Final Closure Decision Document

Sump and Discharge Pipe, K09

Hawthorne Army Depot

DECISION DOCUMENT
Sump and Discharge Pipe – K09
Hawthorne Army Depot
Hawthorne, Nevada
January 2003

1. PURPOSE OF DECISION DOCUMENT

1.1 Introduction

This decision document describes the rationale for the remedial action and closure of Sump and Discharge Pipes – K09 at the Hawthorne Army depot (HWAD), Hawthorne, Nevada. This decision document was prepared by the U.S. Army Corps of Engineers (USACE), Sacramento District and HWAD, with support from the Nevada Division of Environmental Protection (NDEP), Conservation and Natural Resources Department.

1.2 Site Description and Background

The Sump and Discharge Pipes – K09 site consists of a metal, above-ground sump and discharge pipe located outside Building 10 in the main cantonment area. Building 10 houses the machine shop. During the late 1960's the machine shop contained a chrome plating operation. Liquids that were released or discharged inside the building were captured in a drainage trough that emptied into a metal sump located on the west side of Building 10. From there, the sump contents entered a discharge pipe. The discharge pipe was suspected to have been connected to a French drain or leach field system, but it was determined during the course of sampling to connect to the sanitary sewer system. Materials that may have been discharged to the sump include acids, metals, and solvents. The sump measured roughly 6.5 feet by 2.8 feet by 2.3 feet deep. The metal sump was corroded, exposing the underlying soils. The soil underlying the sump and discharge pipe was not discolored nor was there evidence of leakage. Access to the area is not restricted.

1.3 Chemicals of Concern

The chemicals of concern at Sump and Discharge Pipes – K09 are total metals (arsenic, cadmium, chromium, and lead), volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs).

2. SUMMARY OF SITE RISK

The site was evaluated using the Relative Risk Site Evaluation (RRSE) criteria and the score was low. Two discrete surface soil samples and three discrete subsurface soil samples were collected and used to evaluate the surface soil and groundwater pathways.

3. SUMMARY OF REMEDIAL INVESTIGATIONS AND REMEDIAL ACTIONS

3.1 Relative Risk Site Evaluation (RRSE)

A Hazardous and Medical Waste Study and Relative Risk Site Evaluation were conducted at HWAD in July 2000. The purpose of the relative risk evaluation was to provide sufficient data to score five HWAD sites, including the Sump and Discharge Pipes – K09 site. The current Defense Environmental Restoration Program (DERP) management guidance requires that all sites eligible for cleanup must be scored and ranked to determine the degree of potential risk. The process combines information about the level of contamination, the possibility of contamination migration, and the probability that the contamination will be contacted by people and by ecologically sensitive receptors, to qualitatively address the risk each site potentially presents.

The U.S. Army Environmental Center maintains the Defense Site Environmental Restoration Tracking System (DSERTS) to track the Army's environmental sites and their status. Sites must be scored under the RRSE prior to being entered into the DSERTS database. The final site score was low.

3.2 Actual Investigation

A surface soil sample was collected directly beneath the discharge pipe/sewer line connections. A second sample was collected directly beneath the discharge pipe/sump connection. Three subsurface samples were collected: (1) from beneath the sump, (2) from below the sump/discharge pipe connection, (3) from beneath the discharge/sanitary sewer pipe connection. The soils pH values ranged from 7.70 to 8.30 in these soil samples, indicating no adverse impact from acids. These samples were analyzed for total metals (arsenic, cadmium, chromium, and lead), SVOCs and VOCs. Although elevated concentrations of cadmium and lead were found, this is not indicative of a problem. The analytical results are tabulated in Appendix B – Analytical Data results. The concentrations of the chemicals of concern for this site are well below the EPA Region IX Preliminary Remediation Goals.

4. CONCLUSIONS AND RECOMMENDATIONS

The HWAD proposed closure goals for all analytes are listed in Appendix A. These closure goals were used in evaluating the detected chemicals. The elevated metals levels are all below the closure goals. It is recommended that the site be closed with respect to the chemicals of concern and without land use restrictions.

5. PUBLIC INVOLVEMENT

It is U.S. Department of Defense and Army policy to involve the local community throughout the investigation process at an installation. To initiate this involvement, HWAD has established a repository in the local public library, which includes final copies of all past studies and documents regarding environmental issues at the facility. This repository will be maintained and updated with all future final documents as they are issued to HWAD.

HWAD has solicited community participation in establishment of the restoration advisory board (RAB). However, because of insufficient public response, HWAD has not formed a RAB. HWAD will continue to solicit community involvement.

6. DECLARATION

The selected remedy is protective of human health and the environment. It has been shown that a complete exposure pathway to human health and the environment does not exist, and there is no potential for such an exposure pathway to be completed in the future.

US Army

26 Mar 03
Date

David W. Dornblaser
Lieutenant Colonel, US Army
Commanding

State of Nevada

6 May 03
Date

Paul Liebendorfer
Chief, Bureau of Federal Facilities

REFERENCES

EPA, 2001, U.S. Environmental Protection Agency, Region IX, Region 9 Preliminary Remediation Goals (PRGs).

HWAD, 2000, Hawthorne Army Depot, Memorandum, Subject: Request for Relative Risk Assessment on Sites at Hawthorne Army Depot, Hawthorne, Nevada.

ODUSD, 1994, Office of the Deputy Under Secretary of Defense (Environmental Security), Management Guidance for Execution of the FY 94/95 and Development of the FY96 Defense Environmental Restoration Program.

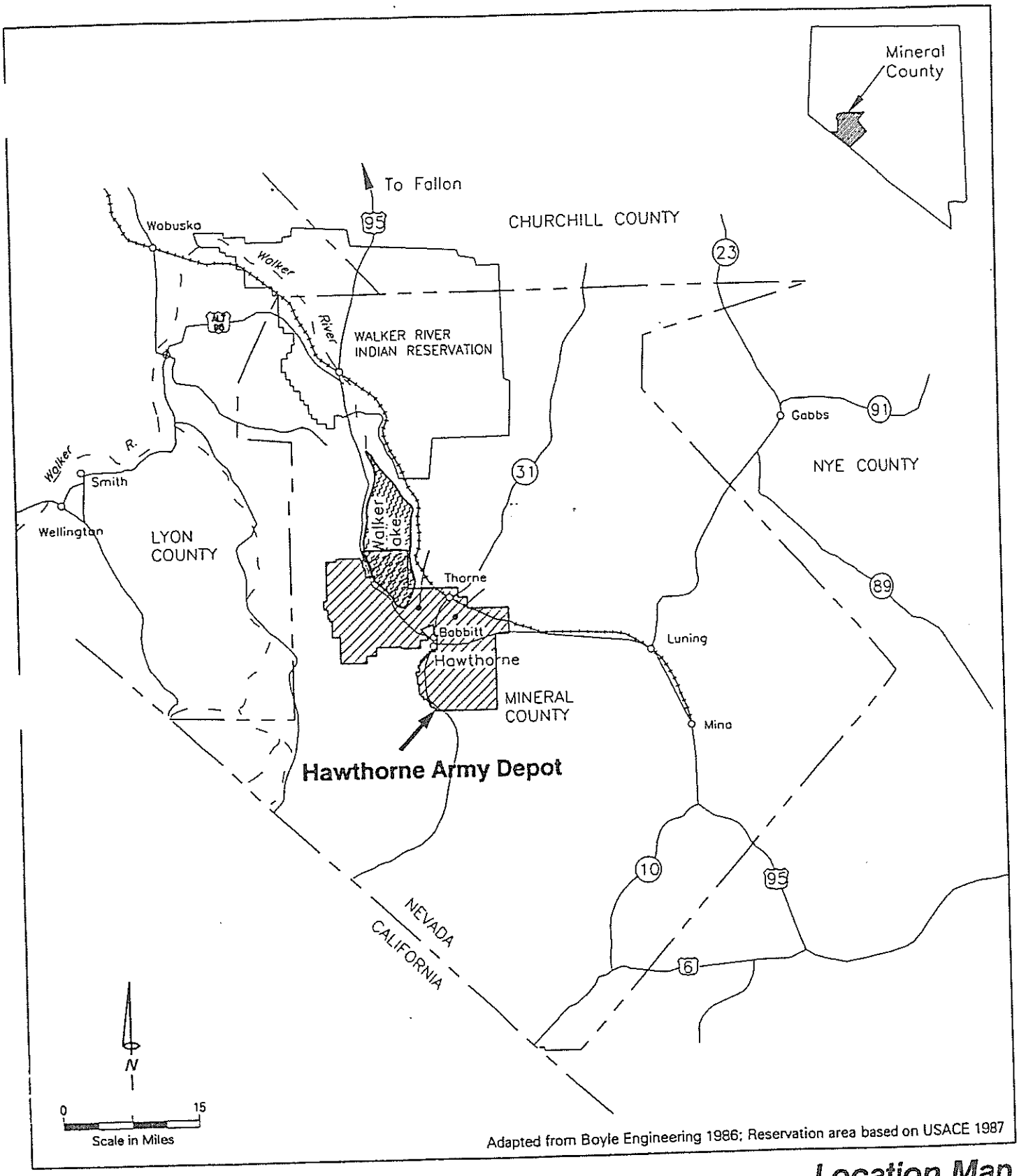
ODUSD, 1995, Office of the Deputy Under Secretary of Defense (Environmental Security), Revised Draft Relative Risk Site Evaluation Primer.

