APPENDIX F

SAMPLE RESULTS
FOR ORGANIC ANALYSIS AS REPORTED BY THE LABORATORY
LAND DISPOSAL UNIT CPP-33, BOREHOLE 1

TABLE F-1

EXPLANATION OF ORGANIC RESULTS QUALIFIERS

U - Indicates the compound was analyzed for but not detected. The sample quantitation limit is the value listed and has been corrected for dilution and percent moisture. For soil samples subjected to GPC clean-up procedures, the sample quantitation limit is also multiplied by 2 to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$ 10 ng/μl in the final extract are to be confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag does <u>not</u> apply to pesticide/PCBs analyzed by GC methods.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.

A - This flag indicates that a TIC is suspected to be an aldol-condensation product.

X - This flag identifies a specific flag required to properly define the results. When used they must be fully described in the associated case narrative.

ORGANIC DATA ASSESSMENT SUMMARY

PROJECT NO. 893-1195 SITE CPP33-01 (INEL)

LABORATORY CEP SAMPLES/MATRIX 17 Soils

7 Water (Trip + Equip. Blanks)

SDG #

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	O			
2. GC/MS TUNE/INSTR. PERFORM	O			
3. CALIBRATIONS	O			
4. BLANKS	O			
5. SURROGATES	O			
6. MATRIX SPIKE/DUP	O			
7. OTHER QC	O			
8. INTERNAL STANDARDS	O			
9. COMPOUND IDENTIFICATION	O			
10. SYSTEM PERFORMANCE	O			
11. OVERALL ASSESSMENT	O			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

NOTES: Init. Cal. - $CHBr_3$ $\overline{RRF}$ < 0.250, %RSD > 30 for Acetone + 2-Butanone

Data, as qualified, acceptable for use.

Validated by: Dennis K. Robinson Date: 5/24/91

Reviewed by: Date:

SDG # CP033-01 Project No. 893-1195

	Acceptable YES	NO
1. Holding Times --- No C-O-C. - Call lab	✓	

	Date Sampled	Analyzed	
1-1 thru 11-4	2/8/91	2/19 + 20/91	11 + 12 days ✓
17-7 thru 33-11	2/12/91	2/26/91	14 days ✓
37-12 thru 39-13	2/13/91	2/25/91	12 days ✓
41-14 thru 47-16	2/14/91	2/25/91	11 days ✓
112 + 113	3/1/91	3/6/91	5 days ✓

2. GC/MS Tuning --- ✓

OK, recalc'd 175/174, 176/174 + 177/176

no calc errors, No trans. errors

3. Calibration --- ✓

Recalc'd RRFs for 1,1-Dichloroethane, Trichloroethene, 1,1,2,2-Tetrachloroethane on initial + Cont. Calib. — OK ✓ CBr_3H - RRF < 0.250 all $CHBr_3$ (R)

Cont. Cal: 2/19 - 9:27 Bromoform - 36.1% D / 2/20 - 8:35 CBr_3H - 32.6% D

2/25 - 8:55 $CHBr_3$ - 33.2 MIBK - 34.3 $CH_2Cl_2CHCl_3$ - 32.5 / 2/26 - 8:48 2-But.-60.3 Acet.-41.2

2/26 - 20:17 2But - 37.6 / 3/06 - 11:03 2-But - 44.8 $CHBr_3$ - 35.2 MIBK - 31.6

4. Blanks ---

Field. ~~TB-2 - $MeCl_2$ Acet. 45~~ Field Blanks — $MeCl_2$, Acetone, Chloroform, 2-Butanone — and 4 TICs

Lab Method Blanks - $MeCl_2$, Acetone, ~~Chloroform~~, and 5 TICs

5. Surrogate Recovery ---

TOLUENE d-8 out for 9101253-18 (TB-1) 87%, 9102336-07 (TB-4) 112%

(?) 6. Matrix Spike/Matrix Spike Duplicates --- ✓

MS/MSD OK - Lab used 80 ng of IS instead of 40 all %Rs and RPDs are control.

7. Field Duplicates --- ✓

No detects in the field duplicate samples.

