Ballfields Parcels at DoDHF Novato, CA
Data Validation Reports
LDC# 13575

Semivolatiles

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Ballfields Parcels at DoDHF Novato, CA

Collection Date: April 6, 2005

LDC Report Date: June 14, 2005

Matrix: Soil

Parameters: Semivolatiles

Validation Level: NFESC Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2502497

Sample Identification

TO63-R2-SB04-0-0.5
TO63-R2-SB04-3-4
TO63-R2-SB01-0-0.5
TO63-R2-SB01-0-0.5 Dup
TO63-R2-SB01-1-2
TO63-R1-SB04-0-0.5
TO63-R1-SB04-4-5
TO63-R1-SB01-0-0.5
TO63-R1-SB03-0-0.5
TO63-R1-SB03-4-5
TO63-R4-SB04-0-0.5
TO63-R4-SB04-4-5
TO63-R5-SB04-0-0.5
TO63-R5-SB04-5-6
TO63-R5-SB02-0-0.5
TO63-R5-SB02-3-4
TO63-R5-SB01-0-0.5
TO63-R5-SB03-0-0.5
TO63-R2-SB03-0-0.5
TO63-R2-SB02-0-0.5
TO63-R1-SB03-0-0.5MS
TO63-R1-SB03-0-0.5MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

The review follows the Final Sampling and Analysis Plan for Preliminary Assessment/Site Investigation of Ballfields Parcels at DoDHF Novato, California, (March 23, 2005) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
5/2/05	4,6-Dinitro-2-methylphenol	23.6	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-0-0.5 TO63-R1-SB04-4-5 TO63-R1-SB01-0-0.5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5 TO63-R1-SB03-0-0.5MS TO63-R1-SB03-0-0.5MSD KWG0505754-5	J (all detects) UJ (all non-detects)	A
5/5/05	2,4-Dinitrophenol	26.8	TO63-R2-SB02-0-0.5	J (all detects) UJ (all non-detects)	A

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/3/05	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 3,3'-Dichlorobenzidine	24 36 30	TO63-R1-SB04-0-0.5 TO63-R1-SB01-0-0.5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5	J (all detects) UJ (all non-detects)	A
5/4/05	Hexachlorocyclopentadiene 2,4-Dinitrophenol	22 27	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-4-5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5 TO63-R1-SB03-0-0.5MS TO63-R1-SB03-0-0.5MSD KWG0505754-2	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Initial calibration verification (ICV) percent differences (%D) were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/2/05	3,3'-Dichlorobenzidine	29	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-0-0.5 TO63-R1-SB04-4-5 TO63-R1-SB01-0-0.5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5 TO63-R1-SB03-0-0.5MS TO63-R1-SB03-0-0.5MSD KWG0505754-5	J (all detects) UJ (all non-detects)	A
5/5/05	3,3'-Dichlorobenzidine	27	TO63-R2-SB02-0-0.5	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0505754-5	4/11/05	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	6.9 ug/L 1.8 ug/L	All samples in SDG K2502497

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TO63-R2-SB04-0-0.5	Di-n-butylphthalate	5.4 ug/Kg	5.7U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TO63-R2-SB04-3-4	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	16 ug/Kg 12 ug/Kg	16U ug/Kg 180U ug/Kg
TO63-R2-SB01-0-0.5	Di-n-butylphthalate	14 ug/Kg	14U ug/Kg
TO63-R2-SB01-0-0.5 Dup	Di-n-butylphthalate	11 ug/Kg	11U ug/Kg
TO63-R2-SB01-1-2	Di-n-butylphthalate	8.7 ug/Kg	8.7U ug/Kg
TO63-R1-SB04-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	12 ug/Kg 10 ug/Kg	12U ug/Kg 170U ug/Kg
TO63-R1-SB01-0-0.5 (5x)	Di-n-butylphthalate	16 ug/Kg	28U ug/Kg
TO63-R1-SB03-0-0.5	Di-n-butylphthalate	9.4 ug/Kg	9.4U ug/Kg
TO63-R1-SB03-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.8 ug/Kg 12 ug/Kg	9.8U ug/Kg 160U ug/Kg
TO63-R4-SB04-0-0.5	Di-n-butylphthalate	8.6 ug/Kg	8.6U ug/Kg
TO63-R4-SB04-4-5	Di-n-butylphthalate	10 ug/Kg	10U ug/Kg
TO63-R5-SB04-0-0.5	Di-n-butylphthalate	5.6 ug/Kg	5.7U ug/Kg
TO63-R5-SB04-5-6	Di-n-butylphthalate	6.0 ug/Kg	8.6U ug/Kg
TO63-R5-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	11 ug/Kg 13 ug/Kg	11U ug/Kg 120U ug/Kg
TO63-R5-SB02-3-4	Bis(2-ethylhexyl)phthalate	4.6 ug/Kg	180U ug/Kg
TO63-R5-SB01-0-0.5 (5x)	Bis(2-ethylhexyl)phthalate	26 ug/Kg	620U ug/Kg
TO63-R5-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	6.3 ug/Kg 13 ug/Kg	6.3U ug/Kg 110U ug/Kg
TO63-R2-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	8.7 ug/Kg 13 ug/Kg	8.7U ug/Kg 160U ug/Kg
TO63-R2-SB02-0-0.5	Di-n-butylphthalate	10 ug/Kg	10U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples TO63-R2-SB01-0-0.5 and TO63-R2-SB01-0-0.5 Dup and samples TO63-R1-SB01-0-0.5 and TO63-R1-SB01-0-0.5Dup (from SDG K2502499) were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	TO63-R2-SB01-0-0.5	TO63-R2-SB01-0-0.5 Dup	
Phenol	6.4	9.1	35
Phenanthrene	2.7	7.2U	200
Di-n-butylphthalate	14	11	24
Bis(2-ethylhexyl)phthalate	84	38	75

Compound	Concentration (ug/Kg)		RPD
	TO63-R1-SB01-0-0.5Dup	TO63-R1-SB01-0-0.5	
Phenol	84U	14	200
Acetophenone	140U	32	200
Phenanthrene	12	5.6	73
Anthracene	28U	3.6	200
Di-n-butylphthalate	16	19	17
Fluoranthene	17	9.1	61
Pyrene	15	8.7	53
Benzo(a)anthracene	28U	5.6	200
Chrysene	15	13	14
Bis(2-ethylhexyl)phthalate	95	76	22
Benzo(b)fluoranthene	28U	17	200

Compound	Concentration (ug/Kg)		RPD
	TO63-R1-SB01-0-0.5Dup	TO63-R1-SB01-0-0.5	
Benzo(k)fluoranthene	28U	3.2	200
Benzo(a)pyrene	9.7	11	13
Indeno(1,2,3-cd)pyrene	28U	4.4	200
Benzo(g,h,i)perylene	28U	7.6	200
Butylbenzylphthalate	17	6.4U	200

XVII. Field Blanks

No field blanks were identified in this SDG.

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Data Qualification Summary - SDG K2502497

SDG	Sample	Compound	Flag	A or P	Reason
K2502497	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-0-0.5 TO63-R1-SB04-4-5 TO63-R1-SB01-0-0.5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5	4,6-Dinitro-2-methylphenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502497	TO63-R2-SB02-0-0.5	2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502497	TO63-R1-SB04-0-0.5 TO63-R1-SB01-0-0.5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5	Hexachlorocyclopentadiene 4,6-Dinitro-2-methylphenol 3,3'-Dichlorobenzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2502497	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-4-5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5	Hexachlorocyclopentadiene 2,4-Dinitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

SDG	Sample	Compound	Flag	A or P	Reason
K2502497	TO63-R2-SB04-0-0.5 TO63-R2-SB04-3-4 TO63-R2-SB01-0-0.5 TO63-R2-SB01-0-0.5 Dup TO63-R2-SB01-1-2 TO63-R1-SB04-0-0.5 TO63-R1-SB04-4-5 TO63-R1-SB01-0-0.5 TO63-R1-SB03-0-0.5 TO63-R1-SB03-4-5 TO63-R4-SB04-0-0.5 TO63-R4-SB04-4-5 TO63-R5-SB04-0-0.5 TO63-R5-SB04-5-6 TO63-R5-SB02-0-0.5 TO63-R5-SB02-3-4 TO63-R5-SB01-0-0.5 TO63-R5-SB03-0-0.5 TO63-R2-SB03-0-0.5 TO63-R2-SB02-0-0.5	3,3'-Dichlorobenzidine	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K2502497

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502497	TO63-R2-SB04-0-0.5	Di-n-butylphthalate	5.7U ug/Kg	A
K2502497	TO63-R2-SB04-3-4	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	16U ug/Kg 180U ug/Kg	A
K2502497	TO63-R2-SB01-0-0.5	Di-n-butylphthalate	14U ug/Kg	A
K2502497	TO63-R2-SB01-0-0.5 Dup	Di-n-butylphthalate	11U ug/Kg	A
K2502497	TO63-R2-SB01-1-2	Di-n-butylphthalate	8.7U ug/Kg	A
K2502497	TO63-R1-SB04-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	12U ug/Kg 170U ug/Kg	A
K2502497	TO63-R1-SB01-0-0.5 (5x)	Di-n-butylphthalate	28U ug/Kg	A
K2502497	TO63-R1-SB03-0-0.5	Di-n-butylphthalate	9.4U ug/Kg	A
K2502497	TO63-R1-SB03-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.8U ug/Kg 160U ug/Kg	A
K2502497	TO63-R4-SB04-0-0.5	Di-n-butylphthalate	8.6U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502497	TO63-R4-SB04-4-5	Di-n-butylphthalate	10U ug/Kg	A
K2502497	TO63-R5-SB04-0-0.5	Di-n-butylphthalate	5.7U ug/Kg	A
K2502497	TO63-R5-SB04-5-6	Di-n-butylphthalate	8.6U ug/Kg	A
K2502497	TO63-R5-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	11U ug/Kg 120U ug/Kg	A
K2502497	TO63-R5-SB02-3-4	Bis(2-ethylhexyl)phthalate	180U ug/Kg	A
K2502497	TO63-R5-SB01-0-0.5 (5x)	Bis(2-ethylhexyl)phthalate	620U ug/Kg	A
K2502497	TO63-R5-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	6.3U ug/Kg 110U ug/Kg	A
K2502497	TO63-R2-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	8.7U ug/Kg 160U ug/Kg	A
K2502497	TO63-R2-SB02-0-0.5	Di-n-butylphthalate	10U ug/Kg	A

