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March 10, 2016

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Initial:

Mr. John Hnat
WDNR
2300 N Dr. Martin Luther King Jr Dr.
Milwaukee, WI 53212

RE: Additional Remedial Action Results and Proposed Supplemental Below Building Treatment, Master Dry Cleaners DERF Site, 6326 W. Bluemound Road, Wauwatosa, WI, BRRTS # 02-41-545142

FID 241 398630

Dear Mr. Hnat:

Objective

The purpose of this letter is to present the results of work completed in February beneath the building at the Master Cleaners site. As you know, soil, groundwater, and vapors were tested beneath the building in February.

Based on the findings, we recommend further source treatment of the soil beneath the former sump. Approval of the supplemental budget is needed to maintain coverage under DERF.

Site Status

The drycleaning business ceased operations in 2015, and a new tenant is seeking to use the building. Prior to occupancy, some additional assessment and remediation has been completed in February 2016 while the building is vacant.

As you know, the site investigation was completed by Sigma Environmental, Milwaukee, WI, with the investigation completed in 2012. Soil borings and a monitoring well network consisting of 19 locations have been established during the investigation. Subslab and indoor vapor samples of the neighboring residential property to the north were also obtained, with no elevated responses.

Petroleum investigation and remediation actions had previously been completed, as the property was also formerly a gas station from approximately 1950 to 1970. Soil excavation and disposal in 2006 addressed the former tank bed contamination, with remaining petroleum persisting in the soil and groundwater southwest of the building.

In early December 2015, Fehr Graham directed the injection of an aqueous mixture containing 3,200 pounds of Provectus IR at the most contaminated area of the property. Areas of injection focused on the south, east, and north edges of the building, but couldn't access the building interior.

Completed Additional Actions February 2016

With closing of the drycleaning operation, the building is temporarily vacant. Activities completed in February 2016 were performed to take advantage of this opportunity for building access so the case can be further positioned for eventual case closure.

These steps are also considered helpful to position the building for occupancy by a non-drycleaning business.

The following actions were completed:

1. Removal of the drycleaning machine and residual clean chemicals, with proper disposal or reuse of remaining chemicals. This was completed by outside private parties in January or early February 2016.

2. Installation of three soil borings on February 10, with completion as temporary monitoring wells (B-101, B-102, B-103) inside the building. The borings were installed using a geoprobe drill rig to a depth of 15 feet at the locations shown on Figure 2. Two soil samples per boring (six total), and three groundwater samples, one per boring, were retained for laboratory analysis of VOCs. Results are discussed in the section below.

3. Testing of the subslab vapor chemistry beneath the building at two locations. Two subslab vapor probes were installed by Fehr Graham personnel and sampled on February 24. Results from the laboratory are still pending. In addition, a site visit by a radon abatement contractor was arranged to provide an accurate preliminary design and cost estimate for a full building vapor mitigation system.

4. Removal of a sealed floor drain sump located in the eastern portion of the building near the former drycleaning operations. Upon removal of the lid, it was apparent the sump had a concrete base and vitreous tile sides, with a piped discharge lateral that likely connected to the sanitary sewer. The sump contained approximately one drum of sludge. The sump was entirely removed and drummed, with the tile and concrete retained in three drums. The drummed materials are present on site, pending proper disposal. The sanitary sewer lateral was capped by a licensed plumber.

5. Upon sump removal, two soil samples were retained for analysis of VOCs, one from beneath the sump at 5.5 feet, and one from beneath the sanitary sewer lateral at 2.5 feet. Results are discussed below.

6. Following removal of the sump, on February 10, 250 pounds of Provectus IR was mixed with 250 gallons of water and added to the sump for treatment of residual contamination beneath the building. The material pooled in the former sump, and slowly drained, with the sump empty of the mixture on February 24.

7. On February 24, one soil sample from beneath the sump was retained using a hand auger to assess the post-treatment results two weeks following application. Results are discussed below.

Results of Additional Actions

The laboratory analytical results of the additional soil sampling and groundwater sampling are attached. Table A.2.1 shows the indoor soil chemistry results, Table A.1.1 shows the groundwater chemistry results, and Figure 1 displays all soil chemistry results from the drycleaner investigation. Draft Figure B.3.a.1 shows the geologic cross section through the building, with the soil chemistry results for PCE added to the figure.

Sludge Chemistry Inside Sump

The sludge in the sump contained high levels of PCE, 20,600,000 ug/kg. The sludge in the drum will be discarded as hazardous waste.

The concrete and vitreous tile that were removed were sampled for laboratory analysis, and the results indicate these materials are non-hazardous, with only 1,280 ug/kg PCE present. This result is below the direct contact level for PCE at an industrial site, and far less than 20X the TCLP limit threshold of 14,000 ug/kg. The three drums of sump materials will be discarded at a licensed subtitle D landfill with other refuse.

Soil Chemistry

The results indicate soil from beneath the building contains PCE at all tested locations. Borings B-101 and B-102 weren't very elevated, with lower levels of PCE ranging from 237 to 2,870 ug/kg. Boring B-103 was closer to the drycleaning machine and sump, and it displays higher levels between 8,000 and 9,050 ug/kg. These results are similar to findings from 2008 at boring HA-1, where 10,900 ug/kg PCE was detected.

The soil chemistry results from boring B-103 also reflect petroleum contamination, similar to the results from the historic gas station samples, but also reflecting some releases that likely took place within the former garage service bay.

Beneath Sump Soil Chemistry

The soil under the sump, after removal on February 10, 2016, contained elevated levels of PCE, 37,600 ug/kg at 2.5 feet beneath the sanitary sewer lateral on the west wall, and 3,160,000 ug/kg at 5.5 feet under the sump. Results following soil treatment with Provectus IR obtained on February 24th contained even higher concentrations, 10,800,000 ug/kg PCE. The higher results reflect sample variability from this area.

? variable more samples

These high concentrations indicate a hot spot of remaining contamination is present beneath the building. Further action to address these elevated concentrations is proposed.

Groundwater Chemistry Results

The groundwater chemistry from borings B-101 and B-103 have elevated concentrations of PCE, ranging from 57 ug/l to 7,030 ug/l. Results from boring B-102 indicate no elevated

levels of any VOCs, with the exception of some petroleum constituents, naphthalene and trimethylbenzenes.

The results from boring B-101 and B-103 also contain elevated levels of naphthalene, trimethylbenzenes, and also ethylbenzene, toluene, and xylenes. Degradation products of PCE are also present at elevated levels, including trichloroethene, cis-1,2-dichloroethene, and vinyl chloride.

The presence of petroleum constituents has been previously identified and the petroleum case closed by the WDNR.

Subslab Vapor Chemistry Results

The subslab vapors were sampled in February 24, but the results have not yet been received. Given the presence of elevated levels of PCE in the soil at the three tested locations under the building, it is likely elevated PCE will be present in the subslab building vapors. Upon receipt the results, the levels will be compared to relevant standards, but we anticipate there will be a need to install a subslab vapor mitigation system. Funding for installation of a vapor mitigation system was previously approved.

Proposed Additional Sub-building Remedial Actions

The sump has not yet been backfilled, and is presently a five-foot deep by 30-inch diameter opening in the floor. The bottom of the sump still contains some residual Provectus IR that did not fully dissolve and seep into the formation.

Soil containing elevated levels of PCE persist beneath the sump from approximately five feet below grade to the water table surface. Further treatment of these high level soils is proposed to minimize contaminant source levels beneath the building, while the opportunity is present.

Excavation and Hazardous Waste Disposal - not cost effective

Excavation was considered as a potential remedy, with removal using a mini-excavator, and disposal as hazardous waste. Realistically, if excavation is selected, an estimated 60 tons of soil may be possible to remove. This assumes excavation of a ten-foot square by eight-foot depth around the sump, and excavation of the sanitary sewer lateral along a 30-foot by two-foot by five-foot deep area inside the building. Mini-excavators may be reaching the limit of their reach at a depth of eight feet, and depth may be slightly less.

The estimated cost for indoor excavation, hauling, disposal, and backfill totals $70,000. This assumes saw cutting the building floor, removal of 60 tons of soil at $500 per ton, plus three loads for transportation at $2,500 per load. Contractor costs will be an estimated $15,000 to excavate and double handle the soil to place it outside the building and into bulk transportation vehicles. Consultant oversight and laboratory confirmation sampling will be needed, plus backfilling and restoration of the building floor.

Despite excavation, remaining soil contamination will persist from depths below eight feet, and at other locations inside the building, as shown by the results from the soil

borings. While I am a frequent proponent of source removal, in this situation, it does not make fiscal sense to spend this much money and still be left with remaining elevated soil concentrations beneath the building.

Injection / Mixing of Zero Valent Iron in Sump Base

Instead, proposed treatment of these higher levels of PCE in unsaturated soil is recommended via injection of EZVI - CH4 in the open sump hole. A geoprobe will be used to advance one or more borings within the building sump opening. The borings will be advanced to a depth or approximately ten feet, or just above the water table. A three-foot side discharge slotted screen (open from 7 to 10 feet) will be used to add the EZVI into the formation in the unsaturated zone. An estimated 50 gallons of EZVI solution (diluted with an estimated 150 gallons of water) will be injected into the sub-building formation using a Geoprobe grout pump configuration.

Some of the product mixture will also be added to the sump directly. It is possible the product may daylight (surface) within the five-foot deep sump hole when trying to inject it at greater depths. Mixing of the soil with the EZVI solution at the base of the sump will be performed using flight augers and the geoprobe rig, to blend the liquid into the underlying soil from five to seven or greater feet below grade. The objective is to treat the unsaturated soil containing higher concentrations of PCE with the EZVI.

This product consists of 15% fine grained (5 micron or less) zero valent iron plus food grade soybean oil as a long term, slow release hydrogen donor. Information on the product is attached. Contact with PCE results in sequestration of the free phase liquid into the soybean oil emulsion, with destruction by the zero valent iron. It is designed as a way to treat source areas of contamination with higher levels of contaminants.

The injection is anticipated to require one to two days for completion. Monitoring of water levels, PID values, and percent LEL will be performed at the three remaining temporary wells B-101, B-102, and B-103, plus the existing monitoring wells closest to the building on all sides, including PZ-1, MW-9, MW-4, PZ-2, MW-8, MW-5, MW-7, and MW-3. A minimum of four readings will be obtained from these locations, including before, and approximately one hour and four hours after injection has begun. Upon completion of injection, a final round of readings will be obtained. Conditions of the issued injection permit will be followed.

Short Term Vapor Extraction

After completion of the chemical addition, operation of a month-long soil vapor extraction blower is proposed. The sump excavation will be backfilled with a two-inch diameter slotted Schedule 40 PVC well pipe bedded in gravel. The slotted interval will extent above the sanitary sewer lateral to a depth of approximately 1.5 feet, so when vapors are extracted from the sump using a blower, air from the sanitary lateral backfill will also be recovered.

At approximately 1.5 feet below grade, 10 to 20 mil plastic will be placed on the gravel surface, and overlain with hydrated bentonite. The bentonite and plastic will create a

surface seal to force vapors to be drawn from the deeper sump and sanitary lateral fill. The sump excavation will be completed with cement to grade.

The two-inch pipe will stick up above grade, and will be connected via piping to an electric blower operating at an estimated 90 cfm and up to 40 inches of water column. The blower can be plugged into the existing electrical outlets, and will be housed inside, with temporary duct installed to vent the extracted air to the outside.

Monitoring of the extracted air will be performed using a field meter (PID) and the field concentration of PCE using Draeger Tubes. Monitoring of induced vacuum beneath the building floor at various locations will be completed at existing or new subslab vapor monitoring points using a digital micromanometer.

The system will operate continuously for an estimated period of one month. Post-installation monitoring will be performed six times on the system functions, on the second day, third day, 7th day, 14th day, 21st day, and 28th day. Monitoring will assess system readings (chemical concentration, flow and vacuum, induced vacuum in the subslab of the building) and the need for continued operation. For example, if the PID response and field Draeger Tubes indicate no PCE is present in the extracted air, we may consider shut down of the system. On the second day of operation and the 21st day of operation, laboratory samples will be retained of the extracted vapors using a summa canister. The sampled gas will be used for assessment of the contaminant mass removed from the subsurface, and as a comparison to assess the accuracy of the Draeger Tube measurements.

After one month of operation, an evaluation will be made of the system performance. It is expected the blower will be unplugged, and the system removed. The two-inch diameter well will be cut flush with the ground surface and capped.

Proposed Additional Scope of Work

Task 0: Project Management

Additional project management time has been included on the cost estimate to cover additional labor needed to perform these additional activities.

Task D: Chemical Treatment Via Injection Beneath Removed Indoor Floor Drain

The injection of EZVI-CH4 using a geoprobe will be completed as a method of reducing residual elevated PCE in the soil beneath the building.

Under this task, the EZVI will be purchased, and water will be brought to the site. The solution will be mixed and injected into borings installed within the existing, open five-foot deep sump. One or more geoprobe borings will be advanced to allow for injection of the product. Material that may return to the ground surface will be mixed into the sump floor soils using multiple shallow flight auger holes.

Monitoring of the injection process will be performed by Fehr Graham personnel.

Addition of the EZVI-CH4 solution can be completed under the existing injection permit. Monitoring will be performed as described above.

Upon completion of this task, a brief letter report will be prepared that documents the activities and presents the results. Depending on timing, this report information may be combined with other planned reports on completed activities.

Task F: Short Term Vapor Extraction

The vapor extraction will be completed by Fehr Graham personnel with assistance from the chemical injection contractor during vapor well installation. Under this task, the extraction well and backfill will be installed, and the floor restored. Initial monitoring will be performed, and the blower connected and vented to the outside.

Six daily visits will be completed over the course of a month to monitor system function and performance. Two laboratory sample of the extracted vapor will be obtained, with analysis of full VOCs.

Periodic email updates of the monitoring results will be provided to the WDNR and client, when available. The estimated mass of removed PCE contamination will be calculated based on the volume of air recovered and the estimated chemistry results. Decisions regarding the need for continued system operation will be made after consultation with the WDNR and the client.

Upon completion of this task, a brief letter report will be prepared that documents the activities and results.

Cost Estimate

The estimated cost for the proposed work is provided on Table 1A, and totals $19,181. We have obtained bids for the injection and chemical product from vendors, and passed their charges on with no markup. Please review the costs, and provide approval of the attached Change Order # 3.

As required by the DERF program bidding requirements, we certify that we will complete services in compliance with ch NR 169, NR 140, and the NR 700 to NR 754 rule series. We will make available to the WDNR for inspection and copying, upon request, all documents and records related to the contract services. We have not prepared this bid in collusion with any other consultant submitting a bid on this site. We will perform all services in an ethical, professional and timely manner. Insurance information for Fehr Graham has previously been provided. We have and will maintain the necessary insurance and deductible coverages specified by NR169.

Schedule

The anticipated project schedule for the proposed additional injection work is only a couple days. The vapor extraction system would be installed following injection, and would operate for one month.

We still plan to get a full round of post-injection groundwater samples in April, followed by twice annual groundwater samples in October and April of next year. Closure is tentatively expected in December 2017, but will depend on the groundwater contaminant trends.

I trust this information meets your needs. If you have any questions, please give me a call.

Sincerely,

Kendrick A. Ebbott, P.G.
Branch Manager

Also Matt Dahlem

Attachment:

Table A.2.1	Soil Analytical Results - VOC - Indoor
Table A.1.1	Groundwater Analytical Results - VOC - Indoor
Figure 1	Site Soil Chemistry
Figure B.3.a-1	Draft Geologic Cross Section Map A-A'
Table 1A	Cost Estimate
Change Order 3	

Cc: Mr. Harold Shipshock, Master Cleaners, c/o Mr. Tom Shipshock, via email
Mr. Don Gallo, Whyte Hirschboeck, via email only

TABLE A.2.1
Soil Analytical Results Table - VOC
Master Drycleaning, Inc.
6326 W. Bluemound Rd., Wauwatosa, WI 53213
BRRTS# 02-41-545142

								Fehr-Graham Post Injection								
Sample ID		Groundwater Pathway RCL	Non-Industrial Direct-Contact RCL	Inside HA-1		Inside HA-2		B-101 Inside N		B-102 Inside S		B-103 Inside E		Inside SUMP		
Date				07/31/08	07/31/08	07/31/08	07/31/08	02/10/16	02/10/16	02/10/16	02/10/16	02/10/16	02/10/16	02/10/16	02/10/16	2/24/16
Depth				1-1.5'	4-4.5'	1-1.5'	4.5-5'	1-3'	8.5-10'	1-3'	9-10'	8-9.5'	16-17'	W Wall 2.5'	Floor 5.5'	Floor 5.5'
Description				stone basecoarse	clay	stone basecoarse	clay	gravelly silty clay	silty clay	silty clay	silty clay	silty clay	silt	silty clay	silty clay	silty clay
DEPTH to Seasonal Low Water Table (ft BGS)				8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'	8-10'
Saturated (S) or Unsaturated (U)				U	U	U	U	U	U	U	U	U	S	U	U	U
PID Reading								1.1	3.5	1.1	126.7	11.2	315			
Notes														Added 250# Slurry of Pro-Invectus IR		
Benzene	(ug/kg)	*5.12*	1,490	<20	<20	<20	<20	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Ethylbenzene	(ug/kg)	*1,570*	7,470	<16	<16	<16	<16	<25.0	<25.0	<25.0	<25.0	<25.0	*25,200*	<125	<12,500	<31,200
Toluene	(ug/kg)	*1,110*	818,000	<23	<23	<23	<23	<25.0	<25.0	<25.0	<25.0	<25.0	*17,800*	<125	<12,500	<31,200
Xylenes (TOTAL)	(ug/kg)	3,940	258,000	<48	<48	<48	<48	<75.0	<75.0	<75.0	<75.0	<75.0	*112,000*	<375	<37,500	<93,700
m&p-Xylene	(ug/kg)	NS	778,000	NR	NR	NR	NR	<50.0	<50.0	<50.0	<50.0	<50.0	82,300	<250	<25,000	<62,500
o-Xylene	(ug/kg)	NS	434,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	29,700	<125	<12,500	<31,200
Naphthalene	(ug/kg)	658	5,150	<117	<117	<117	<117	<40.0	<40.0	<40.0	97.1 J	<40.0	*4,210*	<200	<20,000	<50,100
MTBE	(ug/kg)	27	59,400	<23	<23	<23	<23	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Trimethylbenzene Total (1,2,4- & 1,3,5-)	(ug/kg)	*1,380*	NS	0.0	0.0	0.0	0.0	<50.0	<50.0	<50.0	646	<50.0	59,000	222 J	<25,000	<62,400
1,2,4-Trimethylbenzene	(ug/kg)	NS	89,800	<20	<20	<20	<20	<25.0	<25.0	<25.0	510	<25.0	45,300	222 J	<12,500	<31,200
1,3,5-Trimethylbenzene	(ug/kg)	NS	182,000	<24	<24	<24	<24	<25.0	<25.0	<25.0	136	<25.0	13,700	<125	<12,500	<31,200
Tetrachloroethene (PCE)	(ug/kg)	*4.54*	30,700	*2,600*	*10,900*	*1,000*	*2,120*	*2,140*	*2,870*	*882*	*237*	*8,180*	*9,050*	**37,600**	*3,160,000*	*10,800,000*
Trichloroethene (TCE)	(ug/kg)	*3.58*	1,260	<20	22.9	<20	<20	<25.0	<25.0	<25.0	<25.0	*65.1 J*	<250	<125	<12,500	<31,200
cis-1,2-Dichloroethene	(ug/kg)	*41.2*	156,000	<24	<24	<24	<24	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
trans-1,2-Dichloroethene	(ug/kg)	*58.8*	1,560,000	<29	<29	<29	<29	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Vinyl Chloride	(ug/kg)	*0.138*	67	<17	<17	<17	<17	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Methylene Chloride	(ug/kg)	2.56	60,700	<44	<44	<44	<44	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Bromobenzene	(ug/kg)	NS	354,000	<34	<34	<34	<34	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Bromochloromethane	(ug/kg)	NS	232,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Bromodichloromethane	(ug/kg)	*0.326*	390	<16	<16	<16	<16	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Bromoform	(ug/kg)	*2.33*	61,500	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Bromomethane	(ug/kg)	5.06	10,300	NR	NR	NR	NR	<69.9	<69.9	<69.9	<69.9	<69.9	<699	<350	<35,000	<87,400
n-Butylbenzene	(ug/kg)	NS	108,000	<35	<35	<35	<35	<25.0	<25.0	<25.0	241	<25.0	5,050	<125	<12,500	<31,200
sec-Butylbenzene	(ug/kg)	NS	145,000	<25	<25	<25	<25	<25.0	<25.0	<25.0	169	<25.0	969	<125	<12,500	<31,200
tert-Butylbenzene	(ug/kg)	NS	183,000	<23	<23	<23	<23	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Carbon Tetrachloride	(ug/kg)	*3.88*	884	<21	<21	<21	<21	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Chlorobenzene	(ug/kg)	NS	392,000	<16	<16	<16	<16	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Chloroethane (ethyl chloride)	(ug/kg)	*227*	2,120,000	<23	<23	<23	<23	<67.0	<67.0	<67.0	<67.0	<67.0	<670	<335	<33,500	<83,800
Chloroform	(ug/kg)	*3.33*	423	<50	<50	<50	<50	<46.4	<46.4	<46.4	<46.4	<46.4	<464	<232	<23,200	<58,100
Chloromethane	(ug/kg)	*15.5*	171,000	<43	<43	<43	<43	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
2-Chlorotoluene	(ug/kg)	NS	907,000	<31	<31	<31	<31	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
4-Chlorotoluene	(ug/kg)	NS	253,000	<24	<24	<24	<24	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2-Dibromo-3-chloropropane	(ug/kg)	*0.173*	8	<37	<37	<37	<37	<91.2	<91.2	<91.2	<91.2	<91.2	<912	<456	<45,600	<114,000
Dibromochloromethane	(ug/kg)	*32*	933	<21	<21	<21	<21	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2-Dibromoethane (EDB)	(ug/kg)	*0.0282*	47	<21	<21	<21	<21	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Dibromomethane	(ug/kg)	NS	35,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2-Dichlorobenzene	(ug/kg)	*1,170*	376,000	<32	<32	<32	<32	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,3-Dichlorobenzene	(ug/kg)	*1,150*	297,000	<41	<41	<41	<41	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,4-Dichlorobenzene	(ug/kg)	*144*	3,480	<42	<42	<42	<42	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Dichlorodifluoromethane	(ug/kg)	*3,090*	135,000	<33	<33	<33	<33	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1-Dichloroethane	(ug/kg)	*483*	4,720	<22	<22	<22	<22	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2-Dichloroethane	(ug/kg)	*2.84*	608	<24	<24	<24	<24	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1-Dichloroethene	(ug/kg)	*5.02*	342,000	<27	<27	<27	<27	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2-Dichloropropane	(ug/kg)	*3.32*	1,330	<19	<19	<19	<19	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,3-Dichloropropane	(ug/kg)	NS	1,490,000	<21	<21	<21	<21	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
2,2-Dichloropropane	(ug/kg)	NS	527,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1-Dichloropropene	(ug/kg)	NS	NS	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
cis-1,3-Dichloropropene	(ug/kg)	*0.286*	1,220,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
trans-1,3-Dichloropropene	(ug/kg)	0.286	1,570,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Diisopropyl ether	(ug/kg)	NS	2,260,000	<15	<15	<15	<15	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Hexachloro-1,3-butadiene	(ug/kg)	NS	6,220	<50	<50	<50	<50	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Isopropylbenzene	(ug/kg)	NS	268,000	<30	<30	<30	<30	<25.0	<25.0	<25.0	147	<25.0	2,440	<125	<12,500	<31,200
p-Isopropyltoluene	(ug/kg)	NS	162,000	<30	<30	<30	<30	<25.0	<25.0	<25.0	<25.0	<25.0	749	<125	<12,500	<31,200
n-Propylbenzene	(ug/kg)	NS	264,000	<29	<29	<29	<29	<25.0	<25.0	<25.0	499	<25.0	10,400	<125	<12,500	<31,200
Styrene	(ug/kg)	*220*	867,000	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1,1,2-Tetrachloroethane	(ug/kg)	*53.4*	2,590	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1,2,2-Tetrachloroethane	(ug/kg)	*0.156*	753	<25	<25	<25	<25	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2,3-Trichlorobenzene	(ug/kg)	NS	48,900	<87	<87	<87	<87	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2,4-Trichlorobenzene	(ug/kg)	*408*	22,000	<53	<53	<53	<53	<47.6	<47.6	<47.6	<47.6	<47.6	<476	<238	<23,800	<59,400
1,1,1-Trichlorethane	(ug/kg)	*140*	640,000	<27	<27	<27	<27	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,1,2-Trichlorethane	(ug/kg)	*3.24*	1,480	<30	<30	<30	<30	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
Trichlorofluoromethane	(ug/kg)	NS	1,120,000	<16	<16	<16	<16	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
1,2,3-Trichloropropane	(ug/kg)	*51.9*	5	NR	NR	NR	NR	<25.0	<25.0	<25.0	<25.0	<25.0	<250	<125	<12,500	<31,200
No. of Individual Exceedances (DC)				0	--	0	--	0	0	0	--	--	--	1	1	
Cumulative Hazard Index (DC)				0.0226	--	0.0261	--	0.0186	0.025	0.0077	--	--	--	0.3294	27.4783	
Cumulative Cancer Risk (DC)				8.5E-08	--	9.8E-08	--	7.0E-08	9.3E-08	2.9E-08	--	--	--	1.2E-06	1.0E-04	

<u>Exceedance Highlights:</u>
BOLD Red font indicates DC RCL exceedance per DNR RCL calculator 7/14/14, and BTV exceedance for metals. "**BT**": Cumulative exceedance (HI > 1), eventhough no individual DC RCL was exceeded.
Italic font indicates GW RCL Exceedance per DNR RCL calculator 7/14/14. Groundwater quality (> NR 140 ES) may be affected when GW RCLs are exceeded.

