



Memorandum

To: Laura Roebuck, USACE-Mobile
Joan Hutton, CALIBRE Systems, Inc.

From: Tom Holmes

Date: 29 November 2017

Re: **Data Collection at TDEC Wells
Dunn Field, Defense Depot Memphis, Tennessee**

HDR has prepared this report to present results from data collection at wells installed by the Tennessee Department of Environment and Conservation (TDEC) north and northeast of Dunn Field at the former Defense Depot Memphis, Tennessee (DDMT). This work was performed for the Department of the Army, Office of the Assistant Chief of Staff for Installation Management, Base Realignment and Closure Division (Army) under Contract W91278-16-D-0061, Task Order 0002 with the U.S. Army Corps of Engineers, Mobile District (CESAM).

INTRODUCTION

A plume along the northern boundary of Dunn Field identified during the remedial investigation was considered to have both on-site and off-site sources, based on chlorinated volatile organic compounds (CVOCs) detected in off-site monitoring wells upgradient of Dunn Field (CH2M HILL, 2002). Three upgradient monitoring wells (MW-128 to MW-130) were installed in June 2003 to evaluate the potential for offsite contamination migrating onto the northeast corner of Dunn Field. Well installation and results of groundwater analyses were described in a technical memorandum (Jacobs, 2003). TDEC conducted preliminary assessments and site investigations upgradient of Dunn Field. During investigations at the Wabash Avenue and Cintas/Production Specialties sites from 2005 to 2008, TDEC installed 11 monitoring wells ([Figure 1](#)). Elevated concentrations of CVOCs were detected at the Cintas site, but TDEC did not consider it a source for the plume migrating on to Dunn Field.

CVOC concentrations in soil on Dunn Field were reduced below the remediation goals during the Source Areas remedial action (RA) (HDR|e2M, 2009). CVOC concentrations in most long-term monitoring (LTM) wells on Dunn Field have decreased below maximum contaminant levels (MCLs) due to the RA (HDR, 2017a). However, CVOC concentrations remain above MCLs in off-site wells (MW-129 and MW-130) located across Hayes Road and East Person Avenue from the northeast corner of Dunn Field, and in on-site wells near the northern boundary (MW-7, MW-8, MW-220 and MW-230).

Following discussion with United States Environmental Protection Agency (USEPA) and TDEC, Army agreed to conduct additional investigation to confirm the presence of an off-site source(s). As a first step, Trinity Analysis and Development Corp. (Trinity) performed a membrane interface probe (MIP) survey with soil confirmation sampling in the northeast corner of Dunn Field, based on the original property boundary. The purpose of

the survey was to determine if previously unidentified contaminant source areas exist in this area of Dunn Field and contribute to the persistent groundwater contamination migrating across Dunn Field. The investigation was limited to the unsaturated loess zone, as previous investigations in the Source Areas on Dunn Field have shown the fine-grained soil and organic matter in that zone retard migration of CVOCs and act as a long-term source area. The MIP survey included 49 MIP locations and 26 borings for confirmation soil sampling. The report stated there were no MIP locations where the data indicated elevated levels of contaminants and only one soil sample with an estimated detection of tetrachloroethene (PCE) below the laboratory reporting limit (RL). The report concluded there was no indication of source materials on current or former Army-owned property contributing to elevated CVOC concentrations in groundwater in the northeast portion or upgradient of Dunn Field (Trinity, 2017).

As the next step in Army's investigation of the off-site plume, HDR was assigned the following scope of work: locate and assess the eleven wells installed by TDEC north and northeast of Dunn Field; repair the damaged well pad at WB-03; re-survey the wells for location and elevation relative to benchmark(s) located on DDMT; redevelop and sample the wells; conduct water level sweeps at the TDEC wells and six nearby LTM wells before sampling and at the end of the field event; obtain an Environmental Data Resources, Inc. (EDR) report for environmental sites with potential contaminant sources within a 3-mile radius of Memphis Depot; and prepare this memorandum.

Prior to start of field activities, HDR reviewed boring logs and well installation diagrams provided by TDEC. Well installation data are summarized on [Table 1](#), and soil layer depths at each well are listed on [Table 2](#).

FIELD ACTIVITIES

Well Location and Assessment

The wells were located 27 September by HDR with assistance from Jamie Woods, TDEC Remedial Project Manager for DDMT. All wells at the Wabash Avenue and Cintas sites were located, except WB-04. The ten located wells appeared to be in usable condition, except WB-03 which had a damaged well vault and no well cover or casing plug.

A clearing crew removed brush in the area of WB-04 on 27 September, but the well was not found. The area was searched again by HDR and TDEC, and WB-04 was located on 3 October with a damaged pad and casing, and no visible well vault, cover or casing plug. The well damage was considered too severe for further use of WB-04; a locked well cap was placed on the well casing pending further action by TDEC. Locks were also placed on the well caps for the other TDEC wells.

Well Repair and Location Survey

Well WB-03 was repaired by McCray Drilling on 27 September. McCray trimmed the casing and installed a new pad with a new well vault and cover set flush with the road surface to limit future damage.

All 11 TDEC wells were surveyed for location and elevation by a Tennessee-licensed surveyor from Allen and Hoshall on 3 October. Vertical control is based on the North

American Vertical Datum of 1988 (NAVD). Horizontal control is provided in the Tennessee State Plane coordinate system. The survey plats are provided in [Appendix A](#).

Well Redevelopment

The wells were redeveloped from 27 September to 3 October using a GeoTech Reclaimer submersible pump. The wells were surged periodically during development by manually raising and lowering the pump. Water quality measurements were made to evaluate well development in accordance with the following criteria: turbidity less than 10 nephelometric turbidity units (NTUs), pH within ± 0.1 standard units, and specific conductance within $\pm 5\%$ for three consecutive readings. A well development summary listing the purge volume and final stabilization measurements is provided on [Table 3](#). All wells met the development criteria.

Water Level Measurements

HDR measured groundwater levels in the TDEC wells during well location and assessment on 27 September, a water level sweep on 3 to 4 October prior to sampling, and a final water level sweep on 11 October. Groundwater levels were also measured at nearby LTM wells during the two sweeps. Measurements were made using Solinst Model 101 and Heron dipper-T water level meters with electronic sensors and tapes graduated in 0.01-foot increments. The water level measurements are shown on [Table 4](#).

Groundwater Sampling

Groundwater samples were collected from ten TDEC wells on 7 to 10 October using portable bladder pumps with dedicated Teflon® bladders and Teflon®-lined polyethylene tubing. The pump was placed within the saturated screen interval, and the pumping rate was set to limit the water level decline to 4 inches (0.1 meter) or less. Water quality parameters were measured at 5 to 10 minute intervals during purging using a flow-through cell with an YSI 650 MDS and a separate turbidity meter (LaMotte 2020WE or Horiba). The water quality meters were calibrated prior to sampling each day and, if abnormal readings were observed during the day, the instrument was re-calibrated in the field. All measurements were recorded on field sampling forms.

Purging was conducted to meet the stabilization criteria: three successive readings within 0.1 for pH, 10 millivolts for oxygen reduction potential, 5 percent for specific conductance, 10 percent for dissolved oxygen and <10 NTUs for turbidity. Temperature was also measured and recorded but not used as a stabilization parameter. Samples were collected when stabilization criteria were met, at least three well volumes were removed or the field team leader approved a variance from the criteria. The final stabilization measurements are shown on [Table 5](#). All wells met the stabilization criteria.

Samples were sent to Microbac Laboratories in Marietta, Ohio for laboratory analysis. The samples were analyzed for volatile organic compounds (VOCs) by method 8260B with a 1 week turn-around time.

IDW Management

The waste generated during well redevelopment and sampling was classified as either non-investigative waste or investigation-derived waste (IDW). Non-investigative waste, such as packaging materials, personal protective equipment, disposable sampling

supplies, and other inert refuse, was collected and placed in the dumpster at the DDMT field office for disposal at a municipal landfill.

The IDW consisted of waste water from equipment decontamination and groundwater from development and purging prior to sampling. The water was collected in 5-gallon buckets with lids and added to the condensate storage tank on Dunn Field. When the storage tank nears capacity, grab samples of wastewater will be collected for analysis of VOCs and selected metals prior to discharge per agreement with TDEC.

SUMMARY OF FINDINGS

EDR Report

The EDR report was received on 18 September 2017 and forwarded to Army and CESAM on the same day. The search radius was 2 miles, which is the standard practice for EDR, rather than 3 miles as stated in the scope of work, and was centered near the mid-point of Dunn Field's northern boundary. The following summary information from the EDR report is provided in [Appendix B](#):

- [B1](#), Overview map of the search radius and the locations of listed sites;
- [B2](#), Map Finding Summary listing the number of sites identified by list for search radii from <1/8 mile to >1 mile;
- [B3](#), Mapped Sites Summary listing the listed sites with Map ID, Address, Database and Distance;
- [B4](#), Expanded view of the overview map for the area northeast (upgradient) of the northeast section of Dunn Field; and
- [Table B-1](#), Listed Sites within 1 mile northeast (upgradient) of the northeast section of Dunn Field.

A total of 1672 sites were identified within the 2-mile search radius and 72 sites were located within 1 mile upgradient of the northeast section of Dunn Field; this does not include listings for DDMT. The 72 sites consist of 42 historical auto shops or fuel-related sites, 10 Resource Conservation and Recovery Act (RCRA)-related sites, 5 historical cleaners, 4 National Pollutant Discharge Elimination System (NPDES) sites, 4 Superfund Enterprise Management System (SEMS) sites, 4 Voluntary Cleanup Program (VCP) sites, 2 Emergency Response Notification System (ERNS) sites, and 1 Air emissions-related site.

Hydrogeology

Based on the boring logs, all wells were drilled to a clay layer in the Upper Claiborne at the base of the Fluvial deposits, were screened in the Fluvial aquifer and have flush-mount well pads. The Wabash Avenue site wells (WB-01 to WB-04) were drilled to depths of 56 to 66 feet (ft) below ground surface (bgs) and were installed with 20-ft screens beginning at 20 to 35 ft below top of casing (btoc). The Cintas site wells (CS-01 to CS-07) were drilled to depths of 76 to 96 ft bgs and were installed with 10-ft screens beginning at 52 to 75 ft btoc.

Depth to water measurements and groundwater elevations for TDEC wells and nearby Dunn Field LTM wells are listed on [Table 4](#); groundwater elevations for the pre-sampling sweep on 3 to 4 October are shown and contoured on [Figure 2](#). Depths to water at the

TDEC wells ranged from 13.56 ft btoc at WB-03 to 59.35 ft btoc at CS-06, and groundwater elevations ranged from 251.77 ft NAVD at WB-03 to 240.59 ft NAVD at CS-07. The groundwater flow direction in the area of the TDEC wells is to the southwest; the hydraulic gradient from WB-03 to CS-07 is approximately 0.008. The groundwater flow direction on Dunn Field shifts to the west-southwest due to the groundwater elevation at MW-28 ([Figure 2](#)). The hydraulic gradient from MW-130 to MW-07 is approximately 0.009.

Data Quality Evaluation

Analytical data from the TDEC well samples collected in October 2017 were reviewed by the HDR project chemist based on guidelines in the 2017 QAPP (HDR, 2017b). The complete analytical results for field and quality control (QC) samples, including data quality evaluation (DQE) flags, are presented in Appendix C, [Table C-1](#). The laboratory analytical reports are included in [Appendix D](#) (electronic copies only). The complete DQE for the TDEC 2017 event is provided in [Appendix E](#).

Based on the review and the project DQOs, the data are acceptable and usable. No data were rejected. The primary causes of the qualified data are described below.

- Two results for acetone and methylene chloride were qualified due to acetone in associated rinse blanks. Sample results were less than the RL and qualified as non-detect at the RL. Acetone and methylene chloride are not contaminants of concern (COCs) at the site.
- Two results for chloroform (CF) were qualified due to CF in the associated rinse blank. In one sample, the result was less than the RL and qualified as non-detect at the RL. In the second sample, the result was greater than the RL but less than the blank concentration and qualified as non-detect at the blank concentration. CF is a COC at the site but was detected well below the project action limit.
- Any result reported below the RL but above the method detection limit was flagged “J” and considered an estimated result (unless overridden by other QC flags).

Overall, the VOC data from the TDEC well samples met project data quality objectives (DQOs) and were determined to be sufficient to support investigation of the off-site plume.

Analytical Results

Groundwater samples were collected from ten TDEC wells. [Table 6](#) lists the analytical results for the primary CVOCs and other VOCs detected above the RL in one or more samples. The primary CVOCs for Dunn Field are used for consistency with other Dunn Field reports although they would not be applicable for a plume resulting from an off-site source. The primary CVOCs for Dunn Field are carbon tetrachloride (CT), CF, 1,1-dichloroethene (DCE), trans-1,2-dichloroethene, cis-1,2-dichloroethene (cDCE), 1,1,2,2-tetrachloroethane, PCE, 1,1,1-trichloroethane, TCE, and vinyl chloride; the MCLs are also listed on [Table 6](#).

The following CVOCs were detected above the RL in the TDEC wells: DCE in CS-02, CS-03 and CS-05; CT and CF in CS-06; PCE in CS-05; and TCE in CS-02 and CS-05. The only other VOC detected above the RL was 1,1-dichloroethane in CS-02 and

CS-03. The only CVOC reported above an MCL was DCE in CS-02 at 16.3 micrograms per liter ($\mu\text{g/L}$).

Concentrations of TCE and DCE in TDEC and LTM wells are shown on [Figures 3 and 4](#). The LTM wells shown on Dunn Field were not sampled in October 2017 and the color-coded well symbols are based on the April 2017 LTM analytical results.

The TCE plume on [Figure 3](#) shows the upgradient edge of the plume ($1\text{ }\mu\text{g/L}$ isopleth) near TDEC wells CS-02 ($1.63\text{ }\mu\text{g/L}$), CS-05 ($1.68\text{ }\mu\text{g/L}$) and CS-06 ($0.405\text{ }\mu\text{g/L}$). Higher concentrations were reported upgradient of Dunn Field at MW-129 ($15\text{ }\mu\text{g/L}$) and MW-130 ($49.1\text{ }\mu\text{g/L}$).

The DCE plume on [Figure 4](#) shows the upgradient edge of the plume ($1\text{ }\mu\text{g/L}$ isopleth) on the northeast side of the former Cintas building near CS-01 ($<1\text{ }\mu\text{g/L}$), CS-03 ($6.13\text{ }\mu\text{g/L}$) and CS-04 ($<1\text{ }\mu\text{g/L}$). The highest concentration was reported at CS-02 ($16.3\text{ }\mu\text{g/L}$).

The analytical results at the TDEC wells are consistent with past samples collected during TDEC sample events in December 2005, July 2007 and November-December 2008. The analytical results for CVOCs reported above the MCL in wells upgradient of Dunn Field (PCE, TCE and DCE) are shown on [Table 7](#).

CONCLUSIONS

The EDR report provides useful information for consideration of off-site sources. The TDEC wells were found to be usable and provide a good network for off-site delineation of the CVOC plume migrating on to Dunn Field. The hydraulic gradient for the TDEC wells is consistent in direction and magnitude with the gradient for the Dunn Field LTM wells. The October 2017 analytical results are consistent with previous results for the TDEC wells at the Cintas and Wabash Avenue sites.

The CVOC concentration maps indicate the upgradient limits of the off-site plumes for TCE and DCE are located on the Cintas site. The highest off-site concentrations for this sample event are in well CS-03 for DCE and in well MW-130 for TCE.

REFERENCES

- CH2M HILL, 2002. *Memphis Depot Dunn Field Remedial Investigation Report, Sections 1 through 18, Defense Distribution Center (Memphis), Revision 2*. Prepared for the Defense Logistics Agency and presented to U.S. Army Engineering and Support Center, Huntsville. July 2002.
- HDR, 2017a. *April 2017 Long-Term Monitoring Summary Report. Defense Depot Memphis, Tennessee, U.S. EPA ID Number TN4210020570, Department of the Army, Revision 0*. Prepared for U.S. Army Corps of Engineers, Mobile District. August 2017.
- HDR 2017b. *2017 Uniform Federal Policy-Quality Assurance Project Plan, Environmental Restoration Support at Former Defense Depot Memphis, Tennessee, Revision 0*. Prepared for U.S. Army Corps of Engineers, Mobile District. May 2017.

HDR|e2M, 2009. *Source Areas Interim Remedial Action Completion Report, Dunn Field – Defense Depot Memphis, Tennessee, Defense Logistics Agency, Revision 1*. Prepared for Air Force Center for Engineering and the Environment. September 2009.

Jacobs Federal Programs, 2003. *Technical Memorandum, Installation of Upgradient Wells near Dunn Field*. Prepared for Mobile District Corps of Engineers. 12 August 2003.

Trinity, 2017. *Membrane Interface Probe Survey Report. Dunn Field - Defense Depot Memphis, Tennessee, Department of the Army, Revision 0*. Prepared for U.S. Army Corps of Engineers, Mobile District. July 2017.

TABLES

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TABLE 1
TDEC WELL SUMMARY
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Well	Aquifer	Date Installed	Northing (ft)	Easting (ft)	Top of Casing Elevation (ft, NAVD)	Ground Elevation (ft, NAVD)	Riser Length (ft)	Screen Length (ft)	Total Well Depth (ft, btoc)
CS-01	Fluvial	7/14/2007	282850.40	803576.91	279.76	280.16	57.8	10	67.8
CS-02	Fluvial	7/12/2007	282610.18	803152.00	280.18	280.37	60.0	10	70.0
CS-03	Fluvial	7/13/2007	282927.42	803403.39	275.93	276.23	57.0	10	67.0
CS-04	Fluvial	7/13/2007	283007.08	803119.07	271.30	271.68	52.0	10	62.0
CS-05	Fluvial	12/8/2008	282417.57	803551.18	296.27	296.43	71.0	10	81.0
CS-06	Fluvial	12/10/2008	282248.89	803501.59	301.25	301.59	75.3	10	85.3
CS-07	Fluvial	12/11/2008	281869.67	803590.44	297.51	297.69	74.0	10	84.0
WB-01	Fluvial	12/6/2005	282299.80	804620.05	275.97	276.18	35.0	20	55.0
WB-02	Fluvial	12/7/2005	282427.45	804321.91	272.21	272.34	35.0	20	55.0
WB-03	Fluvial	12/6/2005	282707.22	804642.33	265.33	265.64	20.0	20	40.0
WB-04 ¹	Fluvial	12/6/2005	282920.61	804373.11	263.76	264.00	25.0	20	45.0

Notes:

1) WB-04 is not usable for water levels or sampling

ft: feet

btoc: below top of casing

NAVD: North American Vertical Datum of 1988

TABLE 2
SOIL LAYERS IN TDEC BORINGS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Well	Date Installed	Depth to Base of Layer					Total Boring Depth (ft,bgs)
		Loess (Clayey Silt) (ft,bgs)	Upper Fluvial (Silty Clayey Sand) (ft,bgs)	Lower Fluvial (Sand and Gravel) (ft,bgs)	Upper Clay (ft,bgs)	Dark Grey Clay (ft,bgs)	
CS-01	7/14/2007	21	30	64	76	-	77
CS-02	7/12/2007	24	42	69	76	-	88
CS-03	7/13/2007	21	34	67	70	-	76
CS-04	7/13/2007	20	35	61	68	-	76
CS-05	12/8/2008	27	34	81	90	-	91
CS-06	12/10/2008	26	44	85	93	-	96
CS-07	12/11/2008	29	32	74	86	-	91
WB-01	12/6/2005	29	30	53	59	-	66
WB-02	12/7/2005	18	23	53	60	-	66
WB-03	12/6/2005	16	22	38	45	-	56
WB-04	12/6/2005	15	24	42	45	-	66

Notes:

Layer soil types are an approximation, as soils vary slightly between borings; thin clayey layers are present in Lower Fluvial layer in some borings. See boring logs in TDEC reports

1) for more detail.

ft: feet

bgs: below ground surface

TABLE 3
WELL REDEVELOPMENT SUMMARY
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Well ID	Date Redeveloped	Volume Purged (gallons)	pH	Final Stabilization Parameters			Measured Well Depth	
				Specific Conductivity (mS/cm)	Turbidity (NTU)	Temperature (°C)	Initial (ft, btoc)	Final (ft, btoc)
CS-01	9/28/2017	45	5.5	0.546	9.1	18.4	67.2	67.3
CS-02	9/29/2017	65	5.5	0.234	10.0	20.3	69.9	70.0
CS-03	9/28/2017	67	4.8	0.415	9.9	20.3	66.7	67.0
CS-04	9/29/2017	32	4.9	0.308	5.1	18.7	61.5	61.7
CS-05	9/30/2017	47	5.3	0.742	9.7	18.5	81.0	81.3
CS-06	9/30/2017	36	5.5	0.703	7.6	19.7	85.5	85.7
CS-07	10/1/2017	30	5.2	0.528	4.5	18.7	83.9	84.0
WB-01	10/1/2017	28	5.3	0.479	4.9	20.1	54.9	55.0
WB-02	10/1/2017	31	5.2	0.519	9.4	20.6	54.8	55.0
WB-03	10/2/2017	123	5.2	0.561	5.4	22.2	38.0	39.5

Notes:

°C : degrees Celsius

mS/cm : milliSiemens per centimeter

NM: not measured

NTUs: nephelometric turbidity units

TABLE 4
WATER LEVEL MEASUREMENTS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Well ID	Aquifer	Top of Casing	Top of Screen	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation	Depth to Water	Groundwater Elevation
		Elevation (ft, NAVD)	Elevation (ft, NAVD)	27-Sep-17 (ft, btoc)	27-Sep-17 (ft, NAVD)	3 to 4-Oct-17 (ft, btoc)	3 to 4-Oct-17 (ft, NAVD)	11-Oct-17 (ft, btoc)	11-Oct-17 (ft, NAVD)
CS-01	Fluvial	279.76	221.96	34.45	245.31	34.70	245.06	34.85	244.91
CS-02	Fluvial	280.18	220.18	38.82	241.36	38.73	241.45	38.84	241.34
CS-03	Fluvial	275.93	218.93	30.81	245.12	31.09	244.84	31.21	244.72
CS-04	Fluvial	271.30	219.30	27.34	243.96	27.75	243.55	27.80	243.50
CS-05	Fluvial	296.27	225.27	52.68	243.59	52.92	243.35	53.03	243.24
CS-06	Fluvial	301.25	226.25	59.19	242.06	59.35	241.90	59.39	241.86
CS-07	Fluvial	297.51	223.51	56.90	240.61	56.92	240.59	56.99	240.52
WB-01	Fluvial	275.97	240.97	27.96	248.01	28.55	247.42	28.80	247.17
WB-02	Fluvial	272.21	237.21	24.96	247.25	25.11	247.10	26.30	245.91
WB-03	Fluvial	265.33	245.33	12.83	252.50	13.56	251.77	13.83	251.50
MW-07	Fluvial	295.10	228.10	NM	-	62.97	232.13	62.95	232.15
MW-08	Fluvial	292.59	236.09	NM	-	59.00	233.59	59.02	233.57
MW-28	Fluvial	294.79	240.49	NM	-	54.10	240.69	54.14	240.65
MW-129	Fluvial	293.01	228.01	NM	-	53.98	239.03	54.09	238.92
MW-130	Fluvial	293.17	233.70	NM	-	53.47	239.70	53.50	239.67
MW-230	Fluvial	286.57	227.32	NM	-	52.26	234.31	52.29	234.28

Notes:

1) Initial measurement made during well assessment, prior to well development.

ft, btoc: feet below top of casing

ft, NAVD: feet above North American Vertical Datum of 1988

NM: Not measured

TABLE 5
FINAL WELL STABILIZATION MEASUREMENTS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Well ID	Sample Date	Method	Time Sampled	Sample Depth (ft, btoc)	Water Depth (ft, btoc)	Purge Rate mL/min	Volume Purged Liters	pH	Temp (°C)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Turbidity (NTUs)
CS-01	10/9/2017	Low Flow	15:48	60.0	34.64	160.0	12.0	5.64	19.86	0.546	5.96	168.9	5.50
CS-02	10/8/2017	Low Flow	13:00	62.0	38.36	189.0	6.4	5.35	21.76	0.410	4.60	145.2	5.19
CS-03	10/7/2017	Low Flow	13:55	64.0	30.95	300.0	16.5	5.36	21.93	0.675	5.43	131.7	4.80
CS-04	10/7/2017	Low Flow	15:55	57.0	27.40	200.0	9.0	4.90	20.54	0.551	2.86	144.5	1.36
CS-05	10/8/2017	Low Flow	11:15	77.0	52.58	184.6	12.4	5.22	21.56	0.736	4.17	147.3	1.92
CS-06	10/8/2017	Low Flow	9:24	80.0	59.35	194.0	7.5	5.40	21.61	0.745	1.48	126.9	0.55
CS-07	10/9/2017	Low Flow	13:00	76.0	NM	170.0	13.2	5.66	22.01	0.510	3.33	136.1	9.40
WB-01	10/8/2017	Low Flow	14:44	38.0	28.16	204.0	7.5	5.07	21.42	0.403	2.07	146.6	4.17
WB-02	10/8/2017	Low Flow	15:56	38.0	25.53	196.2	5.5	5.16	23.88	0.474	1.41	153.1	5.11
WB-03	10/10/2017	Low Flow	9:05	22.0	14.30	174.0	7.8	3.26	23.49	0.262	0.08	183.9	1.09

Notes:

°C : degrees Celsius

DF: Dunn Field

DO : Dissolved Oxygen

ft, btoc: feet below top of casing

L : liters

mg/L : milligrams per liter

MI: Main Installation

mL/min: milliliters per minute

mS/cm : milliSiemens per centimeter

mV :millivolts

NA : not applicable

NM : not measured

NTUs: nephelometric turbidity units

OR: out of range

ORP : Oxidation Reduction Potential

TABLE 6
ANALYTICAL RESULTS SUMMARY
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

	Well ID		CS-01	CS-02	CS-03	CS-04	CS-05	CS-06	CS-07	WB-01
	Lab ID		L17100709-12	L17100709-08	L17100709-01	L17100709-03	L17100709-06	L17100709-07	L17100709-13	L17100709-04
	Date		10/9/2017	10/8/2017	10/7/2017	10/7/2017	10/8/2017	10/8/2017	10/9/2017	10/8/2017
Primary CVOCs	Units	MCL								
1,1,2,2-Tetrachloroethane	µg/L	-	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,1,2-Trichloroethane	µg/L	5	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	µg/L	7	1.00 U	16.3	6.13	1.00 U	1.24	1.00 U	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	5	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Carbon tetrachloride	µg/L	5	1.00 U	1.00 U	1.00 U	1.00 U	0.574 J	1.18	1.00 U	1.00 U
Chloroform	µg/L	80	0.300 U	0.300 U	0.300 U	0.300 U	0.163 U	0.334 U	0.300 U	0.300 U
cis-1,2-Dichloroethene	µg/L	70	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	µg/L	5	1.00 U	0.439 J	1.00 U	1.00 U	2.61	0.480 J	1.00 U	1.00 U
trans-1,2-Dichloroethene	µg/L	100	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	µg/L	5	1.00 U	1.63	1.00 U	1.00 U	1.68	0.405 J	1.00 U	1.00 U
Vinyl chloride	µg/L	2	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Other VOCs

1,1-Dichloroethane	µg/L	-	1.00 U	1.14	1.13	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
--------------------	------	---	--------	------	------	--------	--------	--------	--------	--------

Notes:

- 1) Results above MCL shown in **bold**.
 - 2) Duplicate sample results are shown on Table _-_. Sample pairs met criteria for relative percent difference.
 - 3) Results shown for primary CVOCs and for other VOCs if detected above the RL.
- µg/L: micrograms per liter
MCL: Maximum Contaminant Level
RL: Reporting Limit
- : Not Listed

DQE Flags:

U: Analyte not detected above RL
J: Estimated

Method:

8260B: Volatile Organic Compounds

TABLE 6
ANALYTICAL RESULTS SUMMARY
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

	Well ID		WB-02	WB-03
	Lab ID		L17100709-05	L17100709-11
	Date		10/8/2017	10/10/2017
Primary CVOCs	Units	MCL		
1,1,2,2-Tetrachloroethane	µg/L	-	0.500 U	0.500 U
1,1,2-Trichloroethane	µg/L	5	1.00 U	1.00 U
1,1-Dichloroethene	µg/L	7	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	5	0.500 U	0.500 U
Carbon tetrachloride	µg/L	5	1.00 U	1.00 U
Chloroform	µg/L	80	0.300 U	0.300 U
cis-1,2-Dichloroethene	µg/L	70	1.00 U	1.00 U
Tetrachloroethene	µg/L	5	1.00 U	1.00 U
trans-1,2-Dichloroethene	µg/L	100	1.00 U	1.00 U
Trichloroethene	µg/L	5	1.00 U	1.00 U
Vinyl chloride	µg/L	2	1.00 U	1.00 U

Other VOCs

1,1-Dichloroethane	µg/L	-	1.00 U	1.00 U
--------------------	------	---	--------	--------

Notes:

- 1) Results above MCL shown in **bold**.
- 2) Duplicate sample results are shown on Table ___. Sample pairs met criteria for relative percent difference.
- 3) Results shown for primary CVOCs and for other VOCs if detected above the RL.

µg/L: micrograms per liter

MCL: Maximum Contaminant Level

RL: Reporting Limit

- : Not Listed

DQE Flags:

U: Analyte not detected above RL

J: Estimated

Method:

8260B: Volatile Organic Compounds

TABLE 7
HISTORICAL RESULTS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

	Well ID	MCL	WB-01	WB-01	WB-01	WB-02	WB-02	WB-02	WB-03	WB-03	WB-04
	Date		12/8/2005	11/12/2008	10/8/2017	12/8/2005	11/12/2008	10/8/2017	12/9/2005	10/10/2017	12/8/2005
Analyte	Unit										
Tetrachloroethene	µg/L	5	1.0 U	0.50 U	1.00 U	1.0 U	0.50 U	1.00 U	1.0 U	1.00 U	1.0 U
Trichloroethene	µg/L	5	1.0 U	0.50 U	1.00 U	1.0 U	0.50 U	1.00 U	1.0 U	1.00 U	1.0 U
1,1-Dichloroethene	µg/L	7	1.0 U	0.50 U	1.00 U	1.0 U	0.50 U	1.00 U	1.0 U	1.00 U	1.0 U

	Well ID	MCL	CS-01	CS-01	CS-01	CS-02	CS-02	CS-02	CS-03	CS-03	CS-03
	Date		7/16/2007	11/11/2008	10/9/2017	7/15/2007	11/12/2008	10/8/2017	7/16/2007	11/10/2008	10/7/2017
Analyte	Unit										
Tetrachloroethene	µg/L	5	5.0 U	0.26 J	1.00 U	5.0 U	0.50 U	0.439 J	5.0 U	0.50 U	1.00 U
Trichloroethene	µg/L	5	1.9 J	0.50 U	1.00 U	4.4 J	3.9	1.63	5.0 U	0.50 U	1.00 U
1,1-Dichloroethene	µg/L	7	5.0 U	0.50 U	1.00 U	43	48	16.3	5.0 U	23	6.13

	Well ID	MCL	CS-04	CS-04	CS-04	CS-05	CS-05	CS-06	CS-06	CS-07	CS-07
	Date		7/15/2007	11/12/2008	10/7/2017	12/29/2008	10/8/2017	12/30/2008	10/8/2017	12/30/2008	10/9/2017
Analyte	Unit										
Tetrachloroethene	µg/L	5	5.0 U	0.50 U	1.00 U	9.2	2.61	2.5	0.480 J	0.50 U	1.00 U
Trichloroethene	µg/L	5	5.0 U	0.50 U	1.00 U	1.4	1.68	0.38 J	0.405 J	0.50 U	1.00 U
1,1-Dichloroethene	µg/L	7	5.0 U	0.50 U	1.00 U	5.2	1.24	0.72	1.00 U	0.50 U	1.00 U

Notes:

1) Results above MCL shown in **bold**.

µg/L: micrograms per liter

MCL: Maximum Contaminant Level

RL: Reporting Limit

DOE Flags:

U: Analyte not detected above RL

J: Estimated

Method:

8260B: Volatile Organic Compounds

FIGURES

- 1 TDEC and LTM Well Locations
- 2 Fluvial Aquifer Groundwater Elevations
- 3 TCE Results
- 4 DCE Results



Legend

Aquifer	Area
● Fluvial	■ Background
■ Intermediate/Upper Claiborne	■ DF North
▲ Memphis	■ DF West
● Cintas Monitoring Well	■ Off Depot
● Wabash Monitoring Well	
— Original Dunn Field Boundary	

Note:
Well WB-04 is not usable;
TDEC has been notified and
will take necessary action.

Figure 1
TDEC and LTM Well Locations
Data Collection at
TDEC Wells
Dunn Field
Defense Depot
Memphis, Tennessee

0 100 200
Feet

Projection: NAD 1983 StatePlane Tennessee
Units: Feet, Elevation Units: Feet, NAVD83
Date: 11/01/2017
Edition: Rev 0

HDR

Path: W:\TMLS26\TDEC Figures\01_TDEC Well Locations.mxd



Path: \\ATM\TMS26\TDEC Figures\02_TDEC_FAQ_GW Elevations.mxd

Note
1. Groundwater contours are from October 2017.

- Legend**
- Fluvial Aquifer Well
 - Unusable Well
 - ▶ Groundwater Flow Direction
 - - - Potentiometric surface of the Fluvial Aquifer 5-ft. contour
 - - - Potentiometric surface of the Fluvial Aquifer 1-ft. contour
 - Original Dunn Field Boundary

Figure 2
TDEC and LTM Wells
Fluvial Aquifer Groundwater Elevations

Data Collection at
TDEC Wells

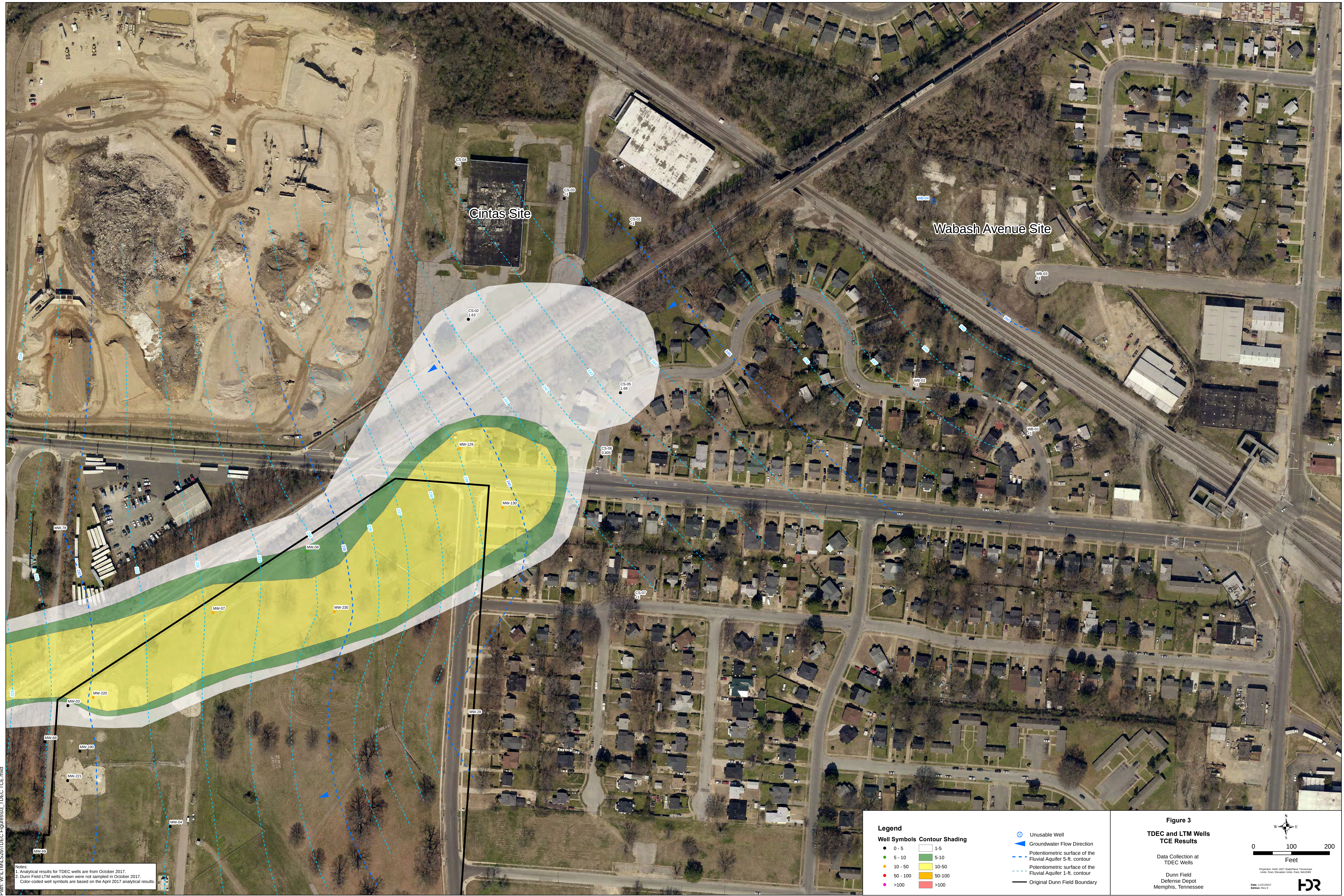
Dunn Field
Defense Depot
Memphis, Tennessee

0 100 200
Feet

Projection: NAD 1983 StatePlane Tennessee
Units: Feet, Elevation Units: Feet, NAVD83

Date: 11/01/2017
Edition: Rev 0

HDR



Notes:
1. Analytical results for TDEC wells are from October 2017.
2. Dunn Field LTM wells shown were not sampled in October 2017.
Color-coded well symbols are based on the April 2017 analytical results.

Legend

Well Symbols

- 0 - 5
- 5 - 10
- 10 - 50
- 50 - 100
- >100

Contour Shading

- 1-5
- 5-10
- 10-50
- 50-100
- >100

- ⊕ Unusable Well
- ➡ Groundwater Flow Direction
- - - Potentiometric surface of the Fluvial Aquifer 5-ft. contour
- - - Potentiometric surface of the Fluvial Aquifer 1-ft. contour
- Original Dunn Field Boundary

Figure 3

TDEC and LTM Wells

TCE Results

Data Collection at TDEC Wells

Dunn Field
Defense Depot
Memphis, Tennessee

0 100 200
Feet

Projection: NAD 1983 StatePlane Tennessee
Units: Feet, Elevation Units: Feet, NAVD83

Date: 11/20/2017
Edition: Rev 0

FDR



Notes:
1. Analytical results for TDEC wells are from October 2017.
2. Dunn Field LTM wells shown were not sampled in October 2017.
Color-coded well symbols are based on the April 2017 analytical results.

Legend

Well Symbols

- 0-7
- 7-10
- >10

Contour Shading

- 1-7
- 7-10
- >10

- Unusable Well
- Groundwater Flow Direction
- Potentiometric surface of the Fluvial Aquifer 5-ft. contour
- Potentiometric surface of the Fluvial Aquifer 1-ft. contour
- Original Dunn Field Boundary

Figure 4
TDEC and LTM Wells
1-1 DCE Results

Data Collection at
TDEC Wells

Dunn Field
Defense Depot
Memphis, Tennessee

0 100 200
Feet

Projection: NAD 1983 StatePlane Tennessee
Units: Feet, Elevation Units: Feet, NAVD83
Date: 11/09/2017
Edition: Rev 0

Appendix A

Survey Plats

Point Table

<i>Point #</i>	<i>Northing</i>	<i>Easting</i>	<i>Elevation</i>	<i>Description</i>
1038	282927.44	803403.39	276.26'	CS-03 Top of Lid
1037	282927.91	803403.30	276.23'	Concrete
1036	282927.42	803403.39	275.93'	CS-03 Top of PVC

Point Table

<i>Point #</i>	<i>Northing</i>	<i>Easting</i>	<i>Elevation</i>	<i>Description</i>
1041	282851.78	803577.27	280.16'	Ground
1040	282850.38	803576.83	280.14'	CS-01 Top of Lid
1039	282850.40	803576.91	279.76'	CS-01 Top of PVC

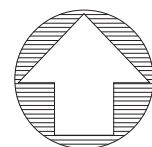
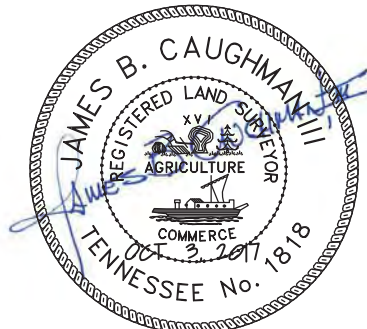
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
Elevations shown are dated:
Oct. 3, 2017

Survey data by: **Allen&Hoshall, Inc.**
1661 International Drive, #100
Memphis, TN 38120
(901) 820-0820
Date of Survey: Oct. 3, 2017
Proj #: 77475-157
Sheet 1 of 1

Monitoring Well Data CS-01, CS-03



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

Point Table				
<i>Point #</i>	<i>Northing</i>	<i>Easting</i>	<i>Elevation</i>	<i>Description</i>
1035	282610.09	803152.25	280.44'	CS-02 Top of Lid
1034	282610.55	803151.56	280.37'	Concrete
1033	282610.18	803152.00	280.18'	CS-02 Top of PVC

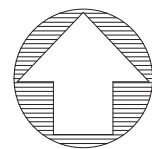
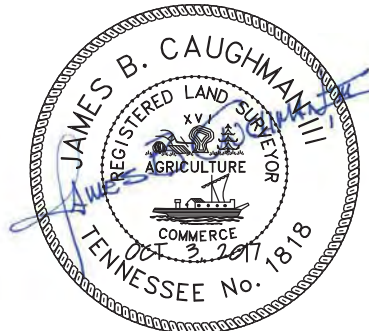
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
Elevations shown are dated:
Oct. 3, 2017

Survey data by: **Allen&Hoshall, Inc.**
1661 International Drive, #100
Memphis, TN 38120
(901) 820-0820
Date of Survey: Oct. 3, 2017
Proj #: 77475-157
Sheet 1 of 1

Monitoring Well Data CS-02



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)

1 inch = 100 ft.

