella:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday November 14, 2023. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sue Bell, Sr Project Manager
SBell@aellab.com

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported	Basis
T2322921001	MW-8	WA	FL-PRO	11/14/2023 09:10	11/14/2023 14:10	1	NA
T2322921001	MW-8	WA	SW-846 8260D	11/14/2023 09:10	11/14/2023 14:10	5	NA
T2322921001	MW-8	WA	SW-846 8270C (SIM)	11/14/2023 09:10	11/14/2023 14:10	18	NA
T2322921002	MW-1	WA	FL-PRO	11/14/2023 09:50	11/14/2023 14:10	1	NA
T2322921002	MW-1	WA	SW-846 8260D	11/14/2023 09:50	11/14/2023 14:10	5	NA
T2322921002	MW-1	WA	SW-846 8270C (SIM)	11/14/2023 09:50	11/14/2023 14:10	18	NA
T2322921003	DW-1	WA	FL-PRO	11/14/2023 10:35	11/14/2023 14:10	1	NA
T2322921003	DW-1	WA	SW-846 8260D	11/14/2023 10:35	11/14/2023 14:10	5	NA
T2322921003	DW-1	WA	SW-846 8270C (SIM)	11/14/2023 10:35	11/14/2023 14:10	18	NA
T2322921004	MW-6	WA	FL-PRO	11/14/2023 11:10	11/14/2023 14:10	1	NA
T2322921004	MW-6	WA	SW-846 8260D	11/14/2023 11:10	11/14/2023 14:10	5	NA
T2322921004	MW-6	WA	SW-846 8270C (SIM)	11/14/2023 11:10	11/14/2023 14:10	18	NA
T2322921005	MW-9	WA	FL-PRO	11/14/2023 11:50	11/14/2023 14:10	1	NA
T2322921005	MW-9	WA	SW-846 8260D	11/14/2023 11:50	11/14/2023 14:10	5	NA
T2322921005	MW-9	WA	SW-846 8270C (SIM)	11/14/2023 11:50	11/14/2023 14:10	18	NA

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Workorder: Cumberland Farms #0963 (T2322921)

Workorder Summary

Batch Comments

GCSst/4035 - FL-PRO Analysis,Water

The control criteria for TPH in the Matrix Spike (5051470) is not applicable. As recorded in the extraction logbook, the sample formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect analyte yields. The affected analyte was qualified to indicate matrix interference.

GCSst/4040 - FL-PRO Analysis,Water

The control criterion was exceeded for the following surrogate in G2311473004: Nonatricosane-C39. Recoveries in the laboratory control sample (LCS) were acceptable, indicating that the analytical batch was in control. The affected surrogate is qualified to indicate suspected matrix interference.

MSSst/2865 - 8270C Analysis,Water,SIM Only

The control criteria for several target analytes in the matrix spike (5051464) and matrix spike duplicate (5051465) are not applicable. As recorded in the extraction logbook, the samples formed emulsions in the solvent layer during the extraction. Such emulsions are known to negatively affect surrogate and analyte yields. The affected analytes and surrogates were qualified to indicate matrix interference.

MSVst/7992 - 8260D Analysis,Water

The following samples were initially run at a dilution due to matrix turbidity: T2322677001, T2322677012, T2322677013, & T2322827005. The dilutions performed were necessary allow accurate analyte detection and quantification.

MSVst/7994 - 8260D Analysis,Water

The following samples were initially run at a dilution factor due to matrix turbidity: T2322827006, T2322827007, & T2322927007. The dilutions performed were necessary allow accurate analyte detection and quantification

The following sample was originally run at a dilution factor of 50X due to strong odor detected from the samples by the analyst during sample preparation: T2322921005. The dilution performed on sample T2322921005 was validated by the following analyte concentration recovered at dilution: 70.05332 ug/L ethylbenzene.

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Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results Qualifiers

Parameter Qualifiers

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J4	Estimated Result

Lab Qualifiers

T	DOH Certification #E84589 (FL NELAC) AEL-Tampa
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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Lab ID: T2322921001	Date Collected: 11/14/2023 09:10			Matrix: Water				
Sample ID: MW-8	Date Received: 11/14/2023 14:10							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	11/20/2023 14:35	11/21/2023 21:19	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 20:32	T
2-Methylnaphthalene	0.029 U	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 20:32	T
Acenaphthene	0.025 U	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 20:32	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 20:32	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 20:32	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	11/20/2023 14:35	11/21/2023 20:32	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 20:32	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	11/20/2023 14:35	11/21/2023 20:32	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	11/20/2023 14:35	11/21/2023 20:32	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 20:32	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	11/20/2023 14:35	11/21/2023 20:32	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 20:32	T
Fluoranthene	0.039 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 20:32	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	11/20/2023 14:35	11/21/2023 20:32	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 20:32	T
Naphthalene	0.050 U	ug/L	0.18	0.050	1	11/20/2023 14:35	11/21/2023 20:32	T
Phenanthrene	0.034 I	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 20:32	T
Pyrene	0.046 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 20:32	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	11/17/2023 15:23	11/17/2023 19:40	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	11/17/2023 15:23	11/17/2023 19:40	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	11/17/2023 15:23	11/17/2023 19:40	T
Toluene	0.66 U	ug/L	1.0	0.66	1	11/17/2023 15:23	11/17/2023 19:40	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	11/17/2023 15:23	11/17/2023 19:40	T





