Pinnacle Engineering

Pinnacle Engineering, Inc
11541 95th Ave North
Minneapolis, MN 55369

Tel: 763-315-4501
800-366-3406
Fax: 763-315-4507

August 9, 2010

Steve Maki, Engineering Specialist
Community Planning and Economic Development
City of Minneapolis
105 5th Ave. South, Ste. 200
Minneapolis, MN 55401-2534

RE: Phase II Environmental Site Assessment
Minneapolis Public Works-Snelling Yard Facility
3601 44th Street East, Minneapolis, Minnesota
Environmental/Geotechnical Engineering Standard Agreement #C-27679
Pinnacle Project Number: R010253.001

Dear Mr. Maki:

Pinnacle Engineering, Inc. (Pinnacle) is pleased to present the results of our Phase II subsurface assessment (Phase II) for the Minneapolis Public Works-Snelling Yard Facility at 3601 44th Street East, Minneapolis, Hennepin County, Minnesota (Site). Based on the results of the Phase II, evidence consistent with low-level petroleum impact to soil and groundwater was found.

If you have any questions or wish to discuss any particular aspect of the project, please contact us at (763) 315-4501. We look forward to being of continued service to you.

Sincerely,

PINNACLE ENGINEERING, INC.

Jason Coyle
Senior Project Scientist

Steve Carlson – Supervisor
Environmental Services

PHASE II
SUBSURFACE SITE ASSESSMENT

FOR:

MINNEAPOLIS PUBLIC WORKS-
SNELLING YARD FACILITY
3601 44TH STREET EAST
MINNEAPOLIS, MINNESOTA

PREPARED FOR:

COMMUNITY PLANNING AND ECONOMIC DEVELOPMENT-
CITY OF MINNEAPOLIS
105 5TH AVE. SOUTH, STE. 200
MINNEAPOLIS, MN 55401-2534
ENVIRONMENTAL/GEOTECHNICAL ENGINEERING
STANDARD AGREEMENT #C-27679

PREPARED BY:

PINNACLE ENGINEERING, INC.
11541 95th AVENUE NORTH
MINNEAPOLIS, MN 55369
(763) 315-4501

PINNACLE PROJECT NUMBER: R010253.001

August 9, 2010

Prepared By:

Eric Simonson
Senior Project Engineer

Reviewed By:

Steve Carlson-Supervisor
Environmental Services

TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION	1
1.1 Site Location	1
1.2 Summary- Phase I	1
1.3 Project Scope	2
2.0 RESULTS	2
2.1 Soil Borings	3
2.2 Stratigraphy	3
2.3 Field Screening	4
2.4 Sample Collection	4
2.5 Laboratory Analytical Results	5
2.5.1 Soil Analytical Results	5
2.5.2 Groundwater Analytical Results	6
2.5.3 Soil Vapor Analytical Results	7
3.0 CONCLUSIONS	7
4.0 RECOMMENDATIONS	8
5.0 STANDARD OF CARE	9

FIGURES/TABLES

Figure 1 Site Location

Figure 2 Site Layout/Boring Locations

Table 1 Analytical Results-Soil

Table 2 Analytical Results-Groundwater

Table 3 Analytical Results-Soil Vapor

APPENDICES

Appendix A Soil Boring Logs

Appendix B Laboratory Analytical Report

1.0 INTRODUCTION

Mr. Steve Maki of the City of Minneapolis retained Pinnacle Engineering, Inc. (Pinnacle) to conduct a Phase II Environmental Site Assessment (Phase I) of the land area of 3.29 acres located at 3601 44th Street East, occupied by the City of Minneapolis Public Works Snelling Yard Facility in Minneapolis, Hennepin County, Minnesota (Site). This assessment was performed under the Environmental/Geotechnical Engineering Standard Agreement #C-27679 between Pinnacle and the City of Minneapolis.

In June, 2010, Pinnacle completed a Phase I Environmental Site Assessment (Phase I) for the Site. The Phase I identified the following Recognized Environmental Conditions (RECs), as defined by ASTM, in connection with the Site:

- Oil/water separators are present in the buildings located at the Site;
- Hydraulic lifts are/were present in the buildings located at the Site; and,
- Evidence of the past presence of above-ground (AST) and underground (UST) petroleum storage tanks at the Site.

Based on the RECs, Pinnacle was authorized to conduct additional assessment to evaluate potential impacts to the Site.

1.1 Site Location

The Site is located at 3601 44th Street East in Minneapolis, Hennepin County, Minnesota, which is within the SE ¼ of the SW ¼ of Section 7, Township 28 North, Range 23 West, as depicted on the St. Paul - West, Minnesota Quadrangle Map (Figure 1).

1.2 Summary- Phase I

The Site consists of two buildings, a garage, two sheds, covered yard storage, open yard storage areas, and an associated parking lot. The two building are located at 3601 44th Street East (Building 1) and 4444 Snelling Avenue South (Building 2). The layout of the Site is shown on Figure 2. Building 1 is single story slab on grade, concrete building facing 44th Street East. Garage doors accesses the northern and southern portions of the main building. A building extension which consists of a single story slab on grade structure with service bays for vehicle and equipment maintenance and repair extends to the southeast from the southeast corner of the main building.

Building 2 consists of a slab on grade, concrete building with a partial basement, in the south portion near Snelling Avenue. A large garage door accesses the northern portion of the building from a parking lot on the west side of the building.

The Phase I showed the Site to have been consistently used as an equipment and service garage for the City of Minneapolis since the 1900s. The buildings all have floor drains, oil/water separators, and former or present hydraulic lifts. The storage yard has historically contained large ASTs and various roadway materials such as salt and sand. Removal of ASTs/USTs previously done at the Site pre-dated current regulations requiring closure sampling to document conditions present in the tank area.

1.3 Project Scope

Pinnacle performed the following scope of work for this assessment:

- Observed the advancement of eight push probe borings to depths of 18 to 36 feet below ground surface (BGS);
- Collected soil samples from each boring for field classification and field screening using a photoionization detector (PID) equipped with a 10.6 eV bulb;
- Collected soil samples from each of the borings for laboratory analysis of benzene, toluene, ethylbenzene and xylenes (BTEX), gasoline range organic compounds (GRO), diesel range organic compounds (DRO), polyaromatic hydrocarbons (PAH), and Resource Conservation and Recovery Act (RCRA) metals;
- Collected one groundwater sample from each boring for laboratory analysis of volatile organic compounds (VOCs), GRO, DRO, PAH, and dissolved RCRA metals;
- Performed additional laboratory analysis for poly-chlorinated biphenyls (PCBs) on selected soil and groundwater samples;
- Collected four soil gas samples from borings advanced to the depth of ten feet bgs for laboratory analysis of VOCs; and
- Prepared this report presenting the data, results, conclusions, and recommendations regarding the assessment.

2.0 RESULTS

This section presents the results of field activities and chemical analyses of samples collected during the Phase II assessment as described in the scope of services. The field

work was completed on July 12 and 13, 2010 under the direction of Eric Simonson of Pinnacle, and on July 14 and 15, 2010 under the direction of Matt Witzel of Pinnacle.

2.1 Soil Borings

Eight push probe soil borings, PP-1 through PP-8, were advanced to the depths of 18 to 36 feet for environmental sampling purposes. The borings were performed by Summit EnviroSolutions with a truck- and track-mounted direct push drilling rig under a subcontract with Pinnacle. Soil samples were collected in 4-foot intervals with an acetate liner placed in a stainless steel sampling tool.

The initial borings, PP-1 and PP-2, were advanced continuously to the groundwater table, encountered at the depth of 33 to 34 feet bgs. Due to difficult drilling conditions, the subsequent borings were advanced continuously to a clay layer encountered at depths of 18- to 24 feet bgs, and completed to the groundwater table using the push probe screen sampling tool. The boring logs are attached in Appendix A, and the borings were advanced in the locations shown on Figure 2.

In general, PP-1 was advanced in the area of former above ground storage tanks (ASTs) in the west-central area of the Site, PP-2 was advanced near a former UST location west of Building 2, PP-3 and P-4 were advanced east and west of the southeast addition of Building 1, PP-5 and PP-6 were advanced south and east, respectively, of Building 2, and PP-7 and PP-8 were advanced west and north, respectively, of the main portion of Building 1. Soil samples for laboratory analysis were collected from selected intervals. The boreholes were abandoned with grout following completion, in accordance with Minnesota Department of Health (MDH) regulations.

2.2 Stratigraphy

In general, the borings encountered surficial fill ranging in thickness from 4- to 8-feet, consisting of sand and gravel, dark brown, silty sand, underlain by silty clay. The fill/clay was underlain by poorly graded sand, generally to the depths of 17½ to 24 feet. Glacial till, composed of sandy clay or clayey sand, was encountered under the sand. In the deeper borings (PP-1 and PP-2), water bearing sand and gravel was encountered under the glacial till to the termination depths. As discussed above, groundwater samples were collected from borings PP-3 through PP-8 by directly driving the push probe screen tool through the glacial till to the water bearing sand/gravel, with no soil samples recovered below the glacial till.

2.3 Field Screening

Soil samples were field screened for the presence of organic vapors using the Minnesota Pollution Control Agency (MPCA) headspace methodology with a Mini-Rae PID equipped with a 10.6 eV lamp. The PID indicates the relative concentration of ionizable vapors expressed in parts per million (ppm) The organic vapor concentrations are shown on the attached soil boring logs.

Field screening detected organic vapors in excess of background levels in many of the recovered soil samples, but none exceeded 1 ppm. Petroleum odors were not noted in any of the soil samples.

2.4 Sample Collection

The samples for laboratory analysis were collected while wearing a pair of single-use nitrile gloves and placed in the appropriate, laboratory-supplied, sample containers. The soil samples were submitted for laboratory analysis of BTEX, GRO, DRO, PAH, and RCRA metals. PCB analysis was also conducted on the soil samples collected from PP-3, PP-4, PP-5, and PP-6, advanced in the general areas of hydraulic hoists in Buildings 1 and 2.

The soil samples for BTEX and GRO analysis were each collected utilizing a Terra Core™ soil coring device. Utilizing this device, five soil plugs of approximately five grams each were collected and extruded into 60 milliliter (ml) jars and preserved with 25 ml of methanol. The soil samples for DRO analysis were also collected with a Terra Core™ soil coring device, with five soil plugs of approximately five grams each collected and extruded, unpreserved, into 60 ml jars. The soil samples for PAH, RCRA metals, and PCB analysis were packed into unpreserved, four-ounce sample jars.

Groundwater samples were collected from each of the borings through the push-probe screen tool attached to the push probe rods. Groundwater was extracted using a check valve and dedicated sample tubing attached to a peristaltic pump. The groundwater samples for VOC and GRO analysis were placed into 40 ml vials containing hydrochloric acid (HCl) as a preservative. The groundwater samples for DRO analysis were placed into two, one-liter amber glass jars containing HCl as a preservative. The groundwater samples for PAH and PCB analysis were placed into two, unpreserved one-liter amber glass jars. The sample for RCRA metals was filtered in the field to remove sediment prior to placing it into a 250-ml plastic container preserved with nitric acid.

A field blank and two trip blanks for VOC analysis were also submitted for quality control.

Pinnacle collected samples of soil gas from the push probes following the "postrun tubing" (PRT) method described by Geoprobe®. The PRT adaptor was connected to a length of dedicated sampling tubing. The sampling line was purged by screening the soil vapor with the PID. The sample was then collected directly into the laboratory-provided Summa canister.

The soil and groundwater samples for analysis were placed in the appropriate laboratory-supplied sample containers and delivered to the laboratory on ice in coolers, via overnight Federal Express, with chain-of-custody documentation.

2.5 Laboratory Analytical Results

The laboratory analysis was performed by Environmental Science Corp. of Mt. Juliet, Tennessee. Please refer to Appendix C for the complete laboratory reports.

2.5.1 Soil Analytical Results

One to two soil samples were collected from each of the borings and analyzed for BTEX, GRO, DRO, PAHs, RCRA Metals, and, in some cases, PCBs. For soil samples, the applicable regulatory standards include Tier I (residential) Soil Reference Values (SRVs). SRVs are risk-based values established by the MPCA. SRV limits set acceptable soil concentrations based on common exposure pathways, including ingestion, dermal contact and inhalation of vapors and particulates. Refer to Table 1 for a summary of the soil analytical results compared with the MPCA Soil Reference Values (SRVs) for Residential areas.

In general, concentrations of VOCs, GRO, and PCBs were not present above the laboratory detection levels in any of the soil samples collected from the Site. Several of the eight RCRA metals were detected in each of the soil samples, but were generally in low concentrations that would be consistent with naturally occurring concentrations. DRO was detected in five of the ten analyzed soil samples, at concentrations ranging from 7 to 85 milligrams per kilogram (mg/kg), with the highest concentrations generally detected in near-surface samples. The MPCA has not established a SRV for DRO. However, the DRO concentrations detected at the Site would be considered low. Low concentrations of several PAHs were detected in the shallow collected from PP-6

(2½ -3'). This sample was collected from a layer of fill that contained clinkers. The detected PAHs were below the SRVs.

2.5.2 Groundwater Analytical Results

One groundwater sample was collected from each of the borings and analyzed for VOCs, GRO, DRO, PAHs, RCRA Metals, and, in some cases, PCBs. Refer to Table 2 for a summary of the groundwater analytical results compared with various regulatory criteria, including the Health Risk Limits (HRLs) for drinking water, the Maximum Contaminant Level (MCL), or the Health Based Values (HBVs).

The 2009 Health Risk Limits (HRLs) are promulgated by rule and are defined as a concentration of a chemical in drinking water that is likely to pose little or no health risk to humans, including vulnerable subpopulations. MCL is the maximum permissible level of a contaminant in water which is delivered to any user of a public water system. HBVs were developed in various years from 1995-2006 were taken from a March 5, 2007, table from the Minnesota Department of Health (MDH). These values are no longer supported by MDH, however these values were used for screening purposes.

VOCs, PAHs, and PCBs were not detected in the groundwater samples collected from the Site. Low concentrations of three VOCs were detected in the field blank, which was collected from the equipment rinse water. A low concentration of GRO, 130 ug/l, was detected in the groundwater sample collected from PP-6. Low concentrations of DRO, ranging from 100 to 160 ug/l were detected in the groundwater samples collected from PP-1, PP-2, PP-5, and PP-6. There are no current regulatory levels for DRO or GRO in drinking water; however, as a comparison, the HBV for Total Petroleum Hydrocarbons is 200 ug/l.

Three of the eight RCRA metals (dissolved) were detected in one or more of the groundwater samples collected from the Site. Arsenic was detected in the groundwater sample collected from PP-8, at a concentration of 24 ug/l, which exceeds the MCL of 10 ug/l. Barium was detected in the groundwater samples collected from each of the eight borings, at concentrations ranging from 44 to 360 ug/l, considerably lower than the HRL of 2,000 ug/l. Selenium was detected in three of the groundwater samples, in concentrations of 21 to 23 ug/l, lower than the HRL of 30 ug/l. The barium and selenium concentrations consistent with values commonly found in shallow groundwater within urbanized areas.

2.5.3 Soil Vapor Analytical Results

Four soil vapor samples (VP-1 through VP-4) were collected from approximately ten feet below the ground surface in the locations shown on Figure 2. Refer to Table 3 for a summary of the soil vapor analytical results compared with the MPCA Intrusion Screening Values (ISVs) for Residential areas. The laboratory report is included in Appendix C.

Several VOCs exceeding the Residential ISVs were detected in the soil gas samples; however, significant concentrations of soil vapor were not present. Only one VOC, 1,3-Butadiene, detected at a concentration of 8 ug/m^3 in VP-2 exceeded the action level of 10 times the ISV. The ISV for 1,3-Butadiene is 0.3 ug/m^3. VP-2 was completed at a location approximately 100 feet from residential buildings located across a street, limiting the risks associated with soil vapor.

3.0 CONCLUSIONS

As documented in the Phase I report various petroleum ASTs/USTs have been in use at the Site in the past. Hydraulic hoists and oil/water separators are also present. No evidence of a major petroleum release, such as significantly elevated concentrations of PCBs, VOCs, BTEX, DRO, or GRO, was found during the Phase II. The highest DRO concentrations in soil were detected in near surface fill soils, at 75 mg/kg and 85 mg/kg in PP-1, 4-5 feet and PP-6, 2½ -3 feet, respectively. The low DRO concentrations found in various soil samples and the DRO and GRO detected in the groundwater may be indicative of impacted fill and/or low-level release(s) of petroleum products.

Localized petroleum impacts may be present in the vicinity of existing underground equipment such as hydraulic hoists and/or oil water separator tanks. These potential sources of impact should be assessed during removal or when the building is demolished.

Significant concentrations of RCRA metals were not detected in the Site soils, with the detected concentrations consistent with naturally occurring levels. The only metal detected in groundwater at a concentration exceeding the regulatory level was arsenic, detected in PP-8 at a concentration of 24 ug/l. The source of the arsenic is not known, and its occurrence at the Site appears limited. Due to the depth of the water table in excess of 30 feet it is unlikely that the detected arsenic would affect redevelopment efforts on the Site.

The only detected PAHs were in the shallow fill in PP-6, where the highest concentration of DRO was also detected. The PAH concentrations were below their SRVs. Clinkers were noted in the fill in this area. Due to the detected DRO and PAH, the surficial fill soils would require proper management if disturbed during future Site redevelopment.

The risk of vapor intrusion to on-Site or off-Site receptors appears to be low. Only one compound, 1,3-Butadiene, detected at a concentration of 8 ug/m^3 in VP-2 exceeded the action level of 10 times the ISV. Additional assessment of soil vapors in the area of VP-2 would be required to more fully define the risk of vapor intrusion as related to future Site development.

4.0 RECOMMENDATIONS

We understand that the City of Minneapolis does not have a current redevelopment plan for the Site. If dewatering would be required for the installation of deep utilities, Pinnacle recommends that additional, project-specific groundwater evaluation be performed to determine the requirements for dewatering discharge.

Additional soil impacts may be present under the existing buildings, in the vicinity of hydraulic lines and/or equipment and below-grade oil/water separator equipment. Pinnacle recommends that additional soil evaluation be completed in these areas at the time of their removal.

A limited risk associated with vapor intrusion appears to be present in the vicinity of VP-2. According to the MPCA guidance documents, a site with representative soil gas sampling results greater than 10 times the ISVs is considered to pose a risk to receptors. Vapor intrusion is the migration of VOCs in soil or groundwater into overlying structures. Vapor intrusion is a concern because inhalation of the vapors can pose a risk to human health. Relatively low concentrations of some VOCs in indoor air may pose long term chronic health risks if sufficiently long exposures occur. High concentrations of some VOCs in indoor air have the potential to cause acute health risks. Additional assessment would be required to more fully determine the magnitude and extent of the potential vapor impacts. If redevelopment occurs in areas with elevated soil vapors, a sub-slab vapor barrier/soil vent system should be incorporated into the project design.

Low level petroleum and non-petroleum impacts were detected in the soil, soil vapor, and groundwater at the Site. A release will be reported to the State's Duty Officer. Due to detected impacts at the Site, it is recommended that future redevelopment be done under the oversight of the MPCA Voluntary Investigation and Cleanup (VIC) Program and/or the Petroleum Brownfields Program (PBP). The programs can provide liability assurances for the buyer and/or seller of an impacted property. Redevelopment would be done under MPCA guidelines.

The MPCA may require additional investigation to determine the full extents of the impacts. If the property is redeveloped, it is recommended that a Response Action Plan (RAP)/Development Response Action Plan (DRAP) be prepared in accordance with MPCA guidelines for the management of impacted soil and/or groundwater that may be disturbed during the development. The RAP/DRAP would also address the necessity of a sub-slab vapor barrier/soil vent system.

5.0 STANDARD OF CARE

The conclusions contained in this report represent our professional opinions. These opinions were arrived at in accordance with the currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended. We reserve the right to redirect our recommendations in light of further information.

Eric Simonson, a Senior Project Engineer at Pinnacle prepared this report. He has a Bachelor of Science in Geological Engineering from the University of North Dakota, combined with over twenty years of professional experience. Steve Carlson, Supervisor of Environmental Services, has reviewed this report. Mr. Carlson is a Biologist with over 22 years of professional experience.

FIGURES/TABLES

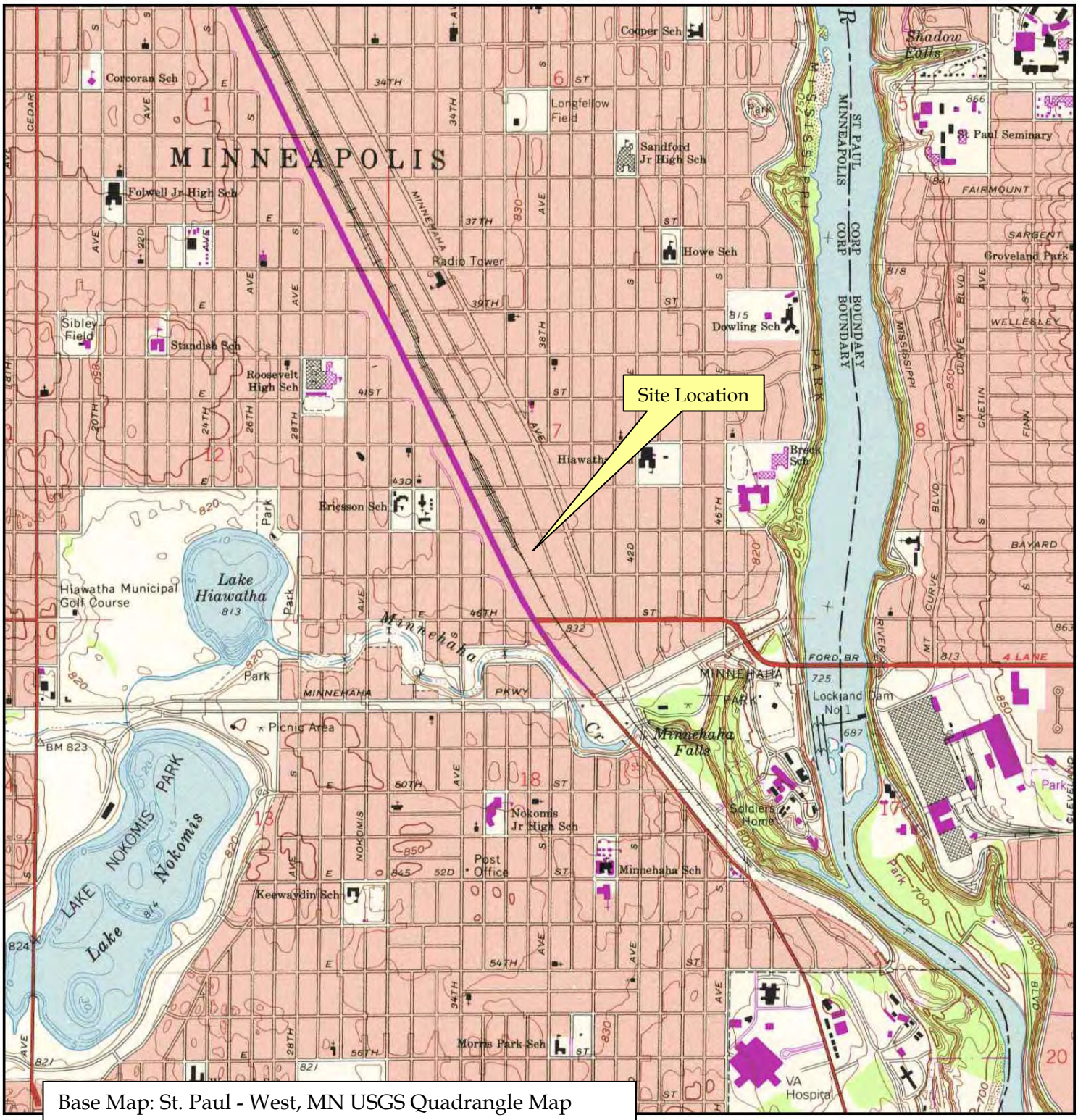
Figure 1 - Site Location

Figure 2 – Site Layout/Boring Locations

Table 1
Analytical Results-Soil

Table 2
Analytical Results-Groundwater

Table 3
Analytical Results-Soil Vapor

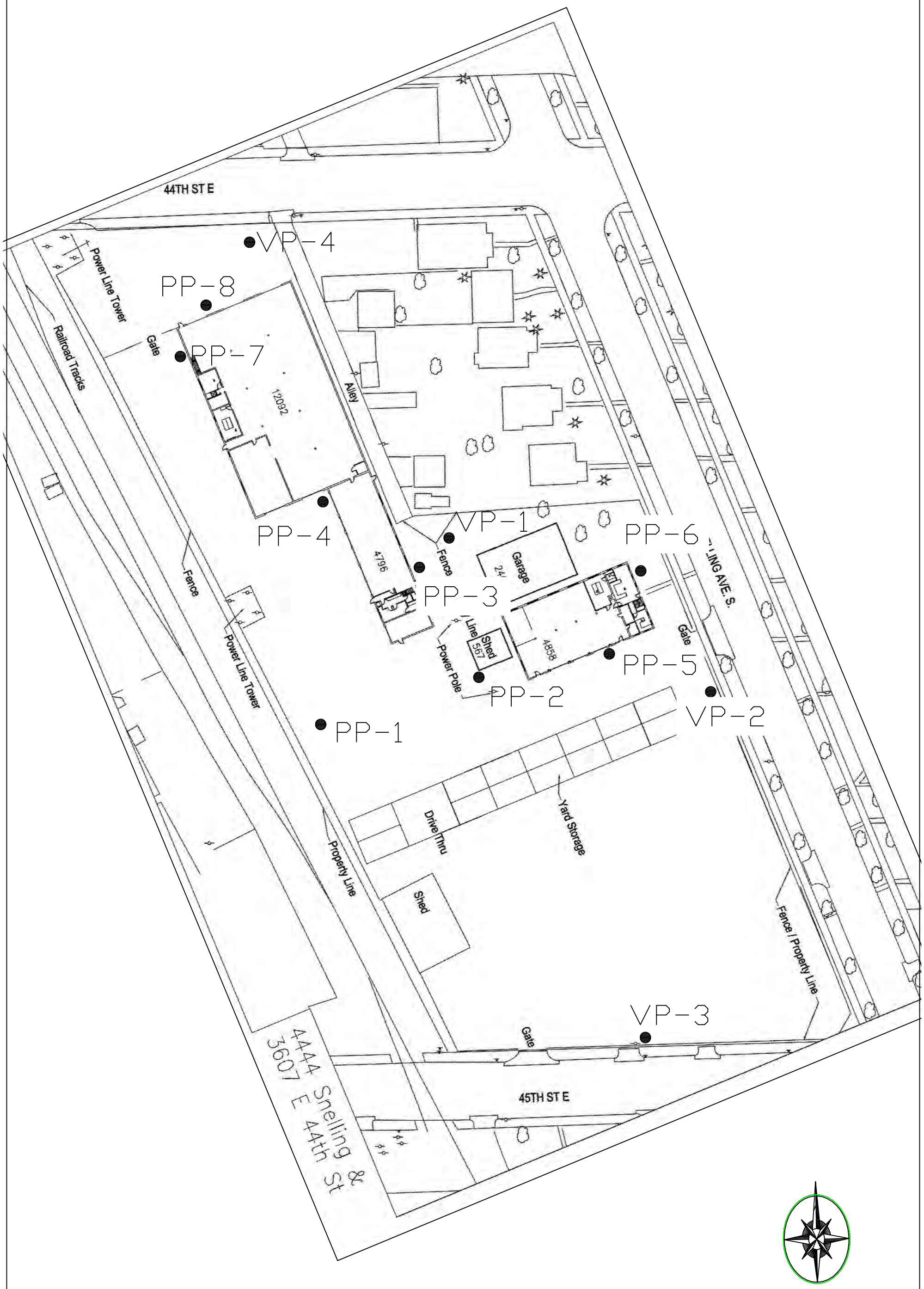


Base Map: St. Paul - West, MN USGS Quadrangle Map

Pinnacle Engineering

11541 95th Avenue N, MN 55369
Phone: 763-315-4501, Fax: 763-315-4507

Figure 1.
Site Location Map
City of Minneapolis Equipment & Storage Yard
3601 44th Street East
Minneapolis, Minnesota
Project Number: R010253.000



Pinnacle Engineering
11541 95th Ave N.
Maple Grove, MN 55369
(763) 315-4501

Figure 2
Site Layout/Boring Locations
Snelling Yard, Minneapolis, MN
Pinnacle Project No.: R010253.001

PREPARED BY: ES
CHECKED BY: SC
DATE: 8/6/10
SCALE: 1"=64' (approx.)