U.S. Army Center for Health Promotion and Prevention Medicine, 2000, Hazardous and Medical Waste Study No. 37-EF-5917-00, Relative Risk Site Evaluation, Hawthorne Army Depot, Nevada, 25-27 July 2000. – SEE SWMU K10 FOLDER

USACHPPM, 1996, United States Army Center for Health Promotion and Preventive Medicine, Information Paper: Estimation of Ground water Contamination Levels from Soil Data.

USACOE, 1998, U.S. Army Corps of Engineers, Final Remedial Investigation Report, Solid Waste Management Unit H04, Navyside Landfill, Hawthorne Army Depot, Hawthorne, NV, December.

FIGURES



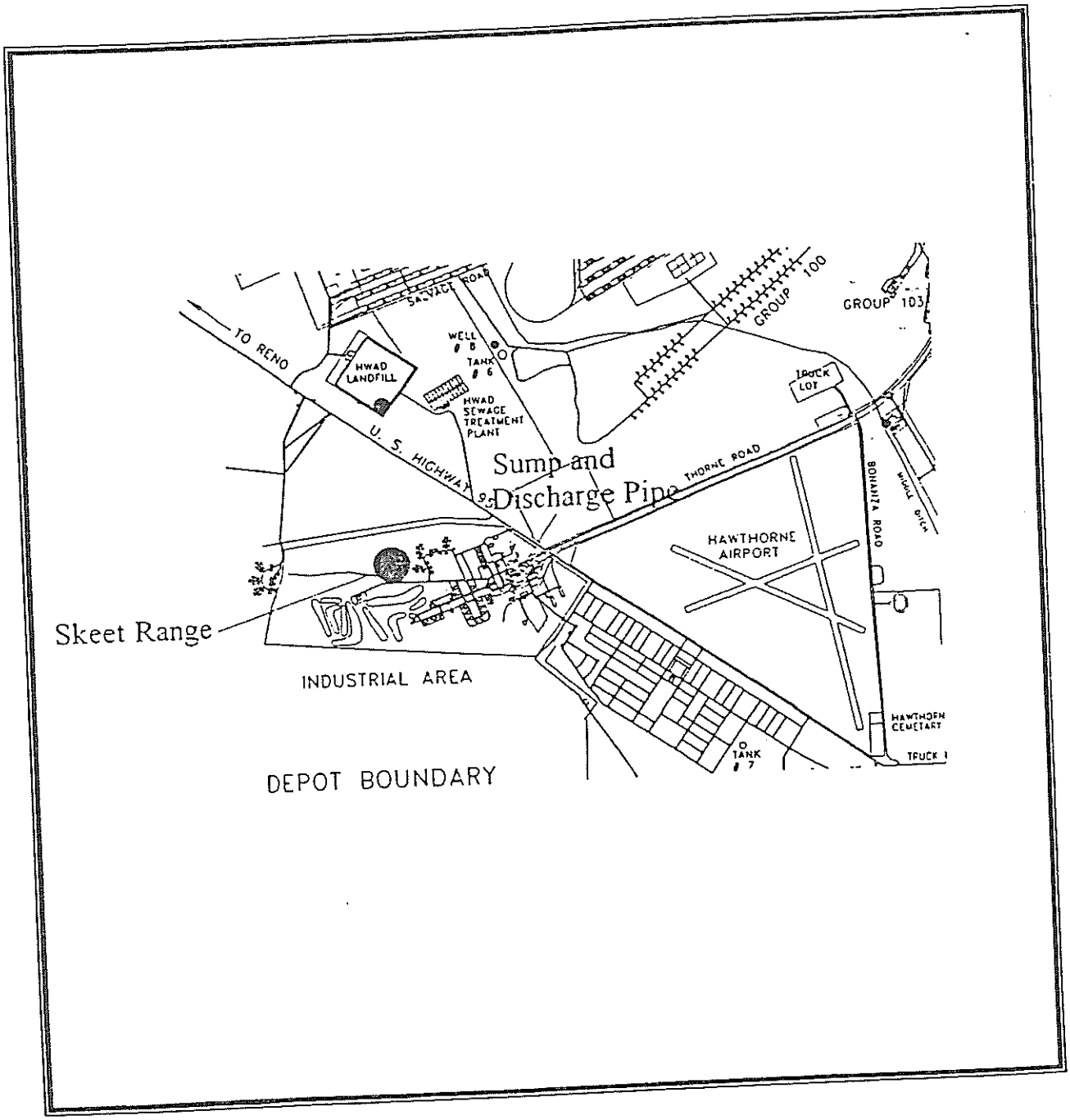
Location Map

Legend

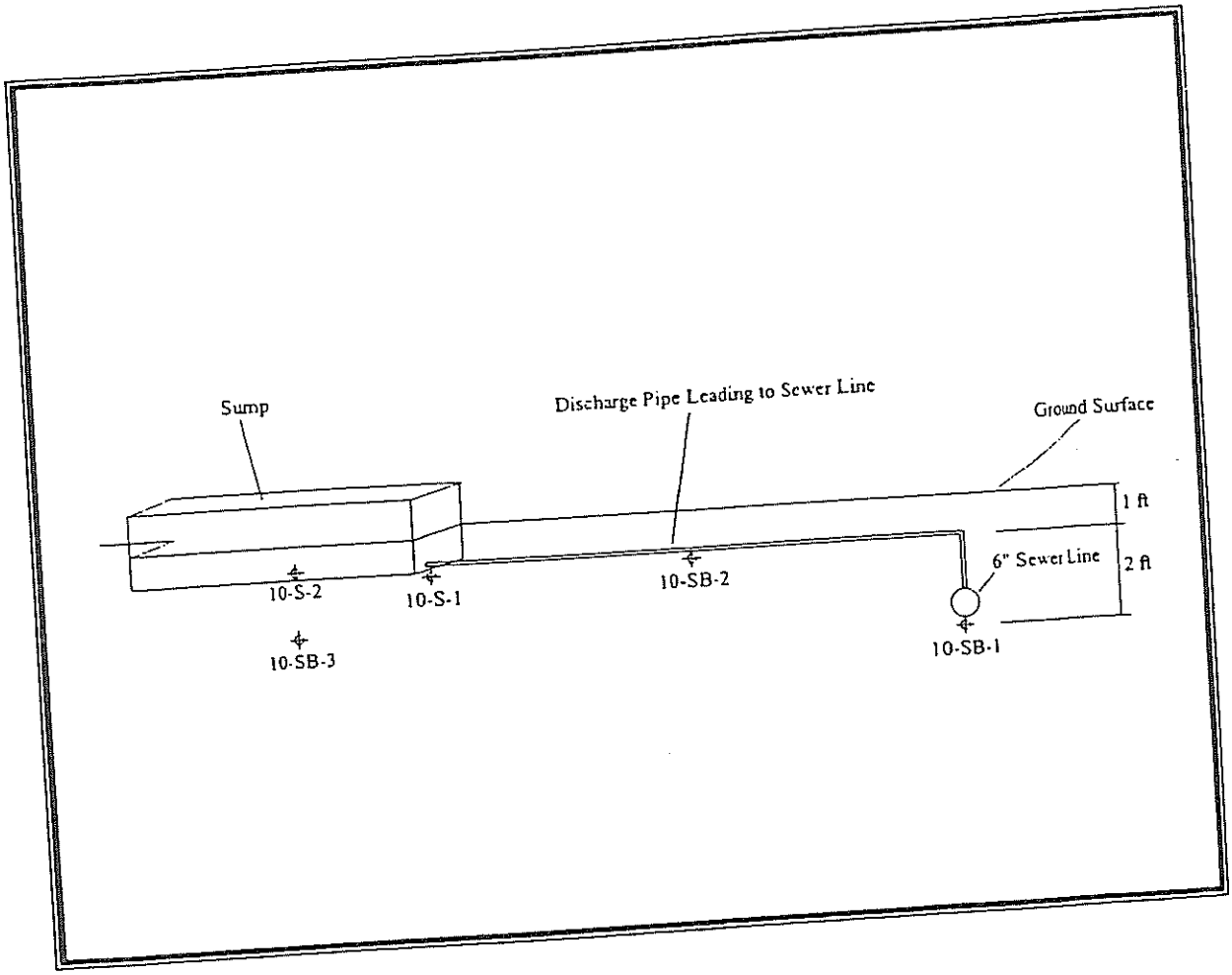
Hawthorne Army Depot

Hawthorne Army Depot
Hawthorne, Nevada

Tetra Tech, Inc.



Locations of Skeet Range, Sump and Discharge Pipe



Sump and Discharge Pipe.

APPENDIX A

PROPOSED CLOSURE GOALS

DEPARTMENT OF THE ARMY
Hawthorne Army Depot
1 South Maine Avenue
Hawthorne, NV 89415-9404

PLY TO
ATTENTION OF

Operations Review Division

16 JUL 2001

Mr. Ken Scarbrough
Division of Environmental Protection
Bureau of Federal Facilities
333 West Nye Lane
Carson City, Nevada 89706-0851

Dear Mr. Scarbrough

Proposed PRG (preliminary remediation goal) values for use at Hawthorne Army Depot.

The US Army Corps of Engineers has reviewed remediation goals for explosives contaminated soil at the Hawthorne Army Depot. We understand that these values were established by NDEP in January 1996 using the best available data from various sources. However, a recent review of these levels indicates that they may no longer be appropriate in lieu of changes to the Nevada Administrative Code. NAC 445A.2272 addresses soil action levels for contaminated sites. The Army believes that the EPA Region IX PRG values are applicable to the HWAD. Residential and industrial values should be appropriately applied depending on current and future land use.

The Army therefore requests your approval for adopting the EPA Region IX PRG values as shown in the enclosed table.

If you have any questions or need additional information, please feel free to contact Mr. Jim Lukasko or Ms. Sophie Ngu at 916-557-5392/7153, respectively.

Point of contact is Mr. Herman Millsap, SMAHW-OR, (775) 945-7317.

Sincerely,

SIGNED
Vernon L. Shankle, P.E.
Chief, Operations Review Division