Notes:
Xylenes reported as total of m-, o-, p-xylenes
NS = No standard established
NA = Not analyzed for parameter
NR = Not Reported

A.1.I
Groundwater Analytical Table - VOC
Master Drycleaning, Inc.
6326 W. Bluemound Rd., Wauwatosa, WI 53213
BRRTS# 02-41-545142

Sample ID		NR 140.10 Preventive Action Limit	NR 140.10 Enforcement Standard	B-101	B-102	B-103
Date				02/24/16	02/24/16	02/24/16
Groundwater Elevation				NA	NA	NA
Benzene	(ug/L)	0.5	5	<12.5	<5.0	<50.0
Ethylbenzene	(ug/L)	140	700	749	162	3,590
Toluene	(ug/L)	160	800	323	<5.0	2,490
Xylenes (TOTAL)	(ug/L)	400	2,000	1,804	280.8	12,470
m&p-Xylene	(ug/L)	NS	NS	1,590	267	9,770
o-Xylene	(ug/L)	NS	NS	214	13.8	2,700
Naphthalene	(ug/L)	10	100	144	102	467 J
MTBE	(ug/L)	12	60	<4.4	<1.7	<17.4
Trimethylbenzene Total (1,2,4- & 1,3,5-)	(ug/L)	96	480	3,170	1,692	5,540
1,2,4-Trimethylbenzene	(ug/L)	NS	NS	2,520	1,420	4,310
1,3,5-Trimethylbenzene	(ug/L)	NS	NS	650	272	1,230
Tetrachloroethene (PCE)	(ug/L)	0.5	5	57.1	<5.0	7,030
Trichloroethene (TCE)	(ug/L)	0.5	5	23.0 J	<3.3	1,120
cis-1,2-Dichloroethene	(ug/L)	7	70	210	<2.6	4,090
trans-1,2-Dichloroethene	(ug/L)	20	100	<6.4	<2.6	<25.7
Vinyl Chloride	(ug/L)	0.02	0.2	11.9 J	<1.8	99.3 J
Methylene Chloride	(ug/L)	0.5	5	<5.8	<2.3	<23.3
Bromobenzene	(ug/L)	NS	NS	<5.8	<2.3	<23.0
Bromochloromethane	(ug/L)	NS	NS	<8.5	<3.4	<34.0
Bromodichloromethane	(ug/L)	0.06	0.6	<12.5	<5.0	<50.0
Bromoform	(ug/L)	0.44	4.4	<12.5	<5.0	<50.0
Bromomethane	(ug/L)	1	10	<60.9	<24.3	<243
n-Butylbenzene	(ug/L)	NS	NS	<12.5	<5.0	222
sec-Butylbenzene	(ug/L)	NS	NS	<54.7	<21.9	<219
tert-Butylbenzene	(ug/L)	NS	NS	<4.5	<1.8	<18.0
Carbon Tetrachloride	(ug/L)	0.5	5	<12.5	<5.0	<50.0
Chlorobenzene	(ug/L)	NS	NS	<12.5	<5.0	<50.0
Chloroethane	(ug/L)	80	400	<9.4	<3.7	<37.5
Chloroform	(ug/L)	0.6	6	<62.5	<25.0	<250
Chloromethane	(ug/L)	3	30	<12.5	<5.0	<50.0
2-Chlorotoluene	(ug/L)	NS	NS	<12.5	<5.0	<50.0
4-Chlorotoluene	(ug/L)	NS	NS	<5.3	<2.1	<21.4
1,2-Dibromo-3-chloropropane	(ug/L)	0.02	0.2	<54.1	<21.6	<216
Dibromochloromethane	(ug/L)	6	60	<12.5	<5.0	<50.0
1,2-Dibromoethane (EDB)	(ug/L)	0.005	0.05	<4.4	<1.8	<17.8
Dibromomethane	(ug/L)	NS	NS	<10.7	<4.3	<42.7
1,2-Dichlorobenzene	(ug/L)	60	600	<12.5	<5.0	<50.0
1,3-Dichlorobenzene	(ug/L)	120	600	<12.5	<5.0	<50.0
1,4-Dichlorobenzene	(ug/L)	15	75	<12.5	<5.0	<50.0
Dichlorodifluoromethane	(ug/L)	200	1,000	<5.6	<2.2	<22.4
1,1-Dichloroethane	(ug/L)	85	850	<6.0	<2.4	<24.2
1,2-Dichloroethane	(ug/L)	0.5	5	<4.2	<1.7	<16.8
1,1-Dichloroethene	(ug/L)	0.7	7	<10.3	<4.1	<41.0
1,2-Dichloropropane	(ug/L)	0.5	5	<5.8	<2.3	<23.3
1,3-Dichloropropane	(ug/L)	NS	NS	<12.5	<5.0	<50.0
2,2-Dichloropropane	(ug/L)	NS	NS	<12.1	<4.8	<48.4
1,1-Dichloropropene	(ug/L)	NS	NS	<11.0	<4.4	<44.1
cis-1,3-Dichloropropene	(ug/L)	0.04	0.4	<12.5	<5.0	<50.0
trans-1,3Dichloropropene	(ug/L)	0.04	0.4	<5.7	<2.3	<23.0
Diisopropyl ether	(ug/L)	NS	NS	<12.5	<5.0	<50.0
Hexachloro-1,3-butadiene	(ug/L)	NS	NS	<52.6	<21.1	<211
Isopropylbenzene	(ug/L)	NS	NS	155	105	269
p-Isopropyltoluene	(ug/L)	NS	NS	<12.5	11.0	<50.0
n-Propylbenzene	(ug/L)	NS	NS	455	267	885
Styrene	(ug/L)	10	100	<12.5	<5.0	<50.0
1,1,1,2-Tetrachloroethane	(ug/L)	7	70	<4.5	<1.8	<18.1
1,1,2,2-Tetrachloroethane	(ug/L)	0.02	0.2	<6.2	<2.5	<24.9
1,2,3-Trichlorobenzene	(ug/L)	NS	NS	<53.3	<21.3	<213
1,2,4-Trichlorobenzene	(ug/L)	14	70	<55.2	<22.1	<221
1,1,1-Trichlorethane	(ug/L)	40	200	<12.5	<5.0	<50.0
1,1,2-Trichlorethane	(ug/L)	0.5	5	<4.9	<2.0	<19.7
Trichlorofluoromethane	(ug/L)	NS	NS	<4.6	<1.8	<18.5
1,2,3-Trichloropropane	(ug/L)	12	60	<12.5	<5.0	<50.0

Notes:
NS = No standard established
-- = Not analyzed for parameter
NR = Not Reported

ITALICS indicates exceedance of NR 140.10 Preventive Action Limit
BOLD indicates exceedance of NR 140.10 Enforcement Standard

LEGEND

MW-14 MONITORING WELL / PIEZOMETER

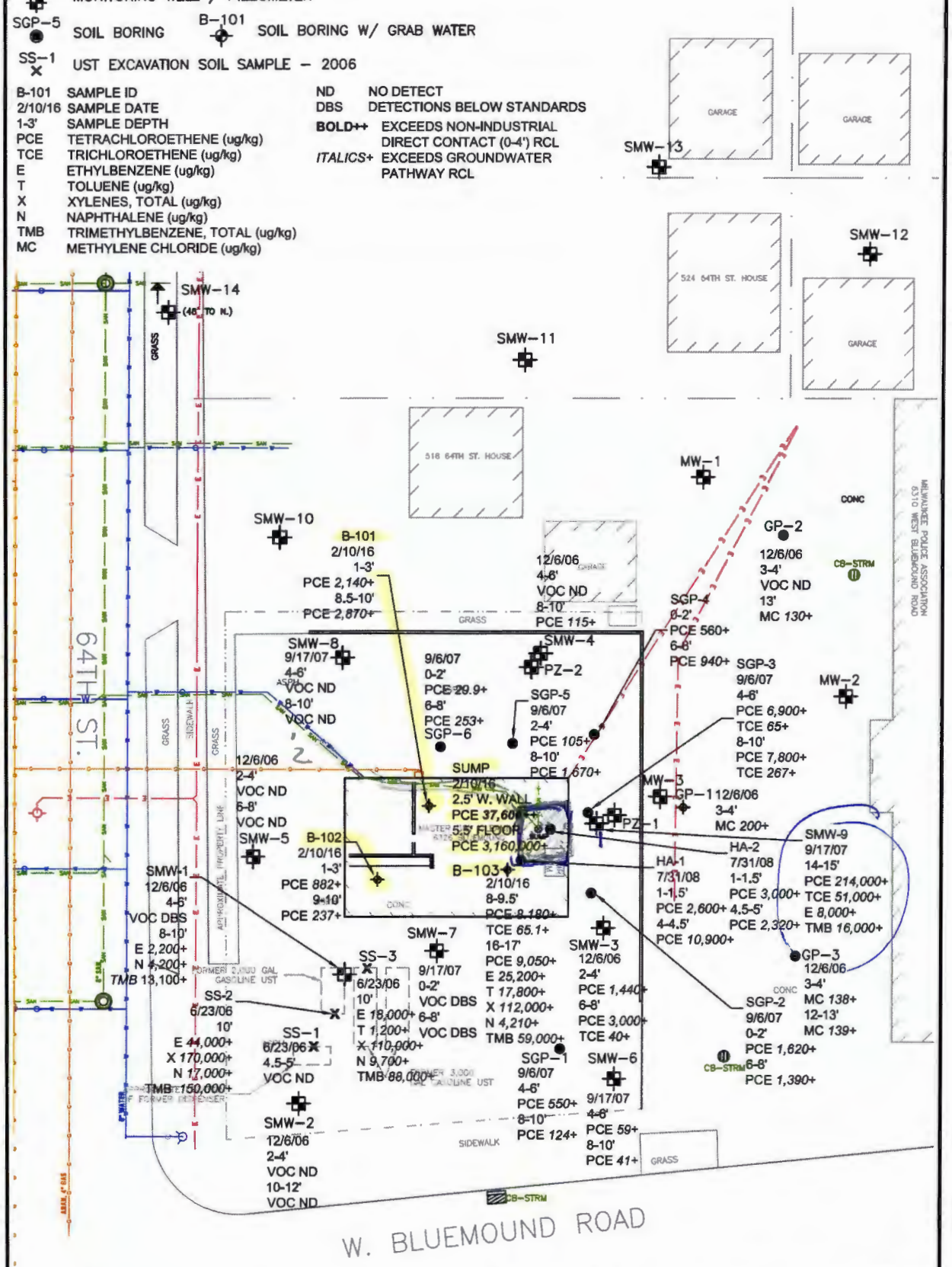
SGP-5 SOIL BORING

B-101 SOIL BORING W/ GRAB WATER

SS-1 UST EXCAVATION SOIL SAMPLE – 2006

B-101	SAMPLE ID
2/10/16	SAMPLE DATE
1-3'	SAMPLE DEPTH
PCE	TETRACHLOROETHENE (ug/kg)
TCE	TRICHLOROETHENE (ug/kg)
E	ETHYLBENZENE (ug/kg)
T	TOLUENE (ug/kg)
X	XYLENES, TOTAL (ug/kg)
N	NAPHTHALENE (ug/kg)
TMB	TRIMETHYLBENZENE, TOTAL (ug/kg)
MC	METHYLENE CHLORIDE (ug/kg)

ND	NO DETECT
DBS	DETECTIONS BELOW STANDARDS
BOLD++	EXCEEDS NON-INDUSTRIAL DIRECT CONTACT (0-4') RCL
ITALICS+	EXCEEDS GROUNDWATER PATHWAY RCL



N W E S

20 0 20

GRAPHIC SCALE IN FEET

FEHR GRAHAM ENGINEERING & ENVIRONMENTAL ILLINOIS IOWA WISCONSIN

MASTER DRYCLEANING INC.
6326 W. BLUEMOUND RD.
WAUWATOSA, WI 53213

DRWN: MKH DATE: 1/17/14 APPD: XXX

TITLE: SITE SOIL CHEMISTRY

BRRTS: 02-41-545142
JOB NO.: 15-1209
PLOT DATE: 3/1/16

FIGURE: 1

G:\(30)\15\15-1209 Master Dry\Exhibits\Drawing-Master-15.1209.dwg, FIG 5-SOIL CHEM -SITE

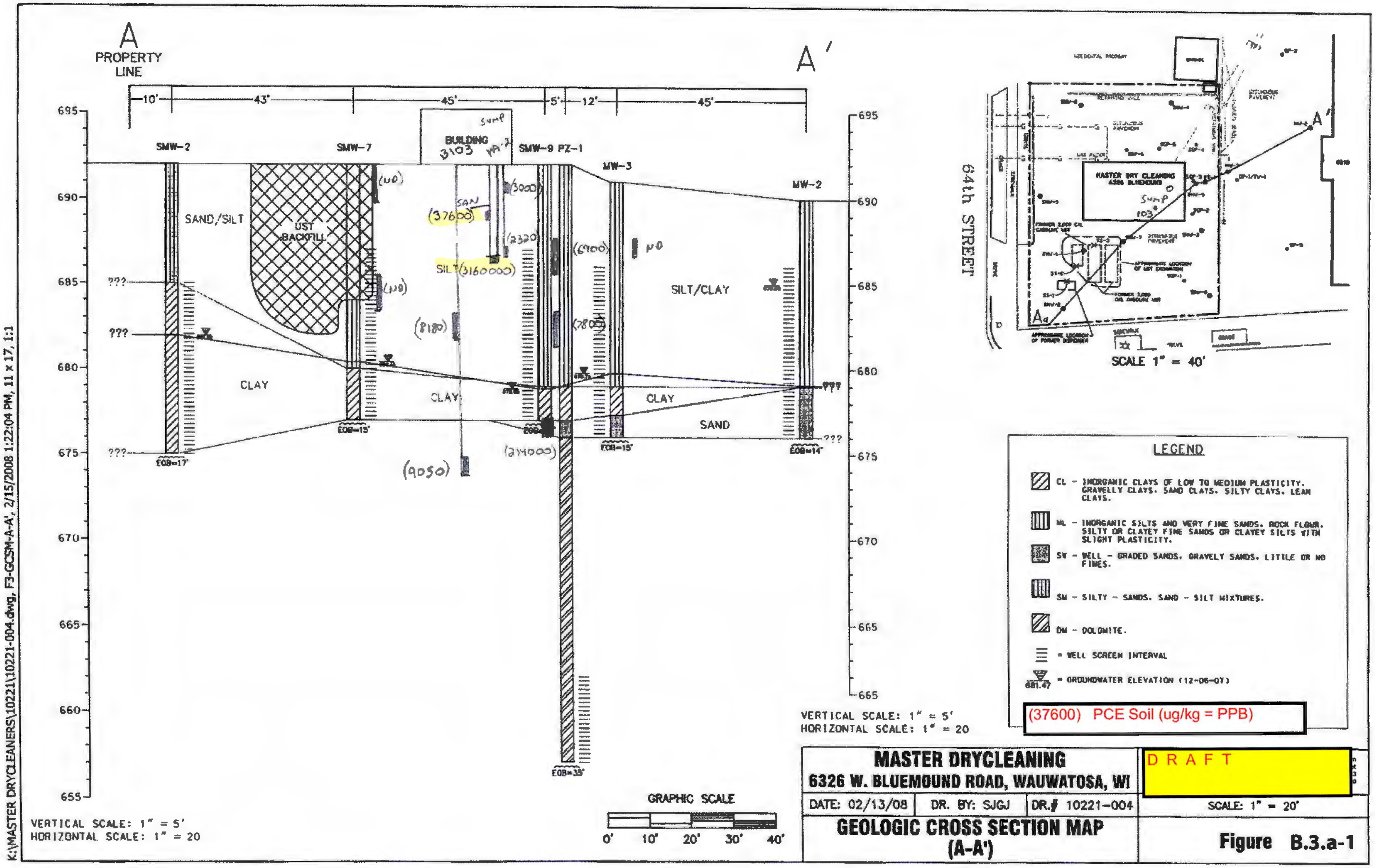

K:\MASTER DRYCLEANERS\10221\10221-004.dwg, F3-GCSM-A-A', 2/15/2008 1:22:04 PM, 11 x 17, 1:1
A
PROPERTY LINE
A'
10'
43'
45'
5'
12'
45'
BUILDING
SMW-2
SMW-7
SMW-9 PZ-1
MW-3
MW-2
SAND/SILT
UST BACKFILL
CLAY
SILT/CLAY
SAND
(37600)
SILT (3160000)
(9050)
(214000)
EOB=17'
EOB=15'
EOB=15'
EOB=14'
EOB=35'
695
690
685
680
675
670
665
660
655
64th STREET
MASTER DRY CLEANING
SCALE 1" = 40'
LEGEND
CL - INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SAND CLAYS, SILTY CLAYS, LEAN CLAYS.
ML - INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
SW - WELL - GRADED SANDS, GRAVELY SANDS, LITTLE OR NO FINES.
SM - SILTY - SANDS, SAND - SILT MIXTURES.
DM - DOLOMITE.
= WELL SCREEN INTERVAL
= GROUNDWATER ELEVATION (12-06-07)
(37600) PCE Soil (ug/kg = PPB)
VERTICAL SCALE: 1" = 5'
HORIZONTAL SCALE: 1" = 20
GRAPHIC SCALE
0' 10' 20' 30' 40'
MASTER DRYCLEANING
6326 W. BLUEMOUND ROAD, WAUWATOSA, WI
DATE: 02/13/08
DR. BY: SJGJ
DR.# 10221-004
SCALE: 1" = 20'
DRAFT
GEOLOGIC CROSS SECTION MAP (A-A')
Figure B.3.a-1

TABLE 1A: Injection Inside Remedial Action Cost Estimate
March 7, 2016
Master Drycleaner, 6326 W. Bluemound Road, Wauwatosa, WI

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Cost
CONSULTING SERVICES				
Task 0: Project Management (addl actions)				
Sr. Hydrogeologist or Engineer	$100.00	10	hour	$1,000.00
Administrative	$60.00	5	hour	$300.00
Subtotal Task				**$1,300.00**
Task D: Supplemental Chemical Treatment Beneath Building				
Sr. Hydrogeologist (PM and letter rpt)	$100.00	6	hour	$600.00
Field Technician 2 days	$70.00	16	hour	$1,120.00
Field Technician (rpt)	$70.00	6	hour	$420.00
Four Gas Meter	$150.00	1	day	$150.00
PID Meter	$100.00	1	day	$100.00
Field Supplies	$20.00	1	day	$20.00
Subtotal Task				**$2,410.00**
Task F: One Month Soil Vapor Extraction				
Install,Monitor, Six Site Visits, Abandon, Lab Samples, Email reports, Data Eval, Final Report				
Sr. Hydrogeologist (Install, Design)	$100.00	12	hour	$1,200.00
Sr. Hydrogeologist (PM and letter rpt)	$100.00	12	hour	$1,200.00
Field Technician Install, Dismantle	$70.00	16	hour	$1,120.00
Field Technician Four mid visits	$70.00	20	hour	$1,400.00
Field Technician (rpt)	$70.00	6	hour	$420.00
Drafting	$60.00	6	hour	$360.00
Draeger Tubes	$300.00	1	lump	$300.00
Blower Rental	$500.00	1	month	$500.00
Duct, PVC Well	$100.00	1	lump	$100.00
Digital Manometer	$25.00	6	day	$150.00
PID Meter	$100.00	6	day	$600.00
Field Supplies	$50.00	1	day	$50.00
Subtotal Task				**$7,400.00**
CONSULTING SERVICES TOTAL				**$11,110.00**
CONTRACTOR				
Task D: Supplemental Chemical Treatment Beneath Building				
Environmental Contractor				
Mobilization	900	1	lump	$900.00
inject borings	1300	1	day	$1,300.00
Inject Crrew and Mix Equipment	2350	1	day	$2,350.00
Decon	150	0.5	lump	$75.00
Abandon	0.6	60	feet	$36.00
Chemical Contractor				
EZVI-CH4	2585	1	drum	$2,585.00
Shipping	275	1	Ground	$275.00
Subtotal Task				**$7,521.00**
Task F: One Month Soil Vapor Extraction				
Install,Monitor, Six Site Visits, Abandon, Lab Samples, Email reports, Data Eval, Final Report				
Laboratory				
Vapor Analytical	$275.00	2	each	$550.00
Subtotal Task				**$550.00**
CONTRACTOR SERVICES TOTAL				**$8,071.00**
TOTAL ESTIMATED COST				**$19,181.00**

Master Drycleaners Inc. approves of the site remediation costs described above and authorizes Fehr Graham to proceed with these activities. Fehr Graham shall not exceed any of these costs without receiving written authorization. The terms and conditions of the original contract for this project will apply to these services.

Master Cleaners Inc. Date

This approval does not guarantee the reimbursement of costs. Final determination regarding the eligibility of costs will be determined at the time of claim review.

Mr. J. Hnat, WDNR Project Manager Date

Kendrick A. Ebbott

Mr. Kendrick A. Ebbott, Fehr Graham 10-Mar-16 Date

REMEDIAL ACTION CHANGE ORDER # 3: March 10, 2016

Master Cleaners, Wauwatosa, WI, BRRTS # 02-41-545142

ITEM DESCRIPTION	Unit Price	Quantity	Units	Total Addl Cost		Prior Appvd Cost		Total Cost
ADDITIONAL REQUESTED SERVICES								
CONSULTANT SERVICES								
Task 0: Project Management (3 years)	See Table 1A			1300		4,420.00		5,720.00
Task A: Removal Dry Clean Machine and				0		0.00		0.00
Task B: Geoprobe Borings Inside Bldg				0		1,685.00		1,685.00
Task C: Subslab Vapor Sample and Analysis				0		1,765.00		1,765.00
Task D Floor Drain Removal, Chem Treat Sub-Bldg	See Table 1A			2410		2,390.00		4,800.00
Task E Vapor Mit System and Documntation				0		1,460.00		1,460.00
Task F One Month Soil Vapor Extraction	See Table 1A			7400		0.00		7,400.00
Task 1: RA Report, WPDES Permit, Notifications, Access Agrmnt				0		5,280.00		5,280.00
Task 2: Prelnj Baseline GW Sampling (18 wells) Indoor Util Locate				0		3,087.00		3,087.00
Task 3 Injection				0		10,760.00		10,760.00
Task 4 Post Inj Monitor 2 weeks Field, 4 Monhs Lab GW, Field Vapor				0		3,431.00		3,431.00
Task 5 Inj Doc Report				0		2,880.00		2,880.00
Task 6: GW Monitoring 6 events at 12 wells				0		8,718.00		8,718.00
Task 7 GW Monitor Status				0		$ 4,140.00		4,140.00
Task 8 Closure Request w DNR Fees				0		$ 6,120.00		6,120.00
Task 9 Well Abandonment				0		$ 2,450.00		2,450.00
RA Consulting				11110		$58,586.00		$69,696.00
CONTRACTOR SERVICES								
Task A: Removal Dry Clean Machine and Chemicals	Not Eligible			0		0		0
Task B: Geoprobe Borings Inside Bldg								
Driller				0		1391		1,391.00
Lab				0		462		462.00
Task C: Subslab Vapor Sample and Analysis				0		576		576.00
Task D Floor Drain Removal, Chem Treat Sub-Bldg	See Table 1A							
Contractor				4661		7550		12,211.00
Chemical				2860		637.5		3,497.50
Lab				0		286		286.00
Task E Vapor Mit System and Documntation				0		2500		2,500.00
Task F One Month Soil Vapor Extraction	See Table 1A	2	275	550		0		550.00
				0				
Task 2: Prelnj Baseline GW Sampling (18 wells) Indoor Util Locate								
Lab				0		900.00		900.00
Private Locate				0		400.00		400.00
Task 3 Injection								
Geoprobe Injection 4 day				0		6,735.00		6,735.00
Chemical Supplier and Mix				0		7,480.50		7,480.50
Lab Requd by Inject Permit				0		508.00		508.00
Task 4 Post Inj Monitor 2 weeks Field, 4 Monhs Lab GW, Field Vapor								
Lab				0		900.00		900.00
Task 6: GW Monitoring 6 events at 12 wells								
lab				0		5,100.00		5,100.00
RA Contractor				$8,071.00		$35,426.00		$43,497.00
TOTALS				$19,181.00		$94,012.00		$113,193.00

TOTAL REQUESTED ADDITIONAL FUNDS	$19,181.00

TOTAL REMEDIAL ACTION BUDGET	Consulting	$69,696
	Commodity	$43,497
	TOTAL	$113,193

Master Drycleaners Inc. approves of the site remediation costs described above and authorizes Fehr Graham to proceed with these activities. Fehr Graham shall not exceed any of these costs without receiving written authorization. The terms and conditions of the original contract for this project will apply to these services.

Master Cleaners Inc. Date

This approval does not guarantee the reimbursement of costs. Final determination regarding the eligibility of costs will be determined at the time of claim review.

Mr. J. Hnat, WDNR Project Manager Date

Mr. Kendrick A. Ebbott, Fehr Graham Date

Site Name: *Master Drycleaning*
BRRTS #: *02-41-545142*
Type of Action: *Remedial Action*

100, 70, 60, 60

Dry Cleaner Environmental Response Program
Reimbursement Cost Detail Linking Spreadsheet Form 4400-214D (R 05/12)

TASKS	BUDGET						INVOICES												DERF COST BREAKOUT (this claim)										
Bid / Budgeted Description	Bid / Budgeted Amount	RA CO # 1, 1/19/16	INSERT	Total Approved Budget	Claims (If applicabl	REMAINING BUDGET	Fehr Graham	Fehr Graham	Pace	Fehr Graham	Fehr Graham	GLS Utility LLC	Provectus	Cabeno Env	Fehr Graham	Pace	Fehr Graham	Total Invoiced Costs	A Soil Investigation	B Soil Remediation	C Groundwater Investigation	D Groundwater Remediation	E Air/Vapor Investigation	F Air/Vapor Remediation	G Lab & Other Analysis	H Miscellaneous Costs	Budget Remaining Use (-) to indicate cost over-run	% Task Complete, Remarks
Invoice Date							7/31/2015	9/30/2015	10/6/2015	10/31/2015	11/30/2015	11/30/2015	12/2/2015	12/4/2015	12/31/2015	12/15/2015	1/31/2016												
Invoice Number							66895	67749	1540010961	68129	68743	5771	10088	5191	69014	1540014164	69474												
Consultant Costs																												Task % Complete
SI by Sigma																												100% Complete
Task 0: Project Management (3 years)	3,120.00	1,300.00	$ -	$ 4,420.00		$ 3,410.00	$ 30.00	$ 140.00		$ 50.00							$ 790.00	$ 1,010.00				$ 1,010.00					$ 3,410.00	30% Complete
Task A: Remove Dry Clean Machine and Residual Chemicals	0.00	0.00		$ -		$ -												$ -									$ -	0% Complete
Task B: Geoprobe Borings Inside Bldg	0.00	1,685.00		$ 1,685.00		$ 1,685.00												$ -	$ -								$ 1,685.00	0% Complete
Task C Subslab Vapor Sample and Analysis	0.00	1,765.00		$ 1,765.00		$ 1,765.00												$ -					$ -				$ 1,765.00	0% Complete
Task D : Floor Drain Remval, Chem Treat Sub Building	0.00	2,390.00		$ 2,390.00		$ 2,390.00												$ -		$ -							$ 2,390.00	0% Complete
Task E Bapor Mitigation System and Documentation	0.00	1,460.00		$ 1,460.00		$ 1,460.00												$ -									$ 1,460.00	0% Complete
Task 1: RA Report, WPDES Permit, Notifications, Access Agrmnt	5,280.00			$ 5,280.00		$ 378.00	$ 750.00	$ 3,220.00		$ 650.00	$ 282.00							$ 4,902.00				$ 4,902.00					$ 378.00	90% Complete
Task 2: Prelnj Baseline GW Sampling (18 wells) Indoor Util Locate	3,087.00			$ 3,087.00		$ 296.00		$ 2,551.00		$ 240.00								$ 2,791.00				$ 2,791.00					$ 296.00	100% Complete
Task 3 Injection	10,760.00			$ 10,760.00		$ 59.97					$ 3,003.00				$ 5,917.03		$ 1,780.00	$ 10,700.03				$ 10,700.03					$ 59.97	100% Complete
Task 4 Post Inj Monitor 2 weeks Field, 4 Months Lab GW, Field Vapor	3,431.00			$ 3,431.00		$ 3,431.00												$ -			$ -						$ 3,431.00	25% Complete
Task 5 Inj Doc Report	2,880.00			$ 2,880.00		$ 710.00					$ 60.00						$ 2,110.00	$ 2,170.00				$ 2,170.00					$ 710.00	90% Complete
Task 6: GW Monitoring 6 events at 12 wells	8,718.00			$ 8,718.00		$ 8,718.00												$ -			$ -						$ 8,718.00	0% Complete
Task 7 GW Monitor Status	$ 4,140.00			$ 4,140.00		$ 3,660.00				$ 480.00								$ 480.00				$ 480.00					$ 3,660.00	0% Complete
Task 8 Closure Request w DNR Fees	$ 6,120.00			$ 6,120.00		$ 6,120.00												$ -									$ 6,120.00	0% Complete
Task 9 Well Abandonment	$ 2,450.00			$ 2,450.00		$ 2,450.00												$ -									$ 2,450.00	0% Complete
				$ -														$ -									$ -	
Consultant Cost Total	*$ 49,986.00*	*$ 8,600.00*	*$ -*	$ 58,586.00	$ -	$ 36,532.97	$ 780.00	$ 5,911.00	$ -	$ 1,420.00	$ 3,345.00	$ -	$ -	$ -	$ 5,917.03	$ -	$ 4,680.00	$ 22,053.03									$ 36,532.97	
Sub-Contractor Costs																												
Service	$ -		$ -	$ -														$ -										
Task A: Remove Dry Clean Machine and Residual Chemicals	0.00	0.00		$ -		$ -																					$ -	0% Complete
Task B: Geoprobe Borings Inside Bldg	0.00	1,391.00		$ 1,391.00		$ 1,391.00																					$ 1,391.00	0% Complete
Lab		462.00		$ 462.00		$ 462.00												$ -							$ -		$ 462.00	0% Complete
Task C Subslab Vapor Sample and Analysis	0.00	576.00		$ 576.00		$ 576.00												$ -									$ 576.00	0% Complete
Task D : Floor Drain Remval, Chem Treat Sub Building	0.00	7,550.00		$ 7,550.00		$ 7,550.00												$ -		$ -							$ 7,550.00	0% Complete
Chemical		637.50		$ 637.50		$ 637.50																					$ 637.50	0% Complete
Lab		286.00		$ 286.00		$ 286.00												$ -							$ -		$ 286.00	0% Complete
Task E Bapor Mitigation System and Documentation	0.00	2,500.00		$ 2,500.00		$ 2,500.00																					$ 2,500.00	0% Complete
						$ -																						
Task 2: Prelnj Baseline GW Sampling (18 wells) Indoor Util Locate																		$ -										
Lab	900.00			$ 900.00		$ (50.00)			$ 950.00									$ 950.00							$ 950.00		$ (50.00)	100% Complete
Private Locate	400.00			$ 400.00		$ 22.00						$ 378.00						$ 378.00				$ 378.00					$ 22.00	100% Complete
Task 3 Injection																												
Geoprobe Injection 4 day	6,735.00			$ 6,735.00		$ (2,925.00)								$ 9,660.00				$ 9,660.00				$ 9,660.00					$ (2,925.00)	100% Complete, took one more day, bid higher than budgeted
Chemical Supplier and Mix	7,480.50			$ 7,480.50		$ 521.75							$6,958.75					$ 6,958.75				$ 6,958.75					$ 521.75	100% Complete
Lab Requd by Inject Permit	0.00	508.00		$ 508.00		$ 254.00										$ 254.00		$ 254.00							$ 254.00		$ 254.00	100% Complete
																		$ -										
Task 4 Post Inj Monitor 2 weeks Field, 4 Months Lab GW, Field Vapor																												
Lab	900.00			$ 900.00														$ -									$ 900.00	0% Complete
Task 6: GW Monitoring 6 events at 12 wells				$ -		$ -												$ -									$ -	
lab	5,100.00			$ 5,100.00		$ -												$ -									$ 5,100.00	0% Complete
																		$ -										
																		$ -										
Sub-Contractor Cost Total	*$ 21,515.50*	*$ 13,910.50*	*$ -*	$ 35,426.00	$ -		$ -	$ -	$ 950.00	$ -	$ -	$ 378.00	$ 6,958.75	$ 9,660.00	$ -	$ 254.00	$ -	*$ 18,200.75*									*$ 17,225.25*	
DERF ELIGIBLE SUB-TOTALS	$ 71,501.50	$ 22,510.50	$ -	$ 94,012.00	$ -		$ 780.00	$ 5,911.00	$ 950.00	$ 1,420.00	$ 3,345.00	$ 378.00	$ 6,958.75	$ 9,660.00	$ 5,917.03	$ 254.00	$ 4,680.00	$ 40,253.78	$ -	$ -	$ -	$ 39,049.78	$ -		$ 1,204.00	$ -	$ 53,758.22	
Non-DERF Eligible Expenses																												
City Wauwatosa Permit											$ 368.00							$ 368.00									$ 368.00	
DNR Injection Permit Fee								$ 700.00																			$ 700.00	
Non-DERF Cost Total					$ -		$ -	$ 700.00	$ -	$ -	$ 368.00	$ -	$ -	$ -	$ -	$ -	$ -	*$ 1,068.00*									*$ 1,068.00*	
INVOICE GRAND TOTAL					$ -		$ 780.00	$ 6,611.00	$ 950.00	$ 1,420.00	$ 3,713.00	$ 378.00	$ 6,958.75	$ 9,660.00	$ 5,917.03	$ 254.00	$ 4,680.00	$ 41,321.78										
											* See Note																	
Check Numbers							8196	8223	8189	8216	8243	8244	8246	8245	8270	8276	8293											
							10/12/2015	11/21/2015	10/10/2015	11/14/2015	12/13/2015	12/13/2015	12/13/2015	12/13/2015	1/17/2016	1/24/2016	2/14/2016											

Inject Permit Inelig

* Note - Credit later by City Tosa for $250, taken off of FG future invoice

Total DERF Eligible Costs This Claim **$ 40,253.78**

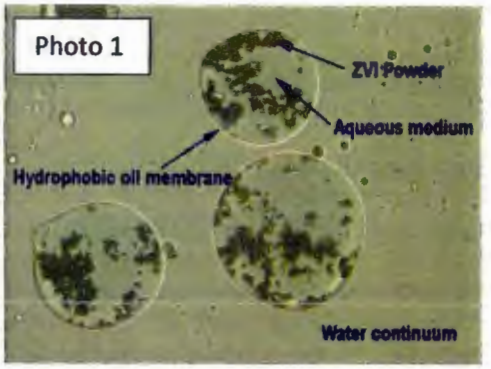
Provectus ENVIRONMENTAL PRODUCTS™

Technical Data Sheet

EZVI-CH4™ Antimethanogenic ISCR DNAPL Technology

TECHNOLOGY DESCRIPTION

In 2003, scientists at the University of Central Florida (UCF) and the National Aeronautics and Space Administration's Kennedy Space Center (NASA-KSC) introduced Emulsified Zero-Valent Iron (EZVI) as a patented technology (Reinhart *et al.*, 2003) that combines food grade vegetable oil (VO) with a surfactant, elemental iron and water in a specific physical structure to enable direct DNAPL destruction utilizing a combination of abiotic and biotic processes (**Photograph 1**). Since then, millions of pounds of EZVI have been used at sites throughout the United States and in Canada and Australia.