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.7	5.6	1	04/11/05	05/04/05	KWG0505754	
Phenol	ND	U	17	2.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	5.7	2.8	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	5.7	2.0	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	5.7	3.9	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	29	14	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	5.7	3.3	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	5.7	3.7	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	5.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	5.7	2.3	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	5.7	1.9	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	5.7	3.0	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	29	6.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	14	14	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	12	10	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	29	17	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	5.7	3.4	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	12	5.5	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	5.7	4.1	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	12	3.1	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	12	3.0	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB04-0-0.5
Lab Code: K2502497-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	5.7	1.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U UJ	120	41	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U	57	34	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U	5.7	4.0	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U	5.7	2.0	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	5.7	2.3	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U	12	3.9	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	57	2.0	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	5.7	2.5	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U	5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U	5.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U	57	9.7	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**5.4**	BJ 5.7 U	5.7	3.0	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U	5.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	5.7	1.7	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	57	4.2	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**21**	J	120	2.0	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U	5.7	2.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	5.7	2.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U	5.7	1.9	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U	5.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	5.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U	5.7	2.7	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-001	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	58	11-87	05/04/05	Acceptable
Phenol-d6	68	20-99	05/04/05	Acceptable
Nitrobenzene-d5	62	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	69	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	78	23-113	05/04/05	Acceptable
Terphenyl-d14	110	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB04-3-4
Lab Code: K2502497-002

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.7	8.5	1	04/11/05	05/04/05	KWG0505754	
Phenol	**10**	J	26	3.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.7	4.2	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	8.7	3.0	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	8.7	5.9	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.7	2.1	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	44	21	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	8.7	5.1	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.7	5.6	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	8.7	3.8	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	8.7	3.5	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	8.7	2.8	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	8.7	4.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	44	9.5	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.7	3.2	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	8.7	3.7	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	21	21	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	**34**		18	16	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.7	3.7	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.7	2.1	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	44	26	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.7	3.2	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	8.7	5.2	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	18	8.3	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.7	6.3	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	18	4.7	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.7	3.2	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.7	4.9	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	18	4.5	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB04-3-4	**Units:**	ug/Kg
Lab Code:	K2502497-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		8.7	1.8	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	180	63	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		87	52	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		8.7	4.9	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		8.7	6.1	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		8.7	3.0	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		8.7	3.5	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		18	5.9	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	87	3.0	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		8.7	3.8	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		8.7	3.7	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		8.7	3.8	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		87	15	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**16**	B	~~8270~~	8.7 U	4.5	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		8.7	3.8	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		8.7	2.3	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		8.7	2.6	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	87	6.4	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		8.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**12**	J	180U	180	3.0	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		8.7	2.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		8.7	4.4	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		8.7	4.4	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		8.7	2.8	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		8.7	3.3	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		8.7	3.8	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		8.7	4.0	1	04/11/05	05/04/05	KWG0505754	

Comments:

8/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB04-3-4	**Units:**	ug/Kg
Lab Code:	K2502497-002	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	11-87	05/04/05	Acceptable
Phenol-d6	71	20-99	05/04/05	Acceptable
Nitrobenzene-d5	58	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	54	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	79	23-113	05/04/05	Acceptable
Terphenyl-d14	96	39-124	05/04/05	Acceptable

† **Analyte Comments**

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB01-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U		7.8	7.6	1	04/11/05	05/04/05	KWG0505754	
Phenol	**6.4**	J		24	3.0	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U		7.8	3.8	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U		7.8	2.7	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U		7.8	5.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U		7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U		39	19	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U		7.8	4.5	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U		7.8	5.0	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U		7.8	3.1	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U		7.8	2.5	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U		7.8	4.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U		39	8.6	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U		7.8	2.8	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U		7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U		19	19	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U		16	14	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U		7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U		7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U	UJ	39	24	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U		7.8	2.8	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U		7.8	4.7	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U		16	7.5	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U		7.8	5.6	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U		16	4.2	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U		7.8	2.8	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U		7.8	4.4	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U		16	4.1	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB01-0-0.5
Lab Code: K2502497-003

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		7.8	1.6	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	160	56	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		78	47	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		7.8	4.4	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		7.8	5.5	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		7.8	2.7	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		7.8	3.1	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		16	5.3	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	78	2.7	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		78	14	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	**2.7**	J		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**14**	B	u	7.8	4.1	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		7.8	2.4	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	78	5.8	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**84**	J		160	2.7	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		7.8	3.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		7.8	3.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		7.8	2.5	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		7.8	3.0	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		7.8	3.6	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB01-0-0.5
Lab Code: K2502497-003

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	54	11-87	05/04/05	Acceptable
Phenol-d6	61	20-99	05/04/05	Acceptable
Nitrobenzene-d5	55	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	63	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	74	23-113	05/04/05	Acceptable
Terphenyl-d14	93	39-124	05/04/05	Acceptable

Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB01-0-0.5 DUP
Lab Code: K2502497-004

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	7.2	7.1	1	04/11/05	05/04/05	KWG0505754	
Phenol	**9.1**	J	22	2.8	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	7.2	3.5	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	7.2	2.5	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	7.2	4.9	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	7.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	36	18	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	7.2	4.2	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	7.2	4.7	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	7.2	3.2	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	7.2	2.9	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	7.2	2.4	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	7.2	3.8	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	36	8.0	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	7.2	2.6	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	7.2	3.1	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	18	18	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	15	13	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	7.2	3.1	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	7.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	36	22	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	7.2	2.6	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	7.2	4.4	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	15	7.0	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	7.2	5.2	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	15	3.9	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	7.2	2.6	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	7.2	4.1	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	15	3.8	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB01-0-0.5 DUP	**Units:**	ug/Kg
Lab Code:	K2502497-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		7.2	1.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	150	52	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		72	44	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		7.2	4.1	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		7.2	5.1	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		7.2	2.5	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		7.2	2.9	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		15	4.9	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	72	2.5	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		7.2	3.2	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		7.2	3.1	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		7.2	3.2	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		72	13	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**11**	B	U	7.2	3.8	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		7.2	3.2	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		7.2	1.9	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		7.2	2.2	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	72	5.4	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		7.2	2.1	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**38**	J		150	2.5	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		7.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		7.2	3.7	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		7.2	3.7	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		7.2	2.4	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		7.2	2.8	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		7.2	3.2	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		7.2	3.4	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB01-0-0.5 DUP
Lab Code: K2502497-004

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	63	11-87	05/04/05	Acceptable
Phenol-d6	73	20-99	05/04/05	Acceptable
Nitrobenzene-d5	64	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	75	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	86	23-113	05/04/05	Acceptable
Terphenyl-d14	92	39-124	05/04/05	Acceptable

Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB01-1-2
Lab Code: K2502497-005

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	7.7	7.6	1	04/11/05	05/04/05	KWG0505754	
Phenol	**7.6**	J	24	3.0	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	7.7	3.7	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	7.7	2.7	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	7.7	5.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	7.7	1.9	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	39	19	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	7.7	4.5	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	7.7	5.0	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	7.7	3.4	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	7.7	3.1	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	7.7	2.5	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	7.7	4.0	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	39	8.5	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	7.7	2.8	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	7.7	3.3	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	19	19	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	16	14	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	7.7	3.3	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	7.7	1.9	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	39	24	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	7.7	2.8	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	7.7	4.7	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	16	7.4	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	7.7	5.6	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	16	4.2	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	7.7	2.8	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	7.7	4.4	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	16	4.0	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB01-1-2	**Units:**	ug/Kg
Lab Code:	K2502497-005	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	7.7	1.6	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U UJ	160	56	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U	77	47	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	7.7	4.4	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U	7.7	5.4	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U	7.7	2.7	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	7.7	3.1	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U	16	5.3	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	77	2.7	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	7.7	3.4	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U	7.7	3.3	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U	7.7	3.4	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U	77	14	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**8.7**	B U	7.7	4.0	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U	7.7	3.4	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U	7.7	2.0	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	7.7	2.4	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	77	5.7	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U	7.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**34**	J	160	2.7	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	7.7	1.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U	7.7	3.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	7.7	3.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U	7.7	2.5	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U	7.7	3.0	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	7.7	3.4	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U	7.7	3.6	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R2-SB01-1-2	**Units:**	ug/Kg
Lab Code:	K2502497-005	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	53	11-87	05/04/05	Acceptable
Phenol-d6	59	20-99	05/04/05	Acceptable
Nitrobenzene-d5	51	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	57	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	70	23-113	05/04/05	Acceptable
Terphenyl-d14	89	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB04-0-0.5
Lab Code: K2502497-006

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	29	28	5	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	85	11	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	29	14	5	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	29	9.7	5	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	29	20	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	29	6.8	5	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	150	68	5	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	29	17	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	29	19	5	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	29	13	5	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	29	12	5	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	29	9.1	5	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	29	15	5	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	150	32	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	29	7.4	5	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	29	11	5	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	29	7.4	5	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	29	12	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	29	8.0	5	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	68	68	5	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	57	50	5	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	29	12	5	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	29	6.8	5	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U	150	85	5	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	29	11	5	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	29	17	5	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	57	28	5	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	29	21	5	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	57	16	5	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	29	11	5	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	29	16	5	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	29	8.0	5	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	57	15	5	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB04-0-0.5
Lab Code: K2502497-006

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	29	5.7	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U	570	210	5	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U	290	170	5	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U	29	7.4	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	29	16	5	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U	29	20	5	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U	29	9.7	5	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	29	12	5	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U	57	20	5	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	290	9.7	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	29	13	5	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	29	8.0	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U	29	12	5	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U	29	13	5	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U	290	49	5	04/11/05	05/03/05	KWG0505754	
Phenanthrene	**14**	JD	29	7.4	5	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U	29	8.0	5	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U	29	7.4	5	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	ND	U	29	15	5	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U	29	13	5	04/11/05	05/03/05	KWG0505754	
Pyrene	**10**	JD	29	7.4	5	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	29	8.5	5	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	290	21	5	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U	29	8.0	5	04/11/05	05/03/05	KWG0505754	
Chrysene	**11**	JD	29	8.0	5	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**240**	JD	570	9.7	5	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	29	6.8	5	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U	29	15	5	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	29	15	5	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U	29	9.1	5	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U	29	11	5	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	29	13	5	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U	29	14	5	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-006	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	68	11-87	05/03/05	Acceptable
Phenol-d6	77	20-99	05/03/05	Acceptable
Nitrobenzene-d5	73	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	83	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	99	23-113	05/03/05	Acceptable
Terphenyl-d14	118	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB04-4-5
Lab Code: K2502497-007

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.5	8.3	1	04/11/05	05/04/05	KWG0505754	
Phenol	ND	U	26	3.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.5	4.1	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	8.5	2.9	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	8.5	5.8	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.5	2.1	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	43	21	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	8.5	5.0	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.5	5.5	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	8.5	3.8	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	8.5	3.4	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	8.5	2.8	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	8.5	4.4	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	43	9.4	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.5	3.1	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	8.5	3.6	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	21	21	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	17	15	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.5	3.6	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.5	2.1	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	43	26	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.5	3.1	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	8.5	5.1	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	17	8.2	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.5	6.1	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	17	4.6	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.5	3.1	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.5	4.8	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	17	4.4	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB04-4-5
Lab Code: K2502497-007