Enclosure

Copies Furnished:

Sacramento District, Corps of Engineers, 1325 J St, CESPK-PM-H/(Ms. Sophie Ngu), CESPK-ED-EF/(Mr. Jim Lukasko), Sacramento, California 95814-2922

ORIGINATOR Millsap DATE 16 July 2001

Hawthorne Army Depot				
		NDEP established Soil Action Level, January 1996	Proposed EPA PRG table dated 11/01/00	
Contaminant	Casno	PCG	R-PRG's	I-PRG's
		mg/kg	mg/kg	mg/kg
1,1,1-Trichloroethane	71-55-6	7200	630	1400
1,1,2,2-Tetrachloroethane	79-34-5	35	0.38	0.9
1,2,3-Trichloropropane	96-18-4	480	0.0014	0.0031
1,2-Dibromoethane (EDB)	106-93-4	0.008	0.0069	0.048
1,2-Dichlorobenzene	95-50-1	7200	370	370
√ 1,3,5-Trinitrobenzene	99-35-4	4	1800	26000
√ 1,3-Dinitrobenzene	99-65-0	8	6.1	88
√ 1,4-Dichlorobenzene	106-46-7	150	3.4	8.1
2,3,7,8-TCDD	1746-01-6	0.000005	0.0000039	0.000027
√ 2,4,6-Trinitrotoluene	1180-96-7	233	16	82
√ 2,4-Dinitrotoluene	121-14-2	2.6	120	1800
√ 2,6-Dinitrotoluene	606-20-2	80	61	880
√ m-Nitrotoluene	88-72-2	800	370	1000
√ o-Nitrotoluene	99-08-1	800	370	1000
√ p-Nitrotoluene	99-99-0	800	370	1000
Acenaphthene	83-32-9	4800	N/A	N/A
Acetone	67-64-1	800	1600	6200
Aluminum	7429-90-5	80000	76000	100000
Anthracene	120-12-7	24000	N/A	N/A
Aroclor-1016	12674-11-2	25	3.9	29
Aroclor-1221	11104-28-2	25	0.22	1
Aroclor-1232	11141-16-5	25	0.22	1
Aroclor-1242	53469-21-9	25	0.22	1
Aroclor-1248	12672-29-6	25	0.22	1
Aroclor-1254	11097-96-1	25	0.22	1
Aroclor-1260	11096-82-5	25	0.22	1
Arsenic	7440-38-2	100	22	440
Barium	7440-39-3	2000	5400	100000
Benzene	71-43-2	10	0.65	1.5
Benzo(a)anthracene	56-55-3	0.96	N/A	N/A
Benzo(a)pyrene	50-32-8	0.1	N/A	N/A
Benzo(b)fluoranthene	205-99-2	0.96	N/A	N/A
Benzo(k)fluoranthene	207-08-9	10	N/A	N/A
Beryllium	7440-41-7	1	150	2200
bis(2-Chloroisopropyl)-ether	108-60-1	3200	2.9	8.1
bis(2-Ethylhexyl)-phthalate	117-81-7	1600	35	180
Bromoform	75-25-2	89	62	310
Bromomethane	74-83-9	112	3.9	13
Butyl benzyl phthalate	85-68-7	16000	12000	100000
C11-C22 (Diesel)	68834-30-5	100	N/A	N/A
Cadmium	7440-43-9	20	37	810
Carbon tetrachloride	56-23-5	10	0.24	0.53
Chlorobenzene	108-90-7	2000	150	540
Chloroform	67-66-3	120	0.24	0.52
Chloromethane	74-87-3	538	1.2	2.7
Chromium	7440-47-3	20	210	450
Chrysene	218-01-9	96	N/A	N/A
Dibenz(a,h)anthracene	53-70-3	0.96	N/A	N/A
Dibromochloromethane	124-48-1	83	1.1	2.7
Dibromomethane	74-95-3	800		
Dibutyl-phthalate	84-74-2	8000	6100	88000