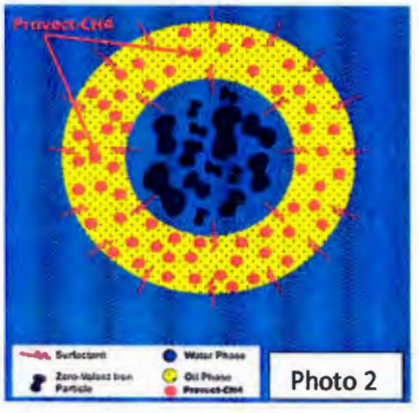


In 2014, Provectus introduced Provect-CH4™ which is a food-grade, natural source of Monacolin K (otherwise known as Lovastatin) and other statins used to prevent methane (CH_4) production by inhibiting the growth and proliferation of methanogenic Archaea (Scalzi *et al,* 2013, 2014). In environmental remediation applications, it can be used as a supplement to conventional enhanced reductive dehalogenation (ERD) and *in situ* chemical reduction (ISCR) amendments rendering them safer and more effective. These include:

- [Emulsified] Oils / Lecithins
- Sugars (lactate, dextrose, glucose)
- Other carbon sources (*e.g.,* molasses, whey)
- Plant based carbon (*e.g.,* cellulose and hemi-cellulose)
- Carbon + ZVI amendments (conventional ISCR reagents)

Antimethanogenic EZVI-CH4™ uniquely combines the proven chemistry of National Aeronautics and Space Administration's (NASA) EZVI Technology with the selective power of Provectus' Provect-CH4™ methanogen inhibitors to yield a genuinely new, antimethanogenic DNAPL technology that is capable of direct *in situ* destruction of source materials (**Photograph 2**). It provides:

- Provect-CH4™ methanogenic inhibitor (blended within fermentable H donor component of EZVI)
- Matching physical chemistry (hydrophobic) enables complete miscibility (contact) with DNAPLs
- Sequestration (phase partitioning) of hydrophobic contaminants (*e.g.,* halogenated hydrocarbons) into outer liquid oil membrane
- Mass flux reduction from source areas due to dramatic decrease in water solubility of contaminants
- Food grade soybean oil as a slow release, long term H donor
- Powdered, highly reactive, ZVI (< 5 µm size distribution) encapsulated within water/VO micelles (not in direct contact with ground water) will only react with contaminants that are hydrophobic



- Abiotic reactions primarily occur in the aqueous interior of emulsion where ZVI is suspended in water
- Biotic reactions primarily occur on the exterior of the emulsion and down gradient (hydrologically) of the EZVI implementation zone

WHAT IS THE PROBLEM WITH METHANE?

There are recognized benefits to methanogens and of limited methanogenesis. For example, i) methanogens are known to play important roles in synergistic microbial ecology, ii) their metabolic activity can help maintain anoxic conditions in treatment zones (through seasonal changes), and iii) the activity of methane mono-oxygenases and other enzymes can stimulate co-metabolic activity of TCE/DCE/VC in redox-recovery zones. Hence, limited production of methane is part of a healthy ERD/ISCR application. However, excessive methane production can become dangerous and represents a costly waste of amendment.

Cost and Efficiency Issues: Production of methane is a direct indication that hydrogen generated from the electron donor amendments was used by methanogens instead of the target microbes (*e.g., Dehalococcoides* spp.), substantially reducing application efficiency. **Table 1** (below) presents a site example where hydrogen demand is calculated for a highly aerobic and oxidized source area measuring approximately 1,850 cubic yards. Hydrogen demand for complete dechlorination of all PCE and TCE mass to ethene within this source area example, including both adsorbed and dissolved contaminants, is less than the amendment consumed to generate 20 mg/L of methane. The same is true of reducing all dissolved oxygen, nitrate, sulfate, and bio-available iron and manganese competing electron acceptors within the hypothetical treatment zone. So, even though this example site is highly oxidized with relatively high total concentrations of PCE and TCE, generating just 20 mg/L of methane constitutes greater than 33% of the total amendment consumption based on moles of H2.

Table 1: H Demand for Complete Dechlorination of PCE/TCE in Hypothetical Source Area.

Constituent	Groundwater Concentration (mg/L)	Molecular Weight (g/mol)	Moles of H_2 to Reduce Mole Analyte	Moles of H_2 Acceptor in Treatment Area
Contaminant Electron Acceptors (To End Product Ethene)				
Tetrachloroethene (PCE)	10.0	165.8	4	1,393
Trichloroethene (TCE)	7.0	131.4	3	364
cis-1,2-Dichloroethene (cDCE)	0.0	96.9	2	0
Vinyl Chloride (VC)	0.0	62.5	1	0
			Complete Dechlorination (Soil+Groundwater) Subtotal	**1,757**
Native Electron Acceptors				
Dissolved Oxygen	9.0	32	2	199
Nitrate (as Nitrogen)	9.0	62	3	682
Sulfate	50.0	96.1	4	736
Fe^{+2} Formation from Fe^{+3}	20.0	55.8	0.5	63
Mn^{+2} Formation from Mn^{+4}	10.0	54.9	1	64
			Baseline Geochemistry Subtotal	**1,745**
Hydrogen Waste for Methane Formation				
Methane Formed	20.0	16	4	1,769
			Initial Treatment Area Hydrogen Usage	**5,271**

Potential Health and Safety Issues: Methane is considered to be a major greenhouse gas. It is explosive, with an LEL of 5% and an UEL of 15%. As a result of the microbial fermentation process, methane will be produced in most situations following the addition of any conventional ERD or ISCR amendment. Excessive and extended production of methane can result in elevated in groundwater concentrations (as high as 1,000 ppm have been reported) which can lead to accumulation in soil gas subsequently impacting indoor air. While this is perhaps more relevant in urban settings where methane can accumulate in basements, under slabs/foundations and/or migrate along utility corridors, excessive methane production has also been observed in more rural settings and other open spaces.

New and Emerging Regulatory Issues: State specific regulations for methane in groundwater have been promulgated, with others pending for soil gas and indoor air. For example, current regulations for methane in groundwater vary from *ca.* 10 to 28 mg CH_4/L (Indiana Department of Environmental Management, 2014). Notably, several ERD projects which intended to use liquid carbon (emulsified oils) sources have failed to receive regulatory approval due to issues associated with excessive production of methane during previous technology applications (Personal Communication - States of California, Indiana, Florida, Michigan, Minnesota, North Carolina). As a result, many remedial practitioners proactively design contingencies for conventional ERD/ISCR implementation in the event that methane exceeds a threshold level ranging from 1 to 10 ppm groundwater. These contingencies often entail expensive and extensive systems for treating methane in soil gas/vapor captured via SVE systems.

Sustainability Issues: Uncontrolled methanogenesis can be interpreted (by some) to represent an avoidable contribution to greenhouse gas emissions hence its active control can have a positive impact on one's overall sustainability index (see example below).

What is The Problem With Methane?

- **Methane is a major greenhouse gas***
  - ✓ Pound for pound, the comparative impact of CH_4 on climate change is over 20x greater than CO_2 over a 100-year period.
  - ✓ 60% of CH_4 emissions come from human activities (Industry, Animal agriculture)
  - ✓ 40% of CH_4 emissions come from natural sources (mainly wetlands, microbes, termites, oceans, sediments, volcanoes, and wildfires).
- **Impacts on Sustainable Remedial Actions**
  - ✓ 100,000 lbs standard ERD / conventional ISCR substrate added to Site
  - ✓ Minimum 30% waste as methane = 30,000 lbs CH_4
  - ✓ 20x CO_2 impact = 600,000 lbs CO_2 equivalence
  - ✓ 10 projects / year = use of Provectus' antimethanogenic compounds can reduce CO_2 emission by > 6,000,000 lbs annually

* epa.gov/climatechange/ghgemissions/gases/ch4.html

EZVI-CH4™ PRIMARY FEATURES

EZVI-CH4™ is the only technology engineered to directly destroy DNAPL while significantly decreasing the wasteful consumption of hydrogen donor by actively controlling the production of methane. The benefits of the combined technologies are notable:

- More Cost Efficient: By inhibiting the growth and proliferation of methane producing Archaea, at least a 30% increase in hydrogen available for dissolved phase biotic dehalogenation processes will be realized.
- More Effective: EZVI-CH4™ is fully miscible (due to hydrophobic nature) with DNAPL source materials. This miscibility provides significant improvement in contacting, and therefore destroying, organic contaminants. The ZVI utilized in EZVI-CH4™ is protected within a micellular structure that only enables it to react with contaminants that have hydrophobic properties.
- Safer: Methane is explosive with an LEL of 5% and an UEL of 15%. Production of methane will result from the addition of any conventional ERD or ISCR amendment: excessive and extended production of methane can result in elevated in groundwater concentrations (>100 ppm have been reported) which can lead to accumulation in soil gas subsequently impacting indoor air. State specific guidelines for methane in groundwater have been published, with others pending for soil gas and indoor air.
- Reduced Potential for Air Exceedances: Excessive methane production can desorb contaminants from the DNAPL and induce their migration from the source area. This can be especially problematic immediately after the remedial construction phase.
- Green and Sustainable Technology: Formulated using renewable resources (plant extracts), utilizes natural processes for contaminant destruction; can significantly reduce carbon footprint of remediation projects by decreasing O&M activities associated with the operation of P&T systems for hydraulic control of source contamination .
- Patented Technologies: Technology end users and their clients are fully protected from all Patent and other legal issues.
- Ease of Use:
    - Product is injected directly into delineated source areas
    - Custom emulsion formulations available to address unique situations
    - Product is delivered to the site in an injection ready state
    - No laborious material transfers and dilutions
    - EZVI-CH4™ formulation is site specific
    - Successfully implemented in wide range of soil types (*e.g.* clays, sands, saprolites, fractured bedrock)
    - Avoids cost and need for contingency planning to manage excessive methane production associated with ISCR/ERD remedial approaches (SVE/AS off gas treatment)
- Longevity (> 3 years): EZVI has been shown to be effective in providing source material destruction and enhanced biological reactions for periods exceeding 4 years during field applications.
- Mass Flux Reduction: The lipophilic nature of the VO component of the EZVI emulsion acts as a co-solvent for the DNAPL to phase partition into, thereby dramatically lowering the water solubility of the DNAPL materials and providing significant MASS FLUX REDUCTION from source areas (~ 1 order of magnitude within < 12 months).
- Cost Competitive: At a list price of $3.00/lb, or $26.60/USG (volume discounts will apply) for EZVI-CH4™ containing 38% (weight) carbon + 10% (weight) micron ZVI + 2% (weight) methane inhibitor, this is the most cost efficient way of procuring these technologies. When all factors are considered EZVI-CH4™ is an excellent value that will greatly benefit your customers.

APPLICATION GUIDELINES:

Using our combined experiences from the past 25 years successfully applying ISCR (both biological and abiotic) at hundreds of sites throughout the world, we developed an application range that incorporates site specific analytical data as well as knowledge of successful application rates from similar sites under similar conditions. Typically our successful application dose ranges from *ca.* 1 to 2 lbs of amendment per cubic foot of aquifer for injections (10% - 15% assuming 20% porosity), dependent on DNAPL/source material conditions (*e.g.,* sorbed vs free phase). The amount of EZVI-CH4™ needed to destroy a DNAPL at a particular source area can be determined as follows:

- Targeting injection within groundwater isoconcentration lines equal to or greater than 10% of the water solubility of the parent compound (*e.g.* for TCE ≥ ~ 120 ppm);
- Once we have the soil volume associated with the above isoconcentration limit at a site, we typically target approximately 10 - 15% of the effective porosity with the EZVI technology at sites with permeable soils (*e.g.* sands/silts);
- For sites with tighter soils we work directly with the implementer to understand their implementation process and we determine EZVI volume based on the site specific implementation process;
- The Provect-CH4™ component of EZVI-CH4™ is suspended within the hydrogen donor (liquid oil membrane) of the emulsification, thereby providing sustained methane inhibition throughout the fermentation of this material.
- Viscosity = 1,100 cP at 20° C
- Specific Gravity = 1.05 – 1.10 g/cc

ORDERING

CONTACT US FOR A COMPLIMENTARY SITE EVALUATION

PROVECTUS ENVIRONMENTAL PRODUCTS, INC.

2871 West Forest Road, Suite 2 | Freeport, IL 61032

Tel: (815) 650-2230 | Fax: (815) 650-2232 | Info@Provectusenv.com

Multiple remedial contracting options available via strategic providers

Turn-Key, Risk-Reward, Pay-for Performance, Remedial Guarantees/Warranties

Literature Cited:

Reinhart *et al,* 2003. Zero-Valent Metal Emulsion for Reductive Dehalogenation of DNAPL, US Patent 6,664,298 B1.

Scalzi, M. and A. Karachalios. 2013 and 2014. Inhibition of Methane Production during Anaerobic Reductive Dechlorination. US PTO 13/ 785,840 and CIP 14/268,637.

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 25, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128224001	SLUDGE	Solid	02/10/16 13:50	02/12/16 13:35

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128224001	SLUDGE	EPA 8260	LAP	13	PASI-G

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Sample: SLUDGE **Lab ID: 40128224001** Collected: 02/10/16 13:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 02/22/16 00:00								
Benzene	**<500**	ug/L	1000	500	1000		02/24/16 09:12	71-43-2	
2-Butanone (MEK)	**<2980**	ug/L	20000	2980	1000		02/24/16 09:12	78-93-3	
Carbon tetrachloride	**<500**	ug/L	1000	500	1000		02/24/16 09:12	56-23-5	
Chlorobenzene	**<500**	ug/L	1000	500	1000		02/24/16 09:12	108-90-7	
Chloroform	**<2500**	ug/L	5000	2500	1000		02/24/16 09:12	67-66-3	
1,2-Dichloroethane	**<168**	ug/L	1000	168	1000		02/24/16 09:12	107-06-2	
1,1-Dichloroethene	**<410**	ug/L	1000	410	1000		02/24/16 09:12	75-35-4	
Tetrachloroethene	**128000**	ug/L	1000	500	1000		02/24/16 09:12	127-18-4	M1
Trichloroethene	**<331**	ug/L	1000	331	1000		02/24/16 09:12	79-01-6	
Vinyl chloride	**<176**	ug/L	1000	176	1000		02/24/16 09:12	75-01-4	
Surrogates									
Toluene-d8 (S)	101	%	70-130		1000		02/24/16 09:12	2037-26-5	
4-Bromofluorobenzene (S)	99	%	70-130		1000		02/24/16 09:12	460-00-4	
Dibromofluoromethane (S)	96	%	70-130		1000		02/24/16 09:12	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

QC Batch: MSV/32303
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 40128224001

METHOD BLANK: 1297969 Matrix: Water
Associated Lab Samples: 40128224001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<0.41	1.0	02/24/16 08:26	
1,2-Dichloroethane	ug/L	<0.17	1.0	02/24/16 08:26	
2-Butanone (MEK)	ug/L	<3.0	20.0	02/24/16 08:26	
Benzene	ug/L	<0.50	1.0	02/24/16 08:26	
Carbon tetrachloride	ug/L	<0.50	1.0	02/24/16 08:26	
Chlorobenzene	ug/L	<0.50	1.0	02/24/16 08:26	
Chloroform	ug/L	<2.5	5.0	02/24/16 08:26	
Tetrachloroethene	ug/L	<0.50	1.0	02/24/16 08:26	
Trichloroethene	ug/L	<0.33	1.0	02/24/16 08:26	
Vinyl chloride	ug/L	<0.18	1.0	02/24/16 08:26	
4-Bromofluorobenzene (S)	%	97	70-130	02/24/16 08:26	
Dibromofluoromethane (S)	%	95	70-130	02/24/16 08:26	
Toluene-d8 (S)	%	99	70-130	02/24/16 08:26	

METHOD BLANK: 1297877 Matrix: Solid
Associated Lab Samples: 40128224001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<4.1	10.0	02/24/16 08:49	
1,2-Dichloroethane	ug/L	<1.7	10.0	02/24/16 08:49	
2-Butanone (MEK)	ug/L	<29.8	200	02/24/16 08:49	
Benzene	ug/L	<5.0	10.0	02/24/16 08:49	
Carbon tetrachloride	ug/L	<5.0	10.0	02/24/16 08:49	
Chlorobenzene	ug/L	<5.0	10.0	02/24/16 08:49	
Chloroform	ug/L	<25.0	50.0	02/24/16 08:49	
Tetrachloroethene	ug/L	<5.0	10.0	02/24/16 08:49	
Trichloroethene	ug/L	<3.3	10.0	02/24/16 08:49	
Vinyl chloride	ug/L	<1.8	10.0	02/24/16 08:49	
4-Bromofluorobenzene (S)	%	99	70-130	02/24/16 08:49	
Dibromofluoromethane (S)	%	97	70-130	02/24/16 08:49	
Toluene-d8 (S)	%	100	70-130	02/24/16 08:49	

LABORATORY CONTROL SAMPLE: 1297970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	50.2	100	70-130	
1,2-Dichloroethane	ug/L	50	52.0	104	70-131	
Benzene	ug/L	50	53.0	106	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

LABORATORY CONTROL SAMPLE: 1297970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	55.1	110	70-130	
Chlorobenzene	ug/L	50	49.9	100	70-130	
Chloroform	ug/L	50	50.0	100	70-130	
Tetrachloroethene	ug/L	50	50.7	101	70-130	
Trichloroethene	ug/L	50	51.4	103	70-130	
Vinyl chloride	ug/L	50	44.3	89	65-142	
4-Bromofluorobenzene (S)	%			104	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1297971 1297972

Parameter	Units	40128224001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	<410	50000	50000	50400	50200	101	100	70-139	0	20	
1,2-Dichloroethane	ug/L	<168	50000	50000	53200	51900	106	104	70-132	3	20	
Benzene	ug/L	<500	50000	50000	54000	54200	108	108	70-130	0	20	
Carbon tetrachloride	ug/L	<500	50000	50000	55400	55900	111	112	70-130	1	20	
Chlorobenzene	ug/L	<500	50000	50000	49200	50800	98	102	70-130	3	20	
Chloroform	ug/L	<2500	50000	50000	51700	52000	103	104	70-130	1	20	
Tetrachloroethene	ug/L	128000	50000	50000	188000	196000	121	136	70-130	4	20	M1
Trichloroethene	ug/L	<331	50000	50000	53600	53000	107	106	70-130	1	20	
Vinyl chloride	ug/L	<176	50000	50000	46400	47300	93	95	60-155	2	20	
4-Bromofluorobenzene (S)	%						103	104	70-130			
Dibromofluoromethane (S)	%						100	100	70-130			
Toluene-d8 (S)	%						99	103	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128224

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128224001	SLUDGE	EPA 8260	MSV/32303		

REPORT OF LABORATORY ANALYSIS

(Please Print Clearly)

Company Name:	FEHR GRAHAM
Branch/Location:	PLYMOUTH
Project Contact:	KEN EBBOTT
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	MASTER CLEANERS
Project State:	WI
Sampled By (Print):	MEGAN HANSEN
Sampled By (Sign):	[signature]
PO #:	
Regulatory Program:	

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4012 8224

CHAIN OF COUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	DERF
Mail To Contact:	KEN EBBOTT
Mail To Company:	FEHR GRAHAM
Mail To Address:	1237 PILGRIM RD PLYMOUTH, WI
Invoice To Contact:	KEN EBBOTT
Invoice To Company:	c/o FEHR GRAHAM
Invoice To Address:	
Invoice To Phone:	

FILTERED? (YES/NO): Y/N — N
PRESERVATION (CODE)*: Pick Letter — A
Analyses Requested: TCLP VOC

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge
W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	TCLP VOC	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	SLUDGE	2/10/16	1350	S	X	2-4ozag A	1-4oz p A ~~1-40ml~~ E [initials] 2/12/16	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	2/12/16	[signature] Pace	2/12/16 1305
[signature] Pace	2/12/16 1335	Susan K[illegible] Pace	2-12-16 1335

PACE Project No. 40128224
Receipt Temp = RoT °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal
Present / Not Present (circled: Not Present)
Intact / Not Intact

Version 6.0 06/14/06

Sample Condition Upon Receipt

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Green Bay, WI 54302

Pace Analytical

Client Name: Fehr Graham

Project #: **WO# : 40128224**

40128224

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☒ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used N/A **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: _____ **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 2-12-16
Initials: SW

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☐Yes	☒No	☐N/A	12. No collect date + time on 40ml 2-12-16 SW
-Includes date/time/ID/Analysis Matrix: S				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☒N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes	☒No		Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14.
Trip Blank Present:	☐Yes	☐No	☒N/A	15.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CK **Date:** 2-15-16

F-GB-C-031-Rev.03 (9April2015) SCUR Form

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February 18, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

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CERTIFICATIONS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128222001	SLUDGE	Solid	02/10/16 13:50	02/12/16 13:35

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128222001	**SLUDGE**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Sample: SLUDGE **Lab ID: 40128222001** Collected: 02/10/16 13:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	71-43-2	W
Bromobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-86-1	W
Bromochloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-97-5	W
Bromodichloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-27-4	W
Bromoform	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-25-2	W
Bromomethane	**<280000**	ug/kg	1000000	280000	4000	02/17/16 07:00	02/17/16 19:24	74-83-9	W
n-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	104-51-8	W
sec-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	135-98-8	W
tert-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	98-06-6	W
Carbon tetrachloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	56-23-5	W
Chlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-90-7	W
Chloroethane	**<268000**	ug/kg	1000000	268000	4000	02/17/16 07:00	02/17/16 19:24	75-00-3	W
Chloroform	**<186000**	ug/kg	1000000	186000	4000	02/17/16 07:00	02/17/16 19:24	67-66-3	W
Chloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-87-3	W
2-Chlorotoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-49-8	W
4-Chlorotoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-43-4	W
1,2-Dibromo-3-chloropropane	**<365000**	ug/kg	1000000	365000	4000	02/17/16 07:00	02/17/16 19:24	96-12-8	W
Dibromochloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	124-48-1	W
1,2-Dibromoethane (EDB)	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-93-4	W
Dibromomethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-95-3	W
1,2-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-50-1	W
1,3-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	541-73-1	W
1,4-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-46-7	W
Dichlorodifluoromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-71-8	W
1,1-Dichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-34-3	L3,W
1,2-Dichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	107-06-2	W
1,1-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-35-4	W
cis-1,2-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	156-59-2	W
trans-1,2-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	156-60-5	W
1,2-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	78-87-5	W
1,3-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	142-28-9	W
2,2-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	594-20-7	W
1,1-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	563-58-6	W
cis-1,3-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	10061-01-5	W
trans-1,3-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	10061-02-6	W
Diisopropyl ether	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-20-3	W
Ethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	100-41-4	W
Hexachloro-1,3-butadiene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	87-68-3	W
Isopropylbenzene (Cumene)	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	98-82-8	W
p-Isopropyltoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	99-87-6	W
Methylene Chloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-09-2	W
Methyl-tert-butyl ether	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	1634-04-4	W
Naphthalene	**<160000**	ug/kg	1000000	160000	4000	02/17/16 07:00	02/17/16 19:24	91-20-3	W
n-Propylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	103-65-1	W
Styrene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Sample: SLUDGE **Lab ID: 40128222001** Collected: 02/10/16 13:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	630-20-6	W
1,1,2,2-Tetrachloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-34-5	W
Tetrachloroethene	**20700000**	ug/kg	314000	131000	4000	02/17/16 07:00	02/17/16 19:24	127-18-4	
Toluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-88-3	W
1,2,3-Trichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	87-61-6	W
1,2,4-Trichlorobenzene	**<190000**	ug/kg	1000000	190000	4000	02/17/16 07:00	02/17/16 19:24	120-82-1	W
1,1,1-Trichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	71-55-6	W
1,1,2-Trichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-00-5	W
Trichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-01-6	W
Trichlorofluoromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-69-4	W
1,2,3-Trichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	96-18-4	W
1,2,4-Trimethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-63-6	W
1,3,5-Trimethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-67-8	W
Vinyl chloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-01-4	W
m&p-Xylene	**<200000**	ug/kg	480000	200000	4000	02/17/16 07:00	02/17/16 19:24	179601-23-1	W
o-Xylene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	49-157		4000	02/17/16 07:00	02/17/16 19:24	1868-53-7	S4
Toluene-d8 (S)	0	%	61-148		4000	02/17/16 07:00	02/17/16 19:24	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	53-134		4000	02/17/16 07:00	02/17/16 19:24	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.6**	%	0.10	0.10	1		02/17/16 16:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

QC Batch: MSV/32249
QC Batch Method: EPA 5035/5030B
Associated Lab Samples: 40128222001

Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List

METHOD BLANK: 1295994
Associated Lab Samples: 40128222001

Matrix: Solid

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/17/16 10:27	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/17/16 10:27	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/17/16 10:27	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/17/16 10:27	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/17/16 10:27	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/17/16 10:27	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/17/16 10:27	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/17/16 10:27	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/17/16 10:27	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/17/16 10:27	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/17/16 10:27	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/17/16 10:27	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/17/16 10:27	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/17/16 10:27	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/17/16 10:27	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/17/16 10:27	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/17/16 10:27	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/17/16 10:27	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/17/16 10:27	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/17/16 10:27	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/17/16 10:27	
Benzene	ug/kg	<9.2	20.0	02/17/16 10:27	
Bromobenzene	ug/kg	<20.6	50.0	02/17/16 10:27	
Bromochloromethane	ug/kg	<21.4	50.0	02/17/16 10:27	
Bromodichloromethane	ug/kg	<9.8	50.0	02/17/16 10:27	
Bromoform	ug/kg	<19.8	50.0	02/17/16 10:27	
Bromomethane	ug/kg	<69.9	250	02/17/16 10:27	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/17/16 10:27	
Chlorobenzene	ug/kg	<14.8	50.0	02/17/16 10:27	
Chloroethane	ug/kg	<67.0	250	02/17/16 10:27	
Chloroform	ug/kg	<46.4	250	02/17/16 10:27	
Chloromethane	ug/kg	<20.4	50.0	02/17/16 10:27	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/17/16 10:27	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/17/16 10:27	
Dibromochloromethane	ug/kg	<17.9	50.0	02/17/16 10:27	
Dibromomethane	ug/kg	<19.3	50.0	02/17/16 10:27	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/17/16 10:27	
Diisopropyl ether	ug/kg	<17.7	50.0	02/17/16 10:27	
Ethylbenzene	ug/kg	<12.4	50.0	02/17/16 10:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128222001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/17/16 10:27	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/17/16 10:27	
m&p-Xylene	ug/kg	<34.4	100	02/17/16 10:27	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/17/16 10:27	
Methylene Chloride	ug/kg	<16.2	50.0	02/17/16 10:27	
n-Butylbenzene	ug/kg	<10.5	50.0	02/17/16 10:27	
n-Propylbenzene	ug/kg	<11.6	50.0	02/17/16 10:27	
Naphthalene	ug/kg	<40.0	250	02/17/16 10:27	
o-Xylene	ug/kg	<14.0	50.0	02/17/16 10:27	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/17/16 10:27	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/17/16 10:27	
Styrene	ug/kg	<9.0	50.0	02/17/16 10:27	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/17/16 10:27	
Tetrachloroethene	ug/kg	<12.9	50.0	02/17/16 10:27	
Toluene	ug/kg	<11.2	50.0	02/17/16 10:27	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/17/16 10:27	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/17/16 10:27	
Trichloroethene	ug/kg	<23.6	50.0	02/17/16 10:27	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/17/16 10:27	
Vinyl chloride	ug/kg	<21.1	50.0	02/17/16 10:27	
4-Bromofluorobenzene (S)	%	92	53-134	02/17/16 10:27	
Dibromofluoromethane (S)	%	116	49-157	02/17/16 10:27	
Toluene-d8 (S)	%	103	61-148	02/17/16 10:27	