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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	28	76	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	27	74	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	29	79	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	650	119	40 - 129	T
o-Terphenyl (S)	ug/L	180	200	111	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	49	98	70 - 128	T
Toluene-d8 (S)	ug/L	50	49	99	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	55	110	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Lab ID: T2322921002	Date Collected: 11/14/2023 09:50			Matrix: Water				
Sample ID: MW-1	Date Received: 11/14/2023 14:10							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	740	ug/L	620	520	1	11/20/2023 14:35	11/21/2023 21:47	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	15	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:01	T
2-Methylnaphthalene	22	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:01	T
Acenaphthene	0.10 I	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:01	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:01	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:01	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	11/20/2023 14:35	11/21/2023 21:01	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:01	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	11/20/2023 14:35	11/21/2023 21:01	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	11/20/2023 14:35	11/21/2023 21:01	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:01	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	11/20/2023 14:35	11/21/2023 21:01	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:01	T
Fluoranthene	0.038 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:01	T
Fluorene	0.065 I	ug/L	0.18	0.035	1	11/20/2023 14:35	11/21/2023 21:01	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:01	T
Naphthalene	25	ug/L	0.18	0.050	1	11/20/2023 14:35	11/21/2023 21:01	T
Phenanthrene	0.065 I	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:01	T
Pyrene	0.040 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:01	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	7.5	ug/L	1.0	0.28	1	11/18/2023 02:31	11/18/2023 12:23	T
Ethylbenzene	110	ug/L	1.0	0.56	1	11/18/2023 02:31	11/18/2023 12:23	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	11/18/2023 02:31	11/18/2023 12:23	T
Toluene	0.66 U	ug/L	1.0	0.66	1	11/18/2023 02:31	11/18/2023 12:23	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	11/18/2023 02:31	11/18/2023 12:23	T





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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	24	66	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	24	66	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	24	67	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	650	119	40 - 129	T
o-Terphenyl (S)	ug/L	180	190	106	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	49	97	70 - 128	T
Toluene-d8 (S)	ug/L	50	53	106	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	53	107	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Lab ID: T2322921003	Date Collected: 11/14/2023 10:35			Matrix: Water				
Sample ID: DW-1	Date Received: 11/14/2023 14:10							
Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	520 U	ug/L	620	520	1	11/20/2023 14:35	11/21/2023 22:14	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	0.039 U	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:29	T
2-Methylnaphthalene	0.033 I	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:29	T
Acenaphthene	0.16 I	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:29	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:29	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:29	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	11/20/2023 14:35	11/21/2023 21:29	T
Benzo[a]pyrene	0.043 I	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:29	T
Benzo[b]fluoranthene	0.080 I	ug/L	0.091	0.039	1	11/20/2023 14:35	11/21/2023 21:29	T
Benzo[g,h,i]perylene	0.057 I	ug/L	0.18	0.041	1	11/20/2023 14:35	11/21/2023 21:29	T
Benzo[k]fluoranthene	0.026 I	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:29	T
Chrysene	0.048 I	ug/L	0.18	0.028	1	11/20/2023 14:35	11/21/2023 21:29	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:29	T
Fluoranthene	0.054 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:29	T
Fluorene	0.035 U	ug/L	0.18	0.035	1	11/20/2023 14:35	11/21/2023 21:29	T
Indeno(1,2,3-cd)pyrene	0.040 I	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:29	T
Naphthalene	0.58	ug/L	0.18	0.050	1	11/20/2023 14:35	11/21/2023 21:29	T
Phenanthrene	0.033 U	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:29	T
Pyrene	0.049 I	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:29	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	0.28 U	ug/L	1.0	0.28	1	11/17/2023 15:23	11/18/2023 01:40	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	1	11/17/2023 15:23	11/18/2023 01:40	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	11/17/2023 15:23	11/18/2023 01:40	T
Toluene	0.66 U	ug/L	1.0	0.66	1	11/17/2023 15:23	11/18/2023 01:40	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	1	11/17/2023 15:23	11/18/2023 01:40	T





FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	22	61	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	22	61	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	21	57	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	620	115	40 - 129	T
o-Terphenyl (S)	ug/L	180	170	93	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	50	99	70 - 128	T
Toluene-d8 (S)	ug/L	50	51	103	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	53	106	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Lab ID: T2322921004
Sample ID: MW-6