Table 1
Results-Soil Samples
Snelling Yard-3601 East 44th Street
Minneapolis, Minnesota
Pinnacle Project No.: R010253.001

Parameter		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	DRO	Chrysene	Fluoranthene	Phenanthrene	Pyrene
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
SRV		9	1100	25	87*	300	160	NA	NA	1080	NA	890
Client Sample ID	**Collect Date**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**
PP-1 24-28 FT	7/13/2010	2.7	140	0.78	20	5.7	<1.0	<4.1	<0.034	<0.034	<0.034	<0.034
PP-1 4-5 FT	7/12/2010	2.6	59	2.5	18	27	<1.2	75	<0.039	<0.039	<0.039	<0.039
PP-2 12-16 FT	7/12/2010	1.6	42	<0.31	8.8	3.4	<1.2	<5.0	<0.042	<0.042	<0.042	<0.042
PP-3 16-18 FT	7/13/2010	4.4	62	0.52	8.4	4.9	<1.1	<4.3	<0.035	<0.035	<0.035	<0.035
PP-4 24 FT	7/14/2010	2.5	81	0.55	11	4.8	<1.2	8.9	<0.040	<0.040	<0.040	<0.040
PP-5 17-18 FT	7/14/2010	2.4	42	0.32	6.4	3.6	<1.0	<4.2	<0.035	<0.035	<0.035	<0.035
PP-6 2.5-3 FT	7/14/2010	3	120	1.2	15	20	<1.1	85	<0.036	0.047	0.059	0.049
PP-6 22.5-23.5 FT	7/14/2010	1.6	44	0.32	9.4	7.1	<1.1	40	<0.035	<0.035	<0.035	<0.035
PP-7 23-24 FT	7/15/2010	1.4	17	<0.26	5.7	8.2	1.8	<4.1	<0.034	<0.034	<0.034	<0.034
PP-8 16-19 FT	7/15/2010	<1.0	21	<0.26	5.4	9	1.2	7	<0.034	<0.034	<0.034	<0.034

SRV=Tier 1 Soil Reference Value-Residential-June, 2009
*SRV is for Chromium IV

Table 2
Results-Groundwater Samples
Snelling Yard-3601 East 44th Street
Minneapolis, Minnesota
Pinnacle Project No.: R010253.001

		RCRA Metals				VOCs			
Parameter		Arsenic, Dissolved	Barium, Dissolved	Selenium, Dissolved	GRO	Bromodichloro methane	Chloroform	2-Butanone (MEK)	DRO
Units		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Regulatory Criteria		10*	2,000	30	200**	6	60	4000	200**
Client Sample ID	**Collect Date**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**	**Value**
PP-1 H2O 33 FT	7/13/2010	<20	140	21	<100	<1.0	<5.0	<10	100
PP-2 H2O 33 FT	7/13/2010	<20	210	23	<100	<1.0	<5.0	<10	130
PP-3 H2O 33 FT	7/13/2010	<20	100	<20	<100	<1.0	<5.0	<10	<100
PP-4 H2O 33 FT	7/14/2010	<20	73	<20	<100	<1.0	<5.0	<10	<100
PP-5 H2O 33 FT	7/14/2010	<20	110	23	<100	<1.0	<5.0	<10	100
PP-6 H2O 32 FT	7/14/2010	<20	44	<20	130	<1.0	<5.0	<10	160
PP-7 H2O 33 FT	7/15/2010	<20	160	<20	<100	<1.0	<5.0	<10	<100
PP-8 H2O 33 FT	7/15/2010	24	360	<20	<100	<1.0	<5.0	<10	<100
TRIP BLANK	7/14/2010	NA	NA	NA	NA	<1.0	<5.0	<10	NA
TRIP BLANK	7/15/2010	NA	NA	NA	NA	<1.0	<5.0	<10	NA
F-BLANK	7/14/2010	NA	NA	NA	NA	2.5	6.6	12	NA

Notes
HRL=Health Risk Limits for Drinking Water, Minnesota Dept. of Health
*MCL=Maximum Contaminant Level
**HBV=Health Based Value for Total Petroleum Hydrocarbons

Table 3
Results-Soil Vapor Samples
Snelling Yard-3601 East 44th Street
Minneapolis, Minnesota
Pinnacle Project No.: R010253.001

Client Sample ID				VP-1 10FT	VP-2 10FT	VP-3 10FT	VP-4 10FT
Collect Date				7/12/2010	7/12/2010	7/12/2010	7/12/2010
Parameter	**Units**	**ISV**	**MN ISV 10X**	**Value**	**Value**	**Value**	**Value**
Acetone	µg/m3	31,000	310,000	210	67	76	67
Benzene	µg/m3	4.5	45	3.2	11	5.1	3.8
Bromodichloromethane	µg/m3	NA	NA	<1.34	<1.34	4	<2.68
1,3-Butadiene	µg/m3	0.3	3	<4.43	8	<4.43	<8.85
Carbon disulfide	µg/m3	700	7,000	5.3	6.5	5	30
Carbon tetrachloride	µg/m3	0.7	7	<1.26	<1.26	1.8	<2.52
Chloroform	µg/m3	100	1,000	<0.973	<0.973	29	<1.95
Cyclohexane	µg/m3	6,000	60,000	<0.689	<0.689	<0.689	2.5
Ethanol	µg/m3	15,000	150,000	4	2.3	2.5	51
Ethylbenzene	µg/m3	1,000	10,000	6.9	21	7.8	8.2
4-Ethyltoluene	µg/m3	NA	NA	7.9	4	3.3	3.5
Trichlorofluoromethane	µg/m3	700	7,000	<1.12	1.9	67	<2.25
Dichlorodifluoromethane	µg/m3	200	2,000	1.3	<0.989	<0.989	3.6
Heptane	µg/m3	NA	NA	4	16	9.4	4.9
n-Hexane	µg/m3	2,000	20,000	2.5	6.3	9.2	4.6
Isopropylbenzene	µg/m3	NA	NA	1.3	1.1	<0.983	<1.97
2-Butanone (MEK)	µg/m3	5,000	50,000	32	27	41	35
Naphthalene	µg/m3	9	90	3.6	<3.30	3.7	<6.60
Propene	µg/m3	NA	NA	<0.689	<0.689	<0.689	17
Styrene	µg/m3	1,000	10,000	6	6	5.1	6
Tetrachloroethylene	µg/m3	20	200	2	7.5	3.3	54
Toluene	µg/m3	5,000	50,000	14	31	14	15
1,1,1-Trichloroethane	µg/m3	5,000	50,000	<1.09	28	3.5	<2.18
1,2,4-Trimethylbenzene	µg/m3	7	70	42	17	15	15
1,3,5-Trimethylbenzene	µg/m3	6	60	12	4.2	3.4	3.4
m&p-Xylene	µg/m3	100	1,000	17	20	14	17
o-Xylene	µg/m3	100	1,000	6.9	7.8	5.2	6.5
TPH (GC/MS) Low Fraction	µg/m3	NA	NA	1300	1200	780	830

Notes
ISV = MPCA Intrusive Screening Values, February, 2009 Version

APPENDIX A
SOIL BORING LOGS

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-1	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: E. Simonson/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/12/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	.5			asphalt pavement and class 5 base			
	3			Fill - sand and gravel, brown, moist	<1		
	5			Fill - silty sand, black, wet			analytical sample collected, 4-5 feet
6	7			Fill - silty clay, brown, moist	<1		
	12			Poorly graded sand, fine- to medium-grained, trace gravel, brown, moist, (SP), alluvium	<1		
12	18			Poorly graded sand, medium- to coarse-grained, trace gravel, brown, moist, (SP), alluvium	ND		
18	24			Clayey sand, trace gravel, brown, moist, (SC), glacial till	ND ND		
24	36			Poorly graded sand, fine-, medium- and coarse-grained, trace to a little gravel, brown, moist, (SP), alluvium	ND ND ND	▼ 33.0'	analytical sample collected, 24-28 feet
36				The boring was terminated at 36 feet. A groundwater sample was collected through the push probe screen point set at 32-36 feet. The boring was then abandoned with bentonite grout.			
42							

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-2	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: E. Simonson/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/12/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	.5			asphalt pavement and class 5 base			
	4			Fill - silty sand over silty clay, black, moist	<1		
6	6.5			Silty clay, brown, moist	<1		
12				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium	<1		analytical sample collected, 12-16 feet
					<1		
18	18			Sandy clay, trace gravel, brown, moist, (CL), glacial till	<1		
24					<1		
	27				<1		
30				Poorly graded sand, fine-, medium- and coarse-grained, trace to a little gravel, brown, moist, (SP), alluvium			no sample recovered
	32			The boring was terminated at 32 feet due to refusal on gravel. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.		▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:	BORING NAME/LOCATION:	SCALE:
Subsurface Investigation	PP-3	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: E. Simonson/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/13/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	1			asphalt pavement and class 5 base			
				Silty clay, brown, wet, possible fill	<1		
	5						
6				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium	<1		
					<1		
12							
					<1		
	17.5				<1		analytical sample collected, 16-18 feet
18	18			Sandy clay, trace gravel, brown, moist, (CL), glacial till			
				The boring was terminated at 18 feet. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.			
24							
30							
						▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-4	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: M. Witzel/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/14/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0				Fill - silty sand with clay, dark brown, moist	<1		
	4						
	5			Poorly graded sand, fine- to medium-grained, brown, wet, (SP), alluvium			
6	6.5			Silty clay, brown, moist	<1		
				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium	<1		
12					<1		
18					<1		analytical sample collected, 24 feet
					<1		
	24						
24	26			Sandy clay, trace gravel, brown, moist, (CL), glacial till	<1		
				The boring was terminated at 26 feet. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.			
30						▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-5	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: M. Witzel/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/14/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	1.5			concrete			
	4			Fill - silty sand, dark brown, moist	<1		
	5			Poorly graded sand, fine- to medium-grained, brown, wet, (SP), alluvium			
	6			Silty clay, brown, moist	<1		
6				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium			
					<1		
12							
					<1		
	18						analytical sample collected, 17-18 feet
18				Sandy clay, trace gravel, brown, moist, (CL), glacial till	<1		
					<1		
	24						
24				The boring was terminated at 24 feet. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.			
30							
						▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:
Subsurface Investigation
Snelling Yard Facility
Pinnacle Project No.: R010253.001

BORING NAME/LOCATION:
PP-6
See Figure 2

SCALE:
1 in. = 6 ft.

LOGGED BY: M. Witzel/Pinnacle
DRILLING METHOD: Push Probe
DRILLING DATE: 7/14/10

RELATIVE ELEV: existing grade
DRILLING CONTRACTOR: Summit

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	1.5			Silty sand, black-Topsoil			
	2.5			Fill - silty sand, a few clinkers, black, moist	<1		
	4			Fill-sand and gravel-dark brown			
	6			Poorly graded sand, fine- to medium-grained, brown, wet, (SP), alluvium			
6	7			Silty clay, brown, moist	<1		
				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium			
					<1		
12							
					<1		
18					<1		
							analytical sample collected, 22.5-23.5 feet
	22.5				<1		
	24			Sandy clay, trace gravel, brown, moist, (CL), glacial till			
24				The boring was terminated at 24 feet. A groundwater sample was collected through the push probe screen point set at 34-38 feet. The boring was then abandoned with bentonite grout.			
30							
						▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-7	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: M. Witzel/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/15/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	0.5			asphalt pavement			
				Fill - sandy clay with gravel, black, moist	<1		
	4			Fill-sand and gravel-dark brown			
6					<1		
	8			Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium			
					<1		
12							
					<1		
18					<1		
					<1		
	24						analytical sample collected, 23-24 feet
24	25			Sandy clay, trace gravel, brown, moist, (CL), glacial till			
				The boring was terminated at 25 feet. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.			
30							
						▼ 33.0'	
36							
42							

LOG OF TEST BORING

PROJECT:	**BORING NAME/LOCATION:**	**SCALE:**
Subsurface Investigation	PP-8	1 in. = 6 ft.
Snelling Yard Facility	See Figure 2	
Pinnacle Project No.: R010253.001		
LOGGED BY: M. Witzel/Pinnacle	**RELATIVE ELEV:** existing grade	
DRILLING METHOD: Push Probe	**DRILLING CONTRACTOR:** Summit	
DRILLING DATE: 7/15/10	**PAGE 1 OF 1**	

Depth (ft.)	Depth	Sample Int. Rec.- (in.)	Log-Graphic	Description - ASTM D 2488	PID	Water Level	Comments
0	1.5			asphalt over concrete			
	3			Fill-Class 5-sand and gravel-brown	<1		
	4			Silty sand, black, moist, possible buried topsoil			
	5			Silty clay, brown, moist			
6				Poorly graded sand, fine- to medium-grained, trace to a little gravel, brown, moist, (SP), alluvium	<1		
					<1		
12							
					<1		
							analytical sample collected, 16-19 feet
18					---		
					---		No sample recovered
							no sample recovered
	23						
24				The boring was terminated at 23 feet. A groundwater sample was collected through the push probe screen point set at 33-37 feet. The boring was then abandoned with bentonite grout.			
30							
						▼ 33.0'	
36							
42							

APPENDIX B
LABORATORY ANALYTICAL REPORTS

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

Report Summary

Friday July 30, 2010

Report Number: L469307
Samples Received: 07/16/10
Client Project: R010253.001

Description: CPED - Snelling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: _____
Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences.
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-01

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.14	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	0.021	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/17/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.7		% Rec.	8021	07/17/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/26/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-01

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-01

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	98.3		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	112.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	84.5		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	0.10	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	101.		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	78.1		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	70.2		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	79.1		% Rec.	8270C	07/28/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-02

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-2 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 12:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.21	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	0.023	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/18/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	97.5		% Rec.	8021	07/18/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-02

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-2 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 12:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-02

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-2 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 12:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	117.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	86.2		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	0.13	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	84.1		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	84.2		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	79.9		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	91.0		% Rec.	8270C	07/28/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-03

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-3 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.10	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/18/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021	07/18/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-03

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-3 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-03

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-3 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	124.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	85.9		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	BDL	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	105.		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	96.9		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	83.7		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	99.7		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1221	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1232	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1242	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1248	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1254	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1260	BDL	0.00050	mg/l	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	83.2		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	86.0		% Rec.	8082	07/19/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-04

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-4 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 12:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.073	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/18/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.2		% Rec.	8021	07/18/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-04

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-4 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 12:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-04

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-4 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 12:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	105.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	122.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	86.1		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	BDL	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	100.		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	82.9		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	70.0		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	79.8		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1221	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1232	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1242	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1248	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1254	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1260	BDL	0.00050	mg/l	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	80.2		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	86.3		% Rec.	8082	07/19/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-05

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-5 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.11	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	0.023	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/18/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.3		% Rec.	8021	07/18/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-05

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-5 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-05

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-5 H2O 33 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	105.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	119.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	81.5		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	0.10	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	100.		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	80.0		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	73.5		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	84.3		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1221	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1232	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1242	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1248	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1254	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1260	BDL	0.00050	mg/l	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	80.1		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	80.7		% Rec.	8082	07/19/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-06

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 H2O 32 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/19/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.044	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	0.13	0.10	mg/l	GROWM/8015M	07/18/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.5		% Rec.	8021	07/18/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-06

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 H2O 32 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-06

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 H2O 32 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	105.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	125.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	85.5		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	0.16	0.10	mg/l	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	106.		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/28/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/28/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/28/10	1
Surrogate Recovery						
Nitrobenzene-d5	69.7		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	67.6		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	82.5		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1221	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1232	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1242	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1248	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1254	BDL	0.00050	mg/l	8082	07/19/10	1
PCB 1260	BDL	0.00050	mg/l	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	90.5		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	89.8		% Rec.	8082	07/19/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:50

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-07

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : F-BLANK

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	0.0025	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	0.0066	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30, 2010

ESC Sample # : L469307-07

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : F-BLANK

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 15:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	0.012	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.50	mg/l	8260B	07/26/10	100
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	113.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	83.0		% Rec.	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-08

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : TRIP BLANK

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-08

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : TRIP BLANK

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1
Surrogate Recovery						
Toluene-d8	106.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	113.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	84.2		% Rec.	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-09

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 4-5 FT

Project # : R010253.001

Collected By :
Collection Date : 07/12/10 11:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	83.9		%	2540G	07/22/10	1
Mercury	BDL	0.024	mg/kg	7471	07/20/10	1
Arsenic	2.6	1.2	mg/kg	6010B	07/22/10	1
Barium	59.	0.30	mg/kg	6010B	07/22/10	1
Cadmium	2.5	0.30	mg/kg	6010B	07/22/10	1
Chromium	18.	0.60	mg/kg	6010B	07/22/10	1
Lead	27.	0.30	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.2	mg/kg	6010B	07/22/10	1
Silver	BDL	0.60	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.027	mg/kg	8021	07/22/10	45
Toluene	BDL	0.27	mg/kg	8021	07/22/10	45
Ethylbenzene	BDL	0.027	mg/kg	8021	07/22/10	45
m&p-Xylene	BDL	0.054	mg/kg	8021	07/22/10	45
o-Xylene	BDL	0.027	mg/kg	8021	07/22/10	45
Methyl tert-butyl ether	BDL	0.054	mg/kg	8021	07/22/10	45
Gasoline (C6-C10)	BDL	5.4	mg/kg	8015	07/22/10	45
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	100.		% Rec.	8021	07/22/10	45
TPH (GC/FID) High Fraction	75.	4.8	mg/kg	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	106.		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.039	mg/kg	8270C	07/29/10	1
Acenaphthene	BDL	0.039	mg/kg	8270C	07/29/10	1
Acenaphthylene	BDL	0.039	mg/kg	8270C	07/29/10	1
Benzo(a)anthracene	BDL	0.039	mg/kg	8270C	07/29/10	1
Benzo(a)pyrene	BDL	0.039	mg/kg	8270C	07/29/10	1
Benzo(b)fluoranthene	BDL	0.039	mg/kg	8270C	07/29/10	1
Benzo(g,h,i)perylene	BDL	0.039	mg/kg	8270C	07/29/10	1
Benzo(k)fluoranthene	BDL	0.039	mg/kg	8270C	07/29/10	1
Chrysene	BDL	0.039	mg/kg	8270C	07/29/10	1
Dibenz(a,h)anthracene	BDL	0.039	mg/kg	8270C	07/29/10	1
Fluoranthene	BDL	0.039	mg/kg	8270C	07/29/10	1
Fluorene	BDL	0.039	mg/kg	8270C	07/29/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.039	mg/kg	8270C	07/29/10	1
Naphthalene	BDL	0.039	mg/kg	8270C	07/29/10	1
Phenanthrene	BDL	0.039	mg/kg	8270C	07/29/10	1
Pyrene	BDL	0.039	mg/kg	8270C	07/29/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-09

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 4-5 FT

Project # : R010253.001

Collected By :
Collection Date : 07/12/10 11:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	52.5		% Rec.	8270C	07/29/10	1
2-Fluorobiphenyl	43.6		% Rec.	8270C	07/29/10	1
p-Terphenyl-d14	46.4		% Rec.	8270C	07/29/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-10

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 24-28 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 09:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	96.5		%	2540G	07/22/10	1
Mercury	BDL	0.021	mg/kg	7471	07/20/10	1
Arsenic	2.7	1.0	mg/kg	6010B	07/22/10	1
Barium	140	0.26	mg/kg	6010B	07/22/10	1
Cadmium	0.78	0.26	mg/kg	6010B	07/22/10	1
Chromium	20.	0.52	mg/kg	6010B	07/22/10	1
Lead	5.7	0.26	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.0	mg/kg	6010B	07/22/10	1
Silver	BDL	0.52	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.026	mg/kg	8021	07/22/10	49.5
Toluene	BDL	0.26	mg/kg	8021	07/22/10	49.5
Ethylbenzene	BDL	0.026	mg/kg	8021	07/22/10	49.5
m&p-Xylene	BDL	0.051	mg/kg	8021	07/22/10	49.5
o-Xylene	BDL	0.026	mg/kg	8021	07/22/10	49.5
Methyl tert-butyl ether	BDL	0.051	mg/kg	8021	07/22/10	49.5
Gasoline (C6-C10)	BDL	5.1	mg/kg	8015	07/22/10	49.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.7		% Rec.	8021	07/22/10	49.5
TPH (GC/FID) High Fraction	BDL	4.1	mg/kg	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	84.4		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.034	mg/kg	8270C	07/27/10	1
Acenaphthene	BDL	0.034	mg/kg	8270C	07/27/10	1
Acenaphthylene	BDL	0.034	mg/kg	8270C	07/27/10	1
Benzo(a)anthracene	BDL	0.034	mg/kg	8270C	07/27/10	1
Benzo(a)pyrene	BDL	0.034	mg/kg	8270C	07/27/10	1
Benzo(b)fluoranthene	BDL	0.034	mg/kg	8270C	07/27/10	1
Benzo(g,h,i)perylene	BDL	0.034	mg/kg	8270C	07/27/10	1
Benzo(k)fluoranthene	BDL	0.034	mg/kg	8270C	07/27/10	1
Chrysene	BDL	0.034	mg/kg	8270C	07/27/10	1
Dibenz(a,h)anthracene	BDL	0.034	mg/kg	8270C	07/27/10	1
Fluoranthene	BDL	0.034	mg/kg	8270C	07/27/10	1
Fluorene	BDL	0.034	mg/kg	8270C	07/27/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.034	mg/kg	8270C	07/27/10	1
Naphthalene	BDL	0.034	mg/kg	8270C	07/27/10	1
Phenanthrene	BDL	0.034	mg/kg	8270C	07/27/10	1
Pyrene	BDL	0.034	mg/kg	8270C	07/27/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-10

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-1 24-28 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 09:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	70.0		% Rec.	8270C	07/27/10	1
2-Fluorobiphenyl	78.3		% Rec.	8270C	07/27/10	1
p-Terphenyl-d14	97.3		% Rec.	8270C	07/27/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-11

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-2 12-16 FT

Project # : R010253.001

Collected By :
Collection Date : 07/12/10 15:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	79.4		%	2540G	07/22/10	1
Mercury	BDL	0.025	mg/kg	7471	07/20/10	1
Arsenic	1.6	1.2	mg/kg	6010B	07/22/10	1
Barium	42.	0.31	mg/kg	6010B	07/22/10	1
Cadmium	BDL	0.31	mg/kg	6010B	07/22/10	1
Chromium	8.8	0.63	mg/kg	6010B	07/22/10	1
Lead	3.4	0.31	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.2	mg/kg	6010B	07/22/10	1
Silver	BDL	0.63	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.030	mg/kg	8021	07/22/10	48.5
Toluene	BDL	0.30	mg/kg	8021	07/22/10	48.5
Ethylbenzene	BDL	0.030	mg/kg	8021	07/22/10	48.5
m&p-Xylene	BDL	0.061	mg/kg	8021	07/22/10	48.5
o-Xylene	BDL	0.030	mg/kg	8021	07/22/10	48.5
Methyl tert-butyl ether	BDL	0.061	mg/kg	8021	07/22/10	48.5
Gasoline (C6-C10)	BDL	6.1	mg/kg	8015	07/22/10	48.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021	07/22/10	48.5
TPH (GC/FID) High Fraction	BDL	5.0	mg/kg	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	77.7		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.042	mg/kg	8270C	07/28/10	1
Acenaphthene	BDL	0.042	mg/kg	8270C	07/28/10	1
Acenaphthylene	BDL	0.042	mg/kg	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.042	mg/kg	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.042	mg/kg	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.042	mg/kg	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.042	mg/kg	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.042	mg/kg	8270C	07/28/10	1
Chrysene	BDL	0.042	mg/kg	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.042	mg/kg	8270C	07/28/10	1
Fluoranthene	BDL	0.042	mg/kg	8270C	07/28/10	1
Fluorene	BDL	0.042	mg/kg	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.042	mg/kg	8270C	07/28/10	1
Naphthalene	BDL	0.042	mg/kg	8270C	07/28/10	1
Phenanthrene	BDL	0.042	mg/kg	8270C	07/28/10	1
Pyrene	BDL	0.042	mg/kg	8270C	07/28/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-11

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-2 12-16 FT

Project # : R010253.001

Collected By :
Collection Date : 07/12/10 15:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	60.9		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	60.4		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	74.2		% Rec.	8270C	07/28/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-12

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-3 16-18 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	93.8		%	2540G	07/22/10	1
Mercury	BDL	0.021	mg/kg	7471	07/20/10	1
Arsenic	4.4	1.1	mg/kg	6010B	07/22/10	1
Barium	62.	0.27	mg/kg	6010B	07/22/10	1
Cadmium	0.52	0.27	mg/kg	6010B	07/22/10	1
Chromium	8.4	0.53	mg/kg	6010B	07/22/10	1
Lead	4.9	0.27	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.1	mg/kg	6010B	07/22/10	1
Silver	BDL	0.53	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.026	mg/kg	8021	07/22/10	48.5
Toluene	BDL	0.26	mg/kg	8021	07/22/10	48.5
Ethylbenzene	BDL	0.026	mg/kg	8021	07/22/10	48.5
m&p-Xylene	BDL	0.052	mg/kg	8021	07/22/10	48.5
o-Xylene	BDL	0.026	mg/kg	8021	07/22/10	48.5
Methyl tert-butyl ether	BDL	0.052	mg/kg	8021	07/22/10	48.5
Gasoline (C6-C10)	BDL	5.2	mg/kg	8015	07/22/10	48.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.4		% Rec.	8021	07/22/10	48.5
TPH (GC/FID) High Fraction	BDL	4.3	mg/kg	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	96.7		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Acenaphthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Acenaphthylene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Chrysene	BDL	0.035	mg/kg	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Fluorene	BDL	0.035	mg/kg	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Naphthalene	BDL	0.035	mg/kg	8270C	07/28/10	1
Phenanthrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-12

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-3 16-18 FT

Project # : R010253.001

Collected By :
Collection Date : 07/13/10 15:15

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	56.2		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	56.6		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	75.9		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1221	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1232	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1242	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1248	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1254	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1260	BDL	0.018	mg/kg	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	73.9		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	90.8		% Rec.	8082	07/19/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-13

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-4 24 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	83.5		%	2540G	07/22/10	1
Mercury	BDL	0.024	mg/kg	7471	07/20/10	1
Arsenic	2.5	1.2	mg/kg	6010B	07/22/10	1
Barium	81.	0.30	mg/kg	6010B	07/22/10	1
Cadmium	0.55	0.30	mg/kg	6010B	07/22/10	1
Chromium	11.	0.60	mg/kg	6010B	07/22/10	1
Lead	4.8	0.30	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.2	mg/kg	6010B	07/22/10	1
Silver	BDL	0.60	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.028	mg/kg	8021	07/22/10	46.5
Toluene	BDL	0.28	mg/kg	8021	07/22/10	46.5
Ethylbenzene	BDL	0.028	mg/kg	8021	07/22/10	46.5
m&p-Xylene	BDL	0.056	mg/kg	8021	07/22/10	46.5
o-Xylene	BDL	0.028	mg/kg	8021	07/22/10	46.5
Methyl tert-butyl ether	BDL	0.056	mg/kg	8021	07/22/10	46.5
Gasoline (C6-C10)	BDL	5.6	mg/kg	8015	07/22/10	46.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.3		% Rec.	8021	07/22/10	46.5
TPH (GC/FID) High Fraction	8.9	4.8	mg/kg	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	100.		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.040	mg/kg	8270C	07/28/10	1
Acenaphthene	BDL	0.040	mg/kg	8270C	07/28/10	1
Acenaphthylene	BDL	0.040	mg/kg	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.040	mg/kg	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.040	mg/kg	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.040	mg/kg	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.040	mg/kg	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.040	mg/kg	8270C	07/28/10	1
Chrysene	BDL	0.040	mg/kg	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	07/28/10	1
Fluoranthene	BDL	0.040	mg/kg	8270C	07/28/10	1
Fluorene	BDL	0.040	mg/kg	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.040	mg/kg	8270C	07/28/10	1
Naphthalene	BDL	0.040	mg/kg	8270C	07/28/10	1
Phenanthrene	BDL	0.040	mg/kg	8270C	07/28/10	1
Pyrene	BDL	0.040	mg/kg	8270C	07/28/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-13

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-4 24 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	79.1		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	70.3		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	80.7		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1221	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1232	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1242	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1248	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1254	BDL	0.020	mg/kg	8082	07/19/10	1
PCB 1260	BDL	0.020	mg/kg	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	79.0		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	93.0		% Rec.	8082	07/19/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-14

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-5 17-18 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	94.7		%	2540G	07/22/10	1
Mercury	BDL	0.021	mg/kg	7471	07/20/10	1
Arsenic	2.4	1.0	mg/kg	6010B	07/22/10	1
Barium	42.	0.26	mg/kg	6010B	07/22/10	1
Cadmium	0.32	0.26	mg/kg	6010B	07/22/10	1
Chromium	6.4	0.53	mg/kg	6010B	07/22/10	1
Lead	3.6	0.26	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.0	mg/kg	6010B	07/22/10	1
Silver	BDL	0.53	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.021	mg/kg	8021	07/22/10	39.5
Toluene	BDL	0.21	mg/kg	8021	07/22/10	39.5
Ethylbenzene	BDL	0.021	mg/kg	8021	07/22/10	39.5
m&p-Xylene	BDL	0.042	mg/kg	8021	07/22/10	39.5
o-Xylene	BDL	0.021	mg/kg	8021	07/22/10	39.5
Methyl tert-butyl ether	BDL	0.042	mg/kg	8021	07/22/10	39.5
Gasoline (C6-C10)	BDL	4.2	mg/kg	8015	07/22/10	39.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.1		% Rec.	8021	07/22/10	39.5
TPH (GC/FID) High Fraction	BDL	4.2	mg/kg	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	94.1		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Acenaphthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Acenaphthylene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(a)anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(a)pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(b)fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(g,h,i)perylene	BDL	0.035	mg/kg	8270C	07/28/10	1
Benzo(k)fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Chrysene	BDL	0.035	mg/kg	8270C	07/28/10	1
Dibenz(a,h)anthracene	BDL	0.035	mg/kg	8270C	07/28/10	1
Fluoranthene	BDL	0.035	mg/kg	8270C	07/28/10	1
Fluorene	BDL	0.035	mg/kg	8270C	07/28/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Naphthalene	BDL	0.035	mg/kg	8270C	07/28/10	1
Phenanthrene	BDL	0.035	mg/kg	8270C	07/28/10	1
Pyrene	BDL	0.035	mg/kg	8270C	07/28/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-14

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-5 17-18 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	73.5		% Rec.	8270C	07/28/10	1
2-Fluorobiphenyl	65.1		% Rec.	8270C	07/28/10	1
p-Terphenyl-d14	91.7		% Rec.	8270C	07/28/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1221	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1232	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1242	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1248	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1254	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1260	BDL	0.018	mg/kg	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	77.6		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	91.7		% Rec.	8082	07/19/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-15

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 2.5-3 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	92.0		%	2540G	07/22/10	1
Mercury	BDL	0.022	mg/kg	7471	07/20/10	1
Arsenic	3.0	1.1	mg/kg	6010B	07/22/10	1
Barium	120	0.27	mg/kg	6010B	07/22/10	1
Cadmium	1.2	0.27	mg/kg	6010B	07/22/10	1
Chromium	15.	0.54	mg/kg	6010B	07/22/10	1
Lead	20.	0.27	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.1	mg/kg	6010B	07/22/10	1
Silver	BDL	0.54	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.027	mg/kg	8021	07/22/10	49.5
Toluene	BDL	0.27	mg/kg	8021	07/22/10	49.5
Ethylbenzene	BDL	0.027	mg/kg	8021	07/22/10	49.5
m&p-Xylene	BDL	0.054	mg/kg	8021	07/22/10	49.5
o-Xylene	BDL	0.027	mg/kg	8021	07/22/10	49.5
Methyl tert-butyl ether	BDL	0.054	mg/kg	8021	07/22/10	49.5
Gasoline (C6-C10)	BDL	5.4	mg/kg	8015	07/22/10	49.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	98.9		% Rec.	8021	07/22/10	49.5
TPH (GC/FID) High Fraction	85.	5.6	mg/kg	DROWM/8015M	07/22/10	1.29
Surrogate recovery(%)						
Triacontane	81.4		% Rec.	DROWM/8015M	07/22/10	1.29
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.036	mg/kg	8270C	07/30/10	1
Acenaphthene	BDL	0.036	mg/kg	8270C	07/30/10	1
Acenaphthylene	BDL	0.036	mg/kg	8270C	07/30/10	1
Benzo(a)anthracene	BDL	0.036	mg/kg	8270C	07/30/10	1
Benzo(a)pyrene	BDL	0.036	mg/kg	8270C	07/30/10	1
Benzo(b)fluoranthene	BDL	0.036	mg/kg	8270C	07/30/10	1
Benzo(g,h,i)perylene	BDL	0.036	mg/kg	8270C	07/30/10	1
Benzo(k)fluoranthene	BDL	0.036	mg/kg	8270C	07/30/10	1
Chrysene	BDL	0.036	mg/kg	8270C	07/30/10	1
Dibenz(a,h)anthracene	BDL	0.036	mg/kg	8270C	07/30/10	1
Fluoranthene	0.047	0.036	mg/kg	8270C	07/30/10	1
Fluorene	BDL	0.036	mg/kg	8270C	07/30/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.036	mg/kg	8270C	07/30/10	1
Naphthalene	BDL	0.036	mg/kg	8270C	07/30/10	1
Phenanthrene	0.059	0.036	mg/kg	8270C	07/30/10	1
Pyrene	0.049	0.036	mg/kg	8270C	07/30/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-15

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 2.5-3 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	77.1		% Rec.	8270C	07/30/10	1
2-Fluorobiphenyl	73.4		% Rec.	8270C	07/30/10	1
p-Terphenyl-d14	91.4		% Rec.	8270C	07/30/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1221	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1232	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1242	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1248	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1254	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1260	BDL	0.018	mg/kg	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	72.4		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	85.2		% Rec.	8082	07/19/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-16

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 22.5-23.5 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	93.3		%	2540G	07/22/10	1
Mercury	BDL	0.021	mg/kg	7471	07/20/10	1
Arsenic	1.6	1.1	mg/kg	6010B	07/22/10	1
Barium	44.	0.27	mg/kg	6010B	07/22/10	1
Cadmium	0.32	0.27	mg/kg	6010B	07/22/10	1
Chromium	9.4	0.54	mg/kg	6010B	07/22/10	1
Lead	7.1	0.27	mg/kg	6010B	07/22/10	1
Selenium	BDL	1.1	mg/kg	6010B	07/22/10	1
Silver	BDL	0.54	mg/kg	6010B	07/22/10	1
PVOCGRO						
Benzene	BDL	0.027	mg/kg	8021	07/23/10	50.5
Toluene	BDL	0.27	mg/kg	8021	07/23/10	50.5
Ethylbenzene	BDL	0.027	mg/kg	8021	07/23/10	50.5
m&p-Xylene	BDL	0.054	mg/kg	8021	07/23/10	50.5
o-Xylene	BDL	0.027	mg/kg	8021	07/23/10	50.5
Methyl tert-butyl ether	BDL	0.054	mg/kg	8021	07/23/10	50.5
Gasoline (C6-C10)	BDL	5.4	mg/kg	8015	07/23/10	50.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.5		% Rec.	8021	07/23/10	50.5
TPH (GC/FID) High Fraction	40.	4.3	mg/kg	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	107.		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.035	mg/kg	8270C	07/30/10	1
Acenaphthene	BDL	0.035	mg/kg	8270C	07/30/10	1
Acenaphthylene	BDL	0.035	mg/kg	8270C	07/30/10	1
Benzo(a)anthracene	BDL	0.035	mg/kg	8270C	07/30/10	1
Benzo(a)pyrene	BDL	0.035	mg/kg	8270C	07/30/10	1
Benzo(b)fluoranthene	BDL	0.035	mg/kg	8270C	07/30/10	1
Benzo(g,h,i)perylene	BDL	0.035	mg/kg	8270C	07/30/10	1
Benzo(k)fluoranthene	BDL	0.035	mg/kg	8270C	07/30/10	1
Chrysene	BDL	0.035	mg/kg	8270C	07/30/10	1
Dibenz(a,h)anthracene	BDL	0.035	mg/kg	8270C	07/30/10	1
Fluoranthene	BDL	0.035	mg/kg	8270C	07/30/10	1
Fluorene	BDL	0.035	mg/kg	8270C	07/30/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.035	mg/kg	8270C	07/30/10	1
Naphthalene	BDL	0.035	mg/kg	8270C	07/30/10	1
Phenanthrene	BDL	0.035	mg/kg	8270C	07/30/10	1
Pyrene	BDL	0.035	mg/kg	8270C	07/30/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 30,2010

ESC Sample # : L469307-16

Date Received : July 16, 2010
Description : CPED - Snelling

Site ID : CPED-SNELLING

Sample ID : PP-6 22.5-23.5 FT

Project # : R010253.001

Collected By :
Collection Date : 07/14/10 14:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	69.1		% Rec.	8270C	07/30/10	1
2-Fluorobiphenyl	69.0		% Rec.	8270C	07/30/10	1
p-Terphenyl-d14	74.3		% Rec.	8270C	07/30/10	1
Polychlorinated Biphenyls						
PCB 1016	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1221	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1232	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1242	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1248	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1254	BDL	0.018	mg/kg	8082	07/19/10	1
PCB 1260	BDL	0.018	mg/kg	8082	07/19/10	1
PCBs Surrogates						
Decachlorobiphenyl	73.4		% Rec.	8082	07/19/10	1
Tetrachloro-m-xylene	84.1		% Rec.	8082	07/19/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/30/10 15:49 Printed: 07/30/10 15:51