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		8.5	1.7	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	170	61	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		85	51	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		8.5	4.8	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		8.5	6.0	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		8.5	2.9	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		8.5	3.4	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		17	5.8	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	85	2.9	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		8.5	3.8	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		8.5	3.6	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		8.5	3.8	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		85	15	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**12**	B	U	8.5	4.4	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		8.5	3.8	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		8.5	2.2	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		8.5	2.6	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	85	6.3	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		8.5	2.4	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**10**	J	170 U	170	2.9	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		8.5	2.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		8.5	4.3	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		8.5	4.3	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		8.5	2.8	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		8.5	3.3	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		8.5	3.8	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		8.5	3.9	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB04-4-5	**Units:**	ug/Kg
Lab Code:	K2502497-007	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	11-87	05/04/05	Acceptable
Phenol-d6	66	20-99	05/04/05	Acceptable
Nitrobenzene-d5	56	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	63	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	72	23-113	05/04/05	Acceptable
Terphenyl-d14	86	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/2005

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB01-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-008	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	28	28	5	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	84	11	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	28	14	5	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	28	9.6	5	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	28	20	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	28	6.8	5	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	140	68	5	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	28	17	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	28	18	5	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	28	13	5	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	28	12	5	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	28	9.0	5	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	28	15	5	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	140	31	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	28	7.3	5	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	28	11	5	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	28	7.3	5	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	28	12	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	28	7.9	5	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	68	68	5	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	56	50	5	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	28	12	5	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	28	6.8	5	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	140	84	5	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	28	11	5	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	28	17	5	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	56	27	5	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	28	21	5	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	56	16	5	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	28	11	5	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	28	16	5	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	28	7.9	5	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	56	15	5	04/11/05	05/03/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB01-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-008	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		28	5.6	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		560	210	5	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		280	170	5	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		28	7.3	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		28	16	5	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		28	20	5	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		28	9.6	5	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		28	12	5	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		56	20	5	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	280	9.6	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		28	13	5	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		28	7.9	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		28	12	5	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		28	13	5	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		280	48	5	04/11/05	05/03/05	KWG0505754	
Phenanthrene	**12**	JD		28	7.3	5	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		28	7.9	5	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		28	7.3	5	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**16**	BJD	28U	28	15	5	04/11/05	05/03/05	KWG0505754	
Fluoranthene	**17**	JD		28	13	5	04/11/05	05/03/05	KWG0505754	
Pyrene	**15**	JD		28	7.3	5	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	**17**	JD		28	8.4	5	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	280	21	5	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U		28	7.9	5	04/11/05	05/03/05	KWG0505754	
Chrysene	**15**	JD		28	7.9	5	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**95**	JD		560	9.6	5	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		28	6.8	5	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		28	14	5	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		28	14	5	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	**9.7**	JD		28	9.0	5	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		28	11	5	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		28	13	5	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		28	13	5	04/11/05	05/03/05	KWG0505754	

Comments:

6/7/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB01-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-008	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	58	11-87	05/03/05	Acceptable
Phenol-d6	70	20-99	05/03/05	Acceptable
Nitrobenzene-d5	72	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	84	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	82	23-113	05/03/05	Acceptable
Terphenyl-d14	109	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB03-0-0.5
Lab Code: K2502497-009

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	6.2	6.1	1	04/11/05	05/04/05	KWG0505754	
Phenol	ND	U	19	2.4	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	6.2	3.0	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	6.2	2.1	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	6.2	4.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	6.2	1.5	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	31	15	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	6.2	3.6	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	6.2	4.0	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	6.2	2.7	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	6.2	2.5	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	6.2	2.0	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	6.2	3.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	31	6.8	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	6.2	2.3	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	6.2	2.6	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	15	15	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	13	11	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	6.2	2.6	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	6.2	1.5	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	31	19	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	6.2	2.3	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	6.2	3.7	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	13	5.9	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	6.2	4.5	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	13	3.4	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	6.2	2.3	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	6.2	3.5	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	13	3.2	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB03-0-0.5
Lab Code: K2502497-009

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	6.2	1.3	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U UJ	130	45	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U	62	37	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U	6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	6.2	3.5	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U	6.2	4.3	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U	6.2	2.1	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	6.2	2.5	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U	13	4.2	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	62	2.1	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	6.2	2.7	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U	6.2	2.6	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U	6.2	2.7	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U	62	11	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	**4.6**	J	6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U	6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**9.4**	B U	6.2	3.2	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	**7.8**		6.2	2.7	1	04/11/05	05/04/05	KWG0505754	
Pyrene	**7.2**		6.2	1.6	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	6.2	1.9	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	62	4.6	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	**3.6**	J	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Chrysene	**6.1**	J	6.2	1.8	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**19**	J	130	2.1	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	6.2	1.5	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	**7.2**		6.2	3.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	6.2	3.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U	6.2	2.0	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	**5.4**	J	6.2	2.4	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	6.2	2.7	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	**4.4**	J	6.2	2.9	1	04/11/05	05/04/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB03-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-009	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	05/04/05	Acceptable
Phenol-d6	69	20-99	05/04/05	Acceptable
Nitrobenzene-d5	68	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	77	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	75	23-113	05/04/05	Acceptable
Terphenyl-d14	89	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB03-4-5	**Units:**	ug/Kg
Lab Code:	K2502497-010	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	7.8	7.7	1	04/11/05	05/04/05	KWG0505754	
Phenol	**4.3**	J	24	3.0	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	7.8	3.8	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	7.8	2.7	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	7.8	5.4	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	39	19	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	7.8	4.6	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	7.8	5.0	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	7.8	3.2	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	7.8	2.5	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	7.8	4.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	39	8.6	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	7.8	2.9	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	19	19	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	16	14	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	39	24	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	7.8	2.9	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	7.8	4.7	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	16	7.5	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	7.8	5.7	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	16	4.3	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	7.8	2.9	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	7.8	4.4	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	16	4.1	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R1-SB03-4-5
Lab Code: K2502497-010

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		7.8	1.6	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	160	57	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		78	47	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		7.8	4.4	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		7.8	5.5	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		7.8	2.7	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		7.8	3.2	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		16	5.4	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	78	2.7	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		7.8	3.3	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		78	14	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**9.8**	B	U	7.8	4.1	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		7.8	2.1	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		7.8	2.4	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	78	5.8	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		7.8	2.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**12**	J	160U	160	2.7	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		7.8	1.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		7.8	4.0	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		7.8	4.0	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		7.8	2.5	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		7.8	3.0	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		7.8	3.5	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		7.8	3.6	1	04/11/05	05/04/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R1-SB03-4-5	**Units:**	ug/Kg
Lab Code:	K2502497-010	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	57	11-87	05/04/05	Acceptable
Phenol-d6	66	20-99	05/04/05	Acceptable
Nitrobenzene-d5	54	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	54	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	73	23-113	05/04/05	Acceptable
Terphenyl-d14	89	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB04-0-0.5
Lab Code: K2502497-011

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.7	5.6	1	04/11/05	05/04/05	KWG0505754	
Phenol	ND	U	18	2.2	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	5.7	2.8	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	5.7	2.0	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	5.7	3.9	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	29	14	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	5.7	3.4	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	5.7	3.7	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	5.7	2.6	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	5.7	2.3	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	5.7	1.9	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	5.7	3.0	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	29	6.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	14	14	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	12	11	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	29	18	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	5.7	3.5	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	12	5.5	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	5.7	4.2	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	12	3.1	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	5.7	2.1	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	12	3.0	1	04/11/05	05/04/05	KWG0505754	

Comments:

10/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R4-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-011	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		5.7	1.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	120	42	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		57	35	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		5.7	3.2	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		5.7	4.0	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		5.7	2.0	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		5.7	2.3	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		12	3.9	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	57	2.0	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		5.7	2.6	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		5.7	2.4	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		5.7	2.6	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		57	9.7	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**8.6**	B	U	5.7	3.0	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		5.7	2.6	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		5.7	1.5	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		5.7	1.8	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	57	4.3	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		5.7	1.6	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**22**	J		120	2.0	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		5.7	1.4	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		5.7	2.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		5.7	2.9	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		5.7	1.9	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		5.7	2.2	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		5.7	2.6	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		5.7	2.7	1	04/11/05	05/04/05	KWG0505754	

Comments:

10/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R4-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-011	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	60	11-87	05/04/05	Acceptable
Phenol-d6	68	20-99	05/04/05	Acceptable
Nitrobenzene-d5	61	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	72	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	82	23-113	05/04/05	Acceptable
Terphenyl-d14	107	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R4-SB04-4-5
Lab Code: K2502497-012

