



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
60 Westview Street
Lexington, MA 02421-3185

Laboratory Results

June 29, 2011

Ted Bzenas - Mail Code OSRR02-2
US EPA New England R1

Project Number: 11050026

Project: A & J Floral - Benton, ME

Analysis: Oil Identification

Analyst: Paul Carroll *Paul Carroll*
6-29-11

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, MISOILID3.SOP.

Soil and product samples were extracted using cyclohexane as a solvent. In most cases Pressurized Fluid Extraction is used on soil samples, however if raw product is visible both soil and product samples are extracted using a waste dilution extraction. Aqueous samples are extracted using a separatory funnel technique with dichloromethane. The dichloromethane extract is concentrated and exchanged to cyclohexane. The extracts were analyzed using an Hewlett Packard 5890 gas chromatograph equipped with a J&W DB-1HT 30 meter 0.32mm ID capillary column. Detection was by Flame Ionization Detector.

Date Samples Received by the Laboratory: 05/20/2011

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617 918 8340 .

Sincerely,

Dan Boudreau 6/30/11

Dan Boudreau
Chemistry Team Leader

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

A & J Floral - Benton, ME

Oil Identification

Matrix: Soil

Field ID	Lab ID	Collected	Extracted	Analysis	Product	Hydrocarbon Range	Qualifier
D03212	AB17831	05/17/2011	06/17/2011	06/21/2011	ND		

Comments: Reporting Limit < 380 mg/kg

D03214	AB17833	05/18/2011	06/17/2011	06/21/2011	Kerosene	C14 - C18	PM
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Comments: PM = Possible Match
Estimated Concentration = 380 mg/kg

D03216	AB17835	05/19/2011	06/17/2011	06/21/2011	ND		
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Comments: Reporting Limit = 100 mg/L

D03217	AB17836	05/18/2011	06/17/2011	06/21/2011	ND		
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Comments: Reporting Limit = 100 mg/L

D03219	AB17838	05/19/2011	06/17/2011	06/21/2011	ND		
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Comments: Reporting Limit = 100 mg/L

D03220	AB17839	05/19/2011	06/17/2011	06/21/2011	ND		
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Comments: Reporting Limit = 100 mg/L

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

A & J Floral - Benton, ME

Oil Identification

Matrix: WATER

Field ID	Lab ID	Collected	Extracted	Analysis	Product	Hydrocarbon Range	Qualifier
D03221	AB17840	05/19/2011	06/17/2011	06/21/2011	ND		

Comments: Reporting Limit = 100 mg/L

D03222	AB17841	05/19/2011	06/17/2011	06/21/2011	ND		
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Comments: Reporting Limit = 100 mg/L

D03223	AB17842	05/19/2011	06/17/2011	06/22/2011	ND		
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Comments: Reporting Limit = 100 mg/L

D03224	AB17843	05/18/2011	06/17/2011	06/22/2011	ND		
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Comments: Reporting Limit = 100 mg/L

CHAIN OF CUSTODY RECORD

No: 1-052011-100136-0003
Site #: R01-110426TB
Lab: OEME

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	D30211	SB-03 (4-8')	✓ GC/MS Operation for VOCs - Soil (\$VOAHS)	Soil	5/17/2011	16:05	1	40 mL VOA	MeOH	
	D30212	SB-03 (4-8')	✓ Pest/PCBs in Soil Samples - Med Level (\$PESMS)	Soil	5/17/2011	16:15	1	8 oz. jar.	4 C	
	D30212	SB-03 (4-8')	✓ Total Petroleum Hydrocarbons - Soil (\$TPHS)	Soil	5/17/2011	16:15	1	4 oz. jar	4 C	
	D30212	SB-03 (4-8')	✓ Metals in Soil (INGLICP7) (\$METMS)	Soil	5/17/2011	16:15	1	4 oz. jar	4 C	
	D30213	SB-05 (4-8')	✓ GC/MS Operation for VOCs - Soil (\$VOAHS)	Soil	5/18/2011	09:00	1	40 mL VOA	MeOH	
	D30214	SB-05 (4-8')	✓ Pest/PCBs in Soil Samples - Med Level (\$PESMS)	Soil	5/18/2011	09:05	1	8 oz. jar	4 C	
	D30214	SB-05 (4-8')	✓ Total Petroleum Hydrocarbons - Soil (\$TPHS)	Soil	5/18/2011	09:05	1	4 oz. jar	4 C	
	D30214	SB-05 (4-8')	✓ Metals in Soil (INGLICP7) (\$METMS)	Soil	5/18/2011	09:05	1	4 oz. jar	4 C	
	D30215	TB-04	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Trip Blank	5/17/2011	07:00	4	40 mL VOA	HCl	
	D30216	MMW-02	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	09:10	2	1 liter amber	4 C	
	D30216	MMW-02	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	09:10	2	1 liter amber	4 C	