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L469307-01	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-02	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-03	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-04	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-05	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-06	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
	WG489311	SAMP	Dibromofluoromethane	R1298228	J1
L469307-07	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469307-08	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
07/30/10 at 15:51:11

TSR Signing Reports: 134
R5 - Desired TAT

Log arsenic water as ASG

Sample: L469307-01 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-02 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-03 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-04 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-05 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-06 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Field-filtered for dissolved metals.
Sample: L469307-07 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-08 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-09 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-10 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-11 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-12 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-13 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-14 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49
Removed 1 DROWM jar; it was contaminated w/ melted ice -JCH 7/16
Sample: L469307-15 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

Sample: L469307-16 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/27/10 00:00 RPT Date: 07/30/10 15:49

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury,Dissolved	< .0002	mg/l			WG488950	07/19/10 10:57
PCB 1016	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1221	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1232	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1242	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1248	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1254	< .017	mg/kg			WG489032	07/19/10 13:17
PCB 1260	< .017	mg/kg			WG489032	07/19/10 13:17
Decachlorobiphenyl		% Rec.	95.94	18.9-115.8	WG489032	07/19/10 13:17
Tetrachloro-m-xylene		% Rec.	87.97	31.8-115.7	WG489032	07/19/10 13:17
Gasoline (C6-C10)	< .1	mg/l			WG488973	07/17/10 13:14
a,a,a-Trifluorotoluene(PID)		% Rec.	97.71	80-120	WG488973	07/17/10 13:14
PCB 1016	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1221	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1232	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1242	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1248	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1254	< .0005	mg/l			WG488963	07/19/10 16:44
PCB 1260	< .0005	mg/l			WG488963	07/19/10 16:44
Decachlorobiphenyl		% Rec.	92.11	10-122.6	WG488963	07/19/10 16:44
Tetrachloro-m-xylene		% Rec.	89.40	15.3-114.2	WG488963	07/19/10 16:44
Mercury	< .02	mg/kg			WG489146	07/20/10 10:19
Mercury	< .02	mg/kg			WG489147	07/20/10 11:45
Acenaphthene	< .0002	mg/l			WG489264	07/20/10 12:34
Acenaphthylene	< .0002	mg/l			WG489264	07/20/10 12:34
Anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(a)anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(a)pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(b)fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(g,h,i)perylene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(k)fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Chrysene	< .0002	mg/l			WG489264	07/20/10 12:34
Dibenz(a,h)anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Fluorene	< .0002	mg/l			WG489264	07/20/10 12:34
Indeno(1,2,3-cd)pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
Naphthalene	< .0002	mg/l			WG489264	07/20/10 12:34
Phenanthrene	< .0002	mg/l			WG489264	07/20/10 12:34
Pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
2-Fluorobiphenyl		% Rec.	60.33	32-128	WG489264	07/20/10 12:34
Nitrobenzene-d5		% Rec.	45.05	15-137	WG489264	07/20/10 12:34
p-Terphenyl-d14		% Rec.	69.58	28-146	WG489264	07/20/10 12:34
TPH (GC/FID) High Fraction	< .1	ppm			WG489077	07/21/10 10:22
Triacontane		% Rec.	57.57	50-150	WG489077	07/21/10 10:22

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
TPH (GC/FID) High Fraction	< 4	ppm			WG489087	07/21/10 15:47
Triacontane		% Rec.	96.38	50-150	WG489087	07/21/10 15:47
Total Solids	< .1	%			WG489557	07/22/10 10:45
Arsenic	< 1	mg/kg			WG489124	07/22/10 09:28
Barium	< .25	mg/kg			WG489124	07/22/10 09:28
Cadmium	< .25	mg/kg			WG489124	07/22/10 09:28
Chromium	< .5	mg/kg			WG489124	07/22/10 09:28
Lead	< .25	mg/kg			WG489124	07/22/10 09:28
Selenium	< 1	mg/kg			WG489124	07/22/10 09:28
Silver	< .5	mg/kg			WG489124	07/22/10 09:28
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,1-Trichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2-Trichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,4-Trichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,4-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG489311	07/21/10 12:16
1,2-Dibromoethane	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,3,5-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,3-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,3-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,4-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
2,2-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
2-Butanone (MEK)	< .01	mg/l			WG489311	07/21/10 12:16
2-Chloroethyl vinyl ether	< .05	mg/l			WG489311	07/21/10 12:16
2-Chlorotoluene	< .001	mg/l			WG489311	07/21/10 12:16
2-Hexanone	< .01	mg/l			WG489311	07/21/10 12:16
4-Chlorotoluene	< .001	mg/l			WG489311	07/21/10 12:16
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG489311	07/21/10 12:16
Acetone	< .05	mg/l			WG489311	07/21/10 12:16
Acrolein	< .05	mg/l			WG489311	07/21/10 12:16
Acrylonitrile	< .01	mg/l			WG489311	07/21/10 12:16
Allyl chloride	< .005	mg/l			WG489311	07/21/10 12:16
Benzene	< .001	mg/l			WG489311	07/21/10 12:16
Bromobenzene	< .001	mg/l			WG489311	07/21/10 12:16
Bromochloromethane	< .001	mg/l			WG489311	07/21/10 12:16
Bromodichloromethane	< .001	mg/l			WG489311	07/21/10 12:16
Bromoform	< .001	mg/l			WG489311	07/21/10 12:16
Bromomethane	< .005	mg/l			WG489311	07/21/10 12:16
Carbon tetrachloride	< .001	mg/l			WG489311	07/21/10 12:16
Chlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
Chlorodibromomethane	< .001	mg/l			WG489311	07/21/10 12:16

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Chloroethane	< .001	mg/l			WG489311	07/21/10 12:16
Chloroform	< .005	mg/l			WG489311	07/21/10 12:16
Chloromethane	< .001	mg/l			WG489311	07/21/10 12:16
cis-1,2-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
cis-1,3-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
Di-isopropyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Dibromomethane	< .001	mg/l			WG489311	07/21/10 12:16
Dichlorodifluoromethane	< .005	mg/l			WG489311	07/21/10 12:16
Ethyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Ethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Hexachloro-1,3-butadiene	< .001	mg/l			WG489311	07/21/10 12:16
Isopropylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Methyl tert-butyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Methylene Chloride	< .005	mg/l			WG489311	07/21/10 12:16
n-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
n-Propylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Naphthalene	< .005	mg/l			WG489311	07/21/10 12:16
p-Isopropyltoluene	< .001	mg/l			WG489311	07/21/10 12:16
sec-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Styrene	< .001	mg/l			WG489311	07/21/10 12:16
tert-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Tetrachloroethene	< .001	mg/l			WG489311	07/21/10 12:16
Tetrahydrofuran	< .005	mg/l			WG489311	07/21/10 12:16
Toluene	< .005	mg/l			WG489311	07/21/10 12:16
trans-1,2-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
trans-1,3-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
Trichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
Trichlorofluoromethane	< .005	mg/l			WG489311	07/21/10 12:16
Vinyl chloride	< .001	mg/l			WG489311	07/21/10 12:16
Xylenes, Total	< .003	mg/l			WG489311	07/21/10 12:16
4-Bromofluorobenzene		% Rec.	96.60	75-128	WG489311	07/21/10 12:16
Dibromofluoromethane		% Rec.	108.0	79-125	WG489311	07/21/10 12:16
Toluene-d8		% Rec.	99.21	87-114	WG489311	07/21/10 12:16
1,2,4-Trimethylbenzene	< .001	mg/kg			WG489398	07/22/10 18:19
1,3,5-Trimethylbenzene	< .001	mg/kg			WG489398	07/22/10 18:19
Benzene	< .0005	mg/kg			WG489398	07/22/10 18:19
Ethylbenzene	< .0005	mg/kg			WG489398	07/22/10 18:19
Gasoline (C6-C10)	< .1	mg/kg			WG489398	07/22/10 18:19
m&p-Xylene	< .001	mg/kg			WG489398	07/22/10 18:19
Methyl tert-butyl ether	< .001	mg/kg			WG489398	07/22/10 18:19
Naphthalene	< .005	mg/kg			WG489398	07/22/10 18:19
o-Xylene	< .0005	mg/kg			WG489398	07/22/10 18:19
Toluene	< .005	mg/kg			WG489398	07/22/10 18:19
a,a,a-Trifluorotoluene(PID)		% Rec.	98.92	80-120	WG489398	07/22/10 18:19
Arsenic,Dissolved	< .02	mg/l			WG489231	07/23/10 14:57
Barium,Dissolved	< .005	mg/l			WG489231	07/23/10 14:57
Cadmium,Dissolved	< .005	mg/l			WG489231	07/23/10 14:57
Chromium,Dissolved	< .01	mg/l			WG489231	07/23/10 14:57
Lead,Dissolved	< .005	mg/l			WG489231	07/23/10 14:57
Selenium,Dissolved	< .02	mg/l			WG489231	07/23/10 14:57
Silver,Dissolved	< .01	mg/l			WG489231	07/23/10 14:57
Acenaphthene	< .033	mg/kg			WG489072	07/23/10 10:19
Acenaphthylene	< .033	mg/kg			WG489072	07/23/10 10:19

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Anthracene	< .033	mg/kg			WG489072	07/23/10 10:19
Benzo(a)anthracene	< .033	mg/kg			WG489072	07/23/10 10:19
Benzo(a)pyrene	< .033	mg/kg			WG489072	07/23/10 10:19
Benzo(b)fluoranthene	< .033	mg/kg			WG489072	07/23/10 10:19
Benzo(g,h,i)perylene	< .033	mg/kg			WG489072	07/23/10 10:19
Benzo(k)fluoranthene	< .033	mg/kg			WG489072	07/23/10 10:19
Chrysene	< .033	mg/kg			WG489072	07/23/10 10:19
Dibenz(a,h)anthracene	< .033	mg/kg			WG489072	07/23/10 10:19
Fluoranthene	< .033	mg/kg			WG489072	07/23/10 10:19
Fluorene	< .033	mg/kg			WG489072	07/23/10 10:19
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG489072	07/23/10 10:19
Naphthalene	< .033	mg/kg			WG489072	07/23/10 10:19
Phenanthrene	< .033	mg/kg			WG489072	07/23/10 10:19
Pyrene	< .033	mg/kg			WG489072	07/23/10 10:19
2-Fluorobiphenyl		% Rec.	54.16	37-123	WG489072	07/23/10 10:19
Nitrobenzene-d5		% Rec.	46.49	19-129	WG489072	07/23/10 10:19
p-Terphenyl-d14		% Rec.	97.39	34-149	WG489072	07/23/10 10:19
Benzene	< .001	mg/l			WG490323	07/26/10 17:30
Tetrahydrofuran	< .005	mg/l			WG490323	07/26/10 17:30
4-Bromofluorobenzene		% Rec.	99.64	75-128	WG490323	07/26/10 17:30
Dibromofluoromethane		% Rec.	101.4	79-125	WG490323	07/26/10 17:30
Toluene-d8		% Rec.	103.6	87-114	WG490323	07/26/10 17:30

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury,Dissolved	mg/l	0	0	0	20	L469307-01	WG488950
Mercury	mg/kg	17.0	24.0	35.3*	20	L469301-04	WG489146
Mercury	mg/kg	0.0150	0.0250	50.0*	20	L469362-01	WG489147
Total Solids	%	94.0	93.3	0.457	5	L469307-16	WG489557
Arsenic	mg/kg	6.20	5.40	13.0	20	L469256-87	WG489124
Barium	mg/kg	190.	160.	15.0	20	L469256-87	WG489124
Cadmium	mg/kg	0.810	0.700	14.2	20	L469256-87	WG489124
Chromium	mg/kg	19.0	17.0	12.7	20	L469256-87	WG489124
Lead	mg/kg	27.0	21.0	24.3*	20	L469256-87	WG489124
Selenium	mg/kg	0	0	0	20	L469256-87	WG489124
Silver	mg/kg	0	0	0	20	L469256-87	WG489124
Arsenic,Dissolved	mg/l	0	0	0	20	L469066-04	WG489231
Barium,Dissolved	mg/l	0.0430	0.0429	0	20	L469066-04	WG489231
Cadmium,Dissolved	mg/l	0	0	0	20	L469066-04	WG489231
Chromium,Dissolved	mg/l	0	0.000100	NA	20	L469066-04	WG489231
Lead,Dissolved	mg/l	0	0	0	20	L469066-04	WG489231
Selenium,Dissolved	mg/l	0	0.00820	NA	20	L469066-04	WG489231
Silver,Dissolved	mg/l	0	0.000300	NA	20	L469066-04	WG489231

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Mercury,Dissolved	mg/l	.003	0.00277	92.3	85-115	WG488950
PCB 1016	mg/kg	.167	0.167	100.	49-105	WG489032
PCB 1260	mg/kg	.167	0.184	110.	62-131	WG489032
Decachlorobiphenyl				96.65	18.9-115.8	WG489032
Tetrachloro-m-xylene				94.77	31.8-115.7	WG489032
Gasoline (C6-C10)	mg/l	.5	0.532	107.	80-120	WG488973
a,a,a-Trifluorotoluene(PID)				101.0	80-120	WG488973
PCB 1016	mg/l	.0005	0.000512	102.	49-105	WG488963
PCB 1260	mg/l	.0005	0.000557	111.	46-126	WG488963
Decachlorobiphenyl				93.70	10-122.6	WG488963
Tetrachloro-m-xylene				94.94	15.3-114.2	WG488963
Mercury	mg/kg	8.77	10.8	123.	71.6-127.7	WG489146
Mercury	mg/kg	8.77	10.2	116.	71.6-127.7	WG489147
Acenaphthene	mg/l	.005	0.00407	81.5	47-121	WG489264
Acenaphthylene	mg/l	.005	0.00444	88.7	46-123	WG489264
Anthracene	mg/l	.005	0.00476	95.1	50-129	WG489264
Benzo(a)anthracene	mg/l	.005	0.00443	88.6	52-128	WG489264
Benzo(a)pyrene	mg/l	.005	0.00461	92.2	52-127	WG489264
Benzo(b)fluoranthene	mg/l	.005	0.00463	92.5	50-127	WG489264
Benzo(g,h,i)perylene	mg/l	.005	0.00484	96.9	45-135	WG489264
Benzo(k)fluoranthene	mg/l	.005	0.00450	90.0	46-131	WG489264
Chrysene	mg/l	.005	0.00443	88.6	44-137	WG489264
Dibenz(a,h)anthracene	mg/l	.005	0.00448	89.6	43-135	WG489264
Fluoranthene	mg/l	.005	0.00504	101.	49-131	WG489264
Fluorene	mg/l	.005	0.00475	95.1	48-127	WG489264
Indeno(1,2,3-cd)pyrene	mg/l	.005	0.00470	94.0	43-137	WG489264
Naphthalene	mg/l	.005	0.00414	82.7	36-117	WG489264
Phenanthrene	mg/l	.005	0.00462	92.3	51-125	WG489264
Pyrene	mg/l	.005	0.00428	85.6	49-134	WG489264
2-Fluorobiphenyl				84.54	32-128	WG489264
Nitrobenzene-d5				64.51	15-137	WG489264
p-Terphenyl-d14				98.58	28-146	WG489264
TPH (GC/FID) High Fraction	mg/l	1	1.01	101.	75-115	WG489077
Triacontane				109.0	50-150	WG489077
TPH (GC/FID) High Fraction	mg/kg	40	36.7	91.7	70-120	WG489087
Triacontane				93.75	50-150	WG489087
Total Solids	%	50	50.0	100.	85-115	WG489557
Arsenic	mg/kg	192	185.	96.4	78.6-120.8	WG489124
Barium	mg/kg	420	414.	98.6	78.8-121.4	WG489124
Cadmium	mg/kg	70.1	67.5	96.3	78.5-121.5	WG489124

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Chromium	mg/kg	168	168.	100.	80.4-120.2	WG489124
Lead	mg/kg	113	111.	98.2	77.3-122.1	WG489124
Selenium	mg/kg	176	168.	95.5	75.6-125.0	WG489124
Silver	mg/kg	115	114.	99.1	66-133.9	WG489124
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0267	107.	75-134	WG489311
1,1,1-Trichloroethane	mg/l	.025	0.0215	85.9	67-137	WG489311
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0273	109.	72-128	WG489311
1,1,2-Trichloroethane	mg/l	.025	0.0249	99.7	79-123	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025	0.0202	80.6	51-149	WG489311
1,1-Dichloroethane	mg/l	.025	0.0200	80.1	67-133	WG489311
1,1-Dichloroethene	mg/l	.025	0.0184	73.5	60-130	WG489311
1,1-Dichloropropene	mg/l	.025	0.0204	81.4	68-132	WG489311
1,2,3-Trichlorobenzene	mg/l	.025	0.0276	110.	63-138	WG489311
1,2,3-Trichloropropane	mg/l	.025	0.0267	107.	68-130	WG489311
1,2,3-Trimethylbenzene	mg/l	.025	0.0237	94.7	70-127	WG489311
1,2,4-Trichlorobenzene	mg/l	.025	0.0271	109.	65-137	WG489311
1,2,4-Trimethylbenzene	mg/l	.025	0.0271	108.	72-135	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0268	107.	55-134	WG489311
1,2-Dibromoethane	mg/l	.025	0.0259	104.	75-126	WG489311
1,2-Dichlorobenzene	mg/l	.025	0.0262	105.	75-122	WG489311
1,2-Dichloroethane	mg/l	.025	0.0195	77.9	63-137	WG489311
1,2-Dichloropropane	mg/l	.025	0.0221	88.3	74-122	WG489311
1,3,5-Trimethylbenzene	mg/l	.025	0.0270	108.	73-134	WG489311
1,3-Dichlorobenzene	mg/l	.025	0.0287	115.	73-131	WG489311
1,3-Dichloropropane	mg/l	.025	0.0241	96.3	77-119	WG489311
1,4-Dichlorobenzene	mg/l	.025	0.0249	99.7	70-121	WG489311
2,2-Dichloropropane	mg/l	.025	0.0205	82.0	46-151	WG489311
2-Butanone (MEK)	mg/l	.125	0.0972	77.8	53-132	WG489311
2-Chloroethyl vinyl ether	mg/l	.125	0.164	131.	0-171	WG489311
2-Chlorotoluene	mg/l	.025	0.0262	105.	74-128	WG489311
2-Hexanone	mg/l	.125	0.125	100.	56-147	WG489311
4-Chlorotoluene	mg/l	.025	0.0263	105.	74-130	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.113	90.6	60-142	WG489311
Acetone	mg/l	.125	0.103	82.7	48-134	WG489311
Acrolein	mg/l	.125	0.0625	50.0	6-182	WG489311
Acrylonitrile	mg/l	.125	0.0977	78.1	60-140	WG489311
Benzene	mg/l	.025	0.0211	84.4	67-126	WG489311
Bromobenzene	mg/l	.025	0.0249	99.8	76-123	WG489311
Bromochloromethane	mg/l	.025	0.0225	89.9	75-128	WG489311
Bromodichloromethane	mg/l	.025	0.0234	93.6	68-133	WG489311
Bromoform	mg/l	.025	0.0317	127.	60-139	WG489311
Bromomethane	mg/l	.025	0.0212	84.8	45-175	WG489311
Carbon tetrachloride	mg/l	.025	0.0215	85.9	64-141	WG489311
Chlorobenzene	mg/l	.025	0.0251	100.	77-125	WG489311
Chlorodibromomethane	mg/l	.025	0.0262	105.	73-138	WG489311
Chloroethane	mg/l	.025	0.0177	70.9	49-155	WG489311
Chloroform	mg/l	.025	0.0205	82.0	66-126	WG489311
Chloromethane	mg/l	.025	0.0207	82.7	45-152	WG489311
cis-1,2-Dichloroethene	mg/l	.025	0.0212	84.8	72-128	WG489311
cis-1,3-Dichloropropene	mg/l	.025	0.0231	92.3	73-131	WG489311
Di-isopropyl ether	mg/l	.025	0.0174	69.6	63-139	WG489311
Dibromomethane	mg/l	.025	0.0228	91.1	73-125	WG489311
Dichlorodifluoromethane	mg/l	.025	0.0214	85.5	39-189	WG489311
Ethyl ether	mg/l	.025	0.0170	67.8	60-142	WG489311
Ethylbenzene	mg/l	.025	0.0256	102.	76-129	WG489311
Hexachloro-1,3-butadiene	mg/l	.025	0.0355	142.*	67-135	WG489311
Isopropylbenzene	mg/l	.025	0.0259	104.	73-132	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Methyl tert-butyl ether	mg/l	.025	0.0193	77.3	51-142	WG489311
Methylene Chloride	mg/l	.025	0.0201	80.4	64-125	WG489311
n-Butylbenzene	mg/l	.025	0.0255	102.	63-142	WG489311
n-Propylbenzene	mg/l	.025	0.0262	105.	71-132	WG489311
Naphthalene	mg/l	.025	0.0250	99.9	56-145	WG489311
p-Isopropyltoluene	mg/l	.025	0.0241	96.4	68-138	WG489311
sec-Butylbenzene	mg/l	.025	0.0284	114.	70-135	WG489311
Styrene	mg/l	.025	0.0242	96.7	78-130	WG489311
tert-Butylbenzene	mg/l	.025	0.0270	108.	72-134	WG489311
Tetrachloroethene	mg/l	.025	0.0299	120.	67-135	WG489311
Tetrahydrofuran	mg/l	.025	0.0166	66.3	50-140	WG489311
Toluene	mg/l	.025	0.0230	92.0	72-122	WG489311
trans-1,2-Dichloroethene	mg/l	.025	0.0211	84.4	67-129	WG489311
trans-1,3-Dichloropropene	mg/l	.025	0.0241	96.2	66-137	WG489311
Trichloroethene	mg/l	.025	0.0243	97.2	74-126	WG489311
Trichlorofluoromethane	mg/l	.025	0.0203	81.2	54-156	WG489311
Vinyl chloride	mg/l	.025	0.0209	83.7	55-153	WG489311
Xylenes, Total	mg/l	.075	0.0791	105.	75-128	WG489311
4-Bromofluorobenzene				102.4	75-128	WG489311
Dibromofluoromethane				92.04	79-125	WG489311
Toluene-d8				98.66	87-114	WG489311
1,2,4-Trimethylbenzene	mg/kg	.05	0.0469	93.7	80-120	WG489398
1,3,5-Trimethylbenzene	mg/kg	.05	0.0454	90.9	80-120	WG489398
Benzene	mg/kg	.05	0.0441	88.2	76-113	WG489398
Ethylbenzene	mg/kg	.05	0.0450	90.0	78-115	WG489398
Gasoline (C6-C10)	mg/kg	.5	0.514	103.	80-120	WG489398
m&p-Xylene	mg/kg	.1	0.0864	86.4	81-120	WG489398
Methyl tert-butyl ether	mg/kg	.05	0.0510	102.	37-145	WG489398
Naphthalene	mg/kg	.05	0.0444	88.8	80-120	WG489398
o-Xylene	mg/kg	.05	0.0448	89.7	79-115	WG489398
Toluene	mg/kg	.05	0.0447	89.3	76-114	WG489398
a,a,a-Trifluorotoluene(PID)				102.1	80-120	WG489398
Arsenic,Dissolved	mg/l	1.13	1.13	100.	85-115	WG489231
Barium,Dissolved	mg/l	1.13	1.15	102.	85-115	WG489231
Cadmium,Dissolved	mg/l	1.13	1.15	102.	85-115	WG489231
Chromium,Dissolved	mg/l	1.13	1.19	105.	85-115	WG489231
Lead,Dissolved	mg/l	1.13	1.17	104.	85-115	WG489231
Selenium,Dissolved	mg/l	1.13	1.06	93.8	85-115	WG489231
Silver,Dissolved	mg/l	1.13	1.11	98.2	85-115	WG489231
Acenaphthene	mg/kg	.167	0.112	67.2	44-117	WG489072
Acenaphthylene	mg/kg	.167	0.117	69.9	43-118	WG489072
Anthracene	mg/kg	.167	0.133	79.7	42-127	WG489072
Benzo(a)anthracene	mg/kg	.167	0.128	76.4	45-127	WG489072
Benzo(a)pyrene	mg/kg	.167	0.120	72.1	46-123	WG489072
Benzo(b)fluoranthene	mg/kg	.167	0.111	66.5	43-126	WG489072
Benzo(g,h,i)perylene	mg/kg	.167	0.157	94.0	43-128	WG489072
Benzo(k)fluoranthene	mg/kg	.167	0.122	73.3	40-126	WG489072
Chrysene	mg/kg	.167	0.128	76.8	44-129	WG489072
Dibenz(a,h)anthracene	mg/kg	.167	0.156	93.6	43-127	WG489072
Fluoranthene	mg/kg	.167	0.134	80.0	44-125	WG489072
Fluorene	mg/kg	.167	0.131	78.3	45-121	WG489072
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.157	93.8	43-127	WG489072
Naphthalene	mg/kg	.167	0.0663	39.7	32-113	WG489072

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Phenanthrene	mg/kg	.167	0.138	82.8	43-124	WG489072
Pyrene	mg/kg	.167	0.128	76.5	47-128	WG489072
2-Fluorobiphenyl				60.02	37-123	WG489072
Nitrobenzene-d5				38.53	19-129	WG489072
p-Terphenyl-d14				94.28	34-149	WG489072
Benzene	mg/l	.025	0.0228	91.4	67-126	WG490323
Tetrahydrofuran	mg/l	.025	0.0215	86.0	50-140	WG490323
4-Bromofluorobenzene				105.9	75-128	WG490323
Dibromofluoromethane				99.88	79-125	WG490323
Toluene-d8				101.9	87-114	WG490323

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
PCB 1016	mg/kg	0.168	0.167	100.	49-105	0.199	25	WG489032
PCB 1260	mg/kg	0.184	0.184	110.	62-131	0.230	22	WG489032
Decachlorobiphenyl				94.94	18.9-115.8			WG489032
Tetrachloro-m-xylene				95.42	31.8-115.7			WG489032
Gasoline (C6-C10)	mg/l	0.483	0.532	97.0	80-120	9.66	20	WG488973
a,a,a-Trifluorotoluene(PID)				101.4	80-120			WG488973
PCB 1016	mg/l	0.000509	0.000512	102.	49-105	0.578	25	WG488963
PCB 1260	mg/l	0.000573	0.000557	115.	46-126	2.81	34	WG488963
Decachlorobiphenyl				98.08	10-122.6			WG488963
Tetrachloro-m-xylene				95.57	15.3-114.2			WG488963
Acenaphthene	mg/l	0.00430	0.00407	86.0	47-121	5.32	21	WG489264
Acenaphthylene	mg/l	0.00463	0.00444	93.0	46-123	4.33	21	WG489264
Anthracene	mg/l	0.00495	0.00476	99.0	50-129	3.94	20	WG489264
Benzo(a)anthracene	mg/l	0.00455	0.00443	91.0	52-128	2.71	20	WG489264
Benzo(a)pyrene	mg/l	0.00473	0.00461	94.0	52-127	2.53	20	WG489264
Benzo(b)fluoranthene	mg/l	0.00495	0.00463	99.0	50-127	6.85	25	WG489264
Benzo(g,h,i)perylene	mg/l	0.00490	0.00484	98.0	45-135	1.21	20	WG489264
Benzo(k)fluoranthene	mg/l	0.00428	0.00450	86.0	46-131	4.96	30	WG489264
Chrysene	mg/l	0.00462	0.00443	92.0	44-137	4.22	20	WG489264
Dibenz(a,h)anthracene	mg/l	0.00461	0.00448	92.0	43-135	2.92	20	WG489264
Fluoranthene	mg/l	0.00532	0.00504	106.	49-131	5.37	20	WG489264
Fluorene	mg/l	0.00493	0.00475	99.0	48-127	3.67	20	WG489264
Indeno(1,2,3-cd)pyrene	mg/l	0.00473	0.00470	94.0	43-137	0.555	20	WG489264
Naphthalene	mg/l	0.00433	0.00414	86.0	36-117	4.56	28	WG489264
Phenanthrene	mg/l	0.00474	0.00462	95.0	51-125	2.63	20	WG489264
Pyrene	mg/l	0.00456	0.00428	91.0	49-134	6.19	20	WG489264
2-Fluorobiphenyl				87.00	32-128			WG489264
Nitrobenzene-d5				68.28	15-137			WG489264
p-Terphenyl-d14				103.6	28-146			WG489264
TPH (GC/FID) High Fraction	mg/l	0.958	1.01	96.0	75-115	5.27	20	WG489077
Triacontane				105.1	50-150			WG489077
TPH (GC/FID) High Fraction	mg/kg	39.3	36.7	98.0	70-120	6.97	20	WG489087
Triacontane				138.2	50-150			WG489087