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.1	7.9	1	04/11/05	05/04/05	KWG0505754	
Phenol	**5.4**	J	25	3.1	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.1	3.9	1	04/11/05	05/04/05	KWG0505754	
2-Chlorophenol	ND	U	8.1	2.8	1	04/11/05	05/04/05	KWG0505754	
2-Methylphenol	ND	U	8.1	5.5	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.1	2.0	1	04/11/05	05/04/05	KWG0505754	
Acetophenone	ND	U	41	20	1	04/11/05	05/04/05	KWG0505754	
4-Methylphenol†	ND	U	8.1	4.7	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.1	5.2	1	04/11/05	05/04/05	KWG0505754	
Hexachloroethane	ND	U	8.1	3.6	1	04/11/05	05/04/05	KWG0505754	
Nitrobenzene	ND	U	8.1	3.3	1	04/11/05	05/04/05	KWG0505754	
Isophorone	ND	U	8.1	2.6	1	04/11/05	05/04/05	KWG0505754	
2-Nitrophenol	ND	U	8.1	4.2	1	04/11/05	05/04/05	KWG0505754	
2,4-Dimethylphenol	ND	U	41	8.9	1	04/11/05	05/04/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.1	2.9	1	04/11/05	05/04/05	KWG0505754	
Naphthalene	ND	U	8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
4-Chloroaniline	ND	U	8.1	3.4	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
Caprolactam	ND	U	20	20	1	04/11/05	05/04/05	KWG0505754	
Benzaldehyde	ND	U	17	15	1	04/11/05	05/04/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.1	3.4	1	04/11/05	05/04/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.1	2.0	1	04/11/05	05/04/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	41	25	1	04/11/05	05/04/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.1	2.9	1	04/11/05	05/04/05	KWG0505754	
2,4,5-Trichlorophenol	**9.6**		8.1	4.9	1	04/11/05	05/04/05	KWG0505754	
Biphenyl	ND	U	17	7.7	1	04/11/05	05/04/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.1	5.8	1	04/11/05	05/04/05	KWG0505754	
2-Nitroaniline	ND	U	17	4.4	1	04/11/05	05/04/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.1	2.9	1	04/11/05	05/04/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.1	4.5	1	04/11/05	05/04/05	KWG0505754	
Acenaphthylene	ND	U	8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
3-Nitroaniline	ND	U	17	4.2	1	04/11/05	05/04/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R4-SB04-4-5	**Units:**	ug/Kg
Lab Code:	K2502497-012	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		8.1	1.7	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	170	58	1	04/11/05	05/04/05	KWG0505754	
4-Nitrophenol	ND	U		81	49	1	04/11/05	05/04/05	KWG0505754	
Dibenzofuran	ND	U		8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		8.1	4.5	1	04/11/05	05/04/05	KWG0505754	
Diethyl Phthalate	ND	U		8.1	5.7	1	04/11/05	05/04/05	KWG0505754	
Fluorene	ND	U		8.1	2.8	1	04/11/05	05/04/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		8.1	3.3	1	04/11/05	05/04/05	KWG0505754	
4-Nitroaniline	ND	U		17	5.5	1	04/11/05	05/04/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	81	2.8	1	04/11/05	05/04/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		8.1	3.6	1	04/11/05	05/04/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
Hexachlorobenzene	ND	U		8.1	3.4	1	04/11/05	05/04/05	KWG0505754	
Atrazine	ND	U		8.1	3.6	1	04/11/05	05/04/05	KWG0505754	
Pentachlorophenol	ND	U		81	14	1	04/11/05	05/04/05	KWG0505754	
Phenanthrene	ND	U		8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
Anthracene	ND	U		8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
Carbazole	ND	U		8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
Di-n-butyl Phthalate	**10**	B	u	8.1	4.2	1	04/11/05	05/04/05	KWG0505754	
Fluoranthene	ND	U		8.1	3.6	1	04/11/05	05/04/05	KWG0505754	
Pyrene	ND	U		8.1	2.1	1	04/11/05	05/04/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		8.1	2.5	1	04/11/05	05/04/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	81	6.0	1	04/11/05	05/04/05	KWG0505754	
Benz(a)anthracene	ND	U		8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
Chrysene	ND	U		8.1	2.3	1	04/11/05	05/04/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**26**	J		170	2.8	1	04/11/05	05/04/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		8.1	2.0	1	04/11/05	05/04/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		8.1	4.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		8.1	4.1	1	04/11/05	05/04/05	KWG0505754	
Benzo(a)pyrene	ND	U		8.1	2.6	1	04/11/05	05/04/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		8.1	3.1	1	04/11/05	05/04/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		8.1	3.6	1	04/11/05	05/04/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		8.1	3.7	1	04/11/05	05/04/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R4-SB04-4-5	**Units:**	ug/Kg
Lab Code:	K2502497-012	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	61	11-87	05/04/05	Acceptable
Phenol-d6	65	20-99	05/04/05	Acceptable
Nitrobenzene-d5	50	10-99	05/04/05	Acceptable
2-Fluorobiphenyl	52	10-104	05/04/05	Acceptable
2,4,6-Tribromophenol	80	23-113	05/04/05	Acceptable
Terphenyl-d14	93	39-124	05/04/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB04-0-0.5
Lab Code: K2502497-013

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.7	5.6	1	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	17	2.2	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	5.7	2.8	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	5.7	2.0	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	5.7	3.9	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	29	14	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	5.7	3.3	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	5.7	3.7	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	5.7	2.3	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	5.7	1.9	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	5.7	3.0	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	29	6.2	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	14	14	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	12	10	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	29	17	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	5.7	3.4	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	12	5.5	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	5.7	4.1	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	12	3.1	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	12	3.0	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-013	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		5.7	1.2	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		120	41	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		57	34	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		5.7	3.2	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		5.7	4.0	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		5.7	2.0	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		5.7	2.3	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		12	3.9	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	57	2.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		57	9.6	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U		5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**5.6**	BJ	5.7U	5.7	3.0	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U		5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U		5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		5.7	1.7	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	57	4.2	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U		5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U		5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**140**			120	2.0	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		5.7	2.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		5.7	2.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U		5.7	1.9	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		5.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		5.7	2.6	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB04-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-013	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	11-87	05/03/05	Acceptable
Phenol-d6	66	20-99	05/03/05	Acceptable
Nitrobenzene-d5	59	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	67	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	88	23-113	05/03/05	Acceptable
Terphenyl-d14	113	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/10/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB04-5-6	**Units:**	ug/Kg
Lab Code:	K2502497-014	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.6	8.4	1	04/11/05	05/03/05	KWG0505754	
Phenol	**6.0**	J	26	3.3	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.6	4.2	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	8.6	3.0	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	8.6	5.9	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	43	21	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	8.6	5.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.6	5.5	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	8.6	3.5	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	8.6	2.8	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	8.6	4.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	43	9.5	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	8.6	3.6	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	21	21	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	18	16	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.6	3.6	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	43	26	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	8.6	5.2	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	18	8.3	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.6	6.2	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	18	4.7	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.6	4.8	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	18	4.5	1	04/11/05	05/03/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB04-5-6
Lab Code: K2502497-014

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	8.6	1.8	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U	180	62	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U	86	52	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	8.6	4.8	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U	8.6	6.0	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U	8.6	3.0	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	8.6	3.5	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U	18	5.9	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	86	3.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U	8.6	3.6	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U	86	15	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**6.0**	BJ 8.6U	8.6	4.5	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	8.6	2.6	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	86	6.4	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U	8.6	2.4	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**32**	J	180	3.0	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U	8.6	4.3	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	8.6	4.3	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U	8.6	2.8	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U	8.6	3.3	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U	8.6	4.0	1	04/11/05	05/03/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB04-5-6	**Units:**	ug/Kg
Lab Code:	K2502497-014	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	45	11-87	05/03/05	Acceptable
Phenol-d6	49	20-99	05/03/05	Acceptable
Nitrobenzene-d5	44	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	43	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	65	23-113	05/03/05	Acceptable
Terphenyl-d14	82	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB02-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-015	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.7	5.6	1	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	18	2.2	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	5.7	2.8	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	5.7	2.0	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	5.7	3.9	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	29	14	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	5.7	3.3	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	5.7	3.7	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	5.7	2.3	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	5.7	1.9	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	5.7	3.0	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	29	6.3	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	14	14	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	12	10	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U US	29	18	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	5.7	3.5	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	12	5.5	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	5.7	4.1	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	12	3.1	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	5.7	2.1	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	12	3.0	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB02-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502497-015	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	5.7	1.2	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U	120	41	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U	57	35	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U	5.7	3.2	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U	5.7	4.0	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U	5.7	2.0	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U	5.7	2.3	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U	12	3.9	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U UJ	57	2.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U	5.7	2.4	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U	57	9.7	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**11**	B U	5.7	3.0	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U	5.7	1.5	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U	5.7	1.8	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U UJ	57	4.3	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U	5.7	1.6	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**13**	J 120 U	120	2.0	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U	5.7	1.4	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U	5.7	2.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U	5.7	2.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U	5.7	1.9	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U	5.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U	5.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U	5.7	2.7	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB02-0-0.5
Lab Code: K2502497-015

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	60	11-87	05/03/05	Acceptable
Phenol-d6	68	20-99	05/03/05	Acceptable
Nitrobenzene-d5	66	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	75	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	82	23-113	05/03/05	Acceptable
Terphenyl-d14	108	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB02-3-4
Lab Code: K2502497-016

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.6	8.5	1	04/11/05	05/03/05	KWG0505754	
Phenol	**7.3**	J	26	3.3	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.6	4.2	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	8.6	3.0	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	8.6	5.9	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	43	21	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	8.6	5.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.6	5.5	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	8.6	3.5	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	8.6	2.8	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	8.6	4.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	43	9.5	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	8.6	3.7	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	21	21	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	18	16	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.6	3.7	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	43	26	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	8.6	5.2	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	18	8.3	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.6	6.2	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	18	4.7	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.6	3.1	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.6	4.9	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	18	4.5	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB02-3-4
Lab Code: K2502497-016

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		8.6	1.8	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		180	62	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		86	52	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		8.6	4.9	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		8.6	6.1	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		8.6	3.0	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		8.6	3.5	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		18	5.9	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	86	3.0	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		8.6	3.7	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		86	15	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U		8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	ND	U		8.6	4.5	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U		8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U		8.6	2.3	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		8.6	2.6	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	86	6.4	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U		8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U		8.6	2.5	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**4.6**	J	180U	180	3.0	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		8.6	2.1	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		8.6	4.3	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		8.6	4.3	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U		8.6	2.8	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		8.6	3.3	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		8.6	3.8	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		8.6	4.0	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB02-3-4
Lab Code: K2502497-016

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	38	11-87	05/03/05	Acceptable
Phenol-d6	37	20-99	05/03/05	Acceptable
Nitrobenzene-d5	39	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	41	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	47	23-113	05/03/05	Acceptable
Terphenyl-d14	58	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB01-0.0.5
Lab Code: K2502497-017

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	31	31	5	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	93	12	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	31	15	5	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	31	11	5	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	31	22	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	31	7.5	5	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	160	75	5	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	31	18	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	31	20	5	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	31	14	5	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	31	13	5	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	31	10	5	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	31	17	5	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	160	35	5	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	31	8.1	5	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	31	12	5	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	31	8.1	5	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	31	13	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	31	8.7	5	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	75	75	5	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	62	55	5	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	31	13	5	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	31	7.5	5	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	160	93	5	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	31	12	5	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	31	19	5	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	62	30	5	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	31	23	5	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	62	17	5	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	31	12	5	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	31	18	5	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	31	8.7	5	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	62	17	5	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB01-0.0.5
Lab Code: K2502497-017

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		31	6.2	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		620	230	5	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		310	190	5	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		31	8.1	5	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		31	18	5	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		31	22	5	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		31	11	5	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		31	13	5	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		62	22	5	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	310	11	5	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		31	14	5	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		31	8.7	5	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		31	13	5	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		31	14	5	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		310	53	5	04/11/05	05/03/05	KWG0505754	
Phenanthrene	**8.4**	JD		31	8.1	5	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		31	8.7	5	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		31	8.1	5	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	ND	U		31	17	5	04/11/05	05/03/05	KWG0505754	
Fluoranthene	**20**	JD		31	14	5	04/11/05	05/03/05	KWG0505754	
Pyrene	**19**	JD		31	8.1	5	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		31	9.3	5	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	310	23	5	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	**14**	JD		31	8.7	5	04/11/05	05/03/05	KWG0505754	
Chrysene	**19**	JD		31	8.7	5	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**26**	JD	620U	620	11	5	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		31	7.5	5	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	**21**	JD		31	16	5	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		31	16	5	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	**16**	JD		31	10	5	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		31	12	5	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		31	14	5	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		31	15	5	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502497
Project:	Novato Ballfields/G486063	**Date Collected:**	04/06/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	TO63-R5-SB01-0.0.5	**Units:**	ug/Kg
Lab Code:	K2502497-017	**Basis:**	Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	54	11-87	05/03/05	Acceptable
Phenol-d6	66	20-99	05/03/05	Acceptable
Nitrobenzene-d5	55	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	64	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	86	23-113	05/03/05	Acceptable
Terphenyl-d14	104	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB03-0.0.5
Lab Code: K2502497-018