Point Table

Point #	Northing	Easting	Elevation	Description
1032	283006.96	803119.00	271.69'	CS-04 Top of Lid
1031	283007.57	803118.73	271.68'	Concrete
1030	283007.08	803119.07	271.30'	CS-04 Top of PVC

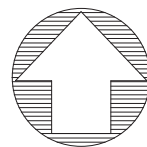
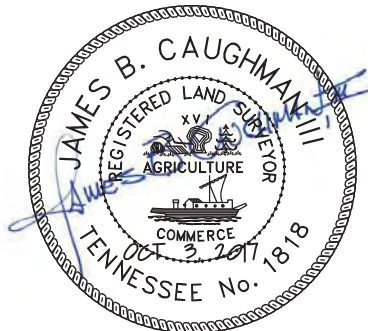
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
 Elevations shown are dated:
 Oct. 3, 2017

Survey data by: **Allen&Hoshall, Inc.**
 1661 International Drive, #100
 Memphis, TN 38120
 (901) 820-0820
 Date of Survey: Oct. 3, 2017
 Proj #: 77475-157
 Sheet 1 of 1

Monitoring Well Data CS-04



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)
 1 inch = 100 ft.

Point Table

Point #	Northing	Easting	Elevation	Description
1024	282300.20	804620.10	276.18'	Concrete
1026	282299.74	804620.08	276.17'	MW-01 Top of Lid
1025	282299.80	804620.05	275.97'	MW-01 Top of PVC

Wabash Ave Site
WB-01, WB-02

Point Table

Point #	Northing	Easting	Elevation	Description
1028	282427.64	804321.87	272.36'	MW-02 Top of Lid
1029	282427.99	804321.72	272.34'	Concrete
1027	282427.45	804321.91	272.21'	MW-02 Top of PVC

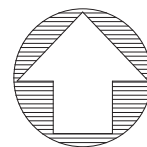
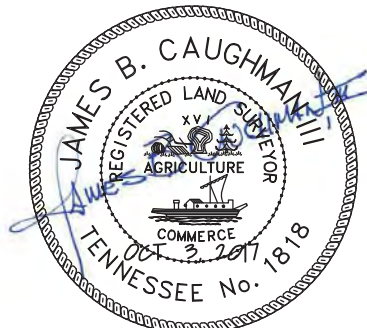
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
 Elevations shown are dated:
 Oct. 3, 2017

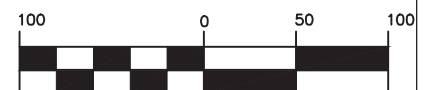
Monitoring Well Data MW-01, MW-02

Survey data by: **Allen&Hoshall, Inc.**
 1661 International Drive, #100
 Memphis, TN 38120
 (901) 820-0820
 Date of Survey: Oct. 3, 2017
 Proj #: 77475-157
 Sheet 1 of 1



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)

1 inch = 100 ft.

Point Table

Point #	Northing	Easting	Elevation	Description
1002	282707.17	804642.46	265.65'	MW-03 Top of Lid
1004	282707.76	804642.31	265.64'	Concrete
1001	282707.22	804642.33	265.33'	MW-03 Top of PVC

Wabash Ave Site
WB-03, WB-04

Point Table

Point #	Northing	Easting	Elevation	Description
1006	282921.22	804372.78	264.00'	Ground
1005	282920.61	804373.11	263.76'	MW-04 Top of PVC

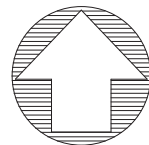
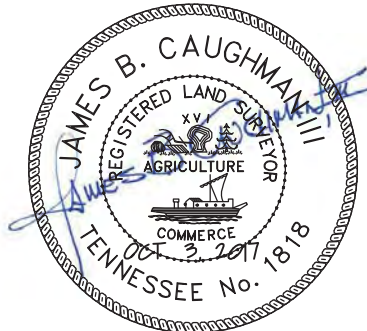
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
Elevations shown are dated:
Oct. 3, 2017

Survey data by: **Allen&Hoshall, Inc.**
1661 International Drive, #100
Memphis, TN 38120
(901) 820-0820
Date of Survey: Oct. 3, 2017
Proj #: 77475-157
Sheet 1 of 1

Monitoring Well Data MW-03, MW-04



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

Point Table

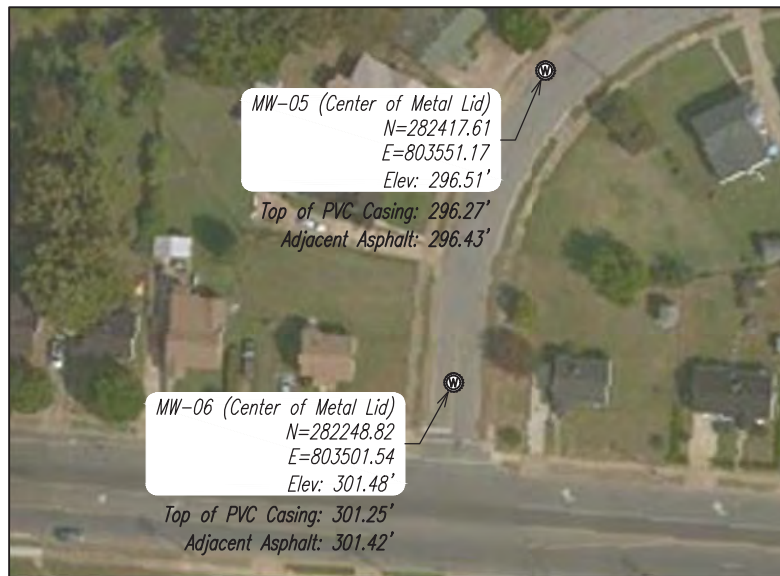
<i>Point #</i>	<i>Northing</i>	<i>Easting</i>	<i>Elevation</i>	<i>Description</i>
1022	282417.61	803551.17	296.51'	MW-05 Top of Lid
1021	282418.03	803551.20	296.43'	ASPHALT
1020	282417.57	803551.18	296.27'	MW-05 Top of PVC

Cintas Site
CS-05, CS-06

Point Table

<i>Point #</i>	<i>Northing</i>	<i>Easting</i>	<i>Elevation</i>	<i>Description</i>
1018	282249.42	803501.60	301.59'	ASPHALT
1019	282248.82	803501.54	301.48'	MW-06 Top of Lid
1017	282248.89	803501.59	301.25'	MW-06 Top of PVC

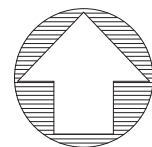
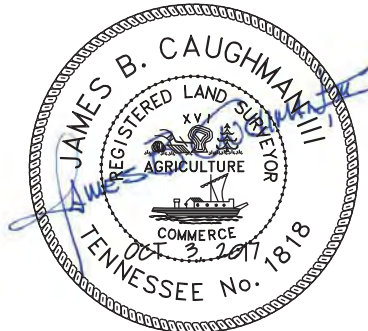
NAD-27 (TN) Coordinates



Site Location: at The Memphis Depot.
 Elevations shown are dated:
 Oct. 3, 2017

Monitoring Well Data MW-05, MW-06

Survey data by: **Allen&Hoshall, Inc.**
 1661 International Drive, #100
 Memphis, TN 38120
 (901) 820-0820
 Date of Survey: Oct. 3, 2017
 Proj #: 77475-157
 Sheet 1 of 1



Grid North, NAD27

GRAPHIC SCALE



(IN FEET)
 1 inch = 100 ft.

Point Table				
Point #	Northing	Easting	Elevation	Description
1016	281869.63	803590.49	297.73'	MW-07 Top of Lid
1015	281870.24	803590.59	297.69'	ASPHALT
1014	281869.67	803590.44	297.51'	MW-07 Top of PVC

NAD-27 (TN) Coordinates

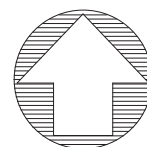
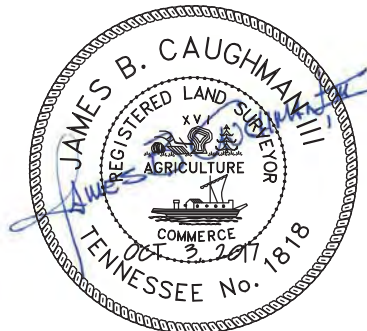
Cintas Site
CS-7



Site Location: at The Memphis Depot.
Elevations shown are dated:
Oct. 3, 2017

Survey data by: **Allen&Hoshall, Inc.**
1661 International Drive, #100
Memphis, TN 38120
(901) 820-0820
Date of Survey: Oct. 3, 2017
Proj #: 77475-157
Sheet 1 of 1

Monitoring Well Data MW-07



Grid North, NAD27

GRAPHIC SCALE



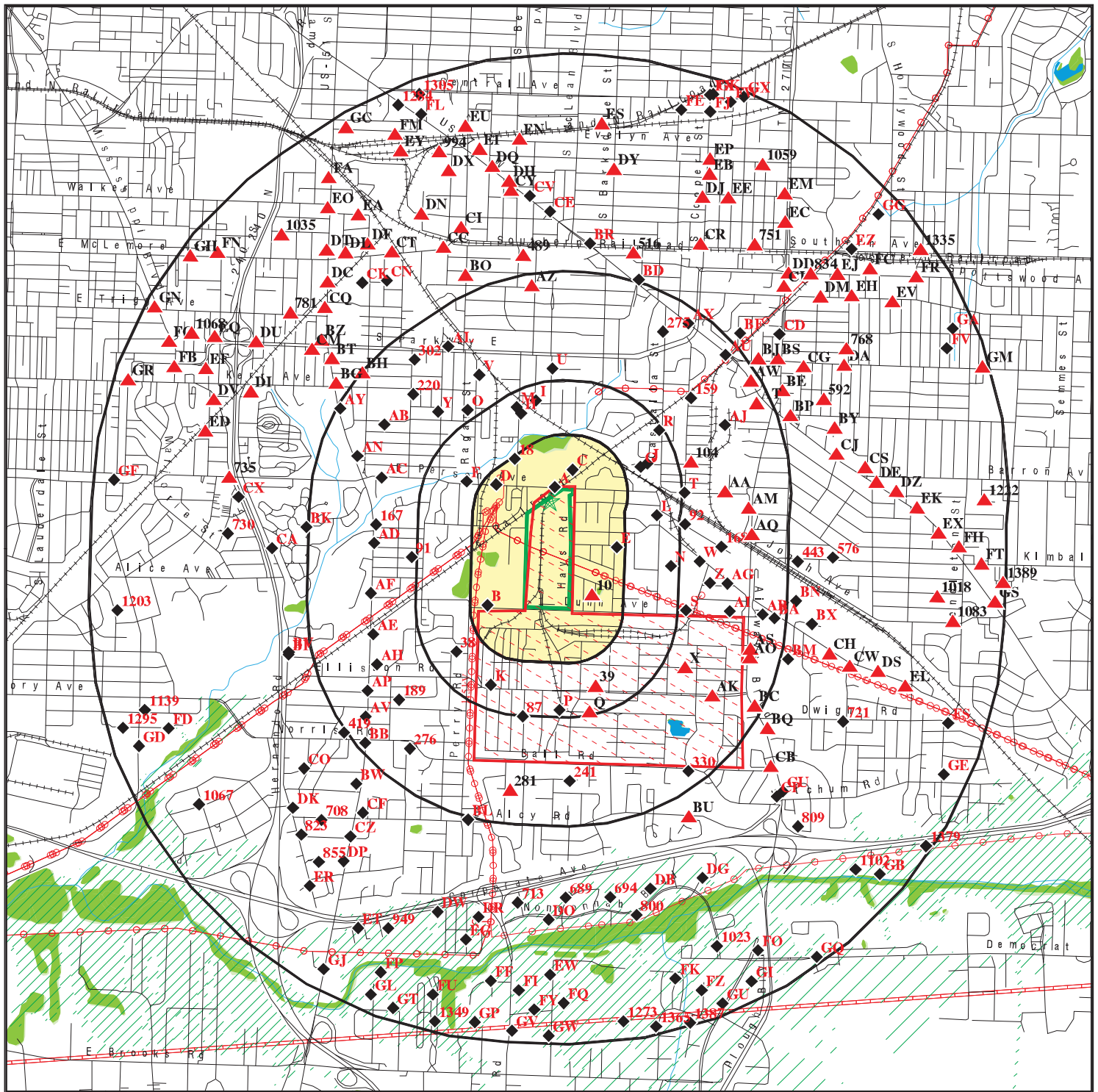
(IN FEET)

1 inch = 100 ft.

Appendix B

EDR Report Summary Information

B1
OVERVIEW MAP - 5052485.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Memphis DDMT
ADDRESS: 1763 E Person Ave
Memphis TN 38106
LAT/LONG: 35.099114 / 90.003712

CLIENT: HDR Engineering, Inc.
CONTACT: Taylor Redmond
INQUIRY #: 5052485.2s
DATE: September 18, 2017 1:09 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	2.000		1	0	0	0	0	1
Proposed NPL	2.000		0	0	0	0	0	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	2.000		0	0	0	0	0	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	2.000		0	0	0	0	0	0
SEMS	2.000		2	0	0	2	4	8
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	2.000		0	0	1	2	4	7
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	2.000		1	0	0	0	1	2
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	2.000		1	0	0	0	1	2
<i>Federal RCRA generators list</i>								
RCRA-LQG	2.000		0	0	0	0	2	2
RCRA-SQG	2.000		0	0	1	2	6	9
RCRA-CESQG	2.000		0	0	0	6	19	25
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	2.000		0	0	0	0	0	0
US ENG CONTROLS	2.000		1	0	0	0	1	2
US INST CONTROL	2.000		1	0	0	0	1	2
<i>Federal ERNS list</i>								
ERNS	1.000		1	1	0	12	NR	14
<i>State- and tribal - equivalent NPL</i>								
TN SHWS	2.000		0	0	0	0	0	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
TN SWF/LF	2.000		0	0	0	0	4	4
<i>State and tribal leaking storage tank lists</i>								
TN LUST	2.000		0	1	4	22	59	86
INDIAN LUST	2.000		0	0	0	0	0	0
TN LUST TRUST	2.000		0	0	0	7	25	32
TN HIST_LUST CO	2.000		0	0	0	1	3	4

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
FEMA UST	2.000		0	0	0	0	0	0
TN UST	2.000		1	1	7	38	125	172
TN AST	2.000		0	0	0	0	0	0
INDIAN UST	2.000		0	0	0	0	0	0
State and tribal institutional control / engineering control registries								
TN ENG CONTROLS	2.000		0	0	0	1	1	2
TN INST CONTROL	2.000		0	0	0	1	2	3
State and tribal voluntary cleanup sites								
TN SRP	2.000		0	0	1	6	7	14
TN VCP	2.000		0	0	0	3	2	5
INDIAN VCP	2.000		0	0	0	0	0	0
State and tribal Brownfields sites								
TN BROWNFIELDS	2.000		0	0	0	0	0	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	2.000		0	0	0	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites								
TN SWRCY	2.000		0	0	1	1	0	2
INDIAN ODI	2.000		0	0	0	0	0	0
DEBRIS REGION 9	2.000		0	0	0	0	0	0
ODI	2.000		0	0	0	0	0	0
IHS OPEN DUMPS	2.000		0	0	0	0	0	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	1.000		0	0	0	0	NR	0
TN CDL	1.000		0	0	0	0	NR	0
TN PRIORITYCLEANERS	2.000		0	0	0	0	0	0
TN DEL SHWS	2.000		0	0	0	0	0	0
US CDL	1.000		0	0	0	0	NR	0
Local Lists of Registered Storage Tanks								
TN HIST UST	2.000		2	1	7	38	133	181
Local Land Records								
TN LIENS	1.000		0	0	0	0	NR	0
LIENS 2	1.000		0	0	0	0	NR	0
Records of Emergency Release Reports								
HMIRS	1.000		0	0	8	3	NR	11

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
TN SPILLS	1.000		0	0	0	5	NR	5
Other Ascertainable Records								
RCRA NonGen / NLR	2.000		3	1	6	35	106	151
FUDS	2.000		0	0	0	0	0	0
DOD	2.000		0	0	0	0	0	0
SCRD DRYCLEANERS	2.000		0	0	0	0	0	0
US FIN ASSUR	1.000		0	0	0	0	NR	0
EPA WATCH LIST	1.000		0	0	0	0	NR	0
2020 COR ACTION	2.000		0	0	0	0	1	1
TSCA	1.000		0	0	0	0	NR	0
TRIS	1.000		0	0	0	0	NR	0
SSTS	1.000		0	0	0	2	NR	2
ROD	2.000		1	0	0	0	0	1
RMP	1.000		0	0	0	0	NR	0
RAATS	1.000		0	0	0	0	NR	0
PRP	1.000		0	0	0	0	NR	0
PADS	1.000		1	0	0	1	NR	2
ICIS	1.000		0	0	1	4	NR	5
FTTS	1.000		0	0	1	2	NR	3
MLTS	1.000		0	0	0	0	NR	0
COAL ASH DOE	1.000		0	0	0	0	NR	0
COAL ASH EPA	2.000		0	0	0	0	0	0
PCB TRANSFORMER	1.000		0	0	0	0	NR	0
RADINFO	1.000		0	0	0	0	NR	0
HIST FTTS	1.000		0	0	1	2	NR	3
DOT OPS	1.000		0	0	0	1	NR	1
CONSENT	2.000		0	0	0	0	0	0
INDIAN RESERV	2.000		0	0	0	0	0	0
FUSRAP	2.000		0	0	0	0	0	0
UMTRA	2.000		0	0	0	0	0	0
LEAD SMELTERS	1.000		0	0	0	0	NR	0
US AIRS	1.000		0	0	0	3	NR	3
US MINES	2.000		0	0	1	0	0	1
ABANDONED MINES	1.000		0	0	0	0	NR	0
FINDS	1.000		3	1	11	58	NR	73
UXO	2.000		0	0	0	0	0	0
DOCKET HWC	2.000		0	0	0	1	0	1
ECHO	1.000		2	1	8	48	NR	59
FUELS PROGRAM	2.000		0	0	0	1	0	1
TN AIRS	1.000		0	0	0	0	NR	0
TN DRYCLEANERS	2.000		0	0	0	0	4	4
TN LEAD	1.000		0	0	0	0	NR	0
NY MANIFEST	0.250		1	0	NR	NR	NR	1
TN NPDES	1.000		1	0	8	21	NR	30

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	2.000		0	0	0	0	0	0
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	2.000		1	1	13	91	348	454
EDR Hist Cleaner	2.000		0	2	4	22	162	190
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
TN RGA LF	2.000		0	0	0	0	1	1
TN RGA LUST	2.000		0	1	4	20	65	90
- Totals --		0	24	11	88	462	1087	1672

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAPPED SITES SUMMARY

Target Property Address:
1763 E PERSON AVE
MEMPHIS, TN 38106

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg		2163 AIRWAYS BLVD.	NPL, SEMS, CORRACTS, RCRA-TSDF, US ENG CONTROLS,	Same	1 ft.
A1	PRODUCTION SPECIALTI	1782 E PERSON AVE	TN NPDES	Lower	151, 0.029, NNE
A2	NATIONAL MANUFACTURI	1782 E PERSON AVENUE	RCRA NonGen / NLR, FINDS, ECHO	Lower	151, 0.029, NNE
B3	AUTO ZONE, INC	1700 DUNN AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	366, 0.069, SSW
B4		1700 DUNN AVE	ERNS	Lower	366, 0.069, SSW
B5	AUTO ZONE	1700 DUNN AVENUE	TN UST	Lower	366, 0.069, SSW
B6	AUTO ZONE	1700 DUNN AVENUE	TN HIST UST	Lower	366, 0.069, SSW
B7	MALONE AND HYDE	1700 DUNN AVENUE	TN HIST UST	Lower	366, 0.069, SSW
C8	CINTAS	1635 S MCLEAN	SEMS	Lower	477, 0.090, NE
C9	CINTAS	1635 S MCLEAN	FINDS	Lower	477, 0.090, NE
10	CAR DOCTOR	1911 S BARKSDALE ST	EDR Hist Auto	Higher	553, 0.105, SSE
D11	MEMPHIS LIGHT GAS &	1667 EAST PERSON	RCRA NonGen / NLR, FINDS, ECHO	Lower	702, 0.133, WNW
B12	HUMBOLDT EXPRESS INC	1620 DUNN	TN LUST, TN UST	Lower	895, 0.170, SSW
B13	HUMBOLDT EXPRESS INC	1620 DUNN	TN HIST UST	Lower	895, 0.170, SSW
B14	HUMBOLDT EXPRESS INC	1620 DUNN	TN RGA LUST	Lower	895, 0.170, SSW
D15		1642 PERSON	ERNS	Lower	1021, 0.193, WNW
E16	SNO WHITE LAUNDERETT	1788 LA PALOMA ST	EDR Hist Cleaner	Lower	1103, 0.209, SE
E17	VILLAGE PARK CLEANER	1786 LA PALOMA ST	EDR Hist Cleaner	Lower	1116, 0.211, ESE
18	CAUSEY TRUCK SERVICE	1629 ROZELLE	EDR Hist Auto	Lower	1263, 0.239, NW
E19	THOMPSON COURTS APAR	1875 KELTNER CIRCLE	FTTS	Lower	1537, 0.291, ESE
E20	THOMPSON COURTS APAR	1875 KELTNER CIRCLE	FINDS	Lower	1537, 0.291, ESE
E21	THOMPSON COURTS APAR	1875 KELTNER CIRCLE	HIST FTTS	Lower	1537, 0.291, ESE
F22	SCIPEO JONES	1571 PERSON AVENUE	TN RGA LUST	Lower	1607, 0.304, WNW
F23	SCIPEO JONES	1571 PERSON AVENUE	TN LUST, TN UST	Lower	1607, 0.304, WNW
F24	SCIPEOS DRIVE-IN GRO	1571 E PERSON AVE	EDR Hist Auto	Lower	1607, 0.304, WNW
F25	SCIPEO JONES	1571 PERSON AVENUE	TN HIST UST	Lower	1607, 0.304, WNW
F26	PERFORMANCE AUTOMOTI	1580 E PERSON AVE B	EDR Hist Auto	Lower	1654, 0.313, WNW
G27	AMERICAN TRUCK & DIE	2006-2008 PERSON AVE	EDR Hist Auto	Lower	1673, 0.317, East
F28	PERSON AVE DRY CLEAN	1569 E PERSON AVE	EDR Hist Cleaner	Lower	1688, 0.320, WNW
G29	BURNS GARAGE	2008 E PERSON AVE	EDR Hist Auto	Lower	1699, 0.322, East
G30	GENERAL MACHINE WORK	2001 WABASH AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	1741, 0.330, ENE
G31	WABASH AVENUE SITE	2001 WABASH AVENUE	SEMS-ARCHIVE	Lower	1741, 0.330, ENE
H32	ROZELLE PLANT	1580 ROZELLE	TN NPDES	Lower	1747, 0.331, NNW
I33	FRANKLIN AUTO BODY &	1499 OAKLAWN ST	EDR Hist Auto	Lower	1825, 0.346, North
G34	KOEN W I & SON DCLO	2028 BOYLE AVE	EDR Hist Cleaner	Lower	1911, 0.362, East
J35	P&P AUTO	1980 WABASH AVE	EDR Hist Auto	Lower	1918, 0.363, ENE
H36	AUTO ZONE	1516 ROZELLE	TN UST	Lower	1961, 0.371, NNW
H37	AUTO ZONE	1516 ROZELLE	TN HIST UST	Lower	1961, 0.371, NNW
38	RIVER OIL COMPANY	1550 CANE RD	EDR Hist Auto	Lower	1968, 0.373, SSW

MAPPED SITES SUMMARY

Target Property Address:
1763 E PERSON AVE
MEMPHIS, TN 38106

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
39	H & H CONTRACTORS IN		US MINES	Higher	1975, 0.374, SSE
G40	MEMPHIS ENGINE REBUI	1637 CASTALIA	EDR Hist Auto	Lower	1989, 0.377, ENE
J41	GENERAL MACHINE WORK	2001 WABASH AVE	TN NPDES	Lower	1990, 0.377, ENE
G42	ROATEN JIM MACHINERY	1655 CASTALIA ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	2011, 0.381, East
G43	MASTER PRESS BRAKE A	1655 CASTALIA ST	EDR Hist Auto	Lower	2011, 0.381, East
G44	J&M AUTO SERVICE	1701 CASTALIA ST	EDR Hist Auto	Lower	2037, 0.386, East
G45	CLAYBORNE TAYLOR	1701 CASTALIA A	TN LUST, TN UST	Lower	2037, 0.386, East
G46	CLAYBORNE TAYLOR	1701 CASTALIA-A	TN RGA LUST	Lower	2037, 0.386, East
K47	BARNHART CRANE & RIG	1701 DUNN AVENUE	TN NPDES	Lower	2059, 0.390, SSW
K48	BARNHART CRANE & RIG	1701 DUNN AVENUE	FINDS, ECHO	Lower	2059, 0.390, SSW
K49		1701 DUNN AVENUE	RCRA-SQG	Lower	2059, 0.390, SSW
L50	FOSTER'S LANDSCAPING	1731 CASTALIA	TN RGA LUST	Lower	2093, 0.396, East
L51	HANMM & BRIDGEFORT G	1731 CASTALIA ST	EDR Hist Auto	Lower	2093, 0.396, East
L52	FOSTER'S LANDSCAPING	1731 CASTALIA	TN HIST UST	Lower	2093, 0.396, East
L53	FOSTER'S LANDSCAPING	1731 CASTALIA	TN LUST, TN UST	Lower	2093, 0.396, East
H54	ALPINE MOVING & STOR	1500 S ROZELLE	RCRA NonGen / NLR, FINDS, ECHO	Lower	2094, 0.397, NNW
L55	KOENB LAURA CLEANER	1747 CASTALIA ST	EDR Hist Cleaner	Lower	2095, 0.397, East
G56	CLAYBORNE TAYLOR	1701 CASTALIA-A	TN HIST UST	Lower	2102, 0.398, East
L57	BENSONS CLEANERS	1745 CASTALIA ST	EDR Hist Cleaner	Lower	2113, 0.400, East
J58	MEMPHIS ENGINE REBUI	1629 CASTALIA	EDR Hist Auto	Lower	2128, 0.403, ENE
I59	THREE STAR PRINT SHO	1468 KYLE ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	2221, 0.421, North
I60	THREE STAR PRINT SHO	1468 KYLE ST	TN NPDES	Lower	2243, 0.425, North
M61	AUTO ZONE	1471 ROZELLE	TN HIST UST	Lower	2276, 0.431, NNW
M62	AUTO ZONE	1471 ROZELLE	TN UST	Lower	2276, 0.431, NNW
N63	MID SOUTH COMPRESS	1824 CASTLIA	TN UST	Lower	2440, 0.462, ESE
N64	MID SOUTH COMPRESS	1824 CASTLIA	TN HIST UST	Lower	2440, 0.462, ESE
O65	RAGAN STREET PROP (F	1558 RAGAN STREET	TN SRP	Lower	2440, 0.462, NW
P66	THOMAS SALES & SERVI	2179 W. E. FREEMAN B	TN SWRCY	Lower	2464, 0.467, South
Q67		1910 DANIELSON PLACE	RCRA NonGen / NLR, FINDS, ECHO	Higher	2541, 0.481, South
Q68	UPS SUPPLY CHAIN SOL	1910 DANIELSON PLACE	TN NPDES	Higher	2541, 0.481, South
Q69	UPS SUPPLY CHAIN SOL	1910 DANIELSON PLACE	ICIS, FINDS	Higher	2541, 0.481, South
Q70	UPS SUPPLY CHAIN SOL	1910 DANIELSON PLACE	TN NPDES	Higher	2541, 0.481, South
R71	GOODE MACHINE WORKS,	1509 CASTALIA	RCRA NonGen / NLR, FINDS, ECHO	Lower	2548, 0.483, NE
R72	GMW, INC.	1509 CASTALIA	TN NPDES	Lower	2548, 0.483, NE
S73	ABF FREIGHT SYSTEM,		TN LUST, TN UST, FINDS, TN NPDES	Higher	2574, 0.488, SE
S74		2080 DUNN RD	HMIRS	Higher	2574, 0.488, SE
S75		2080 DUNN	HMIRS	Higher	2574, 0.488, SE
S76		2080 DUNN AVENUE	HMIRS	Higher	2574, 0.488, SE
S77	ABF FREIGHT SYSTEM,	2080 DUNN ROAD	TN HIST UST	Higher	2574, 0.488, SE

MAPPED SITES SUMMARY

Target Property Address:
1763 E PERSON AVE
MEMPHIS, TN 38106

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
S78		2080 DUNN ROAD	HMIRS	Higher	2574, 0.488, SE
S79		2080 DUNN	HMIRS	Higher	2574, 0.488, SE
S80	ABF FREIGHT SYSTEM,	2080 DUNN ROAD	TN RGA LUST	Higher	2574, 0.488, SE
S81		2080 DUNN RD	HMIRS	Higher	2574, 0.488, SE
S82		2080 DUNN	HMIRS	Higher	2574, 0.488, SE
S83	ARKANSAS BEST FREIGH	2080 DUNN AVENUE	FINDS, ECHO	Higher	2574, 0.488, SE
S84		2080 DUNN RD	HMIRS	Higher	2574, 0.488, SE
O85	MILES OF SMILES	1543 GOLD AVE	EDR Hist Auto	Lower	2614, 0.495, NW
O86	C&M CLEANERS	1572 ETHLYN AVE	EDR Hist Cleaner	Lower	2642, 0.500, NW
87	THE EARTHGRAINS CO.		FINDS	Lower	2654, 0.503, South
T88	AIRWAYS IRON & METAL	2103 E PERSON AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	2694, 0.510, East
T89	AIRWAYS IRON & METAL	2103 E. PERSON	TN SWRCY, TN NPDES	Lower	2694, 0.510, East
O90	IMMACULATE TOUCH	1545 ETHLYN AVE	EDR Hist Auto	Lower	2703, 0.512, NW
91	DOWNS WRECKER SERVIC		FINDS	Lower	2765, 0.524, WSW
92	DIRECT MOTOR EXPRESS	2100 KELLOGG AVE.	RCRA NonGen / NLR, FINDS, ECHO	Lower	2775, 0.526, East
S93		TOLUENE 30 32 M&P 32	RCRA NonGen / NLR	Lower	2843, 0.538, SE
O94	DELTA EXPRESS #3166	1559 LAMAR & WILLET	TN LUST, TN LUST TRUST	Lower	2881, 0.546, NW
P95	RB OF MEMPHIS, INC.	2300 SITLER	TN NPDES	Higher	2881, 0.546, South
U96	SCOTT'S UNION 76	749 PARKWAY	TN HIST UST	Lower	2893, 0.548, North
U97	B.E.D.N. INC.	961 EAST PKWY. ST.	TN UST	Lower	2893, 0.548, North
T98	CARRIER CONCRETE	2141 E PERSON ST	TN RGA LUST	Lower	2932, 0.555, East
T99	NEW CITY CONCRETE PE	2141 E. PERSON AVENU	FINDS, ECHO	Lower	2932, 0.555, East
T100	CARRIER CONCRETE	2141 EAST PERSON ST.	TN HIST UST	Lower	2932, 0.555, East
T101	CARRIER CONCRETE	2141 EAST PERSON ST.	TN UST	Lower	2932, 0.555, East
T102	CARRIER CONCRETE	2141 E PERSON ST	TN LUST, TN NPDES	Lower	2932, 0.555, East
U103	EXXON R/S 5 0622	1054 SOUTH PARKWAY E	TN UST	Lower	2933, 0.555, North
104	RIAS CLEANERS CLDO	2116 WABASH AVE	EDR Hist Cleaner	Higher	2951, 0.559, ENE
V105		1440 RAGAN ST.	ERNS	Lower	3019, 0.572, NNW
V106	SONOCO PRODUCTS COMP	1440 RAGAN STREET	TN SPILLS, TN NPDES	Lower	3019, 0.572, NNW
V107	SONOCO PRODUCTS	1440 RAGAN STREET	RCRA-CESQG, US AIRS, FINDS, ECHO	Lower	3019, 0.572, NNW
V108	SONOCO - PHOENIX	1440 RAGAN STREET	FINDS	Lower	3019, 0.572, NNW
W109	NATIONAL TANK INC	2147 FRISCO AVENUE	TN VCP, TN SRP, TN NPDES	Lower	3134, 0.594, ESE
W110	NATIONAL BUTANE GAS	2147 FRISCO AVENUE	RCRA NonGen / NLR, FINDS, ECHO	Lower	3134, 0.594, ESE
X111		2100 TROYER AVE UNIT	RCRA NonGen / NLR	Higher	3155, 0.598, SE
X112	INNPack, LLC	2100 TROYER AVE # 30	TN NPDES	Higher	3155, 0.598, SE
X113	INNPack LLC	2100 TROYER DR	FINDS, ECHO	Higher	3155, 0.598, SE
X114	INNPack, LLC	2100 TROYER AVE # 30	TN NPDES	Higher	3155, 0.598, SE
Y115	J&L SPECIALITIES INC	2240 DEADRICK ST	PADS	Lower	3275, 0.620, NW
Y116	SYMONS CORP	2240 DEADRICK	RCRA NonGen / NLR, FINDS, ECHO	Lower	3275, 0.620, NW

MAPPED SITES SUMMARY

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1763 E PERSON AVE
MEMPHIS, TN 38106

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Y117	J & L SPECIALTIES, I	2240 DEADRICK STREET	FINDS	Lower	3275, 0.620, NW
Z118		2183 FREEMONT RD	RCRA NonGen / NLR	Lower	3288, 0.623, ESE
Z119	CHARLES H. HILL CONT	2183 FREEMONT	TN NPDES	Lower	3288, 0.623, ESE
Z120	CHARLES H HILL CONTR	2183 FREEMONT RD	FINDS, ECHO	Lower	3288, 0.623, ESE
Z121	CHOCTAW CONCRETE	2183 FREEMONT	FINDS, ECHO	Lower	3288, 0.623, ESE
Z122	RIVER CITY TRUCK SAL	2160 FREEMONT RD	EDR Hist Auto	Lower	3315, 0.628, ESE
Z123	ABADONED SITE	2160 FREEMONT AVENUE	TN HIST UST	Lower	3315, 0.628, ESE
Z124	ABADONED SITE	2160 FREEMONT AVENUE	TN LUST, TN UST	Lower	3315, 0.628, ESE
Z125	ABADONED SITE	2160 FREEMONT AVE	TN RGA LUST	Lower	3315, 0.628, ESE
Z126	TUCKERS TRANSMISSION	2170 DUNN AVE	EDR Hist Auto	Lower	3319, 0.629, SE
W127	KELLOGG CO	2168 FRISCO	TN HIST UST	Lower	3354, 0.635, ESE
W128	KELLOGG USA, INC.	2168 FRISCO AVENUE	ICIS, US AIRS, FINDS, ECHO	Lower	3354, 0.635, ESE
W129	KELLOGG COMPANY	2168 FRISCO AVENUE	FTTS, HIST FTTS	Lower	3354, 0.635, ESE
W130	KELLOGG USA, INC.	2168 FRISCO AVE	TN NPDES	Lower	3354, 0.635, ESE
W131	KELLOGG COMPANY	2168 FRISCO AVENUE	TN UST	Lower	3354, 0.635, ESE
W132		2168 FRISCO AVE	RCRA-CESQG	Lower	3354, 0.635, ESE
AA133	FERRELL PAVING INC	2174 EAST PERSON	TN RGA LUST	Higher	3383, 0.641, East
AA134	FERRELL PAVING INC	2174 E PERSON	TN RGA LUST	Higher	3383, 0.641, East
AA135	FERRELL PAVING INC	2174 EAST PERSON	TN HIST UST	Higher	3383, 0.641, East
AA136	FERRELL PAVING, INC.	2174 EAST PERSON	TN LUST, TN UST, TN HIST UST, TN NPDES	Higher	3383, 0.641, East
AA137	FERRELL PAVING INC	2174 E PERSON	TN LUST, TN LUST TRUST	Higher	3383, 0.641, East
Z138	MORGAN AND TURNER IN	2176 FILMORE	TN UST	Lower	3399, 0.644, ESE
Z139	MORGAN AND TURNER IN	2176 FILMORE	TN HIST UST	Lower	3399, 0.644, ESE
Z140	KEELER IRON WORKS, I	2169 FILMORE 2169 FI	RCRA NonGen / NLR, FINDS, ECHO	Lower	3405, 0.645, ESE
V141		1400 RAGAN STREET	ERNS	Lower	3427, 0.649, NNW
V142	J. STRICKLAND & CO.	1400 RAGAN	RCRA NonGen / NLR, FINDS, ECHO	Lower	3427, 0.649, NNW
V143		1400 REAGAN	TN SPILLS	Lower	3427, 0.649, NNW
V144	J. STRICKLAND & CO.	1400 RAGAN STREET	TN NPDES	Lower	3427, 0.649, NNW
V145		1400 RAGAN ST	ERNS	Lower	3427, 0.649, NNW
V146		1400 RAGAN	RCRA NonGen / NLR	Lower	3427, 0.649, NNW
X147	ZAPPER PRODUCTS LLC	2129 TROYER AVE STE	EDR Hist Auto	Higher	3495, 0.662, SE
Z148	DECORATIVE CABINET C	2192 DUNN	RCRA NonGen / NLR, FINDS, ECHO	Lower	3518, 0.666, SE
Z149		2192 DUNN AVE	RCRA NonGen / NLR	Lower	3518, 0.666, SE
Z150	REAR C & C AUTO SERV	2192 DUNN AVE	EDR Hist Auto	Lower	3518, 0.666, SE
Z151	BAKER ELECTRIC CO IN	2191 FILMORE AVENUE	TN HIST UST	Lower	3529, 0.668, ESE
Z152	BAKER ELECTRIC CO IN	2191 FILMORE AVENUE	TN UST	Lower	3529, 0.668, ESE
Z153	CHOCTAW CONSTRUCTION	2193 FREEMONT ROAD	TN LUST, TN UST	Lower	3531, 0.669, ESE
Z154	CHOCTAW CONSTRUCTION	2193 FREEMONT RD	TN RGA LUST	Lower	3531, 0.669, ESE
Z155	CHOCTAW CONSTRUCTION	2193 FREEMONT ROAD	TN HIST UST	Lower	3531, 0.669, ESE

MAPPED SITES SUMMARY

Target Property Address:
1763 E PERSON AVE
MEMPHIS, TN 38106

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
AB156	JOYCE CINRS	1553 PILLOW ST	EDR Hist Cleaner	Lower	3535, 0.670, WNW
AB157	WHITES GARAGE	1549 PILLOW	EDR Hist Auto	Lower	3563, 0.675, WNW
AA158	AIR CONVEYING CORP	2196 E PERSON AVE	TN NPDES	Higher	3591, 0.680, East
159	C & C ENGINE SALES &	1446 SOUTH COOPER RE	EDR Hist Auto	Lower	3630, 0.688, NE
AC160		1363 PERSON	RCRA-CESQG, FINDS, ECHO	Lower	3631, 0.688, West
AC161	HAMILTON HIGH SCHOOL	1363 PERSON AVENUE	TN HIST UST	Lower	3631, 0.688, West
AC162	HAMILTON HIGH SCHOOL	1363 PERSON AVE	TN RGA LUST	Lower	3631, 0.688, West
AC163	HAMILTON HIGH SCHOOL	1363 PERSON AVENUE	TN LUST, TN UST	Lower	3631, 0.688, West
Z164	LEATH PAINTING CO	2203 FREMONT	TN UST	Lower	3633, 0.688, ESE
Z165	LEATH PAINTING CO	2203 FREMONT	TN HIST UST	Lower	3633, 0.688, ESE
AD166	WELLS & SONS EXXON S	1820 ELVIS PRESLEY	EDR Hist Auto	Lower	3643, 0.690, WSW
167	AUTO WISE	1744 ELVIS PRESLEY B	EDR Hist Auto	Lower	3647, 0.691, West
168		2240 KELLOGG AVE	HMIRS	Lower	3651, 0.691, ESE
AD169	HOUSE OF TOYZ INC	1856 ELVIS PRESLEY B	EDR Hist Auto	Lower	3663, 0.694, WSW
Z170	KERMIT B BUCK AND SO	2204 FREEMONT AVENUE	TN HIST UST	Lower	3673, 0.696, ESE
Z171	KERMIT B BUCK AND SO	2204 FREEMONT AVENUE	TN UST	Lower	3673, 0.696, ESE
AA172		2196 EAST PERSON	RCRA NonGen / NLR, FINDS, ECHO	Higher	3679, 0.697, East
AD173	CAVOLA VIE ESSO SERV	1820 S BELLEVUE BLVD	EDR Hist Auto	Lower	3687, 0.698, WSW
AD174	V I P LAUNDRY	1790 ELVIS PRESLEY	EDR Hist Cleaner	Lower	3688, 0.698, WSW
AD175	UNIQUE CLEANERS CLO	1792 S BELLEVUE BLVD	EDR Hist Cleaner	Lower	3688, 0.698, WSW
AD176	SITE OIL CO BR GAS S	1840 S BELLEVUE BLVD	EDR Hist Auto	Lower	3688, 0.698, WSW
AD177	SITE OIL CO BR GAS S	1840 ELVIS PRESLEY	EDR Hist Auto	Lower	3688, 0.698, WSW
Z178	RUSSELL & BUSBY PAIN	2213 FILMORE ST	TN RGA LUST	Lower	3725, 0.705, ESE
Z179	CONTRACT PAINTING CO	2213 FILMORE ST.	TN LUST, TN UST	Lower	3725, 0.705, ESE
Z180	CONTRACT PAINTING CO	2213 FILMORE ST.	TN HIST UST	Lower	3725, 0.705, ESE
AE181	UNITED ROAD MACHINER	2010 ELVIS PRESLEY B	TN HIST UST	Lower	3727, 0.706, SW
AE182	UNITED ROAD MACHINER	2010 ELVIS PRESLEY B	TN UST	Lower	3727, 0.706, SW
AF183		1921 ELVIS PRESLEY B	ERNS	Lower	3727, 0.706, WSW
AF184		1921 ELVIS PRESLEY B	RCRA-CESQG, FINDS, ECHO	Lower	3727, 0.706, WSW
AF185		1921 ELVIS PRESLEY	ERNS	Lower	3727, 0.706, WSW
AF186	BULK MAIL CENTER AUX	1921 ELVIS PRESLEY B	TN RGA LUST	Lower	3727, 0.706, WSW
AF187	BULK MAIL CENTER AUX	1921 ELVIS PRESLEY B	TN LUST, TN UST, TN HIST UST, TN NPDES	Lower	3727, 0.706, WSW
Z188	JACO-BRYANT PRINTING	2214 FREEMONT STREET	RCRA NonGen / NLR, FINDS, ECHO	Lower	3753, 0.711, ESE
189	BOYD WASH AUTO REPR	1413 ELOISE RD	EDR Hist Auto	Lower	3780, 0.716, SW
AE190	ELVIS PRESLEY BLVD.	2034 ELVIS PRESLEY B	RCRA NonGen / NLR, FINDS, ECHO	Lower	3785, 0.717, SW
AA191		1699 AIRWAYS BLVD	ERNS	Higher	3799, 0.720, East
AA192	ENPAK INC	1699 AIRWAYS BLVD.	TN SRP	Higher	3799, 0.720, East
AA193	GNB/EXIDE	1699 AIRWAYS BLVD.	TN INST CONTROL, TN SRP	Higher	3799, 0.720, East
Z194		2218 FREEMONT RD	RCRA NonGen / NLR	Lower	3804, 0.720, ESE