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2760	111	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2740	110	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2630	105	70-130	
1,1-Dichloroethane	ug/kg	2500	3290	132	70-130	L0
1,1-Dichloroethene	ug/kg	2500	2700	108	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2360	94	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2260	90	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2710	108	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2620	105	70-130	
1,2-Dichloroethane	ug/kg	2500	3030	121	70-134	
1,2-Dichloropropane	ug/kg	2500	2830	113	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2530	101	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2630	105	70-130	
Benzene	ug/kg	2500	2950	118	70-130	
Bromodichloromethane	ug/kg	2500	2340	93	70-130	
Bromoform	ug/kg	2500	2200	88	48-130	
Bromomethane	ug/kg	2500	2780	111	70-169	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2760	110	67-130	
Chlorobenzene	ug/kg	2500	2720	109	70-130	
Chloroethane	ug/kg	2500	2910	116	70-191	
Chloroform	ug/kg	2500	2690	108	70-130	
Chloromethane	ug/kg	2500	2800	112	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2980	119	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2640	106	70-130	
Dibromochloromethane	ug/kg	2500	2460	98	65-130	
Dichlorodifluoromethane	ug/kg	2500	1900	76	12-150	
Ethylbenzene	ug/kg	2500	2640	106	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2640	106	70-130	
m&p-Xylene	ug/kg	5000	5240	105	70-130	
Methyl-tert-butyl ether	ug/kg	2500	3020	121	70-130	
Methylene Chloride	ug/kg	2500	3030	121	70-131	
o-Xylene	ug/kg	2500	2600	104	70-130	
Styrene	ug/kg	2500	2770	111	70-130	
Tetrachloroethene	ug/kg	2500	2350	94	70-130	
Toluene	ug/kg	2500	2670	107	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2690	108	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2380	95	65-130	
Trichloroethene	ug/kg	2500	2610	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2400	96	50-150	
Vinyl chloride	ug/kg	2500	2870	115	67-134	
4-Bromofluorobenzene (S)	%			97	53-134	
Dibromofluoromethane (S)	%			115	49-157	
Toluene-d8 (S)	%			102	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<48.1	3240	2700	3120	2840	96	105	63-130	10	20	
1,1,2,2-Tetrachloroethane	ug/kg	<48.1	3240	2700	3230	2890	100	107	57-136	11	20	
1,1,2-Trichloroethane	ug/kg	<48.1	3240	2700	3100	2740	96	101	70-130	12	20	
1,1-Dichloroethane	ug/kg	<48.1	3240	2700	3740	3260	115	121	62-131	14	23	
1,1-Dichloroethene	ug/kg	<48.1	3240	2700	2890	2720	89	101	42-137	6	20	
1,2,4-Trichlorobenzene	ug/kg	<91.4	3240	2700	2940	2530	91	94	59-137	15	21	
1,2-Dibromo-3-chloropropane	ug/kg	<175	3240	2700	2830	2610	87	97	33-150	8	25	
1,2-Dibromoethane (EDB)	ug/kg	<48.1	3240	2700	2980	2700	92	100	70-130	10	20	
1,2-Dichlorobenzene	ug/kg	<48.1	3240	2700	3150	2810	97	104	70-130	12	20	
1,2-Dichloroethane	ug/kg	<48.1	3240	2700	3440	3100	106	115	68-134	11	20	
1,2-Dichloropropane	ug/kg	<48.1	3240	2700	3190	2950	98	109	70-130	8	20	
1,3-Dichlorobenzene	ug/kg	<48.1	3240	2700	3080	2730	95	101	70-130	12	20	
1,4-Dichlorobenzene	ug/kg	<48.1	3240	2700	3090	2700	95	100	69-130	14	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<48.1	3240	2700	3240	2900	100	107	56-131	11	20	
Bromodichloromethane	ug/kg	<48.1	3240	2700	2850	2610	88	96	64-130	9	20	
Bromoform	ug/kg	<48.1	3240	2700	2670	2410	82	89	48-130	10	20	
Bromomethane	ug/kg	<134	3240	2700	3110	2920	96	108	18-169	6	23	
Carbon tetrachloride	ug/kg	<48.1	3240	2700	3310	3000	102	111	59-130	10	20	
Chlorobenzene	ug/kg	<48.1	3240	2700	3190	2800	98	104	70-130	13	20	
Chloroethane	ug/kg	<129	3240	2700	3390	3000	105	111	10-191	12	20	
Chloroform	ug/kg	<89.3	3240	2700	3080	2900	95	107	65-130	6	20	
Chloromethane	ug/kg	<48.1	3240	2700	3000	2860	93	106	36-132	5	20	
cis-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3270	2920	101	108	59-136	11	24	
cis-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2900	2630	89	97	60-130	10	20	
Dibromochloromethane	ug/kg	<48.1	3240	2700	3070	2630	95	97	59-130	15	20	
Dichlorodifluoromethane	ug/kg	<48.1	3240	2700	1590	1570	49	58	10-150	1	27	
Ethylbenzene	ug/kg	<48.1	3240	2700	3000	2640	93	98	64-130	13	20	
Isopropylbenzene (Cumene)	ug/kg	<48.1	3240	2700	3040	2680	94	99	69-138	12	20	
m&p-Xylene	ug/kg	<96.2	6490	5400	6190	5530	96	102	61-130	11	20	
Methyl-tert-butyl ether	ug/kg	<48.1	3240	2700	3600	3080	111	114	52-134	15	20	
Methylene Chloride	ug/kg	<48.1	3240	2700	3350	3190	103	118	61-131	5	20	
o-Xylene	ug/kg	<48.1	3240	2700	3040	2640	94	98	63-130	14	20	
Styrene	ug/kg	<48.1	3240	2700	3090	2740	95	102	70-130	12	20	
Tetrachloroethene	ug/kg	<48.1	3240	2700	2760	2440	85	90	65-130	12	20	
Toluene	ug/kg	<48.1	3240	2700	3100	2680	96	99	65-130	14	20	
trans-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3380	2990	104	111	55-130	12	20	
trans-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2780	2480	86	92	54-130	11	20	
Trichloroethene	ug/kg	<48.1	3240	2700	2990	2750	92	102	70-130	8	20	
Trichlorofluoromethane	ug/kg	<48.1	3240	2700	2910	2810	90	104	42-150	3	24	
Vinyl chloride	ug/kg	<48.1	3240	2700	2830	2640	87	98	35-134	7	20	
4-Bromofluorobenzene (S)	%						91	91	53-134			
Dibromofluoromethane (S)	%						108	115	49-157			
Toluene-d8 (S)	%						94	94	61-148			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

QC Batch: PMST/12429
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 40128222001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1296318

Parameter	Units	40128277014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.6	24.4	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128222001	SLUDGE	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128222001	SLUDGE	ASTM D2974-87	PMST/12429		

Pace Analytical
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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

40128222

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	FEHR GRAHAM
Branch/Location:	PLY
Project Contact:	KEN EBBOTT
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	MASTER CLEANERS
Project State:	WI
Sampled By (Print):	MEGAN HANSEN
Sampled By (Sign):	
PO #:	
Regulatory Program:	

Quote #:	DERF
Mail To Contact:	KEN EBBOTT
Mail To Company:	FEHR GRAHAM
Mail To Address:	1237 PILGRIM RD PLYMOUTH, WI
Invoice To Contact:	KEN EBBOTT
Invoice To Company:	C/O FEHR GRAHAM
Invoice To Address:	SAME
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analysis Test	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	SLUDGE	2/10/16	1350	S	N	F	VOC		1-40mlVF 1-4ozpf	

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge) Date Needed:		Relinquished By:	Date/Time:	Received By:	Date/Time:	PACE Project No.
Transmit Prelim Rush Results by (complete what you want):			2/12/16		2/12/16 1205	40128222
Email #1:		Relinquished By:	Date/Time:	Received By:	Date/Time:	Receipt Temp = °C
Email #2:			2/12/16 1335			Sample Receipt pH OK / Adjusted
Telephone:		Relinquished By:	Date/Time:	Received By:	Date/Time:	Cooler Custody Seal Present / Not Present Intact / Not Intact
Fax:						
Samples on HOLD are subject to special pricing and release of liability		Relinquished By:	Date/Time:	Received By:	Date/Time:	

Version 6.0 08/14/08

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Client Name: Fehr Graham

Project #: WO#: 40128222

40128222

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☒ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used N/A Type of Ice: Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents: Date: 2-12-16 Initials: SW

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out:	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished:	☑ Yes	☐ No	☐ N/A	3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No	☐ N/A	5.
- VOA Samples frozen upon receipt	☐ Yes	☐ No		Date/Time:
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested:	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume:	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used:	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used:	☑ Yes	☐ No	☐ N/A	
-Pace IR Containers Used:	☐ Yes	☐ No	☑ N/A	
Containers Intact:	☑ Yes	☐ No	☐ N/A	10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11.
Sample Labels match COC:	☐ Yes	☒ No	☐ N/A	12. No collect date + time on 402p. 2-12-16 SW
-Includes date/time/ID/Analysis Matrix: S				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐ Yes	☐ No	☒ N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐ Yes	☐ No	☑ N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐ Yes	☑ No		Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	14.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 2-15-16

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 18, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128219001	**B-101 1-3'**	Solid	02/10/16 10:45	02/12/16 13:35
40128219002	**B-101 5-7'**	Solid	02/10/16 10:50	02/12/16 13:35
40128219003	**B-102 1-3'**	Solid	02/10/16 11:40	02/12/16 13:35
40128219004	**B-102 9-10'**	Solid	02/10/16 11:45	02/12/16 13:35
40128219005	**B-103 8-9.5'**	Solid	02/10/16 12:30	02/12/16 13:35
40128219006	**B-103 16-17'**	Solid	02/10/16 12:35	02/12/16 13:35
40128219007	**SUMP 2.5'**	Solid	02/10/16 14:00	02/12/16 13:35
40128219008	**SUMP 5.5'**	Solid	02/10/16 14:10	02/12/16 13:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128219001	B-101 1-3'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219002	B-101 5-7'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219003	B-102 1-3'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219004	B-102 9-10'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219005	B-103 8-9.5'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219006	B-103 16-17'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219007	SUMP 2.5'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219008	SUMP 5.5'	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 1-3' **Lab ID: 40128219001** Collected: 02/10/16 10:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:10	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:10	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:10	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:10	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:10	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 1-3' **Lab ID: 40128219001** Collected: 02/10/16 10:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-34-5	W
Tetrachloroethene	**2140**	ug/kg	68.2	28.4	1	02/17/16 07:00	02/17/16 15:10	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:10	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:10	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	117	%	49-157		1	02/17/16 07:00	02/17/16 15:10	1868-53-7	
Toluene-d8 (S)	103	%	61-148		1	02/17/16 07:00	02/17/16 15:10	2037-26-5	
4-Bromofluorobenzene (S)	96	%	53-134		1	02/17/16 07:00	02/17/16 15:10	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 5-7' **Lab ID: 40128219002** Collected: 02/10/16 10:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:33	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:33	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:33	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:33	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:33	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 5-7' **Lab ID: 40128219002** Collected: 02/10/16 10:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-34-5	W
Tetrachloroethene	**2870**	ug/kg	72.6	30.3	1	02/17/16 07:00	02/17/16 15:33	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:33	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:33	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	113	%	49-157		1	02/17/16 07:00	02/17/16 15:33	1868-53-7	
Toluene-d8 (S)	100	%	61-148		1	02/17/16 07:00	02/17/16 15:33	2037-26-5	
4-Bromofluorobenzene (S)	94	%	53-134		1	02/17/16 07:00	02/17/16 15:33	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.4**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 1-3' **Lab ID: 40128219003** Collected: 02/10/16 11:40 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:56	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:56	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:56	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:56	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:56	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 1-3' **Lab ID: 40128219003** Collected: 02/10/16 11:40 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-34-5	W
Tetrachloroethene	**882**	ug/kg	68.6	28.6	1	02/17/16 07:00	02/17/16 15:56	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:56	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:56	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	120	%	49-157		1	02/17/16 07:00	02/17/16 15:56	1868-53-7	
Toluene-d8 (S)	107	%	61-148		1	02/17/16 07:00	02/17/16 15:56	2037-26-5	
4-Bromofluorobenzene (S)	100	%	53-134		1	02/17/16 07:00	02/17/16 15:56	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.6**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 9-10' **Lab ID: 40128219004** Collected: 02/10/16 11:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 16:19	74-83-9	W
n-Butylbenzene	**241**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	104-51-8	
sec-Butylbenzene	**169**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	135-98-8	
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 16:19	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 16:19	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 16:19	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	87-68-3	W
Isopropylbenzene (Cumene)	**147**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	1634-04-4	W
Naphthalene	**97.1J**	ug/kg	293	46.9	1	02/17/16 07:00	02/17/16 16:19	91-20-3	
n-Propylbenzene	**499**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	103-65-1	
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 9-10' **Lab ID: 40128219004** Collected: 02/10/16 11:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-34-5	W
Tetrachloroethene	**237**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 16:19	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	96-18-4	W
1,2,4-Trimethylbenzene	**510**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	95-63-6	
1,3,5-Trimethylbenzene	**136**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	108-67-8	
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 16:19	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	49-157		1	02/17/16 07:00	02/17/16 16:19	1868-53-7	
Toluene-d8 (S)	96	%	61-148		1	02/17/16 07:00	02/17/16 16:19	2037-26-5	
4-Bromofluorobenzene (S)	91	%	53-134		1	02/17/16 07:00	02/17/16 16:19	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.7**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 8-9.5' **Lab ID: 40128219005** Collected: 02/10/16 12:30 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 16:42	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 16:42	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 16:42	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 16:42	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 16:42	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 8-9.5' **Lab ID: 40128219005** Collected: 02/10/16 12:30 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	79-34-5	W
Tetrachloroethene	**8180**	ug/kg	74.7	31.1	1	02/17/16 07:00	02/17/16 16:42	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 16:42	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	79-00-5	W
Trichloroethene	**65.1J**	ug/kg	74.7	31.1	1	02/17/16 07:00	02/17/16 16:42	79-01-6	
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 16:42	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	111	%	49-157		1	02/17/16 07:00	02/17/16 16:42	1868-53-7	
Toluene-d8 (S)	95	%	61-148		1	02/17/16 07:00	02/17/16 16:42	2037-26-5	
4-Bromofluorobenzene (S)	89	%	53-134		1	02/17/16 07:00	02/17/16 16:42	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.6**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 16-17' **Lab ID: 40128219006** Collected: 02/10/16 12:35 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	71-43-2	W
Bromobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-86-1	W
Bromochloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-97-5	W
Bromodichloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-27-4	W
Bromoform	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-25-2	W
Bromomethane	**<699**	ug/kg	2500	699	10	02/17/16 07:00	02/17/16 18:14	74-83-9	W
n-Butylbenzene	**5050**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	104-51-8	
sec-Butylbenzene	**969**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	135-98-8	
tert-Butylbenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	98-06-6	W
Carbon tetrachloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	56-23-5	W
Chlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-90-7	W
Chloroethane	**<670**	ug/kg	2500	670	10	02/17/16 07:00	02/17/16 18:14	75-00-3	W
Chloroform	**<464**	ug/kg	2500	464	10	02/17/16 07:00	02/17/16 18:14	67-66-3	W
Chloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-87-3	W
2-Chlorotoluene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	95-49-8	W
4-Chlorotoluene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-43-4	W
1,2-Dibromo-3-chloropropane	**<912**	ug/kg	2500	912	10	02/17/16 07:00	02/17/16 18:14	96-12-8	W
Dibromochloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	124-48-1	W
1,2-Dibromoethane (EDB)	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-93-4	W
Dibromomethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-95-3	W
1,2-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	95-50-1	W
1,3-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	541-73-1	W
1,4-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-46-7	W
Dichlorodifluoromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-71-8	W
1,1-Dichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-34-3	L3,W
1,2-Dichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	107-06-2	W
1,1-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-35-4	W
cis-1,2-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	156-59-2	W
trans-1,2-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	156-60-5	W
1,2-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	78-87-5	W
1,3-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	142-28-9	W
2,2-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	594-20-7	W
1,1-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	563-58-6	W
cis-1,3-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	10061-01-5	W
trans-1,3-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	10061-02-6	W
Diisopropyl ether	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-20-3	W
Ethylbenzene	**25200**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	100-41-4	
Hexachloro-1,3-butadiene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	87-68-3	W
Isopropylbenzene (Cumene)	**2440**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	98-82-8	
p-Isopropyltoluene	**749**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	99-87-6	
Methylene Chloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-09-2	W
Methyl-tert-butyl ether	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	1634-04-4	W
Naphthalene	**4210**	ug/kg	2980	477	10	02/17/16 07:00	02/17/16 18:14	91-20-3	
n-Propylbenzene	**10400**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	103-65-1	
Styrene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 16-17' **Lab ID: 40128219006** Collected: 02/10/16 12:35 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	630-20-6	W
1,1,2,2-Tetrachloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-34-5	W
Tetrachloroethene	**9050**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	127-18-4	
Toluene	**17800**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	87-61-6	W
1,2,4-Trichlorobenzene	**<476**	ug/kg	2500	476	10	02/17/16 07:00	02/17/16 18:14	120-82-1	W
1,1,1-Trichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	71-55-6	W
1,1,2-Trichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-00-5	W
Trichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-01-6	W
Trichlorofluoromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-69-4	W
1,2,3-Trichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	96-18-4	W
1,2,4-Trimethylbenzene	**45300**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	95-63-6	
1,3,5-Trimethylbenzene	**13700**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	108-67-8	
Vinyl chloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-01-4	W
m&p-Xylene	**82300**	ug/kg	1430	595	10	02/17/16 07:00	02/17/16 18:14	179601-23-1	
o-Xylene	**29700**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%	49-157		10	02/17/16 07:00	02/17/16 18:14	1868-53-7	
Toluene-d8 (S)	99	%	61-148		10	02/17/16 07:00	02/17/16 18:14	2037-26-5	
4-Bromofluorobenzene (S)	107	%	53-134		10	02/17/16 07:00	02/17/16 18:14	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 2.5' **Lab ID: 40128219007** Collected: 02/10/16 14:00 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	71-43-2	W
Bromobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-86-1	W
Bromochloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-97-5	W
Bromodichloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-27-4	W
Bromoform	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-25-2	W
Bromomethane	**<350**	ug/kg	1250	350	5	02/17/16 07:00	02/17/16 18:38	74-83-9	W
n-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	104-51-8	W
sec-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	135-98-8	W
tert-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	98-06-6	W
Carbon tetrachloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	56-23-5	W
Chlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-90-7	W
Chloroethane	**<335**	ug/kg	1250	335	5	02/17/16 07:00	02/17/16 18:38	75-00-3	W
Chloroform	**<232**	ug/kg	1250	232	5	02/17/16 07:00	02/17/16 18:38	67-66-3	W
Chloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-87-3	W
2-Chlorotoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-49-8	W
4-Chlorotoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-43-4	W
1,2-Dibromo-3-chloropropane	**<456**	ug/kg	1250	456	5	02/17/16 07:00	02/17/16 18:38	96-12-8	W
Dibromochloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	124-48-1	W
1,2-Dibromoethane (EDB)	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-93-4	W
Dibromomethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-95-3	W
1,2-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-50-1	W
1,3-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	541-73-1	W
1,4-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-46-7	W
Dichlorodifluoromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-71-8	W
1,1-Dichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-34-3	L3,W
1,2-Dichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	107-06-2	W
1,1-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-35-4	W
cis-1,2-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	156-59-2	W
trans-1,2-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	156-60-5	W
1,2-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	78-87-5	W
1,3-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	142-28-9	W
2,2-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	594-20-7	W
1,1-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	563-58-6	W
cis-1,3-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	10061-01-5	W
trans-1,3-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	10061-02-6	W
Diisopropyl ether	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-20-3	W
Ethylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	100-41-4	W
Hexachloro-1,3-butadiene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	87-68-3	W
Isopropylbenzene (Cumene)	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	98-82-8	W
p-Isopropyltoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	99-87-6	W
Methylene Chloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-09-2	W
Methyl-tert-butyl ether	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	1634-04-4	W
Naphthalene	**<200**	ug/kg	1250	200	5	02/17/16 07:00	02/17/16 18:38	91-20-3	W
n-Propylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	103-65-1	W
Styrene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 2.5' **Lab ID: 40128219007** Collected: 02/10/16 14:00 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	630-20-6	W
1,1,2,2-Tetrachloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-34-5	W
Tetrachloroethene	**37600**	ug/kg	337	140	5	02/17/16 07:00	02/17/16 18:38	127-18-4	
Toluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-88-3	W
1,2,3-Trichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	87-61-6	W
1,2,4-Trichlorobenzene	**<238**	ug/kg	1250	238	5	02/17/16 07:00	02/17/16 18:38	120-82-1	W
1,1,1-Trichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	71-55-6	W
1,1,2-Trichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-00-5	W
Trichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-01-6	W
Trichlorofluoromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-69-4	W
1,2,3-Trichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	96-18-4	W
1,2,4-Trimethylbenzene	**222J**	ug/kg	337	140	5	02/17/16 07:00	02/17/16 18:38	95-63-6	
1,3,5-Trimethylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-67-8	W
Vinyl chloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-01-4	W
m&p-Xylene	**<250**	ug/kg	600	250	5	02/17/16 07:00	02/17/16 18:38	179601-23-1	W
o-Xylene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	118	%	49-157		5	02/17/16 07:00	02/17/16 18:38	1868-53-7	
Toluene-d8 (S)	106	%	61-148		5	02/17/16 07:00	02/17/16 18:38	2037-26-5	
4-Bromofluorobenzene (S)	97	%	53-134		5	02/17/16 07:00	02/17/16 18:38	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 5.5' **Lab ID: 40128219008** Collected: 02/10/16 14:10 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	71-43-2	W
Bromobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-86-1	W
Bromochloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-97-5	W
Bromodichloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-27-4	W
Bromoform	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-25-2	W
Bromomethane	**<35000**	ug/kg	125000	35000	500	02/17/16 07:00	02/17/16 19:01	74-83-9	W
n-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	104-51-8	W
sec-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	135-98-8	W
tert-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	98-06-6	W
Carbon tetrachloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	56-23-5	W
Chlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-90-7	W
Chloroethane	**<33500**	ug/kg	125000	33500	500	02/17/16 07:00	02/17/16 19:01	75-00-3	W
Chloroform	**<23200**	ug/kg	125000	23200	500	02/17/16 07:00	02/17/16 19:01	67-66-3	W
Chloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-87-3	W
2-Chlorotoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-49-8	W
4-Chlorotoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-43-4	W
1,2-Dibromo-3-chloropropane	**<45600**	ug/kg	125000	45600	500	02/17/16 07:00	02/17/16 19:01	96-12-8	W
Dibromochloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	124-48-1	W
1,2-Dibromoethane (EDB)	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-93-4	W
Dibromomethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-95-3	W
1,2-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-50-1	W
1,3-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	541-73-1	W
1,4-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-46-7	W
Dichlorodifluoromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-71-8	W
1,1-Dichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-34-3	L3,W
1,2-Dichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	107-06-2	W
1,1-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-35-4	W
cis-1,2-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	156-59-2	W
trans-1,2-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	156-60-5	W
1,2-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	78-87-5	W
1,3-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	142-28-9	W
2,2-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	594-20-7	W
1,1-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	563-58-6	W
cis-1,3-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	10061-01-5	W
trans-1,3-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	10061-02-6	W
Diisopropyl ether	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-20-3	W
Ethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	100-41-4	W
Hexachloro-1,3-butadiene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	87-68-3	W
Isopropylbenzene (Cumene)	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	98-82-8	W
p-Isopropyltoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	99-87-6	W
Methylene Chloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-09-2	W
Methyl-tert-butyl ether	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	1634-04-4	W
Naphthalene	**<20000**	ug/kg	125000	20000	500	02/17/16 07:00	02/17/16 19:01	91-20-3	W
n-Propylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	103-65-1	W
Styrene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 5.5' **Lab ID: 40128219008** Collected: 02/10/16 14:10 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	630-20-6	W
1,1,2,2-Tetrachloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-34-5	W
Tetrachloroethene	**3160000**	ug/kg	34800	14500	500	02/17/16 07:00	02/17/16 19:01	127-18-4	
Toluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-88-3	W
1,2,3-Trichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	87-61-6	W
1,2,4-Trichlorobenzene	**<23800**	ug/kg	125000	23800	500	02/17/16 07:00	02/17/16 19:01	120-82-1	W
1,1,1-Trichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	71-55-6	W
1,1,2-Trichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-00-5	W
Trichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-01-6	W
Trichlorofluoromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-69-4	W
1,2,3-Trichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	96-18-4	W
1,2,4-Trimethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-63-6	W
1,3,5-Trimethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-67-8	W
Vinyl chloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-01-4	W
m&p-Xylene	**<25000**	ug/kg	60000	25000	500	02/17/16 07:00	02/17/16 19:01	179601-23-1	W
o-Xylene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	49-157		500	02/17/16 07:00	02/17/16 19:01	1868-53-7	S4
Toluene-d8 (S)	0	%	61-148		500	02/17/16 07:00	02/17/16 19:01	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	53-134		500	02/17/16 07:00	02/17/16 19:01	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.8**	%	0.10	0.10	1		02/17/16 16:31		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

QC Batch: MSV/32249 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/17/16 10:27	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/17/16 10:27	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/17/16 10:27	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/17/16 10:27	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/17/16 10:27	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/17/16 10:27	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/17/16 10:27	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/17/16 10:27	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/17/16 10:27	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/17/16 10:27	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/17/16 10:27	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/17/16 10:27	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/17/16 10:27	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/17/16 10:27	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/17/16 10:27	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/17/16 10:27	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/17/16 10:27	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/17/16 10:27	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/17/16 10:27	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/17/16 10:27	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/17/16 10:27	
Benzene	ug/kg	<9.2	20.0	02/17/16 10:27	
Bromobenzene	ug/kg	<20.6	50.0	02/17/16 10:27	
Bromochloromethane	ug/kg	<21.4	50.0	02/17/16 10:27	
Bromodichloromethane	ug/kg	<9.8	50.0	02/17/16 10:27	
Bromoform	ug/kg	<19.8	50.0	02/17/16 10:27	
Bromomethane	ug/kg	<69.9	250	02/17/16 10:27	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/17/16 10:27	
Chlorobenzene	ug/kg	<14.8	50.0	02/17/16 10:27	
Chloroethane	ug/kg	<67.0	250	02/17/16 10:27	
Chloroform	ug/kg	<46.4	250	02/17/16 10:27	
Chloromethane	ug/kg	<20.4	50.0	02/17/16 10:27	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/17/16 10:27	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/17/16 10:27	
Dibromochloromethane	ug/kg	<17.9	50.0	02/17/16 10:27	
Dibromomethane	ug/kg	<19.3	50.0	02/17/16 10:27	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/17/16 10:27	
Diisopropyl ether	ug/kg	<17.7	50.0	02/17/16 10:27	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<12.4	50.0	02/17/16 10:27	
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/17/16 10:27	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/17/16 10:27	
m&p-Xylene	ug/kg	<34.4	100	02/17/16 10:27	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/17/16 10:27	
Methylene Chloride	ug/kg	<16.2	50.0	02/17/16 10:27	
n-Butylbenzene	ug/kg	<10.5	50.0	02/17/16 10:27	
n-Propylbenzene	ug/kg	<11.6	50.0	02/17/16 10:27	
Naphthalene	ug/kg	<40.0	250	02/17/16 10:27	
o-Xylene	ug/kg	<14.0	50.0	02/17/16 10:27	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/17/16 10:27	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/17/16 10:27	
Styrene	ug/kg	<9.0	50.0	02/17/16 10:27	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/17/16 10:27	
Tetrachloroethene	ug/kg	<12.9	50.0	02/17/16 10:27	
Toluene	ug/kg	<11.2	50.0	02/17/16 10:27	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/17/16 10:27	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/17/16 10:27	
Trichloroethene	ug/kg	<23.6	50.0	02/17/16 10:27	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/17/16 10:27	
Vinyl chloride	ug/kg	<21.1	50.0	02/17/16 10:27	
4-Bromofluorobenzene (S)	%	92	53-134	02/17/16 10:27	
Dibromofluoromethane (S)	%	116	49-157	02/17/16 10:27	
Toluene-d8 (S)	%	103	61-148	02/17/16 10:27	

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2760	111	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2740	110	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2630	105	70-130	
1,1-Dichloroethane	ug/kg	2500	3290	132	70-130	L0
1,1-Dichloroethene	ug/kg	2500	2700	108	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2360	94	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2260	90	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2710	108	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2620	105	70-130	
1,2-Dichloroethane	ug/kg	2500	3030	121	70-134	
1,2-Dichloropropane	ug/kg	2500	2830	113	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2530	101	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2630	105	70-130	
Benzene	ug/kg	2500	2950	118	70-130	
Bromodichloromethane	ug/kg	2500	2340	93	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2200	88	48-130	
Bromomethane	ug/kg	2500	2780	111	70-169	
Carbon tetrachloride	ug/kg	2500	2760	110	67-130	
Chlorobenzene	ug/kg	2500	2720	109	70-130	
Chloroethane	ug/kg	2500	2910	116	70-191	
Chloroform	ug/kg	2500	2690	108	70-130	
Chloromethane	ug/kg	2500	2800	112	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2980	119	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2640	106	70-130	
Dibromochloromethane	ug/kg	2500	2460	98	65-130	
Dichlorodifluoromethane	ug/kg	2500	1900	76	12-150	
Ethylbenzene	ug/kg	2500	2640	106	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2640	106	70-130	
m&p-Xylene	ug/kg	5000	5240	105	70-130	
Methyl-tert-butyl ether	ug/kg	2500	3020	121	70-130	
Methylene Chloride	ug/kg	2500	3030	121	70-131	
o-Xylene	ug/kg	2500	2600	104	70-130	
Styrene	ug/kg	2500	2770	111	70-130	
Tetrachloroethene	ug/kg	2500	2350	94	70-130	
Toluene	ug/kg	2500	2670	107	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2690	108	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2380	95	65-130	
Trichloroethene	ug/kg	2500	2610	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2400	96	50-150	
Vinyl chloride	ug/kg	2500	2870	115	67-134	
4-Bromofluorobenzene (S)	%			97	53-134	
Dibromofluoromethane (S)	%			115	49-157	
Toluene-d8 (S)	%			102	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<48.1	3240	2700	3120	2840	96	105	63-130	10	20	
1,1,2,2-Tetrachloroethane	ug/kg	<48.1	3240	2700	3230	2890	100	107	57-136	11	20	
1,1,2-Trichloroethane	ug/kg	<48.1	3240	2700	3100	2740	96	101	70-130	12	20	
1,1-Dichloroethane	ug/kg	<48.1	3240	2700	3740	3260	115	121	62-131	14	23	
1,1-Dichloroethene	ug/kg	<48.1	3240	2700	2890	2720	89	101	42-137	6	20	
1,2,4-Trichlorobenzene	ug/kg	<91.4	3240	2700	2940	2530	91	94	59-137	15	21	
1,2-Dibromo-3-chloropropane	ug/kg	<175	3240	2700	2830	2610	87	97	33-150	8	25	
1,2-Dibromoethane (EDB)	ug/kg	<48.1	3240	2700	2980	2700	92	100	70-130	10	20	
1,2-Dichlorobenzene	ug/kg	<48.1	3240	2700	3150	2810	97	104	70-130	12	20	
1,2-Dichloroethane	ug/kg	<48.1	3240	2700	3440	3100	106	115	68-134	11	20	
1,2-Dichloropropane	ug/kg	<48.1	3240	2700	3190	2950	98	109	70-130	8	20	