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1,2-Tetrachloroethane	mg/l	0.0269	0.0267	108.	75-134	0.930	20	WG489311
1,1,1-Trichloroethane	mg/l	0.0209	0.0215	84.0	67-137	2.64	20	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0267	0.0273	107.	72-128	2.44	20	WG489311
1,1,2-Trichloroethane	mg/l	0.0257	0.0249	103.	79-123	2.96	20	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0199	0.0202	80.0	51-149	1.40	20	WG489311
1,1-Dichloroethane	mg/l	0.0190	0.0200	76.0	67-133	5.12	20	WG489311
1,1-Dichloroethene	mg/l	0.0185	0.0184	74.0	60-130	0.770	20	WG489311
1,1-Dichloropropene	mg/l	0.0201	0.0204	80.0	68-132	1.17	20	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0285	0.0276	114.	63-138	3.00	20	WG489311
1,2,3-Trichloropropane	mg/l	0.0270	0.0267	108.	68-130	1.41	20	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0238	0.0237	95.0	70-127	0.620	20	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0274	0.0271	110.	65-137	1.12	20	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0268	0.0271	107.	72-135	1.03	20	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0277	0.0268	111.	55-134	3.41	20	WG489311
1,2-Dibromoethane	mg/l	0.0268	0.0259	107.	75-126	3.43	20	WG489311
1,2-Dichlorobenzene	mg/l	0.0276	0.0262	110.	75-122	5.48	20	WG489311
1,2-Dichloroethane	mg/l	0.0184	0.0195	74.0	63-137	5.75	20	WG489311
1,2-Dichloropropane	mg/l	0.0213	0.0221	85.0	74-122	3.84	20	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0271	0.0270	108.	73-134	0.490	20	WG489311
1,3-Dichlorobenzene	mg/l	0.0280	0.0287	112.	73-131	2.24	20	WG489311
1,3-Dichloropropane	mg/l	0.0234	0.0241	94.0	77-119	2.76	20	WG489311
1,4-Dichlorobenzene	mg/l	0.0245	0.0249	98.0	70-121	1.86	20	WG489311
2,2-Dichloropropane	mg/l	0.0205	0.0205	82.0	46-151	0.140	20	WG489311
2-Butanone (MEK)	mg/l	0.100	0.0972	80.0	53-132	3.16	20	WG489311
2-Chloroethyl vinyl ether	mg/l	0.163	0.164	130.	0-171	0.610	27	WG489311
2-Chlorotoluene	mg/l	0.0258	0.0262	103.	74-128	1.66	20	WG489311
2-Hexanone	mg/l	0.126	0.125	101.	56-147	0.690	20	WG489311
4-Chlorotoluene	mg/l	0.0257	0.0263	103.	74-130	2.23	20	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.112	0.113	90.0	60-142	0.980	20	WG489311
Acetone	mg/l	0.0954	0.103	76.0	48-134	8.09	20	WG489311
Acrolein	mg/l	0.0567	0.0625	45.0	6-182	9.59	39	WG489311
Acrylonitrile	mg/l	0.0940	0.0977	75.0	60-140	3.81	20	WG489311
Benzene	mg/l	0.0207	0.0211	83.0	67-126	1.80	20	WG489311
Bromobenzene	mg/l	0.0244	0.0249	98.0	76-123	2.27	20	WG489311
Bromochloromethane	mg/l	0.0216	0.0225	86.0	75-128	3.85	20	WG489311
Bromodichloromethane	mg/l	0.0235	0.0234	94.0	68-133	0.290	20	WG489311
Bromoform	mg/l	0.0306	0.0317	122.	60-139	3.49	20	WG489311
Bromomethane	mg/l	0.0175	0.0212	70.0	45-175	19.1	20	WG489311
Carbon tetrachloride	mg/l	0.0214	0.0215	86.0	64-141	0.300	20	WG489311
Chlorobenzene	mg/l	0.0254	0.0251	102.	77-125	1.16	20	WG489311
Chlorodibromomethane	mg/l	0.0258	0.0262	103.	73-138	1.77	20	WG489311
Chloroethane	mg/l	0.0158	0.0177	63.0	49-155	11.6	20	WG489311
Chloroform	mg/l	0.0199	0.0205	80.0	66-126	2.99	20	WG489311
Chloromethane	mg/l	0.0191	0.0207	76.0	45-152	8.14	20	WG489311
cis-1,2-Dichloroethene	mg/l	0.0205	0.0212	82.0	72-128	3.36	20	WG489311
cis-1,3-Dichloropropene	mg/l	0.0230	0.0231	92.0	73-131	0.110	20	WG489311
Di-isopropyl ether	mg/l	0.0172	0.0174	69.0	63-139	1.43	20	WG489311
Dibromomethane	mg/l	0.0227	0.0228	91.0	73-125	0.230	20	WG489311
Dichlorodifluoromethane	mg/l	0.0189	0.0214	76.0	39-189	12.3	24	WG489311
Ethyl ether	mg/l	0.0158	0.0170	63.0	60-142	7.26	20	WG489311
Ethylbenzene	mg/l	0.0263	0.0256	105.	76-129	2.79	20	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0358	0.0355	143*	67-135	0.910	20	WG489311
Isopropylbenzene	mg/l	0.0270	0.0259	108.	73-132	4.15	20	WG489311
Methyl tert-butyl ether	mg/l	0.0180	0.0193	72.0	51-142	6.92	20	WG489311
Methylene Chloride	mg/l	0.0184	0.0201	74.0	64-125	8.71	20	WG489311
n-Butylbenzene	mg/l	0.0276	0.0255	110.	63-142	7.90	20	WG489311
n-Propylbenzene	mg/l	0.0272	0.0262	109.	71-132	3.74	20	WG489311
Naphthalene	mg/l	0.0256	0.0250	102.	56-145	2.35	20	WG489311
p-Isopropyltoluene	mg/l	0.0245	0.0241	98.0	68-138	1.64	20	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
sec-Butylbenzene	mg/l	0.0288	0.0284	115.	70-135	1.49	20	WG489311
Styrene	mg/l	0.0243	0.0242	97.0	78-130	0.300	20	WG489311
tert-Butylbenzene	mg/l	0.0268	0.0270	107.	72-134	0.830	20	WG489311
Tetrachloroethene	mg/l	0.0306	0.0299	122.	67-135	2.16	20	WG489311
Tetrahydrofuran	mg/l	0.0164	0.0166	66.0	50-140	0.990	20	WG489311
Toluene	mg/l	0.0231	0.0230	92.0	72-122	0.390	20	WG489311
trans-1,2-Dichloroethene	mg/l	0.0206	0.0211	82.0	67-129	2.35	20	WG489311
trans-1,3-Dichloropropene	mg/l	0.0246	0.0241	98.0	66-137	2.26	20	WG489311
Trichloroethene	mg/l	0.0244	0.0243	98.0	74-126	0.500	20	WG489311
Trichlorofluoromethane	mg/l	0.0192	0.0203	77.0	54-156	5.41	20	WG489311
Vinyl chloride	mg/l	0.0194	0.0209	78.0	55-153	7.68	20	WG489311
Xylenes, Total	mg/l	0.0812	0.0791	108.	75-128	2.65	20	WG489311
4-Bromofluorobenzene				100.7	75-128			WG489311
Dibromofluoromethane				89.75	79-125			WG489311
Toluene-d8				102.3	87-114			WG489311
1,2,4-Trimethylbenzene	mg/kg	0.0478	0.0469	96.0	80-120	1.89	20	WG489398
1,3,5-Trimethylbenzene	mg/kg	0.0471	0.0454	94.0	80-120	3.69	20	WG489398
Benzene	mg/kg	0.0454	0.0441	91.0	76-113	3.03	20	WG489398
Ethylbenzene	mg/kg	0.0474	0.0450	95.0	78-115	5.14	20	WG489398
Gasoline (C6-C10)	mg/kg	0.512	0.514	102.	80-120	0.490	20	WG489398
m&p-Xylene	mg/kg	0.0906	0.0864	91.0	81-120	4.76	20	WG489398
Methyl tert-butyl ether	mg/kg	0.0443	0.0510	89.0	37-145	14.1	24	WG489398
Naphthalene	mg/kg	0.0424	0.0444	85.0	80-120	4.72	20	WG489398
o-Xylene	mg/kg	0.0472	0.0448	94.0	79-115	5.11	20	WG489398
Toluene	mg/kg	0.0462	0.0447	92.0	76-114	3.39	20	WG489398
a,a,a-Trifluorotoluene(PID)				101.6	80-120			WG489398
Acenaphthene	mg/kg	0.123	0.112	74.0	44-117	9.03	21	WG489072
Acenaphthylene	mg/kg	0.126	0.117	76.0	43-118	8.04	20	WG489072
Anthracene	mg/kg	0.151	0.133	91.0	42-127	13.0	21	WG489072
Benzo(a)anthracene	mg/kg	0.146	0.128	87.0	45-127	13.3	21	WG489072
Benzo(a)pyrene	mg/kg	0.132	0.120	79.0	46-123	9.22	20	WG489072
Benzo(b)fluoranthene	mg/kg	0.122	0.111	73.0	43-126	9.66	27	WG489072
Benzo(g,h,i)perylene	mg/kg	0.167	0.157	100.	43-128	6.02	20	WG489072
Benzo(k)fluoranthene	mg/kg	0.136	0.122	81.0	40-126	10.5	32	WG489072
Chrysene	mg/kg	0.140	0.128	84.0	44-129	8.67	22	WG489072
Dibenz(a,h)anthracene	mg/kg	0.164	0.156	98.0	43-127	4.90	20	WG489072
Fluoranthene	mg/kg	0.145	0.134	87.0	44-125	8.32	22	WG489072
Fluorene	mg/kg	0.143	0.131	86.0	45-121	8.82	20	WG489072
Indeno(1,2,3-cd)pyrene	mg/kg	0.168	0.157	101.	43-127	7.13	21	WG489072
Naphthalene	mg/kg	0.0676	0.0663	40.0	32-113	1.91	26	WG489072
Phenanthrene	mg/kg	0.150	0.138	90.0	43-124	7.88	21	WG489072
Pyrene	mg/kg	0.146	0.128	87.0	47-128	13.2	20	WG489072
2-Fluorobiphenyl				59.49	37-123			WG489072
Nitrobenzene-d5				34.25	19-129			WG489072
p-Terphenyl-d14				102.6	34-149			WG489072
Benzene	mg/l	0.0216	0.0228	86.0	67-126	5.72	20	WG490323
Tetrahydrofuran	mg/l	0.0213	0.0215	85.0	50-140	0.770	20	WG490323
4-Bromofluorobenzene				105.4	75-128			WG490323
Dibromofluoromethane				98.95	79-125			WG490323
Toluene-d8				101.9	87-114			WG490323

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury,Dissolved	mg/l	0.00279	0	.003	93.0	70-130	L469307-01	WG488950
Gasoline (C6-C10)	mg/l	0.505	0	.5	101.	80-120	L469307-01	WG488973
a,a,a-Trifluorotoluene(PID)					100.2	80-120		WG488973
PCB 1016	mg/kg	0.156	0	.167	93.7	70-130	L469307-13	WG489032
PCB 1260	mg/kg	0.159	0	.167	95.4	10-197	L469307-13	WG489032
Decachlorobiphenyl					81.21	18.9-115.8		WG489032
Tetrachloro-m-xylene					91.60	31.8-115.7		WG489032
Mercury	mg/kg	14.5	24.0	.0025	0*	70-130	L469301-04	WG489146
Mercury	mg/kg	0.248	0.0250	.25	89.2	70-130	L469362-01	WG489147
Arsenic	mg/kg	52.6	5.40	50	94.4	75-125	L469256-87	WG489124
Barium	mg/kg	217.	160.	50	114.	75-125	L469256-87	WG489124
Cadmium	mg/kg	47.4	0.700	50	93.4	75-125	L469256-87	WG489124
Chromium	mg/kg	66.2	17.0	50	98.4	75-125	L469256-87	WG489124
Lead	mg/kg	67.7	21.0	50	93.4	75-125	L469256-87	WG489124
Selenium	mg/kg	44.1	0	50	88.2	75-125	L469256-87	WG489124
Silver	mg/kg	47.5	0	50	95.0	75-125	L469256-87	WG489124
1,1,1,2-Tetrachloroethane	mg/l	0.0262	0	.025	105.	45-152	L468942-05	WG489311
1,1,1-Trichloroethane	mg/l	0.0215	0	.025	86.0	31-161	L468942-05	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0290	0	.025	116.	49-149	L468942-05	WG489311
1,1,2-Trichloroethane	mg/l	0.0267	0	.025	107.	46-145	L468942-05	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0217	0	.025	87.0	14-168	L468942-05	WG489311
1,1-Dichloroethane	mg/l	0.0211	0	.025	84.5	30-159	L468942-05	WG489311
1,1-Dichloroethene	mg/l	0.0199	0	.025	79.6	10-162	L468942-05	WG489311
1,1-Dichloropropene	mg/l	0.0204	0	.025	81.6	14-162	L468942-05	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0278	0	.025	111.	32-143	L468942-05	WG489311
1,2,3-Trichloropropane	mg/l	0.0284	0	.025	114.	48-148	L468942-05	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0241	0	.025	96.3	36-141	L468942-05	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0272	0	.025	109.	27-142	L468942-05	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0264	0	.025	106.	29-153	L468942-05	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0309	0	.025	124.	37-148	L468942-05	WG489311
1,2-Dibromoethane	mg/l	0.0269	0	.025	107.	41-149	L468942-05	WG489311
1,2-Dichlorobenzene	mg/l	0.0270	0	.025	108.	40-139	L468942-05	WG489311
1,2-Dichloroethane	mg/l	0.0197	0	.025	78.8	29-167	L468942-05	WG489311
1,2-Dichloropropane	mg/l	0.0241	0	.025	96.4	39-148	L468942-05	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0258	0	.025	103.	33-149	L468942-05	WG489311
1,3-Dichlorobenzene	mg/l	0.0282	0	.025	113.	32-148	L468942-05	WG489311
1,3-Dichloropropane	mg/l	0.0244	0	.025	97.5	44-142	L468942-05	WG489311
1,4-Dichlorobenzene	mg/l	0.0255	0	.025	102.	32-136	L468942-05	WG489311
2,2-Dichloropropane	mg/l	0.0215	0	.025	86.2	14-158	L468942-05	WG489311
2-Butanone (MEK)	mg/l	0.109	0	.125	87.1	32-151	L468942-05	WG489311
2-Chloroethyl vinyl ether	mg/l	0.194	0	.125	156.	0-175	L468942-05	WG489311
2-Chlorotoluene	mg/l	0.0252	0	.025	101.	35-147	L468942-05	WG489311
2-Hexanone	mg/l	0.141	0	.125	113.	41-155	L468942-05	WG489311
4-Chlorotoluene	mg/l	0.0257	0	.025	103.	33-147	L468942-05	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.138	0	.125	111.	40-160	L468942-05	WG489311
Acetone	mg/l	0.131	0	.125	105.	25-157	L468942-05	WG489311
Acrolein	mg/l	0.0752	0	.125	60.1	0-179	L468942-05	WG489311
Acrylonitrile	mg/l	0.122	0	.125	98.0	37-162	L468942-05	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Benzene	mg/l	0.0207	0	.025	83.0	16-158	L468942-05	WG489311
Bromobenzene	mg/l	0.0244	0	.025	97.7	37-147	L468942-05	WG489311
Bromochloromethane	mg/l	0.0238	0	.025	95.2	36-154	L468942-05	WG489311
Bromodichloromethane	mg/l	0.0259	0	.025	104.	45-147	L468942-05	WG489311
Bromoform	mg/l	0.0336	0	.025	134.	38-152	L468942-05	WG489311
Bromomethane	mg/l	0.0195	0	.025	78.1	0-191	L468942-05	WG489311
Carbon tetrachloride	mg/l	0.0225	0	.025	90.2	22-168	L468942-05	WG489311
Chlorobenzene	mg/l	0.0248	0	.025	99.0	33-148	L468942-05	WG489311
Chlorodibromomethane	mg/l	0.0267	0	.025	107.	48-151	L468942-05	WG489311
Chloroethane	mg/l	0.0183	0	.025	73.3	4-176	L468942-05	WG489311
Chloroform	mg/l	0.0217	0	.025	86.8	37-147	L468942-05	WG489311
Chloromethane	mg/l	0.0203	0	.025	81.4	10-174	L468942-05	WG489311
cis-1,2-Dichloroethene	mg/l	0.0216	0	.025	86.5	29-156	L468942-05	WG489311
cis-1,3-Dichloropropene	mg/l	0.0259	0	.025	103.	35-148	L468942-05	WG489311
Di-isopropyl ether	mg/l	0.0191	0	.025	76.5	39-160	L468942-05	WG489311
Dibromomethane	mg/l	0.0262	0	.025	105.	36-152	L468942-05	WG489311
Dichlorodifluoromethane	mg/l	0.0206	0	.025	82.5	0-200	L468942-05	WG489311
Ethyl ether	mg/l	0.0185	0	.025	74.0	24-168	L468942-05	WG489311
Ethylbenzene	mg/l	0.0245	0	.025	98.2	29-150	L468942-05	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0344	0	.025	138.	28-144	L468942-05	WG489311
Isopropylbenzene	mg/l	0.0253	0	.025	101.	35-147	L468942-05	WG489311
Methyl tert-butyl ether	mg/l	0.0219	0	.025	87.6	24-167	L468942-05	WG489311
Methylene Chloride	mg/l	0.0215	0	.025	86.0	23-151	L468942-05	WG489311
n-Butylbenzene	mg/l	0.0261	0	.025	104.	22-151	L468942-05	WG489311
n-Propylbenzene	mg/l	0.0257	0	.025	103.	26-150	L468942-05	WG489311
Naphthalene	mg/l	0.0266	0	.025	106.	24-160	L468942-05	WG489311
p-Isopropyltoluene	mg/l	0.0237	0	.025	94.8	28-151	L468942-05	WG489311
sec-Butylbenzene	mg/l	0.0278	0	.025	111.	32-149	L468942-05	WG489311
Styrene	mg/l	0.0236	0	.025	94.5	38-149	L468942-05	WG489311
tert-Butylbenzene	mg/l	0.0266	0	.025	106.	36-149	L468942-05	WG489311
Tetrachloroethene	mg/l	0.0283	0	.025	113.	13-157	L468942-05	WG489311
Tetrahydrofuran	mg/l	0.0211	0	.025	84.2	28-163	L468942-05	WG489311
Toluene	mg/l	0.0250	0	.025	99.8	22-152	L468942-05	WG489311
trans-1,2-Dichloroethene	mg/l	0.0223	0	.025	89.2	11-160	L468942-05	WG489311
trans-1,3-Dichloropropene	mg/l	0.0285	0	.025	114.	33-153	L468942-05	WG489311
Trichloroethene	mg/l	0.0228	0	.025	91.1	18-163	L468942-05	WG489311
Trichlorofluoromethane	mg/l	0.0219	0	.025	87.8	10-177	L468942-05	WG489311
Vinyl chloride	mg/l	0.0213	0	.025	85.1	0-179	L468942-05	WG489311
Xylenes, Total	mg/l	0.0763	0	.075	102.	27-151	L468942-05	WG489311
4-Bromofluorobenzene					101.8	75-128		WG489311
Dibromofluoromethane					99.01	79-125		WG489311
Toluene-d8					111.4	87-114		WG489311
1,2,4-Trimethylbenzene	mg/kg	2.23	0	.05	93.8	80-120	L469127-01	WG489398
1,3,5-Trimethylbenzene	mg/kg	2.17	0	.05	91.3	80-120	L469127-01	WG489398
Benzene	mg/kg	2.20	0	.05	92.7	32-137	L469127-01	WG489398
Ethylbenzene	mg/kg	2.21	0	.05	93.0	10-150	L469127-01	WG489398
Gasoline (C6-C10)	mg/kg	24.4	0	.5	103.	80-120	L469127-01	WG489398
m&p-Xylene	mg/kg	4.23	0	.1	89.1	14-141	L469127-01	WG489398
Methyl tert-butyl ether	mg/kg	3.10	0	.05	130.	24-151	L469127-01	WG489398
Naphthalene	mg/kg	1.93	0	.05	81.4	80-120	L469127-01	WG489398
o-Xylene	mg/kg	2.23	0	.05	93.7	10-157	L469127-01	WG489398
Toluene	mg/kg	2.18	0	.05	91.6	20-142	L469127-01	WG489398
a,a,a-Trifluorotoluene(PID)					102.4	80-120		WG489398
Arsenic,Dissolved	mg/l	1.14	0	1.13	101.	75-125	L469066-04	WG489231
Barium,Dissolved	mg/l	1.16	0.0429	1.13	98.8	75-125	L469066-04	WG489231

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Cadmium,Dissolved	mg/l	1.14	0	1.13	101.	75-125	L469066-04	WG489231
Chromium,Dissolved	mg/l	1.16	0.000100	1.13	103.	75-125	L469066-04	WG489231
Lead,Dissolved	mg/l	1.15	0	1.13	102.	75-125	L469066-04	WG489231
Selenium,Dissolved	mg/l	1.07	0.00820	1.13	94.0	75-125	L469066-04	WG489231
Silver,Dissolved	mg/l	0.0636	0.000300	1.13	5.60*	75-125	L469066-04	WG489231
Acenaphthene	mg/kg	0.129	0	.167	77.2	38-121	L468905-02	WG489072
Acenaphthylene	mg/kg	0.138	0	.167	82.9	39-120	L468905-02	WG489072
Anthracene	mg/kg	0.145	0	.167	86.5	35-133	L468905-02	WG489072
Benzo(a)anthracene	mg/kg	0.155	0.0290	.167	75.4	35-136	L468905-02	WG489072
Benzo(a)pyrene	mg/kg	0.152	0.0270	.167	74.7	37-131	L468905-02	WG489072
Benzo(b)fluoranthene	mg/kg	0.151	0.0330	.167	70.5	29-145	L468905-02	WG489072
Benzo(g,h,i)perylene	mg/kg	0.127	0.0210	.167	63.2	10-139	L468905-02	WG489072
Benzo(k)fluoranthene	mg/kg	0.139	0.0150	.167	74.4	31-140	L468905-02	WG489072
Chrysene	mg/kg	0.157	0.0310	.167	75.6	34-137	L468905-02	WG489072
Dibenz(a,h)anthracene	mg/kg	0.124	0	.167	74.3	21-132	L468905-02	WG489072
Fluoranthene	mg/kg	0.187	0.0590	.167	76.9	34-132	L468905-02	WG489072
Fluorene	mg/kg	0.139	0	.167	83.3	38-126	L468905-02	WG489072
Indeno(1,2,3-cd)pyrene	mg/kg	0.135	0.0190	.167	69.3	17-134	L468905-02	WG489072
Naphthalene	mg/kg	0.103	0	.167	61.5	24-122	L468905-02	WG489072
Phenanthrene	mg/kg	0.161	0.0250	.167	81.3	38-128	L468905-02	WG489072
Pyrene	mg/kg	0.155	0.0490	.167	63.7	35-141	L468905-02	WG489072
2-Fluorobiphenyl					70.67	37-123		WG489072
Nitrobenzene-d5					57.11	19-129		WG489072
p-Terphenyl-d14					81.29	34-149		WG489072
Benzene	mg/l	1.41	1.00	.025	66.1	16-158	L470546-01	WG490323
Tetrahydrofuran	mg/l	0.385	0.0476	.025	54.0	28-163	L470546-01	WG490323
4-Bromofluorobenzene					105.8	75-128		WG490323
Dibromofluoromethane					96.65	79-125		WG490323
Toluene-d8					100.8	87-114		WG490323

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Mercury,Dissolved	mg/l	0.00279	0.00279	93.0	70-130	0	20	L469307-01	WG488950
Mercury,Dissolved	mg/l	0.00281	0.00279	93.7	70-130	0.714	20	L469307-01	WG488950
Gasoline (C6-C10)	mg/l	0.535	0.505	107.	80-120	5.90	20	L469307-01	WG488973
a,a,a-Trifluorotoluene(PID)				99.81	80-120				WG488973
PCB 1016	mg/kg	0.169	0.156	101.	70-130	7.67	25	L469307-13	WG489032
PCB 1260	mg/kg	0.170	0.159	102.	10-197	6.35	39	L469307-13	WG489032
Decachlorobiphenyl				85.97	18.9-115.8				WG489032
Tetrachloro-m-xylene				98.52	31.8-115.7				WG489032
Mercury	mg/kg	11.0	14.5	0*	70-130	27.5*	20	L469301-04	WG489146
Mercury	mg/kg	0.264	0.248	95.6	70-130	6.25	20	L469362-01	WG489147
Arsenic	mg/kg	52.5	52.6	94.2	75-125	0.190	20	L469256-87	WG489124
Barium	mg/kg	216.	217.	112.	75-125	0.462	20	L469256-87	WG489124

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Cadmium	mg/kg	47.5	47.4	93.6	75-125	0.211	20	L469256-87	WG489124
Chromium	mg/kg	66.8	66.2	99.6	75-125	0.902	20	L469256-87	WG489124
Lead	mg/kg	67.4	67.7	92.8	75-125	0.444	20	L469256-87	WG489124
Selenium	mg/kg	44.2	44.1	88.4	75-125	0.227	20	L469256-87	WG489124
Silver	mg/kg	47.9	47.5	95.8	75-125	0.839	20	L469256-87	WG489124
1,1,1,2-Tetrachloroethane	mg/l	0.0258	0.0262	103.	45-152	1.59	21	L468942-05	WG489311
1,1,1-Trichloroethane	mg/l	0.0206	0.0215	82.6	31-161	4.02	23	L468942-05	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0280	0.0290	112.	49-149	3.57	22	L468942-05	WG489311
1,1,2-Trichloroethane	mg/l	0.0255	0.0267	102.	46-145	4.63	20	L468942-05	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0195	0.0217	77.8	14-168	11.1	24	L468942-05	WG489311
1,1-Dichloroethane	mg/l	0.0184	0.0211	73.5	30-159	13.8	21	L468942-05	WG489311
1,1-Dichloroethene	mg/l	0.0175	0.0199	69.9	10-162	13.0	23	L468942-05	WG489311
1,1-Dichloropropene	mg/l	0.0197	0.0204	78.7	14-162	3.68	23	L468942-05	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0287	0.0278	115.	32-143	3.31	33	L468942-05	WG489311
1,2,3-Trichloropropane	mg/l	0.0282	0.0284	113.	48-148	0.610	23	L468942-05	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0234	0.0241	93.8	36-141	2.66	25	L468942-05	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0272	0.0272	109.	27-142	0.0300	30	L468942-05	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0258	0.0264	103.	29-153	2.33	27	L468942-05	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0293	0.0309	117.	37-148	5.43	27	L468942-05	WG489311
1,2-Dibromoethane	mg/l	0.0265	0.0269	106.	41-149	1.52	21	L468942-05	WG489311
1,2-Dichlorobenzene	mg/l	0.0265	0.0270	106.	40-139	1.60	23	L468942-05	WG489311
1,2-Dichloroethane	mg/l	0.0191	0.0197	76.6	29-167	2.79	21	L468942-05	WG489311
1,2-Dichloropropane	mg/l	0.0213	0.0241	85.4	39-148	12.1	20	L468942-05	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0254	0.0258	101.	33-149	1.83	26	L468942-05	WG489311
1,3-Dichlorobenzene	mg/l	0.0280	0.0282	112.	32-148	0.630	24	L468942-05	WG489311
1,3-Dichloropropane	mg/l	0.0238	0.0244	95.0	44-142	2.60	20	L468942-05	WG489311
1,4-Dichlorobenzene	mg/l	0.0243	0.0255	97.1	32-136	5.01	23	L468942-05	WG489311
2,2-Dichloropropane	mg/l	0.0203	0.0215	81.3	14-158	5.76	23	L468942-05	WG489311
2-Butanone (MEK)	mg/l	0.107	0.109	85.5	32-151	1.86	26	L468942-05	WG489311
2-Chloroethyl vinyl ether	mg/l	0.179	0.194	143.	0-175	8.16	75	L468942-05	WG489311
2-Chlorotoluene	mg/l	0.0246	0.0252	98.6	35-147	2.29	24	L468942-05	WG489311
2-Hexanone	mg/l	0.143	0.141	114.	41-155	1.12	28	L468942-05	WG489311
4-Chlorotoluene	mg/l	0.0249	0.0257	99.6	33-147	3.13	25	L468942-05	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.130	0.138	104.	40-160	5.96	28	L468942-05	WG489311
Acetone	mg/l	0.113	0.131	90.4	25-157	14.5	26	L468942-05	WG489311
Acrolein	mg/l	0.0622	0.0752	49.8	0-179	18.8	39	L468942-05	WG489311
Acrylonitrile	mg/l	0.106	0.122	85.1	37-162	14.1	24	L468942-05	WG489311
Benzene	mg/l	0.0201	0.0207	80.5	16-158	3.07	21	L468942-05	WG489311
Bromobenzene	mg/l	0.0238	0.0244	95.3	37-147	2.53	23	L468942-05	WG489311
Bromochloromethane	mg/l	0.0219	0.0238	87.5	36-154	8.50	21	L468942-05	WG489311
Bromodichloromethane	mg/l	0.0230	0.0259	91.8	45-147	12.0	20	L468942-05	WG489311
Bromoform	mg/l	0.0330	0.0336	132.	38-152	1.74	20	L468942-05	WG489311
Bromomethane	mg/l	0.0169	0.0195	67.7	0-191	14.3	35	L468942-05	WG489311
Carbon tetrachloride	mg/l	0.0207	0.0225	83.0	22-168	8.27	24	L468942-05	WG489311
Chlorobenzene	mg/l	0.0242	0.0248	96.8	33-148	2.28	22	L468942-05	WG489311
Chlorodibromomethane	mg/l	0.0261	0.0267	104.	48-151	2.43	21	L468942-05	WG489311
Chloroethane	mg/l	0.0159	0.0183	63.5	4-176	14.3	27	L468942-05	WG489311
Chloroform	mg/l	0.0195	0.0217	78.0	37-147	10.7	21	L468942-05	WG489311
Chloromethane	mg/l	0.0178	0.0203	71.2	10-174	13.3	28	L468942-05	WG489311
cis-1,2-Dichloroethene	mg/l	0.0199	0.0216	79.5	29-156	8.45	22	L468942-05	WG489311
cis-1,3-Dichloropropene	mg/l	0.0228	0.0259	91.1	35-148	12.6	21	L468942-05	WG489311
Di-isopropyl ether	mg/l	0.0169	0.0191	67.6	39-160	12.4	21	L468942-05	WG489311
Dibromomethane	mg/l	0.0230	0.0262	92.1	36-152	13.1	20	L468942-05	WG489311
Dichlorodifluoromethane	mg/l	0.0179	0.0206	71.5	0-200	14.2	26	L468942-05	WG489311
Ethyl ether	mg/l	0.0163	0.0185	65.3	24-168	12.5	23	L468942-05	WG489311
Ethylbenzene	mg/l	0.0246	0.0245	98.6	29-150	0.410	24	L468942-05	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0347	0.0344	139.	28-144	0.880	33	L468942-05	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Isopropylbenzene	mg/l	0.0250	0.0253	100.	35-147	1.31	25	L468942-05	WG489311
Methyl tert-butyl ether	mg/l	0.0192	0.0219	76.9	24-167	13.0	22	L468942-05	WG489311
Methylene Chloride	mg/l	0.0189	0.0215	75.5	23-151	13.0	21	L468942-05	WG489311
n-Butylbenzene	mg/l	0.0248	0.0261	99.3	22-151	5.02	29	L468942-05	WG489311
n-Propylbenzene	mg/l	0.0249	0.0257	99.7	26-150	3.16	25	L468942-05	WG489311
Naphthalene	mg/l	0.0274	0.0266	110.	24-160	2.99	37	L468942-05	WG489311
p-Isopropyltoluene	mg/l	0.0234	0.0237	93.8	28-151	1.16	27	L468942-05	WG489311
sec-Butylbenzene	mg/l	0.0276	0.0278	110.	32-149	0.840	26	L468942-05	WG489311
Styrene	mg/l	0.0231	0.0236	92.6	38-149	2.00	23	L468942-05	WG489311
tert-Butylbenzene	mg/l	0.0261	0.0266	104.	36-149	1.91	26	L468942-05	WG489311
Tetrachloroethene	mg/l	0.0285	0.0283	114.	13-157	0.770	24	L468942-05	WG489311
Tetrahydrofuran	mg/l	0.0192	0.0211	76.6	28-163	9.45	27	L468942-05	WG489311
Toluene	mg/l	0.0220	0.0250	88.0	22-152	12.5	22	L468942-05	WG489311
trans-1,2-Dichloroethene	mg/l	0.0195	0.0223	78.1	11-160	13.3	23	L468942-05	WG489311
trans-1,3-Dichloropropene	mg/l	0.0256	0.0285	102.	33-153	10.9	22	L468942-05	WG489311
Trichloroethene	mg/l	0.0233	0.0228	93.4	18-163	2.50	21	L468942-05	WG489311
Trichlorofluoromethane	mg/l	0.0193	0.0219	77.4	10-177	12.6	24	L468942-05	WG489311
Vinyl chloride	mg/l	0.0190	0.0213	76.1	0-179	11.2	26	L468942-05	WG489311
Xylenes, Total	mg/l	0.0757	0.0763	101.	27-151	0.720	23	L468942-05	WG489311
4-Bromofluorobenzene				99.42	75-128				WG489311
Dibromofluoromethane				91.00	79-125				WG489311
Toluene-d8				100.3	87-114				WG489311
1,2,4-Trimethylbenzene	mg/kg	2.33	2.23	98.2	80-120	4.62	20	L469127-01	WG489398
1,3,5-Trimethylbenzene	mg/kg	2.22	2.17	93.6	80-120	2.39	20	L469127-01	WG489398
Benzene	mg/kg	2.24	2.20	94.1	32-137	1.54	39	L469127-01	WG489398
Ethylbenzene	mg/kg	2.30	2.21	96.7	10-150	3.87	44	L469127-01	WG489398
Gasoline (C6-C10)	mg/kg	26.4	24.4	111.	80-120	7.61	20	L469127-01	WG489398
m&p-Xylene	mg/kg	4.49	4.23	94.6	14-141	5.93	44	L469127-01	WG489398
Methyl tert-butyl ether	mg/kg	2.83	3.10	119.	24-151	9.08	37	L469127-01	WG489398
Naphthalene	mg/kg	2.06	1.93	86.8	80-120	6.41	20	L469127-01	WG489398
o-Xylene	mg/kg	2.32	2.23	97.8	10-157	4.22	44	L469127-01	WG489398
Toluene	mg/kg	2.21	2.18	93.2	20-142	1.71	42	L469127-01	WG489398
a,a,a-Trifluorotoluene(PID)				101.6	80-120				WG489398
Arsenic,Dissolved	mg/l	1.17	1.14	104.	75-125	2.60	20	L469066-04	WG489231
Barium,Dissolved	mg/l	1.22	1.16	104.	75-125	5.04	20	L469066-04	WG489231
Cadmium,Dissolved	mg/l	1.19	1.14	105.	75-125	4.29	20	L469066-04	WG489231
Chromium,Dissolved	mg/l	1.21	1.16	107.	75-125	4.22	20	L469066-04	WG489231
Lead,Dissolved	mg/l	1.19	1.15	105.	75-125	3.42	20	L469066-04	WG489231
Selenium,Dissolved	mg/l	1.11	1.07	97.5	75-125	3.67	20	L469066-04	WG489231
Silver,Dissolved	mg/l	0.0643	0.0636	5.66*	75-125	1.09	20	L469066-04	WG489231
Acenaphthene	mg/kg	0.126	0.129	75.7	38-121	1.97	23	L468905-02	WG489072
Acenaphthylene	mg/kg	0.136	0.138	81.3	39-120	1.94	22	L468905-02	WG489072
Anthracene	mg/kg	0.143	0.145	85.8	35-133	0.907	23	L468905-02	WG489072
Benzo(a)anthracene	mg/kg	0.178	0.155	89.5	35-136	14.1	23	L468905-02	WG489072
Benzo(a)pyrene	mg/kg	0.164	0.152	81.8	37-131	7.49	22	L468905-02	WG489072
Benzo(b)fluoranthene	mg/kg	0.169	0.151	81.4	29-145	11.3	33	L468905-02	WG489072
Benzo(g,h,i)perylene	mg/kg	0.113	0.127	55.2	10-139	11.1	26	L468905-02	WG489072
Benzo(k)fluoranthene	mg/kg	0.143	0.139	76.4	31-140	2.39	34	L468905-02	WG489072
Chrysene	mg/kg	0.173	0.157	84.8	34-137	9.33	23	L468905-02	WG489072
Dibenz(a,h)anthracene	mg/kg	0.110	0.124	65.9	21-132	12.0	25	L468905-02	WG489072
Fluoranthene	mg/kg	0.224	0.187	98.7	34-132	17.7	24	L468905-02	WG489072
Fluorene	mg/kg	0.133	0.139	79.4	38-126	4.70	23	L468905-02	WG489072
Indeno(1,2,3-cd)pyrene	mg/kg	0.125	0.135	63.4	17-134	7.54	25	L468905-02	WG489072

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Naphthalene	mg/kg	0.0966	0.103	57.8	24-122	6.23	29	L468905-02	WG489072
Phenanthrene	mg/kg	0.160	0.161	80.6	38-128	0.737	25	L468905-02	WG489072
Pyrene	mg/kg	0.199	0.155	89.7	35-141	24.5	25	L468905-02	WG489072
2-Fluorobiphenyl				68.00	37-123				WG489072
Nitrobenzene-d5				49.17	19-129				WG489072
p-Terphenyl-d14				80.14	34-149				WG489072
Benzene	mg/l	1.60	1.41	96.0	16-158	12.4	21	L470546-01	WG490323
Tetrahydrofuran	mg/l	0.439	0.385	62.6	28-163	13.1	27	L470546-01	WG490323
4-Bromofluorobenzene				103.8	75-128				WG490323
Dibromofluoromethane				97.67	79-125				WG490323
Toluene-d8				100.4	87-114				WG490323