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Z195	STRICKLAND FAMILY TR	2218 FREEMONT RD	FINDS, ECHO	Lower	3804, 0.720, ESE
AE196		2050 ELVIS PRESLEY B	RCRA NonGen / NLR, FINDS, ECHO	Lower	3820, 0.723, SW
AE197	DELTIC CO	2050 ELVIS PRESLEY B	EDR Hist Auto	Lower	3820, 0.723, SW
AG198	RHS FRAMEWORK	2199 FRISCO AVE	EDR Hist Auto	Lower	3822, 0.724, ESE
AH199	CAIN AUTO CARE	2090 ELVIS PRESLEY B	EDR Hist Auto	Lower	3837, 0.727, SW
AG200	JOHN HEIRIGS	2224 FREMONT	TN HIST UST	Lower	3856, 0.730, ESE
AG201	JOHN HEIRIGS	2224 FREEMONT	TN LUST	Lower	3856, 0.730, ESE
AG202	JOHN HEIRIGS	2224 FREEMONT	TN RGA LUST	Lower	3856, 0.730, ESE
AG203	JOHN HEIRIGS	2224 FREMONT	TN UST	Lower	3856, 0.730, ESE
AE204	OVERHEAD DOOR CO	2080 ELVIS PRESLEY B	TN HIST UST	Lower	3868, 0.733, SW
AE205	OVERHEAD DOOR CO	2080 ELVIS PRESLEY B	TN UST	Lower	3868, 0.733, SW
AE206	OVERHEAD DOOR CORPOR	2080 ELVIS PRESLEY B	FINDS, ECHO	Lower	3868, 0.733, SW
AG207	MARSH COMPANY INCORP	2225 FILMORE	EDR Hist Auto	Lower	3879, 0.735, ESE
AA208	ENPAK INC	1699 AIRWAYS	SEMS, RCRA NonGen / NLR, FINDS, ECHO	Higher	3894, 0.738, East
AG209	ALLSTATE ELECTRIC CO	2227 FREEMONT ROAD	TN RGA LUST	Lower	3895, 0.738, ESE
AG210	ALLSTATE ELECTRIC CO	2227 FREEMONT ROAD	TN LUST, TN LUST TRUST, TN UST	Lower	3895, 0.738, ESE
AG211	ALLSTATE ELECTRIC CO	2227 FREEMONT ROAD	TN HIST UST	Lower	3895, 0.738, ESE
AI212	MEMPHIS ELECTRONICS	2222 DUNN AVE	EDR Hist Auto	Lower	3903, 0.739, ESE
AH213	BELLEVUE RALLY SERVI	2100 ELVIS PRESLEY B	TN HIST_LUST CO	Lower	3908, 0.740, SW
AH214	BELLEVUE RALLY SERVI	2100 ELVIS PRESLEY	TN LUST, TN LUST TRUST, TN UST	Lower	3908, 0.740, SW
AH215	BELLEVUE RALLY SERVI	2100 ELVIS PRESLEY	TN HIST UST	Lower	3908, 0.740, SW
AH216	BELLEVUE RALLY SERVI	2100 ELVIS PRESLEY	TN RGA LUST	Lower	3908, 0.740, SW
AH217	BE UEVUE FINA SERVIC	2100 ELVIS PRESLEY	EDR Hist Auto	Lower	3908, 0.740, SW
AG218	HI TECH AUTOMOTIVE G	2231 FILMORE AVE	EDR Hist Auto	Lower	3950, 0.748, ESE
AG219	IGNITION SERVICE CO	2231 FREEMONT	EDR Hist Auto	Lower	3950, 0.748, ESE
220	DR ROBS SMALL ENGINE	1466 PILLOW ST	EDR Hist Auto	Lower	3993, 0.756, NW
AI221	L & M IRON WORKS INC	2234 DUNN	RCRA NonGen / NLR, FINDS, ECHO	Lower	4003, 0.758, ESE
AJ222		2227 DEADRICK AVE.	ERNS	Lower	4013, 0.760, ENE
AJ223	BIOENERGY DEVELOPMEN	2227 DEADRICK AVENUE	TN VCP, TN SRP, TN NPDES	Lower	4013, 0.760, ENE
AJ224	MEMPHIS BIOFUELS LLC	2227 DEADRICK AVE	FUELS PROGRAM	Lower	4013, 0.760, ENE
AJ225	COCHRAN CORP	2227 DEADRICK AVENUE	US AIRS	Lower	4013, 0.760, ENE
AJ226	BUCKEYE CELLULOSE ME	2227 DEADRICK AVENUE	TN HIST UST	Lower	4013, 0.760, ENE
AJ227	BIOENERGY DEVELOPMEN	2227 DEADRICK AVE	FINDS, ECHO	Lower	4013, 0.760, ENE
AJ228	BIOENERGY DEVELOPMEN	2227 DEADRICK AVENUE	SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO	Lower	4013, 0.760, ENE
AJ229	BUCKEYE CELLULOSE ME	2227 DEADRICK AVENUE	TN UST	Lower	4013, 0.760, ENE
AK230	LIFETIME IND INC	2130 MEMPHIS DEPOT P	SSTS	Higher	4043, 0.766, SE
AH231	PHLLIPS 66 SERV ST	2100 BELLEVUE BLVD	EDR Hist Auto	Lower	4045, 0.766, SW
AH232	SAINT SERVICE STATIO	2122 ELVIS PRESLEY	EDR Hist Auto	Lower	4046, 0.766, SW
AI233	BROWNS GARAGE	2240 DUNN AVE	EDR Hist Auto	Lower	4055, 0.768, ESE

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AK234	LIFETIME IND INC	2130 MEMPHIS DEPOT P	FINDS	Higher	4062, 0.769, SE
AB235		1363 ETHLYN AVENUE	DOT OPS	Lower	4077, 0.772, WNW
AI236	REAS CUSTOM CABINETS	2230 DUNN AVE	TN NPDES	Lower	4100, 0.777, ESE
AH237	SAINT SERV STA & GAR	2120 BELLEVUE BLVD	EDR Hist Auto	Lower	4114, 0.779, SW
AG238	CLENDENIN HEATING AN	2257 FREEMONT	TN UST	Lower	4128, 0.782, ESE
AG239	CLENDENIN HEATING AN	2257 FREEMONT	TN HIST UST	Lower	4128, 0.782, ESE
AH240	SAINT M S SERVICE ST	2122 SOUTH BELLEVUE	EDR Hist Auto	Lower	4130, 0.782, SW
241	MAT CONSTRUCTION INC		FINDS	Lower	4175, 0.791, South
AL242	BROOKS ISERVICE STAT	1343 WILLETT S	EDR Hist Auto	Lower	4177, 0.791, NNW
AH243	HERNDON HANSELL D GA	2127 BELLEVUE BLVD	EDR Hist Auto	Lower	4183, 0.792, SW
AI244	CRAFT MACHINE INC	2244 DUNN AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	4201, 0.796, ESE
AI245	CENTRAL TOOL & MACHI	2244 DUNN AVENUE	EDR Hist Auto	Lower	4201, 0.796, ESE
AI246	AMERICAN HERITAGE SH	2345 DUNN/ FRISCO RO	FINDS	Lower	4209, 0.797, ESE
AM247	GNB INCORPORATED	2215 PERSON AVE.	FINDS, ECHO	Higher	4264, 0.808, East
AN248	CALVARY CEMETARY	1663 ELVIS PRESLEY	TN HIST UST	Lower	4265, 0.808, West
AN249	CALVARY CEMETARY	1663 ELVIS PRESLEY	TN UST	Lower	4265, 0.808, West
AN250	CALVARY CEMETERY	1663 ELVIS PRESLEY	TN NPDES	Lower	4265, 0.808, West
AN251		1663 ELVIS PRESSLEY	ERNS	Lower	4265, 0.808, West
AM252	PURINA MILLS INC	1725 AIRWAYS DR	FINDS, ECHO	Higher	4280, 0.811, East
AO253		2163 AIRWAYS BLVD	ERNS	Higher	4287, 0.812, SE
AO254	DEFENSE DEPOT MEMPHI	2163 AIRWAYS BLVD.	TN HIST UST	Higher	4287, 0.812, SE
AO255	DEFENSE DEPOT MEMPHI	2163 AIRWAYS BLVD.	TN LUST, TN UST, TN NPDES	Higher	4287, 0.812, SE
AO256	US ARMY/DEFENSE DEPO	2163 AIRWAYS BOULEVA	TN ENG CONTROLS	Higher	4287, 0.812, SE
AO257		2163 AIRWAYS	RCRA NonGen / NLR	Higher	4287, 0.812, SE
AO258	DEFENSE DEPOT MEMPHI	2163 AIRWAYS BLVD	ICIS, FINDS, DOCKET HWC, ECHO	Higher	4287, 0.812, SE
AO259	DEFENSE DEPOT MEMPHI	2163 AIRWAYS BLVD BL	FINDS	Higher	4287, 0.812, SE
AO260	DEFENSE DEPOT MEMPHI	2163 AIRWAYS BLVD	TN RGA LUST	Higher	4287, 0.812, SE
AM261		1725 AIRWAYS	ERNS	Higher	4290, 0.812, East
AP262	FIRE DEPT 29	2147 ELVIS PRESLEY	TN UST	Lower	4309, 0.816, SW
AP263	FIRE DEPT #29	2147 ELVIS PRESLEY	TN HIST UST	Lower	4309, 0.816, SW
AL264	RAGLANDS AMOCO	1546 S PARKWAY	EDR Hist Auto	Lower	4310, 0.816, NNW
AH265	WRNGHT & SONS UNION	2127 ELVIS PRESLEY	EDR Hist Auto	Lower	4330, 0.820, SW
AN266	ONE HOUR RHEEM SHOP	1622 ELVIS PRESLEY B	EDR Hist Cleaner	Lower	4339, 0.822, WNW
AM267		1725 AIRWAYS	ERNS	Higher	4376, 0.829, East
AM268	RALSTON PURINA (CHOW	1725 AIRWAYS BLVD	SEMS-ARCHIVE, RCRA NonGen / NLR	Higher	4376, 0.829, East
AM269	RALSTON PURINA CO	1725 AIRWAYS	FINDS, ECHO	Higher	4376, 0.829, East
AI270	MAGNETIC ELECTRIC	1992 AIRWAYS	TN SRP	Lower	4387, 0.831, ESE
AQ271	SOUTHERN METAL PRODU	1775 AIRWAYS BLVD	RCRA NonGen / NLR, FINDS, ECHO	Higher	4390, 0.831, East
AM272	GLENN HE TRBERT PF F	1748 AIRWAYS BLVD	EDR Hist Auto	Higher	4398, 0.833, East

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AM273	JONES LUMBER AND HAR	1755 AIRWAYS BLVD. P	TN UST	Higher	4402, 0.834, East
AM274	JONES LUMBER AND HAR	1755 AIRWAYS BLVD. P	TN HIST UST	Higher	4402, 0.834, East
275		1289 AND 1291 CASTAL	ERNS	Lower	4412, 0.836, NNE
276	REAR CRIBS GARAGE AU	1437 NORRIS RD	EDR Hist Auto	Lower	4420, 0.837, SSW
AL277	RAGLAND'S AMOCO SS	1546 SOUTH PARKWAY E	TN HIST UST	Lower	4420, 0.837, NNW
AL278	RAGLAND'S AMOCO SS	1546 SOUTH PARKWAY E	TN UST	Lower	4420, 0.837, NNW
AL279	RAGLAND UNION 76 SER	1546 SOUTH PKY E	EDR Hist Auto	Lower	4420, 0.837, NNW
AR280	PUMA INDUSTRIES	1992 AIRWAYS BOULEVA	ICIS, FINDS, ECHO	Higher	4439, 0.841, ESE
281	S & D PRINTING CO IN	2392 ROZELLE	RCRA NonGen / NLR, FINDS, ECHO	Higher	4446, 0.842, South
AQ282	YALE	UNKNOWN	FINDS	Lower	4462, 0.845, ESE
AR283	HENLEY SHELL SERV GA	2034 AIRWAYS BLVD	EDR Hist Auto	Higher	4465, 0.846, SE
AR284	A-1 TIRE SERVICE	2030 AIRWAYS BLVD.	TN HIST UST	Higher	4479, 0.848, SE
AR285	GWYNS AMOCO	2030 AIRWAYS	EDR Hist Auto	Higher	4479, 0.848, SE
AR286	A 1 TIRE SERVICE	2030 AIRWAYS BLVD.	TN UST	Higher	4479, 0.848, SE
AS287	AIRWAY TIRE AND ALIG	2050 AIRWAYS	TN UST	Higher	4506, 0.853, SE
AS288	AIRWAYS TIRE & ALIGN	2050 AIRWAYS BLVD	EDR Hist Auto	Higher	4506, 0.853, SE
AS289	AIRWAY TIRE AND ALIG	2050 AIRWAYS	TN HIST UST	Higher	4506, 0.853, SE
AK290		2245 TRUITT	TN SPILLS	Higher	4530, 0.858, SE
AK291	MEMPHIS DEPOT (BUSIN	2245 TRUITT STREET,	FINDS	Higher	4530, 0.858, SE
AP292	GLENNS DX SERVICE	2193 S BELLEVUE BLVD	EDR Hist Auto	Lower	4542, 0.860, SW
AO293	MOBILE WATER TECHNOL	2070 AIRWAYS BLVD.	HIST FTTS	Higher	4548, 0.861, SE
AO294	MOBILE WATER TECHNOL	2070 AIRWAYS BLVD.	SSTS	Higher	4548, 0.861, SE
AO295		2070 AIRWAYS	RCRA-SQG	Higher	4548, 0.861, SE
AO296	MOBILE WATER TECHNOL	2070 AIRWAYS BLVD.	FTTS	Higher	4548, 0.861, SE
AO297	ENVIROGEN TECHNOLOGI	2070 AIRWAYS BOULEVA	FINDS, ECHO	Higher	4548, 0.861, SE
AO298	ENVIROGEN TECHNOLOGI	2070 AIRWAYS BLVD	TN NPDES	Higher	4548, 0.861, SE
AT299	OLD ESTECH GENERAL C	2221 DEADRICK AVE	SEMS	Higher	4572, 0.866, ENE
AU300	TIGER EQUIPMENT INC	2205 LAMAR	RCRA NonGen / NLR, FINDS, ECHO	Higher	4610, 0.873, NE
AU301	UNITED EQUIPMENT INC	2205 LAMAR AVE	EDR Hist Auto	Higher	4610, 0.873, NE
302	HOSKINS ABBIE AUTO M	1376 PILLOW ST	EDR Hist Auto	Lower	4619, 0.875, NW
AV303	GLENNS HOME & AUTO S	2211 ELVIS PRESLEY	EDR Hist Auto	Lower	4682, 0.887, SW
AW304	WASHINGTON & SONS CA	2238 KERR AVE	EDR Hist Cleaner	Higher	4691, 0.888, ENE
AR305		2302 DUNN AVE	EDR Hist Auto	Lower	4701, 0.890, ESE
AV306	TAPPS TEXACO SERV ST	2221 S BELLEVUE BLVD	EDR Hist Auto	Lower	4712, 0.892, SW
AP307	H F GLENN JR	2193 ELVIS PRESLEY	TN LUST, TN HIST UST	Lower	4713, 0.893, SW
AP308	H F GLENN JR	2193 ELVIS PRESLEY	TN UST	Lower	4713, 0.893, SW
AP309	GENNS D X SERVICE	2193 ELVIS PRESLEY	EDR Hist Auto	Lower	4713, 0.893, SW
AU310	SW COR COVINGTON SER	2185 LAMAR BLVD	EDR Hist Auto	Lower	4730, 0.896, NE
AV311	MID SOUTH MOLDINGS C	2231-33 ELVIS PRESLE	RCRA NonGen / NLR, FINDS, ECHO	Lower	4768, 0.903, SW

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AV312	FILTERED WASHERS	2231 ELVIS PRESLEY	EDR Hist Cleaner	Lower	4768, 0.903, SW
AV313	BLUE RIBBON CABINETS	2233 ELVIS PRESLEY B	ICIS, FINDS, ECHO	Lower	4809, 0.911, SW
AX314		2133 LAMAR AVE	EDR Hist Auto	Lower	4812, 0.911, NE
AX315	Q MART	2133 LAMAR AVENUE	TN LUST, TN UST	Lower	4812, 0.911, NE
AX316	ROBINSON TEXACO	2133 LAMAR AVE	TN RGA LUST	Lower	4812, 0.911, NE
AX317	ROBINSON TEXACO	2133 LAMAR AVENUE	TN HIST UST	Lower	4812, 0.911, NE
AV318	KRAUS MODEL	2240 S BELLEVUE BLVD	EDR Hist Cleaner	Lower	4812, 0.911, SW
AV319	KRAUS MODEL CLEANERS	2242 ELVIS PRESLEY	EDR Hist Cleaner	Lower	4816, 0.912, SW
AV320	FAWN LAUNDRY CLEANER	2237 S BELLEVUE BLVD	EDR Hist Cleaner	Lower	4828, 0.914, SW
AV321	JIMS LAUNDRY	2237 ELVIS PRESLEY	EDR Hist Cleaner	Lower	4828, 0.914, SW
AX322	ASHLEY TEXACO SERVIC	2161 LAMAR AVENUE	EDR Hist Auto	Lower	4839, 0.916, NE
AX323	HARTSFIELD TEXACO SE	2153 LAMAR AVE	EDR Hist Auto	Lower	4853, 0.919, NE
AX324	ROBINSON JACK ESSO S	2165 LAMAR AVE	EDR Hist Auto	Lower	4860, 0.920, NE
AV325	NORRIS RD PHILLIPS 6	2243 ELVIS PRESLEY B	EDR Hist Auto	Lower	4861, 0.921, SW
AX326	ABARKERS SUPER SERV	2169 LAMAR AVE	EDR Hist Auto	Lower	4868, 0.922, NE
AV327	ONE HOUR MARTINIZING	2247 S BELLEVUE BLVD	EDR Hist Cleaner	Lower	4888, 0.926, SW
AV328	PAREKH ENTERPRISES	2247 ELVIS PRESLEY B	EDR Hist Cleaner	Lower	4888, 0.926, SW
AV329	K CLEANERS	2247 ELVIS PRESLEY B	RCRA NonGen / NLR, FINDS, ECHO	Lower	4888, 0.926, SW
330	BALL ROAD ATHLETIC C	2107 BALL RD, ~2000'	TN NPDES	Lower	4893, 0.927, SSE
AV331	SAMS CAR CARE CENTER	2221 ELVIS PRESLEY	EDR Hist Auto	Lower	4900, 0.928, SW
AV332	J AND R AUTO SALES	2221 ELVIS PRESLEY	TN HIST UST	Lower	4900, 0.928, SW
AV333	J AND R AUTO SALES	2221 ELVIS PRESLEY	TN UST	Lower	4900, 0.928, SW
AY334	BILLS GARAGE AUTO RE	1557 S BELLEVUE BLVD	EDR Hist Auto	Lower	4907, 0.929, WNW
AZ335	BROWDER KELLY	1697 NETHERWOOD AVE	EDR Hist Auto	Higher	4911, 0.930, North
AX336	ASTRICKLAND & INMAN	2134 LAMAR AVE	EDR Hist Auto	Lower	4913, 0.930, NE
AX337	CIRCLE K STORE #2703	2134 LAMAR AVENUE	TN RGA LUST	Lower	4913, 0.930, NE
AX338	BP/AMOCO #19047	2134 LAMAR AVENUE	TN RGA LUST	Lower	4913, 0.930, NE
AX339	AMOCO OIL SS# 329	2134 LAMAR AVE	TN LUST, TN LUST TRUST, TN UST, TN HIST UST, RCRA...	Lower	4913, 0.930, NE
AX340	AMOCO STATION #329	2134 LAMAR AVENUE	TN RGA LUST	Lower	4913, 0.930, NE
AX341	ADITTO AUTO SERVICE	2142 LAMAR AVE	EDR Hist Auto	Lower	4916, 0.931, NE
AX342	NE COR PAN AM PETROL	2098 LAMAR AVE	EDR Hist Auto	Lower	4916, 0.931, NE
AX343	ARNOLD & BELL	2146 LAMAR AVE	EDR Hist Auto	Lower	4916, 0.931, NE
AT344	MODERN DRY CLEANING	2277 LAMAR AVE	EDR Hist Cleaner	Higher	4932, 0.934, ENE
AV345		2260 ELVIS PRESLEY	TN LUST, TN LUST TRUST, TN UST, TN HIST UST, RCRA...	Lower	4934, 0.934, SW
AV346	THE CIRCLE K STORE #	2260 ELVIS PRESLEY B	TN RGA LUST	Lower	4934, 0.934, SW
AV347	SMITH AMOCO SERVICE	2260 ELVIS PRESLEY	EDR Hist Auto	Lower	4934, 0.934, SW
AV348	SOUTH BELLEVUE AMERI	2260 SOUTH BELLEVUE	EDR Hist Auto	Lower	4934, 0.934, SW
AY349	GUARANTEE MOTOR SALE	1557 ELVIS PRESLEY B	EDR Hist Auto	Lower	4941, 0.936, WNW
AU350	FIRE STATION 16	2203 LAMAR AVENUE	TN LUST, TN UST	Lower	4944, 0.936, NE

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AU351	FIRE STATION #16	2203 LAMAR AVENUE	TN HIST UST	Lower	4944, 0.936, NE
AU352	FIRE STATION #16	2203 LAMAR AVE	TN RGA LUST	Lower	4944, 0.936, NE
AX353	HALE BRUCE JR	2160 LAMAR AVE	EDR Hist Auto	Lower	4960, 0.939, NE
AT354	WALGREENS 3866	1489 AIRWAYS BLVD.	TN SRP, TN VCP	Higher	4967, 0.941, ENE
AW355	DITTO STEPH J AUTO R	2255 LAMAR AVE	EDR Hist Auto	Higher	4978, 0.943, ENE
AW356	BROOME A J GAS STA	2265 LAMAR AVE	EDR Hist Auto	Higher	4980, 0.943, ENE
AZ357	NETHERWOOD CLEANERS	1718 NETHERWOOD AVE	EDR Hist Cleaner	Higher	4982, 0.944, North
AU358	DOLLAR GENERAL	2245 LAMAR AVENUE	TN NPDES	Higher	4986, 0.944, ENE
BA359	KING CYS CO INC MOTO	2345 DUNN AVE	EDR Hist Auto	Lower	4994, 0.946, ESE
BB360	U-HAUL CO OF MEMPHIS	2280 ELVIS PRESLEY B	TN HIST UST	Lower	4997, 0.946, SW
BB361	U HAUL CO OF MEMPHIS	2280 ELVIS PRESLEY B	TN UST	Lower	4997, 0.946, SW
BB362	PARHAM GULF SERVICE	2280 ELVIS PRESLEY	EDR Hist Auto	Lower	4997, 0.946, SW
AW363	BOULDIN HAROLD EUGEN	2269 LAMAR	EDR Hist Auto	Higher	4998, 0.947, ENE
AW364	KROGER #0413-025	2269 LAMAR AVE	RCRA-CESQG, FINDS, ECHO	Higher	4998, 0.947, ENE
AZ365	GLENVIEW CLEANERS	1712 NETHERWOOD AVE	EDR Hist Cleaner	Higher	5001, 0.947, North
AY366	BRAMBLETT GARAGE	1542 S BELLEVUE	EDR Hist Auto	Lower	5002, 0.947, WNW
AU367	A DIETRICH GEO C FIL	2239 LAMAR AVE	EDR Hist Auto	Higher	5004, 0.948, ENE
AW368	ALEE ALLEN C FILLING	2267 LAMAR AVE	EDR Hist Auto	Higher	5007, 0.948, ENE
BC369	CARCARE UAS	2199 AIRWAYS BLVD	EDR Hist Auto	Higher	5013, 0.949, SE
AW370	LEE ALLEN C FILLING	2273 LAMAR AVE	EDR Hist Auto	Higher	5014, 0.950, ENE
AY371	UPGRADE AUTO	1520 ELVIS PRESLEY B	EDR Hist Auto	Lower	5018, 0.950, WNW
AY372	BS CAR CARE CENTER I	1543 ELVIS PRESLEY B	EDR Hist Auto	Lower	5021, 0.951, WNW
AX373	HUNT E R FILLING STA	1276 EAST PKY S	EDR Hist Auto	Lower	5040, 0.955, NE
AW374	KINGS FASHIONS	2252-2 LAMAR AVE	EDR Hist Cleaner	Higher	5068, 0.960, ENE
AU375	TRI-STATE BLOOD & PL	2240 LAMAR	RCRA NonGen / NLR, FINDS, ECHO	Higher	5073, 0.961, ENE
AU376	A BAILEY WELBORN FIL	2238 LAMAR AVE	EDR Hist Auto	Higher	5073, 0.961, ENE
BB377	ATECHS SINCLAIR SERV	2275 S BELLEVUE BLVD	EDR Hist Auto	Lower	5076, 0.961, SW
BC378	CASTALIA BAPTIST CHU	2180 AIRWAYS (EAST S	TN NPDES	Higher	5081, 0.962, SE
AW379		2274 LAMAR AVE	EDR Hist Cleaner	Higher	5100, 0.966, ENE
AW380	KINMAN CLEANERS	2274 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	5100, 0.966, ENE
BC381	BURNETT ESSO SERVICE	2191 AIRWAYS BLVD	EDR Hist Auto	Higher	5101, 0.966, SE
AY382	UNIVERSAL ALUMINUM M	1539 ELVIS PRESLEY	RCRA NonGen / NLR, FINDS, ECHO	Lower	5105, 0.967, WNW
BB383	HOLIDAY INN GULF SER	2280 BELLEVUE BLVD	EDR Hist Auto	Lower	5106, 0.967, SW
BD384	CYCLE ENGINEERING MO	2018 LAMAR AVE	EDR Hist Auto	Lower	5110, 0.968, NNE
BE385	A GULF AIRWAY SERVIC	2305 LAMAR AVE	EDR Hist Auto	Higher	5118, 0.969, ENE
BD386	CRIPPLED CHILDREN'S	2009 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	5127, 0.971, NNE
BF387	OLD TOM BELL CHEVROL	2200 LAMAR AVENUE	TN HIST UST	Lower	5153, 0.976, NE
BF388	TOM BELL CHEVROLET C	2200 LAMAR AVENUE	TN RGA LUST	Lower	5153, 0.976, NE
BF389	UNION CHEVROLET CO	2200 LAMAR AVE	EDR Hist Auto	Lower	5153, 0.976, NE

MAPPED SITES SUMMARY

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1763 E PERSON AVE
MEMPHIS, TN 38106

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
BF390	A WEBSTER CHEVROLET	2200 LAMAR	RCRA NonGen / NLR, FINDS, ECHO	Lower	5153, 0.976, NE
BF391	OLD TOM BELL CHEVROL	2200 LAMAR AVENUE	TN LUST, TN UST	Lower	5153, 0.976, NE
BD392	JONES ROBT CUSTOM HA	2016 LAMAR AVE	EDR Hist Cleaner	Lower	5172, 0.980, NNE
AY393	CLYDE & SON AUTO REP	1525 ELVIS PRESLEY	EDR Hist Auto	Lower	5175, 0.980, WNW
BC394	A A STEAM CLEANING	2207 AIRWAYS BLVD	EDR Hist Cleaner	Higher	5176, 0.980, SE
BC395	ROGERS S B GULF SERV	2207 AIRWAYS BLVD	EDR Hist Auto	Higher	5176, 0.980, SE
AY396		1521 ELVIS PRESLEY B	TN SPILLS	Lower	5177, 0.980, WNW
BB397	PAYNES ARCO SERVICE	2275 ELVIS PRESLEY B	EDR Hist Auto	Lower	5180, 0.981, SW
AY398	INTERSTATE AUTMTC TR	1514 S BELLEVUE	EDR Hist Auto	Lower	5189, 0.983, WNW
AY399	CLYDE & SON GARAGE	1514 ELVIS PRESLEY	EDR Hist Auto	Lower	5191, 0.983, WNW
BE400	KRAUS MODEL	2294 LAMAR AVE	EDR Hist Cleaner	Higher	5195, 0.984, ENE
BE401	SHELTON HORACE E FIL	2294 LAMAR AVE	EDR Hist Auto	Higher	5195, 0.984, ENE
BE402	LAMAR TEXACO	2306 LAMAR AVENUE	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Higher	5226, 0.990, ENE
BE403	EXXON RETAIL STORE #	2306 LAMAR/AIRWAYS	TN LUST	Higher	5226, 0.990, ENE
BE404	DUPRATT VICTOR V GAS	2306 LAMAR AVE	EDR Hist Auto	Higher	5226, 0.990, ENE
BE405		2306 LAMAR AVE	RCRA-CESQG, FINDS, ECHO	Higher	5226, 0.990, ENE
BG406	VACANT CAR LOT	1498 ELVIS PRESLEY B	TN LUST, TN UST	Lower	5241, 0.993, WNW
BG407	VACANT CAR LOT	1498 ELVIS PRESLEY B	TN HIST UST	Lower	5241, 0.993, WNW
BG408	VACANT CAR LOT	1498 ELVIS PRESLEY	TN RGA LUST	Lower	5241, 0.993, WNW
BH409		1310 GILL	HMIRS	Higher	5257, 0.996, NW
BH410		1310 GILL	HMIRS	Higher	5257, 0.996, NW
BI411		1204 MCKELLAR, MEMPH	TN SPILLS	Lower	5275, 0.999, WSW
BI412	R & H IRON WORKS	1204 E MC KELLAR	RCRA NonGen / NLR, FINDS, ECHO	Lower	5275, 0.999, WSW
AY413	HUDSON OIL CO OF DEL	1505 ELVIS PRESLEY	EDR Hist Auto	Lower	5286, 1.001, WNW
BG414	HUDSON OIL CO OF DEL	1505 SOUTH BELLEVUE	EDR Hist Auto	Lower	5289, 1.002, WNW
BG415	BILLUPS PETROLEUM CO	1498 S BELLEVUE BLVD	EDR Hist Auto	Lower	5292, 1.002, WNW
BJ416	GOODYEAR ASC	2259 PARK	TN HIST UST	Higher	5325, 1.009, NE
BJ417	GOODYEAR ASC	2259 PARK	TN UST	Higher	5325, 1.009, NE
BJ418	GOODYEAR TIRE AND RU	2259 PARK AVE	EDR Hist Auto	Higher	5325, 1.009, NE
419	JS CARPET CARE	2249 AMHERST CV	EDR Hist Cleaner	Lower	5331, 1.010, SW
BK420	FOREST HILL CEMETERY	1661 ELVIS PRESLEY B	TN RGA LUST	Lower	5334, 1.010, West
BE421	HIGH GEAR TRANSMISSI	2320 LAMAR AVE	EDR Hist Auto	Higher	5338, 1.011, ENE
BD422	ARMOUR HOMES INC	1986 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	5338, 1.011, NNE
BL423	WCE CLEANERS & LAUND	1576 E ALCY RD	EDR Hist Cleaner	Lower	5339, 1.011, SSW
BL424	EXCELLENT LAUNDRY &	1572 ALCY AVE E	EDR Hist Cleaner	Lower	5371, 1.017, SSW
BE425	TAYLOR MARION AUTO R	1203 TREZEVANT S	EDR Hist Auto	Higher	5371, 1.017, ENE
BE426	ADITTO ANDREW S	1341 TREZEVANT S	EDR Hist Auto	Higher	5411, 1.025, ENE
BA427	AMERICAN HERITAGE SH	2345 DUNN/ FRISCO RO	SEMS	Lower	5424, 1.027, ESE
BB428	BELLEVUE SUZUKI SALE	2319 ELVIS PRESLEY	EDR Hist Auto	Lower	5454, 1.033, SW

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BM429	ALLIED SYSTEMS, LTD.	2355 FRISCO AVENUE	TN LUST, TN UST, TN HIST UST, TN NPDES	Lower	5457, 1.034, ESE
BM430	ALLIED SYSTEMS LTD	2355 FRISCO AVE	TN RGA LUST	Lower	5457, 1.034, ESE
BE431	AAIRWAY CINS INC CLO	1436 TREZEVANT S	EDR Hist Cleaner	Higher	5489, 1.040, ENE
BC432	KERR MC GEE SERVICE	2232 AIRWAYS BLVD	EDR Hist Auto	Higher	5497, 1.041, SE
BC433	KERR MCGEE 6419	2232 AIRWAYS	TN LUST, TN LUST TRUST, TN UST	Higher	5497, 1.041, SE
BC434	KERR-MCGEE #6419	2232 AIRWAYS	TN RGA LUST	Higher	5497, 1.041, SE
BC435	KERR-MCGEE #6419	2232 AIRWAYS	TN HIST UST	Higher	5497, 1.041, SE
BN436	KROGER CO	2330 FRISCO AVE	TN RGA LUST	Lower	5500, 1.042, ESE
BN437	KROGER CO.	2330 FRISCO AVENUE	TN HIST UST	Lower	5500, 1.042, ESE
BN438	KROGER CO.	2330 FRISCO AVENUE	TN LUST, TN UST	Lower	5500, 1.042, ESE
BN439		2330 FRISCO	RCRA NonGen / NLR, FINDS, ECHO	Lower	5500, 1.042, ESE
BG440	JONES & SONS SINCLAI	1462 SOUTH BELLEVUE	EDR Hist Auto	Lower	5501, 1.042, WNW
BO441	MARSHALL OTTO S GAS	1560 NETHERWOOD AVE	EDR Hist Auto	Higher	5504, 1.042, NNW
BO442	PETER PAN ONE HOUR C	1560 NETHERWOOD AVE	EDR Hist Cleaner	Higher	5504, 1.042, NNW
443	SOUTHEASTERN PUBLIC	2367 KIMBALL AVE.	RCRA NonGen / NLR, FINDS, ECHO	Lower	5510, 1.044, ESE
BE444	ASTERLING DRY CLARS	1308 TREZEVANT S	EDR Hist Cleaner	Higher	5517, 1.045, ENE
BE445	LOVE M L	1300 TREZEVANT S	EDR Hist Auto	Higher	5519, 1.045, ENE
BJ446	CLEANING CENTER	2276 PARK AVE	EDR Hist Cleaner	Higher	5520, 1.045, NE
BJ447	XPERT TUNE INC	2280 PARK AVE	EDR Hist Auto	Higher	5520, 1.045, NE
BK448	FOREST HILL CEMETERY	1661 ELVIS PRESLEY B	TN LUST, TN UST	Lower	5527, 1.047, West
BK449	FOREST HILL CEMETERY	1661 ELVIS PRESLEY B	TN HIST_LUST CO	Lower	5527, 1.047, West
BK450	FOREST HILL CEMETERY	1661 ELVIS PRESLEY B	TN HIST UST	Lower	5527, 1.047, West
BI451	CROSS STREET SERVICE	1172 EAST MCKELLAR	TN RGA LUST	Lower	5532, 1.048, WSW
BI452	CROSS STREET SERVICE	1172 EAST MCKELLAR	TN HIST UST	Lower	5532, 1.048, WSW
BI453	CROSS STREET SERVICE	1172 EAST MCKELLAR	TN LUST, TN UST	Lower	5532, 1.048, WSW
BI454	ELARKO TRUCKERS INC	1172 MC KELLAR AVE E	RCRA NonGen / NLR, FINDS, ECHO	Lower	5532, 1.048, WSW
BI455	CROSS STREET SERVICE	1172 E MCKELLAR AVE	EDR Hist Auto	Lower	5532, 1.048, WSW
BG456	MARTINS BODY SHOP	1461 SOUTH BELLEVUE	EDR Hist Auto	Lower	5538, 1.049, WNW
BO457	ETHEL'S LAUNDRY CLEAN	1548 NETHERWOOD AVE	EDR Hist Cleaner	Higher	5540, 1.049, NNW
BO458	WASH UM DRY EM LNDY	1546 NETHERWOOD AVE	EDR Hist Cleaner	Higher	5542, 1.050, NNW
BG459	H L BONHAY	1459 SOUTH BELLEVUE	TN UST	Lower	5554, 1.052, WNW
BG460	H L BONHAY	1459 SOUTH BELLEVUE	TN HIST UST	Lower	5554, 1.052, WNW
BE461	AIRWAY CLEANERS	1436 AIRWAYS BLVD	EDR Hist Cleaner	Higher	5555, 1.052, ENE
BF462	FIRE APPARATUS CO IN	1294 LINCOLN ST	EDR Hist Auto	Lower	5555, 1.052, NE
BP463	S & L CARPETS & DINE	2350 DEADRICK	EDR Hist Cleaner	Higher	5577, 1.056, ENE
BP464	MOTOR EXCHANGE OF AM	2359 LAMAR AVE	EDR Hist Auto	Higher	5581, 1.057, ENE
BP465	S & L CARPETS & DINE	2352 DEADRICK AVE	EDR Hist Cleaner	Higher	5584, 1.058, ENE
BG466		1444 ELVIS PRESLEY	EDR Hist Auto	Higher	5605, 1.062, WNW
BP467	J & M HYDRA-MATIC TR	2365 LAMAR AVE	EDR Hist Auto	Higher	5617, 1.064, ENE

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BQ468	SPARKLE CLEANEN	2256 AIRWAYS BLVD	EDR Hist Cleaner	Higher	5617, 1.064, SE
BG469	TODD SHELL SERV STA	1444 S BELLEVUE BLVD	EDR Hist Auto	Higher	5626, 1.066, WNW
BE470	WASHINGTON & SONS CA	1426 AIRWAYS	EDR Hist Cleaner	Higher	5633, 1.067, ENE
BE471	CARPENTER BUIFORD AU	1428 AIRWAYS BLVD	EDR Hist Auto	Higher	5639, 1.068, ENE
BR472	LARRY & ARTS AUTO SE	1895 LAMAR AVE	EDR Hist Auto	Lower	5640, 1.068, NNE
BQ473	SHOAF MOTOR SALES	2261 AIRWAYS	EDR Hist Auto	Higher	5649, 1.070, SE
BJ474	ARCHERS TEXACO SERV	2292 PARK AVE	EDR Hist Auto	Higher	5651, 1.070, NE
BR475	FOSTER SIDNEY RADIAT	1906 LAMAR AVE	EDR Hist Auto	Lower	5653, 1.071, NNE
BS476	MAJESTIC BATTERY & E	1383 AIRWAYS BLVD	EDR Hist Auto	Higher	5674, 1.075, ENE
BP477	STROUPE PEST CONTROL	2377 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	5676, 1.075, ENE
BQ478	NUNIS TROY E	2263 AIRWAYS BLVD	EDR Hist Auto	Higher	5679, 1.076, SE
BT479	REAR CROSSEN REPAIR	1436 ELVIS PRESLEY	EDR Hist Auto	Higher	5686, 1.077, WNW
BT480	BEL PARK CLEANERS	1436 S BELLEVUE BLVD	EDR Hist Cleaner	Higher	5686, 1.077, WNW
BT481	CLEANERS THE	1436 ELVIS PRESLEY	EDR Hist Cleaner	Higher	5686, 1.077, WNW
BT482	BEL-PARK CLEANERS	1434-36 S BELLEVUE	EDR Hist Cleaner	Higher	5695, 1.079, WNW
BO483	GLENVIEW CLNRS CLDO	1185 WILLETT S	EDR Hist Cleaner	Higher	5706, 1.081, NNW
BT484	BEL-PARK CLEANERS	1434-36 ELVIS PRSLY	EDR Hist Cleaner	Higher	5707, 1.081, WNW
BT485		1432 ELVIS PRESLEY	EDR Hist Cleaner	Higher	5707, 1.081, WNW
BR486A	KENNEY TRAEV K FIL	1900 LAMAR AVE	EDR Hist Auto	Lower	5709, 1.081, NNE
BT487	SPEED WASH SELF SERV	1432 S BELLEVUE BLVD	EDR Hist Cleaner	Higher	5711, 1.082, WNW
BJ488	A NU WAY PRESSING	2311 PARK AVE	EDR Hist Cleaner	Higher	5743, 1.088, ENE
489	MOORE IROY :D AUTO	1116 ROZELLE ST	EDR Hist Auto	Higher	5761, 1.091, North
BS490	MORROW WILLIE	1385 AIRWAYS BLVD	EDR Hist Auto	Higher	5781, 1.095, ENE
BS491	CAR KINGZ	1375 AIRWAYS BLVD	EDR Hist Auto	Higher	5806, 1.100, ENE
BU492	ALCY LAUNDRY & CLEAN	2115 ALCY AVE E	EDR Hist Cleaner	Higher	5812, 1.101, SSE
BV493	BETTER FIXTURES REPR	2050 HERNANDO RD	EDR Hist Auto	Lower	5816, 1.102, WSW
BS494	LAMAR LAUNDRY CLEANE	1398 AIRWAYS BLVD	EDR Hist Cleaner	Higher	5818, 1.102, ENE
BI495	ROGERS REPAIR SHOP	2060 HERNANDO ROAD	EDR Hist Auto	Lower	5830, 1.104, WSW
BR496		1886 LAMAR AVENUE	RCRA NonGen / NLR	Lower	5843, 1.107, North
BR497		1886 LAMAR	RCRA NonGen / NLR, FINDS, ECHO	Lower	5843, 1.107, North
BW498	SHORTS AUTO SERV REP	2381 BELLEVUE BLVD	EDR Hist Auto	Lower	5851, 1.108, SW
BT499	DUSTYS AUTO & REPAIR	1425 ELVIS PRESLEY B	EDR Hist Auto	Lower	5881, 1.114, WNW
BV500	VERTUT BLENDING & PA	2100 HERNANDO ROAD	SEMS, RCRA NonGen / NLR, PRP	Lower	5882, 1.114, WSW
BV501		2100 HERNANDO RD	RCRA NonGen / NLR, ICIS, FINDS, ECHO	Lower	5882, 1.114, WSW
BV502		2100 HERNANDO ROAD	RCRA NonGen / NLR	Lower	5882, 1.114, WSW
BV503	WITHERS WELLFORD DIS	2100 HERNADO ROAD	TN UST	Lower	5882, 1.114, WSW
BV504	WITHERS-WELLFORD DIS	2100 HERNANDO RD	TN RGA LUST	Lower	5882, 1.114, WSW
BV505	WITHERSWELLFORD DIST	2100 HERNANDO RD	TN LUST	Lower	5882, 1.114, WSW
BV506	WITHERS-WELLFORD DIS	2100 HERNADO ROAD	TN HIST UST	Lower	5882, 1.114, WSW