Date Collected: 11/14/2023 11:10
Date Received: 11/14/2023 14:10

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	5200	ug/L	620	520	1	11/20/2023 14:35	11/21/2023 22:42	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	63	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:58	T
2-Methylnaphthalene	120	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:58	T
Acenaphthene	0.18 I	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:58	T
Acenaphthylene	0.029 U	ug/L	0.18	0.029	1	11/20/2023 14:35	11/21/2023 21:58	T
Anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:58	T
Benzo[a]anthracene	0.038 U	ug/L	0.18	0.038	1	11/20/2023 14:35	11/21/2023 21:58	T
Benzo[a]pyrene	0.033 U	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:58	T
Benzo[b]fluoranthene	0.039 U	ug/L	0.091	0.039	1	11/20/2023 14:35	11/21/2023 21:58	T
Benzo[g,h,i]perylene	0.041 U	ug/L	0.18	0.041	1	11/20/2023 14:35	11/21/2023 21:58	T
Benzo[k]fluoranthene	0.025 U	ug/L	0.18	0.025	1	11/20/2023 14:35	11/21/2023 21:58	T
Chrysene	0.028 U	ug/L	0.18	0.028	1	11/20/2023 14:35	11/21/2023 21:58	T
Dibenzo[a,h]anthracene	0.048 U	ug/L	0.18	0.048	1	11/20/2023 14:35	11/21/2023 21:58	T
Fluoranthene	0.034 U	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:58	T
Fluorene	0.11 I	ug/L	0.18	0.035	1	11/20/2023 14:35	11/21/2023 21:58	T
Indeno(1,2,3-cd)pyrene	0.039 U	ug/L	0.18	0.039	1	11/20/2023 14:35	11/21/2023 21:58	T
Naphthalene	300	ug/L	0.18	0.050	1	11/20/2023 14:35	11/21/2023 21:58	T
Phenanthrene	0.058 I	ug/L	0.18	0.033	1	11/20/2023 14:35	11/21/2023 21:58	T
Pyrene	0.034 U	ug/L	0.18	0.034	1	11/20/2023 14:35	11/21/2023 21:58	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	310	ug/L	20	5.7	20	11/18/2023 02:31	11/20/2023 14:06	T
Ethylbenzene	2200	ug/L	20	11	20	11/18/2023 02:31	11/20/2023 14:06	T
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	1	11/18/2023 02:31	11/18/2023 12:49	T
Toluene	3.6	ug/L	1.0	0.66	1	11/18/2023 02:31	11/18/2023 12:49	T
Xylene (Total)	67	ug/L	2.0	1.3	1	11/18/2023 02:31	11/18/2023 12:49	T





FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	36	22	61	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	36	22	61	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	36	19	52	41 - 138	T
Nonatricontane-C39 (S)	ug/L	550	610	111	40 - 129	T
o-Terphenyl (S)	ug/L	180	180	98	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	50	49	97	70 - 128	T
Toluene-d8 (S)	ug/L	50	52	104	77 - 119	T
Bromofluorobenzene (S)	ug/L	50	55	110	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Lab ID: T2322921005
Sample ID: MW-9