SDG # _____ Project No. _____

	Acceptable YES	NO
8. Internal Standards Performance	✓	

All relent. Times and IS areas within criteria

9. TCL Compound Identification	✓	

RRTs OK.

(?) 10. Compound Quant. and Reported Detection Limits	✓	

OK - documentation (i.e., raw data) was not sufficient to permit calculation of reported results. See telecon memos 4/29 & 4/30/91 to David Martinez.

11. Tentatively Identified Compounds	✓	

Unknown TICs at 7.10, 16.7 and 20.7 RTs were also in the standards. ~~4/30~~

12. System Performance	✓	

No rising baseline, all peaks accounted for.

13. Overall Assessment	✓	

Data acceptable for use as qualified.

Golder Associates

TELECON/ CONTACT MEMORANDUM

☐ Personal Visit
☑ Telephone: ☐ Incoming ☑ Outgoing

ROUTE TO:
Files
☐ Project
☐ Business Development
☐ Mailing List

Company Name: CEP
Address: Santa Fe, NM
Person: Waverly Braunstein
Telephone: 800-545-2188
Job/subject: VOA Data Package

Job No. 893-1195.530
Date: 4/29/91
Time: 8:45

Remarks:

Advised Waverly that data package contained No C-O-C Forms. Said she would send them right away.

Asked her to have GC/MS analyst to call regarding specific analytical questions.

She will have David Martinez call me.

Action/Next Contact:

BY: Dennis R. Rehmann

Golder Associates

TELECON/ CONTACT MEMORANDUM

☐ Personal Visit
☑ Telephone: ☑ Incoming ☐ Outgoing

ROUTE TO:
Files
☐ Project
☐ Business Development
☐ Mailing List

Company Name: CEP
Address:

Job No.

Person: David Martinez
Telephone: 800-545-2188
Job/subject: VOA quantitation

Date: 4/29/91
Time: 2:10

Remarks: What volume of standards are being purged?
10 ml

Are using 40 ug/l and 30 ug/l for IS and SS respectively?
That was how he was taught but is modifying to conform to SOW & 8240 (50 ug/l for both).

He will clear Quant. formulas for both water and soil as form 1 values appear to be factor of 2 below what I calculated. He will get back to me on that.

Advised that he should be using daily calibration RRF instead of RRF for quantitation.

Action/Next Contact:
Await Call Back. / Call again NLT 5/2/91

BY: Dennis Lohmann

Golder Associates

TELECON/ CONTACT MEMORANDUM

☐ Personal Visit
☑ Telephone: ☑ Incoming ☐ Outgoing

ROUTE TO:
Files
☑ Project
☐ Business Development
☐ Mailing List

Company Name: CEP
Address:

Job No. 893-1195.530

Person: David Martinez
Telephone: 800-545-2188
Job/subject: VOA DATA PACKAGE

Date: 4/30/91
Time: 09:35

Remarks:

He advised that yes his Form I reported results were understated by factor of 2 due to ~~internal~~ formula in program. He will modify programs to correct.

He stated that for SOW's quant. value of internal standard should be 80 ug/L (?) rather than 40. Values will not change.

I again advised that quant needs to be done using Daily Calibration RRF rather than Initial Calibration avg. RRF. He said he will revise report program to correct this problem.

Advised him to include in case narrative any deviations from method that lab is using.

Action/Next Contact:
None

BY: Dennis Robinson

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-TB-1
9102253-18

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) WATER Lab Sample ID: 9102253-18

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB101

L vel: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	1.	J B	
67-64-1	Acetone	6.	B	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	.6	J	
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	5.	U	X
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-TB-1
9102253-18

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102253-18

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB101

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.24	2.	J
2.	67630	2-Propanol (9CI)	10.15	3.	BJ
3.		Unknown hydrocarbon	16.67	1.	BJ
4.	110543	Hexane (8CI9CI)	20.63	10.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP-33-01-TB2
9102253-11

L) Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M .rix: (soil/water) WATER Lab Sample ID: 9102253-11