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BV507	C & B DIESEL REPAIR	2100 HERNANDO RD	EDR Hist Auto	Lower	5882, 1.114, WSW
BT508	FIELDSTONE CLEANERS	1415 S BELLEVUE	EDR Hist Cleaner	Higher	5899, 1.117, WNW
BT509	BRAZILE DRY CLEANERS	1417 ELVIS PRESLEY B	EDR Hist Cleaner	Higher	5905, 1.118, WNW
BX510	AUTOCOMM INC	2440 DUNN CV	EDR Hist Auto	Lower	5905, 1.118, ESE
BS511	DITTO ANDREW S GAS S	1341 AIRWAYS BLVD	EDR Hist Auto	Higher	5907, 1.119, ENE
BW512	ATOMIC PEST CONTROL	2371 ELVIS PRESLEY B	TN LUST, TN UST	Lower	5922, 1.122, SW
BW513	ATOMIC PEST CONTROL	2371 ELVIS PRESLEY B	TN HIST UST	Lower	5922, 1.122, SW
BW514	ATOMIC PEST CONTROL	2371 ELVIS PRESLEY B	TN RGA LUST	Lower	5922, 1.122, SW
BT515	PONY UP CLEANERS	1413 ELVIS PRESLEY B	EDR Hist Cleaner	Higher	5926, 1.122, WNW
516	SCOGGINS JAMES H REP	1964 E MCLEMORE AVE	EDR Hist Auto	Higher	5944, 1.126, NNE
BW517	GANDYS STLYE SHOP	2381 ELVIS PRESLEY B	EDR Hist Cleaner	Lower	5975, 1.132, SW
BW518	REAR JONES AUTO REPA	2381 ELVIS PRESLEY	EDR Hist Auto	Lower	5975, 1.132, SW
BY519	REAR THREADGILLS GAR	2402 LAMAR AVE	EDR Hist Auto	Higher	5980, 1.133, ENE
BS520	WILLIES AUTO SERVICE	1362 AIRWAYS BLVD	EDR Hist Auto	Higher	5980, 1.133, ENE
BR521	CONOCO SERV STA	1850 LAMAR AVE	EDR Hist Auto	Lower	5986, 1.134, North
BS522	FUTRIS BROS CLEANERS	1350 AIRWAYS BLVD	EDR Hist Cleaner	Higher	5990, 1.134, ENE
BS523	FUTRIS BROS CLN	2327 PARK AVE	EDR Hist Cleaner	Higher	6001, 1.137, ENE
BX524	REAR BROWN CHARLIE W	2427 FRISCO AVE	EDR Hist Auto	Higher	6004, 1.137, ESE
BU525A	ZACKARY SERV STA G	2145 ALCY RD	EDR Hist Auto	Higher	6011, 1.138, SSE
BY526	EXPRESS AUTO SALES A	2417 LAMAR AVE	EDR Hist Auto	Higher	6015, 1.139, ENE
BW527	QUALITY AUTOMOTIVE S	2400 ELVIS PRESLEY B	EDR Hist Auto	Lower	6023, 1.141, SSW
BS528	MAPCO EXPRESS # 3160	2335 PARK AVENUE	TN RGA LUST	Higher	6026, 1.141, ENE
BS529	SAVE AND GO	2335 PARK AVENUE	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Higher	6026, 1.141, ENE
BS530	MAPCO EXPRESS INC	2335 PARK AVE	EDR Hist Auto	Higher	6026, 1.141, ENE
BY531	ANDYS AUTO UPHOLSTER	2408 LAMAR AVE	EDR Hist Auto	Higher	6027, 1.141, ENE
BX532	LOYD DAVIS PLUMBING	2429 FRISCO	TN HIST UST	Higher	6035, 1.143, ESE
BX533	LOYD DAVIS PLUMBING	2429 FRISCO	TN UST	Higher	6035, 1.143, ESE
BT534	HAMPTONS DELTA SERVI	1384 ELVIS PRESLEY	EDR Hist Auto	Higher	6045, 1.145, NW
BT535	WILLIAMS EXPRESS, IN	1384 ELVIS PRESLEY B	TN UST	Higher	6045, 1.145, NW
BT536	WILLIAMS EXPRESS, IN	1384 ELVIS PRESLEY B	TN HIST UST	Higher	6045, 1.145, NW
BX537		PERC 5	RCRA NonGen / NLR	Lower	6069, 1.149, ESE
BZ538	XSPURLINS LLOYD FIFT	1243 SOUTH PKY E	EDR Hist Auto	Higher	6098, 1.155, NW
BZ539	RAYMOND AND DIXIE WI	1243 SOUTH PARKWAY E	TN HIST UST	Higher	6098, 1.155, NW
BX540	BROWN CHARLIE BODY S	2435 FRISCO AVE	EDR Hist Auto	Higher	6100, 1.155, ESE
BX541	CHARLIE BROWN BODY S	2435 FRISCO AVE	SEMS-ARCHIVE	Higher	6100, 1.155, ESE
BZ542	HAMPTONS LION SERVIC	1384 S BELLEVUE BLVD	EDR Hist Auto	Higher	6147, 1.164, NW
CA543	FOREST HILL CEMETARY	1804 HERNANDO STREET	TN LUST TRUST	Lower	6152, 1.165, West
BY544	GRIMES TIRE STORE IN	2429 LAMAR AVE	EDR Hist Auto	Higher	6163, 1.167, East
BZ545	PARKWAY BP	1372 ELVIS PRESLEY B	TN LUST	Higher	6163, 1.167, NW

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BZ546	OWEN C W TEXACO SERV	1233 SOUTH PKY E	EDR Hist Auto	Higher	6168, 1.168, NW
BZ547	PARKWAY BP		TN UST, FINDS	Higher	6171, 1.169, NW
BZ548	PARKWAY BP	1233 SOUTH PARKWAY	TN LUST TRUST	Higher	6171, 1.169, NW
BZ549	SMITHS GULF SERVICE	1381 ELVIS PRESLEY	EDR Hist Auto	Higher	6202, 1.175, WNW
CB550	TOTAL PATROLIUM INC	2337 AIRWAYS BLVD	EDR Hist Auto	Higher	6209, 1.176, SE
CB551	MOE'S STOP N GO	2337 AIRWAYS BLVD.	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Higher	6209, 1.176, SE
CB552	THE MARKET #117	2337 AIRWAYS	TN RGA LUST	Higher	6209, 1.176, SE
CB553	GRIFFIN EXPRESS 2255	2337 AIRWAYS	TN RGA LUST	Higher	6209, 1.176, SE
BW554A	-1 AUTO SERVICE	2419 SOUTH BELLEVUE	EDR Hist Auto	Lower	6228, 1.180, SSW
CC555	INTERNATIONAL ORDR K	1467 E MC LEMORE	RCRA NonGen / NLR, FINDS, ECHO	Higher	6232, 1.180, NNW
CD556	JACKSON & COMPANY FI	1314 AIRWAYS BLVD	EDR Hist Auto	Higher	6236, 1.181, NE
BY557	HIS & HERS AUTO SERV	2443 LAMAR AVE	EDR Hist Auto	Higher	6238, 1.181, East
BW558A	-1 AUTO SERVICE	2419 ELVIS PRESLEY B	EDR Hist Auto	Lower	6243, 1.182, SSW
CD559	BRAVO STAFFING SERVI	2356 PARK AVE	EDR Hist Cleaner	Higher	6261, 1.186, ENE
BW560	RIVER CTY AUTO PTS	2421 ELVIS PRESLEY	EDR Hist Auto	Lower	6272, 1.188, SSW
BW561		2421 ELVIS PRESLEY B	RCRA-CESQG, FINDS, ECHO	Lower	6272, 1.188, SSW
CD562	JONES JOE E	1291 AIRWAYS	EDR Hist Auto	Lower	6275, 1.188, NE
BY563	D&M AUTOMOTIVE	2444 LAMAR AVE	EDR Hist Auto	Higher	6314, 1.196, East
CA564	ABLANKENSIHIP CLAUDE	1901 MISSISSIPPI BL	EDR Hist Auto	Lower	6323, 1.198, WSW
BZ565	RADIATOR EXCHANGE IN	1211 S PARKWAY E	EDR Hist Auto	Higher	6326, 1.198, NW
BZ566	GRANDMA BETTYS CLEAN	1211 S PARKWAY E	EDR Hist Cleaner	Higher	6326, 1.198, NW
CE567	SPEEDOMETER REPAIR S	1791 LAMAR AVENUE	EDR Hist Auto	Lower	6339, 1.201, North
CF568	DELTA EXPRESS #3165	2454 ELVIS PRESLEY	TN RGA LUST	Lower	6346, 1.202, SSW
CF569	MAPCO EXPRESS 3165	2454 ELVIS PRESLEY	TN LUST, TN UST, TN HIST UST	Lower	6346, 1.202, SSW
CF570	LOUIS AUTO SERVICE	2454 ELVIS PRESLEY	EDR Hist Auto	Lower	6346, 1.202, SSW
CG571		2381 PARK	RCRA-CESQG	Higher	6354, 1.203, ENE
CG572	LUCKY STNKE CLEANERS	2381 PARK AVE	EDR Hist Cleaner	Higher	6354, 1.203, ENE
CE573	LOEBS LNDRY CLNS BR	1806 LAMAR AVE	EDR Hist Cleaner	Lower	6356, 1.204, North
CE574	SUPERIOR CLEANERS	1783 LAMAR AVE.	TN DRYCLEANERS	Lower	6358, 1.204, North
CE575	SUPERIOR CLEANERS ET	1783 LAMAR AVE	EDR Hist Cleaner	Lower	6358, 1.204, North
576	BERRY & SON EXPERT T	2462 KIMBALL	RCRA NonGen / NLR, FINDS, ECHO	Lower	6360, 1.205, East
CE577	KABANIS CORNER FOOD	1796 LAMAR AVENUE	TN LUST, TN UST, TN HIST UST	Lower	6362, 1.205, North
CE578	CARTERS UNION OIL SE	1796 LAMAR AVENUE	EDR Hist Auto	Lower	6362, 1.205, North
BZ579	GREENES LION SERV	1384 BELLEVUE BLVD	EDR Hist Auto	Higher	6373, 1.207, NW
CH580	TATUM ELECTRIC CO	2455 FRISCO	TN HIST UST	Higher	6413, 1.215, ESE
CH581	TATUM ELECTRIC CO	2455 FRISCO	TN UST	Higher	6413, 1.215, ESE
BY582	MID-SOUTH AUTO PARTS	2448 LAMAR AVE	EDR Hist Auto	Higher	6416, 1.215, ENE
CE583	MAPCO PETROLEUM INC	1796 LAMAR	TN RGA LUST	Lower	6428, 1.217, North
BZ584	JACKS GULF SERVICE S	1381 S BELLEVUE BLVD	EDR Hist Auto	Higher	6432, 1.218, NW

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
BZ585	JACKS GULF SERV ST	1381 BELLEVUE BLVD	EDR Hist Auto	Higher	6432, 1.218, NW
CI586	STREET MARION S GAS	1519 SOUTHERN AVE	EDR Hist Auto	Higher	6433, 1.218, NNW
CB587	AIRWAYS RADIATOR & C	2365 AIRWAYS BLVD	EDR Hist Auto	Lower	6439, 1.220, SE
CB588	NUNIS SERVICE STATIO	2363 AIRWAYS BLVD	EDR Hist Auto	Lower	6442, 1.220, SE
CA589	SIMMONLS WAYNE GAS S	1835 MISSISSIPPI BL	EDR Hist Auto	Lower	6445, 1.221, West
CJ590	WILLIES FAST FOOD	2466 LAMAR AVE	EDR Hist Auto	Higher	6457, 1.223, East
CJ591	LAMAR AV FREEWAY STA	2471 LAMAR AVE	EDR Hist Auto	Higher	6466, 1.225, East
592	WHITE CHAS DCLO PRSR	1290 RAYMOND ST	EDR Hist Cleaner	Higher	6477, 1.227, ENE
CE593	SANDSON GULF SERVICE	1768 LAMAR AVE	EDR Hist Auto	Lower	6477, 1.227, North
CE594	GIPSON TIRE CO	1767 LAMAR AVENUE	TN UST	Lower	6481, 1.227, North
CE595	GIPSON TIRE CO	1767 LAMAR AVENUE	TN HIST UST	Lower	6481, 1.227, North
CE596	KELLEY JOSEPH P GAS	1767 LAMAR AVE	EDR Hist Auto	Lower	6481, 1.227, North
CF597	EDGERTON GARAGE AUTT	2452 BELLEVUE BLVD	EDR Hist Auto	Lower	6507, 1.232, SSW
CK598	PARK COMM BELLEVUE P	1281 ORGILL ROAD	TN UST	Higher	6510, 1.233, NW
CK599	PARK COMM BELLEVUE P	1281 ORGILL ROAD	TN HIST UST	Higher	6510, 1.233, NW
CH600	AMERICAN REFRIGERATI	2465 FRISCO ROAD	TN HIST UST	Higher	6511, 1.233, ESE
CH601	AMERICAN REFRIGERATI	2465 FRISCO ROAD	TN UST	Higher	6511, 1.233, ESE
CF602	LOUIS AUTO SERVICE A	2454 S BELLEVUE BLVD	EDR Hist Auto	Lower	6524, 1.236, SSW
BZ603	1335 S BELLEVUE	1335 SOUTH BELLEVUE	TN UST, TN HIST UST	Higher	6525, 1.236, NW
CF604	BELLEVUE LAUNDERETTE	2453 BELLEVUE BLVD	EDR Hist Cleaner	Lower	6526, 1.236, SSW
BY605	JATCO INC	1458 LAMAR CV	EDR Hist Auto	Higher	6529, 1.237, ENE
CF606	ARMSTRONG BODY SHOP	2456 ELVIS PRESLEY B	EDR Hist Auto	Lower	6542, 1.239, SSW
CF607	DAVENPORT SERV STA	2456 S BELLEVUE BLVD	EDR Hist Auto	Lower	6542, 1.239, SSW
CF608	FAWN LAUNDRY & CLEAN	2457 ELVIS PRESLEY	RCRA NonGen / NLR, FINDS, ECHO	Lower	6544, 1.239, SSW
CC609	DOOLEY TIRE & OIL CO	1500 E MCLEMORE AVE	EDR Hist Auto	Higher	6550, 1.241, NNW
CF610	FAWN LAUNDRY CLEANER	2457 S BELLEVUE BLVD	EDR Hist Cleaner	Lower	6561, 1.243, SSW
CF611		2457 ELVIS PRESLEY	EDR Hist Cleaner	Lower	6561, 1.243, SSW
CL612	AMARTIN RAY APPLIANC	2328 LONGSTREET DR	EDR Hist Auto	Higher	6563, 1.243, NE
CM613	FIXIT SHOP REPR	1189 SOUTH PKY E	EDR Hist Auto	Higher	6565, 1.243, WNW
CN614	LOVE LUCILLE A LNDY	1196 CANNON ST	EDR Hist Cleaner	Lower	6582, 1.247, NW
CF615	FOSTER AUTOMOTIVE RE	2468 ELVIS PRESLEY B	EDR Hist Auto	Lower	6583, 1.247, SSW
CE616	APOWELL THOS J FILLI	1751 LAMAR AVE	EDR Hist Auto	Lower	6588, 1.248, North
CF617	MFA SERVICE STATION	2468 SOUTH BELLEVUE	EDR Hist Auto	Lower	6593, 1.249, SSW
CK618	NEVAMAR CORP	1278 ORGILL AVENUE	RCRA NonGen / NLR, FINDS, ECHO	Lower	6593, 1.249, NW
CE619	COOPERS ESSO SERVICE	1762 LAMAR AVE	EDR Hist Auto	Lower	6593, 1.249, North
CI620	BAILEYS GARAGE	1097 RAYNER ST	EDR Hist Auto	Higher	6594, 1.249, NNW
CO621	TAYLORS GARAGE	1182 GAUSCO RD	EDR Hist Auto	Lower	6627, 1.255, SW
CP622	CHERRYWOODS LAUNDERE	2319 KETCHUM RD	EDR Hist Cleaner	Lower	6628, 1.255, SE
CQ623	MASSERANO ALEX	1337 BELLEVUE BLVD	EDR Hist Auto	Higher	6631, 1.256, NW

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CR624	NATIONAL ECONOMY PLU	2114 SOUTHERN	TN UST	Higher	6659, 1.261, NNE
CR625	NATIONAL ECONOMY PLU	2114 SOUTHERN	TN HIST UST	Higher	6659, 1.261, NNE
CB626	NORTH VILLAGE COIN O	2370 AIRWAYS BLVD	EDR Hist Cleaner	Higher	6664, 1.262, SE
CE627	LOEBS LAUNDERETTE	1025 S MCLEAN BLVD	EDR Hist Cleaner	Higher	6690, 1.267, North
CR628	LOEBS LAUNDRY CLEANE	1084 S COOPER ST	EDR Hist Cleaner	Higher	6693, 1.268, NNE
CR629	ARGO HOME SERV RUG C	1080 COOPER S	EDR Hist Cleaner	Higher	6715, 1.272, NNE
CR630	COOPER & SOUTHERN ES	1073 COOPER S	EDR Hist Auto	Higher	6725, 1.274, NNE
CR631	VAUGHTERS ESSO SERVI	1073 SOUTH COOPER	EDR Hist Auto	Higher	6725, 1.274, NNE
CC632	OXFORD BUILDING SERV	1425 EAST MCLEMORE	TN UST	Higher	6735, 1.276, NNW
CC633	OXFORD BUILDING SERV	1425 EAST MCLEMORE	TN HIST UST	Higher	6735, 1.276, NNW
CE634	AGULF SERV STA	1758 LAMAR AVE	EDR Hist Auto	Lower	6737, 1.276, North
CK635	CROSS STREET SERVICE	1244 ORGILL AVENUE	TN UST, TN HIST UST	Higher	6744, 1.277, NW
CK636	CROSS STREET SERVICE	1244 ORGILL AVE	EDR Hist Auto	Higher	6744, 1.277, NW
CR637	E Z SERVE 100259	1076 SOUTH COPPER	TN UST	Higher	6749, 1.278, NNE
CR638	E-Z SERVE #100259	1076 SOUTH COPPER	TN HIST UST	Higher	6749, 1.278, NNE
CP639	KENNINGTON CORP	2346 KETCHUM ROAD	EDR Hist Auto	Lower	6754, 1.279, SE
CK640	CROSS STREET SERVICE	1242 ORGILL AVE	EDR Hist Auto	Higher	6764, 1.281, NW
CS641	LUNAS BROTHERS AUTO	2507 LAMAR AVE	EDR Hist Auto	Higher	6790, 1.286, East
CP642	JOYNERS D X SERV ST	2405 AIRWAYS BLVD	EDR Hist Auto	Lower	6797, 1.287, SE
CT643	1415 E. MCLEMORE SIT	1415 E MCLEMORE AVE	TN INST CONTROL, TN SRP	Higher	6800, 1.288, NNW
CQ644	BELLEVUE GARAGE	1295 BELLEVUE BLVD	EDR Hist Auto	Higher	6812, 1.290, NW
CI645	SMITH BRAKE & OIL CH	1049 S WILLETT ST	EDR Hist Auto	Higher	6814, 1.291, NNW
CG646	PARK AV PETROLEUM CO	2425 PARK AVE	EDR Hist Auto	Higher	6814, 1.291, ENE
CU647	FLETCHERS CYCLE SERV	2436 AIRWAYS BLVD	EDR Hist Auto	Lower	6822, 1.292, SE
CQ648	GREENE SERVICE STA G	1215 TRIGG AVE E	EDR Hist Auto	Higher	6842, 1.296, NW
CM649	BALLS CLNRS	1147 SOUTH PKY E	EDR Hist Cleaner	Higher	6849, 1.297, WNW
CL650	ABANDONED STATION	CARNES AND GRAFIELD	TN HIST UST	Higher	6863, 1.300, NE
CV651	PINKSTON & STEPHENSO	1734 LAMAR AVE	EDR Hist Auto	Lower	6863, 1.300, North
CK652	MID-AMERICAN DOOR CO	1293 HALLEY PLACE	RCRA NonGen / NLR, FINDS, ECHO	Lower	6872, 1.302, NW
CK653	DILLARD DOOR COMPANY	1293 HALLY PLACE	RCRA NonGen / NLR, FINDS, ECHO	Lower	6872, 1.302, NW
CQ654	BELLEVUE GARAGE	1295 S BELLEVUE BLVD	EDR Hist Auto	Higher	6880, 1.303, NW
CH655	HUNTER FAN CO	2500 FRISCO AVENUE	TN HIST UST	Higher	6883, 1.304, ESE
CH656	HUNTER'S FAN COMPANY	2500 FRISCO AVENUE	TN HIST UST	Higher	6883, 1.304, ESE
CH657	HUNTER FAN CO	2500 FRISCO AVENUE	TN UST	Higher	6883, 1.304, ESE
CH658	HUNTER FAN COMPANY	2500 FRISCO AVENUE	RCRA NonGen / NLR, ICIS, FTTS, HIST FTTS, FINDS,...	Higher	6883, 1.304, ESE
CN659	JBC SOUTH INC	1298 HALLY PLACE	RCRA-CESQG, FINDS, ECHO	Lower	6885, 1.304, NW
CO660	CHARLEYS TOWING & RO	1157 GAUSCO RD	EDR Hist Auto	Lower	6892, 1.305, SW
CV661	LAMAR CYCLE SHO D	1728 LAMAR AVE	EDR Hist Auto	Lower	6895, 1.306, North
CV662	WATKINS & TOWN	1726 LAMAR AVE	EDR Hist Auto	Lower	6897, 1.306, North

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CV663	A BRETHERICK CLEANER	1726 LAMAR AVE	EDR Hist Cleaner	Lower	6897, 1.306, North
CV664	LAMAR RESCUE MISSION	1730 LAMAR AVENUE	TN HIST UST	Lower	6904, 1.308, North
CV665	LAMAR RESCUE MISSION	1730 LAMAR AVENUE	TN UST	Lower	6904, 1.308, North
CV666	LAMAR RESCUE MISSION	1730 LAMAR AVE	EDR Hist Auto	Lower	6904, 1.308, North
CU667	MYRONS MOBILE SERVIC	2400 AIRWAYS BLVD	EDR Hist Auto	Lower	6914, 1.309, SE
CU668	AIRWAYS SHELL	2400 AIRWAYS	TN UST, TN HIST UST	Lower	6914, 1.309, SE
CQ669	MITCHELL JOHN A FILL	1279 S BELLEVUE BLVD	EDR Hist Auto	Higher	6923, 1.311, NW
CL670	TAYLOR MARION	1203 S AIRWAYS BLVD	EDR Hist Auto	Higher	6933, 1.313, NE
CK671	MARBURY MFG INC	1240 ORGILL AVENUE	TN HIST UST	Higher	6937, 1.314, NW
CK672	MARBURY MFG INC	1240 ORGILL AVENUE	TN LUST, TN UST	Higher	6937, 1.314, NW
CK673	MARBURY MFG INC	1240 ORGILL AVE	TN RGA LUST	Higher	6937, 1.314, NW
CS674	DITTO JOS M	2518 LAMAR AVE	EDR Hist Auto	Higher	6943, 1.315, East
CW675	BROWN 1 REVELLE MOBI	2507 FRISCO AVE	EDR Hist Auto	Higher	6948, 1.316, ESE
CX676	ASMITH ARMIISTEAD AU	1729 MISSISSIPPI BL	EDR Hist Auto	Lower	6956, 1.317, West
CY677	JACK SERVICE & GARAG	992 OAKVIEW ST	EDR Hist Auto	Higher	6960, 1.318, North
CL678	SHORTER CARL CO INC	1200 AIRWAYS BLVD	RCRA NonGen / NLR, FINDS, ECHO	Higher	6971, 1.320, NE
CZ679	LAWSON C STORE	2497 ELVIS PRESLEY B	TN LUST, TN UST	Lower	6986, 1.323, SSW
CZ680	LAWSON C STORE	2497 ELVIS PRESLEY B	TN RGA LUST	Lower	6986, 1.323, SSW
CZ681	LAWSON C STORE	2497 ELVIS PRESLEY B	TN HIST UST	Lower	6986, 1.323, SSW
CV682	CSC CARPET AND FURN	1705 LAMAR AVE	EDR Hist Cleaner	Lower	6990, 1.324, North
CX683	WATKINS R FLOYD AUTO	1721 MISSISSIPPI BL	EDR Hist Auto	Lower	6996, 1.325, West
DA684	DOWDYS AUTO REPAIR	930 KEATING ST	EDR Hist Auto	Higher	6999, 1.326, ENE
CQ685	GATES LUMBER CO	1253 SOUTH BELLEVUE	TN UST	Higher	7005, 1.327, NW
CQ686	GATES LUMBER CO	1253 S BELLEVUE	TN LUST	Higher	7005, 1.327, NW
CQ687	GATES LUMBER CO	1253 S BELLEVUE	TN RGA LUST	Higher	7005, 1.327, NW
CQ688	GATES LUMBER CO	1253 SOUTH BELLEVUE	TN HIST UST	Higher	7005, 1.327, NW
689		1800 PYRAMID PLACE	RCRA-CESQG	Lower	7005, 1.327, South
CU690	AIRWAYS BLVD CLEANER	2362 KETCHAM	RCRA-CESQG, FINDS, ECHO	Lower	7006, 1.327, SE
CU691	QUALITY QUICK AIRWAY	2362 KETCHUM RD	EDR Hist Cleaner	Lower	7006, 1.327, SE
CX692	MWATKINS R FLOYD AUT	1719 MISSISSIPPI BL	EDR Hist Auto	Lower	7007, 1.327, West
CS693	CONCKLIN ESSO SERV	2524 LAMAR AVE	EDR Hist Auto	Higher	7064, 1.338, East
694		1910 NONCONNAH BLVD	RCRA-SQG	Lower	7065, 1.338, South
DB695	NONCONNAH CORPORATE	2005 CORPORATE AVE	TN RGA LUST	Lower	7072, 1.339, SSE
DB696	NONCONNAH CORPORATE	2005 CORPORATE AVENU	TN HIST UST	Lower	7072, 1.339, SSE
DB697	NONCONNAH CORPORATE	2005 CORPORATE AVENU	TN LUST, TN UST	Lower	7072, 1.339, SSE
CV698	AAPEX LAUNDRY CLEANE	1693 LAMAR AVE	EDR Hist Cleaner	Lower	7075, 1.340, North
CW699	CUSTOM TOWING	2519 FRISCO AVE	EDR Hist Auto	Higher	7084, 1.342, ESE
DC700	BILLUPS PETROLEUM CO	1250 S BELLEVUE BLVD	EDR Hist Auto	Higher	7097, 1.344, NW
CT701	GLENVIEW COAL CO	1362 MCLEMORE	TN HIST UST	Higher	7098, 1.344, NNW

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CT702	GLENVIEW COAL CO	1362 MCLEMORE	TN UST	Higher	7098, 1.344, NNW
CS703	JOHNSONS AUTOMOTIVE	1607 HAMILTON	EDR Hist Auto	Higher	7103, 1.345, East
CV704	WATER & GAS PLASTIC	1689 LAMAR	RCRA NonGen / NLR, FINDS, ECHO	Lower	7103, 1.345, North
CS705	JOHNSONS AUTOMOTIVE	1605 HAMILTON ST	EDR Hist Auto	Higher	7104, 1.345, East
DA706	B H & K CLEANERS	2453 PARK AVE	EDR Hist Cleaner	Higher	7110, 1.347, ENE
CL707	LOEBS COIN OP LAUNDR	1153 AIRWAYS BLVD	EDR Hist Cleaner	Higher	7126, 1.350, NE
708	SNS AUTO SERVICE	1221 E ALCY RD	EDR Hist Auto	Lower	7138, 1.352, SW
CV709	GRANGER CLEANERS INC	1683 LAMAR AVE	EDR Hist Cleaner	Lower	7146, 1.353, North
CV710	A MILAMS SERVICE STA	1706 LAMAR AVE	EDR Hist Auto	Lower	7152, 1.355, North
DD711	A WARD GULF SERV GAS	1152 AIRWAYS BLVD	EDR Hist Auto	Higher	7153, 1.355, NE
CS712	SHARP MTR CO	2549 LAMAR AVE	EDR Hist Auto	Higher	7158, 1.356, East
713	ANACOMP INC	2655 DIVIDEND DRIVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	7172, 1.358, South
CS714	WORKMANS TRANSMISSIO	2547 LAMAR AVE	EDR Hist Auto	Higher	7175, 1.359, East
DE715	S AND L AUTOMOTIVES	1667 HUGENOT ST	EDR Hist Auto	Higher	7181, 1.360, East
DF716	NIXON LUMBER COMPANY	1340 E MCLEMORE	TN RGA LUST	Higher	7190, 1.362, NW
DF717	NIXON LUMBER CO	1340 EAST MCLEMORE	TN HIST UST	Higher	7190, 1.362, NW
DF718	NIXON LUMBER CO	1340 EAST MCLEMORE	TN UST	Higher	7190, 1.362, NW
DF719	NIXON LUMBER COMPANY	1340 E MCLEMORE	TN LUST, TN LUST TRUST	Higher	7190, 1.362, NW
DF720	NIXON LUMBER CO INC	1340 EAST MCLEMORE	TN HIST UST	Higher	7190, 1.362, NW
721	WILHAMS WASH & DRY C	2487 DWIGHT RD	EDR Hist Cleaner	Lower	7191, 1.362, SE
DF722	W W GARAGE AUTO REPR	1329 MCLEMORE AVE E	EDR Hist Auto	Higher	7192, 1.362, NW
CS723	LAMAR HEIGHTS SERV S	2544 LAMAR AVE	EDR Hist Auto	Higher	7198, 1.363, East
DD724	WILLIAMS 66 SERV ST	1155 AIRWAYS BLVD	EDR Hist Auto	Higher	7199, 1.363, NE
DD725	LOEB'S 7 11 MARKET 6	1155 AIRWAYS BLVD.	TN UST	Higher	7199, 1.363, NE
DD726	LOEB'S 7-11 MARKET #	1155 AIRWAYS BLVD.	TN HIST UST	Higher	7199, 1.363, NE
DC727	ABILLUPS PETROLEUM C	1250 BELLEVUE S	EDR Hist Auto	Higher	7206, 1.365, NW
DC728	BILLUPS PETROLEUM CO	1250 BELLEVUE BLVD	EDR Hist Auto	Higher	7206, 1.365, NW
DA729	PERRYS CLEANERS JIM	2471 PARK AVE	EDR Hist Cleaner	Higher	7213, 1.366, ENE
730	SHINY AUTO	1818 NORFOLK ST	EDR Hist Auto	Lower	7239, 1.371, West
DA731	FAMOUS CLEANERS	2473 PARK AVE	EDR Hist Cleaner	Higher	7251, 1.373, ENE
CS732	AIRWAY CLEANERS NO	2542 LAMAR AVE	EDR Hist Cleaner	Higher	7259, 1.375, East
CS733	A WILSON LAWRENCE FI	2542 LAMAR AVE	EDR Hist Auto	Higher	7259, 1.375, East
DG734	LUBY LEASING INC	2600 NONCONNAH BLVD	EDR Hist Auto	Lower	7263, 1.376, SSE
735	FERRELL & NORFLEET G	1683 MISSISSIPPI BL	EDR Hist Auto	Higher	7272, 1.377, West
DG736	LEVI STRAUSS & CO. M	2603 CORPORATE AVE E	RCRA NonGen / NLR, FINDS, ECHO	Lower	7284, 1.380, SSE
DG737	MEMPHIS ENVIRONMENTA	2603 CORPORATE AVENU	RCRA NonGen / NLR, FINDS, ECHO	Lower	7284, 1.380, SSE
DH738	A COXWELL CHAS H LND	1684 LAMAR AVE	EDR Hist Cleaner	Higher	7290, 1.381, North
DB739	A.B. DICK COMPANY	2039 NONCONNAH BLVD	RCRA NonGen / NLR, FINDS, ECHO	Lower	7304, 1.383, SSE
DI740	SOUTHERN PAINTING CO	1031 KERR AVENUE	TN HIST UST	Higher	7321, 1.387, WNW

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DI741	SOUTHERN PAINTING CO	1031 KERR AVENUE	TN UST	Higher	7321, 1.387, WNW
DI742	COMMANDER PRODUCTS I	1031 KERR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	7321, 1.387, WNW
DJ743	NEWMANS GULF SERVICE	1010 COOPER S	EDR Hist Auto	Higher	7335, 1.389, NNE
DE744	LOEB'S MARKET #16	2560 LAMAR	TN HIST UST	Higher	7356, 1.393, East
DE745	LOEB'S MARKET 16	2560 LAMAR	TN UST	Higher	7356, 1.393, East
DE746	KELLEY BROS TEXACO S	2560 LAMAR AVE	EDR Hist Auto	Higher	7356, 1.393, East
CY747		1657 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	7367, 1.395, North
CY748	ROZELLE CLEANERS	1657 LAMAR BLVD	EDR Hist Cleaner	Higher	7367, 1.395, North
DI749	BROWN TRUCKING INC	1500 HERNANDO	TN HIST UST	Higher	7388, 1.399, WNW
DI750	BROWN TRUCKING INC	1500 HERNANDO	TN LUST, TN UST	Higher	7388, 1.399, WNW
751	SOMERS WM	1072 NEW YORK ST	EDR Hist Auto	Higher	7413, 1.404, NE
DC752A	PAN AM PETROLEUM	1214 BELLEVUE BLVD	EDR Hist Auto	Higher	7419, 1.405, NW
DG753	MURPHY OIL CORPORATI	2606 CORPORATE AVE E	EDR Hist Auto	Lower	7422, 1.406, SSE
DG754	WANG LABORATORIES IN	2606 CORPORATE AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	7422, 1.406, SSE
DD755	CRAWFORD FELIX AUTO	2376 SPOTTSWOOD AVE	EDR Hist Auto	Higher	7424, 1.406, NE
DK756	NEWTS SIXTY SIX SERV	2432 HERNANDO RD	EDR Hist Auto	Lower	7428, 1.407, SW
DK757	NORRIS RD PHILLIPS 6	2432 HERNANDO ROAD	TN LUST, TN UST	Lower	7428, 1.407, SW
DK758	NORRIS RD 66	2432 HERNANDO RD	TN RGA LUST	Lower	7428, 1.407, SW
DK759	NORRIS RD PHILLIPS 6	2432 HERNANDO ROAD	TN HIST UST	Lower	7428, 1.407, SW
DE760	WOODS FINA	2571 LAMAR AVE	TN RGA LUST	Higher	7436, 1.408, East
DE761	WOODS FINA	2571 LAMAR AVENUE	TN LUST, TN UST	Higher	7436, 1.408, East
DE762	WOODS FINA	2571 LAMAR AVE	TN HIST_LUST CO	Higher	7436, 1.408, East
DE763	WOODS FINA	2571 LAMAR AVENUE	TN HIST UST	Higher	7436, 1.408, East
DG764	DREXEL INC	2602 CORPORATE AVENU	RCRA NonGen / NLR, FINDS, ECHO	Lower	7438, 1.409, SSE
DG765	TURNSET INDUSTRIES I	2602 CORPORATE AVE E	RCRA NonGen / NLR, FINDS, ECHO	Lower	7438, 1.409, SSE
DL766	WEST END CLEANERS	1267 E MCLEMORE AVE	EDR Hist Cleaner	Higher	7461, 1.413, NW
CZ767	PRIMACY AUTOMOTIVE	2549 ELVIS PRESLEY B	EDR Hist Auto	Lower	7467, 1.414, SSW
768	DAVIS WM A AUTO REPR	837 MARECHALNEIL ST	EDR Hist Auto	Higher	7469, 1.415, ENE
DM769	PAYNES AUTO	720 GRAND ST	EDR Hist Auto	Higher	7488, 1.418, NE
DL770	B J AUTO CLINIC	1255 E MCLEMORE ST	EDR Hist Auto	Higher	7490, 1.419, NW
DL771	REAR HERRON ED GARAG	1257 E MCLEMORE AVE	EDR Hist Auto	Higher	7497, 1.420, NW
DA772	MARSHALL HAYWOOD DCL	2503 PARK AVE	EDR Hist Cleaner	Higher	7502, 1.421, ENE
DJ773	TEMPEL BAPTIST CHURC	1000 SOUTH COOPER	TN UST	Higher	7504, 1.421, NNE
DJ774	TEMPEL BAPTIST CHURC	1000 SOUTH COOPER	TN HIST UST	Higher	7504, 1.421, NNE
DN775	UNION PACIFIC RAILRO	1021 MELROSE ST.	TN HIST UST, TN NPDES	Higher	7512, 1.423, NNW
DN776	UPR MOTOR FREIGHT/ME	1021 MELROSE	TN HIST UST	Higher	7512, 1.423, NNW
DN777	HARAHAN BRIDGE	1021 MELROSE	TN UST	Higher	7512, 1.423, NNW
DN778	UNION PACIFIC RAILRO	1021 MELROSE ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	7512, 1.423, NNW
DN779	HARAHAN BRIDGE	1021 MELROSE	TN HIST UST	Higher	7512, 1.423, NNW

MAPPED SITES SUMMARY

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
DE780	DITTO AUTO PARTS & S	2574 LAMAR AVE	EDR Hist Auto	Higher	7515, 1.423, East
781	WATKINS CLEANING SER	1120 E TRIGG AVE	EDR Hist Cleaner	Higher	7526, 1.425, NW
DM782	HOLMES AND SON	2411 CARNES	TN HIST UST	Higher	7530, 1.426, NE
DM783	HOLMES & SON SERV ST	2411 CARNES AVE	EDR Hist Auto	Higher	7530, 1.426, NE
DM784	HOLMES AND SON	2411 CARNES	TN LUST, TN UST	Higher	7530, 1.426, NE
DM785	HOLMES & SON	2411 CARNES	TN RGA LUST	Higher	7530, 1.426, NE
DE786	MAC AUTO REPAIR	2585 LAMAR AVE	EDR Hist Auto	Higher	7548, 1.430, East
DO787	CLARKE AMERICAN	1785 NONCONNAH BLVD.	RCRA NonGen / NLR, FINDS, ECHO	Lower	7552, 1.430, South
DH788	KING & WILBANKS AUTO	1664 LAMAR AVENUE	EDR Hist Auto	Higher	7552, 1.430, North
DH789	YATES TRANAMISIONS	1662 LAMAR AVE	EDR Hist Auto	Higher	7554, 1.431, North
DE790	THREE STAR MUFFLER S	2587 LAMAR	EDR Hist Auto	Higher	7555, 1.431, East
DP791	TURNER TIRE SALES CO	2555 ELVIS PRESLEY B	EDR Hist Auto	Lower	7565, 1.433, SSW
DQ792	KWIK KARPET KLEANING	939 ROLAND ST	EDR Hist Cleaner	Higher	7567, 1.433, NNW
DO793	KONICA BUSINESS MACH	1835 NONCONNAH BOULE	RCRA NonGen / NLR, FINDS, ECHO	Lower	7573, 1.434, South
DF794	LEHMAN ROBERTS CO.	1098 AND 1111 WILSON	TN UST	Higher	7585, 1.437, NW
DF795	LEHMAN ROBERTS CO.	1098 AND 1111 WILSON	TN HIST UST	Higher	7585, 1.437, NW
DM796	PAYNE GARAGE	2407 CARNES AVE	EDR Hist Auto	Higher	7587, 1.437, NE
DH797	LUNATI P J	1656 LAMAR AVE	EDR Hist Auto	Higher	7591, 1.438, North
DE798	P & D AUTO SERVICE	2584 LAMAR AVE	EDR Hist Auto	Higher	7593, 1.438, East
DR799		10 S01	RCRA NonGen / NLR	Lower	7596, 1.439, South
800		1975 NONCONNAH BLVD	RCRA NonGen / NLR	Lower	7609, 1.441, SSE
DQ801	JAMES GARAGE AUTO RE	1635 LAMAR AVE	EDR Hist Auto	Higher	7619, 1.443, North
DM802	CHANNELLS TRUCK REPA	2408 CARNES AVE	EDR Hist Auto	Higher	7623, 1.444, NE
DS803		1364.3 N S01T63 Y Y	RCRA NonGen / NLR	Higher	7646, 1.448, ESE
DT804	ONE HOUR MARTINIZING	1174 S BELLEVUE BLVD	EDR Hist Cleaner	Higher	7651, 1.449, NW
DP805	OIL CITY L S A GAS	2584 ELVIS PRESLEY	EDR Hist Auto	Lower	7652, 1.449, SSW
DP806	EZ FOOD MART	2584 ELVIS PRESLEY B	TN UST	Lower	7652, 1.449, SSW
DP807	DISCOUNT SHOP #2	2584 ELVIS PRESLEY B	TN HIST UST	Lower	7652, 1.449, SSW
DL808	LOEBS LAUNDRY CLEANE	1252 E MCLEMORE AVE	EDR Hist Cleaner	Higher	7656, 1.450, NW
809	A M I INC	2491 JOY LANE	RCRA NonGen / NLR, FINDS, ECHO	Lower	7662, 1.451, SE
DL810	BERNARDS ONE HOUR	1229 E MCLEMORE AVE	EDR Hist Cleaner	Higher	7664, 1.452, NW
DU811	GREENS SOUTH PARKWAY	1055 SOUTH PKY E	EDR Hist Auto	Lower	7674, 1.453, WNW
DV812	CURTIS HOMER AUTO RE	1534 MISSISSIPPI BL	EDR Hist Auto	Higher	7677, 1.454, WNW
DE813	ROCKET SERV STA GAS	2597 LAMAR AVE	EDR Hist Auto	Higher	7687, 1.456, East
DW814	NORTRAX EQUIPMENT CO	1505 CORPORATE AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	7691, 1.457, SSW
DW815	BARTON EQUIPMENT CO.	1505 CORPORATE AVE	TN RGA LUST	Lower	7691, 1.457, SSW
DW816	BARTON EQUIPMENT CO.	1505 CORPORATE AVENU	TN LUST, TN LUST TRUST, TN UST	Lower	7691, 1.457, SSW
DW817	BARTON EQUIPMENT CO.	1505 CORPORATE AVENU	TN HIST UST	Lower	7691, 1.457, SSW
DE818	B & M PRINTING CO	2500 LAMAR AVENUE	RCRA NonGen / NLR, FINDS, ECHO	Higher	7695, 1.457, East