Date Collected: 11/14/2023 11:50
Date Received: 11/14/2023 14:10

Matrix: Water

Parameter	Results	Units	PQL	MDL	DF	Prepared	Analyzed	Lab
SEMIVOLATILES (FL-PRO)								
TPH	19000	ug/L	680	570	1	11/20/2023 08:45	11/20/2023 15:15	T
SEMIVOLATILES (SW-846 3510C/SW-846 8270C (SIM))								
1-Methylnaphthalene	140	ug/L	0.20	0.043	1	11/20/2023 08:45	11/20/2023 16:06	T
2-Methylnaphthalene	230	ug/L	0.20	0.032	1	11/20/2023 08:45	11/20/2023 16:06	T
Acenaphthene	0.41	ug/L	0.20	0.028	1	11/20/2023 08:45	11/20/2023 16:06	T
Acenaphthylene	0.032 U	ug/L	0.20	0.032	1	11/20/2023 08:45	11/20/2023 16:06	T
Anthracene	0.092 I	ug/L	0.20	0.053	1	11/20/2023 08:45	11/20/2023 16:06	T
Benzo[a]anthracene	0.042 U	ug/L	0.20	0.042	1	11/20/2023 08:45	11/20/2023 16:06	T
Benzo[a]pyrene	0.036 U	ug/L	0.20	0.036	1	11/20/2023 08:45	11/20/2023 16:06	T
Benzo[b]fluoranthene	0.043 U	ug/L	0.10	0.043	1	11/20/2023 08:45	11/20/2023 16:06	T
Benzo[g,h,i]perylene	0.045 U	ug/L	0.20	0.045	1	11/20/2023 08:45	11/20/2023 16:06	T
Benzo[k]fluoranthene	0.027 U	ug/L	0.20	0.027	1	11/20/2023 08:45	11/20/2023 16:06	T
Chrysene	0.031 U	ug/L	0.20	0.031	1	11/20/2023 08:45	11/20/2023 16:06	T
Dibenzo[a,h]anthracene	0.053 U	ug/L	0.20	0.053	1	11/20/2023 08:45	11/20/2023 16:06	T
Fluoranthene	0.058 I	ug/L	0.20	0.038	1	11/20/2023 08:45	11/20/2023 16:06	T
Fluorene	0.27	ug/L	0.20	0.038	1	11/20/2023 08:45	11/20/2023 16:06	T
Indeno(1,2,3-cd)pyrene	0.042 U	ug/L	0.20	0.042	1	11/20/2023 08:45	11/20/2023 16:06	T
Naphthalene	930	ug/L	1.0	0.27	5	11/20/2023 08:45	11/21/2023 11:56	T
Phenanthrene	0.17 I	ug/L	0.20	0.036	1	11/20/2023 08:45	11/20/2023 16:06	T
Pyrene	0.045 I	ug/L	0.20	0.037	1	11/20/2023 08:45	11/20/2023 16:06	T
VOLATILES (SW-846 5030B/SW-846 8260D)								
Benzene	810	ug/L	50	14	50	11/18/2023 02:31	11/18/2023 10:14	T
Ethylbenzene	3500	ug/L	50	28	50	11/18/2023 02:31	11/18/2023 10:14	T
Methyl tert-butyl Ether (MTBE)	35 U	ug/L	50	35	50	11/18/2023 02:31	11/18/2023 10:14	T
Toluene	33 U	ug/L	50	33	50	11/18/2023 02:31	11/18/2023 10:14	T
Xylene (Total)	66 U	ug/L	100	66	50	11/18/2023 02:31	11/18/2023 10:14	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

Analytical Results

Analysis Results Comments

1-Methylnaphthalene

J4|Estimated Result

2-Methylnaphthalene

J4|Estimated Result

Benzo[a]pyrene

J4|Estimated Result

Benzo[g,h,i]perylene

J4|Estimated Result

Benzo[k]fluoranthene

J4|Estimated Result

Dibenzo[a,h]anthracene

J4|Estimated Result

Indeno(1,2,3-cd)pyrene

J4|Estimated Result

Naphthalene

J4|Estimated Result

TPH

J4|Estimated Result

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	ug/L	40	29	73	36 - 125	T
Nitrobenzene-d5 (S)	ug/L	40	42	105	34 - 139	T
p-Terphenyl-d14 (S)	ug/L	40	31	78	41 - 138	T
Nonatricontane-C39 (S)	ug/L	600	600	100	40 - 129	T
o-Terphenyl (S)	ug/L	200	250	124	66 - 139	T
1,2-Dichloroethane-d4 (S)	ug/L	2500	2500	102	70 - 128	T
Toluene-d8 (S)	ug/L	2500	2700	107	77 - 119	T
Bromofluorobenzene (S)	ug/L	2500	2800	110	86 - 123	T

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Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: GCST/4035
Preparation Method: FL-PRO
Associated Lab IDs: T2322921005

Analysis Method: FL-PRO

Method Blank(5051468)

Parameter	Results	Units	PQL	MDL	Lab
TPH	570 U	ug/L	680	570	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.51	86	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.21	107	66 - 139	T

Lab Control Sample (5051469)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	ug/L	3400	3500	104	53 - 121	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.61	102	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.22	108	66 - 139	T

Matrix Spike (5051470); Matrix Spike Duplicate (5051471); Original (T2322921005); Parent Lab Sample (T2322921005)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	ug/L	3400	18000	-21	53 - 121	21000	57	13	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.56	93	40 - 129	0.60	100	7	20	T
o-Terphenyl (S)	mg/L	0.20	0.22	112	66 - 139	0.25	123	9	20	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: GCST/4040 Analysis Method: FL-PRO
Preparation Method: FL-PRO
Associated Lab IDs: T2322921001, T2322921002, T2322921003, T2322921004

Method Blank(5052476)

Parameter	Results	Units	PQL	MDL	Lab
TPH	570 U	ug/L	680	570	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.57	95	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.21	105	66 - 139	T

Lab Control Sample (5052477)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
TPH	ug/L	3400	3600	106	53 - 121	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.63	104	40 - 129	T
o-Terphenyl (S)	mg/L	0.20	0.21	106	66 - 139	T

Matrix Spike (5052478); Matrix Spike Duplicate (5052479); Original (T2323309001); Parent Lab Sample (T2323309001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
TPH	ug/L	3400	3600	107	53 - 121	3400	99	8	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Nonatricontane-C39 (S)	mg/L	0.60	0.58	97	40 - 129	0.59	98	1	20	T
o-Terphenyl (S)	mg/L	0.20	0.22	108	66 - 139	0.20	100	7	20	T