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB109

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene_Chloride	5.	U	X
67-64-1	Acetone	4.	JB	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene_(total)	3.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	5.	U	X
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-TB-2
9102253-11

ab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

atrix: (soil/water) WATER Lab Sample ID: 9102253-11

ample wt/vol: 10 (g/mL) mL Lab File ID: >BB109

Level: (low/med) LOW Date Received: --------

Moisture: not dec.____ Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.16	3.	J
2.	67630	2-Propanol (9CI)	10.11	3.	BJ
3.		Unknown hydrocarbon	16.63	1.	BJ
4.	110543	Hexane (8CI9CI)	20.63	9.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-9-5
9102253-01

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB102

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 6 Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	11.	U	
74-83-9	Bromomethane	11.	U	
75-01-4	Vinyl Chloride	11.	U	
75-00-3	Chloroethane	11.	U	
75-09-2	Methylene Chloride	6.	B	
67-64-1	Acetone	13.	B	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene (total)	5.	U	
67-66-3	Chloroform	1.	J	
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	11.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	11.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	X
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	11.	U	
591-78-6	2-Hexanone	11.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-9-5
9102253-01

ab Name:CEP Contract:-------

ab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

atrix: (soil/water) SOIL Lab Sample ID: 9102253-01

ample wt/vol: 5 (g/mL) G Lab File ID: >BB102

Level: (low/med) LOW Date Received: --------

Moisture: not dec.____ Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.12	6.	J
2.	6/630	2-Propanol (9CI)	10.15	5.	BJ
3.	110543	Hexane (8CI9CI)	20.64	21.	BJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-R2-1-1
9102253-0602

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-0602

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB103

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	7.	B	
67-64-1	Acetone	10.	JB	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene (total)	5.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CPP33-01-V2-1-1
9102253-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB103

Level: (low/med) LOW Date Received: --------

Moisture: not dec.4 Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.11	6.	BJ
2.	110543	Hexane (8CI9CI)	20.63	20.	BJ
3.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-3-2
9102253-06

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB104

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	8.	B	
67-64-1	Acetone	14.	B	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene (total)	5.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	X
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-3-2
9102253-06

Lab Name: LEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-06

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB104

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.16	5.	J
2.	67630	2-propanol (9CI)	10.15	6.	BJ
3.		Unknown hydrocarbon	16.63	3.	BJ
4.	110543	Hexane (8CI9CI)	20.63	21.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-12-7-4
9102253-08

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB108

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/20/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	3.	J	
67-64-1	Acetone	19.	B	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene (total)	5.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	
79-01-6	Trichloroethene	1.	J	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	X
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-7-4
9102253-08

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-08

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB108

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/20/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.16	6.	J
2.	67630	2-Propanol (9CI)	10.11	12.	BJ
3.		Unknown hydrocarbon	16.68	3.	BJ
4.	110543	Hexane (8CI9CI)	20.64	24.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-5-3
9102253-09

1 b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102253-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB110

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/20/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene_Chloride	2.	J	
67-64-1	Acetone	14.	B	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene_(total)	5.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	X
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-5-3
9102253-09

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-09

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB110

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/20/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.35	5.	J
2.	67630	2-Propanol (9CI)	10.19	6.	BJ
3.	110543	Hexane (8CI9CI)	20.67	20.	BJ
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FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-C1-V2-11-6
9102253-12

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102253-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB111

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.1 Date Analyzed: 2/20/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q	
74-87-3	Chloromethane	10.	U	
74-83-9	Bromomethane	10.	U	
75-01-4	Vinyl Chloride	10.	U	
75-00-3	Chloroethane	10.	U	
75-09-2	Methylene Chloride	2.	J	
67-64-1	Acetone	9.	JB	
75-15-0	Carbon Disulfide	5.	U	
75-35-4	1,1-Dichloroethene	5.	U	
75-34-3	1,1-Dichloroethane	5.	U	
540-59-0	1,2-Dichloroethene (total)	5.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	5.	U	
78-93-3	2-Butanone	10.	U	
71-55-6	1,1,1-Trichloroethane	5.	U	
56-23-5	Carbon Tetrachloride	5.	U	
108-05-4	Vinyl Acetate	10.	U	
75-27-4	Bromodichloromethane	5.	U	
78-87-5	1,2-Dichloropropane	5.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	X
79-01-6	Trichloroethene	5.	U	
124-48-1	Dibromochloromethane	5.	U	
79-00-5	1,1,2-Trichloroethane	5.	U	
71-43-2	Benzene	5.	U	
10061-02-6	trans-1,3-Dichloropropene	5.	U	
75-25-2	Bromoform	5.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	
591-78-6	2-Hexanone	10.	U	
127-18-4	Tetrachloroethene	5.	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.	U	
108-88-3	Toluene	5.	U	
108-90-7	Chlorobenzene	5.	U	
100-41-4	Ethylbenzene	5.	U	
100-42-5	Styrene	5.	U	
133-02-7	Xylene (total)	5.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-11-6
9102253-12

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102253-12

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB111

Level: (low/med) LOW Date Received: --------

Moisture: not dec.1 Date Analyzed: 2/20/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.15	5.	BJ
2.	110543	Hexane (8CI9CI)	20.63	19.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-TB-4
9102336-07

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102336-07

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB124

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	.5	J	
67-64-1	Acetone	11.	B	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	3.	U	
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-TB-4
9102336-07

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102336-07

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB124

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.99	4.	BJ
2.	67630	2-Propanol (YCI)	10.14	9.	BJ
3.		Unknown hydrocarbon	16.70	1.	BJ
4.	110543	Hexane (8CI9CI)	20.66	10.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-TB-5
9102336-19

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102336-19

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB125

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	5.	U	X
67-64-1	Acetone	5.	B	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	3.	U	
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	3.	U	
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CP033-01-TB-5
9102336-19

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-19

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB125

Level: (low/med) LOW Date Received: --------

Moisture: not dec.19 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.15	14.	BJ
2.		Unknown hydrocarbon	16.67	3.	BJ
3.	110543	Hexane (8CI9CI)	20.67	24.	BJ
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FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-39-13-FD
9102336-01

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB126

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.19 Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	32.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-02-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
133-02-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-39-134FD
9102336-01

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB126

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.19 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.10	6.	BJ
2.	67630	2-propanol (9CI)	10.12	14.	BJ
3.		Unknown hydrocarbon	16.69	3.	BJ
4.	110543	Hexane (8CI9CI)	20.69	24.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-cl-V2-39-13-[illegible] HDC 4/22/9
9102336-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB127

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.22 Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	15.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-02-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
133-02-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CAP33-01-V2-39-131-RD
9102336-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB127

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.22 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.14	5.	BJ
2.	67630	2-Propanol (9CI)	10.17	16.	BJ
3.		Unknown hydrocarbon	16.73	3.	BJ
4.	110543	Hexane (8CI9CI)	20.70	24.	BJ
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FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-37-12
9102336-03

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB128

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.8 Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	J
67-64-1	Acetone	22.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-37-12
9102336-03

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB128

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.8 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.15	13.	BJ
2.		Unknown hydrocarbon	16.71	2.	BJ
3.	110543	Hexane (8CI9CI)	20.67	20.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-41-1
9102336-13

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-13

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB129

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 13 Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	21.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-02-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
133-02-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-H-14
9102336-13

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102336-13

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB129

L vel: (low/med) LOW Date Received: --------

% Moisture: not dec.13 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.11	14.	BJ
2.		Unknown hydrocarbon	16.67	3.	BJ
3.	110543	Hexane (8CI9CI)	20.67	24.	BJ
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FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-45-15
9102336-15

Lab Name: CEP Contract: -------

L b Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-15

S mple wt/vol: 5 (g/mL) G Lab File ID: >BB130

L vel: (low/med) LOW Date Received: --------

% Moisture: not dec.17 Date Analyzed: 2/25/91

C lumn: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	8.	
67-64-1	Acetone	27.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-02-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
133-02-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-45-15
9102336-15

L b Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102336-15

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB130

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.17 Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.04	6.	BJ
2.	67630	2-Propanol (9CI)	10.11	13.	BJ
3.		Unknown hydrocarbon	16.67	4.	BJ
4.	110543	Hexane (8CI9CI)	20.67	35.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-47-16
9102336-17

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102336-17

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB134

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.16 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	4.	J B
67-64-1	Acetone	19.	B
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-02-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
133-02-7	Xylene (total)	6.	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-47-16
9102336-17

L b Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102336-17

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB134

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.16 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.98	11.	BJ
2.	67630	2-Propanol (9CI)	10.13	22.	BJ
3.		Unknown hydrocarbon	16.69	3.	BJ
4.	110543	Hexane (8CI9CI)	20.65	28.	BJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-17-7
9102283-01

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB137

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 4 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	3.	J B
67-64-1	Acetone	11.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-17-7
9102283-01

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-01

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB137

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.4 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.02	5.	BJ
2.	67630	2-Propanol (9CI)	10.17	15.	BJ
3.		Unknown hydrocarbon	16.69	3.	BJ
4.	110543	Hexane (8CI9CI)	20.69	20.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-21-8
9102283-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB138

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 7 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	JB
67-64-1	Acetone	19.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33 01-Y2-21-8
9102283-02

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M_trix: (soil/water) SOIL Lab Sample ID: 9102283-02

S mple wt/vol: 5 (g/mL) G Lab File ID: >BB138

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.7 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

umber TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.42	16.	BJ
2.		Unknown hydrocarbon	17.02	2.	BJ
3.	110543	Hexane (8CI9CI)	21.02	20.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-25-9
9102283-03

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB139

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.7 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	JB
67-64-1	Acetone	25.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CPP33-01-V2-25-9
9102283-03

L b Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102283-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB139

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 7 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	10.15	17.	BJ
2.	67630	2-Propanol (9CI)	16.68	2.	BJ
3.	110543	Hexane (8CI9CI)	20.67	21.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-29-10
9102283-04

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-04

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB140

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 8 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	JB
67-64-1	Acetone	17.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-V2-29-10
9102283-04

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102283-04

S mple wt/vol: 5 (g/mL) G Lab File ID: >BB140

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.8 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	10.15	16.	BJ
2.	67630	2-Propanol (9CI)	16.67	2.	BJ
3.	110543	Hexane (8CI9CI)	20.67	22.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-01-V2-33-11
9102283-05

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9102283-05

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB141

Level: (low/med) LOW Date Received: --------

% Moisture: not dec. 5 Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	3.	J B
67-64-1	Acetone	18.	B
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
133-02-7	Xylene (total)	5.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-VA-33-11
9102283-05

L b Name:CEP Contract:-------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) SOIL Lab Sample ID: 9102283-05

Sample wt/vol: 5 (g/mL) G Lab File ID: >BB141

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.5 Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.08	4.	BJ
2.	67630	2-Propanol (9CI)	10.15	15.	BJ
3.		Unknown hydrocarbon	16.71	2.	BJ
4.	110543	Hexane (8CI9CI)	20.67	22.	BJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-TB-3
9102283-06

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102283-06

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB145

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene_Chloride	5.	U	X
67-64-1	Acetone	4.	JB	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene_(total)	3.	U	
67-66-3	Chloroform	3.	U	
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	3.	U	
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-01-TB-3
9102283-06

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102283-06

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB145

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.08	3.	BJ
2.	67630	2-Propanol (9CI)	10.15	8.	BJ
3.		Unknown hydrocarbon	16.71	1.	BJ
4.	110543	Hexane (8CI9CI)	20.67	10.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-01-V2-0-EB
9102283-07

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9102283-07

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB146

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene_Chloride	5.	U	X
67-64-1	Acetone	48.	B	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene_(total)	3.	U	
67-66-3	Chloroform	3.	U	
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	7.		
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	5.	U	X
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CPP33-01-TX-0-EB
9102283-07

L b Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

M trix: (soil/water) WATER Lab Sample ID: 9102283-07

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB146

L vel: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.16	9.	BJ
2.		Unknown hydrocarbon	16.72	1.	BJ
3.	110543	Hexane (8CI9CI)	20.69	10.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CPP33-1-TB
9103063-04

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9103063-04

Sample wt/vol: 10 (g/mL) mL Lab File ID: >CB022

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 3/06/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl Chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene Chloride	1.	J B
67-64-1	Acetone	4.	J B
75-15-0	Carbon Disulfide	3.	U
75-35-4	1,1-Dichloroethene	3.	U
75-34-3	1,1-Dichloroethane	3.	U
540-59-0	1,2-Dichloroethene (total)	3.	U
67-66-3	Chloroform	3.	U
107-02-2	1,2-Dichloroethane	3.	U
78-93-3	2-Butanone	5.	U
71-55-6	1,1,1-Trichloroethane	3.	U
56-23-5	Carbon Tetrachloride	3.	U
108-05-4	Vinyl Acetate	5.	U
75-27-4	Bromodichloromethane	3.	U
78-87-5	1,2-Dichloropropane	3.	U
10061-01-5	cis-1,3-Dichloropropene	3.	U
79-01-6	Trichloroethene	3.	U
124-48-1	Dibromochloromethane	3.	U
79-00-5	1,1,2-Trichloroethane	3.	U
71-43-2	Benzene	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	U
75-25-2	Bromoform	3.	U
108-10-1	4-Methyl-2-pentanone	5.	U
591-78-6	2-Hexanone	5.	U
127-18-4	Tetrachloroethene	3.	U
79-34-5	1,1,2,2-Tetrachloroethane	3.	U
108-88-3	Toluene	3.	U
108-90-7	Chlorobenzene	3.	U
100-41-4	Ethylbenzene	3.	U
100-42-5	Styrene	3.	U
133-02-7	Xylene (total)	3.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-1-TB
9103063-04

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: 9103063-04

Sample wt/vol: 10 (g/mL) mL Lab File ID: >CB022

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 3/06/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.05	3.	BJ
2.	67630	2-Propanol (9CI)	10.16	6.	BJ
3.	110543	Hexane (8CI9CI)	20.72	5.	BJ
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-1-113
9103063-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9103063-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >CB023

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.24 Date Analyzed: 3/06/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	6.	JB
67-64-1	Acetone	18.	B
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-02-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
133-02-7	Xylene (total)	7.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
LPP33-1-113
9103063-02

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9103063-02

Sample wt/vol: 5 (g/mL) G Lab File ID: >CB023

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.24 Date Analyzed: 3/06/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.08	5.	BJ
2.	67630	2-Propanol (9CI)	10.15	23.	BJ
3.	110543	Hexane (8CI9CI)	20.71	13.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CPP33-1-112
9103063-03

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9103063-03

Sample wt/vol: 5 (g/mL) G Lab File ID: >CB024

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.24 Date Analyzed: 3/06/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	7.	B
67-64-1	Acetone	39.	B
75-15-0	Carbon Disulfide	7.	U
75-35-4	1,1-Dichloroethene	7.	U
75-34-3	1,1-Dichloroethane	7.	U
540-59-0	1,2-Dichloroethene (total)	7.	U
67-66-3	Chloroform	7.	U
107-02-2	1,2-Dichloroethane	7.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	7.	U
56-23-5	Carbon Tetrachloride	7.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	7.	U
78-87-5	1,2-Dichloropropane	7.	U
10061-01-5	cis-1,3-Dichloropropene	7.	U
79-01-6	Trichloroethene	7.	U
124-48-1	Dibromochloromethane	7.	U
79-00-5	1,1,2-Trichloroethane	7.	U
71-43-2	Benzene	7.	U
10061-02-6	trans-1,3-Dichloropropene	7.	U
75-25-2	Bromoform	7.	U
108-10-1	4-Methyl-2-pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	7.	U
79-34-5	1,1,2,2-Tetrachloroethane	7.	U
108-88-3	Toluene	7.	U
108-90-7	Chlorobenzene	7.	U
100-41-4	Ethylbenzene	7.	U
100-42-5	Styrene	7.	U
133-02-7	Xylene (total)	7.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CPP33-1-112
9103063-03

Lab Name: CEP Contract: -------

L b Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) SOIL Lab Sample ID: 9103063-03