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DU819	SOUTH PARKWAY SHELL	1055 S PARKWAY	EDR Hist Auto	Lower	7697, 1.458, WNW
DL820	W&J AUTO REPAIR INC	1128 WALK PL	EDR Hist Auto	Higher	7711, 1.460, NW
DX821		946 RAYNER ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	7719, 1.462, NNW
DP822	HUGHES SHELL SERVICE	2584 S BELLEVUE BLVD	EDR Hist Auto	Lower	7725, 1.463, SSW
823	OFENHEUSLE EMMA O	2498 HERNANDO RD	EDR Hist Auto	Lower	7725, 1.463, SW
DL824	SNELL LESTER A DCLO	1224 MCLEMORE AVE E	EDR Hist Cleaner	Higher	7729, 1.464, NW
DT825	KINGS CLEANERS	1162 BELLEVUE BLVD	EDR Hist Cleaner	Higher	7740, 1.466, NW
DW826	SWITCH MEDICAL WASTE	SWITCH MEDICAL WASTE	TN SWF/LF	Lower	7772, 1.472, SSW
DJ827	TROUTT BROS BARBERS	2127 YOUNG AVE	EDR Hist Cleaner	Higher	7772, 1.472, NNE
DU828	SHELBY EXXON	1054 S PARKWAY EAST	EDR Hist Auto	Higher	7781, 1.474, WNW
DU829	SHELBY EXXON VALUE C	1054 SOUTH PARKWAY	EDR Hist Auto	Higher	7781, 1.474, WNW
DU830	EXXON SS #56022	1054 S. PARKWAY	TN LUST TRUST	Higher	7781, 1.474, WNW
DQ831	COMMERCIAL OIL CO GA	1636 LAMAR AVE	EDR Hist Auto	Higher	7788, 1.475, North
DY832	BAKERS SERVICE STATI	893 BARKSDALE S	EDR Hist Auto	Higher	7790, 1.475, North
DP833	AUTO CLINIC	2598 ELVIS PRESLEY B	EDR Hist Auto	Lower	7802, 1.478, SSW
834	LOVVORN ANIMAL HOSPI	2378 SPOTTSWOOD AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	7802, 1.478, NE
DQ835	ACOCHEAN ROBT H SHEL	1611 LAMAR AVE	EDR Hist Auto	Higher	7806, 1.478, North
DW836		1451 CORPORATE	RCRA-CESQG, TN LUST TRUST, FINDS, ECHO	Lower	7831, 1.483, SSW
DW837	ELLER MEDIA INC.	1451 CORPORATE DRIVE	TN HIST UST	Lower	7831, 1.483, SSW
DW838	UNIVERSAL OUTDOOR IN	1451 CORPORATE DR	TN RGA LUST	Lower	7831, 1.483, SSW
DW839	ELLER MEDIA INC.	1451 CORPORATE DRIVE	TN LUST, TN UST	Lower	7831, 1.483, SSW
DZ840	BARWICK CHIP CHEVROL	2614 LAMAR AVE	EDR Hist Auto	Higher	7835, 1.484, East
DR841		0	RCRA NonGen / NLR	Lower	7844, 1.486, SSW
DY842	ABAKER WM L	889 BARKSDALE S	EDR Hist Auto	Higher	7844, 1.486, North
EA843	LEHMAN-ROBERTS COMPA	1098 WILSON STREET	RCRA-CESQG, FINDS, ECHO	Higher	7871, 1.491, NNW
DS844	TRAF-MARK INC	2595 FRISCO	TN HIST UST	Higher	7876, 1.492, ESE
DS845	TRAF MARK INC	2595 FRISCO	TN UST	Higher	7876, 1.492, ESE
DW846		2709 BARRIS	RCRA NonGen / NLR, PADS	Lower	7877, 1.492, SSW
EB847	COOPER & YOUNG ESSO	945 SOUTH COOPER ST	EDR Hist Auto	Higher	7883, 1.493, NNE
EB848	TROUTT BROS	950 COOPER S	EDR Hist Cleaner	Higher	7884, 1.493, NNE
DP849	PALMERS ALL IN ONE A	2602 ELVIS PRESLEY B	EDR Hist Auto	Lower	7885, 1.493, SSW
DV850	COLEY BROS GAS SERV	1500 MISSISSIPPI BL	EDR Hist Auto	Higher	7888, 1.494, WNW
EB851	COIN O WASH INDRY	948 COOPER S	EDR Hist Cleaner	Higher	7903, 1.497, NNE
DX852	NATIONAL MANUFACTURI	935 RAYNER	RCRA-CESQG, FINDS, ECHO	Higher	7916, 1.499, NNW
EB853	JONES HARRY A FILLIN	945 COOPER S	EDR Hist Auto	Higher	7928, 1.502, NNE
EB854	HODGE C W REPAIR SHO	942 S COOPER ST	EDR Hist Auto	Higher	7933, 1.502, NNE
855	D CANALE GARAGE	1219 HAVEN CIR	EDR Hist Auto	Lower	7941, 1.504, SSW
EB856	HICKEYS GARAGE	2183 YOUNG AVE	EDR Hist Auto	Higher	7964, 1.508, NNE
DW857	FEDERAL FILE CO	2731 BARRIS DR	RCRA NonGen / NLR, FINDS, ECHO	Lower	7964, 1.508, SSW

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DQ858	POST PRINTING CO INC	1612 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	7976, 1.511, North
EB859	HANDWERKER E G	2154 YOUNG AVE	EDR Hist Auto	Higher	7991, 1.513, NNE
EC860	FIRE DEPT #16	1078 EAST PARKWAY SO	TN HIST UST	Higher	7992, 1.514, NE
EC861	FIRE DEPT 16	1078 EAST PARKWAY SO	TN UST	Higher	7992, 1.514, NE
EB862	REEVES CINS DCLO ELN	2160 YOUNG AVE	EDR Hist Cleaner	Higher	7995, 1.514, NNE
DR863	CONVENIENT CAR CARE	2813 LONGATE DRIVE	EDR Hist Auto	Lower	7998, 1.515, South
EB864	AMOORES MTR WKS AUTO	2164 YOUNG AVE	EDR Hist Auto	Higher	8000, 1.515, NNE
EB865	WALKER CHESTER P REP	2168 YOUNG AVE	EDR Hist Auto	Higher	8004, 1.516, NNE
ED866		1581 GAITHER STREET	RCRA NonGen / NLR	Higher	8009, 1.517, WNW
ED867		1581 GAITHER ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	8009, 1.517, WNW
ED868	WASHINGTON & SONS	1581 GAITHER	EDR Hist Cleaner	Higher	8009, 1.517, WNW
ED869	SOUTHSIDE GARAGE	1595 GAITHER	EDR Hist Auto	Higher	8015, 1.518, West
DS870	FIRST RESPONSE, INC.	2601 FRISCO AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	8021, 1.519, ESE
DS871	DENNIES CONTRACTING	2601 FRISCO AVENUE	TN UST	Higher	8021, 1.519, ESE
DS872	DENNIES CONTRACTING	2601 FRISCO AVENUE	TN HIST UST	Higher	8021, 1.519, ESE
DQ873	PLYLER TRACY DCLO CL	1610 LAMAR AVE	EDR Hist Cleaner	Higher	8027, 1.520, North
DQ874	ELITE CLEANERS	1610 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	8027, 1.520, North
EE875	MANKER PRODUCTS CO	2193 YOUNG AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	8031, 1.521, NNE
DT876	PARSONS CLEANERS	1111 S BELLEVUE BLVD	EDR Hist Cleaner	Higher	8031, 1.521, NW
DV877	HALL BATTERY & SERVI	1557 GAITHER PKY	EDR Hist Auto	Lower	8042, 1.523, WNW
ED878	HILL BOYS SNACK SHOP	1575 GAITHER ST	EDR Hist Auto	Higher	8051, 1.525, WNW
EB879	YOUNG AV CINRS	2152 YOUNG AVE	EDR Hist Cleaner	Higher	8067, 1.528, NNE
DV880	SUN CLEANERS	1489 MISSISSIPPI BL	EDR Hist Cleaner	Higher	8081, 1.530, WNW
EB881		928 S COOPER	RCRA NonGen / NLR, FINDS, ECHO	Higher	8082, 1.531, NNE
DV882	AAIAMO CLNRS	1487 MISSISSIPPI BL	EDR Hist Cleaner	Higher	8083, 1.531, WNW
EB883	AFAIRVIEW CLNRS & HA	928 COOPER S	EDR Hist Cleaner	Higher	8087, 1.532, NNE
EB884	AFAIRVIEW CLNRS & HA	926 COOPER S	EDR Hist Cleaner	Higher	8105, 1.535, NNE
EF885	SMITHS GROCERY	955 KERR AVE	EDR Hist Auto	Higher	8117, 1.537, WNW
DZ886	FASHION CLEANERS	2636 LAMAR AVE	RCRA-CESQG, FINDS, ECHO, TN DRYCLEANERS	Higher	8121, 1.538, East
DZ887	HENDERSON D T REPAIR	2636 LAMAR AVE	EDR Hist Auto	Higher	8121, 1.538, East
DZ888		2636 LAMAR AVE	EDR Hist Cleaner	Higher	8121, 1.538, East
EC889	ENRIKUES AUTO SERVIC	1037 E PARKWAY S	EDR Hist Auto	Higher	8127, 1.539, NE
ED890	TRN STATE DISPOSABLE	1626 CLANCY ST	EDR Hist Cleaner	Higher	8140, 1.542, West
EE891	J F SUMMERALL	2219 YOUNG AVENUE	TN HIST UST	Higher	8157, 1.545, NNE
EE892	J F SUMMERALL	2219 YOUNG AVENUE	TN RGA LUST	Higher	8157, 1.545, NNE
EE893	J F SUMMERALL	2219 YOUNG AVENUE	TN LUST, TN LUST TRUST, TN UST	Higher	8157, 1.545, NNE
DZ894	UNIQUE CLEANERS DCLO	2642 LAMAR AVE	EDR Hist Cleaner	Higher	8158, 1.545, East
EC895	A PATTERSONS SERVICE	1029 EAST PKY S	EDR Hist Auto	Higher	8168, 1.547, NE
EC896	BURNETT & BRASFIELD	1027 EAST PKY S	EDR Hist Auto	Higher	8175, 1.548, NE

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EG897	ERNIES GARAGE	2883 LONGATE DR	EDR Hist Auto	Lower	8189, 1.551, South
EF898	ASCHMITTOU GARAGE	1478 MISSISSIPPI BL	EDR Hist Auto	Higher	8193, 1.552, WNW
ED899		1601 CLANEY STREET	RCRA NonGen / NLR	Lower	8197, 1.552, West
EH900	RANGE MOUNT CLN	2487 CARNES AVE	EDR Hist Cleaner	Higher	8199, 1.553, NE
DX901	DOORS INC WHSE REAR	911 RAYNER ST	EDR Hist Auto	Higher	8221, 1.557, NNW
DX902	DOORS INC	911 RAYNER ST.	TN UST	Higher	8221, 1.557, NNW
DX903	DOORS INC	911 RAYNER ST.	TN HIST UST	Higher	8221, 1.557, NNW
EH904	ORANGE MOUND CLNS	2491 CARNES AVE	EDR Hist Cleaner	Higher	8225, 1.558, NE
EH905	NEWELLS SERVICE STA	2484 CARNES AVE	EDR Hist Auto	Higher	8227, 1.558, NE
EG906		2901 LONGGATE DR	RCRA NonGen / NLR, FINDS, ECHO	Lower	8238, 1.560, South
EI907	MAPCO EXPRESS INC	1559 LAMAR AVE	EDR Hist Auto	Higher	8239, 1.560, NNW
EI908	K S LAMAR GAS EXPRES	1559 LAMAR AVENUE	TN UST	Higher	8239, 1.560, NNW
EI909	MAPCO EXPRESS 3166	1559 LAMAR (& WILLET	TN HIST UST	Higher	8240, 1.561, NNW
EH910	FITCHPATRICK JAMES	2490 CARNES AVENUE	EDR Hist Auto	Higher	8251, 1.563, NE
EH911	WOODS SERVICE STATIO	2490 CARNES AVE	TN RGA LUST	Higher	8251, 1.563, NE
EH912	WOODS SERVICE STATIO	2490 CARNES AVENUE	TN HIST UST	Higher	8251, 1.563, NE
EH913	CITY WIDE CAB CO.	2490 CARNES	TN RGA LUST	Higher	8251, 1.563, NE
EH914	WOODS SERVICE STATIO	2490 CARNES AVENUE	TN LUST, TN LUST TRUST, TN UST	Higher	8251, 1.563, NE
EH915	FORMERLY UNION 76 ST	2490 CARNES	TN HIST UST	Higher	8251, 1.563, NE
EF916	MISSISSIPPI COIN LAU	1473 MISSISSIPPI BL	EDR Hist Cleaner	Higher	8275, 1.567, WNW
EI917	LAMA RESCUE MISSION	1578 LAMAR AVE	EDR Hist Auto	Higher	8277, 1.568, NNW
EJ918	SPOTTSWOOD CLEANERS	2456 SPOTTSWOOD AVE	EDR Hist Cleaner	Higher	8287, 1.570, NE
DZ919	EAST MEMPHIS BODY WK	2648 LAMAR AVE	EDR Hist Auto	Higher	8291, 1.570, East
ED920	SOUTHERN LAMINATING	1601 CLANCY ST	TN RGA LUST	Higher	8295, 1.571, West
ED921	SOUTHERN LAMINATING	1601 CLANCY ST.	TN LUST, TN UST	Higher	8295, 1.571, West
ED922	SOUTHERN LAMINATING	1601 CLANCY ST.	TN HIST UST	Higher	8295, 1.571, West
EC923	JORDAN SAML	1015 EAST PKY S	EDR Hist Cleaner	Higher	8296, 1.571, NE
EA924	V E SIHEVELL	1280 WALKER	TN UST	Higher	8297, 1.571, NNW
EA925	V E SIHEVELL	1280 WALKER	TN HIST UST, TN NPDES	Higher	8297, 1.571, NNW
EA926	SCHEVENELL READY MIX	1280 WALKER	TN HIST UST	Higher	8297, 1.571, NNW
EI927	LAMAR CLEANERS	1576 LAMAR BLVD	EDR Hist Cleaner	Higher	8338, 1.579, NNW
EK928	LOEBS LAUNDRY CLEANE	2656 LAMAR AVE	EDR Hist Cleaner	Higher	8340, 1.580, East
EK929	NEWMAN SERVICE STATI	2656 LAMAR AVE	EDR Hist Auto	Higher	8340, 1.580, East
EI930	WAREHOUSE FACILITY	893 RAYNER STREET	TN SRP	Higher	8344, 1.580, NNW
EB931	MID SOUTH TROPHY & E	902 S COOPER	RCRA NonGen / NLR, FINDS, ECHO	Higher	8353, 1.582, NNE
EF932	HALLS BATTERY & SERV	1457 GAITHER COVE	EDR Hist Auto	Higher	8363, 1.584, WNW
EL933	BRIGHT CONSTRUCTION	2637 FRISCO	TN UST	Higher	8372, 1.586, ESE
EL934	BRIGHT CONSTRUCTION	2637 FRISCO	TN HIST UST	Higher	8372, 1.586, ESE
EM935	DUNLAP R C	999 EAST PKY S	EDR Hist Cleaner	Higher	8382, 1.587, NE

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EF936	HALL BATTERY & SERVI	1457 GAITHER ST	EDR Hist Auto	Higher	8391, 1.589, WNW
EG937	FILTER CHANGE SERVIC	2910 HUNTLEY DRIVE	EDR Hist Auto	Lower	8406, 1.592, SSW
EG938	KEYSTONE AUTOMOTIVE	2918 HUNTLEY DR	EDR Hist Auto	Lower	8423, 1.595, SSW
EK939		2666 LAMAR AVE	EDR Hist Auto	Higher	8426, 1.596, East
EI940		880 RAYNER STREET	RCRA NonGen / NLR	Higher	8428, 1.596, NNW
EI941		880 RAYNER ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	8428, 1.596, NNW
EJ942	FORREST YARD-MECHANI	2478 SPOTTSWOOD AVE	TN RGA LUST	Higher	8428, 1.596, NE
EJ943	FORREST YARD MECHANI	2478 SPOTTSWOOD AVEN	TN LUST, TN UST	Higher	8428, 1.596, NE
EJ944	FORREST YARD-MECHANI	2478 SPOTTSWOOD AVEN	TN HIST UST	Higher	8428, 1.596, NE
EJ945		2478 SPOTTSWOOD AVE	RCRA-CESQG, FINDS, ECHO	Higher	8428, 1.596, NE
EN946	TOLBERT JAMES W	1673 EVELYN AVE	EDR Hist Auto	Higher	8432, 1.597, North
EG947	PEARL CLEAN TOTAL CA	2921 HUNTLEY DR	EDR Hist Cleaner	Lower	8441, 1.599, SSW
EO948	BROWN SERVICE STA	1069 S BELLEVUE BLVD	EDR Hist Auto	Higher	8442, 1.599, NW
949	NEXAIR LLC	1385 CORPORATE AVENU	RCRA NonGen / NLR, FINDS, ECHO	Lower	8459, 1.602, SSW
EP950		881 SOUTH COOPER	RCRA NonGen / NLR, FINDS, ECHO	Higher	8478, 1.606, NNE
EF951	WALLACE CLNRS	920 KERR AVE	EDR Hist Cleaner	Higher	8480, 1.606, WNW
EN952	HAROLDS AUTO REBUILD	1700 EVELYN AVE	EDR Hist Auto	Higher	8480, 1.606, North
EP953	PUDDEPHATTES LAUNDER	886 COOPER S	EDR Hist Cleaner	Higher	8487, 1.607, NNE
EK954	PRECISE AUTOMOTIVE S	2668 LAMAR AVE	EDR Hist Auto	Higher	8491, 1.608, East
EP955	FAIRVIEW CLEANERS	886 SO COOPER	EDR Hist Cleaner	Higher	8495, 1.609, NNE
EI956	LAMAR CLEANERS	1576 LAMAR AVE	EDR Hist Cleaner	Higher	8497, 1.609, North
EQ957	MASCO	1039 SOUTH BELLEVIEW	TN RGA LUST	Higher	8510, 1.612, WNW
EQ958	MASCO	1039 SOUTH BELLEVIEW	TN HIST UST	Higher	8510, 1.612, WNW
EQ959	MASCO	1039 SOUTH BELLEVIEW	TN LUST, TN UST	Higher	8510, 1.612, WNW
EI960	DONALD SPENCE ESTATE	1545 LAMAR AVENUE	TN LUST	Higher	8528, 1.615, NNW
EI961	HASTINGS JOHN A FILL	1545 LAMAR AVE	EDR Hist Auto	Higher	8528, 1.615, NNW
EI962	DONALD SPENCE ESTATE	1545 LAMAR AVENUE	TN RGA LUST	Higher	8528, 1.615, NNW
EQ963	FRENCH METHOD CO THE	1390 GAITHER PKY	EDR Hist Cleaner	Higher	8530, 1.616, WNW
ER964	VAIDEN ALIGNMENT SER	2625 HERNANDO ROAD	EDR Hist Auto	Lower	8534, 1.616, SSW
EF965	BAXTER BRUCE A FILLI	931 SOUTH PKY E	EDR Hist Auto	Higher	8546, 1.619, WNW
EQ966	JONES JOHN J CLNR	999 SOUTH PKY E	EDR Hist Cleaner	Higher	8551, 1.620, WNW
EQ967	JONES JOHN DCLO CLN	997 SOUTH PKY E	EDR Hist Cleaner	Higher	8553, 1.620, WNW
EQ968	MYLES & SON GULF SER	951 SOUTH PKY E	EDR Hist Auto	Higher	8554, 1.620, WNW
EQ969	GORDON EMORY CO	1402 GAITHER PARKWAY	RCRA NonGen / NLR, FINDS, ECHO	Higher	8558, 1.621, WNW
EO970	COIN OP LAUNDRY	1223 WALKER AVE	EDR Hist Cleaner	Higher	8566, 1.622, NW
EK971	TWINS AUTO SERVICE	2684 LAMAR AVE	EDR Hist Auto	Higher	8566, 1.622, East
EN972		822 ROZELLE	RCRA NonGen / NLR, FINDS, ECHO	Higher	8569, 1.623, North
EN973		825 SOUTH ROZELLE	RCRA NonGen / NLR	Higher	8581, 1.625, North
EQ974	BP STATION SITE #243	951 S PARKWAY	TN LUST	Higher	8598, 1.628, WNW

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
EQ975	CORNER GROCERY #24	951 SOUTH PKWY.	TN RGA LUST	Higher	8598, 1.628, WNW
EQ976	BP STATION SITE #243	951 S PARKWAY	TN RGA LUST	Higher	8598, 1.628, WNW
EQ977	AMPAK FUEL, LLC	951 SOUTH PKWY.	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Higher	8598, 1.628, WNW
EQ978	PAIGE INTERSTATE GR	951 S PARKWAY	EDR Hist Auto	Higher	8598, 1.628, WNW
EO979	MITCHELL BEDFORD	1044 SOUTH BELLEVUE	EDR Hist Auto	Higher	8599, 1.629, NW
EO980	LOEBS LAUNDRY CLEANE	1044 S BELLEVUE BLVD	EDR Hist Cleaner	Higher	8599, 1.629, NW
EI981		864 RAYNER STREET	RCRA NonGen / NLR, FINDS, ECHO	Higher	8601, 1.629, NNW
EO982	REPAIRS BY D MICHAEL	1046 S BELLEVUE BLVD	EDR Hist Auto	Higher	8605, 1.630, NW
EK983	SHUPE MRS RUTH	2688 LAMAR AVENUE	EDR Hist Cleaner	Higher	8636, 1.636, East
EQ984	CROSS AUBREY & SONS	946 S PARKWAY	EDR Hist Auto	Higher	8645, 1.637, WNW
EM985	M & M ESSO SERVICE S	961 EAST PKY S	EDR Hist Auto	Higher	8672, 1.642, NE
EM986		961 E PARKWAY S	RCRA NonGen / NLR, FINDS, ECHO	Higher	8672, 1.642, NE
EP987		866 COOPER	RCRA NonGen / NLR, FINDS, ECHO	Higher	8695, 1.647, NNE
ES988	THE PICKERING FIRM	821 SOUTH BARKSDALE	TN HIST UST	Higher	8701, 1.648, North
ES989	THE PICKERING FIRM	821 SOUTH BARKSDALE	TN UST	Higher	8701, 1.648, North
ES990	THE PICKERING FIRM	821 SOUTH BARKSDALE	TN HIST UST	Higher	8701, 1.648, North
EQ991	EXXONMOBIL OIL CORPO	946 S PARKWAY E	EDR Hist Auto	Higher	8708, 1.649, WNW
EQ992	MELLENM FOOD MART	946 SOUTH PKWY EAST	TN UST, TN HIST UST	Higher	8708, 1.649, WNW
EQ993		946 S PARKWAY E & CO	RCRA-CESQG, FINDS, ECHO	Higher	8713, 1.650, WNW
994	BLOCKER & WALLACE SE	1470 ROGERS	EDR Hist Auto	Higher	8721, 1.652, NNW
ER995	STATE HIGHWAY DEPART	2666 HERNANDO RD	EDR Hist Auto	Lower	8766, 1.660, SSW
ET996	THOMPSON MACHINERY C	1291 CORPORATE DRIVE	TN HIST UST	Lower	8767, 1.660, SSW
ET997	TAYLOR MACHINERY COM	1291 CORPORATE AVE	EDR Hist Auto	Lower	8767, 1.660, SSW
ET998		1291 CORPORATE AVE.	RCRA-CESQG	Lower	8767, 1.660, SSW
ET999	THOMPSON MACHINERY C	1291 CORPORATE AVE	TN RGA LUST	Lower	8767, 1.660, SSW
ET1000	THOMPSON MACHINERY C	1291 CORPORATE DRIVE	TN LUST, TN UST	Lower	8767, 1.660, SSW
ER1001	TDOT SHELBY COUNTY-H	ELVIS PRESLEY BLVD A	TN SRP	Lower	8800, 1.667, SSW
ER1002	TENN DOT	2678 HERNANDO RD	TN RGA LUST	Lower	8816, 1.670, SSW
ER1003	TENNESSEE DOT	2678 HERNANDO ROAD	TN LUST, TN LUST TRUST, TN UST	Lower	8816, 1.670, SSW
ER1004	TENNESSEE DOT	2678 HERNANDO ROAD	TN HIST UST	Lower	8816, 1.670, SSW
ES1005	BORDEN INC RONCO ENT	800 SOUTH BARKSDALE	TN HIST UST	Higher	8829, 1.672, North
ES1006	BORDEN INC RONCO ENT	800 SOUTH BARKSDALE	TN UST	Higher	8829, 1.672, North
EM1007	CAUGHRONS GULF SERV	945 EAST PKY S	EDR Hist Auto	Higher	8837, 1.674, NE
EM1008	EAST TRAX, INC.	943 EAST PARKWAY SOU	TN UST, TN HIST UST	Higher	8839, 1.674, NE
EM1009	CAUGHRONS GULF SERVI	943 EAST PARKWAY S	EDR Hist Auto	Higher	8839, 1.674, NE
EU1010	SUBWAY GARAGE AUTO	848 WILLETT S	EDR Hist Auto	Higher	8849, 1.676, NNW
EO1011	MITCHELL FINA STATIO	1015 S BELLEVUE BLVD	EDR Hist Auto	Higher	8856, 1.677, NW
EV1012	LAUNDRY MART SELF SE	2571 CARNES AVE	EDR Hist Cleaner	Higher	8873, 1.680, ENE
EW1013		2971 CARRIER ST	RCRA-SQG, FINDS, ECHO	Lower	8887, 1.683, South

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EW1010	UNITED PARCEL SERVIC	2971 CARRIER ST.	TN UST, TN HIST UST, TN NPDES	Lower	8887, 1.683, South
EX1015	SELF SERVICE WASHATE	2717 LAMAR AVE	EDR Hist Cleaner	Higher	8903, 1.686, East
EX1016	ADVANCED TRANSMSNS &	2717 LAMAR AVE	EDR Hist Auto	Higher	8903, 1.686, East
ES1017	MORRIS GARAGE LTD IN	787 S BARKSDALE ST	EDR Hist Auto	Higher	8915, 1.688, North
1018	TOP TO BOTTOM CLEANI	2717 BROWNING AVE	EDR Hist Cleaner	Higher	8917, 1.689, ESE
EV1019	KELLEYS PRESSING SHO	2577 CARNES AVE	EDR Hist Cleaner	Higher	8919, 1.689, ENE
EY1020	BEATRICE/HUNT-WESSON	1351 WILLIAMS AVENUE	TN HIST UST	Higher	8923, 1.690, NNW
EY1022	CONAGRA_FOOD	1351 WILLIAMS AVE	RCRA-SQG, ICIS, US AIRS	Higher	8923, 1.690, NNW
EZ1023	AUTOMOTIVE UNLIMITED	2472 SOUTHERN AVE	EDR Hist Auto	Lower	8933, 1.692, NE
1023		2741 NONCONNAH BLVD	RCRA NonGen / NLR	Lower	8937, 1.693, SSE
EX1024	W MASON DRY CLEANE	2723 LAMAR AVE	EDR Hist Cleaner	Higher	8949, 1.695, East
FA1025	HARDWICK G R AUTO RE	1007 BELLEVUE BLVD	EDR Hist Auto	Higher	8957, 1.696, NW
FA1026	BELLEVUE FILLING STA	1005 S BELLEVUE BLVD	EDR Hist Auto	Higher	8979, 1.701, NW
FB1027	SUN LNDRY & CLNS BR	869 KERR AVE	EDR Hist Cleaner	Higher	8987, 1.702, WNW
FC1028	SOUTHERN RAILWAY	2648 SPOTTSWOOD AVE	TN RGA LUST	Higher	8993, 1.703, NE
FC1029	NORFOLK SOUTHERN RAI	2648 SPOTTSWOOD AVEN	TN HIST UST	Higher	8993, 1.703, NE
FC1030	NORFOLK SOUTHERN RAI	2648 SPOTTSWOOD AVEN	TN LUST, TN UST, TN NPDES	Higher	8993, 1.703, NE
EX1031	OBARRS GARAGE	2731 LAMAR AVE	EDR Hist Auto	Higher	8993, 1.703, East
EV1032	SMITH ELIZA	2585 CARNES AVENUE	EDR Hist Auto	Higher	9002, 1.705, ENE
FA1033	SMITH & BILLINGS SER	1001 BELLEVUE S	EDR Hist Auto	Higher	9010, 1.706, NW
FA1034	ARCHERS ESSO SERVICE	1003 S BELLEVUE BLVD	EDR Hist Auto	Higher	9012, 1.707, NW
1035	YOUNG BROS AUTO REPR	1093 SAXON AVE	EDR Hist Auto	Higher	9014, 1.707, NW
FA1036	FRAYSER SHELL STATIO	1183 WALKER	EDR Hist Auto	Higher	9016, 1.708, NW
EZ1037	SERVICE COAL & OIL C	2494 SOUTHERN AVE	EDR Hist Auto	Higher	9017, 1.708, NE
FD1038	R L MOOR RAILROAD CO	865 EAST BODLEY AVEN	TN HIST UST	Lower	9022, 1.709, WSW
FD1039	R L MOOR RAILROAD CO	865 EAST BODLEY AVEN	TN UST	Lower	9022, 1.709, WSW
EZ1040	ABALLARDS AUTO REPRS	2496 SOUTHERN AVE	EDR Hist Auto	Higher	9025, 1.709, NE
FA1041	WIDGERY WM A GAS STA	1001 BELLEVUE BLVD	EDR Hist Auto	Higher	9047, 1.713, NW
EX1042	ALLEN BLIND & DRAPER	2737 LAMAR AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9073, 1.718, East
FE1043	MEMPHIS METAL MANUFA	795 TANGLEWOOD STREE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9078, 1.719, NNE
EZ1044	SCOTT & SCOTT LIFT T	2510 SOUTHERN	EDR Hist Auto	Higher	9086, 1.721, NE
FD1045		PO BOX 1598	RCRA NonGen / NLR	Lower	9095, 1.723, WSW
EZ1046	MORGAN MOVING SERVIC	2514 SOUTHERN AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9102, 1.724, NE
FF1047	METRO MATERIALS	1634 FERRELL PARK DR	TN LUST, TN UST, TN HIST UST	Lower	9107, 1.725, South
FF1048	METRO MATERIALS INC.	1634 FERRELL PARK DR	TN RGA LUST	Lower	9107, 1.725, South
EY1049	DUPONT ACID RELEASE	POSTAL ADDRESS IS UN	SEMS	Higher	9110, 1.725, NNW
FB1050	MORGAN CLEANERS	857 KERR AVE	EDR Hist Cleaner	Higher	9111, 1.726, WNW
FD1051	AMERICAN RESOURCE RE	901 EAST BODLEY	TN UST	Lower	9117, 1.727, WSW
FD1052	AMERICAN RESOURCE RE	901 EAST BODLEY	TN HIST UST	Lower	9117, 1.727, WSW

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FD1057	PERMA-FIX ENVIRONMEN	901 EAST BODLEY AVE	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-LQG, US...	Lower	9117, 1.727, WSW
EU1058	BELLSOUTH TELECOMMUN	787 S WILLETT ST	EDR Hist Auto	Higher	9125, 1.728, NNW
EU1058	BELLSOUTH TELECOMMUN	787 S WILLETT ST	RCRA-CESQG, FINDS, ECHO	Higher	9125, 1.728, NNW
EX1056	PHILLIPS 66 NO. 0112	2739 LAMAR	TN UST	Higher	9133, 1.730, East
EX1057		2739 LAMAR AVE	EDR Hist Auto	Higher	9133, 1.730, East
EX1058	PHILLIPS 66 #011277	2739 LAMAR	TN LUST, TN HIST UST	Higher	9133, 1.730, East
1059	JEFFREYS AUTO APPERA	879 PHILADELPHIA ST	EDR Hist Auto	Higher	9142, 1.731, NNE
EX1060	MFS STEAM LNDY CLNR	2748 LAMAR AVE	EDR Hist Cleaner	Higher	9155, 1.734, East
EZ1061	KAR-GO RP CENTER OF	2530 SOUTHERN AVENUE	EDR Hist Auto	Higher	9194, 1.741, NE
FB1062	WHITE STAR LAUNDRY C	1443 MISSISSIPPI BL	EDR Hist Cleaner	Higher	9195, 1.741, WNW
FE1063	SOUTHWESTERN WINE AN	2025 YORK AVENUE	TN HIST UST	Higher	9213, 1.745, NNE
FE1064	SOUTHWESTERN WINE AN	2025 YORK AVENUE	TN UST	Higher	9213, 1.745, NNE
FA1065	GOODRICH B F CO *	960 S BELLEVUE BLVD	EDR Hist Auto	Higher	9216, 1.745, NNW
FA1066	SPECTRUM CERAMICS IN	960 S BELLEVUE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9216, 1.745, NNW
1067	RPRIVATE RESIDENTS	928 RUTGERS RD	EDR Hist Cleaner	Lower	9227, 1.748, SW
1068	REAR ARCHER R E GARA	1333 RIDGEWAY ST	EDR Hist Auto	Higher	9237, 1.749, WNW
EV1069	CASH EDGAR	2615 CARNES AVE	EDR Hist Cleaner	Higher	9239, 1.750, ENE
FG1070	HEARONS GULF STATION	1400 MISSISSIPPI	EDR Hist Auto	Higher	9258, 1.753, WNW
EW1071		3011 CARRIER ST	RCRA-CESQG, FINDS, ECHO	Lower	9261, 1.754, South
FB1072	M C BOWEN AUTO SERVI	1437 MISSISSIPPI BLV	EDR Hist Auto	Higher	9265, 1.755, WNW
FB1073		1437 MISSISSIPPII BL	RCRA NonGen / NLR	Higher	9265, 1.755, WNW
FB1074	ALBERTS SERVICE STAT	1421 MISSISSIPPI BL	EDR Hist Auto	Higher	9269, 1.755, WNW
FH1075	BLOOMINGDALE INVESTM	2759 LAMAR AVENUE	TN UST, TN HIST UST	Higher	9282, 1.758, East
FI1076	WEBSTER SAFE AND LOC	3020 MILLBRANCH ROAD	TN HIST UST	Lower	9298, 1.761, South
FI1077	WEBSTER SAFE & LOCK	3020 MILLBRANCH RD	TN RGA LUST	Lower	9298, 1.761, South
FI1078	WEBSTER SAFE AND LOC	3020 MILLBRANCH ROAD	TN LUST, TN UST	Lower	9298, 1.761, South
EX1079	CALDWELLS HOLIDAY GU	2766 LAMAR AVE	EDR Hist Auto	Higher	9298, 1.761, East
FH1080	FILL & CHILL	2759 LAMAR AVE	EDR Hist Auto	Higher	9312, 1.764, East
EZ1081	C E THOMPSON LUMBER	2548 SOUTHERN AVENUE	TN UST	Higher	9313, 1.764, NE
EZ1082	C E THOMPSON LUMBER	2548 SOUTHERN AVENUE	TN HIST UST	Higher	9313, 1.764, NE
1083	KENNEDYS WELDING FAB	2760 DUNN AVE	EDR Hist Auto	Higher	9317, 1.765, ESE
FJ1084		794 SOUTH COOPER	RCRA NonGen / NLR, FINDS, ECHO	Higher	9322, 1.766, NNE
FK1085		2976 VANTAGE	RCRA NonGen / NLR, FINDS, ECHO	Lower	9329, 1.767, SSE
FH1086	GENERAL CLEANERS	2757 KIMBALL AVE	EDR Hist Cleaner	Higher	9334, 1.768, East
EV1087	BOWLING AND SON SERV	2629 CARNES AVENUE	TN LUST, TN UST	Higher	9339, 1.769, ENE
EV1088	BOWLING & SON SERVIC	2629 CARNES AVE	TN RGA LUST	Higher	9339, 1.769, ENE
EV1089	BOWLING AND SON SERV	2629 CARNES AVENUE	TN HIST UST	Higher	9339, 1.769, ENE
EV1090	COLEMAN JAS FILLING	2629 CARNES AVE	EDR Hist Auto	Higher	9339, 1.769, ENE
FJ1091	PHILPOT S E INC	795 S COOPER ST	EDR Hist Auto	Higher	9340, 1.769, NNE

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FJ1092	PHILIP LEASING CORP	795 SOUTH COOPER	TN HIST UST	Higher	9340, 1.769, NNE
FJ1093	PHILIP LEASING CORP	795 SOUTH COOPER	TN UST	Higher	9340, 1.769, NNE
FA1094	LAWRENCE AUTO REPAIR	991 JAMES ST	EDR Hist Auto	Higher	9342, 1.769, NW
FL1095	A WELLER BROS	1461 LAMAR AVE	EDR Hist Auto	Higher	9348, 1.770, NNW
FL1096	WILLHITE & LEE	1459 LAMAR AVE	EDR Hist Auto	Higher	9351, 1.771, NNW
EW1097	DIXIE LITHO PLATE IN	3021 CARRIER STREET	RCRA NonGen / NLR, FINDS, ECHO	Lower	9355, 1.772, South
FG1098	TAYLOR AMOCO	1393 MISSISSIPPI BLV	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Higher	9380, 1.777, WNW
FG1099	PARKWAY SHELL SERVIC	1393 MISSISSIPPI BL	EDR Hist Auto	Higher	9380, 1.777, WNW
FG1100	TAYLOR AMOCO	1393 MISSISSIPPI BLV	TN RGA LUST	Higher	9380, 1.777, WNW
FM1101	M & M CARPET & FABRI	1405 HEISTAN PLACE	EDR Hist Cleaner	Higher	9385, 1.777, NNW
1102	FARRISVIEW DUMP	FARRISVIEW RD 1/2 MI	SEMS-ARCHIVE	Lower	9398, 1.780, SE
FN1103	FREELAND ERNEST E	1000 MCLEMORE AVE E	EDR Hist Auto	Higher	9401, 1.780, NW
FH1104	SUPERIOR CARPET & UP	2764 LAMAR AVE	EDR Hist Cleaner	Higher	9410, 1.782, East
FH1105	JOHNSONS ESSO SERVIC	2769 LAMAR AVE	EDR Hist Auto	Higher	9411, 1.782, East
FD1106	FEDERAL COMPRESS AND	805 EAST BODLEY AVEN	TN UST	Lower	9435, 1.787, WSW
FD1107	FEDERAL COMPRESS AND	805 EAST BODLEY AVEN	TN HIST UST	Lower	9435, 1.787, WSW
FN1108	JACKSON MAHALIA CHKN	979 EAST MC LEMORE	EDR Hist Cleaner	Higher	9440, 1.788, NW
FH1109	FRED DRAPERS CUS ALT	2780 LAMAR AV	EDR Hist Cleaner	Higher	9443, 1.788, East
FA1110	P AND B TRANSFER	963 SOUTH BELLEVUE	TN UST	Higher	9444, 1.789, NW
FA1111	P AND B TRANSFER	963 SOUTH BELLEVUE	TN HIST UST	Higher	9444, 1.789, NW
FH1112	CIRCLE K STORE #3188	2772 LAMAR AVENUE	TN RGA LUST	Higher	9449, 1.790, East
FH1113	BP/AMOCO # 19041	2772 LAMAR AVENUE	TN RGA LUST	Higher	9449, 1.790, East
FH1114	NANCE & CHRISP SERV	2772 LAMAR AVE	EDR Hist Auto	Higher	9449, 1.790, East
FH1115	CIRCLE K STORE #2703	2772 LAMAR AVENUE	TN RGA LUST	Higher	9449, 1.790, East
FH1116	AMOCO STATION #318	2772 LAMAR AVENUE	TN RGA LUST	Higher	9449, 1.790, East
FH1117	BP/AMOCO #00318	2772 LAMAR AVENUE	TN RGA LUST	Higher	9449, 1.790, East
FH1118	AMOCO OIL SS# 318	2772 LAMAR AVE	TN LUST, TN LUST TRUST, TN UST, TN HIST UST, RCRA...	Higher	9449, 1.790, East
FM1119		1381 HEISTAN PLACE	RCRA NonGen / NLR	Higher	9455, 1.791, NNW
FM1120	GLASGOW REBUILDERS	1381 HEISTAN PL	EDR Hist Auto	Higher	9455, 1.791, NNW
FN1121	FIRE DEPT 12 AND 14	980 EAST MCLEMORE	TN UST	Higher	9461, 1.792, NW
FN1122	FIRE DEPT #12 AND 14	980 EAST MCLEMORE	TN HIST UST	Higher	9461, 1.792, NW
FL1123	PORTERS GARAGE	1456 LAMAR AVE	EDR Hist Auto	Higher	9465, 1.793, NNW
FO1124	DTG OPERATIONS, INC.	2780 AIRWAYS BLVD.	TN LUST, TN UST	Lower	9469, 1.793, SSE
FO1125	DTG OPERATIONS, INC.	2780 AIRWAYS BLVD.	TN HIST UST	Lower	9469, 1.793, SSE
FO1126	APPROVED AUTO CENTER	2780 AIRWAYS BLVD	EDR Hist Auto	Lower	9471, 1.794, SSE
FO1127	DOLLAR RENT A CAR	2780 AIRWAYS	TN RGA LUST	Lower	9471, 1.794, SSE
FK1128		2851 DIRECTORS COVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	9474, 1.794, SSE
FN1129	WASH TIME LNDRY	971 E MCLEMORE AVE	EDR Hist Cleaner	Higher	9488, 1.797, NW
FM1130	ONES C K PRINTING C	1369 HEISTAN PLACE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9490, 1.797, NNW