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Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: MSS1/2865
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921005

Analysis Method: SW-846 8270C (SIM)

Method Blank(5051461)

Parameter	Results	Units	PQL	MDL	Lab
Naphthalene	0.055 U	ug/L	0.20	0.055	T
2-Methylnaphthalene	0.032 U	ug/L	0.20	0.032	T
1-Methylnaphthalene	0.043 U	ug/L	0.20	0.043	T
Acenaphthylene	0.032 U	ug/L	0.20	0.032	T
Acenaphthene	0.028 U	ug/L	0.20	0.028	T
Fluorene	0.038 U	ug/L	0.20	0.038	T
Phenanthrene	0.036 U	ug/L	0.20	0.036	T
Anthracene	0.053 U	ug/L	0.20	0.053	T
Fluoranthene	0.038 U	ug/L	0.20	0.038	T
Pyrene	0.037 U	ug/L	0.20	0.037	T
Benzo[a]anthracene	0.042 U	ug/L	0.20	0.042	T
Chrysene	0.031 U	ug/L	0.20	0.031	T
Benzo[b]fluoranthene	0.043 U	ug/L	0.10	0.043	T
Benzo[k]fluoranthene	0.027 U	ug/L	0.20	0.027	T
Benzo[a]pyrene	0.036 U	ug/L	0.20	0.036	T
Indeno(1,2,3-cd)pyrene	0.042 U	ug/L	0.20	0.042	T
Dibenzo[a,h]anthracene	0.053 U	ug/L	0.20	0.053	T
Benzo[g,h,i]perylene	0.045 U	ug/L	0.20	0.045	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0230	57	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0260	65	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0180	45	41 - 138	T

Lab Control Sample (5051462)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Naphthalene	ug/L	20	15	75	43 - 120	T
2-Methylnaphthalene	ug/L	20	17	86	39 - 123	T
1-Methylnaphthalene	ug/L	20	19	93	41 - 123	T
Acenaphthylene	ug/L	20	19	95	35 - 121	T
Acenaphthene	ug/L	20	18	90	46 - 120	T
Fluorene	ug/L	20	18	88	48 - 124	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSt/2865
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921005

Analysis Method: SW-846 8270C (SIM)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Phenanthrene	ug/L	20	17	85	49 - 125	T
Anthracene	ug/L	20	18	91	49 - 127	T
Fluoranthene	ug/L	20	21	103	48 - 130	T
Pyrene	ug/L	20	23	114	48 - 131	T
Benzo[a]anthracene	ug/L	20	17	83	49 - 130	T
Chrysene	ug/L	20	19	96	49 - 130	T
Benzo[b]fluoranthene	ug/L	20	18	92	43 - 134	T
Benzo[k]fluoranthene	ug/L	20	19	95	44 - 134	T
Benzo[a]pyrene	ug/L	20	16	82	43 - 130	T
Indeno(1,2,3-cd)pyrene	ug/L	20	14	69	38 - 137	T
Dibenzo[a,h]anthracene	ug/L	20	15	76	34 - 141	T
Benzo[g,h,i]perylene	ug/L	20	15	73	34 - 138	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.03	74	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0330	82	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0290	73	41 - 138	T

Matrix Spike (5051463); Matrix Spike Duplicate (5051464); Original (T2322921005); Parent Lab Sample (T2322921005)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	ug/L	20	780	-729	43 - 120	800	-665	2	30	T
2-Methylnaphthalene	ug/L	20	210	-114	39 - 123	210	-107	1	30	T
1-Methylnaphthalene	ug/L	20	130	-26	41 - 123	130	-23	0	30	T
Acenaphthylene	ug/L	20	17	84	35 - 121	17	85	1	30	T
Acenaphthene	ug/L	20	16	79	46 - 120	16	80	1	30	T
Fluorene	ug/L	20	16	81	48 - 124	16	80	0	30	T
Phenanthrene	ug/L	20	16	81	49 - 125	16	80	0	30	T
Anthracene	ug/L	20	18	89	49 - 127	18	90	1	30	T
Fluoranthene	ug/L	20	18	91	48 - 130	19	95	5	30	T
Pyrene	ug/L	20	20	101	48 - 131	21	107	6	30	T
Benzo[a]anthracene	ug/L	20	14	70	49 - 130	17	87	23	30	T
Chrysene	ug/L	20	14	72	49 - 130	19	94	27	30	T
Benzo[b]fluoranthene	ug/L	20	14	72	43 - 134	19	96	29	30	T
Benzo[k]fluoranthene	ug/L	20	13	65	44 - 134	19	97	40	30	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSSt/2865
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921005