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	5.5	5.4	1	04/11/05	05/03/05	KWG0505754	
Phenol	ND	U	17	2.1	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	5.5	2.7	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U	5.5	1.9	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U	5.5	3.7	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	5.5	1.4	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U	28	14	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U	5.5	3.2	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	5.5	3.5	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U	5.5	2.4	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U	5.5	2.2	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U	5.5	1.8	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U	5.5	2.9	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U	28	6.0	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U	5.5	2.0	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U	5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U	5.5	2.3	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U	5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U	14	14	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U	11	9.6	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	5.5	2.3	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U	5.5	1.4	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U UJ	28	17	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	5.5	2.0	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	5.5	3.3	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U	11	5.3	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U	5.5	4.0	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U	11	3.0	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U	5.5	2.0	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	5.5	3.1	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U	5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U	11	2.9	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB03-0.0.5
Lab Code: K2502497-018

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		5.5	1.1	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		110	40	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		55	33	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		5.5	3.1	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		5.5	3.9	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		5.5	1.9	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		5.5	2.2	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		11	3.7	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	55	1.9	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		5.5	2.4	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		5.5	2.3	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		5.5	2.4	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		55	9.3	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U		5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**6.3**	B	U	5.5	2.9	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U		5.5	2.4	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U		5.5	1.5	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		5.5	1.7	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	55	4.1	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U		5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U		5.5	1.6	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**13**	J	110U	110	1.9	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		5.5	1.4	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		5.5	2.8	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		5.5	2.8	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U		5.5	1.8	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		5.5	2.1	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		5.5	2.4	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		5.5	2.6	1	04/11/05	05/03/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R5-SB03-0.0.5
Lab Code: K2502497-018

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	57	11-87	05/03/05	Acceptable
Phenol-d6	65	20-99	05/03/05	Acceptable
Nitrobenzene-d5	60	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	73	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	84	23-113	05/03/05	Acceptable
Terphenyl-d14	121	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB03-0.0.5
Lab Code: K2502497-019

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U		7.7	7.6	1	04/11/05	05/03/05	KWG0505754	
Phenol	**5.8**	J		24	3.0	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U		7.7	3.7	1	04/11/05	05/03/05	KWG0505754	
2-Chlorophenol	ND	U		7.7	2.7	1	04/11/05	05/03/05	KWG0505754	
2-Methylphenol	ND	U		7.7	5.3	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U		7.7	1.9	1	04/11/05	05/03/05	KWG0505754	
Acetophenone	ND	U		39	19	1	04/11/05	05/03/05	KWG0505754	
4-Methylphenol†	ND	U		7.7	4.5	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U		7.7	5.0	1	04/11/05	05/03/05	KWG0505754	
Hexachloroethane	ND	U		7.7	3.4	1	04/11/05	05/03/05	KWG0505754	
Nitrobenzene	ND	U		7.7	3.1	1	04/11/05	05/03/05	KWG0505754	
Isophorone	ND	U		7.7	2.5	1	04/11/05	05/03/05	KWG0505754	
2-Nitrophenol	ND	U		7.7	4.0	1	04/11/05	05/03/05	KWG0505754	
2,4-Dimethylphenol	ND	U		39	8.5	1	04/11/05	05/03/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
2,4-Dichlorophenol	ND	U		7.7	2.8	1	04/11/05	05/03/05	KWG0505754	
Naphthalene	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
4-Chloroaniline	ND	U		7.7	3.3	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobutadiene	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Caprolactam	ND	U		19	19	1	04/11/05	05/03/05	KWG0505754	
Benzaldehyde	ND	U		16	14	1	04/11/05	05/03/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U		7.7	3.3	1	04/11/05	05/03/05	KWG0505754	
2-Methylnaphthalene	ND	U		7.7	1.9	1	04/11/05	05/03/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U	UJ	39	24	1	04/11/05	05/03/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U		7.7	2.8	1	04/11/05	05/03/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U		7.7	4.7	1	04/11/05	05/03/05	KWG0505754	
Biphenyl	ND	U		16	7.4	1	04/11/05	05/03/05	KWG0505754	
2-Chloronaphthalene	ND	U		7.7	5.6	1	04/11/05	05/03/05	KWG0505754	
2-Nitroaniline	ND	U		16	4.2	1	04/11/05	05/03/05	KWG0505754	
Dimethyl Phthalate	ND	U		7.7	2.8	1	04/11/05	05/03/05	KWG0505754	
2,6-Dinitrotoluene	ND	U		7.7	4.4	1	04/11/05	05/03/05	KWG0505754	
Acenaphthylene	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
3-Nitroaniline	ND	U		16	4.0	1	04/11/05	05/03/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB03-0.0.5
Lab Code: K2502497-019

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		7.7	1.6	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrophenol	ND	U		160	56	1	04/11/05	05/03/05	KWG0505754	
4-Nitrophenol	ND	U		77	47	1	04/11/05	05/03/05	KWG0505754	
Dibenzofuran	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		7.7	4.4	1	04/11/05	05/03/05	KWG0505754	
Diethyl Phthalate	ND	U		7.7	5.4	1	04/11/05	05/03/05	KWG0505754	
Fluorene	ND	U		7.7	2.7	1	04/11/05	05/03/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		7.7	3.1	1	04/11/05	05/03/05	KWG0505754	
4-Nitroaniline	ND	U		16	5.3	1	04/11/05	05/03/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U	UJ	77	2.7	1	04/11/05	05/03/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		7.7	3.4	1	04/11/05	05/03/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Hexachlorobenzene	ND	U		7.7	3.3	1	04/11/05	05/03/05	KWG0505754	
Atrazine	ND	U		7.7	3.4	1	04/11/05	05/03/05	KWG0505754	
Pentachlorophenol	ND	U		77	14	1	04/11/05	05/03/05	KWG0505754	
Phenanthrene	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
Anthracene	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Carbazole	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
Di-n-butyl Phthalate	**8.7**	B	U	7.7	4.0	1	04/11/05	05/03/05	KWG0505754	
Fluoranthene	ND	U		7.7	3.4	1	04/11/05	05/03/05	KWG0505754	
Pyrene	ND	U		7.7	2.0	1	04/11/05	05/03/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		7.7	2.4	1	04/11/05	05/03/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	77	5.7	1	04/11/05	05/03/05	KWG0505754	
Benz(a)anthracene	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Chrysene	ND	U		7.7	2.2	1	04/11/05	05/03/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**13**	J	160U	160	2.7	1	04/11/05	05/03/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		7.7	1.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		7.7	3.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		7.7	3.9	1	04/11/05	05/03/05	KWG0505754	
Benzo(a)pyrene	ND	U		7.7	2.5	1	04/11/05	05/03/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		7.7	3.0	1	04/11/05	05/03/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		7.7	3.4	1	04/11/05	05/03/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		7.7	3.6	1	04/11/05	05/03/05	KWG0505754	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB03-0.0.5
Lab Code: K2502497-019

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	05/03/05	Acceptable
Phenol-d6	69	20-99	05/03/05	Acceptable
Nitrobenzene-d5	56	10-99	05/03/05	Acceptable
2-Fluorobiphenyl	58	10-104	05/03/05	Acceptable
2,4,6-Tribromophenol	86	23-113	05/03/05	Acceptable
Terphenyl-d14	103	39-124	05/03/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB02-0.0.5
Lab Code: K2502497-020

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	8.0	7.8	1	04/11/05	05/08/05	KWG0505754	
Phenol	ND	U	24	3.1	1	04/11/05	05/08/05	KWG0505754	
Bis(2-chloroethyl) Ether	ND	U	8.0	3.9	1	04/11/05	05/08/05	KWG0505754	
2-Chlorophenol	ND	U	8.0	2.7	1	04/11/05	05/08/05	KWG0505754	
2-Methylphenol	ND	U	8.0	5.4	1	04/11/05	05/08/05	KWG0505754	
Bis(2-chloroisopropyl) Ether	ND	U	8.0	2.0	1	04/11/05	05/08/05	KWG0505754	
Acetophenone	ND	U	40	20	1	04/11/05	05/08/05	KWG0505754	
4-Methylphenol†	ND	U	8.0	4.7	1	04/11/05	05/08/05	KWG0505754	
N-Nitrosodi-n-propylamine	ND	U	8.0	5.1	1	04/11/05	05/08/05	KWG0505754	
Hexachloroethane	ND	U	8.0	3.5	1	04/11/05	05/08/05	KWG0505754	
Nitrobenzene	ND	U	8.0	3.2	1	04/11/05	05/08/05	KWG0505754	
Isophorone	ND	U	8.0	2.6	1	04/11/05	05/08/05	KWG0505754	
2-Nitrophenol	ND	U	8.0	4.2	1	04/11/05	05/08/05	KWG0505754	
2,4-Dimethylphenol	ND	U	40	8.8	1	04/11/05	05/08/05	KWG0505754	
Bis(2-chloroethoxy)methane	ND	U	8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
2,4-Dichlorophenol	ND	U	8.0	2.9	1	04/11/05	05/08/05	KWG0505754	
Naphthalene	ND	U	8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
4-Chloroaniline	ND	U	8.0	3.4	1	04/11/05	05/08/05	KWG0505754	
Hexachlorobutadiene	ND	U	8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
Caprolactam	ND	U	20	20	1	04/11/05	05/08/05	KWG0505754	
Benzaldehyde	ND	U	16	14	1	04/11/05	05/08/05	KWG0505754	
4-Chloro-3-methylphenol	ND	U	8.0	3.4	1	04/11/05	05/08/05	KWG0505754	
2-Methylnaphthalene	ND	U	8.0	2.0	1	04/11/05	05/08/05	KWG0505754	
Hexachlorocyclopentadiene	ND	U	40	24	1	04/11/05	05/08/05	KWG0505754	
2,4,6-Trichlorophenol	ND	U	8.0	2.9	1	04/11/05	05/08/05	KWG0505754	
2,4,5-Trichlorophenol	ND	U	8.0	4.8	1	04/11/05	05/08/05	KWG0505754	
Biphenyl	ND	U	16	7.7	1	04/11/05	05/08/05	KWG0505754	
2-Chloronaphthalene	ND	U	8.0	5.8	1	04/11/05	05/08/05	KWG0505754	
2-Nitroaniline	ND	U	16	4.3	1	04/11/05	05/08/05	KWG0505754	
Dimethyl Phthalate	ND	U	8.0	2.9	1	04/11/05	05/08/05	KWG0505754	
2,6-Dinitrotoluene	ND	U	8.0	4.5	1	04/11/05	05/08/05	KWG0505754	
Acenaphthylene	ND	U	8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
3-Nitroaniline	ND	U	16	4.2	1	04/11/05	05/08/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB02-0.0.5
Lab Code: K2502497-020