Batch number /Run number / Sample number cross reference

WG488950: R1291230: L469307-01 02 03 04 05 06
WG489032: R1291629: L469307-12 13 14 15 16
WG488973: R1291709: L469307-01 02 03 04 05 06
WG488963: R1291728: L469307-03 04 05 06
WG489147: R1293949: L469307-12 13 14 15 16
WG489146: R1293951: L469307-09 10 11
WG489264: R1294268: L469307-01 02 03 04 05 06
WG489077: R1295249: L469307-01 02 03 04 05 06
WG489087: R1296148: L469307-09 10 11 12 13 14 15 16
WG489557: R1296670: L469307-09 10 11 12 13 14 15 16
WG489124: R1297969: L469307-09 10 11 12 13 14 15 16
WG489311: R1298228: L469307-01 02 03 04 05 06 07 08
WG489398: R1299288: L469307-09 10 11 12 13 14 15 16
WG489231: R1299671: L469307-01 02 03 04 05 06
WG489072: R1300168: L469307-09 10 11 12 13 14 15 16
WG490323: R1301229: L469307-01 07

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469307

July 30, 2010

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address:
Pinnacle
11541 95th Ave N.
Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody
Page ___ of ___

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

F003

Report to: Steve Carlson
Email to: scarlson@pinenq.com
Project Description: CPED-Snelling
City/State Collected: Mpls, MN
Phone: 763-315-4501
FAX: " " 4507
Client Project #: A010253.001
ESC Key:
Collected by:
Site/Facility ID#: CPED-Snelling
P.O.#:
Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

CoCode: (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOC	GRO	DRO	PAH	metals (dissolved) (RCRA metals)	PCBs	Remarks/Contaminant	Sample # (lab only)
PP-1 H2O	6	GW	33'	7-13	0930	9	X	X	X	X	X			L469307-01
PP-2 H2O	6	GW	33'	"	1230	9	X	X	X	X	X			02
PP-3 H2O	6	GW	33'	"	1530	9	X	X	X	X	X	X		03

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks:

pH ___ Temp ___
Flow ___ Other ___

9632626513809
9632626513834

Relinquished by: (Signature)	Date: 7-15	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Jeray

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ___

Temp: 3.7°C	Bottles Received: 111	Date: 7/16/10	Time: 0900

Condition: ok (lab use only)
CoC Seals Intact ___ Y ___ N ✓ NA
pH Checked: L2
NCF:

Company Name/Address: Pinnacle Engineering Inc. 11541 95th Ave N Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Steve Carlson

Email to: scarlson@pineng.com

Project Description: CPED - Snelling

City/State Collected: MPLS/MN

Phone: 763-315-4501
FAX:

Client Project #: R010253.001

ESC Key:

Collected by: Matt Witzel

Site/Facility ID#: CPED

P.O.#:

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:

Email? __No __Yes
FAX? __No __Yes

CoCode (lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DRO/1L/HNO3/HCl	GRO/40ml/HCl	VOC/40ml/HCl	PAH/1L/none	RCRA metals dissolved/250ml/nitric	PCB/1L/None	PAH/PB/1L/none	Remarks/Contaminant	Sample # (lab only)
PP-4	Grab	Ww	33	7-14	1200	10	X	X	X	X	X	X			L469307-04
PP-5			33		1530	9	X	X	X		X		X		05
PP-6			32		1500	9	X	X	X		X		X		06
F-blank			—		1530	2			X						07
Trip Blank	—	—	—	—	—	1			X						08

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date: 7-14-10	Time: 1900	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐	Condition: OK (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature) 3.8°C	Temp: 3.8°C / Bottles Received: 111	CoC Seals Intact ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/16/10 / Time: 0900	pH Checked: / NCF:

Company Name/Address:
Pinnacle
11541 95th Avenue N.
Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody
Page ___ of ___

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Steve Carlson
Email to: scarlson@pinnaq.com
Project Description: CPED - Snelling
City/State Collected: Mpls, MN
Phone: 763-315-4501
FAX: " " 4507
Client Project #: R010253.001
ESC Key:
Collected by: Eric Simonson
Site/Facility ID#: CPED-Snelling
P.O.#:

Collected by (signature):
Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

CoCode (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	GRO/BTEX	DRO	PCBs metals	PAH	% solids	PCB	Remarks/Contaminant	Sample # (lab only)
PP-1 4-5'	G	SS	4-5	7-12-10	1100	6	X	X	X	X	X			L469307-09
PP-1 24-28	G	SS	24-28	7-13	0900	6	X	X	X	X	X			10
PP-2 12-16'	G	SS	12-16	7-12-10	1530	6	X	X	X	X	X			11
PP-3 16-18'	G	SS	16-18	7-13	1515	7	X	X	X	X	X	X		12

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date: 7-15	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.9°C / Bottles Received: 111	CoC Seals Intact ___ Y ___ N ___ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/16/10 / Time: 0900	pH Checked: / NCF:

9632 6251 3794
9632 6251 3614

Company Name/Address: Pinnacle Engineering Inc. 11541 95th Ave N Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Steve Carlson

Email to: scarlson@pinengi.com

Project Description: CPED - Snelling

City/State Collected: Minneapolis/MN

Phone: 763-315-4501

FAX:

Client Project #: R01C253.001

ESC Key:

Collected by: Matt Witzel

Site/Facility ID#: CPED-Snelling

P.O.#:

Collected by (signature): Matt Witzel

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:

Email? __No ✓Yes

FAX? __No__Yes

CoCode: (lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DRO/GRO/none	GRO/BTEX/MeOH	PAH/4oz/none	RCRA-MetAls/2oz/none	PCB/4oz/none	% Solids/2oz/none	Remarks/Contaminant	Sample # (lab only)
PP-4-24	Grab	SS	24	7-14-10	1000	7	X	X	X	X	X	X		L469307-13
PP-5-17-18	Grab	SS	17-18	7-14-10	1430	7	X	X	X	X	X	X		14
PP-6 2½-3'	Grab	SS	2½-3	7-14-10	1400	7	X	X	X	X	X	X		15
PP-6 22½-23½	Grab	SS	22½-23½	7-14-10	1430	7	X	X	X	X	X	X		16

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
Matt Witzel	7-14-10	1900	[redacted]		ok
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.8° / Bottles Received: 111	CoC Seals Intact ___ Y ___ N ___ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/16/10 / Time: 0900	pH Checked: / NCF:

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

Report Summary

Monday July 26, 2010

Report Number: L469437
Samples Received: 07/17/10
Client Project: R010253.001

Description: CPED - Snelling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: _____

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences.
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-01

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-7 H2O 33 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/20/10	1
Arsenic,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.16	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/21/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.0		% Rec.	8021	07/21/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-01

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-7 H2O 33 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-01

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-7 H2O 33 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 11:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	123.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	79.7		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	BDL	0.10	mg/l	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	102.		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/26/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/26/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/26/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Surrogate Recovery						
Nitrobenzene-d5	70.1		% Rec.	8270C	07/26/10	1
2-Fluorobiphenyl	79.0		% Rec.	8270C	07/26/10	1
p-Terphenyl-d14	83.8		% Rec.	8270C	07/26/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/26/10 17:05 Printed: 07/26/10 17:05

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-02

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-8 H2O 33 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury,Dissolved	BDL	0.00020	mg/l	7470A	07/20/10	1
Arsenic,Dissolved	0.024	0.020	mg/l	6010B	07/23/10	1
Barium,Dissolved	0.36	0.0050	mg/l	6010B	07/23/10	1
Cadmium,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Chromium,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
Lead,Dissolved	BDL	0.0050	mg/l	6010B	07/23/10	1
Selenium,Dissolved	BDL	0.020	mg/l	6010B	07/23/10	1
Silver,Dissolved	BDL	0.010	mg/l	6010B	07/23/10	1
WI DNR						
Gasoline (C6-C10)	BDL	0.10	mg/l	GROWM/8015M	07/21/10	1
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.4		% Rec.	8021	07/21/10	1
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-02

Site ID :

Project # : R010253.001

Date Received : July 17, 2010
Description : CPED - Snelling

Sample ID : PP-8 H2O 33 FT

Collected By : Matt Witzel
Collection Date : 07/15/10 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26, 2010

ESC Sample # : L469437-02

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-8 H2O 33 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 13:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	125.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	84.1		% Rec.	8260B	07/21/10	1
TPH (GC/FID) High Fraction	BDL	0.10	mg/l	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	99.3		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Acenaphthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Acenaphthylene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(a)anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(a)pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(b)fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(g,h,i)perylene	BDL	0.0010	mg/l	8270C	07/26/10	1
Benzo(k)fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Chrysene	BDL	0.0010	mg/l	8270C	07/26/10	1
Dibenz(a,h)anthracene	BDL	0.0010	mg/l	8270C	07/26/10	1
Fluoranthene	BDL	0.0010	mg/l	8270C	07/26/10	1
Fluorene	BDL	0.0010	mg/l	8270C	07/26/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Naphthalene	BDL	0.0010	mg/l	8270C	07/26/10	1
Phenanthrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Pyrene	BDL	0.0010	mg/l	8270C	07/26/10	1
Surrogate Recovery						
Nitrobenzene-d5	73.3		% Rec.	8270C	07/26/10	1
2-Fluorobiphenyl	88.1		% Rec.	8270C	07/26/10	1
p-Terphenyl-d14	81.2		% Rec.	8270C	07/26/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/26/10 17:05 Printed: 07/26/10 17:05

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-03

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : TRIP BLANK

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Volatile Organics						
Acetone	BDL	0.050	mg/l	8260B	07/21/10	1
Acrolein	BDL	0.050	mg/l	8260B	07/21/10	1
Acrylonitrile	BDL	0.010	mg/l	8260B	07/21/10	1
Allyl chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
Benzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromochloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromodichloromethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromoform	BDL	0.0010	mg/l	8260B	07/21/10	1
Bromomethane	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
sec-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
tert-Butylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Carbon tetrachloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Chlorodibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Chloroethane	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Chloroethyl vinyl ether	BDL	0.050	mg/l	8260B	07/21/10	1
Chloroform	BDL	0.0050	mg/l	8260B	07/21/10	1
Chloromethane	BDL	0.0025	mg/l	8260B	07/21/10	1
2-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
4-Chlorotoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dibromo-3-Chloropropane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2-Dibromoethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Dibromomethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,4-Dichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Dichlorodifluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,1-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,2-Dichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
cis-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
trans-1,3-Dichloropropene	BDL	0.0010	mg/l	8260B	07/21/10	1
2,2-Dichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
Di-isopropyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Ethyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-03

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : TRIP BLANK

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 00:00

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Hexachloro-1,3-butadiene	BDL	0.0010	mg/l	8260B	07/21/10	1
Isopropylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
p-Isopropyltoluene	BDL	0.0010	mg/l	8260B	07/21/10	1
2-Butanone (MEK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methylene Chloride	BDL	0.0050	mg/l	8260B	07/21/10	1
2-Hexanone	BDL	0.010	mg/l	8260B	07/21/10	1
4-Methyl-2-pentanone (MIBK)	BDL	0.010	mg/l	8260B	07/21/10	1
Methyl tert-butyl ether	BDL	0.0010	mg/l	8260B	07/21/10	1
Naphthalene	BDL	0.0050	mg/l	8260B	07/21/10	1
n-Propylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Styrene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2,2-Tetrachloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrachloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Tetrahydrofuran	BDL	0.0050	mg/l	8260B	07/21/10	1
Toluene	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trichlorobenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,1-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,1,2-Trichloroethane	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichloroethene	BDL	0.0010	mg/l	8260B	07/21/10	1
Trichlorofluoromethane	BDL	0.0050	mg/l	8260B	07/21/10	1
1,2,3-Trichloropropane	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,4-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,2,3-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
1,3,5-Trimethylbenzene	BDL	0.0010	mg/l	8260B	07/21/10	1
Vinyl chloride	BDL	0.0010	mg/l	8260B	07/21/10	1
Xylenes, Total	BDL	0.0030	mg/l	8260B	07/21/10	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	07/21/10	1
Dibromofluoromethane	114.		% Rec.	8260B	07/21/10	1
4-Bromofluorobenzene	82.0		% Rec.	8260B	07/21/10	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/26/10 17:05 Printed: 07/26/10 17:05

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-04

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-7 23-24 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 10:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	97.6		%	2540G	07/22/10	1
Mercury	BDL	0.020	mg/kg	7471	07/20/10	1
Arsenic	1.4	1.0	mg/kg	6010B	07/20/10	1
Barium	17.	0.26	mg/kg	6010B	07/20/10	1
Cadmium	BDL	0.26	mg/kg	6010B	07/20/10	1
Chromium	5.7	0.51	mg/kg	6010B	07/20/10	1
Lead	8.2	0.26	mg/kg	6010B	07/20/10	1
Selenium	1.8	1.0	mg/kg	6010B	07/20/10	1
Silver	BDL	0.51	mg/kg	6010B	07/20/10	1
PVOCGRO						
Benzene	BDL	0.023	mg/kg	8021	07/23/10	45.5
Toluene	BDL	0.23	mg/kg	8021	07/23/10	45.5
Ethylbenzene	BDL	0.023	mg/kg	8021	07/23/10	45.5
m&p-Xylene	BDL	0.047	mg/kg	8021	07/23/10	45.5
o-Xylene	BDL	0.023	mg/kg	8021	07/23/10	45.5
Methyl tert-butyl ether	BDL	0.047	mg/kg	8021	07/23/10	45.5
Gasoline (C6-C10)	BDL	4.7	mg/kg	8015	07/23/10	45.5
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.9		% Rec.	8021	07/23/10	45.5
TPH (GC/FID) High Fraction	BDL	4.1	mg/kg	DROWM/8015M	07/21/10	1
Surrogate recovery(%)						
Triacontane	91.0		% Rec.	DROWM/8015M	07/21/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Acenaphthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Acenaphthylene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(a)anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(a)pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(b)fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(g,h,i)perylene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(k)fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Chrysene	BDL	0.034	mg/kg	8270C	07/26/10	1
Dibenz(a,h)anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Fluorene	BDL	0.034	mg/kg	8270C	07/26/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Naphthalene	BDL	0.034	mg/kg	8270C	07/26/10	1
Phenanthrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-04

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-7 23-24 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 10:30

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	65.5		% Rec.	8270C	07/26/10	1
2-Fluorobiphenyl	68.0		% Rec.	8270C	07/26/10	1
p-Terphenyl-d14	70.0		% Rec.	8270C	07/26/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/26/10 17:05 Printed: 07/26/10 17:05

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-05

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-8 16-19 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 13:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Total Solids	96.7		%	2540G	07/22/10	1
Mercury	BDL	0.021	mg/kg	7471	07/20/10	1
Arsenic	BDL	1.0	mg/kg	6010B	07/20/10	1
Barium	21.	0.26	mg/kg	6010B	07/20/10	1
Cadmium	BDL	0.26	mg/kg	6010B	07/20/10	1
Chromium	5.4	0.52	mg/kg	6010B	07/20/10	1
Lead	9.0	0.26	mg/kg	6010B	07/20/10	1
Selenium	1.2	1.0	mg/kg	6010B	07/20/10	1
Silver	BDL	0.52	mg/kg	6010B	07/20/10	1
PVOCGRO						
Benzene	BDL	0.024	mg/kg	8021	07/23/10	46
Toluene	BDL	0.24	mg/kg	8021	07/23/10	46
Ethylbenzene	BDL	0.024	mg/kg	8021	07/23/10	46
m&p-Xylene	BDL	0.048	mg/kg	8021	07/23/10	46
o-Xylene	BDL	0.024	mg/kg	8021	07/23/10	46
Methyl tert-butyl ether	BDL	0.048	mg/kg	8021	07/23/10	46
Gasoline (C6-C10)	BDL	4.8	mg/kg	8015	07/23/10	46
Surrogate recovery-%						
a,a,a-Trifluorotoluene(PID)	99.5		% Rec.	8021	07/23/10	46
TPH (GC/FID) High Fraction	7.0	4.1	mg/kg	DROWM/8015M	07/22/10	1
Surrogate recovery(%)						
Triacontane	90.8		% Rec.	DROWM/8015M	07/22/10	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Acenaphthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Acenaphthylene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(a)anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(a)pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(b)fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(g,h,i)perylene	BDL	0.034	mg/kg	8270C	07/26/10	1
Benzo(k)fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Chrysene	BDL	0.034	mg/kg	8270C	07/26/10	1
Dibenz(a,h)anthracene	BDL	0.034	mg/kg	8270C	07/26/10	1
Fluoranthene	BDL	0.034	mg/kg	8270C	07/26/10	1
Fluorene	BDL	0.034	mg/kg	8270C	07/26/10	1
Indeno(1,2,3-cd)pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Naphthalene	BDL	0.034	mg/kg	8270C	07/26/10	1
Phenanthrene	BDL	0.034	mg/kg	8270C	07/26/10	1
Pyrene	BDL	0.034	mg/kg	8270C	07/26/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Steve Carlson
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 26,2010

ESC Sample # : L469437-05

Date Received : July 17, 2010
Description : CPED - Snelling

Site ID :

Sample ID : PP-8 16-19 FT

Project # : R010253.001

Collected By : Matt Witzel
Collection Date : 07/15/10 13:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Surrogate Recovery						
Nitrobenzene-d5	69.7		% Rec.	8270C	07/26/10	1
2-Fluorobiphenyl	72.6		% Rec.	8270C	07/26/10	1
p-Terphenyl-d14	84.6		% Rec.	8270C	07/26/10	1

Results listed are dry weight basis.
BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
This report shall not be reproduced, except in full, without the written approval from ESC.
The reported analytical results relate only to the sample submitted
Reported: 07/26/10 17:05 Printed: 07/26/10 17:05

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L469437-01	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469437-02	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469437-03	WG489311	SAMP	Hexachloro-1,3-butadiene	R1298228	J4
L469437-04	WG489276	SAMP	Fluorene	R1294908	J3
L469437-05	WG489221	SAMP	Arsenic	R1296469	P1
	WG489221	SAMP	Chromium	R1296469	J3
	WG489221	SAMP	Selenium	R1296469	P1
	WG489276	SAMP	Fluorene	R1294908	J3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
07/26/10 at 17:05:58

TSR Signing Reports: 134
R5 - Desired TAT

Log arsenic water as ASG

Sample: L469437-01 Account: PINNENGMN Received: 07/17/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/26/10 17:05
Field-filtered for dissolved metals.
Sample: L469437-02 Account: PINNENGMN Received: 07/17/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/26/10 17:05
Field-filtered for dissolved metals.
Sample: L469437-03 Account: PINNENGMN Received: 07/17/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/26/10 17:05

Sample: L469437-04 Account: PINNENGMN Received: 07/17/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/26/10 17:05

Sample: L469437-05 Account: PINNENGMN Received: 07/17/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/26/10 17:05

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Mercury,Dissolved	< .0002	mg/l			WG489160	07/20/10 10:08
Mercury	< .02	mg/kg			WG489147	07/20/10 11:45
Acenaphthene	< .0002	mg/l			WG489264	07/20/10 12:34
Acenaphthylene	< .0002	mg/l			WG489264	07/20/10 12:34
Anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(a)anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(a)pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(b)fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(g,h,i)perylene	< .0002	mg/l			WG489264	07/20/10 12:34
Benzo(k)fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Chrysene	< .0002	mg/l			WG489264	07/20/10 12:34
Dibenz(a,h)anthracene	< .0002	mg/l			WG489264	07/20/10 12:34
Fluoranthene	< .0002	mg/l			WG489264	07/20/10 12:34
Fluorene	< .0002	mg/l			WG489264	07/20/10 12:34
Indeno(1,2,3-cd)pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
Naphthalene	< .0002	mg/l			WG489264	07/20/10 12:34
Phenanthrene	< .0002	mg/l			WG489264	07/20/10 12:34
Pyrene	< .0002	mg/l			WG489264	07/20/10 12:34
2-Fluorobiphenyl		% Rec.	60.33	32-128	WG489264	07/20/10 12:34
Nitrobenzene-d5		% Rec.	45.05	15-137	WG489264	07/20/10 12:34
p-Terphenyl-d14		% Rec.	69.58	28-146	WG489264	07/20/10 12:34
Acenaphthene	< .033	mg/kg			WG489276	07/21/10 11:25
Acenaphthylene	< .033	mg/kg			WG489276	07/21/10 11:25
Anthracene	< .033	mg/kg			WG489276	07/21/10 11:25
Benzo(a)anthracene	< .033	mg/kg			WG489276	07/21/10 11:25
Benzo(a)pyrene	< .033	mg/kg			WG489276	07/21/10 11:25
Benzo(b)fluoranthene	< .033	mg/kg			WG489276	07/21/10 11:25
Benzo(g,h,i)perylene	< .033	mg/kg			WG489276	07/21/10 11:25
Benzo(k)fluoranthene	< .033	mg/kg			WG489276	07/21/10 11:25
Chrysene	< .033	mg/kg			WG489276	07/21/10 11:25
Dibenz(a,h)anthracene	< .033	mg/kg			WG489276	07/21/10 11:25
Fluoranthene	< .033	mg/kg			WG489276	07/21/10 11:25
Fluorene	< .033	mg/kg			WG489276	07/21/10 11:25
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG489276	07/21/10 11:25
Naphthalene	< .033	mg/kg			WG489276	07/21/10 11:25
Phenanthrene	< .033	mg/kg			WG489276	07/21/10 11:25
Pyrene	< .033	mg/kg			WG489276	07/21/10 11:25
2-Fluorobiphenyl		% Rec.	77.69	37-123	WG489276	07/21/10 11:25
Nitrobenzene-d5		% Rec.	59.16	19-129	WG489276	07/21/10 11:25
p-Terphenyl-d14		% Rec.	99.75	34-149	WG489276	07/21/10 11:25
TPH (GC/FID) High Fraction	< 4	ppm			WG489087	07/21/10 15:47
Triacontane		% Rec.	96.38	50-150	WG489087	07/21/10 15:47
Gasoline (C6-C10)	< .1	mg/l			WG489358	07/20/10 17:05
a,a,a-Trifluorotoluene(PID)		% Rec.	99.04	80-120	WG489358	07/20/10 17:05
Arsenic	< 1	mg/kg			WG489221	07/20/10 18:34
Barium	< .25	mg/kg			WG489221	07/20/10 18:34
Cadmium	< .25	mg/kg			WG489221	07/20/10 18:34

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Chromium	< .5	mg/kg			WG489221	07/20/10 18:34
Lead	< .25	mg/kg			WG489221	07/20/10 18:34
Selenium	< 1	mg/kg			WG489221	07/20/10 18:34
Silver	< .5	mg/kg			WG489221	07/20/10 18:34
Total Solids	< .1	%			WG489561	07/22/10 10:49
TPH (GC/FID) High Fraction	< .1	ppm			WG489078	07/22/10 11:03
Triacontane		% Rec.	105.7	50-150	WG489078	07/22/10 11:03
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,1-Trichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2-Trichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
1,1-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,2,3-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,4-Trichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2,4-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG489311	07/21/10 12:16
1,2-Dibromoethane	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichloroethane	< .001	mg/l			WG489311	07/21/10 12:16
1,2-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,3,5-Trimethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,3-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
1,3-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
1,4-Dichlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
2,2-Dichloropropane	< .001	mg/l			WG489311	07/21/10 12:16
2-Butanone (MEK)	< .01	mg/l			WG489311	07/21/10 12:16
2-Chloroethyl vinyl ether	< .05	mg/l			WG489311	07/21/10 12:16
2-Chlorotoluene	< .001	mg/l			WG489311	07/21/10 12:16
2-Hexanone	< .01	mg/l			WG489311	07/21/10 12:16
4-Chlorotoluene	< .001	mg/l			WG489311	07/21/10 12:16
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG489311	07/21/10 12:16
Acetone	< .05	mg/l			WG489311	07/21/10 12:16
Acrolein	< .05	mg/l			WG489311	07/21/10 12:16
Acrylonitrile	< .01	mg/l			WG489311	07/21/10 12:16
Allyl chloride	< .005	mg/l			WG489311	07/21/10 12:16
Benzene	< .001	mg/l			WG489311	07/21/10 12:16
Bromobenzene	< .001	mg/l			WG489311	07/21/10 12:16
Bromochloromethane	< .001	mg/l			WG489311	07/21/10 12:16
Bromodichloromethane	< .001	mg/l			WG489311	07/21/10 12:16
Bromoform	< .001	mg/l			WG489311	07/21/10 12:16
Bromomethane	< .005	mg/l			WG489311	07/21/10 12:16
Carbon tetrachloride	< .001	mg/l			WG489311	07/21/10 12:16
Chlorobenzene	< .001	mg/l			WG489311	07/21/10 12:16
Chlorodibromomethane	< .001	mg/l			WG489311	07/21/10 12:16
Chloroethane	< .001	mg/l			WG489311	07/21/10 12:16
Chloroform	< .005	mg/l			WG489311	07/21/10 12:16
Chloromethane	< .001	mg/l			WG489311	07/21/10 12:16
cis-1,2-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
cis-1,3-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
Di-isopropyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Dibromomethane	< .001	mg/l			WG489311	07/21/10 12:16
Dichlorodifluoromethane	< .005	mg/l			WG489311	07/21/10 12:16
Ethyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Ethylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Hexachloro-1,3-butadiene	< .001	mg/l			WG489311	07/21/10 12:16
Isopropylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Methyl tert-butyl ether	< .001	mg/l			WG489311	07/21/10 12:16
Methylene Chloride	< .005	mg/l			WG489311	07/21/10 12:16
n-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
n-Propylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Naphthalene	< .005	mg/l			WG489311	07/21/10 12:16
p-Isopropyltoluene	< .001	mg/l			WG489311	07/21/10 12:16
sec-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Styrene	< .001	mg/l			WG489311	07/21/10 12:16
tert-Butylbenzene	< .001	mg/l			WG489311	07/21/10 12:16
Tetrachloroethene	< .001	mg/l			WG489311	07/21/10 12:16
Tetrahydrofuran	< .005	mg/l			WG489311	07/21/10 12:16
Toluene	< .005	mg/l			WG489311	07/21/10 12:16
trans-1,2-Dichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
trans-1,3-Dichloropropene	< .001	mg/l			WG489311	07/21/10 12:16
Trichloroethene	< .001	mg/l			WG489311	07/21/10 12:16
Trichlorofluoromethane	< .005	mg/l			WG489311	07/21/10 12:16
Vinyl chloride	< .001	mg/l			WG489311	07/21/10 12:16
Xylenes, Total	< .003	mg/l			WG489311	07/21/10 12:16
4-Bromofluorobenzene		% Rec.	96.60	75-128	WG489311	07/21/10 12:16
Dibromofluoromethane		% Rec.	108.0	79-125	WG489311	07/21/10 12:16
Toluene-d8		% Rec.	99.21	87-114	WG489311	07/21/10 12:16
Arsenic,Dissolved	< .02	mg/l			WG489466	07/23/10 10:14
Barium,Dissolved	< .005	mg/l			WG489466	07/23/10 10:14
Cadmium,Dissolved	< .005	mg/l			WG489466	07/23/10 10:14
Chromium,Dissolved	< .01	mg/l			WG489466	07/23/10 10:14
Lead,Dissolved	< .005	mg/l			WG489466	07/23/10 10:14
Selenium,Dissolved	< .02	mg/l			WG489466	07/23/10 10:14
Silver,Dissolved	< .01	mg/l			WG489466	07/23/10 10:14
1,2,4-Trimethylbenzene	< .001	mg/kg			WG489398	07/22/10 18:19
1,3,5-Trimethylbenzene	< .001	mg/kg			WG489398	07/22/10 18:19
Benzene	< .0005	mg/kg			WG489398	07/22/10 18:19
Ethylbenzene	< .0005	mg/kg			WG489398	07/22/10 18:19
Gasoline (C6-C10)	< .1	mg/kg			WG489398	07/22/10 18:19
m&p-Xylene	< .001	mg/kg			WG489398	07/22/10 18:19
Methyl tert-butyl ether	< .001	mg/kg			WG489398	07/22/10 18:19
Naphthalene	< .005	mg/kg			WG489398	07/22/10 18:19
o-Xylene	< .0005	mg/kg			WG489398	07/22/10 18:19
Toluene	< .005	mg/kg			WG489398	07/22/10 18:19
a,a,a-Trifluorotoluene(PID)		% Rec.	98.92	80-120	WG489398	07/22/10 18:19

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Mercury,Dissolved	mg/l	0	0	0	20	L469437-01	WG489160
Mercury	mg/kg	0.0150	0.0250	50.0*	20	L469362-01	WG489147

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
			Duplicate				
Arsenic	mg/kg	1.20	0	NA	20	L469437-05	WG489221
Barium	mg/kg	24.0	20.0	19.8	20	L469437-05	WG489221
Cadmium	mg/kg	0	0	0	20	L469437-05	WG489221
Chromium	mg/kg	8.80	5.30	49.9*	20	L469437-05	WG489221
Lead	mg/kg	8.40	8.80	4.41	20	L469437-05	WG489221
Selenium	mg/kg	1.60	1.10	34.0*	20	L469437-05	WG489221
Silver	mg/kg	0	0	0	20	L469437-05	WG489221
Total Solids	%	73.0	73.1	0.553	5	L469453-03	WG489561
Arsenic,Dissolved	mg/l	0	0.00300	NA	20	L469268-03	WG489466
Barium,Dissolved	mg/l	0.330	0.325	2.43	20	L469268-03	WG489466
Cadmium,Dissolved	mg/l	0	0	0	20	L469268-03	WG489466
Chromium,Dissolved	mg/l	0	0.00200	NA	20	L469268-03	WG489466
Lead,Dissolved	mg/l	0	0.00331	NA	20	L469268-03	WG489466
Selenium,Dissolved	mg/l	0	0	0	20	L469268-03	WG489466
Silver,Dissolved	mg/l	0	0.00360	NA	20	L469268-03	WG489466

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
			Laboratory Control Sample			
Mercury,Dissolved	mg/l	.003	0.00291	97.0	85-115	WG489160
Mercury	mg/kg	8.77	10.2	116.	71.6-127.7	WG489147
Acenaphthene	mg/l	.005	0.00407	81.5	47-121	WG489264
Acenaphthylene	mg/l	.005	0.00444	88.7	46-123	WG489264
Anthracene	mg/l	.005	0.00476	95.1	50-129	WG489264
Benzo(a)anthracene	mg/l	.005	0.00443	88.6	52-128	WG489264
Benzo(a)pyrene	mg/l	.005	0.00461	92.2	52-127	WG489264
Benzo(b)fluoranthene	mg/l	.005	0.00463	92.5	50-127	WG489264
Benzo(g,h,i)perylene	mg/l	.005	0.00484	96.9	45-135	WG489264
Benzo(k)fluoranthene	mg/l	.005	0.00450	90.0	46-131	WG489264
Chrysene	mg/l	.005	0.00443	88.6	44-137	WG489264
Dibenz(a,h)anthracene	mg/l	.005	0.00448	89.6	43-135	WG489264
Fluoranthene	mg/l	.005	0.00504	101.	49-131	WG489264
Fluorene	mg/l	.005	0.00475	95.1	48-127	WG489264
Indeno(1,2,3-cd)pyrene	mg/l	.005	0.00470	94.0	43-137	WG489264
Naphthalene	mg/l	.005	0.00414	82.7	36-117	WG489264
Phenanthrene	mg/l	.005	0.00462	92.3	51-125	WG489264
Pyrene	mg/l	.005	0.00428	85.6	49-134	WG489264
2-Fluorobiphenyl				84.54	32-128	WG489264
Nitrobenzene-d5				64.51	15-137	WG489264
p-Terphenyl-d14				98.58	28-146	WG489264
Acenaphthene	mg/kg	.167	0.118	70.4	44-117	WG489276
Acenaphthylene	mg/kg	.167	0.115	69.1	43-118	WG489276
Anthracene	mg/kg	.167	0.118	70.8	42-127	WG489276
Benzo(a)anthracene	mg/kg	.167	0.115	68.7	45-127	WG489276
Benzo(a)pyrene	mg/kg	.167	0.119	71.0	46-123	WG489276
Benzo(b)fluoranthene	mg/kg	.167	0.115	68.6	43-126	WG489276
Benzo(g,h,i)perylene	mg/kg	.167	0.132	78.8	43-128	WG489276
Benzo(k)fluoranthene	mg/kg	.167	0.120	71.9	40-126	WG489276
Chrysene	mg/kg	.167	0.120	72.1	44-129	WG489276