Analysis Method: SW-846 8270C (SIM)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[a]pyrene	ug/L	20	13	66	43 - 130	19	93	35	30	T
Indeno(1,2,3-cd)pyrene	ug/L	20	9.7	49	38 - 137	15	74	41	30	T
Dibenzo[a,h]anthracene	ug/L	20	9.3	47	34 - 141	15	76	48	30	T
Benzo[g,h,i]perylene	ug/L	20	11	53	34 - 138	16	78	38	30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0250	63	36 - 125	0.0260	64	2	30	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0380	95	34 - 139	0.0380	95	0	30	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0220	55	41 - 138	0.0310	78	34	30	T

Matrix Spike (5051463); Matrix Spike Duplicate (5051464); Original (T2322921005); Parent Lab Sample (T2322921005)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	ug/L	20	780	-729	43 - 120	800	-665	2	30	T
2-Methylnaphthalene	ug/L	20	210	-114	39 - 123	210	-107	1	30	T
1-Methylnaphthalene	ug/L	20	130	-26	41 - 123	130	-23	0	30	T
Acenaphthylene	ug/L	20	17	84	35 - 121	17	85	1	30	T
Acenaphthene	ug/L	20	16	79	46 - 120	16	80	1	30	T
Fluorene	ug/L	20	16	81	48 - 124	16	80	0	30	T
Phenanthrene	ug/L	20	16	81	49 - 125	16	80	0	30	T
Anthracene	ug/L	20	18	89	49 - 127	18	90	1	30	T
Fluoranthene	ug/L	20	18	91	48 - 130	19	95	5	30	T
Pyrene	ug/L	20	20	101	48 - 131	21	107	6	30	T
Benzo[a]anthracene	ug/L	20	14	70	49 - 130	17	87	23	30	T
Chrysene	ug/L	20	14	72	49 - 130	19	94	27	30	T
Benzo[b]fluoranthene	ug/L	20	14	72	43 - 134	19	96	29	30	T
Benzo[k]fluoranthene	ug/L	20	13	65	44 - 134	19	97	40	30	T
Benzo[a]pyrene	ug/L	20	13	66	43 - 130	19	93	35	30	T
Indeno(1,2,3-cd)pyrene	ug/L	20	9.7	49	38 - 137	15	74	41	30	T
Dibenzo[a,h]anthracene	ug/L	20	9.3	47	34 - 141	15	76	48	30	T
Benzo[g,h,i]perylene	ug/L	20	11	53	34 - 138	16	78	38	30	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSS1/2865
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921005

Analysis Method: SW-846 8270C (SIM)

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0250	63	36 - 125	0.0260	64	2	30	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0380	95	34 - 139	0.0380	95	0	30	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0220	55	41 - 138	0.0310	78	34	30	T

QC Result Comments

Matrix Spike - 5051463 - 1-Methylnaphthalene

J4|Estimated Result

Matrix Spike - 5051463 - 2-Methylnaphthalene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - 1-Methylnaphthalene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - 2-Methylnaphthalene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Benzo[a]pyrene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Benzo[g,h,i]perylene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Benzo[k]fluoranthene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Dibenzo[a,h]anthracene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Indeno(1,2,3-cd)pyrene

J4|Estimated Result

Matrix Spike - 5051463 - Naphthalene

J4|Estimated Result

Matrix Spike Duplicate - 5051464 - Naphthalene

J4|Estimated Result

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: MSS1/2868 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921001, T2322921002, T2322921003, T2322921004

Method Blank(5052472)

Parameter	Results	Units	PQL	MDL	Lab
Naphthalene	0.055 U	ug/L	0.20	0.055	T
2-Methylnaphthalene	0.032 U	ug/L	0.20	0.032	T
1-Methylnaphthalene	0.043 U	ug/L	0.20	0.043	T
Acenaphthylene	0.032 U	ug/L	0.20	0.032	T
Acenaphthene	0.028 U	ug/L	0.20	0.028	T
Fluorene	0.038 U	ug/L	0.20	0.038	T
Phenanthrene	0.036 U	ug/L	0.20	0.036	T
Anthracene	0.053 U	ug/L	0.20	0.053	T
Fluoranthene	0.038 U	ug/L	0.20	0.038	T
Pyrene	0.037 U	ug/L	0.20	0.037	T
Benzo[a]anthracene	0.042 U	ug/L	0.20	0.042	T
Chrysene	0.031 U	ug/L	0.20	0.031	T
Benzo[b]fluoranthene	0.043 U	ug/L	0.10	0.043	T
Benzo[k]fluoranthene	0.027 U	ug/L	0.20	0.027	T
Benzo[a]pyrene	0.036 U	ug/L	0.20	0.036	T
Indeno(1,2,3-cd)pyrene	0.042 U	ug/L	0.20	0.042	T
Dibenzo[a,h]anthracene	0.053 U	ug/L	0.20	0.053	T
Benzo[g,h,i]perylene	0.045 U	ug/L	0.20	0.045	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0330	83	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0330	83	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0290	71	41 - 138	T