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3-Dichlorobenzene	ug/kg	<48.1	3240	2700	3080	2730	95	101	70-130	12	20	
1,4-Dichlorobenzene	ug/kg	<48.1	3240	2700	3090	2700	95	100	69-130	14	20	
Benzene	ug/kg	<48.1	3240	2700	3240	2900	100	107	56-131	11	20	
Bromodichloromethane	ug/kg	<48.1	3240	2700	2850	2610	88	96	64-130	9	20	
Bromoform	ug/kg	<48.1	3240	2700	2670	2410	82	89	48-130	10	20	
Bromomethane	ug/kg	<134	3240	2700	3110	2920	96	108	18-169	6	23	
Carbon tetrachloride	ug/kg	<48.1	3240	2700	3310	3000	102	111	59-130	10	20	
Chlorobenzene	ug/kg	<48.1	3240	2700	3190	2800	98	104	70-130	13	20	
Chloroethane	ug/kg	<129	3240	2700	3390	3000	105	111	10-191	12	20	
Chloroform	ug/kg	<89.3	3240	2700	3080	2900	95	107	65-130	6	20	
Chloromethane	ug/kg	<48.1	3240	2700	3000	2860	93	106	36-132	5	20	
cis-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3270	2920	101	108	59-136	11	24	
cis-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2900	2630	89	97	60-130	10	20	
Dibromochloromethane	ug/kg	<48.1	3240	2700	3070	2630	95	97	59-130	15	20	
Dichlorodifluoromethane	ug/kg	<48.1	3240	2700	1590	1570	49	58	10-150	1	27	
Ethylbenzene	ug/kg	<48.1	3240	2700	3000	2640	93	98	64-130	13	20	
Isopropylbenzene (Cumene)	ug/kg	<48.1	3240	2700	3040	2680	94	99	69-138	12	20	
m&p-Xylene	ug/kg	<96.2	6490	5400	6190	5530	96	102	61-130	11	20	
Methyl-tert-butyl ether	ug/kg	<48.1	3240	2700	3600	3080	111	114	52-134	15	20	
Methylene Chloride	ug/kg	<48.1	3240	2700	3350	3190	103	118	61-131	5	20	
o-Xylene	ug/kg	<48.1	3240	2700	3040	2640	94	98	63-130	14	20	
Styrene	ug/kg	<48.1	3240	2700	3090	2740	95	102	70-130	12	20	
Tetrachloroethene	ug/kg	<48.1	3240	2700	2760	2440	85	90	65-130	12	20	
Toluene	ug/kg	<48.1	3240	2700	3100	2680	96	99	65-130	14	20	
trans-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3380	2990	104	111	55-130	12	20	
trans-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2780	2480	86	92	54-130	11	20	
Trichloroethene	ug/kg	<48.1	3240	2700	2990	2750	92	102	70-130	8	20	
Trichlorofluoromethane	ug/kg	<48.1	3240	2700	2910	2810	90	104	42-150	3	24	
Vinyl chloride	ug/kg	<48.1	3240	2700	2830	2640	87	98	35-134	7	20	
4-Bromofluorobenzene (S)	%						91	91	53-134			
Dibromofluoromethane (S)	%						108	115	49-157			
Toluene-d8 (S)	%						94	94	61-148			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

QC Batch: PMST/12429 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

SAMPLE DUPLICATE: 1296318

Parameter	Units	40128277014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.6	24.4	1	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128219001	**B-101 1-3'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219002	**B-101 5-7'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219003	**B-102 1-3'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219004	**B-102 9-10'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219005	**B-103 8-9.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219006	**B-103 16-17'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219007	**SUMP 2.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219008	**SUMP 5.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219001	**B-101 1-3'**	ASTM D2974-87	PMST/12429		
40128219002	**B-101 5-7'**	ASTM D2974-87	PMST/12429		
40128219003	**B-102 1-3'**	ASTM D2974-87	PMST/12429		
40128219004	**B-102 9-10'**	ASTM D2974-87	PMST/12429		
40128219005	**B-103 8-9.5'**	ASTM D2974-87	PMST/12429		
40128219006	**B-103 16-17'**	ASTM D2974-87	PMST/12429		
40128219007	**SUMP 2.5'**	ASTM D2974-87	PMST/12429		
40128219008	**SUMP 5.5'**	ASTM D2974-87	PMST/12429		

401282-19

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	FEHR GRAHAM
Branch/Location:	PLY
Project Contact:	KEN EBBOTT
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	MASTER CLEANERS
Project State:	WI
Sampled By (Print):	MEGAN HANSEN
Sampled By (Sign):	MgH Hansen
PO #:	Regulatory Program:

Quote #:	DERF
Mail To Contact:	KEN EBBOTT
Mail To Company:	FEHR GRAHAM
Mail To Address:	1237 PILGRIM RD PLYMOUTH, WI
Invoice To Contact:	KEN EBBOTT
Invoice To Company:	c/o FEHR GRAHAM
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SL = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analysis Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Y/N	Pres. Codes	VOC			
001	B-101 1-3'	2/10/16	1045	S	N	F	X	1-40mlV	F 1-4oz pA	
002	B-101 5-7'	"	1050	"	"	"	"	"	"	
003	B-102 1-3'	"	1140	"	"	"	"	"	"	
004	B-102 9-10'	"	1145	"	"	"	"	"	"	
005	B-103 8-9.5'	"	1230	"	"	"	"	"	"	
006	B-103 16-17'	"	1235	"	"	"	"	"	"	
007	SUMP 2.5'	"	1400	"	"	"	"	"	"	
008	SUMP 5.5'	"	1410	"	"	"	"	"	"	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
MgH Hansen	2/12/16	Rose Pace	2/12/16 1205
Rose Pace	2/12/16 1335	Susan K. Wheelock	2-12-16 1335

PACE Project No.: 40128219

Receipt Temp = 2.0 °C

Sample Receipt pH: OK / Adjusted

Cooler Custody Seal: Present / (Not Present)

Intact / Not Intact

Version 6.0 06/14/06

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Client Name: Fehr Graham Project # **WO# : 40128219**

40128219

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☒ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used N/A **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: _____ **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 2-12-16
Initials: SM

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
- VOA Samples frozen upon receipt	☐Yes	☐No	
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
-Pace IR Containers Used:	☐Yes	☐No	☑N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☐Yes	☑No	☐N/A
-Includes date/time/ID/Analysis Matrix: S			
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☑N/A
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes	☑No	
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A
Trip Blank Present:	☐Yes	☐No	☑N/A
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A
Pace Trip Blank Lot # (if purchased):			

Comments:

1.
2.
3.
4.
5. Date/Time:
6.
7.
8.
9.
10.
11.
12. No collect date & time on all 40zp. 2-12-16 SM
13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct

Initial when completed	Lab Std #ID of preservative	Date/ Time:

14.
15.

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: GG **Date:** 2-15-16

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(920)469-2436

March 01, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 25, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

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CERTIFICATIONS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(920)469-2436

SAMPLE SUMMARY

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128663001	CONC./TILE SUMP	Solid	02/24/16 14:00	02/25/16 13:30
40128663002	MEOH BLANK	Solid	02/24/16 00:00	02/25/16 13:30

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128663001	**CONC./TILE SUMP**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	BTH	1	PASI-G
40128663002	**MEOH BLANK**	EPA 8260	SMT	64	PASI-G

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Sample: CONC./TILE SUMP **Lab ID: 40128663001** Collected: 02/24/16 14:00 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/29/16 14:32	03/01/16 11:09	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/29/16 14:32	03/01/16 11:09	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/29/16 14:32	03/01/16 11:09	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/29/16 14:32	03/01/16 11:09	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/29/16 14:32	03/01/16 11:09	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Sample: CONC./TILE SUMP **Lab ID: 40128663001** Collected: 02/24/16 14:00 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	79-34-5	W
Tetrachloroethene	**1280**	ug/kg	97.3	40.5	1	02/29/16 14:32	03/01/16 11:09	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/29/16 14:32	03/01/16 11:09	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/29/16 14:32	03/01/16 11:09	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 11:09	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	84	%	49-157		1	02/29/16 14:32	03/01/16 11:09	1868-53-7	
Toluene-d8 (S)	91	%	61-148		1	02/29/16 14:32	03/01/16 11:09	2037-26-5	
4-Bromofluorobenzene (S)	90	%	53-134		1	02/29/16 14:32	03/01/16 11:09	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**38.3**	%	0.10	0.10	1		02/25/16 16:44		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Sample: MEOH BLANK **Lab ID: 40128663002** Collected: 02/24/16 00:00 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/29/16 14:32	03/01/16 01:18	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/29/16 14:32	03/01/16 01:18	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/29/16 14:32	03/01/16 01:18	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/29/16 14:32	03/01/16 01:18	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/29/16 14:32	03/01/16 01:18	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Sample: MEOH BLANK **Lab ID: 40128663002** Collected: 02/24/16 00:00 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	79-34-5	W
Tetrachloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/29/16 14:32	03/01/16 01:18	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/29/16 14:32	03/01/16 01:18	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/29/16 14:32	03/01/16 01:18	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	101	%	49-157		1	02/29/16 14:32	03/01/16 01:18	1868-53-7	
Toluene-d8 (S)	101	%	61-148		1	02/29/16 14:32	03/01/16 01:18	2037-26-5	
4-Bromofluorobenzene (S)	96	%	53-134		1	02/29/16 14:32	03/01/16 01:18	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

QC Batch: MSV/32376 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40128663001, 40128663002

METHOD BLANK: 1300611 Matrix: Solid
Associated Lab Samples: 40128663001, 40128663002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/29/16 19:08	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/29/16 19:08	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/29/16 19:08	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/29/16 19:08	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/29/16 19:08	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/29/16 19:08	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/29/16 19:08	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/29/16 19:08	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/29/16 19:08	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/29/16 19:08	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/29/16 19:08	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/29/16 19:08	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/29/16 19:08	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/29/16 19:08	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/29/16 19:08	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/29/16 19:08	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/29/16 19:08	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/29/16 19:08	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/29/16 19:08	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/29/16 19:08	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/29/16 19:08	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/29/16 19:08	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/29/16 19:08	
Benzene	ug/kg	<9.2	20.0	02/29/16 19:08	
Bromobenzene	ug/kg	<20.6	50.0	02/29/16 19:08	
Bromochloromethane	ug/kg	<21.4	50.0	02/29/16 19:08	
Bromodichloromethane	ug/kg	<9.8	50.0	02/29/16 19:08	
Bromoform	ug/kg	<19.8	50.0	02/29/16 19:08	
Bromomethane	ug/kg	<69.9	250	02/29/16 19:08	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/29/16 19:08	
Chlorobenzene	ug/kg	<14.8	50.0	02/29/16 19:08	
Chloroethane	ug/kg	<67.0	250	02/29/16 19:08	
Chloroform	ug/kg	<46.4	250	02/29/16 19:08	
Chloromethane	ug/kg	<20.4	50.0	02/29/16 19:08	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/29/16 19:08	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/29/16 19:08	
Dibromochloromethane	ug/kg	<17.9	50.0	02/29/16 19:08	
Dibromomethane	ug/kg	<19.3	50.0	02/29/16 19:08	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/29/16 19:08	
Diisopropyl ether	ug/kg	<17.7	50.0	02/29/16 19:08	
Ethylbenzene	ug/kg	<12.4	50.0	02/29/16 19:08	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

METHOD BLANK: 1300611 Matrix: Solid
Associated Lab Samples: 40128663001, 40128663002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/29/16 19:08	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/29/16 19:08	
m&p-Xylene	ug/kg	<34.4	100	02/29/16 19:08	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/29/16 19:08	
Methylene Chloride	ug/kg	<16.2	50.0	02/29/16 19:08	
n-Butylbenzene	ug/kg	<10.5	50.0	02/29/16 19:08	
n-Propylbenzene	ug/kg	<11.6	50.0	02/29/16 19:08	
Naphthalene	ug/kg	<40.0	250	02/29/16 19:08	
o-Xylene	ug/kg	<14.0	50.0	02/29/16 19:08	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/29/16 19:08	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/29/16 19:08	
Styrene	ug/kg	<9.0	50.0	02/29/16 19:08	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/29/16 19:08	
Tetrachloroethene	ug/kg	<12.9	50.0	02/29/16 19:08	
Toluene	ug/kg	<11.2	50.0	02/29/16 19:08	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/29/16 19:08	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/29/16 19:08	
Trichloroethene	ug/kg	<23.6	50.0	02/29/16 19:08	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/29/16 19:08	
Vinyl chloride	ug/kg	<21.1	50.0	02/29/16 19:08	
4-Bromofluorobenzene (S)	%	95	53-134	02/29/16 19:08	
Dibromofluoromethane (S)	%	106	49-157	02/29/16 19:08	
Toluene-d8 (S)	%	107	61-148	02/29/16 19:08	

LABORATORY CONTROL SAMPLE: 1300612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2490	99	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2490	100	70-130	
1,1-Dichloroethane	ug/kg	2500	2370	95	70-130	
1,1-Dichloroethene	ug/kg	2500	2390	96	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2440	98	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2140	86	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2460	98	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2430	97	70-130	
1,2-Dichloroethane	ug/kg	2500	2470	99	70-134	
1,2-Dichloropropane	ug/kg	2500	2580	103	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2390	95	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2360	95	70-130	
Benzene	ug/kg	2500	2560	102	70-130	
Bromodichloromethane	ug/kg	2500	2240	90	70-130	
Bromoform	ug/kg	2500	2070	83	48-130	
Bromomethane	ug/kg	2500	2070	83	70-169	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
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(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

LABORATORY CONTROL SAMPLE: 1300612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2400	96	67-130	
Chlorobenzene	ug/kg	2500	2470	99	70-130	
Chloroethane	ug/kg	2500	2070	83	70-191	
Chloroform	ug/kg	2500	2460	98	70-130	
Chloromethane	ug/kg	2500	1900	76	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2540	102	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2250	90	70-130	
Dibromochloromethane	ug/kg	2500	2180	87	65-130	
Dichlorodifluoromethane	ug/kg	2500	1160	46	12-150	
Ethylbenzene	ug/kg	2500	2500	100	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2580	103	70-130	
m&p-Xylene	ug/kg	5000	5040	101	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2490	99	70-130	
Methylene Chloride	ug/kg	2500	2510	100	70-131	
o-Xylene	ug/kg	2500	2510	100	70-130	
Styrene	ug/kg	2500	2650	106	70-130	
Tetrachloroethene	ug/kg	2500	2190	88	70-130	
Toluene	ug/kg	2500	2580	103	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2460	98	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2250	90	65-130	
Trichloroethene	ug/kg	2500	2510	100	70-130	
Trichlorofluoromethane	ug/kg	2500	2160	86	50-150	
Vinyl chloride	ug/kg	2500	2190	88	67-134	
4-Bromofluorobenzene (S)	%			98	53-134	
Dibromofluoromethane (S)	%			106	49-157	
Toluene-d8 (S)	%			104	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300613 1300614

Parameter	Units	40128680003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<25.0	1610	1610	1480	1490	92	93	63-130	1	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1610	1610	1690	1680	105	105	57-136	0	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1610	1610	1630	1680	101	105	70-130	3	20	
1,1-Dichloroethane	ug/kg	<25.0	1610	1610	1520	1510	95	94	62-131	0	23	
1,1-Dichloroethene	ug/kg	<25.0	1610	1610	1230	1210	77	76	42-137	2	20	
1,2,4-Trichlorobenzene	ug/kg	<47.6	1610	1610	1790	1760	112	110	59-137	2	21	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1610	1610	1650	1590	103	99	33-150	4	25	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1610	1610	1570	1650	98	103	70-130	5	20	
1,2-Dichlorobenzene	ug/kg	<25.0	1610	1610	1680	1730	105	108	70-130	3	20	
1,2-Dichloroethane	ug/kg	<25.0	1610	1610	1640	1600	102	100	68-134	3	20	
1,2-Dichloropropane	ug/kg	<25.0	1610	1610	1640	1660	102	103	70-130	1	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1610	1610	1660	1670	103	104	70-130	1	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1610	1610	1650	1660	103	103	69-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300613 1300614

Parameter	Units	40128680003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<25.0	1610	1610	1630	1610	101	100	56-131	1	20	
Bromodichloromethane	ug/kg	<25.0	1610	1610	1560	1600	97	100	64-130	2	20	
Bromoform	ug/kg	<25.0	1610	1610	1470	1520	91	94	48-130	3	20	
Bromomethane	ug/kg	<69.9	1610	1610	962	1010	60	63	18-169	5	23	
Carbon tetrachloride	ug/kg	<25.0	1610	1610	1430	1420	89	88	59-130	1	20	
Chlorobenzene	ug/kg	<25.0	1610	1610	1640	1660	102	103	70-130	1	20	
Chloroethane	ug/kg	<67.0	1610	1610	1030	1030	64	64	10-191	0	20	
Chloroform	ug/kg	<46.4	1610	1610	1610	1580	100	99	65-130	1	20	
Chloromethane	ug/kg	<25.0	1610	1610	573	557	36	35	36-132	3	20	M1
cis-1,2-Dichloroethene	ug/kg	<25.0	1610	1610	1570	1580	98	99	59-136	1	24	
cis-1,3-Dichloropropene	ug/kg	<25.0	1610	1610	1500	1510	94	94	60-130	1	20	
Dibromochloromethane	ug/kg	<25.0	1610	1610	1520	1570	95	98	59-130	3	20	
Dichlorodifluoromethane	ug/kg	<25.0	1610	1610	165	161	10	10	10-150	3	27	
Ethylbenzene	ug/kg	<25.0	1610	1610	1560	1650	97	103	64-130	6	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1610	1610	1610	1710	100	106	69-138	6	20	
m&p-Xylene	ug/kg	<50.0	3210	3210	3290	3440	102	107	61-130	5	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1610	1610	1610	1590	100	99	52-134	1	20	
Methylene Chloride	ug/kg	<25.0	1610	1610	1560	1590	97	99	61-131	2	20	
o-Xylene	ug/kg	<25.0	1610	1610	1630	1730	102	108	63-130	6	20	
Styrene	ug/kg	<25.0	1610	1610	1660	1750	103	109	70-130	5	20	
Tetrachloroethene	ug/kg	<25.0	1610	1610	1400	1480	87	92	65-130	6	20	
Toluene	ug/kg	<25.0	1610	1610	1580	1690	98	105	65-130	7	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1610	1610	1420	1460	88	91	55-130	3	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1610	1610	1530	1590	95	99	54-130	4	20	
Trichloroethene	ug/kg	<25.0	1610	1610	1530	1580	95	99	70-130	3	20	
Trichlorofluoromethane	ug/kg	<25.0	1610	1610	1010	1030	63	64	42-150	2	24	
Vinyl chloride	ug/kg	<25.0	1610	1610	739	744	46	46	35-134	1	20	
4-Bromofluorobenzene (S)	%						104	107	53-134			
Dibromofluoromethane (S)	%						112	108	49-157			
Toluene-d8 (S)	%						110	113	61-148			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

QC Batch: PMST/12455
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 40128663001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1299574

Parameter	Units	40128662015 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.3	6.3	0	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
W	Non-detect results are reported on a wet weight basis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128663

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128663002	MEOH BLANK	EPA 5035/5030B	MSV/32376	EPA 8260	MSV/32377
40128663001	CONC./TILE SUMP	EPA 5035/5030B	MSV/32376	EPA 8260	MSV/32377
40128663001	CONC./TILE SUMP	ASTM D2974-87	PMST/12455		

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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CHAIN OF CUSTODY

401286663

(Please Print Clearly)	
Company Name:	Fehr Graham
Branch/Location:	Plymouth, WI
Project Contact:	Ken Ebbott
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	Master Dry Cleaning
Project State:	WI
Sampled By (Print):	Mark R. Gibeault
Sampled By (Sign):	Mark R. Gibeault
PO #:	Regulatory Program:

Quote #:	DERF
Mail To Contact:	Ken Ebbott / Mark Gibeault
Mail To Company:	Fehr Graham
Mail To Address:	1237 Pilgrim Rd. Plymouth, WI 53073
Invoice To Contact:	Ken Ebbott
Invoice To Company:	c/o FG
Invoice To Address:	
Invoice To Phone:	

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analysis Requested: VOCs	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Y/N	PRES Code				
001	Conc./Tile Sump	2/24/16	14:00	S	N	F	X		1-4oz pres	40mL vials
002	MeOH Blank						X			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Mark R. Gibeault	2/25/16 9:15	Bree Pace	2/25/16 1120
Bree Pace	2/25/16 1330	Susan Klyfstad	225/16 1330

PACE Project No.
401286663

Receipt Temp = 12.1 °C

Sample Receipt pH
OK / Adjusted

Cooler Custody Seal
Present / ~~Not Present~~
Intact / Not Intact

Version 6.0 06/14/06

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical

Client Name: Fehr Graham

Project # **WO#: 40128663**

40128663

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☑ Pace Other: ______

Tracking #: ______

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other ______

Thermometer Used N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 20 /Corr: ______ **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 2-25-16
Initials: SW

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☑No ☐N/A	12. No collect time on Torp, vial time 1410 2-25-16 SW
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes ☑No	Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	14.
Trip Blank Present:	☒Yes ☑No ☐N/A	15. ~~MeOH Blank on COC - NONE in shipment. 2/25/16~~ 2-25-16 SW
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐ SW

Person Contacted: ______ Date/Time: ______

Comments/ Resolution: ______

Project Manager Review: CH **Date:** 2-25-16

F-GB-C-031-Rev.03 (9April2015) SCUR Form

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March 02, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 25, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

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CERTIFICATIONS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128660001	B-101	Water	02/24/16 14:30	02/25/16 13:30
40128660002	B-102	Water	02/24/16 14:45	02/25/16 13:30
40128660003	B-103	Water	02/24/16 15:00	02/25/16 13:30
40128660004	SUMP 5.5'	Solid	02/24/16 14:10	02/25/16 13:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128660001	**B-101**	EPA 8260	LAP	64	PASI-G
40128660002	**B-102**	EPA 8260	LAP	64	PASI-G
40128660003	**B-103**	EPA 8260	LAP	64	PASI-G
40128660004	**SUMP 5.5'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-101 **Lab ID: 40128660001** Collected: 02/24/16 14:30 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	71-43-2	
Bromobenzene	**<5.8**	ug/L	25.0	5.8	25		03/02/16 10:30	108-86-1	
Bromochloromethane	**<8.5**	ug/L	25.0	8.5	25		03/02/16 10:30	74-97-5	
Bromodichloromethane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	75-27-4	
Bromoform	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	75-25-2	
Bromomethane	**<60.9**	ug/L	125	60.9	25		03/02/16 10:30	74-83-9	
n-Butylbenzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	104-51-8	
sec-Butylbenzene	**<54.7**	ug/L	125	54.7	25		03/02/16 10:30	135-98-8	
tert-Butylbenzene	**<4.5**	ug/L	25.0	4.5	25		03/02/16 10:30	98-06-6	
Carbon tetrachloride	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	56-23-5	
Chlorobenzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	108-90-7	
Chloroethane	**<9.4**	ug/L	25.0	9.4	25		03/02/16 10:30	75-00-3	
Chloroform	**<62.5**	ug/L	125	62.5	25		03/02/16 10:30	67-66-3	
Chloromethane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	74-87-3	
2-Chlorotoluene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	95-49-8	
4-Chlorotoluene	**<5.3**	ug/L	25.0	5.3	25		03/02/16 10:30	106-43-4	
1,2-Dibromo-3-chloropropane	**<54.1**	ug/L	125	54.1	25		03/02/16 10:30	96-12-8	
Dibromochloromethane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	124-48-1	
1,2-Dibromoethane (EDB)	**<4.4**	ug/L	25.0	4.4	25		03/02/16 10:30	106-93-4	
Dibromomethane	**<10.7**	ug/L	25.0	10.7	25		03/02/16 10:30	74-95-3	
1,2-Dichlorobenzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	95-50-1	
1,3-Dichlorobenzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	541-73-1	
1,4-Dichlorobenzene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	106-46-7	
Dichlorodifluoromethane	**<5.6**	ug/L	25.0	5.6	25		03/02/16 10:30	75-71-8	
1,1-Dichloroethane	**<6.0**	ug/L	25.0	6.0	25		03/02/16 10:30	75-34-3	
1,2-Dichloroethane	**<4.2**	ug/L	25.0	4.2	25		03/02/16 10:30	107-06-2	
1,1-Dichloroethene	**<10.3**	ug/L	25.0	10.3	25		03/02/16 10:30	75-35-4	
cis-1,2-Dichloroethene	**210**	ug/L	25.0	6.4	25		03/02/16 10:30	156-59-2	
trans-1,2-Dichloroethene	**<6.4**	ug/L	25.0	6.4	25		03/02/16 10:30	156-60-5	
1,2-Dichloropropane	**<5.8**	ug/L	25.0	5.8	25		03/02/16 10:30	78-87-5	
1,3-Dichloropropane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	142-28-9	
2,2-Dichloropropane	**<12.1**	ug/L	25.0	12.1	25		03/02/16 10:30	594-20-7	
1,1-Dichloropropene	**<11.0**	ug/L	25.0	11.0	25		03/02/16 10:30	563-58-6	
cis-1,3-Dichloropropene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	10061-01-5	
trans-1,3-Dichloropropene	**<5.7**	ug/L	25.0	5.7	25		03/02/16 10:30	10061-02-6	
Diisopropyl ether	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	108-20-3	
Ethylbenzene	**749**	ug/L	25.0	12.5	25		03/02/16 10:30	100-41-4	
Hexachloro-1,3-butadiene	**<52.6**	ug/L	125	52.6	25		03/02/16 10:30	87-68-3	
Isopropylbenzene (Cumene)	**155**	ug/L	25.0	3.6	25		03/02/16 10:30	98-82-8	
p-Isopropyltoluene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	99-87-6	
Methylene Chloride	**<5.8**	ug/L	25.0	5.8	25		03/02/16 10:30	75-09-2	
Methyl-tert-butyl ether	**<4.4**	ug/L	25.0	4.4	25		03/02/16 10:30	1634-04-4	
Naphthalene	**144**	ug/L	125	62.5	25		03/02/16 10:30	91-20-3	
n-Propylbenzene	**455**	ug/L	25.0	12.5	25		03/02/16 10:30	103-65-1	
Styrene	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<4.5**	ug/L	25.0	4.5	25		03/02/16 10:30	630-20-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-101 **Lab ID: 40128660001** Collected: 02/24/16 14:30 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<6.2**	ug/L	25.0	6.2	25		03/02/16 10:30	79-34-5	
Tetrachloroethene	**57.1**	ug/L	25.0	12.5	25		03/02/16 10:30	127-18-4	
Toluene	**323**	ug/L	25.0	12.5	25		03/02/16 10:30	108-88-3	
1,2,3-Trichlorobenzene	**<53.3**	ug/L	125	53.3	25		03/02/16 10:30	87-61-6	
1,2,4-Trichlorobenzene	**<55.2**	ug/L	125	55.2	25		03/02/16 10:30	120-82-1	
1,1,1-Trichloroethane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	71-55-6	
1,1,2-Trichloroethane	**<4.9**	ug/L	25.0	4.9	25		03/02/16 10:30	79-00-5	
Trichloroethene	**23.0J**	ug/L	25.0	8.3	25		03/02/16 10:30	79-01-6	
Trichlorofluoromethane	**<4.6**	ug/L	25.0	4.6	25		03/02/16 10:30	75-69-4	
1,2,3-Trichloropropane	**<12.5**	ug/L	25.0	12.5	25		03/02/16 10:30	96-18-4	
1,2,4-Trimethylbenzene	**2520**	ug/L	25.0	12.5	25		03/02/16 10:30	95-63-6	
1,3,5-Trimethylbenzene	**650**	ug/L	25.0	12.5	25		03/02/16 10:30	108-67-8	
Vinyl chloride	**11.9J**	ug/L	25.0	4.4	25		03/02/16 10:30	75-01-4	
m&p-Xylene	**1590**	ug/L	50.0	25.0	25		03/02/16 10:30	179601-23-1	
o-Xylene	**214**	ug/L	25.0	12.5	25		03/02/16 10:30	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		25		03/02/16 10:30	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		25		03/02/16 10:30	1868-53-7	
Toluene-d8 (S)	99	%	70-130		25		03/02/16 10:30	2037-26-5	

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-102 **Lab ID: 40128660002** Collected: 02/24/16 14:45 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	71-43-2	
Bromobenzene	**<2.3**	ug/L	10.0	2.3	10		03/02/16 10:53	108-86-1	
Bromochloromethane	**<3.4**	ug/L	10.0	3.4	10		03/02/16 10:53	74-97-5	
Bromodichloromethane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	75-27-4	
Bromoform	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	75-25-2	
Bromomethane	**<24.3**	ug/L	50.0	24.3	10		03/02/16 10:53	74-83-9	
n-Butylbenzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	104-51-8	
sec-Butylbenzene	**<21.9**	ug/L	50.0	21.9	10		03/02/16 10:53	135-98-8	
tert-Butylbenzene	**<1.8**	ug/L	10.0	1.8	10		03/02/16 10:53	98-06-6	
Carbon tetrachloride	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	56-23-5	
Chlorobenzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	108-90-7	
Chloroethane	**<3.7**	ug/L	10.0	3.7	10		03/02/16 10:53	75-00-3	
Chloroform	**<25.0**	ug/L	50.0	25.0	10		03/02/16 10:53	67-66-3	
Chloromethane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	74-87-3	
2-Chlorotoluene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	95-49-8	
4-Chlorotoluene	**<2.1**	ug/L	10.0	2.1	10		03/02/16 10:53	106-43-4	
1,2-Dibromo-3-chloropropane	**<21.6**	ug/L	50.0	21.6	10		03/02/16 10:53	96-12-8	
Dibromochloromethane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	124-48-1	
1,2-Dibromoethane (EDB)	**<1.8**	ug/L	10.0	1.8	10		03/02/16 10:53	106-93-4	
Dibromomethane	**<4.3**	ug/L	10.0	4.3	10		03/02/16 10:53	74-95-3	
1,2-Dichlorobenzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	95-50-1	
1,3-Dichlorobenzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	541-73-1	
1,4-Dichlorobenzene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	106-46-7	
Dichlorodifluoromethane	**<2.2**	ug/L	10.0	2.2	10		03/02/16 10:53	75-71-8	
1,1-Dichloroethane	**<2.4**	ug/L	10.0	2.4	10		03/02/16 10:53	75-34-3	
1,2-Dichloroethane	**<1.7**	ug/L	10.0	1.7	10		03/02/16 10:53	107-06-2	
1,1-Dichloroethene	**<4.1**	ug/L	10.0	4.1	10		03/02/16 10:53	75-35-4	
cis-1,2-Dichloroethene	**<2.6**	ug/L	10.0	2.6	10		03/02/16 10:53	156-59-2	
trans-1,2-Dichloroethene	**<2.6**	ug/L	10.0	2.6	10		03/02/16 10:53	156-60-5	
1,2-Dichloropropane	**<2.3**	ug/L	10.0	2.3	10		03/02/16 10:53	78-87-5	
1,3-Dichloropropane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	142-28-9	
2,2-Dichloropropane	**<4.8**	ug/L	10.0	4.8	10		03/02/16 10:53	594-20-7	
1,1-Dichloropropene	**<4.4**	ug/L	10.0	4.4	10		03/02/16 10:53	563-58-6	
cis-1,3-Dichloropropene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	10061-01-5	
trans-1,3-Dichloropropene	**<2.3**	ug/L	10.0	2.3	10		03/02/16 10:53	10061-02-6	
Diisopropyl ether	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	108-20-3	
Ethylbenzene	**162**	ug/L	10.0	5.0	10		03/02/16 10:53	100-41-4	
Hexachloro-1,3-butadiene	**<21.1**	ug/L	50.0	21.1	10		03/02/16 10:53	87-68-3	
Isopropylbenzene (Cumene)	**105**	ug/L	10.0	1.4	10		03/02/16 10:53	98-82-8	
p-Isopropyltoluene	**11.0**	ug/L	10.0	5.0	10		03/02/16 10:53	99-87-6	
Methylene Chloride	**<2.3**	ug/L	10.0	2.3	10		03/02/16 10:53	75-09-2	
Methyl-tert-butyl ether	**<1.7**	ug/L	10.0	1.7	10		03/02/16 10:53	1634-04-4	
Naphthalene	**102**	ug/L	50.0	25.0	10		03/02/16 10:53	91-20-3	
n-Propylbenzene	**267**	ug/L	10.0	5.0	10		03/02/16 10:53	103-65-1	
Styrene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.8**	ug/L	10.0	1.8	10		03/02/16 10:53	630-20-6	