Special Instructions: Please utilize % Solid measurements from metals analysis for VOCs. Please forward results to OSC Ted Bazen as bazenas.ted@epa.gov.

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #
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No: 1-052011-100136-0003

Site #: R01-110426TB

Lab: OEME

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	D30216	MMW-02	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	09:10	2	1 liter amber	4 C	
	D30216	MMW-02	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	09:10	4	40 ml VOA	HCl	
	D30216	MMW-02	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/19/2011	09:10	1	poly	HNO3 pH<2	
	D30217	MMW-03	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/18/2011	15:00	6	40 ml VOA	HCl	Y
	D30217	MMW-03	✓ BNAs in Water (\$BNAW)	Ground Water	5/18/2011	15:00	4	1 liter amber	4 C	Y
	D30217	MMW-03	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/18/2011	15:00	4	1 liter amber	4 C	Y
	D30217	MMW-03	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/18/2011	15:00	2	1 liter amber	4 C	Y
	D30217	MMW-03	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/18/2011	15:00	2	poly	HNO3 pH<2	Y
	D30218	MMW-04	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	10:50	4	40 ml VOA	HCl	
	D30219	MMW-05	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/19/2011	08:15	1	poly	HNO3 pH<2	
	D30219	MMW-05	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	

Special Instructions: Please utilize % Solid measurements from metals analysis for VOCs. Please forward results to OSC Ted Bazenas bazenas.ted@epa.gov.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

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No: 1-052011-100136-0003

Site #: R01-110426TB

Lab: OEMME

No: 1-052011-100136-0003

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	D30219	MMW-05	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	08:15	4	40 ml VOA	HCl	
	D30219	MMW-05	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	
	D30219	MMW-05	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	
	D30220	MMW-06	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	11:20	2	1 liter amber	4 C	
	D30220	MMW-06	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	11:20	2	1 liter amber	4 C	
	D30220	MMW-06	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	11:20	2	1 liter amber	4 C	
	D30220	MMW-06	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/19/2011	11:20	1	poly	HNO3 pH<2	
	D30220	MMW-06	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	11:20	4	40 ml VOA	HCl	
	D30221	MMW-07	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	13:00	4	40 ml VOA	HCl	
	D30221	MMW-07	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	13:00	2	1 liter amber	4 C	
	D30221	MMW-07	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	13:00	2	1 liter amber	4 C	

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No. 1-052011-100136-0003

Site #: R01-110426TB
Lab: OEME

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	D30221	MMW-07	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	13:00	2	1 liter amber	4 C	
	D30221	MMW-07	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/19/2011	13:00	1	poly	HNO3 pH<2	
	D30222	MMW-08	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	11:55	2	1 liter amber	4 C	
	D30222	MMW-08	✓ Metals in Water (INGICP7) (\$METW)	Ground Water	5/19/2011	11:55	1	poly	HNO3 pH<2	
	D30222	MMW-08	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	11:55	2	1 liter amber	4 C	
	D30222	MMW-08	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	11:55	4	40 ml VOA	HCl	
	D30222	MMW-08	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	11:55	2	1 liter amber	4 C	
	D30223	MMW-09	✓ GS/MS Operation for VOCs - Water (\$VOAMW)	Ground Water	5/19/2011	08:15	4	40 ml VOA	HCl	
	D30223	MMW-09	✓ BNAs in Water (\$BNAW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	
	D30223	MMW-09	✓ Pest/PCBs in Aqueous Samples (\$PESW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	
	D30223	MMW-09	✓ Total Petroleum Hydrocarbons - Water (\$TPHW)	Ground Water	5/19/2011	08:15	2	1 liter amber	4 C	

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No. 1-052011-100136-0003

Site #: R01-110426TB
Lab: OEME

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