Lab Control Sample (5052473)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Naphthalene	ug/L	20	14	68	43 - 120	T
2-Methylnaphthalene	ug/L	20	15	76	39 - 123	T
1-Methylnaphthalene	ug/L	20	17	83	41 - 123	T
Acenaphthylene	ug/L	20	17	83	35 - 121	T
Acenaphthene	ug/L	20	16	81	46 - 120	T
Fluorene	ug/L	20	15	73	48 - 124	T





FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MStt/2868 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921001, T2322921002, T2322921003, T2322921004

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Phenanthrene	ug/L	20	15	76	49 - 125	T
Anthracene	ug/L	20	17	83	49 - 127	T
Fluoranthene	ug/L	20	18	91	48 - 130	T
Pyrene	ug/L	20	20	99	48 - 131	T
Benzo[a]anthracene	ug/L	20	14	70	49 - 130	T
Chrysene	ug/L	20	19	97	49 - 130	T
Benzo[b]fluoranthene	ug/L	20	18	88	43 - 134	T
Benzo[k]fluoranthene	ug/L	20	21	103	44 - 134	T
Benzo[a]pyrene	ug/L	20	17	84	43 - 130	T
Indeno(1,2,3-cd)pyrene	ug/L	20	13	66	38 - 137	T
Dibenzo[a,h]anthracene	ug/L	20	16	78	34 - 141	T
Benzo[g,h,i]perylene	ug/L	20	17	85	34 - 138	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0280	69	36 - 125	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0280	71	34 - 139	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0290	72	41 - 138	T

Matrix Spike (5052474); Matrix Spike Duplicate (5052475); Original (T2323309001); Parent Lab Sample (T2323309001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Naphthalene	ug/L	20	13	66	43 - 120	13	64	3	30	T
2-Methylnaphthalene	ug/L	20	15	72	39 - 123	14	71	2	30	T
1-Methylnaphthalene	ug/L	20	16	79	41 - 123	16	79	0	30	T
Acenaphthylene	ug/L	20	17	84	35 - 121	17	84	1	30	T
Acenaphthene	ug/L	20	16	81	46 - 120	16	80	0	30	T
Fluorene	ug/L	20	15	73	48 - 124	15	74	2	30	T
Phenanthrene	ug/L	20	15	74	49 - 125	15	76	3	30	T
Anthracene	ug/L	20	15	77	49 - 127	16	82	6	30	T
Fluoranthene	ug/L	20	18	88	48 - 130	18	91	3	30	T
Pyrene	ug/L	20	20	98	48 - 131	20	98	1	30	T
Benzo[a]anthracene	ug/L	20	13	67	49 - 130	14	69	4	30	T
Chrysene	ug/L	20	18	92	49 - 130	18	92	1	30	T
Benzo[b]fluoranthene	ug/L	20	14	72	43 - 134	16	79	9	30	T
Benzo[k]fluoranthene	ug/L	20	15	75	44 - 134	16	79	5	30	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSS1/2868 Analysis Method: SW-846 8270C (SIM)
Preparation Method: SW-846 3510C
Associated Lab IDs: T2322921001, T2322921002, T2322921003, T2322921004

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Benzo[a]pyrene	ug/L	20	13	66	43 - 130	15	74	12	30	T
Indeno(1,2,3-cd)pyrene	ug/L	20	7.6	38	38 - 137	9.6	48	23	30	T
Dibenzo[a,h]anthracene	ug/L	20	7.9	40	34 - 141	10	51	24	30	T
Benzo[g,h,i]perylene	ug/L	20	11	57	34 - 138	13	65	13	30	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
2-Fluorobiphenyl (S)	mg/L	0.04	0.0270	68	36 - 125	0.0270	69	0	30	T
Nitrobenzene-d5 (S)	mg/L	0.04	0.0280	69	34 - 139	0.0280	69	0	30	T
p-Terphenyl-d14 (S)	mg/L	0.04	0.0270	69	41 - 138	0.03	74	7	30	T

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Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: MSVt/7992
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322921001, T2322921003

Analysis Method: SW-846 8260D

Method Blank(5052244)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Benzene	0.28 U	ug/L	1.0	0.28	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	49	97	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	56	113	86 - 123	T
Toluene-d8 (S)	ug/L	50	50	101	77 - 119	T

Lab Control Sample (5052245); Lab Control Sample Duplicate (5052246); Parent Lab Sample (T2322921001, T2322921003)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	ug/L	20	23	114	71 - 124	22	108	5	20	T
Benzene	ug/L	20	21	103	79 - 120	22	108	5	20	T
Toluene	ug/L	20	19	97	80 - 121	19	97	0	20	T
Ethylbenzene	ug/L	20	19	96	79 - 121	20	98	2	20	T
Xylene (Total)	ug/L	60	59	99	79 - 121	60	100	1	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	49	97	70 - 128	51	103	6		T
Bromofluorobenzene (S)	ug/L	50	49	98	86 - 123	49	99	1		T
Toluene-d8 (S)	ug/L	50	50	101	77 - 119	50	100	1		T