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Dibenz(a,h)anthracene	mg/kg	.167	0.129	77.3	43-127	WG489276
Fluoranthene	mg/kg	.167	0.128	76.5	44-125	WG489276
Fluorene	mg/kg	.167	0.119	71.0	45-121	WG489276
Indeno(1,2,3-cd)pyrene	mg/kg	.167	0.132	79.2	43-127	WG489276
Naphthalene	mg/kg	.167	0.111	66.5	32-113	WG489276
Phenanthrene	mg/kg	.167	0.124	74.0	43-124	WG489276
Pyrene	mg/kg	.167	0.118	70.9	47-128	WG489276
2-Fluorobiphenyl				69.98	37-123	WG489276
Nitrobenzene-d5				51.90	19-129	WG489276
p-Terphenyl-d14				81.83	34-149	WG489276
TPH (GC/FID) High Fraction	mg/kg	40	36.7	91.7	70-120	WG489087
Triacontane				93.75	50-150	WG489087
Gasoline (C6-C10)	mg/l	.5	0.516	103.	80-120	WG489358
a,a,a-Trifluorotoluene(PID)				101.5	80-120	WG489358
Arsenic	mg/kg	192	159.	82.8	78.6-120.8	WG489221
Barium	mg/kg	420	377.	89.8	78.8-121.4	WG489221
Cadmium	mg/kg	70.1	58.9	84.0	78.5-121.5	WG489221
Chromium	mg/kg	168	154.	91.7	80.4-120.2	WG489221
Lead	mg/kg	113	95.4	84.4	77.3-122.1	WG489221
Selenium	mg/kg	176	149.	84.7	75.6-125.0	WG489221
Silver	mg/kg	115	99.1	86.2	66-133.9	WG489221
Total Solids	%	50	50.0	100.	85-115	WG489561
TPH (GC/FID) High Fraction	mg/l	1	1.02	102.	75-115	WG489078
Triacontane				107.7	50-150	WG489078
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0267	107.	75-134	WG489311
1,1,1-Trichloroethane	mg/l	.025	0.0215	85.9	67-137	WG489311
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0273	109.	72-128	WG489311
1,1,2-Trichloroethane	mg/l	.025	0.0249	99.7	79-123	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025	0.0202	80.6	51-149	WG489311
1,1-Dichloroethane	mg/l	.025	0.0200	80.1	67-133	WG489311
1,1-Dichloroethene	mg/l	.025	0.0184	73.5	60-130	WG489311
1,1-Dichloropropene	mg/l	.025	0.0204	81.4	68-132	WG489311
1,2,3-Trichlorobenzene	mg/l	.025	0.0276	110.	63-138	WG489311
1,2,3-Trichloropropane	mg/l	.025	0.0267	107.	68-130	WG489311
1,2,3-Trimethylbenzene	mg/l	.025	0.0237	94.7	70-127	WG489311
1,2,4-Trichlorobenzene	mg/l	.025	0.0271	109.	65-137	WG489311
1,2,4-Trimethylbenzene	mg/l	.025	0.0271	108.	72-135	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0268	107.	55-134	WG489311
1,2-Dibromoethane	mg/l	.025	0.0259	104.	75-126	WG489311
1,2-Dichlorobenzene	mg/l	.025	0.0262	105.	75-122	WG489311
1,2-Dichloroethane	mg/l	.025	0.0195	77.9	63-137	WG489311
1,2-Dichloropropane	mg/l	.025	0.0221	88.3	74-122	WG489311
1,3,5-Trimethylbenzene	mg/l	.025	0.0270	108.	73-134	WG489311
1,3-Dichlorobenzene	mg/l	.025	0.0287	115.	73-131	WG489311
1,3-Dichloropropane	mg/l	.025	0.0241	96.3	77-119	WG489311
1,4-Dichlorobenzene	mg/l	.025	0.0249	99.7	70-121	WG489311
2,2-Dichloropropane	mg/l	.025	0.0205	82.0	46-151	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
2-Butanone (MEK)	mg/l	.125	0.0972	77.8	53-132	WG489311
2-Chloroethyl vinyl ether	mg/l	.125	0.164	131.	0-171	WG489311
2-Chlorotoluene	mg/l	.025	0.0262	105.	74-128	WG489311
2-Hexanone	mg/l	.125	0.125	100.	56-147	WG489311
4-Chlorotoluene	mg/l	.025	0.0263	105.	74-130	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.113	90.6	60-142	WG489311
Acetone	mg/l	.125	0.103	82.7	48-134	WG489311
Acrolein	mg/l	.125	0.0625	50.0	6-182	WG489311
Acrylonitrile	mg/l	.125	0.0977	78.1	60-140	WG489311
Benzene	mg/l	.025	0.0211	84.4	67-126	WG489311
Bromobenzene	mg/l	.025	0.0249	99.8	76-123	WG489311
Bromochloromethane	mg/l	.025	0.0225	89.9	75-128	WG489311
Bromodichloromethane	mg/l	.025	0.0234	93.6	68-133	WG489311
Bromoform	mg/l	.025	0.0317	127.	60-139	WG489311
Bromomethane	mg/l	.025	0.0212	84.8	45-175	WG489311
Carbon tetrachloride	mg/l	.025	0.0215	85.9	64-141	WG489311
Chlorobenzene	mg/l	.025	0.0251	100.	77-125	WG489311
Chlorodibromomethane	mg/l	.025	0.0262	105.	73-138	WG489311
Chloroethane	mg/l	.025	0.0177	70.9	49-155	WG489311
Chloroform	mg/l	.025	0.0205	82.0	66-126	WG489311
Chloromethane	mg/l	.025	0.0207	82.7	45-152	WG489311
cis-1,2-Dichloroethene	mg/l	.025	0.0212	84.8	72-128	WG489311
cis-1,3-Dichloropropene	mg/l	.025	0.0231	92.3	73-131	WG489311
Di-isopropyl ether	mg/l	.025	0.0174	69.6	63-139	WG489311
Dibromomethane	mg/l	.025	0.0228	91.1	73-125	WG489311
Dichlorodifluoromethane	mg/l	.025	0.0214	85.5	39-189	WG489311
Ethyl ether	mg/l	.025	0.0170	67.8	60-142	WG489311
Ethylbenzene	mg/l	.025	0.0256	102.	76-129	WG489311
Hexachloro-1,3-butadiene	mg/l	.025	0.0355	142.*	67-135	WG489311
Isopropylbenzene	mg/l	.025	0.0259	104.	73-132	WG489311
Methyl tert-butyl ether	mg/l	.025	0.0193	77.3	51-142	WG489311
Methylene Chloride	mg/l	.025	0.0201	80.4	64-125	WG489311
n-Butylbenzene	mg/l	.025	0.0255	102.	63-142	WG489311
n-Propylbenzene	mg/l	.025	0.0262	105.	71-132	WG489311
Naphthalene	mg/l	.025	0.0250	99.9	56-145	WG489311
p-Isopropyltoluene	mg/l	.025	0.0241	96.4	68-138	WG489311
sec-Butylbenzene	mg/l	.025	0.0284	114.	70-135	WG489311
Styrene	mg/l	.025	0.0242	96.7	78-130	WG489311
tert-Butylbenzene	mg/l	.025	0.0270	108.	72-134	WG489311
Tetrachloroethene	mg/l	.025	0.0299	120.	67-135	WG489311
Tetrahydrofuran	mg/l	.025	0.0166	66.3	50-140	WG489311
Toluene	mg/l	.025	0.0230	92.0	72-122	WG489311
trans-1,2-Dichloroethene	mg/l	.025	0.0211	84.4	67-129	WG489311
trans-1,3-Dichloropropene	mg/l	.025	0.0241	96.2	66-137	WG489311
Trichloroethene	mg/l	.025	0.0243	97.2	74-126	WG489311
Trichlorofluoromethane	mg/l	.025	0.0203	81.2	54-156	WG489311
Vinyl chloride	mg/l	.025	0.0209	83.7	55-153	WG489311
Xylenes, Total	mg/l	.075	0.0791	105.	75-128	WG489311
4-Bromofluorobenzene				102.4	75-128	WG489311
Dibromofluoromethane				92.04	79-125	WG489311
Toluene-d8				98.66	87-114	WG489311
Arsenic,Dissolved	mg/l	1.13	1.15	102.	85-115	WG489466
Barium,Dissolved	mg/l	1.13	1.17	104.	85-115	WG489466
Cadmium,Dissolved	mg/l	1.13	1.14	101.	85-115	WG489466
Chromium,Dissolved	mg/l	1.13	1.20	106.	85-115	WG489466
Lead,Dissolved	mg/l	1.13	1.20	106.	85-115	WG489466
Selenium,Dissolved	mg/l	1.13	1.13	100.	85-115	WG489466

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Silver,Dissolved	mg/l	1.13	1.12	99.1	85-115	WG489466
1,2,4-Trimethylbenzene	mg/kg	.05	0.0469	93.7	80-120	WG489398
1,3,5-Trimethylbenzene	mg/kg	.05	0.0454	90.9	80-120	WG489398
Benzene	mg/kg	.05	0.0441	88.2	76-113	WG489398
Ethylbenzene	mg/kg	.05	0.0450	90.0	78-115	WG489398
Gasoline (C6-C10)	mg/kg	.5	0.514	103.	80-120	WG489398
m&p-Xylene	mg/kg	.1	0.0864	86.4	81-120	WG489398
Methyl tert-butyl ether	mg/kg	.05	0.0510	102.	37-145	WG489398
Naphthalene	mg/kg	.05	0.0444	88.8	80-120	WG489398
o-Xylene	mg/kg	.05	0.0448	89.7	79-115	WG489398
Toluene	mg/kg	.05	0.0447	89.3	76-114	WG489398
a,a,a-Trifluorotoluene(PID)				102.1	80-120	WG489398

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Acenaphthene	mg/l	0.00430	0.00407	86.0	47-121	5.32	21	WG489264
Acenaphthylene	mg/l	0.00463	0.00444	93.0	46-123	4.33	21	WG489264
Anthracene	mg/l	0.00495	0.00476	99.0	50-129	3.94	20	WG489264
Benzo(a)anthracene	mg/l	0.00455	0.00443	91.0	52-128	2.71	20	WG489264
Benzo(a)pyrene	mg/l	0.00473	0.00461	94.0	52-127	2.53	20	WG489264
Benzo(b)fluoranthene	mg/l	0.00495	0.00463	99.0	50-127	6.85	25	WG489264
Benzo(g,h,i)perylene	mg/l	0.00490	0.00484	98.0	45-135	1.21	20	WG489264
Benzo(k)fluoranthene	mg/l	0.00428	0.00450	86.0	46-131	4.96	30	WG489264
Chrysene	mg/l	0.00462	0.00443	92.0	44-137	4.22	20	WG489264
Dibenz(a,h)anthracene	mg/l	0.00461	0.00448	92.0	43-135	2.92	20	WG489264
Fluoranthene	mg/l	0.00532	0.00504	106.	49-131	5.37	20	WG489264
Fluorene	mg/l	0.00493	0.00475	99.0	48-127	3.67	20	WG489264
Indeno(1,2,3-cd)pyrene	mg/l	0.00473	0.00470	94.0	43-137	0.555	20	WG489264
Naphthalene	mg/l	0.00433	0.00414	86.0	36-117	4.56	28	WG489264
Phenanthrene	mg/l	0.00474	0.00462	95.0	51-125	2.63	20	WG489264
Pyrene	mg/l	0.00456	0.00428	91.0	49-134	6.19	20	WG489264
2-Fluorobiphenyl				87.00	32-128			WG489264
Nitrobenzene-d5				68.28	15-137			WG489264
p-Terphenyl-d14				103.6	28-146			WG489264
Acenaphthene	mg/kg	0.128	0.118	76.0	44-117	8.17	21	WG489276
Acenaphthylene	mg/kg	0.127	0.115	76.0	43-118	9.53	20	WG489276
Anthracene	mg/kg	0.132	0.118	79.0	42-127	11.1	21	WG489276
Benzo(a)anthracene	mg/kg	0.128	0.115	77.0	45-127	11.2	21	WG489276
Benzo(a)pyrene	mg/kg	0.138	0.119	83.0	46-123	15.2	20	WG489276
Benzo(b)fluoranthene	mg/kg	0.141	0.115	85.0	43-126	21.0	27	WG489276
Benzo(g,h,i)perylene	mg/kg	0.149	0.132	89.0	43-128	12.2	20	WG489276
Benzo(k)fluoranthene	mg/kg	0.139	0.120	83.0	40-126	14.7	32	WG489276
Chrysene	mg/kg	0.138	0.120	82.0	44-129	13.4	22	WG489276
Dibenz(a,h)anthracene	mg/kg	0.145	0.129	87.0	43-127	11.7	20	WG489276
Fluoranthene	mg/kg	0.142	0.128	85.0	44-125	10.8	22	WG489276
Fluorene	mg/kg	0.149	0.119	89.0	45-121	22.6*	20	WG489276
Indeno(1,2,3-cd)pyrene	mg/kg	0.148	0.132	89.0	43-127	11.3	21	WG489276
Naphthalene	mg/kg	0.110	0.111	66.0	32-113	1.29	26	WG489276
Phenanthrene	mg/kg	0.139	0.124	83.0	43-124	11.7	21	WG489276
Pyrene	mg/kg	0.136	0.118	82.0	47-128	14.1	20	WG489276
2-Fluorobiphenyl				74.86	37-123			WG489276
Nitrobenzene-d5				53.17	19-129			WG489276
p-Terphenyl-d14				94.43	34-149			WG489276

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
TPH (GC/FID) High Fraction	mg/kg	39.3	36.7	98.0	70-120	6.97	20	WG489087
Triacontane				138.2	50-150			WG489087
Gasoline (C6-C10)	mg/l	0.528	0.516	106.	80-120	2.37	20	WG489358
a,a,a-Trifluorotoluene(PID)				100.8	80-120			WG489358
TPH (GC/FID) High Fraction	mg/l	0.863	1.02	86.0	75-115	16.4	20	WG489078
Triacontane				90.60	50-150			WG489078
1,1,1,2-Tetrachloroethane	mg/l	0.0269	0.0267	108.	75-134	0.930	20	WG489311
1,1,1-Trichloroethane	mg/l	0.0209	0.0215	84.0	67-137	2.64	20	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0267	0.0273	107.	72-128	2.44	20	WG489311
1,1,2-Trichloroethane	mg/l	0.0257	0.0249	103.	79-123	2.96	20	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0199	0.0202	80.0	51-149	1.40	20	WG489311
1,1-Dichloroethane	mg/l	0.0190	0.0200	76.0	67-133	5.12	20	WG489311
1,1-Dichloroethene	mg/l	0.0185	0.0184	74.0	60-130	0.770	20	WG489311
1,1-Dichloropropene	mg/l	0.0201	0.0204	80.0	68-132	1.17	20	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0285	0.0276	114.	63-138	3.00	20	WG489311
1,2,3-Trichloropropane	mg/l	0.0270	0.0267	108.	68-130	1.41	20	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0238	0.0237	95.0	70-127	0.620	20	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0274	0.0271	110.	65-137	1.12	20	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0268	0.0271	107.	72-135	1.03	20	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0277	0.0268	111.	55-134	3.41	20	WG489311
1,2-Dibromoethane	mg/l	0.0268	0.0259	107.	75-126	3.43	20	WG489311
1,2-Dichlorobenzene	mg/l	0.0276	0.0262	110.	75-122	5.48	20	WG489311
1,2-Dichloroethane	mg/l	0.0184	0.0195	74.0	63-137	5.75	20	WG489311
1,2-Dichloropropane	mg/l	0.0213	0.0221	85.0	74-122	3.84	20	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0271	0.0270	108.	73-134	0.490	20	WG489311
1,3-Dichlorobenzene	mg/l	0.0280	0.0287	112.	73-131	2.24	20	WG489311
1,3-Dichloropropane	mg/l	0.0234	0.0241	94.0	77-119	2.76	20	WG489311
1,4-Dichlorobenzene	mg/l	0.0245	0.0249	98.0	70-121	1.86	20	WG489311
2,2-Dichloropropane	mg/l	0.0205	0.0205	82.0	46-151	0.140	20	WG489311
2-Butanone (MEK)	mg/l	0.100	0.0972	80.0	53-132	3.16	20	WG489311
2-Chloroethyl vinyl ether	mg/l	0.163	0.164	130.	0-171	0.610	27	WG489311
2-Chlorotoluene	mg/l	0.0258	0.0262	103.	74-128	1.66	20	WG489311
2-Hexanone	mg/l	0.126	0.125	101.	56-147	0.690	20	WG489311
4-Chlorotoluene	mg/l	0.0257	0.0263	103.	74-130	2.23	20	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.112	0.113	90.0	60-142	0.980	20	WG489311
Acetone	mg/l	0.0954	0.103	76.0	48-134	8.09	20	WG489311
Acrolein	mg/l	0.0567	0.0625	45.0	6-182	9.59	39	WG489311
Acrylonitrile	mg/l	0.0940	0.0977	75.0	60-140	3.81	20	WG489311
Benzene	mg/l	0.0207	0.0211	83.0	67-126	1.80	20	WG489311
Bromobenzene	mg/l	0.0244	0.0249	98.0	76-123	2.27	20	WG489311
Bromochloromethane	mg/l	0.0216	0.0225	86.0	75-128	3.85	20	WG489311
Bromodichloromethane	mg/l	0.0235	0.0234	94.0	68-133	0.290	20	WG489311
Bromoform	mg/l	0.0306	0.0317	122.	60-139	3.49	20	WG489311
Bromomethane	mg/l	0.0175	0.0212	70.0	45-175	19.1	20	WG489311
Carbon tetrachloride	mg/l	0.0214	0.0215	86.0	64-141	0.300	20	WG489311
Chlorobenzene	mg/l	0.0254	0.0251	102.	77-125	1.16	20	WG489311
Chlorodibromomethane	mg/l	0.0258	0.0262	103.	73-138	1.77	20	WG489311
Chloroethane	mg/l	0.0158	0.0177	63.0	49-155	11.6	20	WG489311
Chloroform	mg/l	0.0199	0.0205	80.0	66-126	2.99	20	WG489311
Chloromethane	mg/l	0.0191	0.0207	76.0	45-152	8.14	20	WG489311
cis-1,2-Dichloroethene	mg/l	0.0205	0.0212	82.0	72-128	3.36	20	WG489311
cis-1,3-Dichloropropene	mg/l	0.0230	0.0231	92.0	73-131	0.110	20	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Di-isopropyl ether	mg/l	0.0172	0.0174	69.0	63-139	1.43	20	WG489311
Dibromomethane	mg/l	0.0227	0.0228	91.0	73-125	0.230	20	WG489311
Dichlorodifluoromethane	mg/l	0.0189	0.0214	76.0	39-189	12.3	24	WG489311
Ethyl ether	mg/l	0.0158	0.0170	63.0	60-142	7.26	20	WG489311
Ethylbenzene	mg/l	0.0263	0.0256	105.	76-129	2.79	20	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0358	0.0355	143*	67-135	0.910	20	WG489311
Isopropylbenzene	mg/l	0.0270	0.0259	108.	73-132	4.15	20	WG489311
Methyl tert-butyl ether	mg/l	0.0180	0.0193	72.0	51-142	6.92	20	WG489311
Methylene Chloride	mg/l	0.0184	0.0201	74.0	64-125	8.71	20	WG489311
n-Butylbenzene	mg/l	0.0276	0.0255	110.	63-142	7.90	20	WG489311
n-Propylbenzene	mg/l	0.0272	0.0262	109.	71-132	3.74	20	WG489311
Naphthalene	mg/l	0.0256	0.0250	102.	56-145	2.35	20	WG489311
p-Isopropyltoluene	mg/l	0.0245	0.0241	98.0	68-138	1.64	20	WG489311
sec-Butylbenzene	mg/l	0.0288	0.0284	115.	70-135	1.49	20	WG489311
Styrene	mg/l	0.0243	0.0242	97.0	78-130	0.300	20	WG489311
tert-Butylbenzene	mg/l	0.0268	0.0270	107.	72-134	0.830	20	WG489311
Tetrachloroethene	mg/l	0.0306	0.0299	122.	67-135	2.16	20	WG489311
Tetrahydrofuran	mg/l	0.0164	0.0166	66.0	50-140	0.990	20	WG489311
Toluene	mg/l	0.0231	0.0230	92.0	72-122	0.390	20	WG489311
trans-1,2-Dichloroethene	mg/l	0.0206	0.0211	82.0	67-129	2.35	20	WG489311
trans-1,3-Dichloropropene	mg/l	0.0246	0.0241	98.0	66-137	2.26	20	WG489311
Trichloroethene	mg/l	0.0244	0.0243	98.0	74-126	0.500	20	WG489311
Trichlorofluoromethane	mg/l	0.0192	0.0203	77.0	54-156	5.41	20	WG489311
Vinyl chloride	mg/l	0.0194	0.0209	78.0	55-153	7.68	20	WG489311
Xylenes, Total	mg/l	0.0812	0.0791	108.	75-128	2.65	20	WG489311
4-Bromofluorobenzene				100.7	75-128			WG489311
Dibromofluoromethane				89.75	79-125			WG489311
Toluene-d8				102.3	87-114			WG489311
1,2,4-Trimethylbenzene	mg/kg	0.0478	0.0469	96.0	80-120	1.89	20	WG489398
1,3,5-Trimethylbenzene	mg/kg	0.0471	0.0454	94.0	80-120	3.69	20	WG489398
Benzene	mg/kg	0.0454	0.0441	91.0	76-113	3.03	20	WG489398
Ethylbenzene	mg/kg	0.0474	0.0450	95.0	78-115	5.14	20	WG489398
Gasoline (C6-C10)	mg/kg	0.512	0.514	102.	80-120	0.490	20	WG489398
m&p-Xylene	mg/kg	0.0906	0.0864	91.0	81-120	4.76	20	WG489398
Methyl tert-butyl ether	mg/kg	0.0443	0.0510	89.0	37-145	14.1	24	WG489398
Naphthalene	mg/kg	0.0424	0.0444	85.0	80-120	4.72	20	WG489398
o-Xylene	mg/kg	0.0472	0.0448	94.0	79-115	5.11	20	WG489398
Toluene	mg/kg	0.0462	0.0447	92.0	76-114	3.39	20	WG489398
a,a,a-Trifluorotoluene(PID)				101.6	80-120			WG489398

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury,Dissolved	mg/l	0.00291	0	.003	97.0	70-130	L469437-01	WG489160
Mercury	mg/kg	0.248	0.0250	.25	89.2	70-130	L469362-01	WG489147
Gasoline (C6-C10)	mg/l	0.535	0.0260	.5	102.	80-120	L469424-09	WG489358
a,a,a-Trifluorotoluene(PID)					101.9	80-120		WG489358
Arsenic	mg/kg	45.4	0	50	90.8	75-125	L469437-05	WG489221
Barium	mg/kg	66.4	20.0	50	92.8	75-125	L469437-05	WG489221
Cadmium	mg/kg	44.2	0	50	88.4	75-125	L469437-05	WG489221
Chromium	mg/kg	52.7	5.30	50	94.8	75-125	L469437-05	WG489221

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Lead	mg/kg	52.1	8.80	50	86.6	75-125	L469437-05	WG489221
Selenium	mg/kg	42.7	1.10	50	83.2	75-125	L469437-05	WG489221
Silver	mg/kg	46.5	0	50	93.0	75-125	L469437-05	WG489221
1,1,1,2-Tetrachloroethane	mg/l	0.0262	0	.025	105.	45-152	L468942-05	WG489311
1,1,1-Trichloroethane	mg/l	0.0215	0	.025	86.0	31-161	L468942-05	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0290	0	.025	116.	49-149	L468942-05	WG489311
1,1,2-Trichloroethane	mg/l	0.0267	0	.025	107.	46-145	L468942-05	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0217	0	.025	87.0	14-168	L468942-05	WG489311
1,1-Dichloroethane	mg/l	0.0211	0	.025	84.5	30-159	L468942-05	WG489311
1,1-Dichloroethene	mg/l	0.0199	0	.025	79.6	10-162	L468942-05	WG489311
1,1-Dichloropropene	mg/l	0.0204	0	.025	81.6	14-162	L468942-05	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0278	0	.025	111.	32-143	L468942-05	WG489311
1,2,3-Trichloropropane	mg/l	0.0284	0	.025	114.	48-148	L468942-05	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0241	0	.025	96.3	36-141	L468942-05	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0272	0	.025	109.	27-142	L468942-05	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0264	0	.025	106.	29-153	L468942-05	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0309	0	.025	124.	37-148	L468942-05	WG489311
1,2-Dibromoethane	mg/l	0.0269	0	.025	107.	41-149	L468942-05	WG489311
1,2-Dichlorobenzene	mg/l	0.0270	0	.025	108.	40-139	L468942-05	WG489311
1,2-Dichloroethane	mg/l	0.0197	0	.025	78.8	29-167	L468942-05	WG489311
1,2-Dichloropropane	mg/l	0.0241	0	.025	96.4	39-148	L468942-05	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0258	0	.025	103.	33-149	L468942-05	WG489311
1,3-Dichlorobenzene	mg/l	0.0282	0	.025	113.	32-148	L468942-05	WG489311
1,3-Dichloropropane	mg/l	0.0244	0	.025	97.5	44-142	L468942-05	WG489311
1,4-Dichlorobenzene	mg/l	0.0255	0	.025	102.	32-136	L468942-05	WG489311
2,2-Dichloropropane	mg/l	0.0215	0	.025	86.2	14-158	L468942-05	WG489311
2-Butanone (MEK)	mg/l	0.109	0	.125	87.1	32-151	L468942-05	WG489311
2-Chloroethyl vinyl ether	mg/l	0.194	0	.125	156.	0-175	L468942-05	WG489311
2-Chlorotoluene	mg/l	0.0252	0	.025	101.	35-147	L468942-05	WG489311
2-Hexanone	mg/l	0.141	0	.125	113.	41-155	L468942-05	WG489311
4-Chlorotoluene	mg/l	0.0257	0	.025	103.	33-147	L468942-05	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.138	0	.125	111.	40-160	L468942-05	WG489311
Acetone	mg/l	0.131	0	.125	105.	25-157	L468942-05	WG489311
Acrolein	mg/l	0.0752	0	.125	60.1	0-179	L468942-05	WG489311
Acrylonitrile	mg/l	0.122	0	.125	98.0	37-162	L468942-05	WG489311
Benzene	mg/l	0.0207	0	.025	83.0	16-158	L468942-05	WG489311
Bromobenzene	mg/l	0.0244	0	.025	97.7	37-147	L468942-05	WG489311
Bromochloromethane	mg/l	0.0238	0	.025	95.2	36-154	L468942-05	WG489311
Bromodichloromethane	mg/l	0.0259	0	.025	104.	45-147	L468942-05	WG489311
Bromoform	mg/l	0.0336	0	.025	134.	38-152	L468942-05	WG489311
Bromomethane	mg/l	0.0195	0	.025	78.1	0-191	L468942-05	WG489311
Carbon tetrachloride	mg/l	0.0225	0	.025	90.2	22-168	L468942-05	WG489311
Chlorobenzene	mg/l	0.0248	0	.025	99.0	33-148	L468942-05	WG489311
Chlorodibromomethane	mg/l	0.0267	0	.025	107.	48-151	L468942-05	WG489311
Chloroethane	mg/l	0.0183	0	.025	73.3	4-176	L468942-05	WG489311
Chloroform	mg/l	0.0217	0	.025	86.8	37-147	L468942-05	WG489311
Chloromethane	mg/l	0.0203	0	.025	81.4	10-174	L468942-05	WG489311
cis-1,2-Dichloroethene	mg/l	0.0216	0	.025	86.5	29-156	L468942-05	WG489311
cis-1,3-Dichloropropene	mg/l	0.0259	0	.025	103.	35-148	L468942-05	WG489311
Di-isopropyl ether	mg/l	0.0191	0	.025	76.5	39-160	L468942-05	WG489311
Dibromomethane	mg/l	0.0262	0	.025	105.	36-152	L468942-05	WG489311
Dichlorodifluoromethane	mg/l	0.0206	0	.025	82.5	0-200	L468942-05	WG489311
Ethyl ether	mg/l	0.0185	0	.025	74.0	24-168	L468942-05	WG489311
Ethylbenzene	mg/l	0.0245	0	.025	98.2	29-150	L468942-05	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0344	0	.025	138.	28-144	L468942-05	WG489311
Isopropylbenzene	mg/l	0.0253	0	.025	101.	35-147	L468942-05	WG489311
Methyl tert-butyl ether	mg/l	0.0219	0	.025	87.6	24-167	L468942-05	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	MS Res	Matrix Spike Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Methylene Chloride	mg/l	0.0215	0	.025	86.0	23-151	L468942-05	WG489311
n-Butylbenzene	mg/l	0.0261	0	.025	104.	22-151	L468942-05	WG489311
n-Propylbenzene	mg/l	0.0257	0	.025	103.	26-150	L468942-05	WG489311
Naphthalene	mg/l	0.0266	0	.025	106.	24-160	L468942-05	WG489311
p-Isopropyltoluene	mg/l	0.0237	0	.025	94.8	28-151	L468942-05	WG489311
sec-Butylbenzene	mg/l	0.0278	0	.025	111.	32-149	L468942-05	WG489311
Styrene	mg/l	0.0236	0	.025	94.5	38-149	L468942-05	WG489311
tert-Butylbenzene	mg/l	0.0266	0	.025	106.	36-149	L468942-05	WG489311
Tetrachloroethene	mg/l	0.0283	0	.025	113.	13-157	L468942-05	WG489311
Tetrahydrofuran	mg/l	0.0211	0	.025	84.2	28-163	L468942-05	WG489311
Toluene	mg/l	0.0250	0	.025	99.8	22-152	L468942-05	WG489311
trans-1,2-Dichloroethene	mg/l	0.0223	0	.025	89.2	11-160	L468942-05	WG489311
trans-1,3-Dichloropropene	mg/l	0.0285	0	.025	114.	33-153	L468942-05	WG489311
Trichloroethene	mg/l	0.0228	0	.025	91.1	18-163	L468942-05	WG489311
Trichlorofluoromethane	mg/l	0.0219	0	.025	87.8	10-177	L468942-05	WG489311
Vinyl chloride	mg/l	0.0213	0	.025	85.1	0-179	L468942-05	WG489311
Xylenes, Total	mg/l	0.0763	0	.075	102.	27-151	L468942-05	WG489311
4-Bromofluorobenzene					101.8	75-128		WG489311
Dibromofluoromethane					99.01	79-125		WG489311
Toluene-d8					111.4	87-114		WG489311
Arsenic,Dissolved	mg/l	1.14	0.00300	1.13	101.	75-125	L469268-03	WG489466
Barium,Dissolved	mg/l	1.44	0.325	1.13	98.7	75-125	L469268-03	WG489466
Cadmium,Dissolved	mg/l	1.11	0	1.13	98.2	75-125	L469268-03	WG489466
Chromium,Dissolved	mg/l	1.15	0.00200	1.13	102.	75-125	L469268-03	WG489466
Lead,Dissolved	mg/l	1.15	0.00331	1.13	101.	75-125	L469268-03	WG489466
Selenium,Dissolved	mg/l	1.12	0	1.13	99.1	75-125	L469268-03	WG489466
Silver,Dissolved	mg/l	0.0495	0.00360	1.13	4.06*	75-125	L469268-03	WG489466
1,2,4-Trimethylbenzene	mg/kg	2.23	0	.05	93.8	80-120	L469127-01	WG489398
1,3,5-Trimethylbenzene	mg/kg	2.17	0	.05	91.3	80-120	L469127-01	WG489398
Benzene	mg/kg	2.20	0	.05	92.7	32-137	L469127-01	WG489398
Ethylbenzene	mg/kg	2.21	0	.05	93.0	10-150	L469127-01	WG489398
Gasoline (C6-C10)	mg/kg	24.4	0	.5	103.	80-120	L469127-01	WG489398
m&p-Xylene	mg/kg	4.23	0	.1	89.1	14-141	L469127-01	WG489398
Methyl tert-butyl ether	mg/kg	3.10	0	.05	130.	24-151	L469127-01	WG489398
Naphthalene	mg/kg	1.93	0	.05	81.4	80-120	L469127-01	WG489398
o-Xylene	mg/kg	2.23	0	.05	93.7	10-157	L469127-01	WG489398
Toluene	mg/kg	2.18	0	.05	91.6	20-142	L469127-01	WG489398
a,a,a-Trifluorotoluene(PID)					102.4	80-120		WG489398
Acenaphthene	mg/kg	0.00438	0	.00501	87.4	38-121	L469437-05	WG489276
Acenaphthylene	mg/kg	0.00434	0	.00501	86.7	39-120	L469437-05	WG489276
Anthracene	mg/kg	0.00433	0	.00501	86.5	35-133	L469437-05	WG489276
Benzo(a)anthracene	mg/kg	0.00448	0	.00501	89.4	35-136	L469437-05	WG489276
Benzo(a)pyrene	mg/kg	0.00449	0	.00501	89.6	37-131	L469437-05	WG489276
Benzo(b)fluoranthene	mg/kg	0.00416	0	.00501	83.0	29-145	L469437-05	WG489276
Benzo(g,h,i)perylene	mg/kg	0.00482	0	.00501	96.2	10-139	L469437-05	WG489276
Benzo(k)fluoranthene	mg/kg	0.00404	0	.00501	80.5	31-140	L469437-05	WG489276
Chrysene	mg/kg	0.00441	0	.00501	88.1	34-137	L469437-05	WG489276
Dibenz(a,h)anthracene	mg/kg	0.00477	0	.00501	95.2	21-132	L469437-05	WG489276
Fluoranthene	mg/kg	0.00428	0	.00501	85.5	34-132	L469437-05	WG489276
Fluorene	mg/kg	0.00408	0	.00501	81.5	38-126	L469437-05	WG489276
Indeno(1,2,3-cd)pyrene	mg/kg	0.00500	0	.00501	99.8	17-134	L469437-05	WG489276
Naphthalene	mg/kg	0.00413	0	.00501	82.4	24-122	L469437-05	WG489276
Phenanthrene	mg/kg	0.00439	0	.00501	87.7	38-128	L469437-05	WG489276