Hawthorne Army Depot				
		NDEP established Soil Action Level, January 1996	Proposed EPA PRG table dated 11/01/00	
Contaminant	Casno	PCG	R-PRG's	I-PRG's
		mg/kg	mg/kg	mg/kg
Dichlorodifluoromethane	75-71-8	16000	94	310
Diesel Fuel	11-84-7	100	N/A	N/A
Diethyl phthalate	84-66-2	64000	49000	100000
Ethylbenzene	100-41-4	8000	230	230
Fluoranthene	206-44-0	3200	N/A	N/A
Fluorene	86-73-7	3200	N/A	N/A
√ HMX √	2691-41-0	4000	3100	44000
Lead	7439-92-1	100	400	750
m- & p-Xylene(s)	11015	160000	N/A	N/A
Mercury	7439-97-6	24	23	610
Methylene Chloride	75-09-2	4800	8.9	21
Naphthalene	91-20-3	3200	N/A	N/A
Nitrate as N	14797-55-8	128000	N/A	N/A
Nitrobenzene	98-95-3	40	20	110
o-Xylene	95-47-6	160000	N/A	N/A
Phenol	108-95-2	48000	37000	100000
√ Picric Acid	88-89-1	7	N/A	N/A
Pyrene	129-00-0	2400	N/A	N/A
√ RDX √	121-82-4	64	4.4	22
Selenium	7782-49-2	20	390	10000
Silver	7440-22-4	100	390	10000
Tetrachloroethene	127-18-4	15	5.7	19
Tetryl	479-45-8	800	N/A	N/A
Toluene	108-88-3	16000	520	520
Total xylenes	1330-20-7	160000	N/A	N/A
Xylenes	79-01-6	10	210	210
Trichlorofluoromethane	75-69-4	24000	390	2000
Vinyl chloride	75-01-4	24000	0.15	0.83

√ Nitrobenzene

√ 4-Amino-2,6-dinitrotoluene (4-Am-DNT)

√ 2-Amino-4,6-dinitrotoluene (2-Am-DNT)

APPENDIX B

ANALYTICAL DATA

Field ID: 10-S-1 DLS ID: 1279013

ANALYTE	RESULT/UNITS	METHOD REPORTING LIMIT	ANALYTICAL METHOD	ANALYST	DATE ANALYZED
Arsenic	2.27 mg/Kg		EPA 7060	0028	22-Aug-00
Cadmium	9.25 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Chromium	6.89 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Lead	25.7 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

Field ID: 108-8E **DLS ID:** 1279009

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arsenic	10.3 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Cadmium	1.99 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Chromium	18.2 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Lead	102 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

Field ID: 10-SB-1 **DLS ID:** 1279015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Arsenic	2.06 mg/Kg		EPA 7060	0028	22-Aug-00
Cadmium	<2.05 mg/Kg	2.05	SW-846/EPA 6010B	0025	16-Aug-00
Chromium	<5.11 mg/Kg	5.11	SW-846/EPA 6010B	0025	16-Aug-00
Lead	10.6 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

Field ID: 10-S-2 **DLS ID:** 1279014

ANALYTE	RESULT/UNITS	METHOD REPORTING LIMIT	ANALYTICAL METHOD	WO#	DATE ANALYZED
Arsenic	5.26 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Cadmium	<2.02 mg/Kg	2.02	SW-846/EPA 6010B	0025	16-Aug-00
Chromium	5.16 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Lead	13.3 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

Field ID: 10-SB-2 **DLS ID:** 1279016

ANALYTE	RESULT	REPORTING LIMIT	ANALYTICAL METHOD	SAMPLE	DATE ANALYZED
Arsenic	5.91 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Cadmium	7.68 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Chromium	6.95 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Lead	281 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

Field ID: 10-SB-3 **DLS ID:** 1279017

ANALYTE	RESULTS	REPORTING LIMIT	ANALYTICAL METHOD	ANALYST	DATE ANALYZED
Arsenic	7.47 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00
Cadmium	<2.04 mg/Kg	2.04	SW-846/EPA 6010B	0025	16-Aug-00
Chromium	<5.11 mg/Kg	5.11	SW-846/EPA 6010B	0025	16-Aug-00
Lead	7.77 mg/Kg		SW-846/EPA 6010B	0025	16-Aug-00

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279013

Sample wt/vol: 30.004 (g/ml) G Lab File ID: S4S88042.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 2.9 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
39638-32-9	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	690	U
51-28-5	2,4-Dinitrophenol	690	U
132-64-9	Dibenzofuran	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279015

Sample wt/vol: 30.002 (g/ml) G Lab File ID: S4S88038.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 2.8 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
39638-32-9	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	690	U
51-28-5	2,4-Dinitrophenol	690	U
132-64-9	Dibenzofuran	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL

Lab Sample ID: 1279014

Sample wt/vol: 30.003 (g/ml) G

Lab File ID: S4S88033.D

Level: (low/med) LOW

Date Collected: 07/26/00

% Moisture: 1.7 decanted:(Y/N) N

Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/03/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	680	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	n-Nitrosodiphenylamine(1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL

Sample wt/vol: 30.002 (g/ml) G

Level: (low/med) LOW

% Moisture: 2.8 decanted:(Y/N) N

Concentrated Extract Volume: 1000 (uL)

Injection Volume: 1.0 (uL)

GPC Cleanup: (Y/N) N pH:

Lab Sample ID: 1279015

Lab File ID: S4S88038.D

Date Collected: 07/26/00

Date Extracted: 08/02/00

Date Analyzed: 08/04/00

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	690	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	n-Nitrosodiphenylamine(1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL

Lab Sample ID: 1279016

Sample wt/vol: 30.008 (g/ml) G

Lab File ID: S4S88039.D

Level: (low/med) LOW

Date Collected: 07/26/00

% Moisture: 3.8 decanted:(Y/N) N

Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/04/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
108-95-2	Phenol	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
100-51-6	Benzyl alcohol	350	U
39638-32-9	bis(2-chloroisopropyl)ether	350	U
95-48-7	2-Methylphenol	350	U
67-72-1	Hexachloroethane	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
106-44-5	4-Methylphenol	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	350	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	350	U
208-96-8	Acenaphthylene	350	U
131-11-3	Dimethylphthalate	350	U
606-20-2	2,6-Dinitrotoluene	350	U
83-32-9	Acenaphthene	350	U
99-09-2	3-Nitroaniline	690	U
51-28-5	2,4-Dinitrophenol	690	U
132-64-9	Dibenzofuran	350	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279014

Sample wt/vol: 30.003 (g/ml) G Lab File ID: S4S88033.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 1.7 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/03/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
39638-32-9	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	680	U
51-28-5	2,4-Dinitrophenol	680	U
132-64-9	Dibenzofuran	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279013

Sample wt/vol: 30.004 (g/ml) G Lab File ID: S4S88042.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 2.9 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	690	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	n-Nitrosodiphenylamine(1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-3