Matrix Spike (5052247); Original (T2322791001); Parent Lab Sample (T2322791001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	ug/L	20	23	114	71 - 124	T
Benzene	ug/L	20	18	90	79 - 120	T
Toluene	ug/L	20	20	100	80 - 121	T
Ethylbenzene	ug/L	20	21	103	79 - 121	T
Xylene (Total)	ug/L	60	63	104	79 - 121	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSVt/7992
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322921001, T2322921003

Analysis Method: SW-846 8260D

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	54	107	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	48	96	86 - 123	T
Toluene-d8 (S)	ug/L	50	50	100	77 - 119	T





FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Results

QC Batch: MSVt/7994
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322921002, T2322921004, T2322921005

Analysis Method: SW-846 8260D

Method Blank(5052318)

Parameter	Results	Units	PQL	MDL	Lab
Methyl tert-butyl Ether (MTBE)	0.71 U	ug/L	1.0	0.71	T
Benzene	0.28 U	ug/L	1.0	0.28	T
Toluene	0.66 U	ug/L	1.0	0.66	T
Ethylbenzene	0.56 U	ug/L	1.0	0.56	T
Xylene (Total)	1.3 U	ug/L	2.0	1.3	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	50	100	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	56	113	86 - 123	T
Toluene-d8 (S)	ug/L	50	51	103	77 - 119	T

Lab Control Sample (5052319); Lab Control Sample Duplicate (5052320); Parent Lab Sample (T2322921002, T2322921004, T2322921005)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
Methyl tert-butyl Ether (MT)	ug/L	20	21	103	71 - 124	22	111	8	20	T
Benzene	ug/L	20	20	102	79 - 120	21	107	5	20	T
Toluene	ug/L	20	18	90	80 - 121	20	101	11	20	T
Ethylbenzene	ug/L	20	18	91	79 - 121	20	101	10	20	T
Xylene (Total)	ug/L	60	55	92	79 - 121	62	103	12	20	T

Surrogates

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Dup Result	Dup Recovery	RPD	RPD Limit	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	48	96	70 - 128	48	97	1		T
Bromofluorobenzene (S)	ug/L	50	49	98	86 - 123	48	97	1		T
Toluene-d8 (S)	ug/L	50	42	84	77 - 119	51	101	19		T

Matrix Spike (5052321); Original (T2322935001); Parent Lab Sample (T2322935001)

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
Methyl tert-butyl Ether (MTBE)	ug/L	20	22	110	71 - 124	T
Benzene	ug/L	20	21	105	79 - 120	T
Toluene	ug/L	20	20	98	80 - 121	T
Ethylbenzene	ug/L	20	20	100	79 - 121	T
Xylene (Total)	ug/L	60	61	101	79 - 121	T

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FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Batch: MSVt/7994
Preparation Method: SW-846 5030B
Associated Lab IDs: T2322921002, T2322921004, T2322921005

Analysis Method: SW-846 8260D

Surrogates						
Parameter	Units	Spiked Amount	Spike Result	Spike Recovery	Control Limits	Lab
1,2-Dichloroethane-d4 (S)	ug/L	50	50	100	70 - 128	T
Bromofluorobenzene (S)	ug/L	50	49	97	86 - 123	T
Toluene-d8 (S)	ug/L	50	52	104	77 - 119	T





FINAL

Workorder: Cumberland Farms #0963 (T2322921)

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
GCSt/4035 - FL-PRO			
T2322921005	MW-9	EXTt/5060	FL-PRO
GCSt/4040 - FL-PRO			
T2322921001	MW-8	EXTt/5063	FL-PRO
T2322921002	MW-1	EXTt/5063	FL-PRO
T2322921003	DW-1	EXTt/5063	FL-PRO
T2322921004	MW-6	EXTt/5063	FL-PRO
MSSSt/2865 - SW-846 8270C (SIM)			
T2322921005	MW-9	EXTt/5059	SW-846 3510C
MSSSt/2868 - SW-846 8270C (SIM)			
T2322921001	MW-8	EXTt/5062	SW-846 3510C
T2322921002	MW-1	EXTt/5062	SW-846 3510C
T2322921003	DW-1	EXTt/5062	SW-846 3510C
T2322921004	MW-6	EXTt/5062	SW-846 3510C
MSVt/7992 - SW-846 8260D			
T2322921001	MW-8	MSVt/7991	SW-846 5030B
T2322921003	DW-1	MSVt/7991	SW-846 5030B
MSVt/7994 - SW-846 8260D			
T2322921002	MW-1	MSVt/7993	SW-846 5030B
T2322921004	MW-6	MSVt/7993	SW-846 5030B
T2322921005	MW-9	MSVt/7993	SW-846 5030B



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4,889,2288 • Lab ID: E82535
5,630,9616 • Lab ID: E84589[illegible]