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
		Matrix Spike						
Pyrene	mg/kg	0.00369	0	.00501	73.6	35-141	L469437-05	WG489276
2-Fluorobiphenyl					91.50	37-123		WG489276
Nitrobenzene-d5					81.07	19-129		WG489276
p-Terphenyl-d14					77.71	34-149		WG489276

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
		Matrix Spike Duplicate							
Mercury,Dissolved	mg/l	0.00295	0.00291	98.3	70-130	1.37	20	L469437-01	WG489160
Mercury	mg/kg	0.264	0.248	95.6	70-130	6.25	20	L469362-01	WG489147
Gasoline (C6-C10)	mg/l	0.528	0.535	100.	80-120	1.34	20	L469424-09	WG489358
a,a,a-Trifluorotoluene(PID)				101.3	80-120				WG489358
Arsenic	mg/kg	46.6	45.4	93.2	75-125	2.61	20	L469437-05	WG489221
Barium	mg/kg	75.4	66.4	111.	75-125	12.7	20	L469437-05	WG489221
Cadmium	mg/kg	46.4	44.2	92.8	75-125	4.86	20	L469437-05	WG489221
Chromium	mg/kg	55.0	52.7	99.4	75-125	4.27	20	L469437-05	WG489221
Lead	mg/kg	55.4	52.1	93.2	75-125	6.14	20	L469437-05	WG489221
Selenium	mg/kg	43.0	42.7	83.8	75-125	0.700	20	L469437-05	WG489221
Silver	mg/kg	49.5	46.5	99.0	75-125	6.25	20	L469437-05	WG489221
1,1,1,2-Tetrachloroethane	mg/l	0.0258	0.0262	103.	45-152	1.59	21	L468942-05	WG489311
1,1,1-Trichloroethane	mg/l	0.0206	0.0215	82.6	31-161	4.02	23	L468942-05	WG489311
1,1,2,2-Tetrachloroethane	mg/l	0.0280	0.0290	112.	49-149	3.57	22	L468942-05	WG489311
1,1,2-Trichloroethane	mg/l	0.0255	0.0267	102.	46-145	4.63	20	L468942-05	WG489311
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0195	0.0217	77.8	14-168	11.1	24	L468942-05	WG489311
1,1-Dichloroethane	mg/l	0.0184	0.0211	73.5	30-159	13.8	21	L468942-05	WG489311
1,1-Dichloroethene	mg/l	0.0175	0.0199	69.9	10-162	13.0	23	L468942-05	WG489311
1,1-Dichloropropene	mg/l	0.0197	0.0204	78.7	14-162	3.68	23	L468942-05	WG489311
1,2,3-Trichlorobenzene	mg/l	0.0287	0.0278	115.	32-143	3.31	33	L468942-05	WG489311
1,2,3-Trichloropropane	mg/l	0.0282	0.0284	113.	48-148	0.610	23	L468942-05	WG489311
1,2,3-Trimethylbenzene	mg/l	0.0234	0.0241	93.8	36-141	2.66	25	L468942-05	WG489311
1,2,4-Trichlorobenzene	mg/l	0.0272	0.0272	109.	27-142	0.0300	30	L468942-05	WG489311
1,2,4-Trimethylbenzene	mg/l	0.0258	0.0264	103.	29-153	2.33	27	L468942-05	WG489311
1,2-Dibromo-3-Chloropropane	mg/l	0.0293	0.0309	117.	37-148	5.43	27	L468942-05	WG489311
1,2-Dibromoethane	mg/l	0.0265	0.0269	106.	41-149	1.52	21	L468942-05	WG489311
1,2-Dichlorobenzene	mg/l	0.0265	0.0270	106.	40-139	1.60	23	L468942-05	WG489311
1,2-Dichloroethane	mg/l	0.0191	0.0197	76.6	29-167	2.79	21	L468942-05	WG489311
1,2-Dichloropropane	mg/l	0.0213	0.0241	85.4	39-148	12.1	20	L468942-05	WG489311
1,3,5-Trimethylbenzene	mg/l	0.0254	0.0258	101.	33-149	1.83	26	L468942-05	WG489311
1,3-Dichlorobenzene	mg/l	0.0280	0.0282	112.	32-148	0.630	24	L468942-05	WG489311
1,3-Dichloropropane	mg/l	0.0238	0.0244	95.0	44-142	2.60	20	L468942-05	WG489311
1,4-Dichlorobenzene	mg/l	0.0243	0.0255	97.1	32-136	5.01	23	L468942-05	WG489311
2,2-Dichloropropane	mg/l	0.0203	0.0215	81.3	14-158	5.76	23	L468942-05	WG489311
2-Butanone (MEK)	mg/l	0.107	0.109	85.5	32-151	1.86	26	L468942-05	WG489311
2-Chloroethyl vinyl ether	mg/l	0.179	0.194	143.	0-175	8.16	75	L468942-05	WG489311
2-Chlorotoluene	mg/l	0.0246	0.0252	98.6	35-147	2.29	24	L468942-05	WG489311
2-Hexanone	mg/l	0.143	0.141	114.	41-155	1.12	28	L468942-05	WG489311
4-Chlorotoluene	mg/l	0.0249	0.0257	99.6	33-147	3.13	25	L468942-05	WG489311
4-Methyl-2-pentanone (MIBK)	mg/l	0.130	0.138	104.	40-160	5.96	28	L468942-05	WG489311
Acetone	mg/l	0.113	0.131	90.4	25-157	14.5	26	L468942-05	WG489311
Acrolein	mg/l	0.0622	0.0752	49.8	0-179	18.8	39	L468942-05	WG489311
Acrylonitrile	mg/l	0.106	0.122	85.1	37-162	14.1	24	L468942-05	WG489311

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	MSD	Matrix Spike Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Benzene	mg/l	0.0201	0.0207	80.5	16-158	3.07	21	L468942-05	WG489311
Bromobenzene	mg/l	0.0238	0.0244	95.3	37-147	2.53	23	L468942-05	WG489311
Bromochloromethane	mg/l	0.0219	0.0238	87.5	36-154	8.50	21	L468942-05	WG489311
Bromodichloromethane	mg/l	0.0230	0.0259	91.8	45-147	12.0	20	L468942-05	WG489311
Bromoform	mg/l	0.0330	0.0336	132.	38-152	1.74	20	L468942-05	WG489311
Bromomethane	mg/l	0.0169	0.0195	67.7	0-191	14.3	35	L468942-05	WG489311
Carbon tetrachloride	mg/l	0.0207	0.0225	83.0	22-168	8.27	24	L468942-05	WG489311
Chlorobenzene	mg/l	0.0242	0.0248	96.8	33-148	2.28	22	L468942-05	WG489311
Chlorodibromomethane	mg/l	0.0261	0.0267	104.	48-151	2.43	21	L468942-05	WG489311
Chloroethane	mg/l	0.0159	0.0183	63.5	4-176	14.3	27	L468942-05	WG489311
Chloroform	mg/l	0.0195	0.0217	78.0	37-147	10.7	21	L468942-05	WG489311
Chloromethane	mg/l	0.0178	0.0203	71.2	10-174	13.3	28	L468942-05	WG489311
cis-1,2-Dichloroethene	mg/l	0.0199	0.0216	79.5	29-156	8.45	22	L468942-05	WG489311
cis-1,3-Dichloropropene	mg/l	0.0228	0.0259	91.1	35-148	12.6	21	L468942-05	WG489311
Di-isopropyl ether	mg/l	0.0169	0.0191	67.6	39-160	12.4	21	L468942-05	WG489311
Dibromomethane	mg/l	0.0230	0.0262	92.1	36-152	13.1	20	L468942-05	WG489311
Dichlorodifluoromethane	mg/l	0.0179	0.0206	71.5	0-200	14.2	26	L468942-05	WG489311
Ethyl ether	mg/l	0.0163	0.0185	65.3	24-168	12.5	23	L468942-05	WG489311
Ethylbenzene	mg/l	0.0246	0.0245	98.6	29-150	0.410	24	L468942-05	WG489311
Hexachloro-1,3-butadiene	mg/l	0.0347	0.0344	139.	28-144	0.880	33	L468942-05	WG489311
Isopropylbenzene	mg/l	0.0250	0.0253	100.	35-147	1.31	25	L468942-05	WG489311
Methyl tert-butyl ether	mg/l	0.0192	0.0219	76.9	24-167	13.0	22	L468942-05	WG489311
Methylene Chloride	mg/l	0.0189	0.0215	75.5	23-151	13.0	21	L468942-05	WG489311
n-Butylbenzene	mg/l	0.0248	0.0261	99.3	22-151	5.02	29	L468942-05	WG489311
n-Propylbenzene	mg/l	0.0249	0.0257	99.7	26-150	3.16	25	L468942-05	WG489311
Naphthalene	mg/l	0.0274	0.0266	110.	24-160	2.99	37	L468942-05	WG489311
p-Isopropyltoluene	mg/l	0.0234	0.0237	93.8	28-151	1.16	27	L468942-05	WG489311
sec-Butylbenzene	mg/l	0.0276	0.0278	110.	32-149	0.840	26	L468942-05	WG489311
Styrene	mg/l	0.0231	0.0236	92.6	38-149	2.00	23	L468942-05	WG489311
tert-Butylbenzene	mg/l	0.0261	0.0266	104.	36-149	1.91	26	L468942-05	WG489311
Tetrachloroethene	mg/l	0.0285	0.0283	114.	13-157	0.770	24	L468942-05	WG489311
Tetrahydrofuran	mg/l	0.0192	0.0211	76.6	28-163	9.45	27	L468942-05	WG489311
Toluene	mg/l	0.0220	0.0250	88.0	22-152	12.5	22	L468942-05	WG489311
trans-1,2-Dichloroethene	mg/l	0.0195	0.0223	78.1	11-160	13.3	23	L468942-05	WG489311
trans-1,3-Dichloropropene	mg/l	0.0256	0.0285	102.	33-153	10.9	22	L468942-05	WG489311
Trichloroethene	mg/l	0.0233	0.0228	93.4	18-163	2.50	21	L468942-05	WG489311
Trichlorofluoromethane	mg/l	0.0193	0.0219	77.4	10-177	12.6	24	L468942-05	WG489311
Vinyl chloride	mg/l	0.0190	0.0213	76.1	0-179	11.2	26	L468942-05	WG489311
Xylenes, Total	mg/l	0.0757	0.0763	101.	27-151	0.720	23	L468942-05	WG489311
4-Bromofluorobenzene				99.42	75-128				WG489311
Dibromofluoromethane				91.00	79-125				WG489311
Toluene-d8				100.3	87-114				WG489311
Arsenic,Dissolved	mg/l	1.17	1.14	103.	75-125	2.60	20	L469268-03	WG489466
Barium,Dissolved	mg/l	1.49	1.44	103.	75-125	3.41	20	L469268-03	WG489466
Cadmium,Dissolved	mg/l	1.15	1.11	102.	75-125	3.54	20	L469268-03	WG489466
Chromium,Dissolved	mg/l	1.19	1.15	105.	75-125	3.42	20	L469268-03	WG489466
Lead,Dissolved	mg/l	1.19	1.15	105.	75-125	3.42	20	L469268-03	WG489466
Selenium,Dissolved	mg/l	1.15	1.12	102.	75-125	2.64	20	L469268-03	WG489466
Silver,Dissolved	mg/l	0.0491	0.0495	4.03*	75-125	0.811	20	L469268-03	WG489466
1,2,4-Trimethylbenzene	mg/kg	2.33	2.23	98.2	80-120	4.62	20	L469127-01	WG489398
1,3,5-Trimethylbenzene	mg/kg	2.22	2.17	93.6	80-120	2.39	20	L469127-01	WG489398
Benzene	mg/kg	2.24	2.20	94.1	32-137	1.54	39	L469127-01	WG489398
Ethylbenzene	mg/kg	2.30	2.21	96.7	10-150	3.87	44	L469127-01	WG489398
Gasoline (C6-C10)	mg/kg	26.4	24.4	111.	80-120	7.61	20	L469127-01	WG489398
m&p-Xylene	mg/kg	4.49	4.23	94.6	14-141	5.93	44	L469127-01	WG489398

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Methyl tert-butyl ether	mg/kg	2.83	3.10	119.	24-151	9.08	37	L469127-01	WG489398
Naphthalene	mg/kg	2.06	1.93	86.8	80-120	6.41	20	L469127-01	WG489398
o-Xylene	mg/kg	2.32	2.23	97.8	10-157	4.22	44	L469127-01	WG489398
Toluene	mg/kg	2.21	2.18	93.2	20-142	1.71	42	L469127-01	WG489398
a,a,a-Trifluorotoluene(PID)				101.6	80-120				WG489398
Acenaphthene	mg/kg	0.00367	0.00438	73.2	38-121	17.8	23	L469437-05	WG489276
Acenaphthylene	mg/kg	0.00372	0.00434	74.2	39-120	15.5	22	L469437-05	WG489276
Anthracene	mg/kg	0.00369	0.00433	73.6	35-133	16.0	23	L469437-05	WG489276
Benzo(a)anthracene	mg/kg	0.00390	0.00448	77.9	35-136	13.8	23	L469437-05	WG489276
Benzo(a)pyrene	mg/kg	0.00386	0.00449	77.0	37-131	15.2	22	L469437-05	WG489276
Benzo(b)fluoranthene	mg/kg	0.00354	0.00416	70.7	29-145	15.9	33	L469437-05	WG489276
Benzo(g,h,i)perylene	mg/kg	0.00407	0.00482	81.3	10-139	16.7	26	L469437-05	WG489276
Benzo(k)fluoranthene	mg/kg	0.00346	0.00404	69.0	31-140	15.5	34	L469437-05	WG489276
Chrysene	mg/kg	0.00382	0.00441	76.2	34-137	14.6	23	L469437-05	WG489276
Dibenz(a,h)anthracene	mg/kg	0.00402	0.00477	80.3	21-132	16.9	25	L469437-05	WG489276
Fluoranthene	mg/kg	0.00409	0.00428	81.7	34-132	4.60	24	L469437-05	WG489276
Fluorene	mg/kg	0.00368	0.00408	73.4	38-126	10.5	23	L469437-05	WG489276
Indeno(1,2,3-cd)pyrene	mg/kg	0.00420	0.00500	83.8	17-134	17.5	25	L469437-05	WG489276
Naphthalene	mg/kg	0.00353	0.00413	70.5	24-122	15.5	29	L469437-05	WG489276
Phenanthrene	mg/kg	0.00371	0.00439	74.0	38-128	17.0	25	L469437-05	WG489276
Pyrene	mg/kg	0.00297	0.00369	59.2	35-141	21.6	25	L469437-05	WG489276
2-Fluorobiphenyl				76.91	37-123				WG489276
Nitrobenzene-d5				70.30	19-129				WG489276
p-Terphenyl-d14				64.36	34-149				WG489276

Batch number /Run number / Sample number cross reference

WG489160: R1292850: L469437-01 02
WG489147: R1293949: L469437-04 05
WG489264: R1294268: L469437-01 02
WG489276: R1294908: L469437-04 05
WG489087: R1296148: L469437-04 05
WG489358: R1296348: L469437-01 02
WG489221: R1296469: L469437-04 05
WG489561: R1296672: L469437-04 05
WG489078: R1297608: L469437-01 02
WG489311: R1298228: L469437-01 02 03
WG489466: R1298589: L469437-01 02
WG489398: R1299288: L469437-04 05

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Steve Carlson
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469437

July 26, 2010

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address: Pinnacle Engineering Inc. 11541 95th Ave N Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

A173

Report to: Steve Carlson

Email to: scarlson@pineng.com

Project Description: CPED Snelling

City/State Collected: MPLS/MN

Phone: 763-315-4501

FAX:

Client Project #: R01253.001

ESC Key:

Collected by: Matt Ried

Site/Facility ID#: CPED

P.O.#:

Collected by (signature):

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:

Email? __No __Yes

FAX? __No __Yes

CoCode (lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs.	DRO/1L Amb/HCl	GRO/40ml/HCl	VOC/40ml/HCl	PAH/1L/None	RCRA-metals dissolved/nitric			Remarks/Contaminant	Sample # (lab only)
PP-7 H_2O	Grab	Gw	33	7-15	1100	9	X	X	X	X	X				L469437-01
PP-8 H_2O	"	Gw	33	7-15	1330	9	X	X	X	X	X				02
Trip Blank	—	—	—	—	—				X						03

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

8734 1707 8012

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ ____	Condition: OK (lab use only)	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1°C	Bottles Received: 31	CoC Seals Intact ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/17/10	Time: 0900	pH Checked: <2	NCF:

Company Name/Address: Pinnacle Engineering Inc. 11541 95th Ave N Maple Grove, MN 55369

Alternate billing information:

Analysis/Container/Preservative

Chain of Custody Page 1 of 1

Prepared by:

ENVIRONMENTAL SCIENCE CORP.
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone (615) 758-5858
Phone (800) 767-5859
FAX (615) 758-5859

Report to: Steve Carlson

Email to: scarlson@pinengi.com

Project Description: CPED- Snelling

City/Sate Collected: MPLS/MN

Phone: 763-315-4501
FAX:

Client Project #: R0/0253.001

ESC Key:

Collected by: Matt Wiza

Site/Facility ID#: CPED

P.O.#:

Collected by (signature): Matt Wiza

Immediately Packed on Ice N ___ Y ___

Rush? (Lab MUST Be Notified)
___ Same Day.....200%
___ Next Day.....100%
___ Two Day.....50%
___ Three Day.....25%

Date Results Needed:

Email? __No __Yes
FAX? __No __Yes

CoCode: (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	DRO/60ml/None	GRO/BTEX/60ml/MeOH	PAH/4oz/None	RCRA-metals/2oz/None	% Solids/2oz/None	Remarks/Contaminant	Sample # (lab only)
PP-7-23-24	Grab	SS	23-24	7-15-10	1030	6	X	X	X	X	X		L469437-04
PP-8-16-19	Grab	SS	16-19	7-15-10	1300	6	X	X	X	X	X		05

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐	Condition: OK (lab use only)	
Matt Wiza	7-15-10	1300	[signature]			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1°C	Bottles Received: 31	CoC Seals Intact ___ Y ___ N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/17/10	Time: 0900	pH Checked: <2	NCF:
			Jeremy [signature]			

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

Report Summary

Wednesday July 21, 2010

Report Number: L469321
Samples Received: 07/16/10
Client Project: R010253.001

Description: CPED Snelling

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Mark W. Beasley , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704, ND - R-140
NJ - TN002,NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032008A

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.
Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences.
Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-01

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-1 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 13:30

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	12.5	30.0	87.	210	TO-15	07/21/10	10
Allyl chloride	107-05-1	76.53	0.200	0.630	< 0.20	< 0.63	TO-15	07/20/10	1
Benzene	71-43-2	78.1	0.200	0.640	1.0	3.2	TO-15	07/20/10	1
Benzyl Chloride	100-44-7	127	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Bromodichloromethane	75-27-4	164	0.200	1.30	< 0.20	< 1.3	TO-15	07/20/10	1
Bromoform	75-25-2	253	0.600	6.20	< 0.60	< 6.2	TO-15	07/20/10	1
Bromomethane	74-83-9	94.9	0.200	0.780	< 0.20	< 0.78	TO-15	07/20/10	1
1,3-Butadiene	106-99-0	54.1	2.00	4.40	< 2.0	< 4.4	TO-15	07/20/10	1
tert-Butyl alcohol	75-65-0	74.12	0.200	0.610	< 0.20	< 0.61	TO-15	07/20/10	1
Carbon disulfide	75-15-0	76.1	0.200	0.620	1.7	5.3	TO-15	07/20/10	1
Carbon tetrachloride	56-23-5	154	0.200	1.30	< 0.20	< 1.3	TO-15	07/20/10	1
Chlorobenzene	108-90-7	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
Chloroethane	75-00-3	64.5	0.200	0.530	< 0.20	< 0.53	TO-15	07/20/10	1
Chloroform	67-66-3	119	0.200	0.970	< 0.20	< 0.97	TO-15	07/20/10	1
Chloromethane	74-87-3	50.5	0.200	0.410	< 0.20	< 0.41	TO-15	07/20/10	1
2-Chlorotoluene	95-49-8	126	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Cyclohexane	110-82-7	84.2	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1
Dibromochloromethane	124-48-1	208	0.200	1.70	< 0.20	< 1.7	TO-15	07/20/10	1
1,2-Dibromoethane	106-93-4	188	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,2-Dichloroethane	107-06-2	99	0.200	0.810	< 0.20	< 0.81	TO-15	07/20/10	1
1,1-Dichloroethane	75-34-3	98	0.200	0.800	< 0.20	< 0.80	TO-15	07/20/10	1
1,1-Dichloroethene	75-35-4	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
1,2-Dichloropropane	78-87-5	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
1,4-Dioxane	123-91-1	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Ethanol	64-17-5	46.1	0.630	1.20	2.1	4.0	TO-15	07/20/10	1
Ethylbenzene	100-41-4	106	0.200	0.870	1.6	6.9	TO-15	07/20/10	1
4-Ethyltoluene	622-96-8	120	0.200	0.980	1.6	7.9	TO-15	07/20/10	1
Trichlorofluoromethane	75-69-4	137.4	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.990	0.26	1.3	TO-15	07/20/10	1
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Heptane	142-82-5	100	0.200	0.820	0.99	4.0	TO-15	07/20/10	1
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.70	< 0.63	< 6.7	TO-15	07/20/10	1
n-Hexane	110-54-3	86.2	0.200	0.710	0.72	2.5	TO-15	07/20/10	1
Isopropylbenzene	98-82-8	120.2	0.200	0.980	0.26	1.3	TO-15	07/20/10	1
Methylene Chloride	75-09-2	84.9	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-01

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-1 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 13:30

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Methyl Butyl Ketone	591-78-6	100	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
2-Butanone (MEK)	78-93-3	72.1	1.25	3.70	11.	32.	TO-15	07/20/10	1
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
Methyl methacrylate	80-62-6	100.12	0.200	0.820	< 0.20	< 0.82	TO-15	07/20/10	1
MTBE	1634-04-4	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Naphthalene	91-20-3	128	0.630	3.30	0.69	3.6	TO-15	07/20/10	1
2-Propanol	67-63-0	60.1	1.25	3.10	< 1.3	< 3.1	TO-15	07/20/10	1
Propene	115-07-1	42.1	0.400	0.690	< 0.40	< 0.69	TO-15	07/20/10	1
Styrene	100-42-5	104	0.200	0.850	1.4	6.0	TO-15	07/20/10	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Tetrachloroethylene	127-18-4	166	0.200	1.40	0.30	2.0	TO-15	07/20/10	1
Tetrahydrofuran	109-99-9	72.1	0.200	0.590	< 0.20	< 0.59	TO-15	07/20/10	1
Toluene	108-88-3	92.1	0.200	0.750	3.6	14.	TO-15	07/20/10	1
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.70	< 0.63	< 4.7	TO-15	07/20/10	1
1,1,1-Trichloroethane	71-55-6	133	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
1,1,2-Trichloroethane	79-00-5	133	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
Trichloroethylene	79-01-6	131	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.980	8.6	42.	TO-15	07/20/10	1
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.980	2.4	12.	TO-15	07/20/10	1
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.930	< 0.20	< 0.93	TO-15	07/20/10	1
Vinyl chloride	75-01-4	62.5	0.200	0.510	< 0.20	< 0.51	TO-15	07/20/10	1
Vinyl Bromide	593-60-2	106.95	0.200	0.870	< 0.20	< 0.87	TO-15	07/20/10	1
Vinyl acetate	108-05-4	86.1	0.200	0.700	< 0.20	< 0.70	TO-15	07/20/10	1
m&p-Xylene	1330-20-7	106	0.400	1.70	3.9	17.	TO-15	07/20/10	1
o-Xylene	95-47-6	106	0.200	0.870	1.6	6.9	TO-15	07/20/10	1
TPH (GC/MS) Low Fraction	8006-61-9	101	50.0	210.	310	1300	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-02

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-2 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 14:00

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	5.00	12.0	28.	67.	TO-15	07/21/10	4
Allyl chloride	107-05-1	76.53	0.200	0.630	< 0.20	< 0.63	TO-15	07/20/10	1
Benzene	71-43-2	78.1	0.200	0.640	3.6	11.	TO-15	07/20/10	1
Benzyl Chloride	100-44-7	127	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Bromodichloromethane	75-27-4	164	0.200	1.30	< 0.20	< 1.3	TO-15	07/20/10	1
Bromoform	75-25-2	253	0.600	6.20	< 0.60	< 6.2	TO-15	07/20/10	1
Bromomethane	74-83-9	94.9	0.200	0.780	< 0.20	< 0.78	TO-15	07/20/10	1
1,3-Butadiene	106-99-0	54.1	2.00	4.40	3.6	8.0	TO-15	07/20/10	1
tert-Butyl alcohol	75-65-0	74.12	0.200	0.610	< 0.20	< 0.61	TO-15	07/20/10	1
Carbon disulfide	75-15-0	76.1	0.200	0.620	2.1	6.5	TO-15	07/20/10	1
Carbon tetrachloride	56-23-5	154	0.200	1.30	< 0.20	< 1.3	TO-15	07/20/10	1
Chlorobenzene	108-90-7	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
Chloroethane	75-00-3	64.5	0.200	0.530	< 0.20	< 0.53	TO-15	07/20/10	1
Chloroform	67-66-3	119	0.200	0.970	< 0.20	< 0.97	TO-15	07/20/10	1
Chloromethane	74-87-3	50.5	0.200	0.410	< 0.20	< 0.41	TO-15	07/20/10	1
2-Chlorotoluene	95-49-8	126	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Cyclohexane	110-82-7	84.2	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1
Dibromochloromethane	124-48-1	208	0.200	1.70	< 0.20	< 1.7	TO-15	07/20/10	1
1,2-Dibromoethane	106-93-4	188	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,2-Dichloroethane	107-06-2	99	0.200	0.810	< 0.20	< 0.81	TO-15	07/20/10	1
1,1-Dichloroethane	75-34-3	98	0.200	0.800	< 0.20	< 0.80	TO-15	07/20/10	1
1,1-Dichloroethene	75-35-4	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
1,2-Dichloropropane	78-87-5	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
1,4-Dioxane	123-91-1	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Ethanol	64-17-5	46.1	0.630	1.20	1.2	2.3	TO-15	07/20/10	1
Ethylbenzene	100-41-4	106	0.200	0.870	4.9	21.	TO-15	07/20/10	1
4-Ethyltoluene	622-96-8	120	0.200	0.980	0.81	4.0	TO-15	07/20/10	1
Trichlorofluoromethane	75-69-4	137.4	0.200	1.10	0.34	1.9	TO-15	07/20/10	1
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.990	< 0.20	< 0.99	TO-15	07/20/10	1
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Heptane	142-82-5	100	0.200	0.820	3.8	16.	TO-15	07/20/10	1
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.70	< 0.63	< 6.7	TO-15	07/20/10	1
n-Hexane	110-54-3	86.2	0.200	0.710	1.8	6.3	TO-15	07/20/10	1
Isopropylbenzene	98-82-8	120.2	0.200	0.980	0.22	1.1	TO-15	07/20/10	1
Methylene Chloride	75-09-2	84.9	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-02

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-2 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 14:00

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Methyl Butyl Ketone	591-78-6	100	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
2-Butanone (MEK)	78-93-3	72.1	1.25	3.70	9.0	27.	TO-15	07/20/10	1
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
Methyl methacrylate	80-62-6	100.12	0.200	0.820	< 0.20	< 0.82	TO-15	07/20/10	1
MTBE	1634-04-4	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Naphthalene	91-20-3	128	0.630	3.30	< 0.63	< 3.3	TO-15	07/20/10	1
2-Propanol	67-63-0	60.1	1.25	3.10	< 1.3	< 3.1	TO-15	07/20/10	1
Propene	115-07-1	42.1	0.400	0.690	< 0.40	< 0.69	TO-15	07/20/10	1
Styrene	100-42-5	104	0.200	0.850	1.4	6.0	TO-15	07/20/10	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Tetrachloroethylene	127-18-4	166	0.200	1.40	1.1	7.5	TO-15	07/20/10	1
Tetrahydrofuran	109-99-9	72.1	0.200	0.590	< 0.20	< 0.59	TO-15	07/20/10	1
Toluene	108-88-3	92.1	0.200	0.750	8.2	31.	TO-15	07/20/10	1
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.70	< 0.63	< 4.7	TO-15	07/20/10	1
1,1,1-Trichloroethane	71-55-6	133	0.200	1.10	5.2	28.	TO-15	07/20/10	1
1,1,2-Trichloroethane	79-00-5	133	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
Trichloroethylene	79-01-6	131	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.980	3.5	17.	TO-15	07/20/10	1
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.980	0.85	4.2	TO-15	07/20/10	1
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.930	< 0.20	< 0.93	TO-15	07/20/10	1
Vinyl chloride	75-01-4	62.5	0.200	0.510	< 0.20	< 0.51	TO-15	07/20/10	1
Vinyl Bromide	593-60-2	106.95	0.200	0.870	< 0.20	< 0.87	TO-15	07/20/10	1
Vinyl acetate	108-05-4	86.1	0.200	0.700	< 0.20	< 0.70	TO-15	07/20/10	1
m&p-Xylene	1330-20-7	106	0.400	1.70	4.5	20.	TO-15	07/20/10	1
o-Xylene	95-47-6	106	0.200	0.870	1.8	7.8	TO-15	07/20/10	1
TPH (GC/MS) Low Fraction	8006-61-9	101	50.0	210.	280	1200	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-03

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-3 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 14:30

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	5.00	12.0	32.	76.	TO-15	07/21/10	4
Allyl chloride	107-05-1	76.53	0.200	0.630	< 0.20	< 0.63	TO-15	07/20/10	1
Benzene	71-43-2	78.1	0.200	0.640	1.6	5.1	TO-15	07/20/10	1
Benzyl Chloride	100-44-7	127	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Bromodichloromethane	75-27-4	164	0.200	1.30	0.59	4.0	TO-15	07/20/10	1
Bromoform	75-25-2	253	0.600	6.20	< 0.60	< 6.2	TO-15	07/20/10	1
Bromomethane	74-83-9	94.9	0.200	0.780	< 0.20	< 0.78	TO-15	07/20/10	1
1,3-Butadiene	106-99-0	54.1	2.00	4.40	< 2.0	< 4.4	TO-15	07/20/10	1
tert-Butyl alcohol	75-65-0	74.12	0.200	0.610	< 0.20	< 0.61	TO-15	07/20/10	1
Carbon disulfide	75-15-0	76.1	0.200	0.620	1.6	5.0	TO-15	07/20/10	1
Carbon tetrachloride	56-23-5	154	0.200	1.30	0.29	1.8	TO-15	07/20/10	1
Chlorobenzene	108-90-7	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
Chloroethane	75-00-3	64.5	0.200	0.530	< 0.20	< 0.53	TO-15	07/20/10	1
Chloroform	67-66-3	119	0.200	0.970	6.0	29.	TO-15	07/20/10	1
Chloromethane	74-87-3	50.5	0.200	0.410	< 0.20	< 0.41	TO-15	07/20/10	1
2-Chlorotoluene	95-49-8	126	0.200	1.00	< 0.20	< 1.0	TO-15	07/20/10	1
Cyclohexane	110-82-7	84.2	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1
Dibromochloromethane	124-48-1	208	0.200	1.70	< 0.20	< 1.7	TO-15	07/20/10	1
1,2-Dibromoethane	106-93-4	188	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	< 0.20	< 1.2	TO-15	07/20/10	1
1,2-Dichloroethane	107-06-2	99	0.200	0.810	< 0.20	< 0.81	TO-15	07/20/10	1
1,1-Dichloroethane	75-34-3	98	0.200	0.800	< 0.20	< 0.80	TO-15	07/20/10	1
1,1-Dichloroethene	75-35-4	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
cis-1,2-Dichloroethene	156-59-2	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
trans-1,2-Dichloroethene	156-60-5	96.9	0.200	0.790	< 0.20	< 0.79	TO-15	07/20/10	1
1,2-Dichloropropane	78-87-5	113	0.200	0.920	< 0.20	< 0.92	TO-15	07/20/10	1
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.910	< 0.20	< 0.91	TO-15	07/20/10	1
1,4-Dioxane	123-91-1	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Ethanol	64-17-5	46.1	0.630	1.20	1.3	2.5	TO-15	07/20/10	1
Ethylbenzene	100-41-4	106	0.200	0.870	1.8	7.8	TO-15	07/20/10	1
4-Ethyltoluene	622-96-8	120	0.200	0.980	0.68	3.3	TO-15	07/20/10	1
Trichlorofluoromethane	75-69-4	137.4	0.200	1.10	12.	67.	TO-15	07/20/10	1
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.990	< 0.20	< 0.99	TO-15	07/20/10	1
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.200	1.50	< 0.20	< 1.5	TO-15	07/20/10	1
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Heptane	142-82-5	100	0.200	0.820	2.3	9.4	TO-15	07/20/10	1
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.70	< 0.63	< 6.7	TO-15	07/20/10	1
n-Hexane	110-54-3	86.2	0.200	0.710	2.6	9.2	TO-15	07/20/10	1
Isopropylbenzene	98-82-8	120.2	0.200	0.980	< 0.20	< 0.98	TO-15	07/20/10	1
Methylene Chloride	75-09-2	84.9	0.200	0.690	< 0.20	< 0.69	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-03