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279017

Sample wt/vol: 30.002 (g/ml) G Lab File ID: S4S88027.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 2.1 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/03/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
62-75-9	N-Nitrosodimethylamine	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
108-95-2	Phenol	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
100-51-6	Benzyl alcohol	340	U
39638-32-9	bis(2-chloroisopropyl)ether	340	U
95-48-7	2-Methylphenol	340	U
67-72-1	Hexachloroethane	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
106-44-5	4-Methylphenol	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	340	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	340	U
208-96-8	Acenaphthylene	340	U
131-11-3	Dimethylphthalate	340	U
606-20-2	2,6-Dinitrotoluene	340	U
83-32-9	Acenaphthene	340	U
99-09-2	3-Nitroaniline	680	U
51-28-5	2,4-Dinitrophenol	680	U
132-64-9	Dibenzofuran	340	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279016

Sample wt/vol: 30.008 (g/ml) G Lab File ID: S4S88039.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: 3.8 decanted:(Y/N) N Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 08/04/00

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
121-14-2	2,4-Dinitrotoluene	350	U
100-02-7	4-Nitrophenol	690	U
86-73-7	Fluorene	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
84-66-2	Diethylphthalate	350	U
100-01-6	4-Nitroaniline	690	U
534-52-1	4,6-Dinitro-2-methylphenol	690	U
86-30-6	n-Nitrosodiphenylamine(1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	690	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
56-55-3	Benzo[a]anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo[b]fluoranthene	350	U
207-08-9	Benzo[k]fluoranthene	350	U
50-32-8	Benzo[a]pyrene	350	U
193-39-5	Indeno[1,2,3-cd]pyrene	350	U
53-70-3	Dibenz[a,h]anthracene	350	U
191-24-2	Benzo[g,h,i]perylene	350	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-3

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL

Lab Sample ID: 1279017

Sample wt/vol: 30.002 (g/ml) G

Lab File ID: S4S88027.D

Level: (low/med) LOW

Date Collected: 07/26/00

% Moisture: 2.1 decanted:(Y/N) N

Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/03/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
121-14-2	2,4-Dinitrotoluene	340	U
100-02-7	4-Nitrophenol	680	U
86-73-7	Fluorene	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
84-66-2	Diethylphthalate	340	U
100-01-6	4-Nitroaniline	680	U
534-52-1	4,6-Dinitro-2-methylphenol	680	U
86-30-6	n-Nitrosodiphenylamine(1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	680	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
56-55-3	Benzo[a]anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo[b]fluoranthene	340	U
207-08-9	Benzo[k]fluoranthene	340	U
50-32-8	Benzo[a]pyrene	340	U
193-39-5	Indeno[1,2,3-cd]pyrene	340	U
53-70-3	Dibenz[a,h]anthracene	340	U
191-24-2	Benzo[g,h,i]perylene	340	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: LF-S-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8270 Units: ug/kg

Matrix: (soil/water) SOIL

Lab Sample ID: 1279018

Sample wt/vol: 30.009 (g/ml) G

Lab File ID: S4S88031.D

Level: (low/med) LOW

Date Collected: 07/26/00

% Moisture: 0.1 decanted:(Y/N) N

Date Extracted: 08/02/00

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 08/03/00

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
62-75-9	N-Nitrosodimethylamine	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
108-95-2	Phenol	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
39638-32-9	bis(2-chloroisopropyl)ether	330	U
95-48-7	2-Methylphenol	330	U
67-72-1	Hexachloroethane	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
106-44-5	4-Methylphenol	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	330	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	330	U
208-96-8	Acenaphthylene	330	U
131-11-3	Dimethylphthalate	330	U
606-20-2	2,6-Dinitrotoluene	330	U
83-32-9	Acenaphthene	330	U
99-09-2	3-Nitroaniline	670	U
51-28-5	2,4-Dinitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-3

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279017

Sample wt/vol: 5.0 (g/ml) G Lab File ID: S1S88011.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.1 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
87-68-3	hexachlorobutadiene	2.0	U
91-20-3	naphthalene	2.0	U
87-61-6	1,2,3-trichlorobenzene	2.0	U

1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-SB-3

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279017

Sample wt/vol: 5.0 (g/ml) G Lab File ID: S1S88011.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.1 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
10061-01-5	cis-1,3-dichloropropene	2.0	U
108-10-1	4-methyl-2-pentanone	20	U
108-88-3	toluene	2.0	U
10061-02-6	trans-1,3-dichloropropene	2.0	U
79-00-5	1,1,2-trichloroethane	2.0	U
97-63-2	ethyl methacrylate	20	U
127-18-4	tetrachloroethene	2.0	U
142-28-9	1,3-dichloropropane	2.0	U
591-78-6	2-hexanone	20	U
124-48-1	dibromochloromethane	2.0	U
106-93-4	1,2-dibromoethane	2.0	U
108-90-7	chlorobenzene	2.0	U
630-20-6	1,1,1,2-tetrachloroethane	2.0	U
100-41-4	ethylbenzene	2.0	U
108-38-3;10	m/p-xylene	2.0	U
95-47-6	o-xylene	2.0	U
100-42-5	styrene	2.0	U
75-25-2	bromoform	2.0	U
98-82-8	isopropylbenzene	2.0	U
108-86-1	bromobenzene	2.0	U
79-34-5	1,1,2,2-tetrachloroethane	2.0	U
96-18-4	1,2,3-trichloropropane	2.0	U
110-57-6	trans-1,4-dichloro-2-butene	20	U
103-65-1	n-propylbenzene	2.0	U
95-49-8	2-chlorotoluene	2.0	U
106-43-4	4-chlorotoluene	2.0	U
108-67-8	1,3,5-trimethylbenzene	2.0	U
98-06-6	tert-butylbenzene	2.0	U
76-01-7	pentachloroethane	20	U
95-63-6	1,2,4-trimethylbenzene	2.0	U
135-98-8	sec-butylbenzene	2.0	U
541-73-1	1,3-dichlorobenzene	2.0	U
99-87-6	4-isopropyltoluene	2.0	U
106-46-7	1,4-dichlorobenzene	2.0	U
95-50-1	1,2-dichlorobenzene	2.0	U
104-51-8	n-butylbenzene	2.0	U
67-72-1	hexachloroethane	20	U
96-12-8	1,2-dibromo-3-chloropropane	2.0	U
120-82-1	1,2,4-trichlorobenzene	2.0	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-3

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279017

Sample wt/vol: 5.0 (g/ml) G Lab File ID: S1S88011.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.1 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
75-71-8	dichlorodifluoromethane	2.0	U
74-87-3	chloromethane	2.0	U
75-01-4	vinyl chloride	2.0	U
74-83-9	bromomethane	2.0	U
75-00-3	chloroethane	2.0	U
75-69-4	trichlorofluoromethane	2.7	
60-29-7	ethyl ether	20	U
74-88-4	iodomethane	20	U
75-15-0	carbon disulfide	20	U
67-64-1	acetone	35	
75-35-4	1,1-dichloroethene	2.0	U
107-05-1	allyl chloride	20	U
75-09-2	methylene chloride	2.0	U
107-13-1	acrylonitrile	20	U
1634-04-4	methyl-t-butyl ether	20	U
156-60-5	trans-1,2-dichloroethene	2.0	U
75-34-3	1,1-dichloroethane	2.0	U
594-20-7	2,2-dichloropropane	2.0	U
156-59-2	cis-1,2-dichloroethene	2.0	U
78-93-3	2-butanone	23	B
107-12-0	propionitrile	20	U
96-33-3	methyl acrylate	20	U
126-98-7	methacrylonitrile	20	U
109-99-9	tetrahydrofuran	20	U
74-97-5	bromochloromethane	2.0	U
67-66-3	chloroform	2.0	U
71-55-6	1,1,1-trichloroethane	2.0	U
56-23-5	carbon tetrachloride	2.0	U
563-58-6	1,1-dichloropropene	2.0	U
109-69-3	1-chlorobutane	20	U
71-43-2	benzene	2.0	U
107-06-2	1,2-dichloroethane	2.0	U
79-01-6	trichloroethene	2.0	U
78-87-5	1,2-dichloropropane	2.0	U
74-95-3	dibromomethane	2.0	U
80-62-6	methyl methacrylate	20	U
75-27-4	bromodichloromethane	2.0	U
79-46-9	2-nitropropane	20	U
107-14-2	chloroacetonitrile	20	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279016