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FK1131	VEHICARE OF MEMPHIS	3035 DIRECTORS ROW S	RCRA NonGen / NLR, FINDS, ECHO	Lower	9511, 1.801, SSE
FL1132	IATCO INC	1458 LAMAR AVE	EDR Hist Auto	Higher	9512, 1.802, NNW
FK1133	KIDDE WALTER & COMPA	2996 VANTAGE DR	RCRA NonGen / NLR, FINDS, ECHO	Lower	9514, 1.802, SSE
FM1134	MC GHEE INDUSTRIES I	1361 HEISTAN PLACE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9515, 1.802, NNW
FP1135		2990 SANDBROOK	RCRA NonGen / NLR	Lower	9518, 1.803, SSW
FM1136	TEAMATIC CLEANING S	1353 HEISTAN PL	EDR Hist Cleaner	Higher	9526, 1.804, NNW
FM1137	GLASGOW REBUILDERS	1353 HEISTAN PLACE	EDR Hist Auto	Higher	9526, 1.804, NNW
FM1138		1357 HEISTAN PL	RCRA NonGen / NLR, FINDS, ECHO	Higher	9527, 1.804, NNW
1139	EDDIES SMALL ENGINE	796 E DEMPSTER AVE	EDR Hist Auto	Lower	9534, 1.806, WSW
FE1140	REAR WILLYS & BENNIE	2060 YORK AVE	EDR Hist Auto	Lower	9535, 1.806, NNE
FK1141	STEAM CARPET CLEANIN	3000 VANTAGE DR	EDR Hist Cleaner	Lower	9544, 1.808, SSE
FG1142	KAZS PURE OIL	821 SOUTH MIGHLAND	EDR Hist Auto	Higher	9550, 1.809, WNW
FN1143	GRIFFIS ESSO SERV ST	965 E MCLEMORE AVE	EDR Hist Auto	Higher	9563, 1.811, NW
FQ1144		3050 CARRIER STREET	RCRA-SQG	Lower	9567, 1.812, South
FQ1145	FEDEX FREIGHT, INC	3050 CARRIER ST.	TN LUST, TN LUST TRUST, TN UST, TN HIST UST, TN...	Lower	9567, 1.812, South
FQ1146	CON-WAY SOUTHWEST EX	3050 CARRIER ST	TN RGA LUST	Lower	9567, 1.812, South
FQ1147	CON-WAY SOUTHERN EXP	3050 CARRIER ST.	TN RGA LUST	Lower	9567, 1.812, South
FQ1148	CON-WAY SOUTHERN EXP	3050 CARRIER ST.	TN HIST UST	Lower	9567, 1.812, South
FR1149	SPOTLESS CLEANERS DC	2650 CARNES AVE	EDR Hist Cleaner	Higher	9570, 1.812, ENE
FL1150	BIUMENFELD OIL CO	1441 LAMAR AVE	EDR Hist Auto	Higher	9578, 1.814, NNW
FS1151	FUTNS CLEANERS	2236 PENDLETON ST	EDR Hist Cleaner	Lower	9578, 1.814, ESE
FS1152	FJTRIS BROS CLEANERS	2238 PENDLETON ST	EDR Hist Cleaner	Lower	9580, 1.814, ESE
FE1153	STEEL AND ROOF STRUC	2074 YORK AVENUE	TN UST	Lower	9582, 1.815, NNE
FE1154	STEEL AND ROOF STRUC	2074 YORK AVENUE	TN HIST UST	Lower	9582, 1.815, NNE
FS1155	HAWKINS LION SERV ST	2226 PENDLETON ST	EDR Hist Auto	Lower	9607, 1.820, ESE
FT1156	MURPHYS DEEP ROCK SE	2785 LAMAR AVE	EDR Hist Auto	Higher	9627, 1.823, East
FG1157	K GENERATOR SERVICE	1355 MISSISSIPPI BL	EDR Hist Auto	Higher	9638, 1.825, WNW
FJ1158	APONDER CLEANERS	768 COOPER S	EDR Hist Cleaner	Higher	9641, 1.826, NNE
FT1159	COVINGTON RICHD L	2781 LAMAR AVE	EDR Hist Auto	Higher	9652, 1.828, East
FU1160	TEX GAS	3017 JUCA LN	EDR Hist Auto	Lower	9659, 1.829, SSW
FI1161	ARROW OFFICE BUILDIN	3050 MILLBRANCH	TN UST	Lower	9668, 1.831, South
FI1162	ARROW OFFICE BUILDIN	3050 MILLBRANCH	TN HIST UST	Lower	9668, 1.831, South
FL1163	POMINDEXTER UNION 76	1442 LAMAR AVE	EDR Hist Auto	Higher	9672, 1.832, NNW
FV1164	NU WAY CLNS DCLO CLN	2734 PARK AVE	EDR Hist Cleaner	Lower	9674, 1.832, ENE
FV1165	NU WAY CLEANERS	829 MARIANNA ST	EDR Hist Cleaner	Lower	9700, 1.837, ENE
FW1166	RICE HEATING CO. INC	2200-2204 YORK AVENU	RCRA NonGen / NLR, FINDS, ECHO	Higher	9706, 1.838, NNE
FW1167	HUB AUTOMOTIVE	2200 YORK AVE	EDR Hist Auto	Higher	9706, 1.838, NNE
FL1168		8488 N S01T50	RCRA NonGen / NLR	Lower	9717, 1.840, NNW
FT1169	E RICHARDS SERVICE	2809 LAMAR AVE	EDR Hist Auto	Higher	9730, 1.843, ESE

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
FU1170	CROFT HERSHEL	3030 JUCA LANE	EDR Hist Auto	Lower	9732, 1.843, SSW
FR1171	BOSTON CLNRS DCLO CL	665 BOSTON ST	EDR Hist Cleaner	Higher	9734, 1.844, ENE
FX1172	ALBERT COOK PLUMBING	2101 CENTRAL AVENUE	TN UST, TN HIST UST	Lower	9743, 1.845, NNE
FW1173	STEPHENS BROS CONTRA	222 YORK STREET	TN LUST TRUST	Higher	9743, 1.845, NNE
FY1174	FLEET SERVICE	1770 TRANSPORT	EDR Hist Auto	Lower	9747, 1.846, South
FJ1175	ANDREWS WISE MOTOR	758 COOPER S	EDR Hist Auto	Lower	9757, 1.848, NNE
FJ1176	FRANKL UN LAUNDRY CL	758 COOPER S	EDR Hist Cleaner	Lower	9757, 1.848, NNE
FT1177	FIRE DEPT #22	2788 LAMAR	TN HIST UST	Higher	9759, 1.848, East
FT1178	FIRE DEPT 22	2788 LAMAR	TN UST	Higher	9759, 1.848, East
FV1179	KERR MCGEE 6417	2742 PARK AVENUE	TN UST	Lower	9762, 1.849, ENE
FV1180	DEEP ROCK SERVICE ST	2742 PARK AVE	EDR Hist Auto	Lower	9762, 1.849, ENE
FV1181	KERR-MCGEE #6417	2742 PARK AVENUE	TN HIST UST	Lower	9762, 1.849, ENE
FN1182	WASH O MATIC LAUNDRY	946 E MCLEMORE AVE	EDR Hist Cleaner	Higher	9762, 1.849, NW
FI1183	LYONS CLEANERS	1750 TRANSPORT AVE.	TN DRYCLEANERS	Lower	9774, 1.851, South
FI1184	LYONS ENTERPRISES IN	1750 TRANSPORT AVE	EDR Hist Cleaner	Lower	9774, 1.851, South
FN1185	CROWN CLEANERS	944 E MCLEMORE AVE	EDR Hist Cleaner	Higher	9781, 1.852, NW
FJ1186	MCGHEE CRANE SERVICE	781 MEDA ST.	TN HIST UST	Higher	9786, 1.853, NNE
FJ1187	MCGHEE CRANE SERVICE	781 MEDA ST.	TN UST	Higher	9786, 1.853, NNE
FW1188	SEIFFERT MAT & ELECT	2212 YORK AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	9786, 1.853, NNE
FZ1189		2855 DIRECTORS COVE	RCRA NonGen / NLR	Lower	9796, 1.855, SSE
FN1190	COLLEGE CLEANERS	1140 COLLEGE ST	EDR Hist Cleaner	Higher	9801, 1.856, NW
FR1191	RUTLEDGE OPHELIA CLO	659 BOSTON ST	EDR Hist Cleaner	Higher	9808, 1.858, ENE
GA1192	LEWIS JAS A 3 AUTO R	797 MARIANNA ST	EDR Hist Auto	Lower	9814, 1.859, ENE
FN1193	S & M CLEANERS	1138 COLLEGE	EDR Hist Cleaner	Higher	9826, 1.861, NW
FW1194	STEPHENS BROS INC	2222 YORK	TN HIST UST	Higher	9835, 1.863, NNE
FW1195	STEPHENS BROS INC	2222 YORK	TN RGA LUST	Higher	9835, 1.863, NNE
FW1196	STEPHENS BROS INC	2222 YORK	TN LUST, TN UST	Higher	9835, 1.863, NNE
FZ1197	DIRECTOR COVE SERVIC	2862 DIRECTORS COVE	TN LUST, TN UST	Lower	9850, 1.866, SSE
FZ1198	ENCODA SYSTEMS INC	2862 DIRECTORS COVE	TN HIST UST	Lower	9850, 1.866, SSE
FZ1199	DS SYSTEMS INC	2862 DIRECTORS COVE	TN RGA LUST	Lower	9850, 1.866, SSE
FZ1200	BETTER LIVING LABORA	2873 DIRECTORS COVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	9865, 1.868, SSE
FZ1201	TAYLOR DIESEL GROUP	2864 DIRECTORS CV	EDR Hist Auto	Lower	9866, 1.869, SSE
FP1202	B & L TRAILER SALES	2995 SANDBROOK	EDR Hist Auto	Lower	9868, 1.869, SSW
1203	SMITH AMOCO SERVICE	2010 LARAMIE ST	EDR Hist Auto	Lower	9869, 1.869, WSW
FT1204	DONS RADIATOR & AIR	2807 LAMAR AVE	EDR Hist Auto	Higher	9881, 1.871, ESE
FY1205	MHC TRUCK LEASING, I	1721 TRANSPORT ROAD	TN UST, TN HIST UST	Lower	9895, 1.874, South
FY1206	SOUTHLAND TRUCK CENT	1721 TRANSPORT AVE	EDR Hist Auto	Lower	9895, 1.874, South
FV1207	MURPHY CORP SPUR OIL	2771 PARK AVE	EDR Hist Auto	Lower	9903, 1.876, ENE
FV1208	NAKHLEH'S EXPRESS	2771 PARK STREET	TN UST	Lower	9903, 1.876, ENE

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GB120	RYDER TRUCK RENTAL	2578 LINDAWOOD AVENUE	TN LUST, TN UST	Lower	9910, 1.877, SE
GB121	TRAVIS N CAGLE	2578 LINDAWOOD AVE	TN RGA LUST	Lower	9910, 1.877, SE
GC121	HANCO MANUFACTURING	1301 HEISTAN PLACE	RCRA NonGen / NLR, ICIS, FINDS, ECHO	Higher	9910, 1.877, NNW
GD121	MINERAL WOOL	2368 PROSPECT	TN ENG CONTROLS, TN INST CONTROL, TN VCP, TN SRP	Lower	9935, 1.882, WSW
GD121	MINERAL WOOL	2368 PROSPECT STREET	SEMS	Lower	9935, 1.882, WSW
GD1214		2368 PROSPECT ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	9935, 1.882, WSW
GE121	TIME SAVER CONVIENEN	2350 PENDLETON	TN HIST UST	Lower	9936, 1.882, SE
GE121	TIME SAVER CONVIENEN	2350 PENDLETON	TN RGA LUST	Lower	9936, 1.882, SE
GE121	TIME SAVER MARKET 1	2350 PENDLETON ST	EDR Hist Auto	Lower	9936, 1.882, SE
GE121	TIME SAVER CONVIENEN	2350 PENDLETON	TN LUST, TN LUST TRUST, TN UST	Lower	9936, 1.882, SE
FW121	BALDACO INC	2174 YORK	RCRA NonGen / NLR, FINDS, ECHO	Lower	9939, 1.882, NNE
GF1220		709 E DISON AVE	RCRA-CESQG	Lower	9962, 1.887, West
FT122	HUTSON SELF SERV LND	2790 KIMBALL AVE	EDR Hist Cleaner	Higher	9965, 1.887, East
1222	MORRIS CARPET CLEANI	1672 DUNMOOR ST	EDR Hist Cleaner	Higher	9968, 1.888, East
FZ1223		2883 DIRECTORS COVE	RCRA-CESQG	Lower	9969, 1.888, SSE
FX1224	COOPER STREET CLEANE	739 COOPER S	EDR Hist Cleaner	Lower	9972, 1.889, NNE
FX1225	LUKER PATTERN WORKS	2121 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	9974, 1.889, NNE
GG1226		499 S HOLLYWOOD ST	SEMS-ARCHIVE, RCRA-CESQG	Lower	9982, 1.891, NE
GG1227	MEMPHIS COCA COLA BO	499 SOUTH HOLLYWOOD	TN UST	Lower	9982, 1.891, NE
GG1228	MEMPHIS COCA COLA BO	499 S HOLLYWOOD	TN LUST	Lower	9982, 1.891, NE
GG1229	MEMPHIS COCA COLA BO	499 S HOLLYWOOD	TN RGA LUST	Lower	9982, 1.891, NE
GG1230	MEMPHIS COCA COLA BO	499 SOUTH HOLLYWOOD	TN SRP, TN HIST UST	Lower	9982, 1.891, NE
GH1231	KINGS FIX IT SHOP RE	924 E MCLEMORE AVE	EDR Hist Auto	Higher	9986, 1.891, NW
FV1232	LOEBS LAUNDRY CLEANE	2772 PARK AVE	EDR Hist Cleaner	Lower	10003, 1.895, ENE
FQ1233	THE SOUTHERN CO INC	3101 CARRIER ST	RCRA-CESQG, FINDS, ECHO	Lower	10006, 1.895, South
FQ1234	HYSTER COMPANY*	3101 CARRIER ST	EDR Hist Auto	Lower	10006, 1.895, South
FQ1235	THE SOUTHERN CO., IN	3101 CARRIER	TN UST, TN HIST UST	Lower	10006, 1.895, South
GA1236	SHMAEL NICK L AUTO	782 MARIANNA ST	EDR Hist Auto	Lower	10006, 1.895, ENE
FX1237	BURN ABSTON & CO BR	742 COOPER S	EDR Hist Auto	Lower	10014, 1.897, NNE
FQ1238	CONTRACT FREIGHTERS	3086 CARRIER ST.	TN LUST, TN LUST TRUST, TN UST	Lower	10021, 1.898, South
FQ1239	CONTRACT FREIGHTERS	3086 CARRIER ST	TN RGA LUST	Lower	10021, 1.898, South
FQ1240	CONTRACT FREIGHTERS	3086 CARRIER ST.	TN HIST UST	Lower	10021, 1.898, South
FV1241	MAPCO EXPRESS # 7448	890 PENDELTON ST.	TN RGA LUST	Lower	10033, 1.900, ENE
FV1242	DELTA #7448	890 PENDLETON ST	TN LUST	Lower	10033, 1.900, ENE
FV1243	MAPCO EXPRESS # 7448	890 PENDELTON ST.	TN LUST	Lower	10033, 1.900, ENE
FV1244	DELTA SERVICE STATIO	890 PENDLETON ST	EDR Hist Auto	Lower	10033, 1.900, ENE
FV1245	MAPCO EXPRESS # 74	890 PENDELTON ST.	TN RGA LUST	Lower	10033, 1.900, ENE
FV1246	DELTA #7448	890 PENDLETON ST	TN RGA LUST	Lower	10033, 1.900, ENE
FV1247	WILLIAMS EXPRESS #74	890 PENDELTON STREET	TN LUST TRUST	Lower	10033, 1.900, ENE

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GI1248	CATFISH CABIN	2846 AIRWAYS	TN HIST UST	Lower	10037, 1.901, SSE
GI1249	CATFISH CABIN	2846 AIRWAYS	TN UST	Lower	10037, 1.901, SSE
GJ1250	MID AMERICA INTL TRC	2955 ELVIS PRESLEY B	EDR Hist Auto	Lower	10040, 1.902, SSW
FX1251	AM FRENCH DRY CLNG C	738 COOPER S	EDR Hist Cleaner	Lower	10048, 1.903, NNE
FX1252	SMITH & ROUTH DCLO C	740 COOPER S	EDR Hist Cleaner	Lower	10048, 1.903, NNE
GF1253	ALLEN PUMPING STATIO	709 DISON AVENUE	TN RGA LUST	Lower	10050, 1.903, West
FT1254		2829 KIMBALL AVE	EDR Hist Cleaner	Higher	10058, 1.905, East
FW1255	MORRIS GARAGE LTD IN	747 MEDA	EDR Hist Auto	Lower	10062, 1.906, NNE
GF1256	ALLEN PUMPING STATIO	709 DISON AVENUE	TN LUST, TN UST, TN HIST UST, TN SPILLS	Lower	10063, 1.906, West
GI1257	2303 DEMOCRAT ROAD	2303 DEMOCRAT ROAD	TN UST, TN HIST UST	Lower	10066, 1.906, SSE
FX1258	AM FRENCH DRY CLUE	736 COOPER S	EDR Hist Cleaner	Lower	10067, 1.907, NNE
FT1259	BHULA KANTI R	2831 KIMBALL	EDR Hist Auto	Higher	10073, 1.908, East
FT1260	KIMBALL COIN UP	2831 KIMBALL AVE	EDR Hist Cleaner	Higher	10073, 1.908, East
FW1261	UNKNOWN-OUR #57-9658	2169 CENTRAL AVENUE	TN HIST UST	Lower	10074, 1.908, NNE
FW1262	MOSS PURE SERVICE CE	2169 CENTRAL AVE	EDR Hist Auto	Lower	10074, 1.908, NNE
FW1263	UNKNOWN OUR 57 9658	2169 CENTRAL AVENUE	TN UST	Lower	10074, 1.908, NNE
GK1264	DO DUDS LAUNDRY	2153 CENTRAL AVE	EDR Hist Cleaner	Lower	10074, 1.908, NNE
GK1265	AGERBER CHAS CO AUTO	2153 CENTRAL AVE	EDR Hist Auto	Lower	10074, 1.908, NNE
FX1266	A SITE OIL CO FILL S	2120 CENTRAL AVE	EDR Hist Auto	Lower	10083, 1.910, NNE
FX1267	WILLIAM LOEB	2120 CENTRAL	TN UST	Lower	10083, 1.910, NNE
FX1268	WILLIAM LOEB	2120 CENTRAL	TN HIST UST	Lower	10083, 1.910, NNE
GE1269	SOUTHLAND CORP	2731 KETCHUM	TN RGA LUST	Lower	10084, 1.910, SE
GE1270	SOUTHLAND CORP	2731 KETCHUM	TN HIST UST	Lower	10084, 1.910, SE
GE1271		2731 KETCHUM RD	EDR Hist Cleaner	Lower	10084, 1.910, SE
GE1272	SOUTHLAND CORP	2731 KETCHUM	TN LUST, TN LUST TRUST, TN UST	Lower	10084, 1.910, SE
1273		1940 E BROOKS RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	10093, 1.912, South
GH1274	PETER PAN ONE HOUR C	899 E MC LEMORE	EDR Hist Cleaner	Higher	10100, 1.913, NW
GL1275	MIDWAY MOTOR FREIGHT	3013 SANDBROOK	TN RGA LUST	Lower	10112, 1.915, SSW
GL1276	MIDWAY MOTOR FREIGHT	3013 SANDBROOK	TN HIST UST	Lower	10112, 1.915, SSW
GL1277	MIDWAY MOTOR FREIGHT	3013 SANDBROOK	TN LUST, TN UST	Lower	10112, 1.915, SSW
GM1278	GOODSONS JOE LION SE	2785 PARK AVE	EDR Hist Auto	Higher	10114, 1.916, ENE
GM1279	PARK AVENUE CITGO	2785 PARK AVENUE	TN UST, TN HIST UST	Higher	10114, 1.916, ENE
GN1280	C & M LAUNDRY & CLEA	1286 MISSISSIPPI BL	EDR Hist Cleaner	Higher	10115, 1.916, WNW
GH1281		895 E MCLEMORE AVE	EDR Hist Cleaner	Higher	10122, 1.917, NW
GC1282	CHARLES E HERKLE	1249 HEISTON PLACE	TN UST	Higher	10134, 1.919, NNW
GC1283	CHARLES E HERKLE	1249 HEISTON PLACE	TN HIST UST	Higher	10134, 1.919, NNW
1284	EXPRESS DRY CLEANERS	1377 LAMAR AVE	EDR Hist Cleaner	Lower	10135, 1.920, NNW
GP1285	MAGNOLIA TRUCK LINES	3097 FONTAINE	TN UST	Lower	10139, 1.920, South
GP1286	MAGNOLIA TRUCK LINE	3097 FONTAINE RD	RCRA NonGen / NLR, FINDS, ECHO	Lower	10139, 1.920, South

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GP1286	MAGNOLIA TRUCK LINES	3097 FONTAINE	TN HIST UST	Lower	10139, 1.920, South
GP1286	HEAVY TRUCK & TRAILER	3097 FONTAINE RD	EDR Hist Auto	Lower	10139, 1.920, South
GP1286	INSERVCO CORPORATION	3097 FONTAINE	TN RGA LF	Lower	10139, 1.920, South
FX1290	PRODUCERS & REINERS	728 COOPER S	EDR Hist Auto	Lower	10141, 1.921, NNE
GN1291	RAMEYS GARAGE	1297 MISSISSIPPI BL	EDR Hist Auto	Higher	10147, 1.922, WNW
FW1292	DAVIS BEN SERV STA &	2189 CENTRAL AVE	EDR Hist Auto	Lower	10155, 1.923, NNE
FW1293	BEN DAVIS GARAGE	2189 CENTRAL	TN HIST UST	Lower	10155, 1.923, NNE
FW1293	BEN DAVIS GARAGE	2189 CENTRAL	TN UST	Lower	10155, 1.923, NNE
1295	PRINCE BILLY FORKLIF	715 E BODLEY AVE	EDR Hist Auto	Lower	10161, 1.924, WSW
FY1296		P.O. BOX 161110	RCRA NonGen / NLR	Lower	10162, 1.925, South
GQ1297	AIR ROUTE TRAFFIC CO	9 DEMOCRAT RD	TN LUST, TN HIST_LUST CO	Lower	10176, 1.927, SSE
GK1296	GORDON D D GULF SERV	2142 CENTRAL AVE	EDR Hist Auto	Lower	10179, 1.928, NNE
GK1296	MAPCO EXPRESS #3261	2142 CENTRAL AVE	TN RGA LUST	Lower	10179, 1.928, NNE
GK1300	MAPCO EXPRESS 3261	2142 CENTRAL AVENUE	TN LUST, TN LUST TRUST, TN UST, TN HIST UST	Lower	10179, 1.928, NNE
FW1303	BOWLING'S (PARKING L	746 COX ST.	TN UST	Lower	10186, 1.929, NNE
FW1303	BOWLING'S (PARKING L	746 COX ST.	TN HIST UST	Lower	10186, 1.929, NNE
GK1303	SPENCER CO/MIDSOUTH	2166 CENTRAL	TN UST	Lower	10187, 1.929, NNE
GK1303	SPENCER CO/MIDSOUTH	2166 CENTRAL	TN HIST UST	Lower	10187, 1.929, NNE
1305	TOWNHOUSE STORE	1437 CENTRAL AVE	EDR Hist Cleaner	Lower	10188, 1.930, NNW
GH1306	SMITHS OIL COMPANY	2909 AIRWAYS BLVD	EDR Hist Auto	Lower	10193, 1.930, SSE
GR1307	TOWNSLEYS SERVICE ST	740 SOUTH PKY E	EDR Hist Auto	Higher	10203, 1.932, WNW
FW1308	PARTY CONCEPTS	2197 CENTRAL AVENUE	TN HIST UST	Lower	10207, 1.933, NNE
FW1308	PARTY CONCEPTS	2197 CENTRAL AVENUE	TN UST	Lower	10207, 1.933, NNE
GJ1310	FAYSE PAN AM SEV GAS	2969 HIGHWAY 51 N	EDR Hist Auto	Lower	10210, 1.934, SSW
GS1311		2837 LAMAR	RCRA-SQG, FINDS, ECHO	Higher	10220, 1.936, ESE
GS1310	ONE HOUR VALET INC B	2837 LAMAR AVE	EDR Hist Cleaner	Higher	10220, 1.936, ESE
GH1313	JONES 66 SERVICE	875 EAST MCLEMORE	TN LUST, TN UST	Higher	10220, 1.936, NW
GH1313	PHILLIPS 66 CO #0126	875 EAST MCLEMORE	TN RGA LUST	Higher	10220, 1.936, NW
GH1313	JONES SIXTY SIX SERV	875 E MCLEMORE AVE	EDR Hist Auto	Higher	10220, 1.936, NW
GH1313	JONES 66 SERVICE	875 EAST MCLEMORE	TN HIST UST	Higher	10220, 1.936, NW
GK1313	BRASHEAR P MERLIN AU	2176 CENTRAL AVE	EDR Hist Auto	Lower	10226, 1.937, NNE
GL1318		2990 SANBROOK MEMPHI	RCRA NonGen / NLR, FINDS, ECHO	Lower	10226, 1.937, SSW
FW1318	BOWLINGS CRANKSHAFT	2215 CENTRAL AVE	EDR Hist Auto	Lower	10228, 1.937, NNE
GT1323	BAILEYS TRAILER SERV	1420 STONEBROOK	EDR Hist Auto	Lower	10233, 1.938, SSW
GT1323	FORMER- TENNESSEE CA	1420 STONEBROOK DRIV	TN HIST UST	Lower	10233, 1.938, SSW
GT1323	FORMER TENNESSEE CAR	1420 STONEBROOK DRIV	TN UST	Lower	10233, 1.938, SSW
GT1323		1420 STONEBROOK AVE	RCRA NonGen / NLR	Lower	10233, 1.938, SSW
GC1323	BROWNS AUTO REPAIR &	1252 HEISTAN PL	EDR Hist Auto	Higher	10236, 1.939, NNW
GK1326	CARWILE'S CUSTOM CLE	2178 CENTRAL AVE.	TN DRYCLEANERS	Lower	10242, 1.940, NNE

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GK1326	CARWILES CUSTOM CLEA	2178 CENTRAL AVE	EDR Hist Cleaner	Lower	10242, 1.940, NNE
GK1326	CARWILES CUSTOM CLEA	2178 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	10242, 1.940, NNE
GN1326	CROW ADRON D FLLING	1283 MISSISSIPPI BL	EDR Hist Auto	Higher	10243, 1.940, WNW
GJ1329	LIBERTY TIRE RECYCLI	LIBERTY TIRE RECYCLI	TN SWF/LF	Lower	10252, 1.942, SSW
GH1331	KIRBY FRANK C GAS ST	880 E MCLEMORE AVE	EDR Hist Auto	Higher	10260, 1.943, NW
GH1331	WILLIAMS TEXACO	880 E MCLEMORE	TN RGA LUST	Higher	10260, 1.943, NW
GH1331	WILLIAMS TEXACO	880 E MCLEMORE	TN LUST	Higher	10260, 1.943, NW
GH1331	WILLIAMS TEXACO	880 EAST MCLEMORE	TN UST	Higher	10260, 1.943, NW
GH1331	WILLIAMS TEXACO	880 EAST MCLEMORE	TN HIST UST	Higher	10260, 1.943, NW
1335	CASH EDGAR CLOTHES P	2650 SOUTHERN AVE	EDR Hist Cleaner	Higher	10262, 1.944, NE
GT1336	ORTHOPEADICS DIVISIO	1450 EAST BROOKS ROA	TN UST	Lower	10268, 1.945, SSW
GT1337		1450 EAST BROOKS RD	RCRA-LQG, US AIRS, NY MANIFEST	Lower	10268, 1.945, SSW
GT1338	SMITH & NEPHEW INC -	1450 BROOKS ROAD	TN SRP, TN NPDES	Lower	10268, 1.945, SSW
GT1339	ORTHOPEADICS DIVISIO	1450 EAST BROOKS ROA	TN HIST UST	Lower	10268, 1.945, SSW
GQ1340	DEMOCRAT RD TRANSFER	DEMOCRAT RD TRANSFER	TN SWF/LF	Lower	10269, 1.945, SSE
GK1341		2186 CENTRAL AVE	EDR Hist Cleaner	Lower	10269, 1.945, NNE
GU1340	DELTA 3017	2921 AIRWAYS BLVD	TN RGA LUST	Lower	10272, 1.945, SSE
GU1340	MAPCO EXPRESS # 3017	2921 AIRWAYS BLVD.	TN RGA LUST	Lower	10272, 1.945, SSE
GU1340	MAPCO EXPRESS 3017	2921 AIRWAYS	TN HIST UST	Lower	10272, 1.945, SSE
GU1340	DELTA 3017	2921 AIRWAYS BLVD	TN RGA LUST	Lower	10272, 1.945, SSE
GU1340	MAPCO EXPRESS 3017	2921 AIRWAYS	TN LUST, TN LUST TRUST, TN UST	Lower	10272, 1.945, SSE
GU1340	DELTA SERVICE STATIO	2921 AIRWAYS BLVD	EDR Hist Auto	Lower	10272, 1.945, SSE
GR1340	DYSONS TOPS	2009 S02T63	RCRA NonGen / NLR, FINDS	Higher	10272, 1.945, WNW
1349	TOMS MOBILE MECHANIC	3084 JOSIBPET LN	EDR Hist Auto	Lower	10280, 1.947, SSW
GV1350		3068 MILL BRANCH	RCRA-SQG	Lower	10280, 1.947, South
GV1351		3068 MILL BRANCH	RCRA NonGen / NLR, FINDS, ECHO	Lower	10280, 1.947, South
GH1352	JONES SIXTY SIX SERV	876 MCLEMORE AVE E	EDR Hist Auto	Higher	10285, 1.948, NW
GK1356	COOK ENTERPRISES LTD	2200 CENTRAL AVE	EDR Hist Cleaner	Lower	10301, 1.951, NNE
GK1354		2192 CENTRAL AVE	RCRA NonGen / NLR, FINDS, ECHO	Lower	10301, 1.951, NNE
GR1355	J. W. JONES	733 S SOMERVILLE/712	TN SRP	Higher	10306, 1.952, WNW
GR1355	J. W. JONES	733 S SOMERVILLE/712	TN VCP	Higher	10306, 1.952, WNW
GS1355	HIGGINS GENERATOR CO	2836 LAMAR AVENUE	EDR Hist Auto	Higher	10322, 1.955, ESE
GN1356	GRANGER WM 0 DLO CLN	1275 MISSISSIPPI BL	EDR Hist Cleaner	Higher	10327, 1.956, WNW
GN1356	HARRELL B B FILLING	1275 MISSISSIPPI BL	EDR Hist Auto	Higher	10327, 1.956, WNW
GN1360	GRANGEI CINS DCLO CL	1277 MISSISSIPPI BL	EDR Hist Cleaner	Higher	10329, 1.956, WNW
GL1361	JOINT CLUTCH & GEAR,	3040 SANDBROOK	RCRA NonGen / NLR, FINDS, ECHO	Lower	10331, 1.957, SSW
GL1362	JOINT CLUTCH & GEAR	3040 SANDBROOK	EDR Hist Auto	Lower	10331, 1.957, SSW
GM1360	SUDS PALACE SELF SER	2794 PARK AVE	EDR Hist Cleaner	Higher	10338, 1.958, ENE
GI1364	MONARCH CUSTOM TRUCK	2900 AIRWAYS BLVD	EDR Hist Auto	Lower	10346, 1.959, SSE

MAPPED SITES SUMMARY

Target Property Address:
1763 E PERSON AVE
MEMPHIS, TN 38106

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1365		3089 DIRECTORS ROW	RCRA NonGen / NLR, FINDS, ECHO	Lower	10348, 1.960, SSE
GQ1366	AMR COMBSNORTH COMPL	2451 DEMOCRAT RD.	TN LUST TRUST	Lower	10350, 1.960, SSE
GP1367	INSERVCO CORPORATION	INSERVCO CORPORATION	TN SWF/LF	Lower	10362, 1.962, South
GW1368	P WERNER S/M CONTR	3113 CARRIER	TN UST	Lower	10365, 1.963, South
GW1369	P WERNER S/M CONTR	3113 CARRIER	TN HIST UST	Lower	10365, 1.963, South
GQ1370	SANITATION DEPT	2482 DEMOCRAT ROAD	TN UST	Lower	10367, 1.963, SSE
GQ1371	SANITATION DEPT	2482 DEMOCRAT ROAD	TN HIST UST	Lower	10367, 1.963, SSE
GQ1372	FEDERAL EXPRESS CORP	2461 DEMOCRAT HANGAR	RCRA-CESQG, FINDS, ECHO	Lower	10376, 1.965, SSE
GM1373	BOYLAND SHELL STATIO	2804 PARK AVENUE	EDR Hist Auto	Higher	10381, 1.966, ENE
GP1374	FLEET REPAIR SERVICE	3100 FONTAINE RD A	EDR Hist Auto	Lower	10385, 1.967, South
GW1375	STAR EXPRESS INC	3126 CARRIER ST	EDR Hist Auto	Lower	10386, 1.967, South
GX1376	ATRACY OREN D FILLIN	2218 CENTRAL AVE	EDR Hist Auto	Lower	10393, 1.968, NNE
GX1377	RAGGHIANTI BROS	2218 CENTRAL	TN UST	Lower	10393, 1.968, NNE
GX1378	RAGGHIANTI BROS	2218 CENTRAL	TN HIST UST	Lower	10393, 1.968, NNE
1379		2695 FARRISVIEW BLVD	RCRA NonGen / NLR	Lower	10401, 1.970, SE
GP1380	LEWELLYN FABRICATION	3109 FONTAINE ST.	TN HIST UST	Lower	10403, 1.970, South
GP1381	LEWELLYN FABRICATION	3109 FONTAINE ST.	TN LUST, TN UST	Lower	10403, 1.970, South
GP1382	LEWELLYN MANUFACTURI	3109 FONTAINE RD.	TN LUST TRUST, RCRA NonGen / NLR, ICIS, FINDS,...	Lower	10403, 1.970, South
GP1383	LEWELLYN FABRICATION	3109 FONTAINE ST	TN RGA LUST	Lower	10403, 1.970, South
GI1384	MONARCH CUSTOM TRUCK	2900 AIRWAYS BLVD.	RCRA NonGen / NLR, FINDS, ECHO	Lower	10434, 1.976, SSE
GW1385	RAPID CARTAGE	3126 CARRIER ST.	TN HIST UST	Lower	10446, 1.978, South
GW1386	RAPID CARTAGE	3126 CARRIER ST.	TN UST	Lower	10446, 1.978, South
1387	BRANDON HARRISON	3057 CHAIRMAN DR	EDR Hist Cleaner	Lower	10461, 1.981, SSE
GR1388	JACKSON MAHALIA CHKN	705 SOUTH PARKWAY E	EDR Hist Cleaner	Higher	10473, 1.984, WNW
1389	CARPET CLEANING	2863 WASHINGTON SQUA	EDR Hist Cleaner	Higher	10498, 1.988, East
GE1390	REDMANS AUTO	2769 KETCHUM RD APT	EDR Hist Auto	Lower	10504, 1.989, SE
GU1391	CARE INNS INC	2930 AIRWAYS BLVD	RCRA NonGen / NLR, FINDS, ECHO	Lower	10504, 1.989, SSE
GW1392	ENGINE SERVICE PARTS	3143 CARRIER	EDR Hist Auto	Lower	10528, 1.994, South

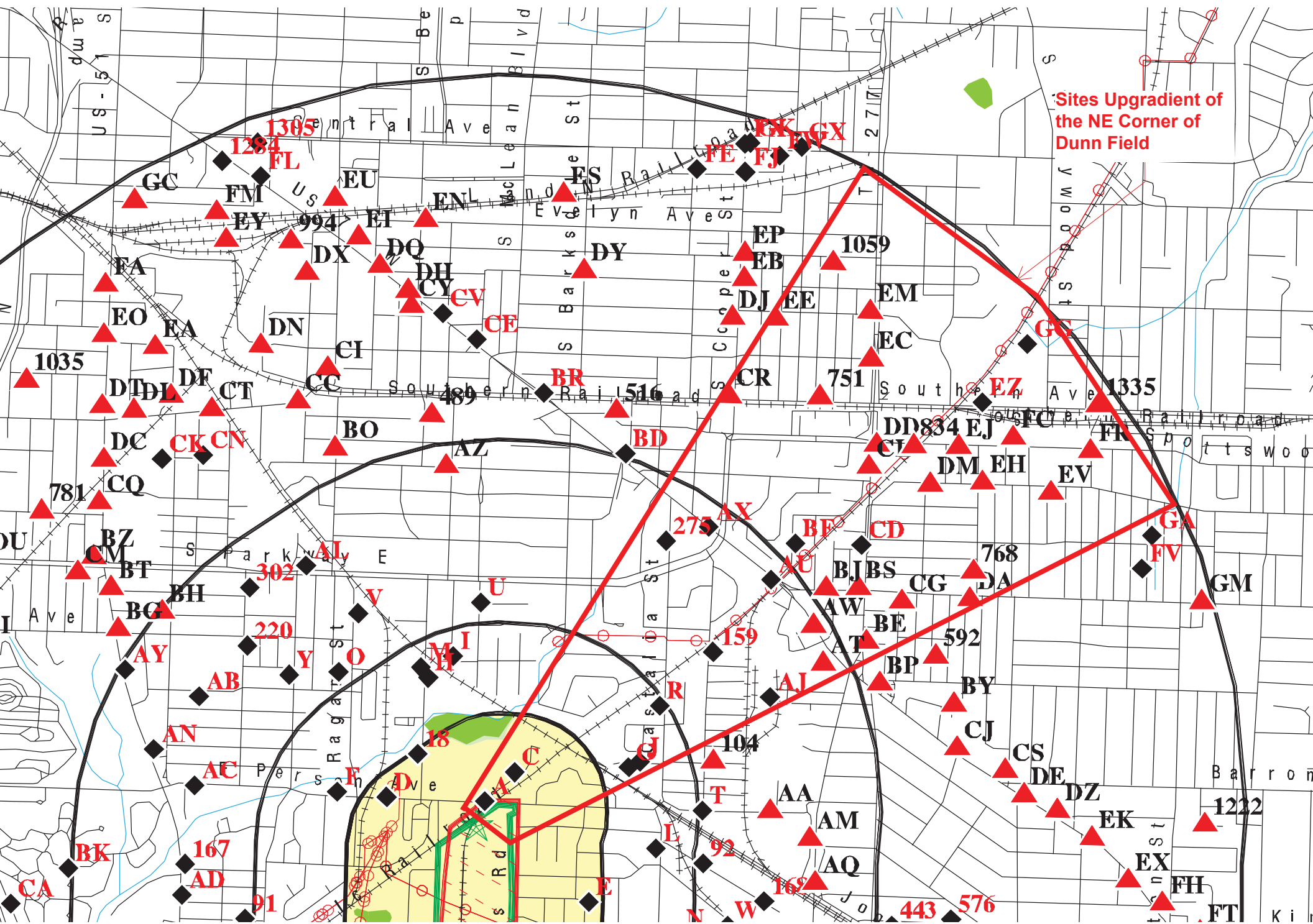
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TABLE B-1
LISTED ENVIRONMENTAL SITES NORTHEAST OF DUNN FIELD
DATA COLLECTION AT TDEC OFFSITE WELLS
Dunn Field - Defense Depot Memphis, Tennessee

Map Symbol	Name	Street Address	Source List
Sites within 0.25 Mile			
A1	Production Specialties	1782 E Person Ave	TN NPDES
A2	National Manufacturing Co.	1782 E Person Ave	RCRA NonGeb/NLR, FINDS, ECHO
C8/C9	Cintas	1635 S McLean	SEMS TNN000410012
Sites within 0.5 Mile			
G27	American Truck & Diesel	2006-2008 Person Ave	EDR Hist Auto
G29	Burns Garage	2008 Person Ave	EDR Hist Auto
G30	General Machine Works	2001 Wabash Avenue	RCRA NonGen/NLR, FINDS, ECHO
G31	Wabash Avenue Site	2001 Wabash Avenue	SEMS-Archive TNN000407822
G34	Koen W. I. & Son Cleaners	2028 Boyle Ave	EDR Hist Cleaner
G40	Memphis Engine Rebuilders Inc	1637 Castalia St	EDR Hist Auto
G42	Roaten Jim Machinery Co	1655 Castalia St	RCRA NonGen/NLR, FINDS, ECHO
G43	Master Press Brake Auto Repair	1655 Castalia St	EDR Hist Auto
G44	J&M Auto Service	1701 Castalia St	EDR Hist Auto
G45/G46/G56	Clayborne Taylor	1701 Castalia St	TN LUST, TN UST/RGA LUST/Hist UST
J35	P&P Auto	1980 Wabash Ave	EDR Hist Auto
J41	General Machine Works	2001 Wabash Avenue	TN NPDES
J58	Memphis Engine Rebuilders Inc	1629 Castalia St	EDR Hist Auto
R71	Goode Machine Works	1509 Castalia St	RCRA NonGen/NLR, FINDS, ECHO
R72	GMW Inc	1509 Castalia St	TN NPDES
Sites within 1.0 Mile			
AJ222	-	2227 Deadrick Ave	ERNS
AJ223/AJ227/AJ228	Bioenergy Development Group LLC	2227 Deadrick Ave	TN VCP, TN SRP, TN NPDES, SEMS-ARCHIVE, RCRA-SQG, FINDS, ECHO TND099179418
AJ224	Memphis Biofuels LLC	2227 Deadrick Ave	FUELS PROGRAM
AJ225	Cochran Corp	2227 Deadrick Ave	US AIRS
AJ226/AJ229	Buckeye Cellulose Memphis South	2227 Deadrick Ave	TN HIST UST, TN UST
AT299	Old Estech General Chemicals Inc	2221 Deadrick Ave	SEMS
AT344	Modern Dry Cleaning	2277 Lamar Ave	EDR Hist Cleaner
AT354	Walgreens 3866	1489 Airways Blvd.	TN VCP
AW304	Washington & Sons Carpet SVC	2238 Kerr Ave	EDR Hist Cleaner
AW355	Ditto Steph J Auto Repr	2255 Lamar Ave	EDR Hist Auto
AW356	Broome A J Gas Sta	2265 Lamar Ave	EDR Hist Auto
AW363	Bouldin Harold Eugene	2269 Lamar	EDR Hist Auto
AW364	Kroger #0413-025	2269 Lamar Ave	RCRA-CESQG, FINDS, ECHO TNR000037374
AW368	Alee Allen C Filling Sta	2267 Lamar Ave	EDR Hist Auto
AW370	Lee Allen C Filling Sta	2273 Lamar Ave	EDR Hist Auto
AW374	Kings Fashions	2252-2 Lamar Ave	EDR Hist Cleaner
AW379	-	2274 Lamar Ave	EDR Hist Cleaner

TABLE B-1
LISTED ENVIRONMENTAL SITES NORTHEAST OF DUNN FIELD
DATA COLLECTION AT TDEC OFFSITE WELLS
Dunn Field - Defense Depot Memphis, Tennessee