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		8.0	1.6	1	04/11/05	05/08/05	KWG0505754	
2,4-Dinitrophenol	ND	U	UJ	160	58	1	04/11/05	05/08/05	KWG0505754	
4-Nitrophenol	ND	U		80	48	1	04/11/05	05/08/05	KWG0505754	
Dibenzofuran	ND	U		8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
2,4-Dinitrotoluene	ND	U		8.0	4.5	1	04/11/05	05/08/05	KWG0505754	
Diethyl Phthalate	ND	U		8.0	5.6	1	04/11/05	05/08/05	KWG0505754	
Fluorene	ND	U		8.0	2.7	1	04/11/05	05/08/05	KWG0505754	
4-Chlorophenyl Phenyl Ether	ND	U		8.0	3.2	1	04/11/05	05/08/05	KWG0505754	
4-Nitroaniline	ND	U		16	5.4	1	04/11/05	05/08/05	KWG0505754	
2-Methyl-4,6-dinitrophenol	ND	U		80	2.7	1	04/11/05	05/08/05	KWG0505754	
N-Nitrosodiphenylamine	ND	U		8.0	3.5	1	04/11/05	05/08/05	KWG0505754	
4-Bromophenyl Phenyl Ether	ND	U		8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
Hexachlorobenzene	ND	U		8.0	3.4	1	04/11/05	05/08/05	KWG0505754	
Atrazine	ND	U		8.0	3.5	1	04/11/05	05/08/05	KWG0505754	
Pentachlorophenol	ND	U		80	14	1	04/11/05	05/08/05	KWG0505754	
Phenanthrene	ND	U		8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
Anthracene	ND	U		8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
Carbazole	ND	U		8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
Di-n-butyl Phthalate	**10**	B	U	8.0	4.2	1	04/11/05	05/08/05	KWG0505754	
Fluoranthene	ND	U		8.0	3.5	1	04/11/05	05/08/05	KWG0505754	
Pyrene	ND	U		8.0	2.1	1	04/11/05	05/08/05	KWG0505754	
Butyl Benzyl Phthalate	ND	U		8.0	2.4	1	04/11/05	05/08/05	KWG0505754	
3,3'-Dichlorobenzidine	ND	U	UJ	80	5.9	1	04/11/05	05/08/05	KWG0505754	
Benz(a)anthracene	ND	U		8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
Chrysene	ND	U		8.0	2.3	1	04/11/05	05/08/05	KWG0505754	
Bis(2-ethylhexyl) Phthalate	**22**	J		160	2.7	1	04/11/05	05/08/05	KWG0505754	
Di-n-octyl Phthalate	ND	U		8.0	2.0	1	04/11/05	05/08/05	KWG0505754	
Benzo(b)fluoranthene	ND	U		8.0	4.0	1	04/11/05	05/08/05	KWG0505754	
Benzo(k)fluoranthene	ND	U		8.0	4.0	1	04/11/05	05/08/05	KWG0505754	
Benzo(a)pyrene	ND	U		8.0	2.6	1	04/11/05	05/08/05	KWG0505754	
Indeno(1,2,3-cd)pyrene	ND	U		8.0	3.1	1	04/11/05	05/08/05	KWG0505754	
Dibenz(a,h)anthracene	ND	U		8.0	3.5	1	04/11/05	05/08/05	KWG0505754	
Benzo(g,h,i)perylene	ND	U		8.0	3.7	1	04/11/05	05/08/05	KWG0505754	

Comments:

6/20/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502497
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: TO63-R2-SB02-0.0.5
Lab Code: K2502497-020

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	67	11-87	05/08/05	Acceptable
Phenol-d6	77	20-99	05/08/05	Acceptable
Nitrobenzene-d5	63	10-99	05/08/05	Acceptable
2-Fluorobiphenyl	64	10-104	05/08/05	Acceptable
2,4,6-Tribromophenol	81	23-113	05/08/05	Acceptable
Terphenyl-d14	89	39-124	05/08/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/20/05

LDC #: 13575A2
SDG #: K2502497
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 6/13/05
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/6/05
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD ≤ 30/15. r² SPCCs
IV.	Continuing calibration	SW	%D ≤ 20. ICV ≤ 25%
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 3+4, 8+TO63-R1-SB01-0-0.5 Dup (K2502497)
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
All Soils

1 2	TO63-R2-SB04-0-0.5	11 2	TO63-R4-SB04-0-0.5	21 2	TO63-R1-SB03-0-0.5MS	31 2	KNF0505154-5
2 2	TO63-R2-SB04-3-4	12 2	TO63-R4-SB04-4-5	22 2	TO63-R1-SB03-0-0.5MSD	32	
3 2	TO63-R2-SB01-0-0.5	13 1	TO63-R5-SB04-0-0.5	23		33	
4 2	TO63-R2-SB01-0-0.5 Dup	14 1	TO63-R5-SB04-5-6	24		34	
5 2	TO63-R2-SB01-1-2	15 1	TO63-R5-SB02-0-0.5	25		35	
6 1	TO63-R1-SB04-0-0.5	16 1	TO63-R5-SB02-3-4	26		36	
7 2	TO63-R1-SB04-4-5	17 1	TO63-R5-SB01-0-0.5	27		37	
8 1	TO63-R1-SB01-0-0.5	18 1	TO63-R5-SB03-0-0.5	28		38	
9 2	TO63-R1-SB03-0-0.5	19 1	TO63-R2-SB03-0-0.5	29		39	
10 2	TO63-R1-SB03-4-5	20 3	TO63-R2-SB02-0-0.5	30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol** ✓	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene ✓	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol* ✓	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate ✓	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene* ✓	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine ✓	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol ✓	EEE. Bis(2-ethylhexyl)phthalate ✓	TTT. Acetophenone
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 13575A2
SDG #: K2502499

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	5/2/05	ICA2	PP	23.6 (≤15)		1-19, 21-22 BK	J/UJ/A
	5/5/05	ICA2	HH	26.8 (≤15)		20	J/UJ/A

INICAL.2S

LDC #: 135T5A2
SDG #: K2502497

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤~~25.0%~~ 20%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	5/2/05	0502F017-18 (1ev)	BBB	29		1-19. 21-22 BK	J/UJ/A
	5/5/05	0505F017-18 (1ev)	BBB	27		20	J/UJ/A
	5/3/05	0503F001-2	X	24		6.8.13-19	J/UJ/A
			PP	36			↓
			BBB	30			
	5/4/05	0504F001-2	X	22		1-5.7.9-12.	J/UJ/A
			HH	27		21-2. BK	↓

CONCAL.2S

LDC #: 13575A2
SDG #: K2502497

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 4/11/05 **Blank analysis date:** 5/4/05
Conc. units: ug/g Associated Samples: NA

Compound	Blank ID	Sample Identification									
KWG0505754-5		1	2	3	4	5	6(5)	7	8(5)	9	10
XX	6.9	5.4/5.7U	16/U	14/U	11/U	8.7/U		12/U	16/28U	9.4/U	9.8/U
ZZZ	1.8	21	12/180U	84	38	34	240	10/170U	95	19	12/160U

Blank extraction date: [illegible] **Blank analysis date:** _____
Conc. units: [illegible] Associated Samples: NA

Compound	Blank ID	Sample Identification									
KWG0505754-5		11	12	13	14	15	16	17(5)	18	19	20
XX	6.9	8.6/U	10/U	5.6/5.7U	6.0/8.6U	11/U			6.3/U	8.7/U	10/U
ZZZ	1.8	22	26	140	32	13/120U	4.6/180U	26/620U	13/110U	13/160U	22

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 135582
SDG #: K2500497

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: 9
2nd reviewer: 1

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg)		RPD
	3	4	
A	6.4	9.1	35
UU	2.7	7.2U	200
XX	14	11	24
ZZZ	84	38	75

Compound	Concentration (ug/kg)		RPD
	8	T063R1-SB01-00.5 DUP	
A	84U	14	200
TTT	140U	32	↓
UU	12	5.6	73
VV	28U	3.6	200
XX	16	19	17
YY	17	9.1	61

Compound	Concentration ( )		RPD
ZZ	15	8.7	53
CCC	28U	5.6	200
DDD	15	13	14
EEE	95	76	22
GGG	28U	17	200
HHH	28U	3.2	↓

Compound	Concentration ( )		RPD
III	9.7	11	13
JJJ	28U	4.4	200
LLL	28U	7.6	↓
AAA	17	6.4U	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Ballfields Parcels at DoDHF Novato, CA

Collection Date: April 5 through April 6, 2005

LDC Report Date: June 14, 2005

Matrix: Soil

Parameters: Semivolatiles

Validation Level: NFESC Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2502499

Sample Identification

TO63-SPN-SB02-0-0.5
TO63-SPN-SB02-4-5
TO63-SPN-SB03-0-0.5
TO63-R1-SB02-0-0.5
TO63-R1-SB01-0-0.5Dup
TO63-R1-SB02-0-0.5MS
TO63-R1-SB02-0-0.5MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

The review follows the Final Sampling and Analysis Plan for Preliminary Assessment/Site Investigation of Ballfields Parcels at DoDHF Novato, California, (March 23, 2005) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified a P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%RSD	Associated Samples	Flag	A or P
4/12/05	Hexachlorocyclopentadiene 4-Nitrophenol	16.0 19.8	All samples in SDG K2502499	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/15/05	Hexachlorocyclopentadiene 2,4-Dinitrophenol	24 24	All samples in SDG K2502499	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values for all system performance check compounds (SPCCs) were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0505755-7	4/11/05	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	8.2 ug/L 7.7 ug/L	All samples in SDG K2502499

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
TO63-SPN-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	14 ug/Kg 17 ug/Kg	14U ug/Kg 160U ug/Kg
TO63-SPN-SB02-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.3 ug/Kg 8.9 ug/Kg	9.3U ug/Kg 150U ug/Kg
TO63-SPN-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	12 ug/Kg 41 ug/Kg	12U ug/Kg 140U ug/Kg
TO63-R1-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	17 ug/Kg 43 ug/Kg	17U ug/Kg 120U ug/Kg
TO63-R1-SB01-0-0.5Dup	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	19 ug/Kg 76 ug/Kg	19U ug/Kg 130U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples TO63-R1-SB01-0-0.5Dup and TO63-R1-SB01-0-0.5 (from SDG K2502497) were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	TO63-R1-SB01-0-0.5Dup	TO63-R1-SB01-0-0.5	
Phenol	84U	14	200
Acetophenone	140U	32	200
Phenanthrene	12	5.6	73
Anthracene	28U	3.6	200
Di-n-butylphthalate	16	19	17
Fluoranthene	17	9.1	61
Pyrene	15	8.7	53
Benzo(a)anthracene	28U	5.6	200
Chrysene	15	13	14
Bis(2-ethylhexyl)phthalate	95	76	22
Benzo(b)fluoranthene	28U	17	200
Benzo(k)fluoranthene	28U	3.2	200
Benzo(a)pyrene	9.7	11	13
Indeno(1,2,3-cd)pyrene	28U	4.4	200
Benzo(g,h,i)perylene	28U	7.6	200
Butylbenzylphthalate	17	6.4U	200

XVII. Field Blanks

No field blanks were identified in this SDG.