Sample wt/vol: 5.5 (g/ml) G Lab File ID: S1S88010.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 3.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
87-68-3	hexachlorobutadiene	1.9	U
91-20-3	naphthalene	1.9	U
87-61-6	1,2,3-trichlorobenzene	1.9	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279016

Sample wt/vol: 5.5 (g/ml) G Lab File ID: S1S88010.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 3.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
10061-01-5	cis-1,3-dichloropropene	1.9	U
108-10-1	4-methyl-2-pentanone	19	U
108-88-3	toluene	1.9	U
10061-02-6	trans-1,3-dichloropropene	1.9	U
79-00-5	1,1,2-trichloroethane	1.9	U
97-63-2	ethyl methacrylate	19	U
127-18-4	tetrachloroethene	1.9	U
142-28-9	1,3-dichloropropane	1.9	U
591-78-6	2-hexanone	19	U
124-48-1	dibromochloromethane	1.9	U
106-93-4	1,2-dibromoethane	1.9	U
108-90-7	chlorobenzene	1.9	U
630-20-6	1,1,1,2-tetrachloroethane	1.9	U
100-41-4	ethylbenzene	1.9	U
108-38-3;10	m/p-xylene	1.9	U
95-47-6	o-xylene	1.9	U
100-42-5	styrene	1.9	U
75-25-2	bromoform	1.9	U
98-82-8	isopropylbenzene	1.9	U
108-86-1	bromobenzene	1.9	U
79-34-5	1,1,2,2-tetrachloroethane	1.9	U
96-18-4	1,2,3-trichloropropane	1.9	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
103-65-1	n-propylbenzene	1.9	U
95-49-8	2-chlorotoluene	1.9	U
106-43-4	4-chlorotoluene	1.9	U
108-67-8	1,3,5-trimethylbenzene	1.9	U
98-06-6	tert-butylbenzene	1.9	U
76-01-7	pentachloroethane	19	U
95-63-6	1,2,4-trimethylbenzene	1.9	U
135-98-8	sec-butylbenzene	1.9	U
541-73-1	1,3-dichlorobenzene	1.9	U
99-87-6	4-isopropyltoluene	1.9	U
106-46-7	1,4-dichlorobenzene	1.9	U
95-50-1	1,2-dichlorobenzene	1.9	U
104-51-8	n-butylbenzene	1.9	U
67-72-1	hexachloroethane	19	U
96-12-8	1,2-dibromo-3-chloropropane	1.9	U
120-82-1	1,2,4-trichlorobenzene	1.9	U

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1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-SB-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279016

Sample wt/vol: 5.5 (g/ml) G Lab File ID: S1S88010.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 3.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	dichlorodifluoromethane	1.9	U
74-87-3	chloromethane	1.9	U
75-01-4	vinyl chloride	1.9	U
74-83-9	bromomethane	1.9	U
75-00-3	chloroethane	1.9	U
75-69-4	trichlorofluoromethane	3.5	
60-29-7	ethyl ether	19	U
74-88-4	iodomethane	19	U
75-15-0	carbon disulfide	19	U
67-64-1	acetone	150	
75-35-4	1,1-dichloroethene	1.9	U
107-05-1	allyl chloride	19	U
75-09-2	methylene chloride	1.9	U
107-13-1	acrylonitrile	19	U
1634-04-4	methyl-t-butyl ether	19	U
156-60-5	trans-1,2-dichloroethene	1.9	U
75-34-3	1,1-dichloroethane	1.9	U
594-20-7	2,2-dichloropropane	1.9	U
156-59-2	cis-1,2-dichloroethene	1.9	U
78-93-3	2-butanone	45	B
107-12-0	propionitrile	19	U
96-33-3	methyl acrylate	19	U
126-98-7	methacrylonitrile	19	U
109-99-9	tetrahydrofuran	19	U
74-97-5	bromochloromethane	1.9	U
67-66-3	chloroform	1.9	U
71-55-6	1,1,1-trichloroethane	1.9	U
56-23-5	carbon tetrachloride	1.9	U
563-58-6	1,1-dichloropropene	1.9	U
109-69-3	1-chlorobutane	19	U
71-43-2	benzene	1.9	U
107-06-2	1,2-dichloroethane	1.9	U
79-01-6	trichloroethene	1.9	U
78-87-5	1,2-dichloropropane	1.9	U
74-95-3	dibromomethane	1.9	U
80-62-6	methyl methacrylate	19	U
75-27-4	bromodichloromethane	1.9	U
79-46-9	2-nitropropane	19	U
107-14-2	chloroacetonitrile	19	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279015

Sample wt/vol: 4.7 (g/ml) G Lab File ID: S1S88009.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
87-68-3	hexachlorobutadiene	2.2	U
91-20-3	naphthalene	2.2	U
87-61-6	1,2,3-trichlorobenzene	2.2	U

1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-SB-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279015

Sample wt/vol: 4.7 (g/ml) G Lab File ID: S1S88009.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg)	UG/KG	Q
10061-01-5	cis-1,3-dichloropropene	2.2	U
108-10-1	4-methyl-2-pentanone	22	U
108-88-3	toluene	2.2	U
10061-02-6	trans-1,3-dichloropropene	2.2	U
79-00-5	1,1,2-trichloroethane	2.2	U
97-63-2	ethyl methacrylate	22	U
127-18-4	tetrachloroethene	2.2	U
142-28-9	1,3-dichloropropane	2.2	U
591-78-6	2-hexanone	22	U
124-48-1	dibromochloromethane	2.2	U
106-93-4	1,2-dibromoethane	2.2	U
108-90-7	chlorobenzene	2.2	U
630-20-6	1,1,1,2-tetrachloroethane	2.2	U
100-41-4	ethylbenzene	2.2	U
108-38-3;10	m/p-xylene	2.2	U
95-47-6	o-xylene	2.2	U
100-42-5	styrene	2.2	U
75-25-2	bromoform	2.2	U
98-82-8	isopropylbenzene	2.2	U
108-86-1	bromobenzene	2.2	U
79-34-5	1,1,2,2-tetrachloroethane	2.2	U
96-18-4	1,2,3-trichloropropane	2.2	U
110-57-6	trans-1,4-dichloro-2-butene	22	U
103-65-1	n-propylbenzene	2.2	U
95-49-8	2-chlorotoluene	2.2	U
106-43-4	4-chlorotoluene	2.2	U
108-67-8	1,3,5-trimethylbenzene	2.2	U
98-06-6	tert-butylbenzene	2.2	U
76-01-7	pentachloroethane	22	U
95-63-6	1,2,4-trimethylbenzene	2.2	U
135-98-8	sec-butylbenzene	2.2	U
541-73-1	1,3-dichlorobenzene	2.2	U
99-87-6	4-isopropyltoluene	2.2	U
106-46-7	1,4-dichlorobenzene	2.2	U
95-50-1	1,2-dichlorobenzene	2.2	U
104-51-8	n-butylbenzene	2.2	U
67-72-1	hexachloroethane	22	U
96-12-8	1,2-dibromo-3-chloropropane	2.2	U
120-82-1	1,2,4-trichlorobenzene	2.2	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-SB-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279015

Sample wt/vol: 4.7 (g/ml) G Lab File ID: S1S88009.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.8 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
75-71-8	dichlorodifluoromethane	2.2	U
74-87-3	chloromethane	2.2	U
75-01-4	vinyl chloride	2.2	U
74-83-9	bromomethane	2.2	U
75-00-3	chloroethane	2.2	U
75-69-4	trichlorofluoromethane	4.9	
60-29-7	ethyl ether	22	U
74-88-4	iodomethane	22	U
75-15-0	carbon disulfide	22	U
67-64-1	acetone	57	
75-35-4	1,1-dichloroethene	2.2	U
107-05-1	allyl chloride	22	U
75-09-2	methylene chloride	2.2	U
107-13-1	acrylonitrile	22	U
1634-04-4	methyl-t-butyl ether	22	U
156-60-5	trans-1,2-dichloroethene	2.2	U
75-34-3	1,1-dichloroethane	2.2	U
594-20-7	2,2-dichloropropane	2.2	U
156-59-2	cis-1,2-dichloroethene	2.2	U
78-93-3	2-butanone	26	B
107-12-0	propionitrile	22	U
96-33-3	methyl acrylate	22	U
126-98-7	methacrylonitrile	22	U
109-99-9	tetrahydrofuran	22	U
74-97-5	bromochloromethane	2.2	U
67-66-3	chloroform	2.2	U
71-55-6	1,1,1-trichloroethane	2.2	U
56-23-5	carbon tetrachloride	2.2	U
563-58-6	1,1-dichloropropene	2.2	U
109-69-3	1-chlorobutane	22	U
71-43-2	benzene	2.2	U
107-06-2	1,2-dichloroethane	2.2	U
79-01-6	trichloroethene	2.2	U
78-87-5	1,2-dichloropropane	2.2	U
74-95-3	dibromomethane	2.2	U
80-62-6	methyl methacrylate	22	U
75-27-4	bromodichloromethane	2.2	U
79-46-9	2-nitropropane	22	U
107-14-2	chloroacetonitrile	22	U

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1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-S-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279014

Sample wt/vol: 5.4 (g/ml) G Lab File ID: S1S88008.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 1.7 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND (ug/L or ug/Kg) UG/KG		Q
87-68-3	hexachlorobutadiene	1.9	U
91-20-3	naphthalene	1.9	U
87-61-6	1,2,3-trichlorobenzene	1.9	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279014

Sample wt/vol: 5.4 (g/ml) G Lab File ID: S1S88008.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 1.7 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
10061-01-5	cis-1,3-dichloropropene	1.9	U
108-10-1	4-methyl-2-pentanone	19	U
108-88-3	toluene	1.9	U
10061-02-6	trans-1,3-dichloropropene	1.9	U
79-00-5	1,1,2-trichloroethane	1.9	U
97-63-2	ethyl methacrylate	19	U
127-18-4	tetrachloroethene	1.9	U
142-28-9	1,3-dichloropropane	1.9	U
591-78-6	2-hexanone	19	U
124-48-1	dibromochloromethane	1.9	U
106-93-4	1,2-dibromoethane	1.9	U
108-90-7	chlorobenzene	1.9	U
630-20-6	1,1,1,2-tetrachloroethane	1.9	U
100-41-4	ethylbenzene	1.9	U
108-38-3;10	m/p-xylene	1.9	U
95-47-6	o-xylene	1.9	U
100-42-5	styrene	1.9	U
75-25-2	bromoform	1.9	U
98-82-8	isopropylbenzene	1.9	U
108-86-1	bromobenzene	1.9	U
79-34-5	1,1,2,2-tetrachloroethane	1.9	U
96-18-4	1,2,3-trichloropropane	1.9	U
110-57-6	trans-1,4-dichloro-2-butene	19	U
103-65-1	n-propylbenzene	1.9	U
95-49-8	2-chlorotoluene	1.9	U
106-43-4	4-chlorotoluene	1.9	U
108-67-8	1,3,5-trimethylbenzene	1.9	U
98-06-6	tert-butylbenzene	1.9	U
76-01-7	pentachloroethane	19	U
95-63-6	1,2,4-trimethylbenzene	1.9	U
135-98-8	sec-butylbenzene	1.9	U
541-73-1	1,3-dichlorobenzene	1.9	U
99-87-6	4-isopropyltoluene	1.9	U
106-46-7	1,4-dichlorobenzene	1.9	U
95-50-1	1,2-dichlorobenzene	1.9	U
104-51-8	n-butylbenzene	1.9	U
67-72-1	hexachloroethane	19	U
96-12-8	1,2-dibromo-3-chloropropane	1.9	U
120-82-1	1,2,4-trichlorobenzene	1.9	U

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1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-S-2

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279014

Sample wt/vol: 5.4 (g/ml) G Lab File ID: S1S88008.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 1.7 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
75-71-8	dichlorodifluoromethane	1.9	U
74-87-3	chloromethane	1.9	U
75-01-4	vinyl chloride	1.9	U
74-83-9	bromomethane	1.9	U
75-00-3	chloroethane	1.9	U
75-69-4	trichlorofluoromethane	2.5	
60-29-7	ethyl ether	19	U
74-88-4	iodomethane	19	U
75-15-0	carbon disulfide	19	U
67-64-1	acetone	130	
75-35-4	1,1-dichloroethene	1.9	U
107-05-1	allyl chloride	19	U
75-09-2	methylene chloride	1.9	U
107-13-1	acrylonitrile	19	U
1634-04-4	methyl-t-butyl ether	19	U
156-60-5	trans-1,2-dichloroethene	1.9	U
75-34-3	1,1-dichloroethane	1.9	U
594-20-7	2,2-dichloropropane	1.9	U
156-59-2	cis-1,2-dichloroethene	1.9	U
78-93-3	2-butanone	56	B
107-12-0	propionitrile	19	U
96-33-3	methyl acrylate	19	U
126-98-7	methacrylonitrile	19	U
109-99-9	tetrahydrofuran	19	U
74-97-5	bromochloromethane	1.9	U
67-66-3	chloroform	1.9	U
71-55-6	1,1,1-trichloroethane	1.9	U
56-23-5	carbon tetrachloride	1.9	U
563-58-6	1,1-dichloropropene	1.9	U
109-69-3	1-chlorobutane	19	U
71-43-2	benzene	1.9	U
107-06-2	1,2-dichloroethane	1.9	U
79-01-6	trichloroethene	1.9	U
78-87-5	1,2-dichloropropane	1.9	U
74-95-3	dibromomethane	1.9	U
80-62-6	methyl methacrylate	19	U
75-27-4	bromodichloromethane	1.9	U
79-46-9	2-nitropropane	19	U
107-14-2	chloroacetonitrile	19	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: **10-S-1**

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279013

Sample wt/vol: 4.8 (g/ml) G Lab File ID: S1S88007.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.9 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
87-68-3	hexachlorobutadiene	2.1	U
91-20-3	naphthalene	2.1	U
87-61-6	1,2,3-trichlorobenzene	2.1	U

1A

Sample Number:

VOLATILE ORGANICS ANALYSIS DATA SHEET

10-S-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279013

Sample wt/vol: 4.8 (g/ml) G Lab File ID: S1S88007.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.9 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
10061-01-5	cis-1,3-dichloropropene	2.1	U
108-10-1	4-methyl-2-pentanone	21	U
108-88-3	toluene	2.1	U
10061-02-6	trans-1,3-dichloropropene	2.1	U
79-00-5	1,1,2-trichloroethane	2.1	U
97-63-2	ethyl methacrylate	21	U
127-18-4	tetrachloroethene	2.1	U
142-28-9	1,3-dichloropropane	2.1	U
591-78-6	2-hexanone	21	U
124-48-1	dibromochloromethane	2.1	U
106-93-4	1,2-dibromoethane	2.1	U
108-90-7	chlorobenzene	2.1	U
630-20-6	1,1,1,2-tetrachloroethane	2.1	U
100-41-4	ethylbenzene	2.1	U
108-38-3;10	m/p-xylene	2.1	U
95-47-6	o-xylene	2.1	U
100-42-5	styrene	2.1	U
75-25-2	bromoform	2.1	U
98-82-8	isopropylbenzene	2.1	U
108-86-1	bromobenzene	2.1	U
79-34-5	1,1,2,2-tetrachloroethane	2.1	U
96-18-4	1,2,3-trichloropropane	2.1	U
110-57-6	trans-1,4-dichloro-2-butene	21	U
103-65-1	n-propylbenzene	2.1	U
95-49-8	2-chlorotoluene	2.1	U
106-43-4	4-chlorotoluene	2.1	U
108-67-8	1,3,5-trimethylbenzene	2.1	U
98-06-6	tert-butylbenzene	2.1	U
76-01-7	pentachloroethane	21	U
95-63-6	1,2,4-trimethylbenzene	2.1	U
135-98-8	sec-butylbenzene	2.1	U
541-73-1	1,3-dichlorobenzene	2.1	U
99-87-6	4-isopropyltoluene	2.1	U
106-46-7	1,4-dichlorobenzene	2.1	U
95-50-1	1,2-dichlorobenzene	2.1	U
104-51-8	n-butylbenzene	2.1	U
67-72-1	hexachloroethane	21	U
96-12-8	1,2-dibromo-3-chloropropane	2.1	U
120-82-1	1,2,4-trichlorobenzene	2.1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Sample Number: 10-S-1

Lab Name: USACHPPM/DLS/ASD/GCMS POC: Mioduski

Profile: 25469-591 Site: Hawthorn Code: E8260 Units: ug/kg

Matrix: (soil/water) SOIL Lab Sample ID: 1279013

Sample wt/vol: 4.8 (g/ml) G Lab File ID: S1S88007.D

Level: (low/med) LOW Date Collected: 07/26/00

% Moisture: not dec. 2.9 Date Analyzed: 08/01/00

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	dichlorodifluoromethane	2.1	U
74-87-3	chloromethane	2.1	U
75-01-4	vinyl chloride	2.1	U
74-83-9	bromomethane	2.1	U
75-00-3	chloroethane	2.1	U
75-69-4	trichlorofluoromethane	2.7	
60-29-7	ethyl ether	21	U
74-88-4	iodomethane	21	U
75-15-0	carbon disulfide	21	U
67-64-1	acetone	70	
75-35-4	1,1-dichloroethene	2.1	U
107-05-1	allyl chloride	21	U
75-09-2	methylene chloride	2.1	U
107-13-1	acrylonitrile	21	U
1634-04-4	methyl-t-butyl ether	21	U
156-60-5	trans-1,2-dichloroethene	2.1	U
75-34-3	1,1-dichloroethane	2.1	U
594-20-7	2,2-dichloropropane	2.1	U
156-59-2	cis-1,2-dichloroethene	2.1	U
78-93-3	2-butanone	27	B
107-12-0	propionitrile	21	U
96-33-3	methyl acrylate	21	U
126-98-7	methacrylonitrile	21	U
109-99-9	tetrahydrofuran	21	U
74-97-5	bromochloromethane	2.1	U
67-66-3	chloroform	2.1	U
71-55-6	1,1,1-trichloroethane	2.1	U
56-23-5	carbon tetrachloride	2.1	U
563-58-6	1,1-dichloropropene	2.1	U
109-69-3	1-chlorobutane	21	U
71-43-2	benzene	2.1	U
107-06-2	1,2-dichloroethane	2.1	U
79-01-6	trichloroethene	2.1	U
78-87-5	1,2-dichloropropane	2.1	U
74-95-3	dibromomethane	2.1	U
80-62-6	methyl methacrylate	21	U
75-27-4	bromodichloromethane	2.1	U
79-46-9	2-nitropropane	21	U
107-14-2	chloroacetonitrile	21	U

SAMPLE SUMMARY

Field Number	Date Collected	LISMD Number	Data File Number	Matrix
10-S-1	7/26/00	1279013	s1s88007.d	SOIL
		1279013MS	m1s88016.d	SOIL
		1279013MSD	m1s88017.d	SOIL
10-S-2	7/26/00	1279014	s1s88008.d	SOIL
10-SB-1	7/26/00	1279015	s1s88009.d	SOIL
10-SB-2	7/26/00	1279016	s1s88010.d	SOIL
10-SB-3	7/26/00	1279017	s1s88011.d	SOIL
LF-S-1	7/26/00	1279018	s1s88012.d	SOIL
LF-S-2	7/26/00	1279019	s1s88013.d	SOIL
LF-S-3	7/26/00	1279020	s1s88014.d	SOIL
LF-SB-1	7/26/00	1279021	s1s88015.d	SOIL
LF-SB-2	7/26/00	1279022	s1s88024.d	SOIL
LF-SB-3	7/26/00	1279023	s1s88025.d	SOIL
BLK VOC ENCORE		1279040	s1s88026.d	SOIL

DLS Final Analytical Report, HAWTHORNE

Program 37, SUBJONO 5917, DLS WO# 1279, Report Serial No. 54346, 08/17/2000

SAMPLE SUMMARY

Sorted by Field ID

Field ID	DLS ID	Date Collected	Matrix
10-S-1	1279013	26-Jul-00	Soil
10-S-2	1279014	26-Jul-00	Soil
10-SB-1	1279015	26-Jul-00	Soil
10-SB-2	1279016	26-Jul-00	Soil
10-SB-3	1279017	26-Jul-00	Soil
LF-SB-1	1279021	26-Jul-00	Soil
LF-SB-2	1279022	26-Jul-00	Soil
LF-SB-3	1279023	26-Jul-00	Soil

DLS Final Analytical Report, HAWTHORNE

Program 37, SUBJONO 5917, DLS WO# 1279, Report Serial No. 54346, 08/17/2000

ANALYTICAL DATA REPORT

(FORMAT OPTION 1)

Sorted by Field ID

Field ID: 10-S-1 **DLS ID:** 1279013

Analyte	Results	Method Reporting Limit	Analytical Method	Analyst	Date Analyzed
pH	7.80 pH Units		SW-846/EPA 9045	0126	01-Aug-00

Field ID: 10-S-2 **DLS ID:** 1279014

Analyte	Results	Method Reporting Limit	Analytical Method	Analyst	Date Analyzed
pH	7.70 pH Units		SW-846/EPA 9045	0126	01-Aug-00

Field ID: 10-SB-1 **DLS ID:** 1279015

Analyte	Results	Method Reporting Limit	Analytical Method	Analyst	Date Analyzed
pH	8.00 pH Units		SW-846/EPA 9045	0126	01-Aug-00

Field ID: 10-SB-2 **DLS ID:** 1279016

Analyte	Results	Method Reporting Limit	Analytical Method	Analyst	Date Analyzed
pH	8.10 pH Units		SW-846/EPA 9045	0126	01-Aug-00

Field ID: 10-SB-3 **DLS ID:** 1279017

Analyte	Results	Method Reporting Limit	Analytical Method	Analyst	Date Analyzed
pH	8.30 pH Units		SW-846/EPA 9045	0126	01-Aug-00