AW380	Kinman Cleaners	2274 Lamar Ave	RCRA NonGen/NLR, FINDS, ECHO TND981745128
AU300	Tiger Equipment Inc	2205 Lamar Ave	RCRA NonGen/NLR, FINDS, ECHO TND047929609
AU301	United Equipment Inc	2205 Lamar Ave	EDR Hist Auto
AU310	SW Cor Covington Service Sta	2185 Lamar Ave	EDR Hist Auto
AU350/AU351/AU352	Fire Station #16	2203 Lamar Avenue	TN LUST, TN UST, TN HIST UST, TN RGA LUST
AU358	Dollar General	2245 Lamar Avenue	TN NPDES
AU367	A Dietrich Geo C Filling Sta	2239 Lamar Ave	EDR Hist Auto
AU375	Tri-State Blood & Plasma Ctr	2240 Lamar Ave	RCRA NonGen/NLR, FINDS, ECHO TND084784883
AU376	A Bailey Welborn Filling	2238 Lamar Ave	EDR Hist Auto
AX314	-	2133 Lamar Ave	EDR Hist Auto
AX315	Q Mart	2133 Lamar Ave	TN LUST, TN UST
AX316/AX317	Robinson Texaco	2133 Lamar Ave	TN RGA LUST, TN HIST UST
AX322	Ashley Texaco Service	2161 Lamar Ave	EDR Hist Auto
AX323	Hartsfield Texaco Serv Sta	2153 Lamar Ave	EDR Hist Auto
AX324	Robinson Jack Esso Sery	2165 Lamar Ave	EDR Hist Auto
AX326	Abarkers Super Serv	2169 Lamar Ave	EDR Hist Auto
AX336	Astrickland & Inman Gas Sta	2134 Lamar Ave	EDR Hist Auto
AX337	Circle K Store #2703191	2134 Lamar Ave	TN RGA LUST
AX338	BP/AMOCO #19047	2134 Lamar Avenue	TN RGA LUST
AX339/AX340	AMOCO Oil SS#329	2134 Lamar Ave	TN LUST, TN UST, TN HIST UST, RCRA NonGen/NLR, FINDS, ECHO TND987780426, TN RGA LUST
AX341	ADITTO AUTO SERVICE	2142 Lamar Ave	EDR Hist Auto
AX342	NE Cor Pan Am Petroleum Co	2098 Lamar Ave	EDR Hist Auto
AX343	Arnold & Bell	2146 Lamar Ave	EDR Hist Auto
AX353	Hale Bruce JR	2160 Lamar Ave	EDR Hist Auto
AX373	Hunt E R Filling Sta	1276 East Pky S	EDR Hist Auto
159	C&C Engine Sales & Service	1446 South Cooper (Rear)	EDR Hist Auto
275	-	1289-1291 Castalia St	ERNS

Appendix C

Results of Laboratory Analyses

TABLE C-1
ANALYTICAL RESULTS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

	Well ID	CS-01	CS-02	CS-03	CS-04	CS-04	CS-05	CS-06	CS-07
	Sample ID	CS-01	CS-02	CS-03	CS-04-DUP-1	CS-04	CS-05	CS-06	CS-07
	Lab ID	L17100709-12	L17100709-08	L17100709-01	L17100709-02	L17100709-03	L17100709-06	L17100709-07	L17100709-13
	Date	10/9/2017	10/8/2017	10/7/2017	10/7/2017	10/7/2017	10/8/2017	10/8/2017	10/9/2017
Analyte	Units								
1,1,1,2-Tetrachloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.414 J	1.00 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,1,2-Trichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	µg/L	1.00 U	1.14	1.13	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	µg/L	1.00 U	16.3	6.13	1.00 U	1.00 U	1.24	1.00 U	1.00 U
1,1-Dichloropropene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
1,2-Dibromoethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,2-Dichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichloropropane	µg/L	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U
1,4-Dichlorobenzene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1-Chlorohexane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,2-Dichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Hexanone	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
4-Chlorotoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Acetone	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Benzene	µg/L	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U
Bromobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromochloromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromodichloromethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Bromoform	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromomethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon disulfide	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon tetrachloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.574 J	1.18	1.00 U
Chlorobenzene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Chloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	µg/L	0.300 U	0.300 U	0.300 U	0.300 U	0.300 U	0.163 U	0.334 U	0.300 U
Chloromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,2-Dichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,3-Dichloropropene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Dibromochloromethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Dibromomethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Dichlorodifluoromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Hexachlorobutadiene	µg/L	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U
Isopropylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m-,p-Xylene	µg/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
MEK (2-Butanone)	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Methyl t-butyl ether (MTBE)	µg/L	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	1.82 J
Methylene chloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.291 U	0.303 U	1.00 U
MIBK (methyl isobutyl ketone)	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Naphthalene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Propylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
o-Xylene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
p-Isopropyltoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
sec-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Styrene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
tert-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	µg/L	1.00 U	0.439 J	1.00 U	1.00 U	1.00 U	2.61	0.480 J	1.00 U
Toluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
trans-1,2-Dichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
trans-1,3-Dichloropropene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	µg/L	1.00 U	1.63	1.00 U	1.00 U	1.00 U	1.68	0.405 J	1.00 U
Trichlorofluoromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Vinyl chloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Notes:

µg/L: micrograms per liter

RL: Reporting Limit

DQE Flags:

U: Analyte not detected above RL

J: Estimated

Method:

8260B: Volatile Organic Compounds

TABLE C-1
ANALYTICAL RESULTS
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

	Well ID	CS-07	WB-01	WB-02	WB-03	RB-1	RB-2	RB-3	RB-4
	Sample ID	CS-07-DUP-2	WB-01	WB-02	WB-03	RB-1	RB-2	RB-3	RB-4
	Lab ID	L17100709-14	L17100709-04	L17100709-05	L17100709-11	L17100709-15	L17100709-16	L17100709-17	L17100709-18
	Date	10/9/2017	10/8/2017	10/8/2017	10/10/2017	10/7/2017	10/8/2017	10/9/2017	10/10/2017
Analyte	Units								
1,1,1,2-Tetrachloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,1,1-Trichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1,2,2-Tetrachloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,1,2-Trichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,1-Dichloropropene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,3-Trichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2,4-Trimethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dibromo-3-chloropropane	µg/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
1,2-Dibromoethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,2-Dichloroethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1,2-Dichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3,5-Trimethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichlorobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
1,3-Dichloropropane	µg/L	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U
1,4-Dichlorobenzene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
1-Chlorohexane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2,2-Dichloropropane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Chlorotoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
2-Hexanone	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
4-Chlorotoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Acetone	µg/L	2.98 U	10.0 U	2.56 U	10.0 U	16.9	15.3	15.8	20.6
Benzene	µg/L	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U	0.400 U
Bromobenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromochloromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromodichloromethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Bromoform	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Bromomethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon disulfide	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Carbon tetrachloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chlorobenzene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Chloroethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Chloroform	µg/L	0.300 U	0.300 U	0.300 U	0.300 U	0.343	0.373	0.345	0.203 J
Chloromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,2-Dichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
cis-1,3-Dichloropropene	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Dibromochloromethane	µg/L	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U
Dibromomethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Dichlorodifluoromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Hexachlorobutadiene	µg/L	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U	0.600 U
Isopropylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
m-,p-Xylene	µg/L	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
MEK (2-Butanone)	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Methyl t-butyl ether (MTBE)	µg/L	1.84 J	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U	5.00 U
Methylene chloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	0.455 J	0.382 J	0.431 J	0.355 J
MIBK (methyl isobutyl ketone)	µg/L	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Naphthalene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
n-Propylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
o-Xylene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
p-Isopropyltoluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
sec-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Styrene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
tert-Butylbenzene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Tetrachloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Toluene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	0.315 J
trans-1,2-Dichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
trans-1,3-Dichloropropene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichloroethene	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Trichlorofluoromethane	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Vinyl chloride	µg/L	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U

Notes:

µg/L: micrograms per liter

RL: Reporting Limit

DQE Flags:

U: Analyte not detected above RL

J: Estimated

Method:

8260B: Volatile Organic Compounds

Appendix D

Laboratory Analytical Reports

Laboratory Report Number: L17100709 (Revised)

Diane Short & Associates
CT Laboratories
1978 S. Garrison St
Lakewood, CO 80227

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac's Ohio Valley Division (OVD). If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed below.

Laboratory Contact:
Michelle Taylor – Client Services Specialist
(740) 373-4071
Michelle.Taylor@microbac.com

I certify that all test results meet all of the requirements of the accrediting authority listed below. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

This report was certified on October 23 2017



Leslie Bucina – Managing Director

State of Origin: TN
Accrediting Authority: N/A ID:N/A
QAPP: AFCEE Ver. 4.0



Record of Sample Receipt and Inspection

Comments/Discrepancies

This is the record of the shipment conditions and the inspection records for the samples received and reported as a sample delivery group (SDG). All of the samples were inspected and observed to conform to our receipt policies, except as noted below.

The following discrepancies were noted:

Discrepancy	Resolution
Sample ID: CS-02-MS. 1 of 3 voa vials received w/headspace >6mm. BRG	Please proceed. MRT

Coolers

Cooler #	Temperature Gun	Temperature	COC #	Airbill #	Temp Required?
00114035	H	0.0		1001891711510004575000788034630060	X

Inspection Checklist

#	Question	Result
1	Were shipping coolers sealed?	Yes
2	Were custody seals intact?	Yes
3	Were cooler temperatures in range of 0-6?	Yes
4	Was ice present?	Yes
5	Were COC's received/information complete/signed and dated?	Yes
6	Were sample containers intact and match COC?	Yes
7	Were sample labels intact and match COC?	Yes
8	Were the correct containers and volumes received?	Yes
9	Were samples received within EPA hold times?	Yes
10	Were correct preservatives used? (water only)	Yes
11	Were pH ranges acceptable? (voa's excluded)	NA
12	Were VOA samples free of headspace (less than 6mm)?	No

Samples Received

Client ID	Laboratory ID	Date Collected	Date Received
CS-03	L17100709-01	10/07/2017 13:55	10/11/2017 11:03
DUP-1	L17100709-02	10/07/2017 16:10	10/11/2017 11:03
CS-04	L17100709-03	10/07/2017 15:55	10/11/2017 11:03
WB-01	L17100709-04	10/08/2017 14:44	10/11/2017 11:03
WB-02	L17100709-05	10/08/2017 15:56	10/11/2017 11:03
CS-05	L17100709-06	10/08/2017 11:15	10/11/2017 11:03
CS-06	L17100709-07	10/08/2017 09:24	10/11/2017 11:03
CS-02	L17100709-08	10/08/2017 13:04	10/11/2017 11:03
CS-02-MS	L17100709-09	10/08/2017 13:04	10/11/2017 11:03
CS-02-MSD	L17100709-10	10/08/2017 13:04	10/11/2017 11:03
WB-03	L17100709-11	10/10/2017 09:15	10/11/2017 11:03
CS-01	L17100709-12	10/09/2017 15:48	10/11/2017 11:03
CS-07	L17100709-13	10/09/2017 12:58	10/11/2017 11:03
DUP-2	L17100709-14	10/09/2017 13:07	10/11/2017 11:03
RB-1	L17100709-15	10/07/2017 15:00	10/11/2017 11:03
RB-2	L17100709-16	10/08/2017 15:30	10/11/2017 11:03
RB-3	L17100709-17	10/09/2017 15:25	10/11/2017 11:03
RB-4	L17100709-18	10/10/2017 17:00	10/11/2017 11:03



Login Number: L17100709
Department: Volatiles
Analyst: Jared Smith

METHOD

Preparation SW-846 5030B/5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: Recovery above range was observed for Chloromethane and Dichlorodifluoromethane in the ICV WG633150-12 analyzed 10/10/2017 on HPMS6. Outliers were not detected above the RLs in the associated analyses. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recovery above range was observed for Dichlorodifluoromethane in the CCV WG634066-02 analyzed 10/16/2017 on HPMS6. Recovery above range was observed for Dichlorodifluoromethane in the CCV WG634399-02 analyzed 10/17/2017 on HPMS6. Outliers were not detected above the RLs in the associated analyses. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: None.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low areacounts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

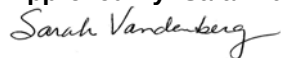
Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 130552

Approved By: Sarah Vandenberg



Certificate of Analysis

Sample #: L17100709-01

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-03

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 17:58

Collect Date: 10/07/2017 13:55

Dilution: 1

File ID: 6M150701

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3	1.13		1.00	0.125
1,1-Dichloroethene	75-35-4	6.13		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.7	85	115		
1,2-Dichloroethane-d4	98.3	72	119		
Toluene-d8	99.6	81	120		
4-Bromofluorobenzene	101	76	119		
Q	One or more quality control criteria failed. See narrative.				

Certificate of Analysis

U	Undetected; the analyte was analyzed for, but not detected.
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Certificate of Analysis

Sample #: L17100709-02	PrePrep Method: N/A	Instrument: HPMS6
Client ID: DUP-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 18:27
Collect Date: 10/07/2017 16:10	Dilution: 1	File ID: 6M150702
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.7	85	115		
1,2-Dichloroethane-d4	97.6	72	119		
Toluene-d8	99.4	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-03	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-04	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 18:56
Collect Date: 10/07/2017 15:55	Dilution: 1	File ID: 6M150703
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.2	85	115		
1,2-Dichloroethane-d4	97.3	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-04	PrePrep Method: N/A	Instrument: HPMS6
Client ID: WB-01	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 19:26
Collect Date: 10/08/2017 14:44	Dilution: 1	File ID: 6M150704
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	99.2	72	119		
Toluene-d8	99.5	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-05	PrePrep Method: N/A	Instrument: HPMS6
Client ID: WB-02	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 19:55
Collect Date: 10/08/2017 15:56	Dilution: 1	File ID: 6M150705
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	2.56	F	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	99.2	72	119		
Toluene-d8	99.5	81	120		
4-Bromofluorobenzene	103	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-06	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-05	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 20:24
Collect Date: 10/08/2017 11:15	Dilution: 1	File ID: 6M150706
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6	0.414	F	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4	1.24		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5	0.574	F	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.163	F	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.291	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	1.68		1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	2.61		1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.8	85	115		
1,2-Dichloroethane-d4	96.9	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-07

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-06

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 20:53

Collect Date: 10/08/2017 09:24

Dilution: 1

File ID: 6M150707

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5	1.18		1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.334		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.303	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	0.405	F	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	0.480	F	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.2	85	115		
1,2-Dichloroethane-d4	98.9	72	119		
Toluene-d8	99.6	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-08	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-02	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 16:59
Collect Date: 10/08/2017 13:04	Dilution: 1	File ID: 6M150699
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3	1.14		1.00	0.125
1,1-Dichloroethene	75-35-4	16.3		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	1.63		1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	0.439	F	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.5	85	115		
1,2-Dichloroethane-d4	96.6	72	119		
Toluene-d8	99.9	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-09	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-02-MS	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 14:31
Collect Date: 10/08/2017 13:04	Dilution: 1	File ID: 6M150694
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	20.2		0.500	0.250
1,1,1-Trichloroethane	71-55-6	20.4		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	19.7		0.500	0.200
1,1,2-Trichloroethane	79-00-5	20.1		1.00	0.250
1,1-Dichloroethane	75-34-3	20.8		1.00	0.125
1,1-Dichloroethene	75-35-4	32.8		1.00	0.500
1,1-Dichloropropene	563-58-6	20.9		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	20.0		1.00	0.150
1,2,3-Trichloropropane	96-18-4	20.4		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	20.4		1.00	0.200
1,2,4-Trimethylbenzene	95-63-6	21.1		1.00	0.250
1,2-Dichloroethane	107-06-2	21.0		0.500	0.250
1,2-Dichlorobenzene	95-50-1	20.2		1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8	20.4		2.00	1.00
1,2-Dichloropropane	78-87-5	21.3		1.00	0.200
1,2-Dibromoethane	106-93-4	20.8		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.5		1.00	0.250
1,3-Dichlorobenzene	541-73-1	20.3		1.00	0.250
1,3-Dichloropropane	142-28-9	21.3		0.400	0.200
1,4-Dichlorobenzene	106-46-7	19.4		0.500	0.125
1-Chlorohexane	544-10-5	20.3		1.00	0.125
2,2-Dichloropropane	594-20-7	19.7		1.00	0.250
2-Hexanone	591-78-6	19.6		10.0	2.50
2-Chlorotoluene	95-49-8	21.2		1.00	0.125
4-Chlorotoluene	106-43-4	20.1		1.00	0.250
Acetone	67-64-1	20.9		10.0	2.50
Benzene	71-43-2	20.5		0.400	0.125
Bromobenzene	108-86-1	20.3		1.00	0.125
Bromochloromethane	74-97-5	21.0		1.00	0.200
Bromodichloromethane	75-27-4	20.3		0.500	0.250
Bromoform	75-25-2	18.7		1.00	0.500
Bromomethane	74-83-9	15.2		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0	16.8		1.00	0.500
Carbon tetrachloride	56-23-5	19.9		1.00	0.250
Chlorobenzene	108-90-7	20.3		0.500	0.125
Chloroethane	75-00-3	22.6		1.00	0.500
Chloroform	67-66-3	20.1		0.300	0.125
Chloromethane	74-87-3	21.9		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	21.1		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	23.1		0.500	0.250
Dibromochloromethane	124-48-1	19.9		0.500	0.250
Dibromomethane	74-95-3	21.1		1.00	0.250
Dichlorodifluoromethane	75-71-8	22.3	Q	1.00	0.250
Ethylbenzene	100-41-4	20.6		1.00	0.250
Hexachlorobutadiene	87-68-3	19.9		0.600	0.250
Isopropylbenzene	98-82-8	20.4		1.00	0.250
Methylene chloride	75-09-2	19.9		1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	20.2		5.00	0.500
MEK (2-Butanone)	78-93-3	20.4		10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1	19.1		10.0	2.50
n-Butylbenzene	104-51-8	20.6		1.00	0.250
n-Propylbenzene	103-65-1	21.8		1.00	0.125
m-,p-Xylene	179601-23-1	41.7		2.00	0.500
Naphthalene	91-20-3	21.1		1.00	0.200
o-Xylene	95-47-6	21.8		1.00	0.250
p-Isopropyltoluene	99-87-6	21.0		1.00	0.250
sec-Butylbenzene	135-98-8	20.7		1.00	0.250
Styrene	100-42-5	21.9		1.00	0.125
Trichloroethene	79-01-6	21.9		1.00	0.250
tert-Butylbenzene	98-06-6	20.9		1.00	0.250
Tetrachloroethene	127-18-4	20.1		1.00	0.250
Toluene	108-88-3	20.4		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.7		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.8		1.00	0.500
Trichlorofluoromethane	75-69-4	19.5		1.00	0.250
Vinyl chloride	75-01-4	23.1		1.00	0.250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	97.7	85	115	
1,2-Dichloroethane-d4	95.8	72	119	
Toluene-d8	97.5	81	120	
4-Bromofluorobenzene	99.7	76	119	

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
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Certificate of Analysis

Sample #: L17100709-10	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-02-MSD	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 15:00
Collect Date: 10/08/2017 13:04	Dilution: 1	File ID: 6M150695
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	20.1		0.500	0.250
1,1,1-Trichloroethane	71-55-6	20.2		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	19.6		0.500	0.200
1,1,2-Trichloroethane	79-00-5	19.9		1.00	0.250
1,1-Dichloroethane	75-34-3	20.6		1.00	0.125
1,1-Dichloroethene	75-35-4	32.3		1.00	0.500
1,1-Dichloropropene	563-58-6	20.9		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	20.0		1.00	0.150
1,2,3-Trichloropropane	96-18-4	19.8		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	20.5		1.00	0.200
1,2,4-Trimethylbenzene	95-63-6	20.7		1.00	0.250
1,2-Dichloroethane	107-06-2	20.5		0.500	0.250
1,2-Dichlorobenzene	95-50-1	20.0		1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8	20.5		2.00	1.00
1,2-Dichloropropane	78-87-5	21.0		1.00	0.200
1,2-Dibromoethane	106-93-4	20.5		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.1		1.00	0.250
1,3-Dichlorobenzene	541-73-1	19.8		1.00	0.250
1,3-Dichloropropane	142-28-9	21.2		0.400	0.200
1,4-Dichlorobenzene	106-46-7	19.1		0.500	0.125
1-Chlorohexane	544-10-5	20.3		1.00	0.125
2,2-Dichloropropane	594-20-7	19.4		1.00	0.250
2-Hexanone	591-78-6	19.6		10.0	2.50
2-Chlorotoluene	95-49-8	20.8		1.00	0.125
4-Chlorotoluene	106-43-4	19.6		1.00	0.250
Acetone	67-64-1	22.0		10.0	2.50
Benzene	71-43-2	20.3		0.400	0.125
Bromobenzene	108-86-1	19.9		1.00	0.125
Bromochloromethane	74-97-5	20.8		1.00	0.200
Bromodichloromethane	75-27-4	19.9		0.500	0.250
Bromoform	75-25-2	18.8		1.00	0.500
Bromomethane	74-83-9	15.2		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0	16.8		1.00	0.500
Carbon tetrachloride	56-23-5	20.0		1.00	0.250
Chlorobenzene	108-90-7	20.2		0.500	0.125
Chloroethane	75-00-3	22.5		1.00	0.500
Chloroform	67-66-3	19.9		0.300	0.125
Chloromethane	74-87-3	22.3		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	20.7		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	22.8		0.500	0.250
Dibromochloromethane	124-48-1	19.5		0.500	0.250
Dibromomethane	74-95-3	20.9		1.00	0.250
Dichlorodifluoromethane	75-71-8	22.4	Q	1.00	0.250
Ethylbenzene	100-41-4	20.6		1.00	0.250
Hexachlorobutadiene	87-68-3	19.8		0.600	0.250
Isopropylbenzene	98-82-8	20.5		1.00	0.250
Methylene chloride	75-09-2	19.9		1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	20.0		5.00	0.500
MEK (2-Butanone)	78-93-3	20.2		10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1	18.7		10.0	2.50
n-Butylbenzene	104-51-8	20.6		1.00	0.250
n-Propylbenzene	103-65-1	21.4		1.00	0.125
m-,p-Xylene	179601-23-1	41.0		2.00	0.500
Naphthalene	91-20-3	21.3		1.00	0.200
o-Xylene	95-47-6	21.4		1.00	0.250
p-Isopropyltoluene	99-87-6	20.7		1.00	0.250
sec-Butylbenzene	135-98-8	20.3		1.00	0.250
Styrene	100-42-5	21.6		1.00	0.125
Trichloroethene	79-01-6	21.7		1.00	0.250
tert-Butylbenzene	98-06-6	20.7		1.00	0.250
Tetrachloroethene	127-18-4	20.2		1.00	0.250
Toluene	108-88-3	20.3		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.5		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.4		1.00	0.500
Trichlorofluoromethane	75-69-4	19.4		1.00	0.250
Vinyl chloride	75-01-4	22.9		1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.8	85	115		
1,2-Dichloroethane-d4	95.7	72	119		
Toluene-d8	98.7	81	120		
4-Bromofluorobenzene	100	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
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Certificate of Analysis

Sample #: L17100709-11

PrePrep Method: N/A

Instrument: HPMS6

Client ID: WB-03

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 21:22

Collect Date: 10/10/2017 09:15

Dilution: 1

File ID: 6M150708

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	98.4	72	119		
Toluene-d8	99.2	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-12	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-01	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 21:52
Collect Date: 10/09/2017 15:48	Dilution: 1	File ID: 6M150709
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	101	85	115		
1,2-Dichloroethane-d4	98.8	72	119		
Toluene-d8	100	81	120		
4-Bromofluorobenzene	99.7	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-13	PrePrep Method: N/A	Instrument: HPMS6
Client ID: CS-07	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634067	Analyst: TMB	Run Date: 10/16/2017 22:21
Collect Date: 10/09/2017 12:58	Dilution: 1	File ID: 6M150710
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	1.82	F	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.5	85	115		
1,2-Dichloroethane-d4	97.5	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-14

PrePrep Method: N/A

Instrument: HPMS6

Client ID: DUP-2

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 22:50

Collect Date: 10/09/2017 13:07

Dilution: 1

File ID: 6M150711

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	2.98	F	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	1.84	F	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.6	85	115		
1,2-Dichloroethane-d4	99.8	72	119		
Toluene-d8	100	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-15	PrePrep Method: N/A	Instrument: HPMS6
Client ID: RB-1	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634400	Analyst: JDS	Run Date: 10/18/2017 02:06
Collect Date: 10/07/2017 15:00	Dilution: 1	File ID: 6M150761
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	16.9		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.343		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.455	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	100	85	115		
1,2-Dichloroethane-d4	99.9	72	119		
Toluene-d8	98.8	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-16	PrePrep Method: N/A	Instrument: HPMS6
Client ID: RB-2	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634400	Analyst: JDS	Run Date: 10/18/2017 01:36
Collect Date: 10/08/2017 15:30	Dilution: 1	File ID: 6M150760
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	15.3		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.373		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.382	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250

Surrogate	Recovery	Lower Limit	Upper Limit	Q
Dibromofluoromethane	98.9	85	115	
1,2-Dichloroethane-d4	98.7	72	119	
Toluene-d8	99.4	81	120	
4-Bromofluorobenzene	102	76	119	

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-17	PrePrep Method: N/A	Instrument: HPMS6
Client ID: RB-3	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634400	Analyst: JDS	Run Date: 10/18/2017 02:35
Collect Date: 10/09/2017 15:25	Dilution: 1	File ID: 6M150762
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	15.8		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.345		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.431	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	98.9	72	119		
Toluene-d8	98.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-18

PrePrep Method: N/A

Instrument: HPMS6

Client ID: RB-4

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634400

Analyst: JDS

Run Date: 10/18/2017 03:05

Collect Date: 10/10/2017 17:00

Dilution: 1

File ID: 6M150763

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	20.6		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.203	F	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.355	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.315	F	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.8	85	115		
1,2-Dichloroethane-d4	100	72	119		
Toluene-d8	98.6	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Certificate of Analysis

2.1 Volatiles Data

2.1.1 Volatiles GCMS Data (8260)

2.1.1.1 Summary Data



Login Number: L17100709
Department: Volatiles
Analyst: Jared Smith

METHOD

Preparation SW-846 5030B/5030C/5035A

Analysis SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: Recovery above range was observed for Chloromethane and Dichlorodifluoromethane in the ICV WG633150-12 analyzed 10/10/2017 on HPMS6. Outliers were not detected above the RLs in the associated analyses. Please see the applicable QC report for a detailed presentation of the failures.

Continuing Calibration and Tune: Recovery above range was observed for Dichlorodifluoromethane in the CCV WG634066-02 analyzed 10/16/2017 on HPMS6. Recovery above range was observed for Dichlorodifluoromethane in the CCV WG634399-02 analyzed 10/17/2017 on HPMS6. Outliers were not detected above the RLs in the associated analyses. Please see the applicable QC report for a detailed presentation of the failures.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Other: None.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak. In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak. This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low areacounts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

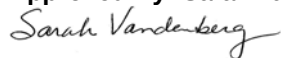
Reason #4: System Establishes Incorrect Baseline. There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous. Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Managing Director or the QAO will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 130552

Approved By: Sarah Vandenberg



Certificate of Analysis

Sample #: L17100709-01

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-03

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 17:58

Collect Date: 10/07/2017 13:55

Dilution: 1

File ID: 6M150701

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3	1.13		1.00	0.125
1,1-Dichloroethene	75-35-4	6.13		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500
Carbon disulfide	75-15-0		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.7	85	115		
1,2-Dichloroethane-d4	98.3	72	119		
Toluene-d8	99.6	81	120		
4-Bromofluorobenzene	101	76	119		
Q	One or more quality control criteria failed. See narrative.				

Certificate of Analysis

U	Undetected; the analyte was analyzed for, but not detected.
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Certificate of Analysis

Sample #: L17100709-02

PrePrep Method: N/A

Instrument: HPMS6

Client ID: DUP-1

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 18:27

Collect Date: 10/07/2017 16:10

Dilution: 1

File ID: 6M150702

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.7	85	115		
1,2-Dichloroethane-d4	97.6	72	119		
Toluene-d8	99.4	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-03

Client ID: CS-04

Matrix: Water

Workgroup #: WG634067

Collect Date: 10/07/2017 15:55

Sample Tag: 01

PrePrep Method: N/A

Prep Method: 5030B/5030C/5035A

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: N/A

Cal Date: 10/09/2017 17:37

Run Date: 10/16/2017 18:56

File ID: 6M150703

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.2	85	115		
1,2-Dichloroethane-d4	97.3	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-04

PrePrep Method: N/A

Instrument: HPMS6

Client ID: WB-01

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 19:26

Collect Date: 10/08/2017 14:44

Dilution: 1

File ID: 6M150704

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	99.2	72	119		
Toluene-d8	99.5	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-05

PrePrep Method: N/A

Instrument: HPMS6

Client ID: WB-02

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 19:55

Collect Date: 10/08/2017 15:56

Dilution: 1

File ID: 6M150705

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	2.56	F	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	99.2	72	119		
Toluene-d8	99.5	81	120		
4-Bromofluorobenzene	103	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-06

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-05

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 20:24

Collect Date: 10/08/2017 11:15

Dilution: 1

File ID: 6M150706

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1,1-Trichloroethane	71-55-6	0.414	F	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4	1.24		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5	0.574	F	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.163	F	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.291	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	1.68		1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	2.61		1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.8	85	115		
1,2-Dichloroethane-d4	96.9	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-07

Client ID: CS-06

Matrix: Water

Workgroup #: WG634067

Collect Date: 10/08/2017 09:24

Sample Tag: 01

PrePrep Method: N/A

Prep Method: 5030B/5030C/5035A

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: N/A

Cal Date: 10/09/2017 17:37

Run Date: 10/16/2017 20:53

File ID: 6M150707

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5	1.18		1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.334		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.303	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	0.405	F	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	0.480	F	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.2	85	115		
1,2-Dichloroethane-d4	98.9	72	119		
Toluene-d8	99.6	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-08

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-02

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 16:59

Collect Date: 10/08/2017 13:04

Dilution: 1

File ID: 6M150699

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3	1.14		1.00	0.125
1,1-Dichloroethene	75-35-4	16.3		1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6	1.63		1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4	0.439	F	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.5	85	115		
1,2-Dichloroethane-d4	96.6	72	119		
Toluene-d8	99.9	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-09

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-02-MS

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 14:31

Collect Date: 10/08/2017 13:04

Dilution: 1

File ID: 6M150694

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	20.2		0.500	0.250
1,1,1,1-Trichloroethane	71-55-6	20.4		1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5	19.7		0.500	0.200
1,1,2-Trichloroethane	79-00-5	20.1		1.00	0.250
1,1-Dichloroethane	75-34-3	20.8		1.00	0.125
1,1-Dichloroethene	75-35-4	32.8		1.00	0.500
1,1-Dichloropropene	563-58-6	20.9		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	20.0		1.00	0.150
1,2,3-Trichloropropane	96-18-4	20.4		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	20.4		1.00	0.200
1,2,4-Trimethylbenzene	95-63-6	21.1		1.00	0.250
1,2-Dichloroethane	107-06-2	21.0		0.500	0.250
1,2-Dichlorobenzene	95-50-1	20.2		1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8	20.4		2.00	1.00
1,2-Dichloropropane	78-87-5	21.3		1.00	0.200
1,2-Dibromoethane	106-93-4	20.8		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.5		1.00	0.250
1,3-Dichlorobenzene	541-73-1	20.3		1.00	0.250
1,3-Dichloropropane	142-28-9	21.3		0.400	0.200
1,4-Dichlorobenzene	106-46-7	19.4		0.500	0.125
1-Chlorohexane	544-10-5	20.3		1.00	0.125
2,2-Dichloropropane	594-20-7	19.7		1.00	0.250
2-Hexanone	591-78-6	19.6		10.0	2.50
2-Chlorotoluene	95-49-8	21.2		1.00	0.125
4-Chlorotoluene	106-43-4	20.1		1.00	0.250
Acetone	67-64-1	20.9		10.0	2.50
Benzene	71-43-2	20.5		0.400	0.125
Bromobenzene	108-86-1	20.3		1.00	0.125
Bromochloromethane	74-97-5	21.0		1.00	0.200
Bromodichloromethane	75-27-4	20.3		0.500	0.250
Bromoform	75-25-2	18.7		1.00	0.500
Bromomethane	74-83-9	15.2		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0	16.8		1.00	0.500
Carbon tetrachloride	56-23-5	19.9		1.00	0.250
Chlorobenzene	108-90-7	20.3		0.500	0.125
Chloroethane	75-00-3	22.6		1.00	0.500
Chloroform	67-66-3	20.1		0.300	0.125
Chloromethane	74-87-3	21.9		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	21.1		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	23.1		0.500	0.250
Dibromochloromethane	124-48-1	19.9		0.500	0.250
Dibromomethane	74-95-3	21.1		1.00	0.250
Dichlorodifluoromethane	75-71-8	22.3	Q	1.00	0.250
Ethylbenzene	100-41-4	20.6		1.00	0.250
Hexachlorobutadiene	87-68-3	19.9		0.600	0.250
Isopropylbenzene	98-82-8	20.4		1.00	0.250
Methylene chloride	75-09-2	19.9		1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	20.2		5.00	0.500
MEK (2-Butanone)	78-93-3	20.4		10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1	19.1		10.0	2.50
n-Butylbenzene	104-51-8	20.6		1.00	0.250
n-Propylbenzene	103-65-1	21.8		1.00	0.125
m-,p-Xylene	179601-23-1	41.7		2.00	0.500
Naphthalene	91-20-3	21.1		1.00	0.200
o-Xylene	95-47-6	21.8		1.00	0.250
p-Isopropyltoluene	99-87-6	21.0		1.00	0.250
sec-Butylbenzene	135-98-8	20.7		1.00	0.250
Styrene	100-42-5	21.9		1.00	0.125
Trichloroethene	79-01-6	21.9		1.00	0.250
tert-Butylbenzene	98-06-6	20.9		1.00	0.250
Tetrachloroethene	127-18-4	20.1		1.00	0.250
Toluene	108-88-3	20.4		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.7		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.8		1.00	0.500
Trichlorofluoromethane	75-69-4	19.5		1.00	0.250
Vinyl chloride	75-01-4	23.1		1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	97.7	85	115		
1,2-Dichloroethane-d4	95.8	72	119		
Toluene-d8	97.5	81	120		
4-Bromofluorobenzene	99.7	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
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Certificate of Analysis

Sample #: L17100709-10

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-02-MSD

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 15:00

Collect Date: 10/08/2017 13:04

Dilution: 1

File ID: 6M150695

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6	20.1		0.500	0.250
1,1,1,1-Trichloroethane	71-55-6	20.2		1.00	0.250
1,1,1,2-Tetrachloroethane	79-34-5	19.6		0.500	0.200
1,1,2-Trichloroethane	79-00-5	19.9		1.00	0.250
1,1-Dichloroethane	75-34-3	20.6		1.00	0.125
1,1-Dichloroethene	75-35-4	32.3		1.00	0.500
1,1-Dichloropropene	563-58-6	20.9		1.00	0.250
1,2,3-Trichlorobenzene	87-61-6	20.0		1.00	0.150
1,2,3-Trichloropropane	96-18-4	19.8		1.00	0.500
1,2,4-Trichlorobenzene	120-82-1	20.5		1.00	0.200
1,2,4-Trimethylbenzene	95-63-6	20.7		1.00	0.250
1,2-Dichloroethane	107-06-2	20.5		0.500	0.250
1,2-Dichlorobenzene	95-50-1	20.0		1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8	20.5		2.00	1.00
1,2-Dichloropropane	78-87-5	21.0		1.00	0.200
1,2-Dibromoethane	106-93-4	20.5		1.00	0.250
1,3,5-Trimethylbenzene	108-67-8	21.1		1.00	0.250
1,3-Dichlorobenzene	541-73-1	19.8		1.00	0.250
1,3-Dichloropropane	142-28-9	21.2		0.400	0.200
1,4-Dichlorobenzene	106-46-7	19.1		0.500	0.125
1-Chlorohexane	544-10-5	20.3		1.00	0.125
2,2-Dichloropropane	594-20-7	19.4		1.00	0.250
2-Hexanone	591-78-6	19.6		10.0	2.50
2-Chlorotoluene	95-49-8	20.8		1.00	0.125
4-Chlorotoluene	106-43-4	19.6		1.00	0.250
Acetone	67-64-1	22.0		10.0	2.50
Benzene	71-43-2	20.3		0.400	0.125
Bromobenzene	108-86-1	19.9		1.00	0.125
Bromochloromethane	74-97-5	20.8		1.00	0.200
Bromodichloromethane	75-27-4	19.9		0.500	0.250
Bromoform	75-25-2	18.8		1.00	0.500
Bromomethane	74-83-9	15.2		1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0	16.8		1.00	0.500
Carbon tetrachloride	56-23-5	20.0		1.00	0.250
Chlorobenzene	108-90-7	20.2		0.500	0.125
Chloroethane	75-00-3	22.5		1.00	0.500
Chloroform	67-66-3	19.9		0.300	0.125
Chloromethane	74-87-3	22.3		1.00	0.500
cis-1,2-Dichloroethene	156-59-2	20.7		1.00	0.250
cis-1,3-Dichloropropene	10061-01-5	22.8		0.500	0.250
Dibromochloromethane	124-48-1	19.5		0.500	0.250
Dibromomethane	74-95-3	20.9		1.00	0.250
Dichlorodifluoromethane	75-71-8	22.4	Q	1.00	0.250
Ethylbenzene	100-41-4	20.6		1.00	0.250
Hexachlorobutadiene	87-68-3	19.8		0.600	0.250
Isopropylbenzene	98-82-8	20.5		1.00	0.250
Methylene chloride	75-09-2	19.9		1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	20.0		5.00	0.500
MEK (2-Butanone)	78-93-3	20.2		10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1	18.7		10.0	2.50
n-Butylbenzene	104-51-8	20.6		1.00	0.250
n-Propylbenzene	103-65-1	21.4		1.00	0.125
m-,p-Xylene	179601-23-1	41.0		2.00	0.500
Naphthalene	91-20-3	21.3		1.00	0.200
o-Xylene	95-47-6	21.4		1.00	0.250
p-Isopropyltoluene	99-87-6	20.7		1.00	0.250
sec-Butylbenzene	135-98-8	20.3		1.00	0.250
Styrene	100-42-5	21.6		1.00	0.125
Trichloroethene	79-01-6	21.7		1.00	0.250
tert-Butylbenzene	98-06-6	20.7		1.00	0.250
Tetrachloroethene	127-18-4	20.2		1.00	0.250
Toluene	108-88-3	20.3		1.00	0.250
trans-1,2-Dichloroethene	156-60-5	20.5		1.00	0.250
trans-1,3-Dichloropropene	10061-02-6	20.4		1.00	0.500
Trichlorofluoromethane	75-69-4	19.4		1.00	0.250
Vinyl chloride	75-01-4	22.9		1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.8	85	115		
1,2-Dichloroethane-d4	95.7	72	119		
Toluene-d8	98.7	81	120		
4-Bromofluorobenzene	100	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
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Certificate of Analysis

Sample #: L17100709-11

PrePrep Method: N/A

Instrument: HPMS6

Client ID: WB-03

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 21:22

Collect Date: 10/10/2017 09:15

Dilution: 1

File ID: 6M150708

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	98.4	72	119		
Toluene-d8	99.2	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-12

Client ID: CS-01

Matrix: Water

Workgroup #: WG634067

Collect Date: 10/09/2017 15:48

Sample Tag: 01

PrePrep Method: N/A

Prep Method: 5030B/5030C/5035A

Analytical Method: 8260B

Analyst: TMB

Dilution: 1

Units: ug/L

Instrument: HPMS6

Prep Date: N/A

Cal Date: 10/09/2017 17:37

Run Date: 10/16/2017 21:52

File ID: 6M150709

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	101	85	115		
1,2-Dichloroethane-d4	98.8	72	119		
Toluene-d8	100	81	120		
4-Bromofluorobenzene	99.7	76	119		

Certificate of Analysis

Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-13

PrePrep Method: N/A

Instrument: HPMS6

Client ID: CS-07

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 22:21

Collect Date: 10/09/2017 12:58

Dilution: 1

File ID: 6M150710

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1		U	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	1.82	F	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.5	85	115		
1,2-Dichloroethane-d4	97.5	72	119		
Toluene-d8	99.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-14

PrePrep Method: N/A

Instrument: HPMS6

Client ID: DUP-2

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634067

Analyst: TMB

Run Date: 10/16/2017 22:50

Collect Date: 10/09/2017 13:07

Dilution: 1

File ID: 6M150711

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	2.98	F	10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3		U	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2		U	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4	1.84	F	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.6	85	115		
1,2-Dichloroethane-d4	99.8	72	119		
Toluene-d8	100	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-15

PrePrep Method: N/A

Instrument: HPMS6

Client ID: RB-1

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634400

Analyst: JDS

Run Date: 10/18/2017 02:06

Collect Date: 10/07/2017 15:00

Dilution: 1

File ID: 6M150761

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	16.9		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.343		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.455	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	100	85	115		
1,2-Dichloroethane-d4	99.9	72	119		
Toluene-d8	98.8	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-16	PrePrep Method: N/A	Instrument: HPMS6
Client ID: RB-2	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634400	Analyst: JDS	Run Date: 10/18/2017 01:36
Collect Date: 10/08/2017 15:30	Dilution: 1	File ID: 6M150760
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	15.3		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.373		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.382	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	98.9	85	115		
1,2-Dichloroethane-d4	98.7	72	119		
Toluene-d8	99.4	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-17

PrePrep Method: N/A

Instrument: HPMS6

Client ID: RB-3

Prep Method: 5030B/5030C/5035A

Prep Date: N/A

Matrix: Water

Analytical Method: 8260B

Cal Date: 10/09/2017 17:37

Workgroup #: WG634400

Analyst: JDS

Run Date: 10/18/2017 02:35

Collect Date: 10/09/2017 15:25

Dilution: 1

File ID: 6M150762

Sample Tag: 01

Units: ug/L

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	15.8		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.345		0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.431	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3		U	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.9	85	115		
1,2-Dichloroethane-d4	98.9	72	119		
Toluene-d8	98.7	81	120		
4-Bromofluorobenzene	102	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Sample #: L17100709-18	PrePrep Method: N/A	Instrument: HPMS6
Client ID: RB-4	Prep Method: 5030B/5030C/5035A	Prep Date: N/A
Matrix: Water	Analytical Method: 8260B	Cal Date: 10/09/2017 17:37
Workgroup #: WG634400	Analyst: JDS	Run Date: 10/18/2017 03:05
Collect Date: 10/10/2017 17:00	Dilution: 1	File ID: 6M150763
Sample Tag: 01	Units: ug/L	

Analyte	CAS #	Result	Qual	RL	MDL
1,1,1,2-Tetrachloroethane	630-20-6		U	0.500	0.250
1,1,1-Trichloroethane	71-55-6		U	1.00	0.250
1,1,2,2-Tetrachloroethane	79-34-5		U	0.500	0.200
1,1,2-Trichloroethane	79-00-5		U	1.00	0.250
1,1-Dichloroethane	75-34-3		U	1.00	0.125
1,1-Dichloroethene	75-35-4		U	1.00	0.500
1,1-Dichloropropene	563-58-6		U	1.00	0.250
1,2,3-Trichlorobenzene	87-61-6		U	1.00	0.150
1,2,3-Trichloropropane	96-18-4		U	1.00	0.500
1,2,4-Trichlorobenzene	120-82-1		U	1.00	0.200
1,2,4-Trimethylbenzene	95-63-6		U	1.00	0.250
1,2-Dichloroethane	107-06-2		U	0.500	0.250
1,2-Dichlorobenzene	95-50-1		U	1.00	0.125
1,2-Dibromo-3-chloropropane	96-12-8		U	2.00	1.00
1,2-Dichloropropane	78-87-5		U	1.00	0.200
1,2-Dibromoethane	106-93-4		U	1.00	0.250
1,3,5-Trimethylbenzene	108-67-8		U	1.00	0.250
1,3-Dichlorobenzene	541-73-1		U	1.00	0.250
1,3-Dichloropropane	142-28-9		U	0.400	0.200
1,4-Dichlorobenzene	106-46-7		U	0.500	0.125
1-Chlorohexane	544-10-5		U	1.00	0.125
2,2-Dichloropropane	594-20-7		U	1.00	0.250
2-Hexanone	591-78-6		U	10.0	2.50
2-Chlorotoluene	95-49-8		U	1.00	0.125
4-Chlorotoluene	106-43-4		U	1.00	0.250
Acetone	67-64-1	20.6		10.0	2.50
Benzene	71-43-2		U	0.400	0.125
Bromobenzene	108-86-1		U	1.00	0.125
Bromochloromethane	74-97-5		U	1.00	0.200
Bromodichloromethane	75-27-4		U	0.500	0.250
Bromoform	75-25-2		U	1.00	0.500
Bromomethane	74-83-9		U	1.00	0.500

Certificate of Analysis

Analyte	CAS #	Result	Qual	RL	MDL
Carbon disulfide	75-15-0		U	1.00	0.500
Carbon tetrachloride	56-23-5		U	1.00	0.250
Chlorobenzene	108-90-7		U	0.500	0.125
Chloroethane	75-00-3		U	1.00	0.500
Chloroform	67-66-3	0.203	F	0.300	0.125
Chloromethane	74-87-3		U	1.00	0.500
cis-1,2-Dichloroethene	156-59-2		U	1.00	0.250
cis-1,3-Dichloropropene	10061-01-5		U	0.500	0.250
Dibromochloromethane	124-48-1		U	0.500	0.250
Dibromomethane	74-95-3		U	1.00	0.250
Dichlorodifluoromethane	75-71-8		Q	1.00	0.250
Ethylbenzene	100-41-4		U	1.00	0.250
Hexachlorobutadiene	87-68-3		U	0.600	0.250
Isopropylbenzene	98-82-8		U	1.00	0.250
Methylene chloride	75-09-2	0.355	F	1.00	0.250
Methyl t-butyl ether (MTBE)	1634-04-4		U	5.00	0.500
MEK (2-Butanone)	78-93-3		U	10.0	2.50
MIBK (methyl isobutyl ketone)	108-10-1		U	10.0	2.50
n-Butylbenzene	104-51-8		U	1.00	0.250
n-Propylbenzene	103-65-1		U	1.00	0.125
m-,p-Xylene	179601-23-1		U	2.00	0.500
Naphthalene	91-20-3		U	1.00	0.200
o-Xylene	95-47-6		U	1.00	0.250
p-Isopropyltoluene	99-87-6		U	1.00	0.250
sec-Butylbenzene	135-98-8		U	1.00	0.250
Styrene	100-42-5		U	1.00	0.125
Trichloroethene	79-01-6		U	1.00	0.250
tert-Butylbenzene	98-06-6		U	1.00	0.250
Tetrachloroethene	127-18-4		U	1.00	0.250
Toluene	108-88-3	0.315	F	1.00	0.250
trans-1,2-Dichloroethene	156-60-5		U	1.00	0.250
trans-1,3-Dichloropropene	10061-02-6		U	1.00	0.500
Trichlorofluoromethane	75-69-4		U	1.00	0.250
Vinyl chloride	75-01-4		U	1.00	0.250
Surrogate	Recovery	Lower Limit	Upper Limit	Q	
Dibromofluoromethane	99.8	85	115		
1,2-Dichloroethane-d4	100	72	119		
Toluene-d8	98.6	81	120		
4-Bromofluorobenzene	101	76	119		

Certificate of Analysis

F	Found; the analyte was positively identified with concentration above MDL but below RL.
Q	One or more quality control criteria failed. See narrative.
U	Undetected; the analyte was analyzed for, but not detected.

Certificate of Analysis

Certificate of Analysis

2.1.1.2 QC Summary Data

Example 8260 Calculations

1.0 Calculating the Response Factor (RF) from the initial calibration (ICAL) data:

$$RF = [(Ax) (Cis)] / [(Ais) (Cx)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured:	3399156
Cis = Concentration of the specific internal standard (ug/mL)	25
Ais = Area of the characteristic ion of the specific internal standard	846471
Cx = Concentration of the compound in the standard being measured (ug/mL)	100

RF = Calculated Response Factor **1.0039**

2.0 Calculating the concentration (C) of a compound in water using the average RF: *

$$Cx = [(Ax) (Cis) (Vn)(D)] / [(Ais) (RF) (Vs)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Vs = Purge volume of sample (mL)	10
Vn = Nominal purge volume of sample (mL) (10.0 mL)	10
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

3.0 Calculating the concentration (C) of a compound in soil using the average RF: *

$$Cx = [(Ax) (Cis) (Wn)(D)] / [(Ais) (RF) (Ws)]$$

Example

where:

Ax = Area of the characteristic ion for the compound being measured	3122498
Cis = Concentration of the specific internal standard (ug/L)	25
D = Dilution factor for sample as a multiplier (10x = 10)	1
Ais = Area of the characteristic ion of the specific internal standard	611048
RF = Average RF from the ICAL	1.004
Ws = Weight of sample purged (g)	5
Wn = Nominal purge weight (g) (5.0 g)	5
Cx = Concentration of the compound in the sample being measured (ug/L)	127.2428

Dry weight correction:

Percent solids (PCT_S)	50
Cd = (Cx) (100)/PCT_S	254.4856

* Concentrations appearing on the instrument quantitation reports are on-column results and do not take into account initial volume, final volume, and the dilution factor.

4.0 Concentration from Linear Regression

Step 1: Retrieve Curve Data From Plot, $y = mx + b$

y = response ratio = response of analyte / response of IS = Ax/Ais

x = amount ratio = concentration analyte/concentration internal standard = Cx / Cis

m = slope from curve = 0.213

b = intercept from curve = - 0.00642

Step 2: Calculate y from Quantitation Report

$$y = 86550/593147 = 0.1459$$

Step 3: Solve for x

$$x = (y - b)/m = [(0.1459 - (-0.00642))/0.213] = 0.7152$$

Step 4: Solve for analyte concentration Cx

$$Cx = Cis (x) = (25.0)(0.7152) = 17.88$$

Example Spreadsheet Calculation:

Slope from curve, m:	0.213
Intercept from curve, b:	-0.00642
Area of analyte, Ax:	86550
Area of Internal Standard, Ais:	593147
Concentration of IS, Cis	25.00
Response Ratio:	0.145917
Amount Ratio:	0.715195
Concentration:	17.87988
Units of Internal Standard:	ug/L

5.0 Concentration from Quadratic Regression**Step 1 - Retrieve Curve Data from Plot, $y = Ax^2 + Bx + C$**

Where:

$$Ax^2 + Bx + (C - y) = 0$$

A, B, C = constants from the ICAL quadratic regression

y = Response ratio = Area of analyte/Area of internal standard (IS)

x = Amount ratio = Concentration of analyte/concentration of IS

Step 2: Calculate y from Quantitation Report

$$y = Ax/Ais$$

Step 3: Solve for x using the quadratic formula

$$Ax^2 + Bx + C - y = 0$$

$$x = \frac{b \pm \sqrt{(b^2 - 4a(c - y))}}{2a} \quad \text{(Two possible solutions)}$$

Step 4: Solve for analyte concentration Cx

$$Cx = (Cis)(\text{Amount ratio})$$

Example Spreadsheet Calculation:

Value of A from plot:	-0.00629
Value of B from plot:	0.511
Value of C from plot:	-0.0276
Area of unknown from quantitation report:	293821
Area of IS from quantitation report:	784848
Response ratio, y:	0.374367
C - y:	-0.40197
Root 1 - Computed amount ratio, X1:	80.44567
Root 2 - Computed amount ratio, X2:	0.794396 use this solution
Concentration of IS, Cis:	25.00
Concentration of analyte, Cx:	19.86 ug/L

Analyst / Date		Analyst / Date	
CPD	10/12/17	CPD	10/13/17
Time On	Temp On °C	Time Off	Temp Off °C
1505	22.3	0812	22.7

Temp probe ID:
☒ 1025 ☐ 1023

*Matrix Code = (S-solid) (SS-sand, soil or sludge) (P-paint) (O-organic) (W-water or waste)

Peer Review By:

Calibration Table Report
Method: 8260WT.M
Title: 8260B/624_WATER SOP:MSV01 10-09-17 - HPMS6
Last Calibration: Wed Oct 11 09:56:20 2017
Curve: WG633150
Calibration Files

		0.3	0.4	1	2	5	20	50	100	200	300	r^2			
		GM150514.D	GM150515.D	GM150516.D	GM150517.D	GM150518.D	GM150519.D	GM150520.D	GM150521.D	GM150522.D	GM150523.D				
Compound												Avg	%RSD	Linear	Quad
I	Fluorobenzene	ISTD													
T	Dichlorodifluoromethane			0.382	0.375	0.381	0.446	0.459	0.441	0.424		0.415	8.498		
P	Chloromethane			0.504	0.318	0.328	0.326	0.315	0.318	0.319		0.347	19.992	1.000	
C	Vinyl Chloride		0.284	0.288	0.250	0.246	0.260	0.268	0.253	0.233		0.260	7.251		
T	1,3-Butadiene				0.250	0.213	0.228	0.199	0.176	0.163	0.138	0.195	20.003	0.999	
T	Bromomethane			0.204	0.171	0.157	0.141	0.160	0.173	0.182		0.170	11.830		
T	Chloroethane			0.246	0.221	0.215	0.221	0.226	0.218	0.214		0.223	4.887		
T	Trichlorofluoromethane		0.485	0.479	0.475	0.489	0.483	0.499	0.477	0.476		0.483	1.687		
T	Diethyl ether			0.276	0.269	0.271	0.271	0.258	0.256		0.242	0.263	4.496		
T	Isoprene					0.424	0.457	0.455	0.430	0.428		0.402	0.433	4.778	
T	Acrolein				0.041	0.042	0.044	0.041	0.042		0.041	0.042	2.514		
T	1,1,2-Trichloro-1,2,2-Trifluoroet			0.243	0.244	0.251	0.250	0.257	0.248	0.251		0.249	1.931		
T	Acetone					0.084	0.083	0.083	0.076	0.075	0.071	0.078	6.993		
C	1,1-Dichloroethene		0.467	0.488	0.477	0.477	0.485	0.501	0.478	0.475		0.481	2.133		
T	Tert-Butyl Alcohol				0.022	0.023	0.023	0.022	0.023		0.023	0.023	2.114		
T	Dimethyl Sulfide					0.308	0.347	0.343	0.330	0.324	0.310	0.327	5.003		
T	Iodomethane			0.093	0.104	0.161	0.280	0.297	0.281	0.271	0.206	0.212	39.260	0.990	
T	Methyl acetate					0.248	0.251	0.243	0.234	0.223	0.220	0.236	5.576		
T	Methylene Chloride			0.347	0.309	0.287	0.290	0.291	0.281	0.274		0.297	8.206		
T	Carbon Disulfide			1.004	0.901	0.894	0.952	0.936	0.887	0.850	0.784	0.901	7.365		
T	Acrylonitrile			0.099	0.101	0.100	0.105	0.108	0.108		0.099	0.103	4.072		
T	Methyl Tert Butyl Ether			0.655	0.652	0.674	0.703	0.728	0.706	0.698		0.688	4.128		
T	trans-1,2-Dichloroethene		0.255	0.279	0.258	0.273	0.271	0.280	0.268	0.268		0.269	3.306		
T	n-Hexane					0.454	0.492	0.487	0.459	0.454	0.431	0.463	4.956		
T	Diisopropyl ether			1.360	1.328	1.331	1.306	1.243	1.203		1.090	1.266	7.496		
T	Vinyl Acetate					0.495	0.522	0.543	0.541	0.532	0.515	0.525	3.459		
P	1,1-Dichloroethane		0.577	0.637	0.578	0.582	0.572	0.584	0.558	0.549		0.580	4.550		
T	Ethyl-Tert-Butyl ether			1.041	1.005	1.009	1.004	0.961	0.952		0.903	0.982	4.692		
T	2-Butanone					0.122	0.120	0.127	0.120	0.121	0.120	0.122	2.316		
T	Propionitrile			0.034	0.036	0.037	0.038	0.036	0.038		0.037	0.037	3.264		
T	2,2-Dichloropropane		0.466	0.479	0.447	0.444	0.427	0.449	0.437	0.443		0.449	3.687		
T	cis-1,2-Dichloroethene			0.266	0.297	0.300	0.293	0.300	0.310	0.298	0.293	0.294	4.282		
C	Chloroform		0.568	0.566	0.565	0.524	0.523	0.513	0.526	0.507	0.500	0.532	5.025		
T	1-Bromopropane			0.045	0.045	0.052	0.056	0.057	0.056	0.056	0.053	0.053	9.032		
T	Bromochloromethane		0.147	0.168	0.179	0.174	0.173	0.180	0.175	0.173		0.171	6.073		
T	Tetrahydrofuran				0.081	0.083	0.085	0.082	0.082		0.080	0.082	2.340		
S	Dibromofluoromethane			0.267	0.278	0.274	0.278	0.279	0.264	0.266	0.258	0.271	2.900		
T	1,1,1-Trichloroethane		0.472	0.469	0.461	0.465	0.461	0.479	0.462	0.459		0.466	1.509		
T	Cyclohexane			0.517	0.524	0.553	0.594	0.597	0.570	0.561	0.533	0.556	5.454		
T	1,1-Dichloropropene			0.361	0.369	0.381	0.381	0.395	0.380	0.378		0.378	2.765		
T	Tert-Amyl-Methyl ether			0.768	0.766	0.767	0.766	0.741	0.738		0.705	0.750	3.165		
T	Carbon Tetrachloride		0.388	0.427	0.399	0.416	0.417	0.437	0.421	0.422		0.4159	3.6947		
S	1,2-Dichloroethane-d4				0.334	0.339	0.324	0.327	0.31	0.312	0.301	0.3211	4.3402		
T	Heptane											0	0		
T	1,2-Dichloroethane		0.42	0.397	0.414	0.406	0.405	0.416	0.401	0.394		0.4066	2.2727		
T	Benzene		1.161	1.212	1.131	1.103	1.082	1.106	1.047	0.987		1.1036	6.2019		
T	Trichloroethene		0.283	0.3	0.275	0.28	0.283	0.293	0.283	0.277		0.2842	2.9387		
T	Methylcyclohexane					0.411	0.448	0.447	0.429	0.422	0.402	0.4265	4.3947		
C	1,2-Dichloropropane		0.303	0.327	0.326	0.32	0.319	0.327	0.319	0.313		0.3193	2.5566		
T	1,4-Dioxane					0.002	0.002	0.002	0.002		0.002	0.0021	5.6909		
T	Bromodichloromethane		0.367	0.399	0.399	0.39	0.395	0.413	0.402	0.398		0.3954	3.295		
T	Dibromomethane		0.121	0.143	0.151	0.149	0.152	0.158	0.155	0.152		0.1477	7.9054		
T	2-Chloroethyl Vinyl Ether			0.118	0.129	0.141	0.159	0.17	0.154	0.154	0.152	0.1471	11.446		
T	4-Methyl-2-Pentanone					0.086	0.096	0.102	0.099	0.098	0.097	0.0965	5.7849		
T	cis-1,3-Dichloropropene		0.378	0.4	0.403	0.422	0.442	0.465	0.454	0.444		0.4258	7.1038		
T	Dimethyl Disulfide					0.212	0.264	0.274	0.271	0.268	0.257	0.2576	8.8892		
I	Chlorobenzene-d5	ISTD													
S	Toluene-d8			1.352	1.367	1.34	1.32	1.282	1.228	1.224	1.168	1.285	5.5762		
C	Toluene		1.436	1.566	1.521	1.529	1.524	1.521	1.463	1.361		1.4902	4.45		
T	Ethyl Methacrylate			0.317	0.334	0.376	0.441	0.44	0.441	0.434	0.427	0.4014	12.868		
T	Paraldehyde											0	0		
T	trans-1,3-Dichloropropene			0.467	0.509	0.509	0.537	0.553	0.545	0.54		0.5228	5.7113		
T	1,1,2-Trichloroethane		0.294	0.291	0.302	0.293	0.295	0.293	0.29	0.283		0.2926	1.819		
T	2-Hexanone					0.216	0.243	0.255	0.25	0.251	0.25	0.2442	5.8163		
T	1,3-Dichloropropane			0.51	0.499	0.512	0.511	0.517	0.52	0.514	0.504	0.5108	1.3317		
T	Tetrachloroethene		0.396	0.397	0.395	0.397	0.392	0.395	0.386	0.381		0.3925	1.5267		
T	Dibromochloromethane		0.331	0.348	0.371	0.372	0.391	0.401	0.399	0.393		0.3757	6.7743		
T	1,2-Dibromoethane		0.254	0.275	0.277	0.272	0.279	0.289	0.291	0.288		0.2781	4.3798		
T	1-Chlorohexane		0.38	0.404	0.428	0.46	0.513	0.509	0.499	0.488	0.464	0.4605	10.375		
P	Chlorobenzene		1.087	1.1	1.076	1.039	1.016	1.002	0.96	0.888		1.0208	6.995		
T	1,1,1,2-Tetrachloroethane		0.337	0.393	0.387	0.388	0.39	0.389	0.383	0.364		0.3788	5.0785		
C	Ethylbenzene		0.494	0.552	0.535	0.54	0.549	0.547	0.53	0.5		0.5308	4.1919		
T	m-,p-Xylene		0.617	0.674	0.656	0.669	0.664	0.656	0.629	0.569		0.6419	5.4993		
T	o-Xylene			0.607	0.604	0.618	0.661	0.661	0.645	0.608		0.6292	4.1021		
T	Styrene		0.857	0.952	1.01	1.065	1.113	1.13	1.11	1.024		1.0327	9.0226		
P	Bromoform			0.198	0.217	0.223	0.232	0.244	0.251	0.244		0.2298	8.0931		
T	Isopropylbenzene			1.43	1.557	1.578	1.625	1.689	1.691	1.635	1.466		1.584	6.0921	
I	1,4-Dichlorobenzene-d4	ISTD													
P	1,1,2,2-Tetrachloroethane		0.595	0.629	0.666	0.668	0.645	0.66	0.649	0.651		0.6455	3.6925		
S	p-Bromofluorobenzene			0.89	0.936	0.938	0.967	0.97	0.933	0.98	0.941	0.9445	3.018		

T	1,2,3-Trichloropropane			0.187	0.203	0.19	0.197	0.199	0.195	0.198		0.1955	2.8482
T	trans-1,4-Dichloro-2-Butene			0.15	0.182	0.194	0.211	0.218	0.22	0.23	0.216	0.2026	12.964
T	n-Propylbenzene		3.171	3.347	3.45	3.64	3.691	3.722	3.505	3.196		3.4652	6.19
T	Bromobenzene	0.813	0.748	0.818	0.828	0.813	0.825	0.826	0.795	0.799		0.8072	3.1093
T	1,3,5-Trimethylbenzene		2.067	2.307	2.403	2.547	2.599	2.656	2.545	2.448		2.4465	7.7615
T	2-Chlorotoluene		2.321	2.565	2.495	2.505	2.503	2.543	2.391	2.263		2.4483	4.4913
T	4-Chlorotoluene		1.987	2.141	2.201	2.206	2.153	2.141	2.084	2.05		2.1203	3.5624
T	a-Methylstyrene					1.301	1.513	1.514	1.469	1.426	1.273	1.416	7.4426
T	tert-Butylbenzene			0.48	0.507	0.532	0.545	0.553	0.534	0.528		0.5254	4.7351
T	1,2,4-Trimethylbenzene			2.631	2.687	2.714	2.721	2.745	2.619	2.465		2.6547	3.6067
T	sec-Butylbenzene			2.95	2.949	3.088	3.131	3.185	3.022	2.822		3.021	4.1295
T	p-Isopropyltoluene			2.443	2.572	2.729	2.792	2.835	2.702	2.513		2.6554	5.561
T	1,3-Dichlorobenzene		1.614	1.611	1.594	1.59	1.585	1.59	1.534	1.476		1.5741	2.9589
T	1,4-Dichlorobenzene	2.103	1.864	1.724	1.698	1.626	1.584	1.595	1.52	1.459		1.686	11.645
T	n-Butylbenzene			2.275	2.312	2.477	2.489	2.539	2.426	2.283		2.4002	4.5225
T	1,2-Dichlorobenzene	1.666	1.589	1.544	1.516	1.481	1.493	1.494	1.434	1.368		1.5095	5.6951
T	1,2-Dibromo-3-Chloropropane				0.101	0.118	0.124	0.131	0.127	0.129		0.1217	9.3235
T	1,2,4-Trichlorobenzene		1.087	1.034	1.036	1.027	1.074	1.082	1.047	1.04		1.0535	2.2472
T	Hexachlorobutadiene		0.441	0.493	0.436	0.439	0.455	0.454	0.446	0.449		0.4515	3.9641
T	Naphthalene			1.916	1.949	2	2.083	2.237	2.305	2.2	2.089	2.0977	6.6903
T	1,2,3-Trichlorobenzene	1.082	0.997	0.99	0.948	0.96	0.992	0.999	0.96	0.949		0.9863	4.1899

Wed Oct 11 11:24:15 2017

3.0 Attachments

Microbac Laboratories Inc.
Ohio Valley Division Analyst List
October 23, 2017

001 - BIO-CHEM TESTING WVDEP 220	002 - REIC Consultants, Inc. WVDEP 060
003 - Sturm Environmental	004 - MICROBAC PITTSBURGH
005 - ES LABORATORIES	006 - ALCOSAN LABORATORIES
007 - ALS LABORATORIES	008 - BENCHMARK LABORATORIES
010 - MICROBAC CHICAGOLAND	AC - AMBER R. CARMICHAEL
ADC - ANTHONY D. CANTER	ADG - APRIL D. GREENE
ALS - ADRIANE L. STEED	AWE - ANDREW W. ESSIG
AZH - AFTER HOURS	BJO - BRIAN J. OGDEN
BLG - BRENDA L. GREENWALT	BLR - BRANDON L. RICHARDS
BNB - Brandi N. Bentley	BRG - BRENDA R. GREGORY
CAS - Craig A. Smith	CEB - CHAD E. BARNES
CLC - CHRYS L. CRAWFORD	CLG - CARA L. GREENWOOD
CLS - CARA L. STRICKLER	CPD - CHAD P. DAVIS
CSH - CHRIS S. HILL	CV - Carl Volkman
DAK - DEAN A. KETELSEN	DCM - DAVID C. MERCKLE
DEV - DAVID E. VANDENBERG	DIH - DEANNA I. HESSON
DLB - DAVID L. BUMGARNER	DLP - DOROTHY L. PAYNE
DSM - DAVID S. MOSSOR	DTG - DOMINIC T. GEHRET
ECL - ERIC C. LAWSON	EPT - ETHAN P. TIDD
ERP - ERIN R. PORTER	FJB - FRANCES J. BOLDEN
HRF - HEATHER R. FAIRCHILD	JDH - JUSTIN D. HESSON
JDS - JARED D. SMITH	JKP - JACQUELINE K. PARSONS
JLD - JESSICA L. DELONG	JST - JOSHUA S. TAYLOR
JTP - JOSHUA T. PEMBERTON	JWR - JOHN W. RICHARDS
JWS - JACK W. SHEAVES	JYH - JI Y. HU
KAK - KATHY A. KIRBY	KDD - Katelyn D. Daley
KEB - KATIE E. BARNES	KHR - KIM H. RHODES
KKB - KERRI K. BUCK	KRA - KATHY R. ALBERTSON
KRP - KATHY R. PARSONS	LJH - Lacey J. Hendershot
LLS - LARRY L. STEPHENS	LSB - LESLIE S. BUCINA
LSJ - LAURA S. JONES	MAP - MARLA A. PORTER
MBK - MORGAN B. KNOWLTON	MES - MARY E. SCHILLING
MMB - MAREN M. BEERY	MRT - MICHELLE R. TAYLOR
OJE - OMOYEMWEN J. ENGLISH	PDM - PIERCE D. MORRIS
PIT - MICROBAC WARRENDALE	RAF - REBEKAH A. FINN
REK - BOB E. KYER	RLB - BOB BUCHANAN
RNP - RICK N. PETTY	SAV - SARAH A. VANDENBERG
SCA - SUEELLEN C. ADAMS	SCB - SARAH C. BOGOLIN
SCJ - SUE ELLEN C. JOHNSON	SDC - SHALYN D. CONLEY
TB - TODD BOYLE	TMB - TIFFANY M. BAILEY
TMM - TAMMY M. MORRIS	VC - VICKI COLLIER
WTD - WADE T. DELONG	XXX - UNAVAILABLE OR SUBCONTRACT
ZTB - ZACH T. BARNES	

Phone: 740-373-4071



CHAIN-OF-CUSTODY RECORD

Toll Free: 800-373-4071

Company Name:		Project Contact:		Turn Around Requirements:		Project ID:	
HDR		Lynn Lutz		1 week			
Contact Phone #:		Location:		Signature:		Matrix*	
914 374 0003		Mem. Tenn		C. J. [Signature]			
Sample I.D. No.	Grab	Date	Time	Com	Time	Matrix*	
CS-03	X	10/17/17	1355				
DUP-1	X	10/17/17	1610				
CS-04	X	10/17/17	1555				
WB-01	X	10/18/17	1444				
WB-02	X	10/18/17	1556				
CS-05	X	10/18/17	1115				
CS-06	X	10/18/17	0924				
CS-02	X	10/18/17	1304				
CS-02-MS	X	10/18/17	1304				
CS-02-MSD	X	10/18/17	1304				
WB-03	X	10/10/17	0915				
CS-01	X	10/19/17	1548				
CS-07	X	10/19/17	1258				
DUP-2	X	10/19/17	1307				
RB-1	X	10/17/17	1500				
RB-2	X	10/18/17	1530				
RB-3	X	10/19/17	1525				
RB-4	X	10/10/17	1700				

Relinquished by: (Signature) *[Signature]*

Relinquished by: (Signature) *[Signature]*

Date: 10/10/17

Date: 10/10/17

Time: 1600

Time: 1700

Received by: (Signature) _____

Received by: (Signature) _____

Date: _____

Time: _____

Microbac OVD

Received: 10/11/2017 11:03

By: BREND A GREGORY

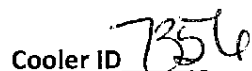
221000107356

Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Branda Gregory

221000107356

Page 1 of 1



Cooler ID

[illegible]

pH	Exceptions
----	------------

pH Lot # NA

SAMPLE ID	Bottle 1	Bottle 2	Bottle 3	Bottle 4	Bottle 5	Bottle 6
PRESERVATIVE EXCEPTIONS ☒ NONE ☐ AS NOTED <u>CSG 10/11/17</u>						

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Appendix E

Data Quality Evaluation

DATA QUALITY EVALUATION

A sampling event was conducted by HDR for the TDEC wells northeast of Dunn Field at the former Defense Depot Memphis, Tennessee (DDMT) in October 2017. The wells to be sampled were identified in the Confirmation Notice #2 Statement of Work from USACE, Mobile.

Groundwater samples for the TDEC wells were submitted to Microbac Laboratories in Marietta, Ohio for analysis. Field activities and laboratory analyses were performed in accordance with the *2017 Uniform Federal Policy-Quality Assurance Project Plan, Revision 0* (2017 QAPP) (HDR 2017).

The data quality evaluation (DQE) process involves assessment of all field and laboratory procedures for compliance with the QAPP. This data validation assessment by HDR is designed to evaluate problems with quality assurance (QA)/quality control (QC) associated with the laboratory data and potential impact to the data quality objectives (DQOs). The DQE findings are summarized in the following sections.

FIELD ACTIVITIES AND FIELD QUALITY CONTROL

The field effort included the collection of groundwater samples from 10 designated wells during the sample event in October 2017. The TDEC well locations are shown on Figure 1 of the report.

Field QC samples were collected at selected wells to evaluate sampling technique and decontamination procedures. These samples included field duplicates, trip blanks and field equipment (rinsate) blanks. Additional samples were collected at selected locations for matrix spike/matrix spike duplicate (MS/MSD) analyses in the laboratory. Sample bottles met U.S. Environmental Protection Agency (USEPA) requirements for environmentally clean containers. Documentation of the sampling was performed in the field to ensure that the samples collected, sample labels, chain-of-custody (COC) records, and request for analysis were consistent. COC forms were filled out manually. Custody seals were placed on each sample cooler prior to shipment by common carrier.

ANALYTICAL METHODS

The groundwater samples were analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) by method SW 8260B.

LABORATORY QUALITY CONTROL

The laboratory QC program, including sample handling, laboratory control, and reporting, is documented in the 2017 QAPP. Sample handling includes documentation of sample receipt, placement in storage, lab personnel using the sample, and disposal. The laboratory control consists of instrument calibration and maintenance, laboratory control samples (LCS), method blanks and matrix spikes. Reporting of the laboratory control data was planned prior to the collection of the data, allowing the laboratory to place the appropriate information into the data package so that the DQE could be performed in a timely manner.

DQE SUMMARY

The objective of the DQE was to provide a review of the chemical data reports submitted by the laboratory and to assess the data in relation to the DQOs stated in the 2017 QAPP. The DQE consisted of review of laboratory QC data and field QC parameters, and flagging of the data as usable, usable with qualification, or unusable in accordance with the DQE standard operating procedures (SOPs) using the criteria for each analytical method performed. The following information was reviewed:

- Sample Integrity (Deliverables)
- Sample Completeness
- Sample Holding Times
- Laboratory Methods for Extraction and Analysis (Calibration, Internal Standards)
- Method Accuracy (bias) and Precision (Surrogates, MS/MSD, LCS Recoveries)
- Laboratory Performance Criteria (Blanks, Instrument Performance Checks)

Field QC parameters were evaluated through field duplicates, rinsate blanks, field documentation, and shipping criteria.

The DQE was summarized by use of flags that indicate to the reviewer that the data being considered has been qualified using the established criteria. Sample delivery group (SDG) narrative detailing the evaluation of the laboratory data by HDR are included as attachments in this Appendix. The SDGs and associated groundwater samples are listed on Table E-1.

The following sections provide summary discussions of the required data qualifications for each sampling event. A Level III DQE was performed and the data quality indicators (DQIs), expressed in terms of precision, accuracy, representativeness, comparability, completeness, and sensitivity, were assessed. This included the evaluation of sample integrity, holding times, trip blanks, rinsate blanks, method blanks, internal standards, surrogate recoveries, MS/MSD recoveries, LCSs, and field duplicate precision. The results of the DQI assessment are provided below.

Precision

Field duplicates were collected to assess sampling precision. They consisted of replicate grab samples collected concurrently with the associated field samples. Precision is best expressed in terms of relative percent difference (RPD).

Field precision goals were met for the duplicate sample pairs collected during the sampling event. Laboratory precision is discussed in more detail in the attached narrative.

Accuracy

Accuracy or bias was measured through the analyses of LCSs and MS/MSDs. Sample specific accuracy is measured through surrogate recovery. Accuracy is expressed as percent recovery

(%R). Field and laboratory blanks are analyzed to assess potential bias in the reported sample results. Bias is expressed through qualification of analytical results.

Sample results are evaluated against blank results as described in the *National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, September 2016). Sample results with concentration of an analyte less than the RL and less than the concentration in an associated blank (or less than two times the concentration in the blank for common laboratory contaminants acetone, 2-butanone [MEK] and methylene chloride) are reported as non-detect at the standard RL. Sample results with concentration of an analyte greater than the RL but less than the concentration in an associated blank (or less than two times for common laboratory contaminants) are reported as non-detect at an elevated RL. Sample results greater than the blank result (or greater than two times for common laboratory contaminants) are not considered to have been greatly affected and are not qualified.

All MS, MSD, LCS and LCSD recoveries were within control limits. Further discussion of the LCS and MS/MSD recoveries is provided in the attached DQE narrative.

Six results in four samples were qualified as non-detect either at the RL or the blank's level due to detections in the rinsate blanks. Further discussion of the blank results is provided in the attached DQE narrative.

Representativeness

Representativeness refers to the degree sample data accurately and precisely describes the population of samples at a sampling point or under certain environmental conditions. Samples that are not properly preserved or are analyzed beyond holding times may not be considered representative. Review of sampling procedures, laboratory preparation, analysis holding times, trip blank and rinsate blank analysis help in providing this assessment.

Sampling procedures followed the 2017 QAPP and were considered representative of the matrices collected. Laboratory preparation and analysis followed method guidelines.

Comparability

The selection of standardized methods and consistent laboratory practices facilitates the comparison of data between sampling events.

This was the first time the TDEC wells were sampled by HDR and the first time the wells were sampled since 2005 (WB-01 to WB-03) or 2007 (CS-01 to CS-04). The limited analytical data are comparable to the current event.

Completeness

Completeness is determined for both field and analytical objectives. Field completeness is calculated from the number of samples proposed versus the actual number of samples collected. Analytical completeness is expressed in terms of usable data. The project completeness goal for DDMT is 90% as stated in the 2017 QAPP.

Data from the TDEC wells event was 100% complete and therefore met the completeness DQO.

Sensitivity

Analytical sensitivity is the concentration at which the measurement system can quantitate target analytes in the environmental matrices of concern. Analytical sensitivity is expressed in terms of the RL, which is provided by the respective laboratories as their reasonable and defensible quantitation limit for environmental samples above the method detection limit (MDL), which is established by each laboratory using pure water or clean matrix.

The analytical method RLs and MDLs were compared to groundwater protection standards as listed in the 2017 QAPP and were below the standards for the contaminants of concern.

The following sections discuss only those deficiencies encountered during the evaluation that resulted in qualified and/or unusable data.

TDEC Wells, October 2017

A total of 22 water samples including 10 groundwater field samples and 12 QA/QC samples (duplicates, MS/MSD, trip blanks, rinsate blanks) were collected from 10 TDEC wells in October 2017. Samples were analyzed for TCL VOCs. The data are usable with qualifications as described below:

- Two results for acetone were qualified as 10.0 U due to acetone in the associated rinse blanks. Sample results were less than the reporting limit (RL) and qualified as non-detect at the RL. Acetone is not a COC at the site.
- Two results for methylene chloride were qualified as 1.00 U due to methylene chloride in the associated rinse blank. Sample results were less than the reporting limit (RL) and qualified as non-detect at the RL. Methylene chloride is not a COC at the site.
- One result for chloroform was qualified as 0.300 U due to chloroform in the associated rinse blank. The sample result was less than the RL and qualified as non-detect at the RL. Chloroform is a COC at the site but was detected well below the project action limit.
- One result for chloroform was qualified as 0.373 U due to chloroform in the associated rinse blank. The sample result was greater than the RL but less than the blank concentration and qualified as non-detect at the blank concentration. Chloroform is a COC at the site but was detected well below the project action limit.
- Any result reported below the RL but above the method detection limit was flagged “J” and considered an estimated result (unless overridden by other quality control [QC] flags).



SUMMARY

The sample data from the TDEC wells event at the met the data quality objectives and are of sufficient quality to support the evaluation of remedial actions.

TABLE E-1
TDEC WELLS SAMPLE DATA GROUP SUMMARY TABLE
DATA COLLECTION AT TDEC WELLS
Dunn Field - Defense Depot Memphis, Tennessee

SDG		Groundwater Samples		Quality Control Samples
<u>TDEC Sampling Event - October 2017</u>				
L17100709	CS-01	CS-04	CS-07	DUP-1
	CS-02	CS-05	WB-01	DUP-2
	CS-03	CS-06	WB-02	CS-02-MS
			WB-03	CS-02-MSD
				RB-1
				RB-2
				RB-3
				RB-4

DATA VALIDATION AND USABILITY REPORT

VOLATILES by USEPA SW-846 Method 8260B

Project: DDMT Memphis TDEC Wells October 2017
Project/Task Number: 10021503
Sample Data Package: L17100709
Laboratory: Microbac Laboratories, Marietta, Ohio
Sample Matrix: Groundwater
Sampling Dates: 07-10 October 2017
Validation Guidelines: Project Quality Assurance Project Plan (QAPP) (2017 Uniform Federal Policy-Quality Assurance Project Plan, Revision 0, Environmental Restoration Support at Former Defense Depot Memphis, Tennessee, May 12, 2017), United States Environmental Protection Agency (USEPA) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd edition (SW-846), National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, September 2016); and professional judgment
Validation Level: Steps I (verification), IIa (validation) and III (data usability)
Data Reviewer: Lynn K. Lutz, HDR

Sample ID	Matrix	Lab ID	VOCs
CS-03	GW	L17100709-01	X
DUP-1	GW	L17100709-02	X
CS-04	GW	L17100709-03	X
WB-01	GW	L17100709-04	X
WB-02	GW	L17100709-05	X
CS-05	GW	L17100709-06	X
CS-06	GW	L17100709-07	X
CS-02	GW	L17100709-08	X
CS-02-MS	GW	L17100709-09	X
CS-02-MSD	GW	L17100709-10	X
WB-03	GW	L17100709-11	X
CS-01	GW	L17100709-12	X
CS-07	GW	L17100709-13	X
DUP-2	GW	L17100709-14	X
RB-1	GW	L17100709-15	X
RB-2	GW	L17100709-16	X
RB-3	GW	L17100709-17	X
RB-4	GW	L17100709-18	X

SUMMARY

All laboratory data were acceptable with qualification.

I. SAMPLE RECEIPT / CHAIN OF CUSTODY

Samples were received AT 0.0°C, within the correct temperature range of 0-6°C. The chains of custody (COCs) were filled out and signed. All samples had the proper preservation. No qualification was required.

II. HOLDING TIMES

Holding time criteria were met. Samples were analyzed within 14 days of collection. No qualification was required.

III. INSTRUMENT PERFORMANCE

GC/MS BFB tuning criteria were met. No qualification was required.

IV. INSTRUMENT CALIBRATION

INITIAL CALIBRATIONS

Initial calibration criteria were met. Minimum relative response factor (RRF) criteria were met. The concentration of the lowest standard was at or below the reporting limit (RL). The linearity was acceptable. No qualification was required.

SECOND SOURCE STANDARDS

Second source standard criteria were not all met. Chloromethane and dichlorodifluoromethane had percent difference (%D) values of 27% and 34%, above the control limit of 20%. These analytes were non-detect in the samples. No qualification was required.

CONTINUING CALIBRATIONS

Dichlorodifluoromethane in both Continuing Calibration Verification (CCV) standards had %D values of +20.4% and +25.9%, above the control limit of 20% and with higher responses than in the initial calibration. This analyte was non-detect in all field samples and no qualification was required.

V. BLANKS

METHOD BLANKS

1,4-Dichlorobenzene was detected at a trace level in one method blank. This analyte was non-detect in the associated samples and no qualification was required.

TRIP BLANKS

The applicable trip blanks were reported in data packages L17100637 and L17100710. Acetone was detected in one trip blank (LTM-TB4-LA-26, collected on 10/10/2017), but acetone in the associated samples was non-detect and no qualification was required.

EQUIPMENT RINSATE BLANKS

Acetone, chloroform, methylene chloride and toluene were detected in the rinsate blanks and in the associated samples, which required qualification as shown in the table below.

Rinse Blank ID	Analyte	Concentration (µg/L)	RL (µg/L)	Sample IDs	Concentration (µg/L)	Final Sample Qualification
RB-1	Acetone	16.9	10	CS-03	ND	None
	Chloroform	0.343	0.3	CS-04	ND	
	Methylene Chloride	0.455	1.0	DUP-1	ND	
RB-2	Acetone	15.3	10	CS-02 CS-05 CS-06 WB-01	ND	None

Rinse Blank ID	Analyte	Concentration (µg/L)	RL (µg/L)	Sample IDs	Concentration (µg/L)	Final Sample Qualification
	Acetone	15.3	10	WB-02	2.56 J	10.0 U
	Chloroform	0.373	0.3	CS-02 WB-01 WB-02	ND	None
	Chloroform	0.373	0.3	CS-05	0.163 J	0.300 U
	Chloroform	0.373	0.3	CS-06	0.334 J	0.373 U
	Methylene Chloride	0.382 J	1.0	CS-02 WB-01 WB-02	ND	None
	Methylene Chloride	0.382 J	1.0	CS-05	0.291 J	1.00 U
	Methylene Chloride	0.382 J	1.0	CS-06	0.303 J	1.00 U
RB-3	Acetone	15.8	10	CS-01 CS-07	ND	None
	Acetone	15.8	10	DUP-2	2.98 J	10.0 U
	Chloroform	0.345	0.3	CS-01 CS-07 DUP-2	ND	None
	Methylene Chloride	0.431 J	1.0	CS-01 CS-07 DUP-2	ND	None
RB-4	Acetone	20.6	10	WB-03	ND	None
	Chloroform	0.203 J	0.3		ND	
	Methylene Chloride	0.355 J	1.0		ND	
	Toluene	0.315 J	1.0		ND	

VI. LABORATORY CONTROL SAMPLES (LCS)

LCS and LCS duplicate recoveries were within control limits. Relative percent differences (RPDs) were within control limits. No qualification was required.

VII. SURROGATES

All surrogate recoveries were within control limits and no qualification was required.

VIII. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD)

Sample CS-02 was designated on the COC for MS/MSD analysis. All recoveries and RPDs were within control limits and no qualification was required.

IX. DUPLICATES

FIELD DUPLICATES

Field duplicate samples were collected as identified in the following table.

Parent Sample	Field Duplicate Sample
CS-04	DUP-1
CS-07	DUP-2

All target analytes in both parent/FD sample pairs were non-detect except for methyl tert-butyl ether (MTBE), which was detected at trace levels in the CS-07/DUP-2 pair. These results were within control limits. No qualification was required.

X. INTERNAL STANDARDS (ISTD)

All ISTD criteria were met. The retention times (RTs) were within 10 seconds of the RT in the associated opening CCV standard. The areas were within 50-200% of the area in the associated opening CCV standard. No qualification was required.

XI. REPORTING LIMITS (RL) AND METHOD DETECTION LIMITS (MDL)

The RLs were below the project action limits listed in the QAPP.

XII. SAMPLE RESULTS / TRANSCRIPTION VERIFICATION

Transcription between the data package and the EDDs was verified. Sample results reported between the MDL and RL were qualified as estimated (J).

XIII. DATA USABILITY

No data were rejected. Data required minimal qualification. All data are usable as qualified.