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-102 **Lab ID: 40128660002** Collected: 02/24/16 14:45 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<2.5**	ug/L	10.0	2.5	10		03/02/16 10:53	79-34-5	
Tetrachloroethene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	127-18-4	
Toluene	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	108-88-3	
1,2,3-Trichlorobenzene	**<21.3**	ug/L	50.0	21.3	10		03/02/16 10:53	87-61-6	
1,2,4-Trichlorobenzene	**<22.1**	ug/L	50.0	22.1	10		03/02/16 10:53	120-82-1	
1,1,1-Trichloroethane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	71-55-6	
1,1,2-Trichloroethane	**<2.0**	ug/L	10.0	2.0	10		03/02/16 10:53	79-00-5	
Trichloroethene	**<3.3**	ug/L	10.0	3.3	10		03/02/16 10:53	79-01-6	
Trichlorofluoromethane	**<1.8**	ug/L	10.0	1.8	10		03/02/16 10:53	75-69-4	
1,2,3-Trichloropropane	**<5.0**	ug/L	10.0	5.0	10		03/02/16 10:53	96-18-4	
1,2,4-Trimethylbenzene	**1420**	ug/L	10.0	5.0	10		03/02/16 10:53	95-63-6	
1,3,5-Trimethylbenzene	**272**	ug/L	10.0	5.0	10		03/02/16 10:53	108-67-8	
Vinyl chloride	**<1.8**	ug/L	10.0	1.8	10		03/02/16 10:53	75-01-4	
m&p-Xylene	**267**	ug/L	20.0	10.0	10		03/02/16 10:53	179601-23-1	
o-Xylene	**13.8**	ug/L	10.0	5.0	10		03/02/16 10:53	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		10		03/02/16 10:53	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		10		03/02/16 10:53	1868-53-7	
Toluene-d8 (S)	99	%	70-130		10		03/02/16 10:53	2037-26-5	

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-103 **Lab ID: 40128660003** Collected: 02/24/16 15:00 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	71-43-2	
Bromobenzene	**<23.0**	ug/L	100	23.0	100		03/02/16 11:15	108-86-1	
Bromochloromethane	**<34.0**	ug/L	100	34.0	100		03/02/16 11:15	74-97-5	
Bromodichloromethane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	75-27-4	
Bromoform	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	75-25-2	
Bromomethane	**<243**	ug/L	500	243	100		03/02/16 11:15	74-83-9	
n-Butylbenzene	**222**	ug/L	100	50.0	100		03/02/16 11:15	104-51-8	
sec-Butylbenzene	**<219**	ug/L	500	219	100		03/02/16 11:15	135-98-8	
tert-Butylbenzene	**<18.0**	ug/L	100	18.0	100		03/02/16 11:15	98-06-6	
Carbon tetrachloride	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	56-23-5	
Chlorobenzene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	108-90-7	
Chloroethane	**<37.5**	ug/L	100	37.5	100		03/02/16 11:15	75-00-3	
Chloroform	**<250**	ug/L	500	250	100		03/02/16 11:15	67-66-3	
Chloromethane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	74-87-3	
2-Chlorotoluene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	95-49-8	
4-Chlorotoluene	**<21.4**	ug/L	100	21.4	100		03/02/16 11:15	106-43-4	
1,2-Dibromo-3-chloropropane	**<216**	ug/L	500	216	100		03/02/16 11:15	96-12-8	
Dibromochloromethane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	124-48-1	
1,2-Dibromoethane (EDB)	**<17.8**	ug/L	100	17.8	100		03/02/16 11:15	106-93-4	
Dibromomethane	**<42.7**	ug/L	100	42.7	100		03/02/16 11:15	74-95-3	
1,2-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	95-50-1	
1,3-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	541-73-1	
1,4-Dichlorobenzene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	106-46-7	
Dichlorodifluoromethane	**<22.4**	ug/L	100	22.4	100		03/02/16 11:15	75-71-8	
1,1-Dichloroethane	**<24.2**	ug/L	100	24.2	100		03/02/16 11:15	75-34-3	
1,2-Dichloroethane	**<16.8**	ug/L	100	16.8	100		03/02/16 11:15	107-06-2	
1,1-Dichloroethene	**<41.0**	ug/L	100	41.0	100		03/02/16 11:15	75-35-4	
cis-1,2-Dichloroethene	**4090**	ug/L	100	25.6	100		03/02/16 11:15	156-59-2	
trans-1,2-Dichloroethene	**<25.7**	ug/L	100	25.7	100		03/02/16 11:15	156-60-5	
1,2-Dichloropropane	**<23.3**	ug/L	100	23.3	100		03/02/16 11:15	78-87-5	
1,3-Dichloropropane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	142-28-9	
2,2-Dichloropropane	**<48.4**	ug/L	100	48.4	100		03/02/16 11:15	594-20-7	
1,1-Dichloropropene	**<44.1**	ug/L	100	44.1	100		03/02/16 11:15	563-58-6	
cis-1,3-Dichloropropene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	10061-01-5	
trans-1,3-Dichloropropene	**<23.0**	ug/L	100	23.0	100		03/02/16 11:15	10061-02-6	
Diisopropyl ether	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	108-20-3	
Ethylbenzene	**3590**	ug/L	100	50.0	100		03/02/16 11:15	100-41-4	
Hexachloro-1,3-butadiene	**<211**	ug/L	500	211	100		03/02/16 11:15	87-68-3	
Isopropylbenzene (Cumene)	**269**	ug/L	100	14.3	100		03/02/16 11:15	98-82-8	
p-Isopropyltoluene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	99-87-6	
Methylene Chloride	**<23.3**	ug/L	100	23.3	100		03/02/16 11:15	75-09-2	
Methyl-tert-butyl ether	**<17.4**	ug/L	100	17.4	100		03/02/16 11:15	1634-04-4	
Naphthalene	**467J**	ug/L	500	250	100		03/02/16 11:15	91-20-3	
n-Propylbenzene	**885**	ug/L	100	50.0	100		03/02/16 11:15	103-65-1	
Styrene	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<18.1**	ug/L	100	18.1	100		03/02/16 11:15	630-20-6	

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ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: B-103 **Lab ID: 40128660003** Collected: 02/24/16 15:00 Received: 02/25/16 13:30 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<24.9**	ug/L	100	24.9	100		03/02/16 11:15	79-34-5	
Tetrachloroethene	**7030**	ug/L	100	50.0	100		03/02/16 11:15	127-18-4	
Toluene	**2490**	ug/L	100	50.0	100		03/02/16 11:15	108-88-3	
1,2,3-Trichlorobenzene	**<213**	ug/L	500	213	100		03/02/16 11:15	87-61-6	
1,2,4-Trichlorobenzene	**<221**	ug/L	500	221	100		03/02/16 11:15	120-82-1	
1,1,1-Trichloroethane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	71-55-6	
1,1,2-Trichloroethane	**<19.7**	ug/L	100	19.7	100		03/02/16 11:15	79-00-5	
Trichloroethene	**1120**	ug/L	100	33.1	100		03/02/16 11:15	79-01-6	
Trichlorofluoromethane	**<18.5**	ug/L	100	18.5	100		03/02/16 11:15	75-69-4	
1,2,3-Trichloropropane	**<50.0**	ug/L	100	50.0	100		03/02/16 11:15	96-18-4	
1,2,4-Trimethylbenzene	**4310**	ug/L	100	50.0	100		03/02/16 11:15	95-63-6	
1,3,5-Trimethylbenzene	**1230**	ug/L	100	50.0	100		03/02/16 11:15	108-67-8	
Vinyl chloride	**99.3J**	ug/L	100	17.6	100		03/02/16 11:15	75-01-4	
m&p-Xylene	**9770**	ug/L	200	100	100		03/02/16 11:15	179601-23-1	
o-Xylene	**2700**	ug/L	100	50.0	100		03/02/16 11:15	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		100		03/02/16 11:15	460-00-4	
Dibromofluoromethane (S)	99	%	70-130		100		03/02/16 11:15	1868-53-7	
Toluene-d8 (S)	98	%	70-130		100		03/02/16 11:15	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: SUMP 5.5' **Lab ID: 40128660004** Collected: 02/24/16 14:10 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	71-43-2	W
Bromobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	108-86-1	W
Bromochloromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	74-97-5	W
Bromodichloromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-27-4	W
Bromoform	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-25-2	W
Bromomethane	**<87400**	ug/kg	312000	87400	1250	02/29/16 14:32	03/01/16 10:46	74-83-9	W
n-Butylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	104-51-8	W
sec-Butylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	135-98-8	W
tert-Butylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	98-06-6	W
Carbon tetrachloride	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	56-23-5	W
Chlorobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	108-90-7	W
Chloroethane	**<83800**	ug/kg	312000	83800	1250	02/29/16 14:32	03/01/16 10:46	75-00-3	W
Chloroform	**<58100**	ug/kg	312000	58100	1250	02/29/16 14:32	03/01/16 10:46	67-66-3	W
Chloromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	74-87-3	W
2-Chlorotoluene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	95-49-8	W
4-Chlorotoluene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	106-43-4	W
1,2-Dibromo-3-chloropropane	**<114000**	ug/kg	312000	114000	1250	02/29/16 14:32	03/01/16 10:46	96-12-8	W
Dibromochloromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	124-48-1	W
1,2-Dibromoethane (EDB)	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	106-93-4	W
Dibromomethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	74-95-3	W
1,2-Dichlorobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	95-50-1	W
1,3-Dichlorobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	541-73-1	W
1,4-Dichlorobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	106-46-7	W
Dichlorodifluoromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-71-8	W
1,1-Dichloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-34-3	W
1,2-Dichloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	107-06-2	W
1,1-Dichloroethene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-35-4	W
cis-1,2-Dichloroethene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	156-59-2	W
trans-1,2-Dichloroethene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	156-60-5	W
1,2-Dichloropropane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	78-87-5	W
1,3-Dichloropropane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	142-28-9	W
2,2-Dichloropropane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	594-20-7	W
1,1-Dichloropropene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	563-58-6	W
cis-1,3-Dichloropropene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	10061-01-5	W
trans-1,3-Dichloropropene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	10061-02-6	W
Diisopropyl ether	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	108-20-3	W
Ethylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	100-41-4	W
Hexachloro-1,3-butadiene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	87-68-3	W
Isopropylbenzene (Cumene)	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	98-82-8	W
p-Isopropyltoluene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	99-87-6	W
Methylene Chloride	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-09-2	W
Methyl-tert-butyl ether	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	1634-04-4	W
Naphthalene	**<50100**	ug/kg	312000	50100	1250	02/29/16 14:32	03/01/16 10:46	91-20-3	W
n-Propylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	103-65-1	W
Styrene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Sample: SUMP 5.5' **Lab ID: 40128660004** Collected: 02/24/16 14:10 Received: 02/25/16 13:30 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	630-20-6	W
1,1,2,2-Tetrachloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	79-34-5	W
Tetrachloroethene	**10800000**	ug/kg	125000	52100	1250	02/29/16 14:32	03/01/16 10:46	127-18-4	
Toluene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	108-88-3	W
1,2,3-Trichlorobenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	87-61-6	W
1,2,4-Trichlorobenzene	**<59400**	ug/kg	312000	59400	1250	02/29/16 14:32	03/01/16 10:46	120-82-1	W
1,1,1-Trichloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	71-55-6	W
1,1,2-Trichloroethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	79-00-5	W
Trichloroethene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	79-01-6	W
Trichlorofluoromethane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-69-4	W
1,2,3-Trichloropropane	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	96-18-4	W
1,2,4-Trimethylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	95-63-6	W
1,3,5-Trimethylbenzene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	108-67-8	W
Vinyl chloride	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	75-01-4	W
m&p-Xylene	**<62500**	ug/kg	150000	62500	1250	02/29/16 14:32	03/01/16 10:46	179601-23-1	W
o-Xylene	**<31200**	ug/kg	75000	31200	1250	02/29/16 14:32	03/01/16 10:46	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	49-157		1250	02/29/16 14:32	03/01/16 10:46	1868-53-7	S4
Toluene-d8 (S)	0	%	61-148		1250	02/29/16 14:32	03/01/16 10:46	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	53-134		1250	02/29/16 14:32	03/01/16 10:46	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**40.0**	%	0.10	0.10	1		02/29/16 13:39		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

QC Batch: MSV/32376
QC Batch Method: EPA 5035/5030B
Associated Lab Samples: 40128660004

Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List

METHOD BLANK: 1300611
Associated Lab Samples: 40128660004

Matrix: Solid

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/29/16 19:08	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/29/16 19:08	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/29/16 19:08	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/29/16 19:08	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/29/16 19:08	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/29/16 19:08	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/29/16 19:08	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/29/16 19:08	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/29/16 19:08	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/29/16 19:08	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/29/16 19:08	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/29/16 19:08	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/29/16 19:08	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/29/16 19:08	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/29/16 19:08	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/29/16 19:08	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/29/16 19:08	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/29/16 19:08	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/29/16 19:08	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/29/16 19:08	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/29/16 19:08	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/29/16 19:08	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/29/16 19:08	
Benzene	ug/kg	<9.2	20.0	02/29/16 19:08	
Bromobenzene	ug/kg	<20.6	50.0	02/29/16 19:08	
Bromochloromethane	ug/kg	<21.4	50.0	02/29/16 19:08	
Bromodichloromethane	ug/kg	<9.8	50.0	02/29/16 19:08	
Bromoform	ug/kg	<19.8	50.0	02/29/16 19:08	
Bromomethane	ug/kg	<69.9	250	02/29/16 19:08	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/29/16 19:08	
Chlorobenzene	ug/kg	<14.8	50.0	02/29/16 19:08	
Chloroethane	ug/kg	<67.0	250	02/29/16 19:08	
Chloroform	ug/kg	<46.4	250	02/29/16 19:08	
Chloromethane	ug/kg	<20.4	50.0	02/29/16 19:08	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/29/16 19:08	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/29/16 19:08	
Dibromochloromethane	ug/kg	<17.9	50.0	02/29/16 19:08	
Dibromomethane	ug/kg	<19.3	50.0	02/29/16 19:08	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/29/16 19:08	
Diisopropyl ether	ug/kg	<17.7	50.0	02/29/16 19:08	
Ethylbenzene	ug/kg	<12.4	50.0	02/29/16 19:08	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

METHOD BLANK: 1300611 Matrix: Solid
Associated Lab Samples: 40128660004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/29/16 19:08	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/29/16 19:08	
m&p-Xylene	ug/kg	<34.4	100	02/29/16 19:08	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/29/16 19:08	
Methylene Chloride	ug/kg	<16.2	50.0	02/29/16 19:08	
n-Butylbenzene	ug/kg	<10.5	50.0	02/29/16 19:08	
n-Propylbenzene	ug/kg	<11.6	50.0	02/29/16 19:08	
Naphthalene	ug/kg	<40.0	250	02/29/16 19:08	
o-Xylene	ug/kg	<14.0	50.0	02/29/16 19:08	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/29/16 19:08	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/29/16 19:08	
Styrene	ug/kg	<9.0	50.0	02/29/16 19:08	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/29/16 19:08	
Tetrachloroethene	ug/kg	<12.9	50.0	02/29/16 19:08	
Toluene	ug/kg	<11.2	50.0	02/29/16 19:08	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/29/16 19:08	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/29/16 19:08	
Trichloroethene	ug/kg	<23.6	50.0	02/29/16 19:08	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/29/16 19:08	
Vinyl chloride	ug/kg	<21.1	50.0	02/29/16 19:08	
4-Bromofluorobenzene (S)	%	95	53-134	02/29/16 19:08	
Dibromofluoromethane (S)	%	106	49-157	02/29/16 19:08	
Toluene-d8 (S)	%	107	61-148	02/29/16 19:08	

LABORATORY CONTROL SAMPLE: 1300612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2450	98	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2490	99	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2490	100	70-130	
1,1-Dichloroethane	ug/kg	2500	2370	95	70-130	
1,1-Dichloroethene	ug/kg	2500	2390	96	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2440	98	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2140	86	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2460	98	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2430	97	70-130	
1,2-Dichloroethane	ug/kg	2500	2470	99	70-134	
1,2-Dichloropropane	ug/kg	2500	2580	103	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2390	95	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2360	95	70-130	
Benzene	ug/kg	2500	2560	102	70-130	
Bromodichloromethane	ug/kg	2500	2240	90	70-130	
Bromoform	ug/kg	2500	2070	83	48-130	
Bromomethane	ug/kg	2500	2070	83	70-169	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

LABORATORY CONTROL SAMPLE: 1300612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2400	96	67-130	
Chlorobenzene	ug/kg	2500	2470	99	70-130	
Chloroethane	ug/kg	2500	2070	83	70-191	
Chloroform	ug/kg	2500	2460	98	70-130	
Chloromethane	ug/kg	2500	1900	76	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2540	102	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2250	90	70-130	
Dibromochloromethane	ug/kg	2500	2180	87	65-130	
Dichlorodifluoromethane	ug/kg	2500	1160	46	12-150	
Ethylbenzene	ug/kg	2500	2500	100	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2580	103	70-130	
m&p-Xylene	ug/kg	5000	5040	101	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2490	99	70-130	
Methylene Chloride	ug/kg	2500	2510	100	70-131	
o-Xylene	ug/kg	2500	2510	100	70-130	
Styrene	ug/kg	2500	2650	106	70-130	
Tetrachloroethene	ug/kg	2500	2190	88	70-130	
Toluene	ug/kg	2500	2580	103	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2460	98	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2250	90	65-130	
Trichloroethene	ug/kg	2500	2510	100	70-130	
Trichlorofluoromethane	ug/kg	2500	2160	86	50-150	
Vinyl chloride	ug/kg	2500	2190	88	67-134	
4-Bromofluorobenzene (S)	%			98	53-134	
Dibromofluoromethane (S)	%			106	49-157	
Toluene-d8 (S)	%			104	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300613 1300614

Parameter	Units	40128680003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<25.0	1610	1610	1480	1490	92	93	63-130	1	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1610	1610	1690	1680	105	105	57-136	0	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1610	1610	1630	1680	101	105	70-130	3	20	
1,1-Dichloroethane	ug/kg	<25.0	1610	1610	1520	1510	95	94	62-131	0	23	
1,1-Dichloroethene	ug/kg	<25.0	1610	1610	1230	1210	77	76	42-137	2	20	
1,2,4-Trichlorobenzene	ug/kg	<47.6	1610	1610	1790	1760	112	110	59-137	2	21	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	1610	1610	1650	1590	103	99	33-150	4	25	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1610	1610	1570	1650	98	103	70-130	5	20	
1,2-Dichlorobenzene	ug/kg	<25.0	1610	1610	1680	1730	105	108	70-130	3	20	
1,2-Dichloroethane	ug/kg	<25.0	1610	1610	1640	1600	102	100	68-134	3	20	
1,2-Dichloropropane	ug/kg	<25.0	1610	1610	1640	1660	102	103	70-130	1	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1610	1610	1660	1670	103	104	70-130	1	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1610	1610	1650	1660	103	103	69-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300613 1300614

Parameter	Units	40128680003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<25.0	1610	1610	1630	1610	101	100	56-131	1	20	
Bromodichloromethane	ug/kg	<25.0	1610	1610	1560	1600	97	100	64-130	2	20	
Bromoform	ug/kg	<25.0	1610	1610	1470	1520	91	94	48-130	3	20	
Bromomethane	ug/kg	<69.9	1610	1610	962	1010	60	63	18-169	5	23	
Carbon tetrachloride	ug/kg	<25.0	1610	1610	1430	1420	89	88	59-130	1	20	
Chlorobenzene	ug/kg	<25.0	1610	1610	1640	1660	102	103	70-130	1	20	
Chloroethane	ug/kg	<67.0	1610	1610	1030	1030	64	64	10-191	0	20	
Chloroform	ug/kg	<46.4	1610	1610	1610	1580	100	99	65-130	1	20	
Chloromethane	ug/kg	<25.0	1610	1610	573	557	36	35	36-132	3	20	M1
cis-1,2-Dichloroethene	ug/kg	<25.0	1610	1610	1570	1580	98	99	59-136	1	24	
cis-1,3-Dichloropropene	ug/kg	<25.0	1610	1610	1500	1510	94	94	60-130	1	20	
Dibromochloromethane	ug/kg	<25.0	1610	1610	1520	1570	95	98	59-130	3	20	
Dichlorodifluoromethane	ug/kg	<25.0	1610	1610	165	161	10	10	10-150	3	27	
Ethylbenzene	ug/kg	<25.0	1610	1610	1560	1650	97	103	64-130	6	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1610	1610	1610	1710	100	106	69-138	6	20	
m&p-Xylene	ug/kg	<50.0	3210	3210	3290	3440	102	107	61-130	5	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1610	1610	1610	1590	100	99	52-134	1	20	
Methylene Chloride	ug/kg	<25.0	1610	1610	1560	1590	97	99	61-131	2	20	
o-Xylene	ug/kg	<25.0	1610	1610	1630	1730	102	108	63-130	6	20	
Styrene	ug/kg	<25.0	1610	1610	1660	1750	103	109	70-130	5	20	
Tetrachloroethene	ug/kg	<25.0	1610	1610	1400	1480	87	92	65-130	6	20	
Toluene	ug/kg	<25.0	1610	1610	1580	1690	98	105	65-130	7	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1610	1610	1420	1460	88	91	55-130	3	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1610	1610	1530	1590	95	99	54-130	4	20	
Trichloroethene	ug/kg	<25.0	1610	1610	1530	1580	95	99	70-130	3	20	
Trichlorofluoromethane	ug/kg	<25.0	1610	1610	1010	1030	63	64	42-150	2	24	
Vinyl chloride	ug/kg	<25.0	1610	1610	739	744	46	46	35-134	1	20	
4-Bromofluorobenzene (S)	%						104	107	53-134			
Dibromofluoromethane (S)	%						112	108	49-157			
Toluene-d8 (S)	%						110	113	61-148			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

QC Batch: MSV/32359 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40128660001, 40128660002, 40128660003

METHOD BLANK: 1299781 Matrix: Water
Associated Lab Samples: 40128660001, 40128660002, 40128660003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	03/01/16 07:55	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	03/01/16 07:55	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	03/01/16 07:55	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	03/01/16 07:55	
1,1-Dichloroethane	ug/L	<0.24	1.0	03/01/16 07:55	
1,1-Dichloroethene	ug/L	<0.41	1.0	03/01/16 07:55	
1,1-Dichloropropene	ug/L	<0.44	1.0	03/01/16 07:55	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	03/01/16 07:55	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	03/01/16 07:55	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	03/01/16 07:55	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	03/01/16 07:55	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	03/01/16 07:55	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	03/01/16 07:55	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	03/01/16 07:55	
1,2-Dichloroethane	ug/L	<0.17	1.0	03/01/16 07:55	
1,2-Dichloropropane	ug/L	<0.23	1.0	03/01/16 07:55	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	03/01/16 07:55	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	03/01/16 07:55	
1,3-Dichloropropane	ug/L	<0.50	1.0	03/01/16 07:55	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	03/01/16 07:55	
2,2-Dichloropropane	ug/L	<0.48	1.0	03/01/16 07:55	
2-Chlorotoluene	ug/L	<0.50	1.0	03/01/16 07:55	
4-Chlorotoluene	ug/L	<0.21	1.0	03/01/16 07:55	
Benzene	ug/L	<0.50	1.0	03/01/16 07:55	
Bromobenzene	ug/L	<0.23	1.0	03/01/16 07:55	
Bromochloromethane	ug/L	<0.34	1.0	03/01/16 07:55	
Bromodichloromethane	ug/L	<0.50	1.0	03/01/16 07:55	
Bromoform	ug/L	<0.50	1.0	03/01/16 07:55	
Bromomethane	ug/L	<2.4	5.0	03/01/16 07:55	
Carbon tetrachloride	ug/L	<0.50	1.0	03/01/16 07:55	
Chlorobenzene	ug/L	<0.50	1.0	03/01/16 07:55	
Chloroethane	ug/L	<0.37	1.0	03/01/16 07:55	
Chloroform	ug/L	<2.5	5.0	03/01/16 07:55	
Chloromethane	ug/L	<0.50	1.0	03/01/16 07:55	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	03/01/16 07:55	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	03/01/16 07:55	
Dibromochloromethane	ug/L	<0.50	1.0	03/01/16 07:55	
Dibromomethane	ug/L	<0.43	1.0	03/01/16 07:55	
Dichlorodifluoromethane	ug/L	<0.22	1.0	03/01/16 07:55	
Diisopropyl ether	ug/L	<0.50	1.0	03/01/16 07:55	
Ethylbenzene	ug/L	<0.50	1.0	03/01/16 07:55	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

METHOD BLANK: 1299781 Matrix: Water
Associated Lab Samples: 40128660001, 40128660002, 40128660003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	03/01/16 07:55	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	03/01/16 07:55	
m&p-Xylene	ug/L	<1.0	2.0	03/01/16 07:55	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	03/01/16 07:55	
Methylene Chloride	ug/L	<0.23	1.0	03/01/16 07:55	
n-Butylbenzene	ug/L	<0.50	1.0	03/01/16 07:55	
n-Propylbenzene	ug/L	<0.50	1.0	03/01/16 07:55	
Naphthalene	ug/L	<2.5	5.0	03/01/16 07:55	
o-Xylene	ug/L	<0.50	1.0	03/01/16 07:55	
p-Isopropyltoluene	ug/L	<0.50	1.0	03/01/16 07:55	
sec-Butylbenzene	ug/L	<2.2	5.0	03/01/16 07:55	
Styrene	ug/L	<0.50	1.0	03/01/16 07:55	
tert-Butylbenzene	ug/L	<0.18	1.0	03/01/16 07:55	
Tetrachloroethene	ug/L	<0.50	1.0	03/01/16 07:55	
Toluene	ug/L	<0.50	1.0	03/01/16 07:55	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	03/01/16 07:55	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	03/01/16 07:55	
Trichloroethene	ug/L	<0.33	1.0	03/01/16 07:55	
Trichlorofluoromethane	ug/L	<0.18	1.0	03/01/16 07:55	
Vinyl chloride	ug/L	<0.18	1.0	03/01/16 07:55	
4-Bromofluorobenzene (S)	%	100	70-130	03/01/16 07:55	
Dibromofluoromethane (S)	%	96	70-130	03/01/16 07:55	
Toluene-d8 (S)	%	101	70-130	03/01/16 07:55	

LABORATORY CONTROL SAMPLE: 1299782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.9	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	53.2	106	70-130	
1,1,2-Trichloroethane	ug/L	50	55.1	110	70-130	
1,1-Dichloroethane	ug/L	50	53.9	108	70-130	
1,1-Dichloroethene	ug/L	50	52.8	106	70-130	
1,2,4-Trichlorobenzene	ug/L	50	52.0	104	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	52.0	104	50-150	
1,2-Dibromoethane (EDB)	ug/L	50	53.1	106	70-130	
1,2-Dichlorobenzene	ug/L	50	55.2	110	70-130	
1,2-Dichloroethane	ug/L	50	50.4	101	70-131	
1,2-Dichloropropane	ug/L	50	56.9	114	70-130	
1,3-Dichlorobenzene	ug/L	50	55.7	111	70-130	
1,4-Dichlorobenzene	ug/L	50	54.3	109	70-130	
Benzene	ug/L	50	56.0	112	70-130	
Bromodichloromethane	ug/L	50	54.6	109	70-130	
Bromoform	ug/L	50	47.7	95	68-130	
Bromomethane	ug/L	50	35.6	71	38-137	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

LABORATORY CONTROL SAMPLE: 1299782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	57.2	114	70-130	
Chlorobenzene	ug/L	50	55.7	111	70-130	
Chloroethane	ug/L	50	45.3	91	70-136	
Chloroform	ug/L	50	53.1	106	70-130	
Chloromethane	ug/L	50	38.2	76	48-144	
cis-1,2-Dichloroethene	ug/L	50	55.0	110	70-130	
cis-1,3-Dichloropropene	ug/L	50	51.0	102	70-130	
Dibromochloromethane	ug/L	50	50.1	100	70-130	
Dichlorodifluoromethane	ug/L	50	31.4	63	33-157	
Ethylbenzene	ug/L	50	57.1	114	70-132	
Isopropylbenzene (Cumene)	ug/L	50	57.9	116	70-130	
m&p-Xylene	ug/L	100	114	114	70-131	
Methyl-tert-butyl ether	ug/L	50	52.2	104	48-141	
Methylene Chloride	ug/L	50	54.0	108	70-130	
o-Xylene	ug/L	50	55.7	111	70-131	
Styrene	ug/L	50	57.2	114	70-130	
Tetrachloroethene	ug/L	50	55.1	110	70-130	
Toluene	ug/L	50	57.3	115	70-130	
trans-1,2-Dichloroethene	ug/L	50	53.6	107	70-130	
trans-1,3-Dichloropropene	ug/L	50	50.2	100	70-130	
Trichloroethene	ug/L	50	56.6	113	70-130	
Trichlorofluoromethane	ug/L	50	50.5	101	50-150	
Vinyl chloride	ug/L	50	45.1	90	65-142	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			98	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300424 1300425