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-3 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 14:30

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Methyl Butyl Ketone	591-78-6	100	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
2-Butanone (MEK)	78-93-3	72.1	1.25	3.70	14.	41.	TO-15	07/20/10	1
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	1.25	5.10	< 1.3	< 5.1	TO-15	07/20/10	1
Methyl methacrylate	80-62-6	100.12	0.200	0.820	< 0.20	< 0.82	TO-15	07/20/10	1
MTBE	1634-04-4	88.1	0.200	0.720	< 0.20	< 0.72	TO-15	07/20/10	1
Naphthalene	91-20-3	128	0.630	3.30	0.70	3.7	TO-15	07/20/10	1
2-Propanol	67-63-0	60.1	1.25	3.10	< 1.3	< 3.1	TO-15	07/20/10	1
Propene	115-07-1	42.1	0.400	0.690	< 0.40	< 0.69	TO-15	07/20/10	1
Styrene	100-42-5	104	0.200	0.850	1.2	5.1	TO-15	07/20/10	1
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.40	< 0.20	< 1.4	TO-15	07/20/10	1
Tetrachloroethylene	127-18-4	166	0.200	1.40	0.48	3.3	TO-15	07/20/10	1
Tetrahydrofuran	109-99-9	72.1	0.200	0.590	< 0.20	< 0.59	TO-15	07/20/10	1
Toluene	108-88-3	92.1	0.200	0.750	3.7	14.	TO-15	07/20/10	1
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.70	< 0.63	< 4.7	TO-15	07/20/10	1
1,1,1-Trichloroethane	71-55-6	133	0.200	1.10	0.64	3.5	TO-15	07/20/10	1
1,1,2-Trichloroethane	79-00-5	133	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
Trichloroethylene	79-01-6	131	0.200	1.10	< 0.20	< 1.1	TO-15	07/20/10	1
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.980	3.0	15.	TO-15	07/20/10	1
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.980	0.70	3.4	TO-15	07/20/10	1
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.930	< 0.20	< 0.93	TO-15	07/20/10	1
Vinyl chloride	75-01-4	62.5	0.200	0.510	< 0.20	< 0.51	TO-15	07/20/10	1
Vinyl Bromide	593-60-2	106.95	0.200	0.870	< 0.20	< 0.87	TO-15	07/20/10	1
Vinyl acetate	108-05-4	86.1	0.200	0.700	< 0.20	< 0.70	TO-15	07/20/10	1
m&p-Xylene	1330-20-7	106	0.400	1.70	3.2	14.	TO-15	07/20/10	1
o-Xylene	95-47-6	106	0.200	0.870	1.2	5.2	TO-15	07/20/10	1
TPH (GC/MS) Low Fraction	8006-61-9	101	50.0	210.	190	780	TO-15	07/20/10	1

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-04

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-4 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 16:40

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Volatile Organics									
Acetone	67-64-1	58.1	2.50	5.90	28.	67.	TO-15	07/20/10	2
Allyl chloride	107-05-1	76.53	0.400	1.30	< 0.40	< 1.3	TO-15	07/20/10	2
Benzene	71-43-2	78.1	0.400	1.30	1.2	3.8	TO-15	07/20/10	2
Benzyl Chloride	100-44-7	127	0.400	2.10	< 0.40	< 2.1	TO-15	07/20/10	2
Bromodichloromethane	75-27-4	164	0.400	2.70	< 0.40	< 2.7	TO-15	07/20/10	2
Bromoform	75-25-2	253	1.20	12.0	< 1.2	< 12.	TO-15	07/20/10	2
Bromomethane	74-83-9	94.9	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
1,3-Butadiene	106-99-0	54.1	4.00	8.90	< 4.0	< 8.9	TO-15	07/20/10	2
tert-Butyl alcohol	75-65-0	74.12	0.400	1.20	< 0.40	< 1.2	TO-15	07/20/10	2
Carbon disulfide	75-15-0	76.1	0.400	1.20	9.7	30.	TO-15	07/20/10	2
Carbon tetrachloride	56-23-5	154	0.400	2.50	< 0.40	< 2.5	TO-15	07/20/10	2
Chlorobenzene	108-90-7	113	0.400	1.80	< 0.40	< 1.8	TO-15	07/20/10	2
Chloroethane	75-00-3	64.5	0.400	1.10	< 0.40	< 1.1	TO-15	07/20/10	2
Chloroform	67-66-3	119	0.400	1.90	< 0.40	< 1.9	TO-15	07/20/10	2
Chloromethane	74-87-3	50.5	0.400	0.830	< 0.40	< 0.83	TO-15	07/20/10	2
2-Chlorotoluene	95-49-8	126	0.400	2.10	< 0.40	< 2.1	TO-15	07/20/10	2
Cyclohexane	110-82-7	84.2	0.400	1.40	0.74	2.5	TO-15	07/20/10	2
Dibromochloromethane	124-48-1	208	0.400	3.40	< 0.40	< 3.4	TO-15	07/20/10	2
1,2-Dibromoethane	106-93-4	188	0.400	3.10	< 0.40	< 3.1	TO-15	07/20/10	2
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	07/20/10	2
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	< 0.40	< 2.4	TO-15	07/20/10	2
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	< 0.40	< 2.4	TO-15	07/20/10	2
1,2-Dichloroethane	107-06-2	99	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
1,1-Dichloroethane	75-34-3	98	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
1,1-Dichloroethene	75-35-4	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
cis-1,2-Dichloroethene	156-59-2	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
trans-1,2-Dichloroethene	156-60-5	96.9	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
1,2-Dichloropropane	78-87-5	113	0.400	1.80	< 0.40	< 1.8	TO-15	07/20/10	2
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.80	< 0.40	< 1.8	TO-15	07/20/10	2
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.80	< 0.40	< 1.8	TO-15	07/20/10	2
1,4-Dioxane	123-91-1	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	07/20/10	2
Ethanol	64-17-5	46.1	1.26	2.40	27.	51.	TO-15	07/20/10	2
Ethylbenzene	100-41-4	106	0.400	1.70	1.9	8.2	TO-15	07/20/10	2
4-Ethyltoluene	622-96-8	120	0.400	2.00	0.72	3.5	TO-15	07/20/10	2
Trichlorofluoromethane	75-69-4	137.4	0.400	2.20	< 0.40	< 2.2	TO-15	07/20/10	2
Dichlorodifluoromethane	75-71-8	120.92	0.400	2.00	0.73	3.6	TO-15	07/20/10	2
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.400	3.10	< 0.40	< 3.1	TO-15	07/20/10	2
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	< 0.40	< 2.8	TO-15	07/20/10	2
Heptane	142-82-5	100	0.400	1.60	1.2	4.9	TO-15	07/20/10	2
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.0	< 1.3	< 13.	TO-15	07/20/10	2
n-Hexane	110-54-3	86.2	0.400	1.40	1.3	4.6	TO-15	07/20/10	2
Isopropylbenzene	98-82-8	120.2	0.400	2.00	< 0.40	< 2.0	TO-15	07/20/10	2
Methylene Chloride	75-09-2	84.9	0.400	1.40	< 0.40	< 1.4	TO-15	07/20/10	2

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Matt Witzel
Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove, MN 55369

July 21, 2010

ESC Sample # : L469321-04

Date Received : July 16, 2010
Description : CPED Snelling

Site ID :

Sample ID : VP-4 10FT

Project # : R010253.001

Collected By : Eric Simonson
Collection Date : 07/12/10 16:40

Parameter	Cas#	Mol Wght	RDL1	RDL2	ppbv	ug/m3	Method	Date	Dil.
Methyl Butyl Ketone	591-78-6	100	2.50	10.0	< 2.5	< 10.	TO-15	07/20/10	2
2-Butanone (MEK)	78-93-3	72.1	2.50	7.40	12.	35.	TO-15	07/20/10	2
4-Methyl-2-pentanone (MIBK)	108-10-1	100.1	2.50	10.0	< 2.5	< 10.	TO-15	07/20/10	2
Methyl methacrylate	80-62-6	100.12	0.400	1.60	< 0.40	< 1.6	TO-15	07/20/10	2
MTBE	1634-04-4	88.1	0.400	1.40	< 0.40	< 1.4	TO-15	07/20/10	2
Naphthalene	91-20-3	128	1.26	6.60	< 1.3	< 6.6	TO-15	07/20/10	2
2-Propanol	67-63-0	60.1	2.50	6.10	< 2.5	< 6.1	TO-15	07/20/10	2
Propene	115-07-1	42.1	0.800	1.40	9.8	17.	TO-15	07/20/10	2
Styrene	100-42-5	104	0.400	1.70	1.4	6.0	TO-15	07/20/10	2
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.70	< 0.40	< 2.7	TO-15	07/20/10	2
Tetrachloroethylene	127-18-4	166	0.400	2.70	7.9	54.	TO-15	07/20/10	2
Tetrahydrofuran	109-99-9	72.1	0.400	1.20	< 0.40	< 1.2	TO-15	07/20/10	2
Toluene	108-88-3	92.1	0.400	1.50	4.1	15.	TO-15	07/20/10	2
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.30	< 1.3	< 9.3	TO-15	07/20/10	2
1,1,1-Trichloroethane	71-55-6	133	0.400	2.20	< 0.40	< 2.2	TO-15	07/20/10	2
1,1,2-Trichloroethane	79-00-5	133	0.400	2.20	< 0.40	< 2.2	TO-15	07/20/10	2
Trichloroethylene	79-01-6	131	0.400	2.10	< 0.40	< 2.1	TO-15	07/20/10	2
1,2,4-Trimethylbenzene	95-63-6	120	0.400	2.00	3.0	15.	TO-15	07/20/10	2
1,3,5-Trimethylbenzene	108-67-8	120	0.400	2.00	0.70	3.4	TO-15	07/20/10	2
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.90	< 0.40	< 1.9	TO-15	07/20/10	2
Vinyl chloride	75-01-4	62.5	0.400	1.00	< 0.40	< 1.0	TO-15	07/20/10	2
Vinyl Bromide	593-60-2	106.95	0.400	1.70	< 0.40	< 1.7	TO-15	07/20/10	2
Vinyl acetate	108-05-4	86.1	0.400	1.40	< 0.40	< 1.4	TO-15	07/20/10	2
m&p-Xylene	1330-20-7	106	0.800	3.50	3.9	17.	TO-15	07/20/10	2
o-Xylene	95-47-6	106	0.400	1.70	1.5	6.5	TO-15	07/20/10	2
TPH (GC/MS) Low Fraction	8006-61-9	101	100.	410.	200	830	TO-15	07/20/10	2

RDL1 = ppbv , RDL2 = ug/m3
Note:
Units are based on (STP) - Standard Temperature and Pressure
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.
.
Reported: 07/21/10 09:45 Printed: 07/21/10 09:46

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L469321-01	WG489240	SAMP	tert-Butyl alcohol	R1293409	J4
L469321-02	WG489240	SAMP	tert-Butyl alcohol	R1293409	J4
L469321-03	WG489240	SAMP	tert-Butyl alcohol	R1293409	J4
L469321-04	WG489240	SAMP	tert-Butyl alcohol	R1293409	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J4	The associated batch QC was outside the established quality control range for accuracy.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
07/21/10 at 09:46:24

TSR Signing Reports: 134
R5 - Desired TAT

Log arsenic water as ASG

Sample: L469321-01 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/21/10 09:45

Sample: L469321-02 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/21/10 09:45

Sample: L469321-03 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/21/10 09:45

Sample: L469321-04 Account: PINNENGMN Received: 07/16/10 09:00 Due Date: 07/23/10 00:00 RPT Date: 07/21/10 09:45

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Matt Witzel
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469321

July 21, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1-Trichloroethane	< .2	ppb			WG489240	07/20/10 03:15
1,1,2,2-Tetrachloroethane	< .2	ppb			WG489240	07/20/10 03:15
1,1,2-Trichloroethane	< .2	ppb			WG489240	07/20/10 03:15
1,1,2-Trichlorotrifluoroethane	< .2	ppb			WG489240	07/20/10 03:15
1,1-Dichloroethane	< .2	ppb			WG489240	07/20/10 03:15
1,1-Dichloroethene	< .2	ppb			WG489240	07/20/10 03:15
1,2,4-Trichlorobenzene	< .63	ppb			WG489240	07/20/10 03:15
1,2,4-Trimethylbenzene	< .2	ppb			WG489240	07/20/10 03:15
1,2-Dibromoethane	< .2	ppb			WG489240	07/20/10 03:15
1,2-Dichlorobenzene	< .2	ppb			WG489240	07/20/10 03:15
1,2-Dichloroethane	< .2	ppb			WG489240	07/20/10 03:15
1,2-Dichloropropane	< .2	ppb			WG489240	07/20/10 03:15
1,2-Dichlorotetrafluoroethane	< .2	ppb			WG489240	07/20/10 03:15
1,3,5-Trimethylbenzene	< .2	ppb			WG489240	07/20/10 03:15
1,3-Butadiene	< 2	ppb			WG489240	07/20/10 03:15
1,3-Dichlorobenzene	< .2	ppb			WG489240	07/20/10 03:15
1,4-Dichlorobenzene	< .2	ppb			WG489240	07/20/10 03:15
1,4-Dioxane	< .2	ppb			WG489240	07/20/10 03:15
2,2,4-Trimethylpentane	< .2	ppb			WG489240	07/20/10 03:15
2-Butanone (MEK)	< 1.25	ppb			WG489240	07/20/10 03:15
2-Chlorotoluene	< .2	ppb			WG489240	07/20/10 03:15
2-Propanol	< 1.25	ppb			WG489240	07/20/10 03:15
4-Ethyltoluene	< .2	ppb			WG489240	07/20/10 03:15
4-Methyl-2-pentanone (MIBK)	< 1.25	ppb			WG489240	07/20/10 03:15
Acetone	< 1.25	ppb			WG489240	07/20/10 03:15
Allyl chloride	< .2	ppb			WG489240	07/20/10 03:15
Benzene	< .2	ppb			WG489240	07/20/10 03:15
Benzyl Chloride	< .2	ppb			WG489240	07/20/10 03:15
Bromodichloromethane	< .2	ppb			WG489240	07/20/10 03:15
Bromoform	< .6	ppb			WG489240	07/20/10 03:15
Bromomethane	< .2	ppb			WG489240	07/20/10 03:15
Carbon disulfide	< .2	ppb			WG489240	07/20/10 03:15
Carbon tetrachloride	< .2	ppb			WG489240	07/20/10 03:15
Chlorobenzene	< .2	ppb			WG489240	07/20/10 03:15
Dibromochloromethane	< .2	ppb			WG489240	07/20/10 03:15
Chloroethane	< .2	ppb			WG489240	07/20/10 03:15
Chloroform	< .2	ppb			WG489240	07/20/10 03:15
Chloromethane	< .2	ppb			WG489240	07/20/10 03:15
cis-1,2-Dichloroethene	< .2	ppb			WG489240	07/20/10 03:15
cis-1,3-Dichloropropene	< .2	ppb			WG489240	07/20/10 03:15
Cyclohexane	< .2	ppb			WG489240	07/20/10 03:15
Dichlorodifluoromethane	< .2	ppb			WG489240	07/20/10 03:15
Ethanol	< .63	ppb			WG489240	07/20/10 03:15
Ethylbenzene	< .2	ppb			WG489240	07/20/10 03:15
Heptane	< .2	ppb			WG489240	07/20/10 03:15
Hexachloro-1,3-butadiene	< .63	ppb			WG489240	07/20/10 03:15
Isopropylbenzene	< .2	ppb			WG489240	07/20/10 03:15
m&p-Xylene	< .4	ppb			WG489240	07/20/10 03:15
Methyl Butyl Ketone	< 1.25	ppb			WG489240	07/20/10 03:15
Methyl methacrylate	< .2	ppb			WG489240	07/20/10 03:15
MTBE	< .2	ppb			WG489240	07/20/10 03:15
Methylene Chloride	< .2	ppb			WG489240	07/20/10 03:15
n-Hexane	< .2	ppb			WG489240	07/20/10 03:15
Naphthalene	< .63	ppb			WG489240	07/20/10 03:15
o-Xylene	< .2	ppb			WG489240	07/20/10 03:15
Propene	< .4	ppb			WG489240	07/20/10 03:15
Styrene	< .2	ppb			WG489240	07/20/10 03:15
tert-Butyl alcohol	< .2	ppb			WG489240	07/20/10 03:15
Tetrachloroethylene	< .2	ppb			WG489240	07/20/10 03:15

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Matt Witzel
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469321

July 21, 2010

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Tetrahydrofuran	< .2	ppb			WG489240	07/20/10 03:15
Toluene	< .2	ppb			WG489240	07/20/10 03:15
TPH (GC/MS) Low Fraction	< 50	ppb			WG489240	07/20/10 03:15
trans-1,2-Dichloroethene	< .2	ppb			WG489240	07/20/10 03:15
trans-1,3-Dichloropropene	< .2	ppb			WG489240	07/20/10 03:15
Trichloroethylene	< .2	ppb			WG489240	07/20/10 03:15
Trichlorofluoromethane	< .2	ppb			WG489240	07/20/10 03:15
Vinyl acetate	< .2	ppb			WG489240	07/20/10 03:15
Vinyl Bromide	< .2	ppb			WG489240	07/20/10 03:15
Vinyl chloride	< .2	ppb			WG489240	07/20/10 03:15
Acetone	< 1.25	ppb			WG489472	07/20/10 20:42

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1,1-Trichloroethane	ppb	3.75	3.18	84.8	70-130	WG489240
1,1,2,2-Tetrachloroethane	ppb	3.75	3.49	93.0	70-130	WG489240
1,1,2-Trichloroethane	ppb	3.75	3.23	86.2	70-130	WG489240
1,1,2-Trichlorotrifluoroethane	ppb	3.75	3.18	84.7	70-130	WG489240
1,1-Dichloroethane	ppb	3.75	3.27	87.2	70-130	WG489240
1,1-Dichloroethene	ppb	3.75	3.17	84.6	70-130	WG489240
1,2,4-Trichlorobenzene	ppb	3.75	3.53	94.2	70-130	WG489240
1,2,4-Trimethylbenzene	ppb	3.75	3.45	91.9	70-130	WG489240
1,2-Dibromoethane	ppb	3.75	3.36	89.7	70-130	WG489240
1,2-Dichlorobenzene	ppb	3.75	3.36	89.7	70-130	WG489240
1,2-Dichloroethane	ppb	3.75	3.25	86.7	70-130	WG489240
1,2-Dichloropropane	ppb	3.75	3.29	87.8	70-130	WG489240
1,2-Dichlorotetrafluoroethane	ppb	3.75	3.08	82.1	70-130	WG489240
1,3,5-Trimethylbenzene	ppb	3.75	3.32	88.7	70-130	WG489240
1,3-Butadiene	ppb	3.75	3.14	83.6	70-130	WG489240
1,3-Dichlorobenzene	ppb	3.75	3.29	87.6	70-130	WG489240
1,4-Dichlorobenzene	ppb	3.75	3.29	87.6	70-130	WG489240
1,4-Dioxane	ppb	3.75	2.96	79.0	70-130	WG489240
2,2,4-Trimethylpentane	ppb	3.75	3.22	85.8	70-130	WG489240
2-Butanone (MEK)	ppb	3.75	3.72	99.1	70-130	WG489240
2-Chlorotoluene	ppb	3.75	3.37	89.8	70-130	WG489240
2-Propanol	ppb	3.75	3.55	94.6	70-130	WG489240
4-Ethyltoluene	ppb	3.75	3.48	92.8	70-130	WG489240
4-Methyl-2-pentanone (MIBK)	ppb	3.75	3.70	98.6	70-130	WG489240
Acetone	ppb	3.75	3.51	93.6	70-130	WG489240
Allyl chloride	ppb	3.75	3.23	86.2	70-130	WG489240
Benzene	ppb	3.75	3.25	86.7	70-130	WG489240
Benzyl Chloride	ppb	3.75	3.52	93.9	70-130	WG489240
Bromodichloromethane	ppb	3.75	3.27	87.2	70-130	WG489240
Bromoform	ppb	3.75	3.50	93.3	70-130	WG489240
Bromomethane	ppb	3.75	3.10	82.7	70-130	WG489240
Carbon disulfide	ppb	3.75	3.09	82.4	70-130	WG489240
Carbon tetrachloride	ppb	3.75	3.22	85.8	70-130	WG489240
Chlorobenzene	ppb	3.75	3.27	87.3	70-130	WG489240
Dibromochloromethane	ppb	3.75	3.39	90.5	70-130	WG489240
Chloroethane	ppb	3.75	3.19	85.1	70-130	WG489240
Chloroform	ppb	3.75	3.22	85.8	70-130	WG489240
Chloromethane	ppb	3.75	3.04	81.2	70-130	WG489240
cis-1,2-Dichloroethene	ppb	3.75	3.24	86.3	70-130	WG489240
cis-1,3-Dichloropropene	ppb	3.75	3.29	87.7	70-130	WG489240
Cyclohexane	ppb	3.75	3.20	85.3	70-130	WG489240
Dichlorodifluoromethane	ppb	3.75	3.03	80.7	70-130	WG489240

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Matt Witzel
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469321

July 21, 2010

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Ethanol	ppb	3.75	3.37	90.0	70-130	WG489240
Ethylbenzene	ppb	3.75	3.38	90.2	70-130	WG489240
Heptane	ppb	3.75	3.14	83.9	70-130	WG489240
Hexachloro-1,3-butadiene	ppb	3.75	3.52	93.8	70-130	WG489240
Isopropylbenzene	ppb	3.75	3.39	90.3	70-130	WG489240
m&p-Xylene	ppb	7.5	6.71	89.5	70-130	WG489240
Methyl Butyl Ketone	ppb	3.75	3.76	100.	70-130	WG489240
Methyl methacrylate	ppb	3.75	3.54	94.5	70-130	WG489240
MTBE	ppb	3.75	3.53	94.1	70-130	WG489240
Methylene Chloride	ppb	3.75	3.11	82.9	70-130	WG489240
n-Hexane	ppb	3.75	3.21	85.7	70-130	WG489240
Naphthalene	ppb	3.75	3.62	96.4	70-130	WG489240
o-Xylene	ppb	3.75	3.39	90.3	70-130	WG489240
Propene	ppb	3.75	3.04	81.2	70-130	WG489240
Styrene	ppb	3.75	3.45	91.9	70-130	WG489240
tert-Butyl alcohol	ppb	3.75	2.33	62.2*	70-130	WG489240
Tetrachloroethylene	ppb	3.75	3.09	82.5	70-130	WG489240
Tetrahydrofuran	ppb	3.75	3.63	96.9	70-130	WG489240
Toluene	ppb	3.75	3.32	88.5	70-130	WG489240
TPH (GC/MS) Low Fraction	ppb	150	136.	90.6	70-130	WG489240
trans-1,2-Dichloroethene	ppb	3.75	3.18	84.7	70-130	WG489240
trans-1,3-Dichloropropene	ppb	3.75	3.37	89.8	70-130	WG489240
Trichloroethylene	ppb	3.75	3.10	82.6	70-130	WG489240
Trichlorofluoromethane	ppb	3.75	3.13	83.4	70-130	WG489240
Vinyl acetate	ppb	3.75	3.62	96.6	70-130	WG489240
Vinyl Bromide	ppb	3.75	3.15	84.1	70-130	WG489240
Vinyl chloride	ppb	3.75	3.08	82.2	70-130	WG489240
Acetone	ppb	3.75	3.71	98.9	70-130	WG489472

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1-Trichloroethane	ppb	3.42	3.18	91.0	70-130	7.44	25	WG489240
1,1,2,2-Tetrachloroethane	ppb	3.75	3.49	100.	70-130	7.16	25	WG489240
1,1,2-Trichloroethane	ppb	3.51	3.23	94.0	70-130	8.27	25	WG489240
1,1,2-Trichlorotrifluoroethane	ppb	3.42	3.18	91.0	70-130	7.38	25	WG489240
1,1-Dichloroethane	ppb	3.46	3.27	92.0	70-130	5.76	25	WG489240
1,1-Dichloroethene	ppb	3.40	3.17	91.0	70-130	7.02	25	WG489240
1,2,4-Trichlorobenzene	ppb	3.64	3.53	97.0	70-130	3.09	25	WG489240
1,2,4-Trimethylbenzene	ppb	3.71	3.45	99.0	70-130	7.38	25	WG489240
1,2-Dibromoethane	ppb	3.60	3.36	96.0	70-130	6.89	25	WG489240
1,2-Dichlorobenzene	ppb	3.61	3.36	96.0	70-130	7.16	25	WG489240
1,2-Dichloroethane	ppb	3.49	3.25	93.0	70-130	7.22	25	WG489240
1,2-Dichloropropane	ppb	3.56	3.29	95.0	70-130	7.93	25	WG489240
1,2-Dichlorotetrafluoroethane	ppb	3.29	3.08	88.0	70-130	6.67	25	WG489240
1,3,5-Trimethylbenzene	ppb	3.60	3.32	96.0	70-130	8.03	25	WG489240
1,3-Butadiene	ppb	3.40	3.14	91.0	70-130	8.11	25	WG489240
1,3-Dichlorobenzene	ppb	3.54	3.29	94.0	70-130	7.46	25	WG489240
1,4-Dichlorobenzene	ppb	3.54	3.29	94.0	70-130	7.37	25	WG489240
1,4-Dioxane	ppb	3.49	2.96	93.0	70-130	16.3	25	WG489240
2,2,4-Trimethylpentane	ppb	3.46	3.22	92.0	70-130	7.34	25	WG489240
2-Butanone (MEK)	ppb	3.92	3.72	104.	70-130	5.40	25	WG489240
2-Chlorotoluene	ppb	3.64	3.37	97.0	70-130	7.70	25	WG489240
2-Propanol	ppb	3.68	3.55	98.0	70-130	3.70	25	WG489240
4-Ethyltoluene	ppb	3.73	3.48	99.0	70-130	7.02	25	WG489240
4-Methyl-2-pentanone (MIBK)	ppb	3.84	3.70	102.	70-130	3.84	25	WG489240
Acetone	ppb	3.73	3.51	99.0	70-130	5.98	25	WG489240

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Matt Witzel
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469321

July 21, 2010

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
Allyl chloride	ppb	3.52	3.23	94.0	70-130	8.42	25	WG489240
Benzene	ppb	3.49	3.25	93.0	70-130	7.22	25	WG489240
Benzyl Chloride	ppb	3.81	3.52	102.	70-130	7.83	25	WG489240
Bromodichloromethane	ppb	3.54	3.27	94.0	70-130	7.89	25	WG489240
Bromoform	ppb	3.78	3.50	101.	70-130	7.81	25	WG489240
Bromomethane	ppb	3.30	3.10	88.0	70-130	6.19	25	WG489240
Carbon disulfide	ppb	3.32	3.09	89.0	70-130	7.36	25	WG489240
Carbon tetrachloride	ppb	3.49	3.22	93.0	70-130	8.18	25	WG489240
Chlorobenzene	ppb	3.51	3.27	94.0	70-130	7.05	25	WG489240
Dibromochloromethane	ppb	3.67	3.39	98.0	70-130	7.83	25	WG489240
Chloroethane	ppb	3.41	3.19	91.0	70-130	6.76	25	WG489240
Chloroform	ppb	3.45	3.22	92.0	70-130	6.95	25	WG489240
Chloromethane	ppb	3.28	3.04	87.0	70-130	7.40	25	WG489240
cis-1,2-Dichloroethene	ppb	3.49	3.24	93.0	70-130	7.56	25	WG489240
cis-1,3-Dichloropropene	ppb	3.51	3.29	94.0	70-130	6.49	25	WG489240
Cyclohexane	ppb	3.43	3.20	91.0	70-130	6.94	25	WG489240
Dichlorodifluoromethane	ppb	3.27	3.03	87.0	70-130	7.63	25	WG489240
Ethanol	ppb	3.60	3.37	96.0	70-130	6.37	25	WG489240
Ethylbenzene	ppb	3.63	3.38	97.0	70-130	7.00	25	WG489240
Heptane	ppb	3.40	3.14	91.0	70-130	7.83	25	WG489240
Hexachloro-1,3-butadiene	ppb	3.63	3.52	97.0	70-130	3.29	25	WG489240
Isopropylbenzene	ppb	3.63	3.39	97.0	70-130	7.03	25	WG489240
m&p-Xylene	ppb	7.22	6.71	96.0	70-130	7.32	25	WG489240
Methyl Butyl Ketone	ppb	3.91	3.76	104.	70-130	3.89	25	WG489240
Methyl methacrylate	ppb	3.71	3.54	99.0	70-130	4.72	25	WG489240
MTBE	ppb	3.73	3.53	100.	70-130	5.67	25	WG489240
Methylene Chloride	ppb	3.36	3.11	89.0	70-130	7.59	25	WG489240
n-Hexane	ppb	3.44	3.21	92.0	70-130	6.70	25	WG489240
Naphthalene	ppb	3.77	3.62	100.	70-130	4.03	25	WG489240
o-Xylene	ppb	3.64	3.39	97.0	70-130	7.10	25	WG489240
Propene	ppb	3.30	3.04	88.0	70-130	8.19	25	WG489240
Styrene	ppb	3.70	3.45	98.0	70-130	7.00	25	WG489240
tert-Butyl alcohol	ppb	2.98	2.33	79.0	70-130	24.4	25	WG489240
Tetrachloroethylene	ppb	3.31	3.09	88.0	70-130	6.69	25	WG489240
Tetrahydrofuran	ppb	3.79	3.63	101.	70-130	4.28	25	WG489240
Toluene	ppb	3.59	3.32	96.0	70-130	7.81	25	WG489240
TPH (GC/MS) Low Fraction	ppb	149.	136.	99.0	70-130	9.25	25	WG489240
trans-1,2-Dichloroethene	ppb	3.43	3.18	91.0	70-130	7.61	25	WG489240
trans-1,3-Dichloropropene	ppb	3.63	3.37	97.0	70-130	7.40	25	WG489240
Trichloroethylene	ppb	3.32	3.10	88.0	70-130	6.76	25	WG489240
Trichlorofluoromethane	ppb	3.34	3.13	89.0	70-130	6.65	25	WG489240
Vinyl acetate	ppb	3.83	3.62	102.	70-130	5.74	25	WG489240
Vinyl Bromide	ppb	3.36	3.15	90.0	70-130	6.44	25	WG489240
Vinyl chloride	ppb	3.32	3.08	88.0	70-130	7.28	25	WG489240
Acetone	ppb	3.66	3.71	98.0	70-130	1.26	25	WG489472

Batch number /Run number / Sample number cross reference

WG489240: R1293409: L469321-01 02 03 04
WG489472: R1293948: L469321-01 02 03

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Pinnacle Engineering - Maple G. MN.
Matt Witzel
11541 95th Ave. N

Maple Grove, MN 55369

Quality Assurance Report
Level II

L469321

July 21, 2010

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Pinnacle Engineering - Maple G. MN.
11541 95th Ave. N
Maple Grove,MN 55369

Billing information:
John Landwehr
11541 95th Ave. N
Maple Grove,MN 55369

Analysis/Container/Preservative

Chain of Custody
Page __ of __

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

Report to: Matt Witzel
Email: mwitzel@pineng.com
Project Description: CPED- Snelling
City/State Collected
Phone: (763) 315-4501
FAX: (763) 315-4507
Client Project #: R010253.001
Lab Project #: PINNENGMN-CPED
Collected by (print): Eric Swanson
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N X Y __

Rush? (Lab MUST Be Notified)
__ Same Day 200%
__ Next Day 100%
__ Two Day 50%
__ Three Day 25%

Date Results Needed
Email? __No X Yes
FAX? __No __Yes

Acctnum: PINNENGMN (lab use only)
Template/Prelogin: T65786/ P325904
Cooler #: 7-6-106m
Shipped Via: FedEX 2nd Day

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	TO-15TIC Summa							Remarks/Contaminant	Sample # (lab only)
VP-1	G	Air	10'	7-12	1330	1	X								L469321-01
VP-2	G	Air	10'		1400	1	X								02
VP-3	G	Air	10'		1430	1	X								03
VP-4	G	Air	10'		1640	1	X								04

*Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

9632 6251 3423

Relinquished by: (Signature)	Date: 7-15	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐	Condition: OK (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb. Bottles Received: 4 Summa	COC Seal Intact: ___Y ___N ___NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7/16/10 Time: 0400	pH Checked: NCF: