

Co-269

AUG 03 2002

July 22, 2002

ICES 2262



Ms. Eva Chu
Hazardous Materials Specialist
Alameda County Health Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Supplementary Site Investigation
Marina Cove Subdivision
Alameda, California

Dear Eva:

At the request of KB Homes ("the Client"), Innovative and Creative Environmental Solutions (ICES) conducted a supplementary site investigation at the Park Parcel of the Marina Cove Subdivision in Alameda, California ("the Site"; Figure 1).

OBJECTIVE

The purpose of the supplementary site investigation activities was to delineate the extent of the volatile organic compounds (VOCs) that were previously encountered in soil samples TR-1 and TR-2. The soil samples were collected from a trench which was located at the western portion of the Site.

SAMPLING ACTIVITIES

Sampling activities consisted of collecting soil and grab groundwater samples from four boring locations. Borings B-1 and B-2 were located north to northeast of the trench and downgradient of samples TR-1 and TR-2; boring B-3 was located within the trench adjacent to sample TR-1; and boring B-4 was located south to southwest of the trench and upgradient of samples TR-1 and TR-2. The approximate boring locations are shown in Figure 2.

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Marina Cove Subdivision
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Soil samples were collected from the borings at depths of approximately 3 feet and 6 feet below the existing ground surface (bgs) by driving a sampler containing vinyl acetate tubing using a power probe. The soil samples were also screened for volatile compounds using a portable photoionization detector (PID). Grab groundwater samples were also collected from the four boring locations using hydropunches. Hollow diameter PVC screen at the bottom of the casing was advanced to approximately 2 feet below the first permeable zone. The casing was retracted approximately 4 feet to allow infiltration of groundwater. A groundwater sample was collected from each hydropunch by lowering a Teflon bailer through the hollow casing. The sample was transferred into 40-ml VOA vials and 100-ml polyethylene bottles.

The filled vinyl acetate tubes, VOA vials, and polyethylene bottles were immediately capped, sealed, labeled, and placed in a chilled cooler containing crushed ice for transportation to the laboratory. Proper documentation and field chain-of-custody procedures were followed.

The borings were backfilled with cement grout upon completion of the sampling activities. All equipment used during this investigation which might have come into contact with contaminated materials was thoroughly decontaminated before and after each use. This was accomplished by washing with Alconox (a laboratory-grade detergent) and rinsing with deionized or distilled water.

FIELD OBSERVATIONS

The Site was generally underlain by a brown sandy clay to the total depth of the borings at approximately 10 feet bgs. Groundwater was encountered at a depth of 6.5 bgs.

The surficial sediments at the Site were neither stained nor discolored. Additionally, no odor was detected from the soil samples. PID readings of 0 parts-per-million (ppm) were recorded for the soil samples (Table 1).



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LABORATORY ANALYSIS

The soil and grab groundwater samples were sent to McCampbell Analytical Inc. of Pacheco, California, a state-certified laboratory, and selectively analyzed for:

- VOCs using EPA Method 8260; and
- pH using EPA Method 9045.

The samples were analyzed on a 72-hour rush turnaround basis.

LABORATORY ANALYTICAL RESULTS

The laboratory analytical results are summarized in Tables 2 and 3. Laboratory certificates are also attached. The results are as follows:

Laboratory analysis of the soil samples indicated that:

- pH levels ranged from 6.52 to 7.86.
- 2-butanone concentrations ranged from less than 0.010 mg/kg (not detected) to 0.012 mg/kg.
- The remaining VOC concentrations analyzed using EPA Method 8260 were below their respective detection limits.

Analysis of groundwater samples indicated that:

- pH levels ranged from 6.45 to 6.67.
- Chloroform concentrations ranged from less than 0.5 $\mu\text{g}/\text{l}$ (not detected) to 8.9 $\mu\text{g}/\text{l}$.
- 1-1-dichloroethane concentrations ranged from less than 0.5 $\mu\text{g}/\text{l}$ (not detected) to 1.3 $\mu\text{g}/\text{l}$.
- 2-butanone concentrations ranged from 1.3 $\mu\text{g}/\text{l}$ to 2.4 $\mu\text{g}/\text{l}$.



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- Carbon disulfide concentrations ranged from less than 0.5 $\mu\text{g}/\text{l}$ (not detected) to 2.4 $\mu\text{g}/\text{l}$.
- 1,2-dichloroethane (1,2-DCA) concentrations ranged from less than 0.5 $\mu\text{g}/\text{l}$ (not detected) to 3.6 $\mu\text{g}/\text{l}$.
- Methyl tertiary-butyl ether (MTBE) concentrations ranged from less than 0.5 $\mu\text{g}/\text{l}$ (not detected) to 6.3 $\mu\text{g}/\text{l}$.
- The remaining VOC concentrations analyzed using EPA Method 8260 were below their respective detection limits.

DISCUSSION

Laboratory analytical results indicated that soil samples contained non-detectable concentrations of VOCs, with the exception of sample B-1A. B-1A contained a detectable concentration of 2-butanone of 0.012 mg/kg, which was below the California Regional Water Quality Control Board's Risk-Based Screening Level (RWQCB RBSL) of 13 mg/kg¹ for residential soil. pH levels detected in the soil samples ranged from 6.52 to 7.86.

The grab groundwater samples collected contained non-detectable to low concentrations of chloroform, 1,1-dichloroethane, 2-butanone, carbon disulfide, 1,2-DCA, and MTBE. pH levels ranged from 6.64 to 6.67. The detectable concentrations of chloroform, 1,1-dichloroethane, 2-butanone, 1,2-DCA, and MTBE contained in the grab groundwater samples are significantly below the RWQCB RBSLs for surface groundwater (Table 4). Carbon disulfide contained in the grab groundwater samples were below the U.S. Environmental Protection Agency Region IX Preliminary Remediation Goal for tap water of 1,000 $\mu\text{g}/\text{l}$.

¹ RBSL is based on the cleanup level intended for vadose-zone soils in residential landuse areas where drinking water resources are not considered threatened.

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Based on the laboratory analytical results of this investigation, it appears that the surficial soil and groundwater within the western portion of the Site contain VOC concentrations which are considered to be non-hazardous in the State of California. We recommend that no further action be required and are requesting closure of the site mitigation activities for the sulfuric acid cleanup conducted at the Site.

EXCLUSIONS

ICES assumes no responsibility or liability for the reliance hereon or use hereof of information contained in this report by anyone other than the party to whom it is addressed. The evaluations and recommendations presented in this report are based on the limited site investigation results available at this time and could be revised if new information necessitating further review of the Site becomes available.

If you have any questions or comments, please do not hesitate to contact Derek Wong or me.

Sincerely,


Peng Leong, P.E.
Principal Engineer



Enclosure

cc: Mr. Joe Sordi, KB Homes



TABLE 1

PID READINGS
Marina Cove Subdivision
Alameda, California

(concentrations expressed in parts-per-million)

| Sample ID | Depth (feet) | PID Reading |
|-----------|--------------|-------------|
| B-1A | 3.0 | 0 |
| B-1B | 6.0 | 0 |
| B-2A | 3.0 | 0 |
| B-2B | 6.0 | 0 |
| B-3A | 3.0 | 0 |
| B-3B | 6.0 | 0 |



TABLE 2

SOIL SAMPLE RESULTS
Marina Cove Subdivision
Alameda, California

(concentrations are expressed in mg/kg)

| Sample ID | Depth (feet) | 2-Butanone | pH |
|-----------|--------------|------------|------|
| B-1A | 3.0 | 0.012 | 6.52 |
| B-2A | 3.0 | ND < 0.010 | 7.86 |
| B-3A | 3.0 | ND < 0.010 | 7.60 |
| B-4A | 3.0 | ND < 0.010 | 7.44 |

ND Not Detected

Note:

1. The remaining volatile organic compounds analyzed using EPA Method 8260 were below their respective detection limits.



TABLE 3

GROUNDWATER SAMPLE RESULTS
Marina Cove Subdivision
Alameda, California

(concentrations are expressed in ug/l)

| Sample ID | Chloroform | 1-1-Dichloroethane | 2-Butanone | Carbon Disulfide | 1,2-DCA | MTBE | pH |
|-----------|------------|--------------------|------------|------------------|----------|----------|------|
| B-1W | 8.9 | ND < 0.5 | 2.0 | ND < 0.5 | ND < 0.5 | ND < 0.5 | 6.45 |
| B-2W | ND < 0.5 | ND < 0.5 | 1.3 | 2.4 | 3.6 | ND < 0.5 | 6.67 |
| B-3W | 7.7 | 1.3 | 1.7 | 0.86 | ND < 0.5 | 6.3 | 6.64 |
| B-4W | 5.4 | ND < 0.5 | 2.4 | 0.55 | ND < 0.5 | ND < 0.5 | 6.64 |

ND Not Detected

Note:

1. The remaining volatile organic compounds analyzed using EPA Method 8260 were below their respective detection limits.



TABLE 4

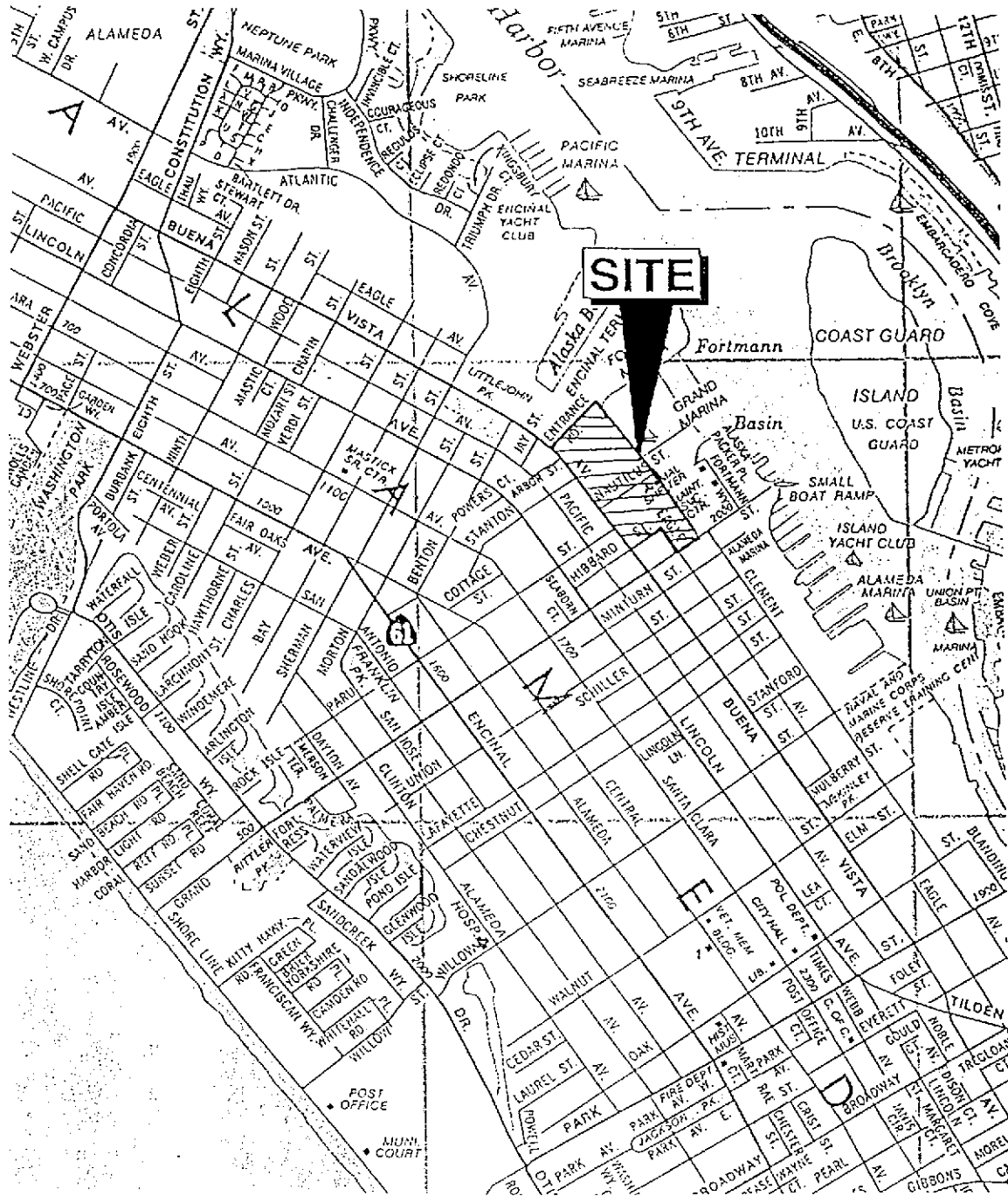
GROUNDWATER RISK-BASED SCREENING LEVELS

Marina Cove Subdivision
Alameda, California

| Analyte | RBSL ¹ ($\mu\text{g/l}$) |
|-------------------------------|--|
| Chloroform | 28 |
| 1,1-Dichloroethane | 47 |
| 2-Butanone | 14,000 |
| Carbon Disulfide ² | 1,000 |
| 1,2-DCA | 910 |
| MTBE | 1,800 |

Notes:

1. RBSLs presented above are based on cleanup levels where drinking water resources are not considered threatened.
2. No RBSL cleanup level listed by RWQCB. U.S. Environmental Protection Agency Region IX Preliminary Remediation Goal for tap water was adopted.



MAP SOURCE :
CSAA

Scale: 1" : ± 1320' July 2002



SITE LOCATION

Marina Cove Subdivision, Alameda, California

Figure 1

Project 2262

FORTMANN
BASIN

Former
CPC International
Tank Farm

B-1

B-2

B-3
TR-1

TR-2

B-4

EXPLANATION:

● Boring Location
B-1

△ Trench Sample Location (October 2001)
TR-1



Scale: 1" : ± 50'

July 2002

BORING LOCATIONS

Marina Cove Subdivision, Alameda, California

Figure 2

Project 2262

KCE
Innovative & Creative Environmental Solutions

alameda7

LABORATORY CERTIFICATES



McC Campbell Analytical Inc.

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 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/18/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207245

| | |
|-----------|--------------|
| Lab ID | 0207245-001A |
| Client ID | B-1A |
| Matrix | Soil |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-------------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND<80 | 1.0 | 50 | Benzene | ND | 1.0 | 5.0 |
| Bromobenzene | ND | 1.0 | 5.0 | Bromochloromethane | ND | 1.0 | 5.0 |
| Bromodichloromethane | ND | 1.0 | 5.0 | Bromoform | ND | 1.0 | 5.0 |
| Bromomethane | ND | 1.0 | 5.0 | 2-Butanone (MEK) | 12 | 1.0 | 10 |
| n-Butyl benzene | ND | 1.0 | 5.0 | sec-Butyl benzene | ND | 1.0 | 5.0 |
| tert-Butyl benzene | ND | 1.0 | 5.0 | Carbon Disulfide | ND | 1.0 | 5.0 |
| Carbon Tetrachloride | ND | 1.0 | 5.0 | Chlorobenzene | ND | 1.0 | 5.0 |
| Chloroethane | ND | 1.0 | 5.0 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 10 |
| Chloroform | ND | 1.0 | 5.0 | Chloromethane | ND | 1.0 | 5.0 |
| 2-Chlorotoluene | ND | 1.0 | 5.0 | 4-Chlorotoluene | ND | 1.0 | 5.0 |
| Dibromochloromethane | ND | 1.0 | 5.0 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 5.0 |
| 1,2-Dibromochloroethane (EDB) | ND | 1.0 | 5.0 | Dibromomethane | ND | 1.0 | 5.0 |
| 1,2-Dichlorobenzene | ND | 1.0 | 5.0 | 1,3-Dichlorobenzene | ND | 1.0 | 5.0 |
| 1,4-Dichlorobenzene | ND | 1.0 | 5.0 | Dichlorodifluoromethane | ND | 1.0 | 5.0 |
| 1,1-Dichloroethane | ND | 1.0 | 5.0 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 5.0 |
| 1,1-Dichloroethene | ND | 1.0 | 5.0 | cis-1,2-Dichloroethene | ND | 1.0 | 5.0 |
| trans-1,2-Dichloroethene | ND | 1.0 | 5.0 | 1,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,3-Dichloropropane | ND | 1.0 | 5.0 | 2,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,1-Dichloropropene | ND | 1.0 | 5.0 | cis-1,3-Dichloropropene | ND | 1.0 | 5.0 |
| trans-1,3-Dichloropropene | ND | 1.0 | 5.0 | Ethylbenzene | ND | 1.0 | 5.0 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 5.0 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 10 | 4-Isopropyl toluene | ND | 1.0 | 5.0 |
| Isopropylbenzene | ND | 1.0 | 5.0 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 5.0 |
| Methylene chloride | ND | 1.0 | 5.0 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 5.0 |
| Naphthalene | ND | 1.0 | 5.0 | n-Propyl benzene | ND | 1.0 | 5.0 |
| Styrene | ND | 1.0 | 5.0 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 5.0 | Tetrachloroethene | ND | 1.0 | 5.0 |
| Toluene | ND | 1.0 | 5.0 | 1,2,3-Trichlorobenzene | ND | 1.0 | 5.0 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 5.0 | 1,1,1-Trichloroethane | ND | 1.0 | 5.0 |
| 1,1,2-Trichloroethane | ND | 1.0 | 5.0 | Trichloroethene | ND | 1.0 | 5.0 |
| Trichlorofluoromethane | ND | 1.0 | 5.0 | 1,2,3-Trichloropropane | ND | 1.0 | 5.0 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 5.0 | 1,3,5-Trimethylbenzene | ND | 1.0 | 5.0 |
| Vinyl Acetate | ND | 1.0 | 50 | Vinyl Chloride | ND | 1.0 | 5.0 |
| Xylenes | ND | 1.0 | 5.0 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 97.1 | %SS2: | 106 |
| %SS3: | 96.6 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L. soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe. product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/18/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW3030B

Analytical Method: SW826GB

Work Order: 0207245

| | |
|-----------|--------------|
| Lab ID | 0207245-003A |
| Client ID | B-2A |
| Matrix | Soil |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND<80 | 1.0 | 50 | Benzene | ND | 1.0 | 5.0 |
| Bromobenzene | ND | 1.0 | 5.0 | Bromochloromethane | ND | 1.0 | 5.0 |
| Bromodichloromethane | ND | 1.0 | 5.0 | Bromoform | ND | 1.0 | 5.0 |
| Bromomethane | ND | 1.0 | 5.0 | 2-Butanone (MEK) | ND | 1.0 | 10 |
| n-Butyl benzene | ND | 1.0 | 5.0 | sec-Butyl benzene | ND | 1.0 | 5.0 |
| tert-Butyl benzene | ND | 1.0 | 5.0 | Carbon Disulfide | ND | 1.0 | 5.0 |
| Carbon Tetrachloride | ND | 1.0 | 5.0 | Chlorobenzene | ND | 1.0 | 5.0 |
| Chloroethane | ND | 1.0 | 5.0 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 10 |
| Chloroform | ND | 1.0 | 5.0 | Chloromethane | ND | 1.0 | 5.0 |
| 2-Chlorotoluene | ND | 1.0 | 5.0 | 4-Chlorotoluene | ND | 1.0 | 5.0 |
| Dibromochloromethane | ND | 1.0 | 5.0 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 5.0 |
| 1,2-Dibromoethane (FDB) | ND | 1.0 | 5.0 | Dibromomethane | ND | 1.0 | 5.0 |
| 1,2-Dichlorobenzene | ND | 1.0 | 5.0 | 1,3-Dichlorobenzene | ND | 1.0 | 5.0 |
| 1,4-Dichlorobenzene | ND | 1.0 | 5.0 | Dichlorodifluoromethane | ND | 1.0 | 5.0 |
| 1,1-Dichloroethane | ND | 1.0 | 5.0 | 1,2-Dichloroethane (1,2-DCE) | ND | 1.0 | 5.0 |
| 1,1-Dichloroethene | ND | 1.0 | 5.0 | cis-1,2-Dichloroethene | ND | 1.0 | 5.0 |
| trans-1,2-Dichloroethene | ND | 1.0 | 5.0 | 1,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,3-Dichloropropane | ND | 1.0 | 5.0 | 2,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,1-Dichloropropene | ND | 1.0 | 5.0 | cis-1,3-Dichloropropene | ND | 1.0 | 5.0 |
| trans-1,3-Dichloropropene | ND | 1.0 | 5.0 | Ethylbenzene | ND | 1.0 | 5.0 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 5.0 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 10 | 4-Isopropyl toluene | ND | 1.0 | 5.0 |
| Isopropylbenzene | ND | 1.0 | 5.0 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 5.0 |
| Methylene chloride | ND | 1.0 | 5.0 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 5.0 |
| Naphthalene | ND | 1.0 | 5.0 | n-Propyl benzene | ND | 1.0 | 5.0 |
| Styrene | ND | 1.0 | 5.0 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 5.0 | Tetrachloroethene | ND | 1.0 | 5.0 |
| Toluene | ND | 1.0 | 5.0 | 1,2,3-Trichlorobenzene | ND | 1.0 | 5.0 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 5.0 | 1,1,1-Trichloroethane | ND | 1.0 | 5.0 |
| 1,1,2-Trichloroethane | ND | 1.0 | 5.0 | Trichloroethene | ND | 1.0 | 5.0 |
| Trichlorofluoromethane | ND | 1.0 | 5.0 | 1,2,3-Trichloropropane | ND | 1.0 | 5.0 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 5.0 | 1,3,5-Trimethylbenzene | ND | 1.0 | 5.0 |
| Vinyl Acetate | ND | 1.0 | 50 | Vinyl Chloride | ND | 1.0 | 5.0 |
| Xylenes | ND | 1.0 | 5.0 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 94.8 | %SS2: | 107 |
| %SS3: | 97.6 | | |

Comments

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than -2 vol. % sediment; j) sample diluted due to high organic content.



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| | | |
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| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/18/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SWS030B

Analytical Method: SW8260B

Work Order: 0207245

| | |
|-----------|--------------|
| Lab ID | 0207245-005A |
| Client ID | B-3A |
| Matrix | Soil |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND<80 | 1.0 | 50 | Benzene | ND | 1.0 | 5.0 |
| Bromobenzene | ND | 1.0 | 5.0 | Bromochloromethane | ND | 1.0 | 5.0 |
| Bromodichloromethane | ND | 1.0 | 5.0 | Bromofom | ND | 1.0 | 5.0 |
| Bromomethane | ND | 1.0 | 5.0 | 2-Butanone (MEK) | ND | 1.0 | 10 |
| n-Butyl benzene | ND | 1.0 | 5.0 | sec-Butyl benzene | ND | 1.0 | 5.0 |
| tert-Butyl benzene | ND | 1.0 | 5.0 | Carbon Disulfide | ND | 1.0 | 5.0 |
| Carbon Tetrachloride | ND | 1.0 | 5.0 | Chlorobenzene | ND | 1.0 | 5.0 |
| Chloroethane | ND | 1.0 | 5.0 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 10 |
| Chloroform | ND | 1.0 | 5.0 | Chloromethane | ND | 1.0 | 5.0 |
| 2-Chlorotoluene | ND | 1.0 | 5.0 | 4-Chlorotoluene | ND | 1.0 | 5.0 |
| Dibromochloromethane | ND | 1.0 | 5.0 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 5.0 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 5.0 | Dibromomethane | ND | 1.0 | 5.0 |
| 1,2-Dichlorobenzene | ND | 1.0 | 5.0 | 1,3-Dichlorobenzene | ND | 1.0 | 5.0 |
| 1,4-Dichlorobenzene | ND | 1.0 | 5.0 | Dichlorodifluoromethane | ND | 1.0 | 5.0 |
| 1,1-Dichloroethane | ND | 1.0 | 5.0 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 5.0 |
| 1,1-Dichloroethene | ND | 1.0 | 5.0 | cis-1,2-Dichloroethene | ND | 1.0 | 5.0 |
| trans-1,2-Dichloroethene | ND | 1.0 | 5.0 | 1,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,3-Dichloropropane | ND | 1.0 | 5.0 | 2,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,1-Dichloropropene | ND | 1.0 | 5.0 | cis-1,3-Dichloropropene | ND | 1.0 | 5.0 |
| trans-1,3-Dichloropropene | ND | 1.0 | 5.0 | Ethylbenzene | ND | 1.0 | 5.0 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 5.0 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 10 | 4-Isopropyl toluene | ND | 1.0 | 5.0 |
| Isopropylbenzene | ND | 1.0 | 5.0 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 5.0 |
| Methylene chloride | ND | 1.0 | 5.0 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 5.0 |
| Naphthalene | ND | 1.0 | 5.0 | n-Propyl benzene | ND | 1.0 | 5.0 |
| Styrene | ND | 1.0 | 5.0 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 5.0 | Tetrachloroethene | ND | 1.0 | 5.0 |
| Toluene | ND | 1.0 | 5.0 | 1,2,3-Trichlorobenzene | ND | 1.0 | 5.0 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 5.0 | 1,1,1-Trichloroethane | ND | 1.0 | 5.0 |
| 1,1,2-Trichloroethane | ND | 1.0 | 5.0 | Trichloroethene | ND | 1.0 | 5.0 |
| Trichlorofluoromethane | ND | 1.0 | 5.0 | 1,2,3-Trichloropropane | ND | 1.0 | 5.0 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 5.0 | 1,3,5-Trimethylbenzene | ND | 1.0 | 5.0 |
| Vinyl Acetate | ND | 1.0 | 50 | Vinyl Chloride | ND | 1.0 | 5.0 |
| Xylenes | ND | 1.0 | 5.0 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 94.0 | %SS2: | 106 |
| %SS3: | 97.9 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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 Telephone: 925-798-1620 Fax: 925-798-1622
 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/18/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207245

| | |
|-----------|--------------|
| Lab ID | 0207245-007A |
| Client ID | B-4A |
| Matrix | Soil |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND<80 | 1.0 | 50 | Benzene | ND | 1.0 | 5.0 |
| Bromobenzene | ND | 1.0 | 5.0 | Bromochloromethane | ND | 1.0 | 5.0 |
| Bromodichloromethane | ND | 1.0 | 5.0 | Bromofluoromethane | ND | 1.0 | 5.0 |
| Bromomethane | ND | 1.0 | 5.0 | 2-Butanone (MEK) | ND | 1.0 | 10 |
| n-Butyl benzene | ND | 1.0 | 5.0 | sec-Butyl benzene | ND | 1.0 | 5.0 |
| tert-Butyl benzene | ND | 1.0 | 5.0 | Carbon Disulfide | ND | 1.0 | 5.0 |
| Carbon Tetrachloride | ND | 1.0 | 5.0 | Chlorobenzene | ND | 1.0 | 5.0 |
| Chloroethane | ND | 1.0 | 5.0 | 2-Chloromethyl Vinyl Ether | ND | 1.0 | 10 |
| Chloroform | ND | 1.0 | 5.0 | Chloromethane | ND | 1.0 | 5.0 |
| 2-Chlorotoluene | ND | 1.0 | 5.0 | 4-Chlorotoluene | ND | 1.0 | 5.0 |
| Dibromochloromethane | ND | 1.0 | 5.0 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 5.0 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 5.0 | Dibromomethane | ND | 1.0 | 5.0 |
| 1,2-Dichlorobenzene | ND | 1.0 | 5.0 | 1,3-Dichlorobenzene | ND | 1.0 | 5.0 |
| 1,4-Dichlorobenzene | ND | 1.0 | 5.0 | Dichlorodifluoromethane | ND | 1.0 | 5.0 |
| 1,1-Dichloroethane | ND | 1.0 | 5.0 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 5.0 |
| 1,1-Dichloroethene | ND | 1.0 | 5.0 | cis-1,2-Dichloroethene | ND | 1.0 | 5.0 |
| trans-1,2-Dichloroethene | ND | 1.0 | 5.0 | 1,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,3-Dichloropropane | ND | 1.0 | 5.0 | 2,2-Dichloropropane | ND | 1.0 | 5.0 |
| 1,1-Dichloropropene | ND | 1.0 | 5.0 | cis-1,3-Dichloropropene | ND | 1.0 | 5.0 |
| trans-1,3-Dichloropropene | ND | 1.0 | 5.0 | Ethylbenzene | ND | 1.0 | 5.0 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 5.0 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 10 | 4-Isopropyl toluene | ND | 1.0 | 5.0 |
| Isopropylbenzene | ND | 1.0 | 5.0 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 5.0 |
| Methylene chloride | ND | 1.0 | 5.0 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 5.0 |
| Naphthalene | ND | 1.0 | 5.0 | n-Propyl benzene | ND | 1.0 | 5.0 |
| Styrene | ND | 1.0 | 5.0 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 5.0 | Tetrachloroethene | ND | 1.0 | 5.0 |
| Toluene | ND | 1.0 | 5.0 | 1,2,3-Trichlorobenzene | ND | 1.0 | 5.0 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 5.0 | 1,1,1-Trichloroethane | ND | 1.0 | 5.0 |
| 1,1,2-Trichloroethane | ND | 1.0 | 5.0 | Trichloroethene | ND | 1.0 | 5.0 |
| Trichlorofluoromethane | ND | 1.0 | 5.0 | 1,2,3-Trichloropropane | ND | 1.0 | 5.0 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 5.0 | 1,3,5-Trimethylbenzene | ND | 1.0 | 5.0 |
| Vinyl Acetate | ND | 1.0 | 50 | Vinyl Chloride | ND | 1.0 | 5.0 |
| Xylenes | ND | 1.0 | 5.0 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 93.8 | %SS2: | 107 |
| %SS3: | 97.9 | | |

Comments:
 * water and vapor samples and all TCLP & SPLP extracts are reported in ug/l., soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis
 h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



Innovative & Creative Environmental Solutions

CHAIN-OF-CUSTODY



P.O. Box 99288 • Emeryville • CA 94662-9288
Tel (510) 652-3222 • Fax (510) 652-3555

0207245

| Project Name | | | Project No. | | ANALYSIS | | | | | | Laboratory Name/Address | |
|--------------|----------------------------|----------------|------------------|--------------|----------|----|-----|--|--|--|-------------------------|-----------------------|
| | | | ICFS <u>2262</u> | | | | | | | | | McCampbell Analytical |
| Lab Number | ICES Sample Identification | Date Collected | Sample Type | No. of Cont. | VOCS | PH | HOI | | | | | Comments / Hazards |
| | B-1A | 7-18-02 | Soil | 1 | X | X | | | | | | |
| | B-1B | 7-18-02 | Soil | 1 | | | X | | | | | |
| | B-2A | 7-18-02 | Soil | 1 | X | X | | | | | | |
| | B-2B | 7-18-02 | Soil | 1 | | | X | | | | | |
| | B-3A | 7-18-02 | Soil | 1 | X | X | | | | | | |
| | B-3B | 7-18-02 | Soil | 1 | | | X | | | | | |
| | B-4A | 7-18-02 | Soil | 1 | X | X | | | | | | |
| | B-4B | 7-18-02 | Soil | 1 | | | X | | | | | |

| | | | | | |
|--|--------------|--------------|---|-----------|------------|
| Relinquished by: (Signature) <i>JWK WJ</i> | DATE 7/18/02 | TIME 11:45 | Received by: (Signature) <i>B. Butts</i> | DATE 7/18 | TIME 11:45 |
| Relinquished by: (Signature) <i>B. Butts</i> | DATE 7/18 | TIME 12:25pm | Received by: (Signature) <i>Maria Vines</i> | DATE 7/18 | TIME |
| Relinquished by: (Signature) | DATE | TIME | Received by: (Signature) | DATE | TIME |

NOTE: Please send reports and invoices to the above address.

TURNAROUND TIME: 24 Hours 48 Hours 3 Days Normal: 5 Days

Stamp: RECEIVED...
Page 1 of 1

McCampbell Analytical Inc.

110 Second Avenue South, #D7
 Pacheco, CA 94553-5500
 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0207245

Client:
 ICES
 P.O. Box 99288
 Emeryville, CA 94662

TEL: (510) 652-3222
 FAX: (510) 652-3555
 ProjectNo: #2262
 PO:

18-Jul-02

| Sample ID | ClientSampID | Matrix | Collection Date | Bottle | Requested Tests | |
|-------------|--------------|--------|-----------------|--------|-----------------|---------|
| | | | | | SW8260B | SW9045C |
| 0207245-001 | B-1A | Soil | 7/18/02 | | A | A |
| 0207245-002 | B-1B | Soil | 7/18/02 | | A | A |
| 0207245-003 | B-2A | Soil | 7/18/02 | | A | A |
| 0207245-004 | B-2B | Soil | 7/18/02 | | A | A |
| 0207245-005 | B-3A | Soil | 7/18/02 | | A | A |
| 0207245-006 | B-3B | Soil | 7/18/02 | | A | A |
| 0207245-007 | B-4A | Soil | 7/18/02 | | A | A |
| 0207245-008 | B-4B | Soil | 7/18/02 | | A | A |

Comments: 72hr Rush

Date/Time

Date/Time

Relinquished by:

Received by:

Relinquished by:

Received by:

Relinquished by:

Received by:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other



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 http://www.mcccampbell.com E-mail: snain@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/19/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207244

| | |
|-----------|--------------|
| Lab ID | 0207244-001A |
| Client ID | B-1W |
| Matrix | Water |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND | 1.0 | 5.0 | Benzene | ND | 1.0 | 0.5 |
| Bromobenzene | ND | 1.0 | 0.5 | Bromochloromethane | ND | 1.0 | 0.5 |
| Bromodichloromethane | ND | 1.0 | 0.5 | Bromoforn | ND | 1.0 | 0.5 |
| Bromomethane | ND | 1.0 | 0.5 | 2-Butanone (MEK) | 2.0 | 1.0 | 1.0 |
| n-Butyl benzene | ND | 1.0 | 0.5 | sec-Butyl benzene | ND | 1.0 | 0.5 |
| tert-Butyl benzene | ND | 1.0 | 0.5 | Carbon Disulfide | ND | 1.0 | 0.5 |
| Carbon Tetrachloride | ND | 1.0 | 0.5 | Chlorobenzene | ND | 1.0 | 0.5 |
| Chloroethane | ND | 1.0 | 0.5 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 1.0 |
| Chloroform | 8.9 | 1.0 | 0.5 | Chloromethane | ND | 1.0 | 0.5 |
| 2-Chlorotoluene | ND | 1.0 | 0.5 | 4-Chlorotoluene | ND | 1.0 | 0.5 |
| Dibromochloromethane | ND | 1.0 | 0.5 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 0.5 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 0.5 | Dibromomethane | ND | 1.0 | 0.5 |
| 1,2-Dichlorobenzene | ND | 1.0 | 0.5 | 1,3-Dichlorobenzene | ND | 1.0 | 0.5 |
| 1,4-Dichlorobenzene | ND | 1.0 | 0.5 | Dichlorodifluoromethane | ND | 1.0 | 0.5 |
| 1,1-Dichloroethane | ND | 1.0 | 0.5 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 0.5 |
| 1,1-Dichloroethene | ND | 1.0 | 0.5 | cis-1,2-Dichloroethene | ND | 1.0 | 0.5 |
| trans-1,2-Dichloroethene | ND | 1.0 | 0.5 | 1,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,3-Dichloropropane | ND | 1.0 | 0.5 | 2,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,1-Dichloropropene | ND | 1.0 | 0.5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.5 |
| trans-1,3-Dichloropropene | ND | 1.0 | 0.5 | Ethylbenzene | ND | 1.0 | 0.5 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 0.5 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 1.0 | 4-Isopropyl toluene | ND | 1.0 | 0.5 |
| Isopropylbenzene | ND | 1.0 | 0.5 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 0.5 |
| Methylene chloride | ND | 1.0 | 0.5 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 0.5 |
| Naphthalene | ND | 1.0 | 0.5 | n-Propyl benzene | ND | 1.0 | 0.5 |
| Styrene | ND | 1.0 | 0.5 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.5 | Tetrachloroethene | ND | 1.0 | 0.5 |
| Toluene | ND | 1.0 | 0.5 | 1,2,3-Trichlorobenzene | ND | 1.0 | 0.5 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 0.5 | 1,1,1-Trichloroethane | ND | 1.0 | 0.5 |
| 1,1,2-Trichloroethane | ND | 1.0 | 0.5 | Trichloroethene | ND | 1.0 | 0.5 |
| Trichlorofluoromethane | ND | 1.0 | 0.5 | 1,2,3-Trichloropropane | ND | 1.0 | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 0.5 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.5 |
| Vinyl Acetate | ND | 1.0 | 5.0 | Vinyl Chloride | ND | 1.0 | 0.5 |
| Xylenes | ND | 1.0 | 0.5 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 105 | %SS2: | 100 |
| %SS3: | 92.1 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than --2 vol. % sediment; j) sample diluted due to high organic content.



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 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/19/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207244

| | |
|-----------|---------------|
| Lab ID | 0207244-002A |
| Client ID | |
| Matrix | B-2W Water |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND | 1.0 | 5.0 | Benzene | ND | 1.0 | 0.5 |
| Bromobenzene | ND | 1.0 | 0.5 | Bromochloromethane | ND | 1.0 | 0.5 |
| Bromodichloromethane | ND | 1.0 | 0.5 | Bromoform | ND | 1.0 | 0.5 |
| Bromomethane | ND | 1.0 | 0.5 | 2-Butanone (MEK) | 1.3 | 1.0 | 1.0 |
| n-Butyl benzene | ND | 1.0 | 0.5 | sec-Butyl benzene | ND | 1.0 | 0.5 |
| tert-Butyl benzene | ND | 1.0 | 0.5 | Carbon Disulfide | 2.4 | 1.0 | 0.5 |
| Carbon Tetrachloride | ND | 1.0 | 0.5 | Chlorobenzene | ND | 1.0 | 0.5 |
| Chloroethane | ND | 1.0 | 0.5 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 1.0 |
| Chloroform | ND | 1.0 | 0.5 | Chloromethane | ND | 1.0 | 0.5 |
| 2-Chlorotoluene | ND | 1.0 | 0.5 | 4-Chlorotoluene | ND | 1.0 | 0.5 |
| Dibromochloromethane | ND | 1.0 | 0.5 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 0.5 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 0.5 | Dibromomethane | ND | 1.0 | 0.5 |
| 1,2-Dichlorobenzene | ND | 1.0 | 0.5 | 1,3-Dichlorobenzene | ND | 1.0 | 0.5 |
| 1,4-Dichlorobenzene | ND | 1.0 | 0.5 | Dichlorodifluoromethane | ND | 1.0 | 0.5 |
| 1,1-Dichloroethane | ND | 1.0 | 0.5 | 1,2-Dichloroethane (1,2-DCA) | 3.6 | 1.0 | 0.5 |
| 1,1-Dichloroethene | ND | 1.0 | 0.5 | cis-1,2-Dichloroethene | ND | 1.0 | 0.5 |
| trans-1,2-Dichloroethene | ND | 1.0 | 0.5 | 1,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,3-Dichloropropane | ND | 1.0 | 0.5 | 2,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,1-Dichloropropene | ND | 1.0 | 0.5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.5 |
| trans-1,3-Dichloropropene | ND | 1.0 | 0.5 | Ethylbenzene | ND | 1.0 | 0.5 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 0.5 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 1.0 | 4-Isopropyl toluene | ND | 1.0 | 0.5 |
| Isopropylbenzene | ND | 1.0 | 0.5 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 0.5 |
| Methylene chloride | ND | 1.0 | 0.5 | Methyl-t-butyl ether (MTBE) | ND | 1.0 | 0.5 |
| Naphthalene | ND | 1.0 | 0.5 | n-Propyl benzene | ND | 1.0 | 0.5 |
| Styrene | ND | 1.0 | 0.5 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.5 | Tetrachloroethene | ND | 1.0 | 0.5 |
| Toluene | ND | 1.0 | 0.5 | 1,2,3-Trichlorobenzene | ND | 1.0 | 0.5 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 0.5 | 1,1,1-Trichloroethane | ND | 1.0 | 0.5 |
| 1,1,2-Trichloroethane | ND | 1.0 | 0.5 | Trichloroethene | ND | 1.0 | 0.5 |
| Trichlorofluoromethane | ND | 1.0 | 0.5 | 1,2,3-Trichloropropane | ND | 1.0 | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 0.5 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.5 |
| Vinyl Acetate | ND | 1.0 | 5.0 | Vinyl Chloride | ND | 1.0 | 0.5 |
| Xylenes | ND | 1.0 | 0.5 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|------|
| %SS1: | 106 | %SS2: | 99.1 |
| %SS3: | 92.2 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



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 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | | Date Received: 07/18/02 |
| | Client Contact: Peng Leong | Date Extracted: 07/19/02 |
| | Client P.O.: | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207244

| | |
|-----------|--------------|
| Lab ID | 0207244-003A |
| Client ID | B-3W |
| Matrix | Water |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND | 1.0 | 5.0 | Benzene | ND | 1.0 | 0.5 |
| Bromobenzene | ND | 1.0 | 0.5 | Bromochloromethane | ND | 1.0 | 0.5 |
| Bromodichloromethane | ND | 1.0 | 0.5 | Bromoform | ND | 1.0 | 0.5 |
| Bromomethane | ND | 1.0 | 0.5 | 2-Butanone (MEK) | 1.7 | 1.0 | 1.0 |
| n-Butyl benzene | ND | 1.0 | 0.5 | sec-Butyl benzene | ND | 1.0 | 0.5 |
| tert-Butyl benzene | ND | 1.0 | 0.5 | Carbon Disulfide | 0.86 | 1.0 | 0.5 |
| Carbon Tetrachloride | ND | 1.0 | 0.5 | Chlorobenzene | ND | 1.0 | 0.5 |
| Chloroethane | ND | 1.0 | 0.5 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 1.0 |
| Chloroform | 7.7 | 1.0 | 0.5 | Chloromethane | ND | 1.0 | 0.5 |
| 2-Chlorotoluene | ND | 1.0 | 0.5 | 4-Chlorotoluene | ND | 1.0 | 0.5 |
| Dibromochloromethane | ND | 1.0 | 0.5 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 0.5 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 0.5 | Dibromomethane | ND | 1.0 | 0.5 |
| 1,2-Dichlorobenzene | ND | 1.0 | 0.5 | 1,3-Dichlorobenzene | ND | 1.0 | 0.5 |
| 1,4-Dichlorobenzene | ND | 1.0 | 0.5 | Dichlorodifluoromethane | ND | 1.0 | 0.5 |
| 1,1-Dichloroethane | 1.3 | 1.0 | 0.5 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 0.5 |
| 1,1-Dichloroethene | ND | 1.0 | 0.5 | cis-1,2-Dichloroethene | ND | 1.0 | 0.5 |
| trans-1,2-Dichloroethene | ND | 1.0 | 0.5 | 1,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,3-Dichloropropane | ND | 1.0 | 0.5 | 2,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,1-Dichloropropene | ND | 1.0 | 0.5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.5 |
| trans-1,3-Dichloropropene | ND | 1.0 | 0.5 | Ethylbenzene | ND | 1.0 | 0.5 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 0.5 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 1.0 | 4-Isopropyl toluene | ND | 1.0 | 0.5 |
| Isopropylbenzene | ND | 1.0 | 0.5 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 0.5 |
| Methylene chloride | ND | 1.0 | 0.5 | Methyl-t-butyl ether (MTBE) | 6.3 | 1.0 | 0.5 |
| Naphthalene | ND | 1.0 | 0.5 | n-Propyl benzene | ND | 1.0 | 0.5 |
| Styrene | ND | 1.0 | 0.5 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.5 | Tetrachloroethene | ND | 1.0 | 0.5 |
| Toluene | ND | 1.0 | 0.5 | 1,2,3-Trichlorobenzene | ND | 1.0 | 0.5 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 0.5 | 1,1,1-Trichloroethane | ND | 1.0 | 0.5 |
| 1,1,2-Trichloroethane | ND | 1.0 | 0.5 | Trichloroethene | ND | 1.0 | 0.5 |
| Trichlorofluoromethane | ND | 1.0 | 0.5 | 1,2,3-Trichloropropane | ND | 1.0 | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 0.5 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.5 |
| Vinyl Acetate | ND | 1.0 | 5.0 | Vinyl Chloride | ND | 1.0 | 0.5 |
| Xylenes | ND | 1.0 | 0.5 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|------|
| %SS1: | 109 | %SS2: | 99.8 |
| %SS3: | 93.3 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in ug/kg, wipe samples in ug/wipe, product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



McC Campbell Analytical Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 http://www.mcccampbell.com E-mail: main@mcccampbell.com

| | | |
|--|----------------------------|--------------------------|
| ICES P.O. Box 99288 Emeryville, CA 94662 | Client Project ID: #2262 | Date Sampled: 07/18/02 |
| | Client Contact: Peng Leong | Date Received: 07/18/02 |
| | Client P.O.: | Date Extracted: 07/19/02 |
| | | Date Analyzed: 07/19/02 |

Volatiles Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0207244

| | |
|-----------|--------------|
| Lab ID | 0207244-004A |
| Client ID | B-4W |
| Matrix | Water |

| Compound | Concentration * | DF | Reporting Limit | Compound | Concentration * | DF | Reporting Limit |
|-----------------------------|-----------------|-----|-----------------|------------------------------|-----------------|-----|-----------------|
| Acetone | ND | 1.0 | 5.0 | Benzene | ND | 1.0 | 0.5 |
| Bronobenzene | ND | 1.0 | 0.5 | Bromochloromethane | ND | 1.0 | 0.5 |
| Bromodichloromethane | ND | 1.0 | 0.5 | Bromoform | ND | 1.0 | 0.5 |
| Bromomethane | ND | 1.0 | 0.5 | 2-Butanone (MEK) | 2.4 | 1.0 | 1.0 |
| n-Butyl benzene | ND | 1.0 | 0.5 | sec-Butyl benzene | ND | 1.0 | 0.5 |
| tert-Butyl benzene | ND | 1.0 | 0.5 | Carbon Disulfide | 0.55 | 1.0 | 0.5 |
| Carbon Tetrachloride | ND | 1.0 | 0.5 | Chlorobenzene | ND | 1.0 | 0.5 |
| Chloroethane | ND | 1.0 | 0.5 | 2-Chloroethyl Vinyl Ether | ND | 1.0 | 1.0 |
| Chloroform | 5.4 | 1.0 | 0.5 | Chloromethane | ND | 1.0 | 0.5 |
| 2-Chlorotoluene | ND | 1.0 | 0.5 | 4-Chlorotoluene | ND | 1.0 | 0.5 |
| Dibromochloromethane | ND | 1.0 | 0.5 | 1,2-Dibromo-3-chloropropane | ND | 1.0 | 0.5 |
| 1,2-Dibromoethane (EDB) | ND | 1.0 | 0.5 | Dibromomethane | ND | 1.0 | 0.5 |
| 1,2-Dichlorobenzene | ND | 1.0 | 0.5 | 1,3-Dichlorobenzene | ND | 1.0 | 0.5 |
| 1,4-Dichlorobenzene | ND | 1.0 | 0.5 | Dichlorodifluoromethane | ND | 1.0 | 0.5 |
| 1,1-Dichloroethane | ND | 1.0 | 0.5 | 1,2-Dichloroethane (1,2-DCA) | ND | 1.0 | 0.5 |
| 1,1-Dichloroethene | ND | 1.0 | 0.5 | cis-1,2-Dichloroethene | ND | 1.0 | 0.5 |
| trans-1,2-Dichloroethene | ND | 1.0 | 0.5 | 1,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,3-Dichloropropane | ND | 1.0 | 0.5 | 2,2-Dichloropropane | ND | 1.0 | 0.5 |
| 1,1-Dichloropropene | ND | 1.0 | 0.5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.5 |
| trans-1,3-Dichloropropene | ND | 1.0 | 0.5 | Ethylbenzene | ND | 1.0 | 0.5 |
| Hexachlorobutadiene | ND | 1.0 | 5.0 | 2-Hexanone | ND | 1.0 | 0.5 |
| Iodomethane (Methyl iodide) | ND | 1.0 | 1.0 | 4-Isopropyl toluene | ND | 1.0 | 0.5 |
| Isopropylbenzene | ND | 1.0 | 0.5 | 4-Methyl-2-pentanone (MIBK) | ND | 1.0 | 0.5 |
| Methylene chloride | ND | 1.0 | 0.5 | Methyl-1-butyl ether (MTBE) | ND | 1.0 | 0.5 |
| Naphthalene | ND | 1.0 | 0.5 | n-Propyl benzene | ND | 1.0 | 0.5 |
| Styrene | ND | 1.0 | 0.5 | 1,1,1,2-Tetrachloroethane | ND | 1.0 | 0.5 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.5 | Tetrachloroethene | ND | 1.0 | 0.5 |
| Toluene | ND | 1.0 | 0.5 | 1,2,3-Trichlorobenzene | ND | 1.0 | 0.5 |
| 1,2,4-Trichlorobenzene | ND | 1.0 | 0.5 | 1,1,1-Trichloroethane | ND | 1.0 | 0.5 |
| 1,1,2-Trichloroethane | ND | 1.0 | 0.5 | Trichloroethene | ND | 1.0 | 0.5 |
| Trichlorofluoromethane | ND | 1.0 | 0.5 | 1,2,3-Trichloropropane | ND | 1.0 | 0.5 |
| 1,2,4-Trimethylbenzene | ND | 1.0 | 0.5 | 1,3,5-Trimethylbenzene | ND | 1.0 | 0.5 |
| Vinyl Acetate | ND | 1.0 | 5.0 | Vinyl Chloride | ND | 1.0 | 0.5 |
| Xylenes | ND | 1.0 | 0.5 | | | | |

Surrogate Recoveries (%)

| | | | |
|-------|------|-------|-----|
| %SS1: | 107 | %SS2: | 100 |
| %SS3: | 91.6 | | |

Comments:

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L. soil/sludge/solid samples in ug/kg. wipe samples in ug/wipe. product/oil/non-aqueous liquid samples in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) sample diluted due to high organic content.



Innovative & Creative Environmental Solutions

CHAIN-OF-CUSTODY

RUSH

P.O. Box 99288 • Emeryville • CA 94662-9288
Tel (510) 652-3222 • Fax (510) 652-3555

0207244

| Project Name | | | Project No. | | ANALYSIS | | | | | | Laboratory Name/Address |
|--|----------------------------|----------------|-------------|--------------|----------|---|--|--|--|---------|-------------------------|
| | | | ICFS 2262 | | | | | | | | McCampbell Analytical |
| Lab Number | ICES Sample Identification | Date Collected | Sample Type | No. of Cont. | VOCs | pH | | | | | Comments / Hazards |
| T | B-1W | 7-18-02 | Water | 3 | X | X | | | | | |
| T20 | B-2W | 7-18-02 | Water | 3 | X | X | | | | | |
| T20 | B-3W | 7-18-02 | Water | 3 | X | X | | | | | |
| T2 | B-4W | 7-18-02 | Water | 3 | X | X | | | | | |
| Relinquished by: (Signature) <i>MKW</i> | | | | DATE | TIME | Received by: (Signature) <i>B. Butts</i> | | | | DATE | TIME |
| | | | | 7/18/02 | 11:45 | | | | | 7/18 | 11:45 |
| Relinquished by: (Signature) <i>B. Butts</i> | | | | DATE | TIME | Received by: (Signature) <i>Maria Vazquez</i> | | | | DATE | TIME |
| | | | | 7/18 | 12:25pm | | | | | 7/18/02 | |
| Relinquished by: (Signature) | | | | DATE | TIME | Received by: (Signature) | | | | DATE | TIME |
| | | | | | | | | | | | |

NOTE: Please send reports and invoices to the above address.

TURNAROUND TIME: 24 Hours 48 Hours 3 Days Normal 5 Days

IDENTIFICATION
 ANALYSIS
 STORAGE
 TRANSPORTATION

McC Campbell Analytical Inc.

110 Second Avenue South, #D7
 Pacheco, CA 94553-5560
 (925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0207244

Client:

ICES
 P.O. Box 99288
 Emeryville, CA 94662

TEL: (510) 652-3222
 FAX: (510) 652-3555
 ProjectNo: #2262
 PO:

18-Jul-02

| Sample ID | ClientSampleID | Matrix | Collection Date | Bottle | SM4500H+B | SW8260B | Requested Tests |
|-------------|----------------|--------|-----------------|--------|-----------|---------|-----------------|
| 0207244-001 | B-1W | Water | 7/18/02 | B | A | | |
| 0207244-002 | B-2W | Water | 7/18/02 | B | A | | |
| 0207244-003 | B-3W | Water | 7/18/02 | B | A | | |
| 0207244-004 | B-4W | Water | 7/18/02 | B | A | | |

Comments: 72hr Rush

| | | | |
|------------------|-----------|--------------|-----------|
| | Date/Time | | Date/Time |
| Relinquished by: | | Received by: | |
| Relinquished by: | | Received by: | |
| Relinquished by: | | Received by: | |

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other