Parameter	Units	40128649001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.50	50	50	53.7	53.5	107	107	70-130	0	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	50	50	49.0	48.6	98	97	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.20	50	50	50.8	52.5	102	105	70-130	3	20	
1,1-Dichloroethane	ug/L	<0.24	50	50	52.3	52.5	105	105	70-134	0	20	
1,1-Dichloroethene	ug/L	<0.41	50	50	51.6	51.7	103	103	70-139	0	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	50	50	50.2	50.1	100	99	70-130	0	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	50	50	46.0	44.8	92	90	50-150	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	50	50	51.6	52.2	103	104	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.50	50	50	51.4	51.7	102	103	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.17	50	50	50.0	49.8	100	100	70-132	0	20	
1,2-Dichloropropane	ug/L	<0.23	50	50	52.1	54.5	104	109	70-130	4	20	
1,3-Dichlorobenzene	ug/L	<0.50	50	50	53.4	52.9	107	106	70-130	1	20	
1,4-Dichlorobenzene	ug/L	<0.50	50	50	51.8	51.2	104	102	70-130	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1300424 1300425

Parameter	Units	40128649001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.50	50	50	52.9	54.4	106	109	70-130	3	20	
Bromodichloromethane	ug/L	<0.50	50	50	50.9	50.9	102	102	70-132	0	20	
Bromoform	ug/L	<0.50	50	50	45.0	46.1	90	92	68-130	2	20	
Bromomethane	ug/L	<2.4	50	50	37.9	39.7	76	79	38-141	4	20	
Carbon tetrachloride	ug/L	<0.50	50	50	54.2	54.6	108	109	70-130	1	20	
Chlorobenzene	ug/L	<0.50	50	50	53.0	54.7	106	109	70-130	3	20	
Chloroethane	ug/L	<0.37	50	50	43.3	43.7	87	87	66-152	1	20	
Chloroform	ug/L	<2.5	50	50	51.6	52.1	103	104	70-130	1	20	
Chloromethane	ug/L	<0.50	50	50	36.8	36.6	73	73	44-151	0	20	
cis-1,2-Dichloroethene	ug/L	<0.26	50	50	52.1	52.2	104	104	70-130	0	20	
cis-1,3-Dichloropropene	ug/L	<0.50	50	50	48.0	49.1	96	98	70-130	2	20	
Dibromochloromethane	ug/L	<0.50	50	50	47.7	47.2	95	94	70-130	1	20	
Dichlorodifluoromethane	ug/L	<0.22	50	50	30.6	30.4	61	61	29-160	1	20	
Ethylbenzene	ug/L	<0.50	50	50	54.7	54.7	109	109	70-132	0	20	
Isopropylbenzene (Cumene)	ug/L	<0.14	50	50	56.9	56.0	114	112	70-130	2	20	
m&p-Xylene	ug/L	<1.0	100	100	109	109	109	109	70-131	0	20	
Methyl-tert-butyl ether	ug/L	<0.17	50	50	48.8	49.5	98	99	48-143	1	20	
Methylene Chloride	ug/L	<0.23	50	50	50.8	50.6	102	101	70-130	0	20	
o-Xylene	ug/L	<0.50	50	50	53.4	53.8	107	108	70-131	1	20	
Styrene	ug/L	<0.50	50	50	55.8	54.8	112	110	70-130	2	20	
Tetrachloroethene	ug/L	<0.50	50	50	53.3	53.8	107	108	70-130	1	20	
Toluene	ug/L	<0.50	50	50	55.2	55.9	110	111	70-130	1	20	
trans-1,2-Dichloroethene	ug/L	<0.26	50	50	51.9	51.5	104	103	70-132	1	20	
trans-1,3-Dichloropropene	ug/L	<0.23	50	50	48.0	47.5	96	95	70-130	1	20	
Trichloroethene	ug/L	<0.33	50	50	54.2	53.7	108	107	70-130	1	20	
Trichlorofluoromethane	ug/L	<0.18	50	50	49.0	49.6	98	99	50-153	1	20	
Vinyl chloride	ug/L	<0.18	50	50	43.2	43.1	86	86	60-155	0	20	
4-Bromofluorobenzene (S)	%						99	99	70-130			
Dibromofluoromethane (S)	%						99	99	70-130			
Toluene-d8 (S)	%						102	102	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

QC Batch: PMST/12466
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40128660004

SAMPLE DUPLICATE: 1300547

Parameter	Units	40128714001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.7	8.4	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER DRY CLEANING
Pace Project No.: 40128660

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128660004	**SUMP 5.5'**	EPA 5035/5030B	MSV/32376	EPA 8260	MSV/32377
40128660001	**B-101**	EPA 8260	MSV/32359		
40128660002	**B-102**	EPA 8260	MSV/32359		
40128660003	**B-103**	EPA 8260	MSV/32359		
40128660004	**SUMP 5.5'**	ASTM D2974-87	PMST/12466		

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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BH

CHAIN OF CUSTODY

401286160

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Fehr Graham
Branch/Location:	Plymouth, WI
Project Contact:	Ken Ebbott
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	Master Dry Cleaning
Project State:	WI
Sampled By (Print):	Mark R. Gibeault
Sampled By (Sign):	Mark R. Gibeault
PO #:	Regulatory Program:

Quote #:	DERF
Mail To Contact:	Ken Ebbott/Mark Gibeault
Mail To Company:	Fehr Graham
Mail To Address:	1237 Pilgrim Rd. Plymouth, WI 53073
Invoice To Contact:	Ken Ebbott
Invoice To Company:	c/o FG
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SL = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analysis Required: FILTERED? (YES/NO)									CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Pick Letter		B	F								
					PRESERVATION (CODE)*		VOCs	VOCs								
001	B-101	2/24/16	14:30	GW			X								3-40ml VB	
002	B-102		14:45	GW			X									
003	B-103		15:00	GW			X									
004	Sump 5.5'		14:10	S				X							1-40ml vF, 1-40zp	A
~~005~~	~~MeOH Blank~~ 2-23-16 cm															

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Mark R Gibeault	2/25/16 9:15	Kree Pare	2/25/16 1120
Kree Pare	2/25/16 1330	Susan K Wyland	2-25-16 1330

PACE Project No.
401286160
Receipt Temp = ROT °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

Sample Condition Upon Receipt

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1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Client Name: Fehr Graham

Project **WO# : 40128660**

40128660

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☑ Pace Other: ______

Tracking #: ______

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used N/A **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI Corr: **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☑ no

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

Person examining contents:
Date: 2-25-16
Initials: SE

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☑N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S+W	☑Yes	~~No~~ 2/25/16	☐N/A	12. 004-ID on 40ml vial is "Conc/Tile Sump Top on. Holes is "Master Sump Concrete Tile" Not collect date + time on poly. 2/25/16
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct 2-25-16 SE
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☑N/A	
exceptions: (VOA), coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☑Yes	☐No		Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	14.
Trip Blank Present:	~~Yes~~	☐No	☑N/A	15. ~~MeOH Blank in shipment Lab added to COC 2/25/16~~
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased):				2-25-16 SE

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: ______ Date/Time: ______

Comments/ Resolution: ______

Project Manager Review: [signature] **Date:** 2-25-16

F-GB-C-031-Rev.03 (9April2015) SCUR Form

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February 18, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

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CERTIFICATIONS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE SUMMARY

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128222001	SLUDGE	Solid	02/10/16 13:50	02/12/16 13:35

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128222001	SLUDGE	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Sample: SLUDGE **Lab ID: 40128222001** Collected: 02/10/16 13:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	71-43-2	W
Bromobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-86-1	W
Bromochloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-97-5	W
Bromodichloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-27-4	W
Bromoform	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-25-2	W
Bromomethane	**<280000**	ug/kg	1000000	280000	4000	02/17/16 07:00	02/17/16 19:24	74-83-9	W
n-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	104-51-8	W
sec-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	135-98-8	W
tert-Butylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	98-06-6	W
Carbon tetrachloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	56-23-5	W
Chlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-90-7	W
Chloroethane	**<268000**	ug/kg	1000000	268000	4000	02/17/16 07:00	02/17/16 19:24	75-00-3	W
Chloroform	**<186000**	ug/kg	1000000	186000	4000	02/17/16 07:00	02/17/16 19:24	67-66-3	W
Chloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-87-3	W
2-Chlorotoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-49-8	W
4-Chlorotoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-43-4	W
1,2-Dibromo-3-chloropropane	**<365000**	ug/kg	1000000	365000	4000	02/17/16 07:00	02/17/16 19:24	96-12-8	W
Dibromochloromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	124-48-1	W
1,2-Dibromoethane (EDB)	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-93-4	W
Dibromomethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	74-95-3	W
1,2-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-50-1	W
1,3-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	541-73-1	W
1,4-Dichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	106-46-7	W
Dichlorodifluoromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-71-8	W
1,1-Dichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-34-3	L3,W
1,2-Dichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	107-06-2	W
1,1-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-35-4	W
cis-1,2-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	156-59-2	W
trans-1,2-Dichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	156-60-5	W
1,2-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	78-87-5	W
1,3-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	142-28-9	W
2,2-Dichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	594-20-7	W
1,1-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	563-58-6	W
cis-1,3-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	10061-01-5	W
trans-1,3-Dichloropropene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	10061-02-6	W
Diisopropyl ether	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-20-3	W
Ethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	100-41-4	W
Hexachloro-1,3-butadiene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	87-68-3	W
Isopropylbenzene (Cumene)	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	98-82-8	W
p-Isopropyltoluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	99-87-6	W
Methylene Chloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-09-2	W
Methyl-tert-butyl ether	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	1634-04-4	W
Naphthalene	**<160000**	ug/kg	1000000	160000	4000	02/17/16 07:00	02/17/16 19:24	91-20-3	W
n-Propylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	103-65-1	W
Styrene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Sample: SLUDGE **Lab ID: 40128222001** Collected: 02/10/16 13:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	630-20-6	W
1,1,2,2-Tetrachloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-34-5	W
Tetrachloroethene	**20700000**	ug/kg	314000	131000	4000	02/17/16 07:00	02/17/16 19:24	127-18-4	
Toluene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-88-3	W
1,2,3-Trichlorobenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	87-61-6	W
1,2,4-Trichlorobenzene	**<190000**	ug/kg	1000000	190000	4000	02/17/16 07:00	02/17/16 19:24	120-82-1	W
1,1,1-Trichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	71-55-6	W
1,1,2-Trichloroethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-00-5	W
Trichloroethene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	79-01-6	W
Trichlorofluoromethane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-69-4	W
1,2,3-Trichloropropane	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	96-18-4	W
1,2,4-Trimethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-63-6	W
1,3,5-Trimethylbenzene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	108-67-8	W
Vinyl chloride	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	75-01-4	W
m&p-Xylene	**<200000**	ug/kg	480000	200000	4000	02/17/16 07:00	02/17/16 19:24	179601-23-1	W
o-Xylene	**<100000**	ug/kg	240000	100000	4000	02/17/16 07:00	02/17/16 19:24	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	49-157		4000	02/17/16 07:00	02/17/16 19:24	1868-53-7	S4
Toluene-d8 (S)	0	%	61-148		4000	02/17/16 07:00	02/17/16 19:24	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	53-134		4000	02/17/16 07:00	02/17/16 19:24	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**23.6**	%	0.10	0.10	1		02/17/16 16:31		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

QC Batch: MSV/32249
QC Batch Method: EPA 5035/5030B
Associated Lab Samples: 40128222001

Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List

METHOD BLANK: 1295994
Associated Lab Samples: 40128222001

Matrix: Solid

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/17/16 10:27	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/17/16 10:27	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/17/16 10:27	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/17/16 10:27	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/17/16 10:27	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/17/16 10:27	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/17/16 10:27	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/17/16 10:27	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/17/16 10:27	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/17/16 10:27	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/17/16 10:27	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/17/16 10:27	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/17/16 10:27	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/17/16 10:27	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/17/16 10:27	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/17/16 10:27	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/17/16 10:27	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/17/16 10:27	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/17/16 10:27	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/17/16 10:27	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/17/16 10:27	
Benzene	ug/kg	<9.2	20.0	02/17/16 10:27	
Bromobenzene	ug/kg	<20.6	50.0	02/17/16 10:27	
Bromochloromethane	ug/kg	<21.4	50.0	02/17/16 10:27	
Bromodichloromethane	ug/kg	<9.8	50.0	02/17/16 10:27	
Bromoform	ug/kg	<19.8	50.0	02/17/16 10:27	
Bromomethane	ug/kg	<69.9	250	02/17/16 10:27	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/17/16 10:27	
Chlorobenzene	ug/kg	<14.8	50.0	02/17/16 10:27	
Chloroethane	ug/kg	<67.0	250	02/17/16 10:27	
Chloroform	ug/kg	<46.4	250	02/17/16 10:27	
Chloromethane	ug/kg	<20.4	50.0	02/17/16 10:27	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/17/16 10:27	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/17/16 10:27	
Dibromochloromethane	ug/kg	<17.9	50.0	02/17/16 10:27	
Dibromomethane	ug/kg	<19.3	50.0	02/17/16 10:27	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/17/16 10:27	
Diisopropyl ether	ug/kg	<17.7	50.0	02/17/16 10:27	
Ethylbenzene	ug/kg	<12.4	50.0	02/17/16 10:27	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128222001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/17/16 10:27	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/17/16 10:27	
m&p-Xylene	ug/kg	<34.4	100	02/17/16 10:27	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/17/16 10:27	
Methylene Chloride	ug/kg	<16.2	50.0	02/17/16 10:27	
n-Butylbenzene	ug/kg	<10.5	50.0	02/17/16 10:27	
n-Propylbenzene	ug/kg	<11.6	50.0	02/17/16 10:27	
Naphthalene	ug/kg	<40.0	250	02/17/16 10:27	
o-Xylene	ug/kg	<14.0	50.0	02/17/16 10:27	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/17/16 10:27	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/17/16 10:27	
Styrene	ug/kg	<9.0	50.0	02/17/16 10:27	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/17/16 10:27	
Tetrachloroethene	ug/kg	<12.9	50.0	02/17/16 10:27	
Toluene	ug/kg	<11.2	50.0	02/17/16 10:27	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/17/16 10:27	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/17/16 10:27	
Trichloroethene	ug/kg	<23.6	50.0	02/17/16 10:27	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/17/16 10:27	
Vinyl chloride	ug/kg	<21.1	50.0	02/17/16 10:27	
4-Bromofluorobenzene (S)	%	92	53-134	02/17/16 10:27	
Dibromofluoromethane (S)	%	116	49-157	02/17/16 10:27	
Toluene-d8 (S)	%	103	61-148	02/17/16 10:27	

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2760	111	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2740	110	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2630	105	70-130	
1,1-Dichloroethane	ug/kg	2500	3290	132	70-130	L0
1,1-Dichloroethene	ug/kg	2500	2700	108	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2360	94	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2260	90	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2710	108	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2620	105	70-130	
1,2-Dichloroethane	ug/kg	2500	3030	121	70-134	
1,2-Dichloropropane	ug/kg	2500	2830	113	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2530	101	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2630	105	70-130	
Benzene	ug/kg	2500	2950	118	70-130	
Bromodichloromethane	ug/kg	2500	2340	93	70-130	
Bromoform	ug/kg	2500	2200	88	48-130	
Bromomethane	ug/kg	2500	2780	111	70-169	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/kg	2500	2760	110	67-130	
Chlorobenzene	ug/kg	2500	2720	109	70-130	
Chloroethane	ug/kg	2500	2910	116	70-191	
Chloroform	ug/kg	2500	2690	108	70-130	
Chloromethane	ug/kg	2500	2800	112	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2980	119	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2640	106	70-130	
Dibromochloromethane	ug/kg	2500	2460	98	65-130	
Dichlorodifluoromethane	ug/kg	2500	1900	76	12-150	
Ethylbenzene	ug/kg	2500	2640	106	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2640	106	70-130	
m&p-Xylene	ug/kg	5000	5240	105	70-130	
Methyl-tert-butyl ether	ug/kg	2500	3020	121	70-130	
Methylene Chloride	ug/kg	2500	3030	121	70-131	
o-Xylene	ug/kg	2500	2600	104	70-130	
Styrene	ug/kg	2500	2770	111	70-130	
Tetrachloroethene	ug/kg	2500	2350	94	70-130	
Toluene	ug/kg	2500	2670	107	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2690	108	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2380	95	65-130	
Trichloroethene	ug/kg	2500	2610	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2400	96	50-150	
Vinyl chloride	ug/kg	2500	2870	115	67-134	
4-Bromofluorobenzene (S)	%			97	53-134	
Dibromofluoromethane (S)	%			115	49-157	
Toluene-d8 (S)	%			102	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<48.1	3240	2700	3120	2840	96	105	63-130	10	20	
1,1,2,2-Tetrachloroethane	ug/kg	<48.1	3240	2700	3230	2890	100	107	57-136	11	20	
1,1,2-Trichloroethane	ug/kg	<48.1	3240	2700	3100	2740	96	101	70-130	12	20	
1,1-Dichloroethane	ug/kg	<48.1	3240	2700	3740	3260	115	121	62-131	14	23	
1,1-Dichloroethene	ug/kg	<48.1	3240	2700	2890	2720	89	101	42-137	6	20	
1,2,4-Trichlorobenzene	ug/kg	<91.4	3240	2700	2940	2530	91	94	59-137	15	21	
1,2-Dibromo-3-chloropropane	ug/kg	<175	3240	2700	2830	2610	87	97	33-150	8	25	
1,2-Dibromoethane (EDB)	ug/kg	<48.1	3240	2700	2980	2700	92	100	70-130	10	20	
1,2-Dichlorobenzene	ug/kg	<48.1	3240	2700	3150	2810	97	104	70-130	12	20	
1,2-Dichloroethane	ug/kg	<48.1	3240	2700	3440	3100	106	115	68-134	11	20	
1,2-Dichloropropane	ug/kg	<48.1	3240	2700	3190	2950	98	109	70-130	8	20	
1,3-Dichlorobenzene	ug/kg	<48.1	3240	2700	3080	2730	95	101	70-130	12	20	
1,4-Dichlorobenzene	ug/kg	<48.1	3240	2700	3090	2700	95	100	69-130	14	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/kg	<48.1	3240	2700	3240	2900	100	107	56-131	11	20	
Bromodichloromethane	ug/kg	<48.1	3240	2700	2850	2610	88	96	64-130	9	20	
Bromoform	ug/kg	<48.1	3240	2700	2670	2410	82	89	48-130	10	20	
Bromomethane	ug/kg	<134	3240	2700	3110	2920	96	108	18-169	6	23	
Carbon tetrachloride	ug/kg	<48.1	3240	2700	3310	3000	102	111	59-130	10	20	
Chlorobenzene	ug/kg	<48.1	3240	2700	3190	2800	98	104	70-130	13	20	
Chloroethane	ug/kg	<129	3240	2700	3390	3000	105	111	10-191	12	20	
Chloroform	ug/kg	<89.3	3240	2700	3080	2900	95	107	65-130	6	20	
Chloromethane	ug/kg	<48.1	3240	2700	3000	2860	93	106	36-132	5	20	
cis-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3270	2920	101	108	59-136	11	24	
cis-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2900	2630	89	97	60-130	10	20	
Dibromochloromethane	ug/kg	<48.1	3240	2700	3070	2630	95	97	59-130	15	20	
Dichlorodifluoromethane	ug/kg	<48.1	3240	2700	1590	1570	49	58	10-150	1	27	
Ethylbenzene	ug/kg	<48.1	3240	2700	3000	2640	93	98	64-130	13	20	
Isopropylbenzene (Cumene)	ug/kg	<48.1	3240	2700	3040	2680	94	99	69-138	12	20	
m&p-Xylene	ug/kg	<96.2	6490	5400	6190	5530	96	102	61-130	11	20	
Methyl-tert-butyl ether	ug/kg	<48.1	3240	2700	3600	3080	111	114	52-134	15	20	
Methylene Chloride	ug/kg	<48.1	3240	2700	3350	3190	103	118	61-131	5	20	
o-Xylene	ug/kg	<48.1	3240	2700	3040	2640	94	98	63-130	14	20	
Styrene	ug/kg	<48.1	3240	2700	3090	2740	95	102	70-130	12	20	
Tetrachloroethene	ug/kg	<48.1	3240	2700	2760	2440	85	90	65-130	12	20	
Toluene	ug/kg	<48.1	3240	2700	3100	2680	96	99	65-130	14	20	
trans-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3380	2990	104	111	55-130	12	20	
trans-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2780	2480	86	92	54-130	11	20	
Trichloroethene	ug/kg	<48.1	3240	2700	2990	2750	92	102	70-130	8	20	
Trichlorofluoromethane	ug/kg	<48.1	3240	2700	2910	2810	90	104	42-150	3	24	
Vinyl chloride	ug/kg	<48.1	3240	2700	2830	2640	87	98	35-134	7	20	
4-Bromofluorobenzene (S)	%						91	91	53-134			
Dibromofluoromethane (S)	%						108	115	49-157			
Toluene-d8 (S)	%						94	94	61-148			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

QC Batch: PMST/12429
QC Batch Method: ASTM D2974-87
Associated Lab Samples: 40128222001

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture

SAMPLE DUPLICATE: 1296318

Parameter	Units	40128277014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.6	24.4	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

Pace Analytical Services, Inc.
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(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128222

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128222001	**SLUDGE**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128222001	**SLUDGE**	ASTM D2974-87	PMST/12429		

Pace Analytical
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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

BD

40128222

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	FEHR GRAHAM
Branch/Location:	PLY
Project Contact:	KEN EBBOTT
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	MASTER CLEANERS
Project State:	WI
Sampled By (Print):	MEGAN HANSEN
Sampled By (Sign):	
PO #:	
Regulatory Program:	

Quote #:	DERF
Mail To Contact:	KEN EBBOTT
Mail To Company:	FEHR GRAHAM
Mail To Address:	1237 PILGRIM RD PLYMOUTH, WI
Invoice To Contact:	KEN EBBOTT
Invoice To Company:	BD C/O FEHR GRAHAM
Invoice To Address:	SAME
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analysis Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					Y/N	PRES Code	VOC			
001	SLUDGE	2/10/16	1350	S	N	F	X		1-40mlVF 1-4ozPP	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
	2/12/16		2/12/16 1205
	2/12/16 1335		

PACE Project No.: 40128222

Receipt Temp = °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / Not Present; Intact / Not Intact

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical™

Client Name: Fehr Graham

Project #

WO#: 40128222

40128222

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☒ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used N/A Type of Ice: (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: Biological Tissue is Frozen: ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 2-12-16
Initials: SW

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

				Comments:
Chain of Custody Present:	☒Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☒Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes	☐No		Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes	☒No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☒No	☐N/A	7.
Sufficient Volume:	☒Yes	☐No	☐N/A	8.
Correct Containers Used:	☒Yes	☐No	☐N/A	9.
-Pace Containers Used:	☒Yes	☐No	☐N/A	
-Pace IR Containers Used:	☐Yes	☐No	☒N/A	
Containers Intact:	☒Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11.
Sample Labels match COC:	☐Yes	☒No	☐N/A	12. No collect date + time on 40rp. 2-12-16 SW
-Includes date/time/ID/Analysis Matrix: S				
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes	☐No	☒N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes	☐No	☒N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes	☒No		Initial when completed / Lab Std #ID of preservative / Date/Time:
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14.
Trip Blank Present:	☐Yes	☐No	☒N/A	15.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if purchased):				

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 2-15-16

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Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

February 18, 2016

Ken Ebbott
Fehr Graham Engineering and Environmental
1237 Pilgrim Rd
Plymouth, WI 53073

RE: Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Dear Ken Ebbott:
Enclosed are the analytical results for sample(s) received by the laboratory on February 12, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,

Christopher Hyska

Christopher Hyska
christopher.hyska@pacelabs.com
Project Manager

Enclosures

cc: Megan Hansen, Fehr Graham Engineering and Environmental

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Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Green Bay Certification IDs
1241 Bellevue Street, Green Bay, WI 54302
Florida/NELAP Certification #: E87948
Illinois Certification #: 200050
Kentucky Certification #: 82
Louisiana Certification #: 04168
Minnesota Certification #: 055-999-334
Virginia VELAP ID: 460263
North Dakota Certification #: R-150
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
US Dept of Agriculture #: S-76505
Virginia VELAP Certification ID: 460263
Virginia VELAP ID: 460263
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40128219001	B-101 1-3'	Solid	02/10/16 10:45	02/12/16 13:35
40128219002	B-101 5-7'	Solid	02/10/16 10:50	02/12/16 13:35
40128219003	B-102 1-3'	Solid	02/10/16 11:40	02/12/16 13:35
40128219004	B-102 9-10'	Solid	02/10/16 11:45	02/12/16 13:35
40128219005	B-103 8-9.5'	Solid	02/10/16 12:30	02/12/16 13:35
40128219006	B-103 16-17'	Solid	02/10/16 12:35	02/12/16 13:35
40128219007	SUMP 2.5'	Solid	02/10/16 14:00	02/12/16 13:35
40128219008	SUMP 5.5'	Solid	02/10/16 14:10	02/12/16 13:35

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SAMPLE ANALYTE COUNT

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40128219001	**B-101 1-3'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219002	**B-101 5-7'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219003	**B-102 1-3'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219004	**B-102 9-10'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219005	**B-103 8-9.5'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219006	**B-103 16-17'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219007	**SUMP 2.5'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G
40128219008	**SUMP 5.5'**	EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	MAM	1	PASI-G

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 1-3' **Lab ID: 40128219001** Collected: 02/10/16 10:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:10	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:10	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:10	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:10	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:10	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 1-3' **Lab ID: 40128219001** Collected: 02/10/16 10:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-34-5	W
Tetrachloroethene	**2140**	ug/kg	68.2	28.4	1	02/17/16 07:00	02/17/16 15:10	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:10	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:10	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:10	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	117	%	49-157		1	02/17/16 07:00	02/17/16 15:10	1868-53-7	
Toluene-d8 (S)	103	%	61-148		1	02/17/16 07:00	02/17/16 15:10	2037-26-5	
4-Bromofluorobenzene (S)	96	%	53-134		1	02/17/16 07:00	02/17/16 15:10	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 5-7' **Lab ID: 40128219002** Collected: 02/10/16 10:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:33	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:33	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:33	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:33	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:33	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	100-42-5	W

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-101 5-7' **Lab ID: 40128219002** Collected: 02/10/16 10:50 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-34-5	W
Tetrachloroethene	**2870**	ug/kg	72.6	30.3	1	02/17/16 07:00	02/17/16 15:33	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:33	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:33	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:33	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	113	%	49-157		1	02/17/16 07:00	02/17/16 15:33	1868-53-7	
Toluene-d8 (S)	100	%	61-148		1	02/17/16 07:00	02/17/16 15:33	2037-26-5	
4-Bromofluorobenzene (S)	94	%	53-134		1	02/17/16 07:00	02/17/16 15:33	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.4**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 1-3' **Lab ID: 40128219003** Collected: 02/10/16 11:40 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 15:56	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 15:56	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 15:56	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 15:56	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 15:56	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 1-3' **Lab ID: 40128219003** Collected: 02/10/16 11:40 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-34-5	W
Tetrachloroethene	**882**	ug/kg	68.6	28.6	1	02/17/16 07:00	02/17/16 15:56	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 15:56	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 15:56	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 15:56	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	120	%	49-157		1	02/17/16 07:00	02/17/16 15:56	1868-53-7	
Toluene-d8 (S)	107	%	61-148		1	02/17/16 07:00	02/17/16 15:56	2037-26-5	
4-Bromofluorobenzene (S)	100	%	53-134		1	02/17/16 07:00	02/17/16 15:56	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.6**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 9-10' **Lab ID: 40128219004** Collected: 02/10/16 11:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 16:19	74-83-9	W
n-Butylbenzene	**241**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	104-51-8	
sec-Butylbenzene	**169**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	135-98-8	
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 16:19	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 16:19	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 16:19	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	87-68-3	W
Isopropylbenzene (Cumene)	**147**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	98-82-8	
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	1634-04-4	W
Naphthalene	**97.1J**	ug/kg	293	46.9	1	02/17/16 07:00	02/17/16 16:19	91-20-3	
n-Propylbenzene	**499**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	103-65-1	
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-102 9-10' **Lab ID: 40128219004** Collected: 02/10/16 11:45 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-34-5	W
Tetrachloroethene	**237**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 16:19	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	96-18-4	W
1,2,4-Trimethylbenzene	**510**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	95-63-6	
1,3,5-Trimethylbenzene	**136**	ug/kg	70.3	29.3	1	02/17/16 07:00	02/17/16 16:19	108-67-8	
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 16:19	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:19	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	49-157		1	02/17/16 07:00	02/17/16 16:19	1868-53-7	
Toluene-d8 (S)	96	%	61-148		1	02/17/16 07:00	02/17/16 16:19	2037-26-5	
4-Bromofluorobenzene (S)	91	%	53-134		1	02/17/16 07:00	02/17/16 16:19	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**14.7**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 8-9.5' **Lab ID: 40128219005** Collected: 02/10/16 12:30 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-27-4	W
Bromoform	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-25-2	W
Bromomethane	**<69.9**	ug/kg	250	69.9	1	02/17/16 07:00	02/17/16 16:42	74-83-9	W
n-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-90-7	W
Chloroethane	**<67.0**	ug/kg	250	67.0	1	02/17/16 07:00	02/17/16 16:42	75-00-3	W
Chloroform	**<46.4**	ug/kg	250	46.4	1	02/17/16 07:00	02/17/16 16:42	67-66-3	W
Chloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-43-4	W
1,2-Dibromo-3-chloropropane	**<91.2**	ug/kg	250	91.2	1	02/17/16 07:00	02/17/16 16:42	96-12-8	W
Dibromochloromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-34-3	L3,W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	563-58-6	W
cis-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	100-41-4	W
Hexachloro-1,3-butadiene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	99-87-6	W
Methylene Chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	1634-04-4	W
Naphthalene	**<40.0**	ug/kg	250	40.0	1	02/17/16 07:00	02/17/16 16:42	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	100-42-5	W