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Data Qualification Summary - SDG K2502499

SDG	Sample	Compound	Flag	A or P	Reason
K2502499	TO63-SPN-SB02-0-0.5 TO63-SPN-SB02-4-5 TO63-SPN-SB03-0-0.5 TO63-R1-SB02-0-0.5 TO63-R1-SB01-0-0.5Dup	Hexachlorocyclopentadiene 4-Nitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD)
K2502499	TO63-SPN-SB02-0-0.5 TO63-SPN-SB02-4-5 TO63-SPN-SB03-0-0.5 TO63-R1-SB02-0-0.5 TO63-R1-SB01-0-0.5Dup	Hexachlorocyclopentadiene 2,4-Dinitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

Ballfields Parcels at DoDHF Novato, CA
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K2502499

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2502499	TO63-SPN-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	14U ug/Kg 160U ug/Kg	A
K2502499	TO63-SPN-SB02-4-5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	9.3U ug/Kg 150U ug/Kg	A
K2502499	TO63-SPN-SB03-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	12U ug/Kg 140U ug/Kg	A
K2502499	TO63-R1-SB02-0-0.5	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	17U ug/Kg 120U ug/Kg	A
K2502499	TO63-R1-SB01-0-0.5Dup	Di-n-butylphthalate Bis(2-ethylhexyl)phthalate	19U ug/Kg 130U ug/Kg	A

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB02-0-0.5
Lab Code: K2502499-008

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U		7.7	7.6	1	04/11/05	04/15/05	KWG0505755	
Phenol	ND	U		24	3.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U		7.7	3.7	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U		7.7	2.7	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U		7.7	5.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U		7.7	1.9	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	ND	U		39	19	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U		7.7	4.5	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U		7.7	5.0	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U		7.7	3.4	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U		7.7	3.1	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U		7.7	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U		7.7	4.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U		39	8.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U		7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U		7.7	2.8	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U		7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U		7.7	3.3	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U		7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U		19	19	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U		16	14	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U		7.7	3.3	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U		7.7	1.9	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U	UJ	39	24	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U		7.7	2.8	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U		7.7	4.7	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U		16	7.4	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U		7.7	5.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U		16	4.2	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U		7.7	2.8	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U		7.7	4.4	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U		7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U		16	4.0	1	04/11/05	04/15/05	KWG0505755	

Comments:

6/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502499
Project:	Novato Ballfields/G486063	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	T063-SPN-SB02-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502499-008	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	7.7	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U UJ	160	56	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U UJ	77	47	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U	7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U	7.7	4.4	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U	7.7	5.4	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U	7.7	2.7	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U	7.7	3.1	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U	16	5.3	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U	77	2.7	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U	7.7	3.4	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U	7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U	7.7	3.3	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U	7.7	3.4	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U	77	14	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	ND	U	7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U	7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U	7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**14**	B U	7.7	4.0	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	ND	U	7.7	3.4	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**2.0**	J	7.7	2.0	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U	7.7	2.4	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	77	5.7	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	ND	U	7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
Chrysene	ND	U	7.7	2.2	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**17**	J 160U	160	2.7	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U	7.7	1.9	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	ND	U	7.7	3.9	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U	7.7	3.9	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	ND	U	7.7	2.5	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	ND	U	7.7	3.0	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U	7.7	3.4	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**12**		7.7	3.6	1	04/11/05	04/15/05	KWG0505755	

Comments: 6/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB02-0-0.5
Lab Code: K2502499-008

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	04/15/05	Acceptable
Phenol-d6	69	20-99	04/15/05	Acceptable
Nitrobenzene-d5	64	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	66	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	69	23-113	04/15/05	Acceptable
Terphenyl-d14	79	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB02-4-5
Lab Code: K2502499-009

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	7.1	6.9	1	04/11/05	04/15/05	KWG0505755	
Phenol	ND	U	22	2.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	7.1	3.4	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	7.1	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	7.1	4.8	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	7.1	1.7	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	ND	U	36	17	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	7.1	4.1	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	7.1	4.5	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	7.1	3.1	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	7.1	2.9	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	7.1	2.3	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	7.1	3.7	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	36	7.8	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	7.1	2.6	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	7.1	3.0	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	17	17	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	15	13	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	7.1	3.0	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	7.1	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U UJ	36	22	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	7.1	2.6	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	7.1	4.3	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	15	6.8	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	7.1	5.1	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U	15	3.8	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	7.1	2.6	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	7.1	4.0	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	15	3.7	1	04/11/05	04/15/05	KWG0505755	

Comments: 4/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502499
Project:	Novato Ballfields/G486063	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	T063-SPN-SB02-4-5	**Units:**	ug/Kg
Lab Code:	K2502499-009	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U	7.1	1.5	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U UJ	150	51	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U UJ	71	43	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U	7.1	4.0	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U	7.1	5.0	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U	7.1	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U	7.1	2.9	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U	15	4.8	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U	71	2.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U	7.1	3.1	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U	7.1	3.0	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U	7.1	3.1	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U	71	12	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**9.3**	B U	7.1	3.7	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	ND	U	7.1	3.1	1	04/11/05	04/15/05	KWG0505755	
Pyrene	ND	U	7.1	1.9	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	**4.6**	J	7.1	2.2	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U	71	5.2	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
Chrysene	ND	U	7.1	2.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**8.9**	J 150 U	150	2.4	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U	7.1	1.7	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	ND	U	7.1	3.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U	7.1	3.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	ND	U	7.1	2.3	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	ND	U	7.1	2.7	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U	7.1	3.1	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**12**		7.1	3.3	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB02-4-5
Lab Code: K2502499-009

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	56	11-87	04/15/05	Acceptable
Phenol-d6	65	20-99	04/15/05	Acceptable
Nitrobenzene-d5	62	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	64	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	71	23-113	04/15/05	Acceptable
Terphenyl-d14	78	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB03-0-0.5
Lab Code: K2502499-010

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	6.8	6.7	1	04/11/05	04/15/05	KWG0505755	
Phenol	**12**	J	21	2.6	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	6.8	3.3	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	6.8	2.4	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	6.8	4.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	6.8	1.7	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**39**		34	17	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	6.8	4.0	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	6.8	4.4	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	6.8	3.0	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	6.8	2.8	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	6.8	2.2	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	6.8	3.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	34	7.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	6.8	2.5	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	6.8	2.9	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	17	17	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	14	12	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	6.8	2.9	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	6.8	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U UJ	34	21	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	6.8	2.5	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	6.8	4.1	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	14	6.6	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	6.8	4.9	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U	14	3.7	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	6.8	2.5	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	6.8	3.9	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	14	3.6	1	04/11/05	04/15/05	KWG0505755	

Comments:

6/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle Memorial Institute	**Service Request:**	K2502499
Project:	Novato Ballfields/G486063	**Date Collected:**	04/05/2005
Sample Matrix:	Soil	**Date Received:**	04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name:	T063-SPN-SB03-0-0.5	**Units:**	ug/Kg
Lab Code:	K2502499-010	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C		

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		6.8	1.4	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	UJ	140	49	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	UJ	68	41	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U		6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U		6.8	3.9	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U		6.8	4.8	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U		6.8	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U		6.8	2.8	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U		14	4.7	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U		68	2.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U		6.8	3.0	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U		6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U		6.8	2.9	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U		6.8	3.0	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U		68	12	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**6.6**	J		6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U		6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
Carbazole	**2.5**	J		6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**12**	B	u	6.8	3.6	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**6.3**	J		6.8	3.0	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**6.6**	J		6.8	1.8	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U		6.8	2.1	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U		68	5.1	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**2.9**	J		6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**5.8**	J		6.8	2.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**41**	J	140u	140	2.4	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U		6.8	1.7	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**5.6**	J		6.8	3.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U		6.8	3.5	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**3.3**	J		6.8	2.2	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**3.2**	J		6.8	2.6	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U		6.8	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**21**			6.8	3.2	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/05/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-SPN-SB03-0-0.5
Lab Code: K2502499-010

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	04/15/05	Acceptable
Phenol-d6	79	20-99	04/15/05	Acceptable
Nitrobenzene-d5	67	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	80	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	107	23-113	04/15/05	Acceptable
Terphenyl-d14	117	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB02-0-0.5
Lab Code: K2502499-011

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U		5.9	5.8	1	04/11/05	04/15/05	KWG0505755	
Phenol	**7.2**	J		18	2.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U		5.9	2.8	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U		5.9	4.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**22**	J		30	14	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U		5.9	3.4	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U		5.9	3.8	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U		5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U		30	6.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U		14	14	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U		12	11	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U	UJ	30	18	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U		5.9	3.5	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U		12	5.6	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U		5.9	4.2	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	**5.3**	J		12	3.2	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U		5.9	2.1	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U		12	3.1	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB02-0-0.5
Lab Code: K2502499-011

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C

Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		5.9	1.2	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	UJ	120	42	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	UJ	59	35	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U		5.9	3.3	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U		5.9	4.1	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U		5.9	2.0	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U		5.9	2.4	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U		12	4.0	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U		59	2.0	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U		5.9	2.5	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U		59	10	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**4.7**	J		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Anthracene	ND	U		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U		5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**17**	B	U	5.9	3.1	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**7.0**			5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**7.0**			5.9	1.6	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U		5.9	1.8	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U		59	4.4	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**3.6**	J		5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**6.7**			5.9	1.7	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**43**	J	120U	120	2.0	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U		5.9	1.4	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**7.9**			5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	ND	U		5.9	3.0	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**4.7**	J		5.9	1.9	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**4.3**	J		5.9	2.3	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U		5.9	2.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**5.1**	J		5.9	2.7	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB02-0-0.5
Lab Code: K2502499-011