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 8-9.5' **Lab ID: 40128219005** Collected: 02/10/16 12:30 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	79-34-5	W
Tetrachloroethene	**8180**	ug/kg	74.7	31.1	1	02/17/16 07:00	02/17/16 16:42	127-18-4	
Toluene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-88-3	W
1,2,3-Trichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	87-61-6	W
1,2,4-Trichlorobenzene	**<47.6**	ug/kg	250	47.6	1	02/17/16 07:00	02/17/16 16:42	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	79-00-5	W
Trichloroethene	**65.1J**	ug/kg	74.7	31.1	1	02/17/16 07:00	02/17/16 16:42	79-01-6	
Trichlorofluoromethane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-69-4	W
1,2,3-Trichloropropane	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	02/17/16 07:00	02/17/16 16:42	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	02/17/16 07:00	02/17/16 16:42	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	111	%	49-157		1	02/17/16 07:00	02/17/16 16:42	1868-53-7	
Toluene-d8 (S)	95	%	61-148		1	02/17/16 07:00	02/17/16 16:42	2037-26-5	
4-Bromofluorobenzene (S)	89	%	53-134		1	02/17/16 07:00	02/17/16 16:42	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.6**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 16-17' **Lab ID: 40128219006** Collected: 02/10/16 12:35 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	71-43-2	W
Bromobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-86-1	W
Bromochloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-97-5	W
Bromodichloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-27-4	W
Bromoform	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-25-2	W
Bromomethane	**<699**	ug/kg	2500	699	10	02/17/16 07:00	02/17/16 18:14	74-83-9	W
n-Butylbenzene	**5050**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	104-51-8	
sec-Butylbenzene	**969**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	135-98-8	
tert-Butylbenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	98-06-6	W
Carbon tetrachloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	56-23-5	W
Chlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-90-7	W
Chloroethane	**<670**	ug/kg	2500	670	10	02/17/16 07:00	02/17/16 18:14	75-00-3	W
Chloroform	**<464**	ug/kg	2500	464	10	02/17/16 07:00	02/17/16 18:14	67-66-3	W
Chloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-87-3	W
2-Chlorotoluene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	95-49-8	W
4-Chlorotoluene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-43-4	W
1,2-Dibromo-3-chloropropane	**<912**	ug/kg	2500	912	10	02/17/16 07:00	02/17/16 18:14	96-12-8	W
Dibromochloromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	124-48-1	W
1,2-Dibromoethane (EDB)	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-93-4	W
Dibromomethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	74-95-3	W
1,2-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	95-50-1	W
1,3-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	541-73-1	W
1,4-Dichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	106-46-7	W
Dichlorodifluoromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-71-8	W
1,1-Dichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-34-3	L3,W
1,2-Dichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	107-06-2	W
1,1-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-35-4	W
cis-1,2-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	156-59-2	W
trans-1,2-Dichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	156-60-5	W
1,2-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	78-87-5	W
1,3-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	142-28-9	W
2,2-Dichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	594-20-7	W
1,1-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	563-58-6	W
cis-1,3-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	10061-01-5	W
trans-1,3-Dichloropropene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	10061-02-6	W
Diisopropyl ether	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	108-20-3	W
Ethylbenzene	**25200**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	100-41-4	
Hexachloro-1,3-butadiene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	87-68-3	W
Isopropylbenzene (Cumene)	**2440**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	98-82-8	
p-Isopropyltoluene	**749**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	99-87-6	
Methylene Chloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-09-2	W
Methyl-tert-butyl ether	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	1634-04-4	W
Naphthalene	**4210**	ug/kg	2980	477	10	02/17/16 07:00	02/17/16 18:14	91-20-3	
n-Propylbenzene	**10400**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	103-65-1	
Styrene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: B-103 16-17' **Lab ID: 40128219006** Collected: 02/10/16 12:35 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	630-20-6	W
1,1,2,2-Tetrachloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-34-5	W
Tetrachloroethene	**9050**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	127-18-4	
Toluene	**17800**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	108-88-3	
1,2,3-Trichlorobenzene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	87-61-6	W
1,2,4-Trichlorobenzene	**<476**	ug/kg	2500	476	10	02/17/16 07:00	02/17/16 18:14	120-82-1	W
1,1,1-Trichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	71-55-6	W
1,1,2-Trichloroethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-00-5	W
Trichloroethene	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	79-01-6	W
Trichlorofluoromethane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-69-4	W
1,2,3-Trichloropropane	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	96-18-4	W
1,2,4-Trimethylbenzene	**45300**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	95-63-6	
1,3,5-Trimethylbenzene	**13700**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	108-67-8	
Vinyl chloride	**<250**	ug/kg	600	250	10	02/17/16 07:00	02/17/16 18:14	75-01-4	W
m&p-Xylene	**82300**	ug/kg	1430	595	10	02/17/16 07:00	02/17/16 18:14	179601-23-1	
o-Xylene	**29700**	ug/kg	714	298	10	02/17/16 07:00	02/17/16 18:14	95-47-6	
Surrogates									
Dibromofluoromethane (S)	109	%	49-157		10	02/17/16 07:00	02/17/16 18:14	1868-53-7	
Toluene-d8 (S)	99	%	61-148		10	02/17/16 07:00	02/17/16 18:14	2037-26-5	
4-Bromofluorobenzene (S)	107	%	53-134		10	02/17/16 07:00	02/17/16 18:14	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**16.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 2.5' **Lab ID: 40128219007** Collected: 02/10/16 14:00 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	71-43-2	W
Bromobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-86-1	W
Bromochloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-97-5	W
Bromodichloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-27-4	W
Bromoform	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-25-2	W
Bromomethane	**<350**	ug/kg	1250	350	5	02/17/16 07:00	02/17/16 18:38	74-83-9	W
n-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	104-51-8	W
sec-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	135-98-8	W
tert-Butylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	98-06-6	W
Carbon tetrachloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	56-23-5	W
Chlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-90-7	W
Chloroethane	**<335**	ug/kg	1250	335	5	02/17/16 07:00	02/17/16 18:38	75-00-3	W
Chloroform	**<232**	ug/kg	1250	232	5	02/17/16 07:00	02/17/16 18:38	67-66-3	W
Chloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-87-3	W
2-Chlorotoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-49-8	W
4-Chlorotoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-43-4	W
1,2-Dibromo-3-chloropropane	**<456**	ug/kg	1250	456	5	02/17/16 07:00	02/17/16 18:38	96-12-8	W
Dibromochloromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	124-48-1	W
1,2-Dibromoethane (EDB)	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-93-4	W
Dibromomethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	74-95-3	W
1,2-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-50-1	W
1,3-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	541-73-1	W
1,4-Dichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	106-46-7	W
Dichlorodifluoromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-71-8	W
1,1-Dichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-34-3	L3,W
1,2-Dichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	107-06-2	W
1,1-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-35-4	W
cis-1,2-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	156-59-2	W
trans-1,2-Dichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	156-60-5	W
1,2-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	78-87-5	W
1,3-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	142-28-9	W
2,2-Dichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	594-20-7	W
1,1-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	563-58-6	W
cis-1,3-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	10061-01-5	W
trans-1,3-Dichloropropene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	10061-02-6	W
Diisopropyl ether	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-20-3	W
Ethylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	100-41-4	W
Hexachloro-1,3-butadiene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	87-68-3	W
Isopropylbenzene (Cumene)	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	98-82-8	W
p-Isopropyltoluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	99-87-6	W
Methylene Chloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-09-2	W
Methyl-tert-butyl ether	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	1634-04-4	W
Naphthalene	**<200**	ug/kg	1250	200	5	02/17/16 07:00	02/17/16 18:38	91-20-3	W
n-Propylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	103-65-1	W
Styrene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	100-42-5	W

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 2.5' **Lab ID: 40128219007** Collected: 02/10/16 14:00 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	630-20-6	W
1,1,2,2-Tetrachloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-34-5	W
Tetrachloroethene	**37600**	ug/kg	337	140	5	02/17/16 07:00	02/17/16 18:38	127-18-4	
Toluene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-88-3	W
1,2,3-Trichlorobenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	87-61-6	W
1,2,4-Trichlorobenzene	**<238**	ug/kg	1250	238	5	02/17/16 07:00	02/17/16 18:38	120-82-1	W
1,1,1-Trichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	71-55-6	W
1,1,2-Trichloroethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-00-5	W
Trichloroethene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	79-01-6	W
Trichlorofluoromethane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-69-4	W
1,2,3-Trichloropropane	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	96-18-4	W
1,2,4-Trimethylbenzene	**222J**	ug/kg	337	140	5	02/17/16 07:00	02/17/16 18:38	95-63-6	
1,3,5-Trimethylbenzene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	108-67-8	W
Vinyl chloride	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	75-01-4	W
m&p-Xylene	**<250**	ug/kg	600	250	5	02/17/16 07:00	02/17/16 18:38	179601-23-1	W
o-Xylene	**<125**	ug/kg	300	125	5	02/17/16 07:00	02/17/16 18:38	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	118	%	49-157		5	02/17/16 07:00	02/17/16 18:38	1868-53-7	
Toluene-d8 (S)	106	%	61-148		5	02/17/16 07:00	02/17/16 18:38	2037-26-5	
4-Bromofluorobenzene (S)	97	%	53-134		5	02/17/16 07:00	02/17/16 18:38	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**11.0**	%	0.10	0.10	1		02/17/16 16:30		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 5.5' **Lab ID: 40128219008** Collected: 02/10/16 14:10 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	71-43-2	W
Bromobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-86-1	W
Bromochloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-97-5	W
Bromodichloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-27-4	W
Bromoform	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-25-2	W
Bromomethane	**<35000**	ug/kg	125000	35000	500	02/17/16 07:00	02/17/16 19:01	74-83-9	W
n-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	104-51-8	W
sec-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	135-98-8	W
tert-Butylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	98-06-6	W
Carbon tetrachloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	56-23-5	W
Chlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-90-7	W
Chloroethane	**<33500**	ug/kg	125000	33500	500	02/17/16 07:00	02/17/16 19:01	75-00-3	W
Chloroform	**<23200**	ug/kg	125000	23200	500	02/17/16 07:00	02/17/16 19:01	67-66-3	W
Chloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-87-3	W
2-Chlorotoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-49-8	W
4-Chlorotoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-43-4	W
1,2-Dibromo-3-chloropropane	**<45600**	ug/kg	125000	45600	500	02/17/16 07:00	02/17/16 19:01	96-12-8	W
Dibromochloromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	124-48-1	W
1,2-Dibromoethane (EDB)	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-93-4	W
Dibromomethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	74-95-3	W
1,2-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-50-1	W
1,3-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	541-73-1	W
1,4-Dichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	106-46-7	W
Dichlorodifluoromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-71-8	W
1,1-Dichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-34-3	L3,W
1,2-Dichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	107-06-2	W
1,1-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-35-4	W
cis-1,2-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	156-59-2	W
trans-1,2-Dichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	156-60-5	W
1,2-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	78-87-5	W
1,3-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	142-28-9	W
2,2-Dichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	594-20-7	W
1,1-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	563-58-6	W
cis-1,3-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	10061-01-5	W
trans-1,3-Dichloropropene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	10061-02-6	W
Diisopropyl ether	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-20-3	W
Ethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	100-41-4	W
Hexachloro-1,3-butadiene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	87-68-3	W
Isopropylbenzene (Cumene)	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	98-82-8	W
p-Isopropyltoluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	99-87-6	W
Methylene Chloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-09-2	W
Methyl-tert-butyl ether	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	1634-04-4	W
Naphthalene	**<20000**	ug/kg	125000	20000	500	02/17/16 07:00	02/17/16 19:01	91-20-3	W
n-Propylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	103-65-1	W
Styrene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	100-42-5	W

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Sample: SUMP 5.5' **Lab ID: 40128219008** Collected: 02/10/16 14:10 Received: 02/12/16 13:35 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	630-20-6	W
1,1,2,2-Tetrachloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-34-5	W
Tetrachloroethene	**3160000**	ug/kg	34800	14500	500	02/17/16 07:00	02/17/16 19:01	127-18-4	
Toluene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-88-3	W
1,2,3-Trichlorobenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	87-61-6	W
1,2,4-Trichlorobenzene	**<23800**	ug/kg	125000	23800	500	02/17/16 07:00	02/17/16 19:01	120-82-1	W
1,1,1-Trichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	71-55-6	W
1,1,2-Trichloroethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-00-5	W
Trichloroethene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	79-01-6	W
Trichlorofluoromethane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-69-4	W
1,2,3-Trichloropropane	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	96-18-4	W
1,2,4-Trimethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-63-6	W
1,3,5-Trimethylbenzene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	108-67-8	W
Vinyl chloride	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	75-01-4	W
m&p-Xylene	**<25000**	ug/kg	60000	25000	500	02/17/16 07:00	02/17/16 19:01	179601-23-1	W
o-Xylene	**<12500**	ug/kg	30000	12500	500	02/17/16 07:00	02/17/16 19:01	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	0	%	49-157		500	02/17/16 07:00	02/17/16 19:01	1868-53-7	S4
Toluene-d8 (S)	0	%	61-148		500	02/17/16 07:00	02/17/16 19:01	2037-26-5	S4
4-Bromofluorobenzene (S)	0	%	53-134		500	02/17/16 07:00	02/17/16 19:01	460-00-4	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**13.8**	%	0.10	0.10	1		02/17/16 16:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

QC Batch: MSV/32249 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<13.7	50.0	02/17/16 10:27	
1,1,1-Trichloroethane	ug/kg	<14.4	50.0	02/17/16 10:27	
1,1,2,2-Tetrachloroethane	ug/kg	<17.5	50.0	02/17/16 10:27	
1,1,2-Trichloroethane	ug/kg	<20.2	50.0	02/17/16 10:27	
1,1-Dichloroethane	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloroethene	ug/kg	<17.6	50.0	02/17/16 10:27	
1,1-Dichloropropene	ug/kg	<14.0	50.0	02/17/16 10:27	
1,2,3-Trichlorobenzene	ug/kg	<17.0	50.0	02/17/16 10:27	
1,2,3-Trichloropropane	ug/kg	<22.3	50.0	02/17/16 10:27	
1,2,4-Trichlorobenzene	ug/kg	<47.6	250	02/17/16 10:27	
1,2,4-Trimethylbenzene	ug/kg	<12.2	50.0	02/17/16 10:27	
1,2-Dibromo-3-chloropropane	ug/kg	<91.2	250	02/17/16 10:27	
1,2-Dibromoethane (EDB)	ug/kg	<14.7	50.0	02/17/16 10:27	
1,2-Dichlorobenzene	ug/kg	<16.2	50.0	02/17/16 10:27	
1,2-Dichloroethane	ug/kg	<15.0	50.0	02/17/16 10:27	
1,2-Dichloropropane	ug/kg	<16.8	50.0	02/17/16 10:27	
1,3,5-Trimethylbenzene	ug/kg	<14.5	50.0	02/17/16 10:27	
1,3-Dichlorobenzene	ug/kg	<13.2	50.0	02/17/16 10:27	
1,3-Dichloropropane	ug/kg	<12.0	50.0	02/17/16 10:27	
1,4-Dichlorobenzene	ug/kg	<15.9	50.0	02/17/16 10:27	
2,2-Dichloropropane	ug/kg	<12.6	50.0	02/17/16 10:27	
2-Chlorotoluene	ug/kg	<15.8	50.0	02/17/16 10:27	
4-Chlorotoluene	ug/kg	<13.0	50.0	02/17/16 10:27	
Benzene	ug/kg	<9.2	20.0	02/17/16 10:27	
Bromobenzene	ug/kg	<20.6	50.0	02/17/16 10:27	
Bromochloromethane	ug/kg	<21.4	50.0	02/17/16 10:27	
Bromodichloromethane	ug/kg	<9.8	50.0	02/17/16 10:27	
Bromoform	ug/kg	<19.8	50.0	02/17/16 10:27	
Bromomethane	ug/kg	<69.9	250	02/17/16 10:27	
Carbon tetrachloride	ug/kg	<12.1	50.0	02/17/16 10:27	
Chlorobenzene	ug/kg	<14.8	50.0	02/17/16 10:27	
Chloroethane	ug/kg	<67.0	250	02/17/16 10:27	
Chloroform	ug/kg	<46.4	250	02/17/16 10:27	
Chloromethane	ug/kg	<20.4	50.0	02/17/16 10:27	
cis-1,2-Dichloroethene	ug/kg	<16.6	50.0	02/17/16 10:27	
cis-1,3-Dichloropropene	ug/kg	<16.6	50.0	02/17/16 10:27	
Dibromochloromethane	ug/kg	<17.9	50.0	02/17/16 10:27	
Dibromomethane	ug/kg	<19.3	50.0	02/17/16 10:27	
Dichlorodifluoromethane	ug/kg	<12.3	50.0	02/17/16 10:27	
Diisopropyl ether	ug/kg	<17.7	50.0	02/17/16 10:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

METHOD BLANK: 1295994 Matrix: Solid
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<12.4	50.0	02/17/16 10:27	
Hexachloro-1,3-butadiene	ug/kg	<24.5	50.0	02/17/16 10:27	
Isopropylbenzene (Cumene)	ug/kg	<12.6	50.0	02/17/16 10:27	
m&p-Xylene	ug/kg	<34.4	100	02/17/16 10:27	
Methyl-tert-butyl ether	ug/kg	<12.7	50.0	02/17/16 10:27	
Methylene Chloride	ug/kg	<16.2	50.0	02/17/16 10:27	
n-Butylbenzene	ug/kg	<10.5	50.0	02/17/16 10:27	
n-Propylbenzene	ug/kg	<11.6	50.0	02/17/16 10:27	
Naphthalene	ug/kg	<40.0	250	02/17/16 10:27	
o-Xylene	ug/kg	<14.0	50.0	02/17/16 10:27	
p-Isopropyltoluene	ug/kg	<12.0	50.0	02/17/16 10:27	
sec-Butylbenzene	ug/kg	<11.9	50.0	02/17/16 10:27	
Styrene	ug/kg	<9.0	50.0	02/17/16 10:27	
tert-Butylbenzene	ug/kg	<9.5	50.0	02/17/16 10:27	
Tetrachloroethene	ug/kg	<12.9	50.0	02/17/16 10:27	
Toluene	ug/kg	<11.2	50.0	02/17/16 10:27	
trans-1,2-Dichloroethene	ug/kg	<16.5	50.0	02/17/16 10:27	
trans-1,3-Dichloropropene	ug/kg	<14.4	50.0	02/17/16 10:27	
Trichloroethene	ug/kg	<23.6	50.0	02/17/16 10:27	
Trichlorofluoromethane	ug/kg	<24.7	50.0	02/17/16 10:27	
Vinyl chloride	ug/kg	<21.1	50.0	02/17/16 10:27	
4-Bromofluorobenzene (S)	%	92	53-134	02/17/16 10:27	
Dibromofluoromethane (S)	%	116	49-157	02/17/16 10:27	
Toluene-d8 (S)	%	103	61-148	02/17/16 10:27	

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2760	111	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2740	110	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2630	105	70-130	
1,1-Dichloroethane	ug/kg	2500	3290	132	70-130	L0
1,1-Dichloroethene	ug/kg	2500	2700	108	70-132	
1,2,4-Trichlorobenzene	ug/kg	2500	2360	94	70-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2260	90	45-150	
1,2-Dibromoethane (EDB)	ug/kg	2500	2710	108	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2620	105	70-130	
1,2-Dichloroethane	ug/kg	2500	3030	121	70-134	
1,2-Dichloropropane	ug/kg	2500	2830	113	70-130	
1,3-Dichlorobenzene	ug/kg	2500	2530	101	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2630	105	70-130	
Benzene	ug/kg	2500	2950	118	70-130	
Bromodichloromethane	ug/kg	2500	2340	93	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

LABORATORY CONTROL SAMPLE: 1295995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromoform	ug/kg	2500	2200	88	48-130	
Bromomethane	ug/kg	2500	2780	111	70-169	
Carbon tetrachloride	ug/kg	2500	2760	110	67-130	
Chlorobenzene	ug/kg	2500	2720	109	70-130	
Chloroethane	ug/kg	2500	2910	116	70-191	
Chloroform	ug/kg	2500	2690	108	70-130	
Chloromethane	ug/kg	2500	2800	112	52-132	
cis-1,2-Dichloroethene	ug/kg	2500	2980	119	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2640	106	70-130	
Dibromochloromethane	ug/kg	2500	2460	98	65-130	
Dichlorodifluoromethane	ug/kg	2500	1900	76	12-150	
Ethylbenzene	ug/kg	2500	2640	106	70-130	
Isopropylbenzene (Cumene)	ug/kg	2500	2640	106	70-130	
m&p-Xylene	ug/kg	5000	5240	105	70-130	
Methyl-tert-butyl ether	ug/kg	2500	3020	121	70-130	
Methylene Chloride	ug/kg	2500	3030	121	70-131	
o-Xylene	ug/kg	2500	2600	104	70-130	
Styrene	ug/kg	2500	2770	111	70-130	
Tetrachloroethene	ug/kg	2500	2350	94	70-130	
Toluene	ug/kg	2500	2670	107	70-130	
trans-1,2-Dichloroethene	ug/kg	2500	2690	108	69-130	
trans-1,3-Dichloropropene	ug/kg	2500	2380	95	65-130	
Trichloroethene	ug/kg	2500	2610	104	70-130	
Trichlorofluoromethane	ug/kg	2500	2400	96	50-150	
Vinyl chloride	ug/kg	2500	2870	115	67-134	
4-Bromofluorobenzene (S)	%			97	53-134	
Dibromofluoromethane (S)	%			115	49-157	
Toluene-d8 (S)	%			102	61-148	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<48.1	3240	2700	3120	2840	96	105	63-130	10	20	
1,1,2,2-Tetrachloroethane	ug/kg	<48.1	3240	2700	3230	2890	100	107	57-136	11	20	
1,1,2-Trichloroethane	ug/kg	<48.1	3240	2700	3100	2740	96	101	70-130	12	20	
1,1-Dichloroethane	ug/kg	<48.1	3240	2700	3740	3260	115	121	62-131	14	23	
1,1-Dichloroethene	ug/kg	<48.1	3240	2700	2890	2720	89	101	42-137	6	20	
1,2,4-Trichlorobenzene	ug/kg	<91.4	3240	2700	2940	2530	91	94	59-137	15	21	
1,2-Dibromo-3-chloropropane	ug/kg	<175	3240	2700	2830	2610	87	97	33-150	8	25	
1,2-Dibromoethane (EDB)	ug/kg	<48.1	3240	2700	2980	2700	92	100	70-130	10	20	
1,2-Dichlorobenzene	ug/kg	<48.1	3240	2700	3150	2810	97	104	70-130	12	20	
1,2-Dichloroethane	ug/kg	<48.1	3240	2700	3440	3100	106	115	68-134	11	20	
1,2-Dichloropropane	ug/kg	<48.1	3240	2700	3190	2950	98	109	70-130	8	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1295996 1295997

Parameter	Units	40128207003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,3-Dichlorobenzene	ug/kg	<48.1	3240	2700	3080	2730	95	101	70-130	12	20	
1,4-Dichlorobenzene	ug/kg	<48.1	3240	2700	3090	2700	95	100	69-130	14	20	
Benzene	ug/kg	<48.1	3240	2700	3240	2900	100	107	56-131	11	20	
Bromodichloromethane	ug/kg	<48.1	3240	2700	2850	2610	88	96	64-130	9	20	
Bromoform	ug/kg	<48.1	3240	2700	2670	2410	82	89	48-130	10	20	
Bromomethane	ug/kg	<134	3240	2700	3110	2920	96	108	18-169	6	23	
Carbon tetrachloride	ug/kg	<48.1	3240	2700	3310	3000	102	111	59-130	10	20	
Chlorobenzene	ug/kg	<48.1	3240	2700	3190	2800	98	104	70-130	13	20	
Chloroethane	ug/kg	<129	3240	2700	3390	3000	105	111	10-191	12	20	
Chloroform	ug/kg	<89.3	3240	2700	3080	2900	95	107	65-130	6	20	
Chloromethane	ug/kg	<48.1	3240	2700	3000	2860	93	106	36-132	5	20	
cis-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3270	2920	101	108	59-136	11	24	
cis-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2900	2630	89	97	60-130	10	20	
Dibromochloromethane	ug/kg	<48.1	3240	2700	3070	2630	95	97	59-130	15	20	
Dichlorodifluoromethane	ug/kg	<48.1	3240	2700	1590	1570	49	58	10-150	1	27	
Ethylbenzene	ug/kg	<48.1	3240	2700	3000	2640	93	98	64-130	13	20	
Isopropylbenzene (Cumene)	ug/kg	<48.1	3240	2700	3040	2680	94	99	69-138	12	20	
m&p-Xylene	ug/kg	<96.2	6490	5400	6190	5530	96	102	61-130	11	20	
Methyl-tert-butyl ether	ug/kg	<48.1	3240	2700	3600	3080	111	114	52-134	15	20	
Methylene Chloride	ug/kg	<48.1	3240	2700	3350	3190	103	118	61-131	5	20	
o-Xylene	ug/kg	<48.1	3240	2700	3040	2640	94	98	63-130	14	20	
Styrene	ug/kg	<48.1	3240	2700	3090	2740	95	102	70-130	12	20	
Tetrachloroethene	ug/kg	<48.1	3240	2700	2760	2440	85	90	65-130	12	20	
Toluene	ug/kg	<48.1	3240	2700	3100	2680	96	99	65-130	14	20	
trans-1,2-Dichloroethene	ug/kg	<48.1	3240	2700	3380	2990	104	111	55-130	12	20	
trans-1,3-Dichloropropene	ug/kg	<48.1	3240	2700	2780	2480	86	92	54-130	11	20	
Trichloroethene	ug/kg	<48.1	3240	2700	2990	2750	92	102	70-130	8	20	
Trichlorofluoromethane	ug/kg	<48.1	3240	2700	2910	2810	90	104	42-150	3	24	
Vinyl chloride	ug/kg	<48.1	3240	2700	2830	2640	87	98	35-134	7	20	
4-Bromofluorobenzene (S)	%						91	91	53-134			
Dibromofluoromethane (S)	%						108	115	49-157			
Toluene-d8 (S)	%						94	94	61-148			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

QC Batch: PMST/12429 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40128219001, 40128219002, 40128219003, 40128219004, 40128219005, 40128219006, 40128219007, 40128219008

SAMPLE DUPLICATE: 1296318

Parameter	Units	40128277014 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.6	24.4	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.

Pace Analytical
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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 15-1209 MASTER CLEANERS
Pace Project No.: 40128219

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40128219001	**B-101 1-3'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219002	**B-101 5-7'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219003	**B-102 1-3'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219004	**B-102 9-10'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219005	**B-103 8-9.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219006	**B-103 16-17'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219007	**SUMP 2.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219008	**SUMP 5.5'**	EPA 5035/5030B	MSV/32249	EPA 8260	MSV/32256
40128219001	**B-101 1-3'**	ASTM D2974-87	PMST/12429		
40128219002	**B-101 5-7'**	ASTM D2974-87	PMST/12429		
40128219003	**B-102 1-3'**	ASTM D2974-87	PMST/12429		
40128219004	**B-102 9-10'**	ASTM D2974-87	PMST/12429		
40128219005	**B-103 8-9.5'**	ASTM D2974-87	PMST/12429		
40128219006	**B-103 16-17'**	ASTM D2974-87	PMST/12429		
40128219007	**SUMP 2.5'**	ASTM D2974-87	PMST/12429		
40128219008	**SUMP 5.5'**	ASTM D2974-87	PMST/12429		

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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CHAIN OF CUSTODY

40128219

(Please Print Clearly)	
Company Name:	FEHR GRAHAM
Branch/Location:	PLY
Project Contact:	KEN EBBOTT
Phone:	920-892-2444
Project Number:	15-1209
Project Name:	MASTER CLEANERS
Project State:	WI
Sampled By (Print):	MEGAN THAUSEN
Sampled By (Sign):	MgO Thausen
PO #:	
Regulatory Program:	

Quote #:	DERF
Mail To Contact:	KEN EBBOTT
Mail To Company:	FEHR GRAHAM
Mail To Address:	1237 PILGRIM RD PLYMOUTH, WI
Invoice To Contact:	KEN EBBOTT
Invoice To Company:	C/O FEHR GRAHAM
Invoice To Address:	
Invoice To Phone:	

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					YIN	Pick Letter	VOC			
001	B-101 1-3'	2/10/16	1045	S	N	F	X	1-40mlV	F 1-4oz pA	
002	B-101 5-7'	↓	1050	↓	↓	↓	↓			
003	B-102 1-3'		1140							
004	B-102 9-10'		1145							
005	B-103 8-9.5'		1230							
006	B-103 16-17'		1235							
007	SUMP 2.5'		1400							
008	SUMP 5.5'	↓	1410	↓	↓	↓	↓	↓	↓	

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Megan Thausen	2/12/16	Grace Page	2/12/16 1205
Grace Page	2/12/16 1335	Elizabeth Wyler Pace	2-12-16 1335

PACE Project No.: 40128219

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / (Not Present)
Intact / Not Intact

Version 6.0 08/14/06

Sample Condition Upon Receipt

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Pace Analytical

Client Name: Fehr Graham Project # **WO# : 40128219**

40128219

Courier: ☐ Fed Ex ☐ UPS ☐ Client ☒ Pace Other: _____

Tracking #: _____

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used N/A **Type of Ice:** Wet Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: RDT /Corr: _____ **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp Blank Present: ☐ yes ☒ no

Person examining contents:
Date: 2-12-16
Initials: SM

Temp should be above freezing to 6°C for all sample except Biota.
Frozen Biota Samples should be received ≤ 0°C.

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☐Yes ☑No ☐N/A	12. No collect date & time on all 40zp. 2-12-16 SM
-Includes date/time/ID/Analysis Matrix: S		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	☐Yes ☐No ☑N/A	13. ☐ HNO3 ☐ H2SO4 ☐ NaOH ☐ NaOH +ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	☐Yes ☑No	Initial when completed / Lab Std #ID of preservative / Date/ Time:
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	14.
Trip Blank Present:	☐Yes ☐No ☑N/A	15.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 2-15-16