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	54	11-87	04/15/05	Acceptable
Phenol-d6	71	20-99	04/15/05	Acceptable
Nitrobenzene-d5	65	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	74	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	81	23-113	04/15/05	Acceptable
Terphenyl-d14	97	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/17/05

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB01-0-0.5 DUP
Lab Code: K2502499-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,4,5-Tetrachlorobenzene	ND	U	6.4	6.2	1	04/11/05	04/15/05	KWG0505755	
Phenol	**14**	J	19	2.5	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethyl) Ether	ND	U	6.4	3.1	1	04/11/05	04/15/05	KWG0505755	
2-Chlorophenol	ND	U	6.4	2.2	1	04/11/05	04/15/05	KWG0505755	
2-Methylphenol	ND	U	6.4	4.3	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroisopropyl) Ether	ND	U	6.4	1.6	1	04/11/05	04/15/05	KWG0505755	
Acetophenone	**32**		32	16	1	04/11/05	04/15/05	KWG0505755	
4-Methylphenol†	ND	U	6.4	3.7	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodi-n-propylamine	ND	U	6.4	4.1	1	04/11/05	04/15/05	KWG0505755	
Hexachloroethane	ND	U	6.4	2.8	1	04/11/05	04/15/05	KWG0505755	
Nitrobenzene	ND	U	6.4	2.6	1	04/11/05	04/15/05	KWG0505755	
Isophorone	ND	U	6.4	2.1	1	04/11/05	04/15/05	KWG0505755	
2-Nitrophenol	ND	U	6.4	3.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dimethylphenol	ND	U	32	7.0	1	04/11/05	04/15/05	KWG0505755	
Bis(2-chloroethoxy)methane	ND	U	6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
2,4-Dichlorophenol	ND	U	6.4	2.3	1	04/11/05	04/15/05	KWG0505755	
Naphthalene	ND	U	6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
4-Chloroaniline	ND	U	6.4	2.7	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobutadiene	ND	U	6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
Caprolactam	ND	U	16	16	1	04/11/05	04/15/05	KWG0505755	
Benzaldehyde	ND	U	13	12	1	04/11/05	04/15/05	KWG0505755	
4-Chloro-3-methylphenol	ND	U	6.4	2.7	1	04/11/05	04/15/05	KWG0505755	
2-Methylnaphthalene	ND	U	6.4	1.6	1	04/11/05	04/15/05	KWG0505755	
Hexachlorocyclopentadiene	ND	U UJ	32	19	1	04/11/05	04/15/05	KWG0505755	
2,4,6-Trichlorophenol	ND	U	6.4	2.3	1	04/11/05	04/15/05	KWG0505755	
2,4,5-Trichlorophenol	ND	U	6.4	3.8	1	04/11/05	04/15/05	KWG0505755	
Biphenyl	ND	U	13	6.1	1	04/11/05	04/15/05	KWG0505755	
2-Chloronaphthalene	ND	U	6.4	4.6	1	04/11/05	04/15/05	KWG0505755	
2-Nitroaniline	ND	U	13	3.5	1	04/11/05	04/15/05	KWG0505755	
Dimethyl Phthalate	ND	U	6.4	2.3	1	04/11/05	04/15/05	KWG0505755	
2,6-Dinitrotoluene	ND	U	6.4	3.6	1	04/11/05	04/15/05	KWG0505755	
Acenaphthylene	ND	U	6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
3-Nitroaniline	ND	U	13	3.3	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB01-0-0.5 DUP
Lab Code: K2502499-012

Extraction Method: EPA 3541
Analysis Method: 8270C

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	Result	Q		MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Acenaphthene	ND	U		6.4	1.3	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrophenol	ND	U	UJ	130	46	1	04/11/05	04/15/05	KWG0505755	
4-Nitrophenol	ND	U	UJ	64	38	1	04/11/05	04/15/05	KWG0505755	
Dibenzofuran	ND	U		6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
2,4-Dinitrotoluene	ND	U		6.4	3.6	1	04/11/05	04/15/05	KWG0505755	
Diethyl Phthalate	ND	U		6.4	4.5	1	04/11/05	04/15/05	KWG0505755	
Fluorene	ND	U		6.4	2.2	1	04/11/05	04/15/05	KWG0505755	
4-Chlorophenyl Phenyl Ether	ND	U		6.4	2.6	1	04/11/05	04/15/05	KWG0505755	
4-Nitroaniline	ND	U		13	4.3	1	04/11/05	04/15/05	KWG0505755	
2-Methyl-4,6-dinitrophenol	ND	U		64	2.2	1	04/11/05	04/15/05	KWG0505755	
N-Nitrosodiphenylamine	ND	U		6.4	2.8	1	04/11/05	04/15/05	KWG0505755	
4-Bromophenyl Phenyl Ether	ND	U		6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
Hexachlorobenzene	ND	U		6.4	2.7	1	04/11/05	04/15/05	KWG0505755	
Atrazine	ND	U		6.4	2.8	1	04/11/05	04/15/05	KWG0505755	
Pentachlorophenol	ND	U		64	11	1	04/11/05	04/15/05	KWG0505755	
Phenanthrene	**5.6**	J		6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
Anthracene	**3.6**	J		6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
Carbazole	ND	U		6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
Di-n-butyl Phthalate	**19**	B	U	6.4	3.3	1	04/11/05	04/15/05	KWG0505755	
Fluoranthene	**9.1**			6.4	2.8	1	04/11/05	04/15/05	KWG0505755	
Pyrene	**8.7**			6.4	1.7	1	04/11/05	04/15/05	KWG0505755	
Butyl Benzyl Phthalate	ND	U		6.4	1.9	1	04/11/05	04/15/05	KWG0505755	
3,3'-Dichlorobenzidine	ND	U		64	4.7	1	04/11/05	04/15/05	KWG0505755	
Benz(a)anthracene	**5.6**	J		6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
Chrysene	**13**			6.4	1.8	1	04/11/05	04/15/05	KWG0505755	
Bis(2-ethylhexyl) Phthalate	**76**	J	130U	130	2.2	1	04/11/05	04/15/05	KWG0505755	
Di-n-octyl Phthalate	ND	U		6.4	1.6	1	04/11/05	04/15/05	KWG0505755	
Benzo(b)fluoranthene	**17**			6.4	3.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(k)fluoranthene	**3.2**	J		6.4	3.2	1	04/11/05	04/15/05	KWG0505755	
Benzo(a)pyrene	**11**			6.4	2.1	1	04/11/05	04/15/05	KWG0505755	
Indeno(1,2,3-cd)pyrene	**4.4**	J		6.4	2.5	1	04/11/05	04/15/05	KWG0505755	
Dibenz(a,h)anthracene	ND	U		6.4	2.8	1	04/11/05	04/15/05	KWG0505755	
Benzo(g,h,i)perylene	**7.6**			6.4	3.0	1	04/11/05	04/15/05	KWG0505755	

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle Memorial Institute
Project: Novato Ballfields/G486063
Sample Matrix: Soil

Service Request: K2502499
Date Collected: 04/06/2005
Date Received: 04/07/2005

Semi-Volatile Organic Compounds by GC/MS

Sample Name: T063-R1-SB01-0-0.5 DUP
Lab Code: K2502499-012

Units: ug/Kg
Basis: Dry

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2-Fluorophenol	59	11-87	04/15/05	Acceptable
Phenol-d6	74	20-99	04/15/05	Acceptable
Nitrobenzene-d5	69	10-99	04/15/05	Acceptable
2-Fluorobiphenyl	79	10-104	04/15/05	Acceptable
2,4,6-Tribromophenol	101	23-113	04/15/05	Acceptable
Terphenyl-d14	114	39-124	04/15/05	Acceptable

† Analyte Comments

4-Methylphenol	This analyte cannot be separated from 3-Methylphenol.

Comments:

6/17/05

LDC #: 13575B2

SDG #: K2502499

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 6/13/05

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/5-6/05
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	%RSD ≤ 30/15. r² SPCCs
IV.	Continuing calibration	SW	%D ≤ 20. ICV ≤ 25%
V.	Blanks	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D=5+TO63-R1-SB01-0-0.5 (K2502497)
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	TO63-SPN-SB02-0-0.5	11	KN505755-7	21		31	
2	TO63-SPN-SB02-4-5	12		22		32	
3	TO63-SPN-SB03-0-0.5	13		23		33	
4	TO63-R1-SB02-0-0.5	14		24		34	
5	TO63-R1-SB01-0-0.5Dup	15		25		35	
6	TO63-R1-SB02-0-0.5MS	16		26		36	
7	TO63-R1-SB02-0-0.5MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. Acetophenone
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 13575B2
SDG #: 10502499

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: 4
2nd Reviewer: 2

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Did the laboratory conduct an acceptable 5 point calibration prior to sample analysis?
(Y) N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
(Y) N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?________
(Y) N N/A Did the initial calibration meet the acceptance criteria?
Y (N) N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/12/05	ICAL	X	16.0 (≤15)		All + BLK	J/UJ/A
			II	19.8 ↓			↓

LDC #: 13575B2
SDG #: K2502499

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 8

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ~~≤25.0%~~ 20%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/15/05	0415F001-2	X	24 ~~(>20)~~	—	all+Bk	J/UJ/A
			HH	24			

CONCAL.2S

LDC #: 13575B2
SDG #: 502499

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 4/11/05 **Blank analysis date:** 4/15/05
Conc. units: µg/kg Associated Samples: NA

Compound	Blank ID	Sample Identification								
	050555-7	1	2	3	4	5				
XX	8.2	14/U	9.3/U	12/U	17/U	19/U				
ZZZ	7.7	17/160U	8.9/150U	41/140U	43/120U	76/130U				

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 185152
SDG #: 10502499

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 8

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		KW50505755-7	TPH	125 (39-124)	No Qual
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

SUR.2S

LDC #: 13575B2
SDG #: K0502499

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: 9
2nd reviewer: 9

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg)		RPD
	T063-R1-SB01-0-0.5	5	
A	84U	14	200
TTT	140U	32	↓
UU	12	5.6	73
VV	28U	3.6	200
XX	16	19	17
YY	17	9.1	61

Compound	Concentration ( )		RPD
ZZ	15	8.7	53
CCC	28U	5.6	200
DDD	15	13	14
EEE	95	76	22
GGG	28U	17	200
HHH	28U	3.2	↓

Compound	Concentration ( )		RPD
III	9.7	11	13
JJJ	28U	4.4	200
LLL	28U	7.6	↓
AAA	17	6.4U	

Compound	Concentration ( )		RPD