S mple wt/vol: 5 (g/mL) G Lab File ID: >CB024

L vel: (low/med) LOW Date Received: --------

% Moisture: not dec.24 Date Analyzed: 3/06/91

C lumn: PACK Dilution Factor: 1.00000

umber TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.14	6.	BJ
2.	67630	2-Propanol (9CI)	10.17	23.	BJ
3.	110543	Hexane (8CI9CI)	20.73	14.	BJ
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAA

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAA

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB099

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/19/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	1.	J	
67-64-1	Acetone	5.	J	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	X
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	10.	U	X
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	5.	U	X
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAA

ab Name: LEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

atrix: (soil/water) WATER Lab Sample ID: VBLKAA

ample wt/vol: 10 (g/mL) mL Lab File ID: >BB099

Level: (low/med) LOW Date Received: --------

Moisture: not dec.____ Date Analyzed: 2/19/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.11	3.	J
2.		Unknown hydrocarbon	16.67	1.	J
3.	110543	Hexane (8CI9CI)	20.63	11.	J
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FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAB

L.b Name:CEP Contract:-------

L b Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAB

S mple wt/vol: 10 (g/mL) mL Lab File ID: >BB107

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/20/91

C lumn: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl Chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene_Chloride	5.	U X
67-64-1	Acetone	7.	[illegible]
75-15-0	Carbon Disulfide	3.	U
75-35-4	1,1-Dichloroethene	3.	U
75-34-3	1,1-Dichloroethane	3.	U
540-59-0	1,2-Dichloroethene_(total)	3.	U
67-66-3	Chloroform	5.	U X
107-02-2	1,2-Dichloroethane	3.	U
78-93-3	2-Butanone	5.	U
71-55-6	1,1,1-Trichloroethane	3.	U
56-23-5	Carbon Tetrachloride	3.	U
108-05-4	Vinyl Acetate	5.	U
75-27-4	Bromodichloromethane	3.	U
78-87-5	1,2-Dichloropropane	3.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U X
79-01-6	Trichloroethene	3.	U
124-48-1	Dibromochloromethane	3.	U
79-00-5	1,1,2-Trichloroethane	3.	U
71-43-2	Benzene	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	U
75-25-2	Bromoform	3.	U
108-10-1	4-Methyl-2-pentanone	5.	U
591-78-6	2-Hexanone	5.	U
127-18-4	Tetrachloroethene	3.	U
79-34-5	1,1,2,2-Tetrachloroethane	3.	U
108-88-3	Toluene	3.	U
108-90-7	Chlorobenzene	3.	U
100-41-4	Ethylbenzene	3.	U
100-42-5	Styrene	3.	U
133-02-7	Xylene (total)	3.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAB

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAB

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB107

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/20/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67630	2-Propanol (9CI)	10.13	4.	J
2.		Unknown hydrocarbon	16.65	1.	J
3.	110543	Hexane (8CI9CI)	20.65	10.	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAC

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAC

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB114

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/21/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	5.	U	X
67-64-1	Acetone	6.	[illegible]	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	5.	U	X
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	3.	U	
79-01-6	Trichloroethene	3.	U	
124-48-1	Dibromochloromethane	3.	U	
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	5.	U	
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	3.	U	
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAC

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAC

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB114

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/21/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.08	3.	J
2.	67630	2-Propanol (9CI)	10.11	6.	J
3.		Unknown hydrocarbon	16.67	1.	J
4.	110543	Hexane (8CI9CI)	20.64	10.	J
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FORM 10A-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAD

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAD

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB123

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/25/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl Chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene Chloride	.7	J
67-64-1	Acetone	7.	B
75-15-0	Carbon Disulfide	3.	U
75-35-4	1,1-Dichloroethene	3.	U
75-34-3	1,1-Dichloroethane	3.	U
540-59-0	1,2-Dichloroethene (total)	3.	U
67-66-3	Chloroform	3.	U
107-02-2	1,2-Dichloroethane	3.	U
78-93-3	2-Butanone	5.	U
71-55-6	1,1,1-Trichloroethane	3.	U
56-23-5	Carbon Tetrachloride	3.	U
108-05-4	Vinyl Acetate	5.	U
75-27-4	Bromodichloromethane	3.	U
78-87-5	1,2-Dichloropropane	3.	U
10061-01-5	cis-1,3-Dichloropropene	3.	U
79-01-6	Trichloroethene	3.	U
124-48-1	Dibromochloromethane	3.	U
79-00-5	1,1,2-Trichloroethane	3.	U
71-43-2	Benzene	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	U
75-25-2	Bromoform	3.	U
108-10-1	4-Methyl-2-pentanone	5.	U
591-78-6	2-Hexanone	5.	U
127-18-4	Tetrachloroethene	3.	U
79-34-5	1,1,2,2-Tetrachloroethane	3.	U
108-88-3	Toluene	3.	U
108-90-7	Chlorobenzene	3.	U
100-41-4	Ethylbenzene	3.	U
100-42-5	Styrene	3.	U
133-02-7	Xylene (total)	3.	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAD

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAD

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB123

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/25/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	7.00	3.	J
2. 67-63-0	2-Propanol (9CI)	10.11	6.	J
3.	Unknown hydrocarbon	16.67	1.	J
4. 110-54-3	Hexane (8CI,9CI)	20.63	10.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAE

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAE

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB133

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl Chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene Chloride	1.	J
67-64-1	Acetone	5.	J
75-15-0	Carbon Disulfide	3.	U
75-35-4	1,1-Dichloroethene	3.	U
75-34-3	1,1-Dichloroethane	3.	U
540-59-0	1,2-Dichloroethene (total)	3.	U
67-66-3	Chloroform	3.	U
107-02-2	1,2-Dichloroethane	3.	U
78-93-3	2-Butanone	5.	U
71-55-6	1,1,1-Trichloroethane	3.	U
56-23-5	Carbon Tetrachloride	3.	U
108-05-4	Vinyl Acetate	5.	U
75-27-4	Bromodichloromethane	3.	U
78-87-5	1,2-Dichloropropane	3.	U
10061-01-5	cis-1,3-Dichloropropene	3.	U
79-01-6	Trichloroethene	3.	U
124-48-1	Dibromochloromethane	3.	U
79-00-5	1,1,2-Trichloroethane	3.	U
71-43-2	Benzene	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	U
75-25-2	Bromoform	3.	U
108-10-1	4-Methyl-2-pentanone	5.	U
591-78-6	2-Hexanone	5.	U
127-18-4	Tetrachloroethene	3.	U
79-34-5	1,1,2,2-Tetrachloroethane	3.	U
108-88-3	Toluene	3.	U
108-90-7	Chlorobenzene	3.	U
100-41-4	Ethylbenzene	3.	U
100-42-5	Styrene	3.	U
133-02-7	Xylene (total)	3.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAE

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAE

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB133

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.96	3.	J
2.	67630	2-Propanol (9CI)	10.11	8.	J
3.		Unknown hydrocarbon	16.67	1.	J
4.	110543	Hexane (8CI9CI)	20.67	12.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAF

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAF

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB144

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5.	U
74-83-9	Bromomethane	5.	U
75-01-4	Vinyl Chloride	5.	U
75-00-3	Chloroethane	5.	U
75-09-2	Methylene Chloride	1.	JB
67-64-1	Acetone	6.	B
75-15-0	Carbon Disulfide	3.	U
75-35-4	1,1-Dichloroethene	3.	U
75-34-3	1,1-Dichloroethane	3.	U
540-59-0	1,2-Dichloroethene (total)	3.	U
67-66-3	Chloroform	3.	U
107-02-2	1,2-Dichloroethane	3.	U
78-93-3	2-Butanone	5.	U
71-55-6	1,1,1-Trichloroethane	3.	U
56-23-5	Carbon Tetrachloride	3.	U
108-05-4	Vinyl Acetate	5.	U
75-27-4	Bromodichloromethane	3.	U
78-87-5	1,2-Dichloropropane	3.	U
10061-01-5	cis-1,3-Dichloropropene	3.	U
79-01-6	Trichloroethene	3.	U
124-48-1	Dibromochloromethane	3.	U
79-00-5	1,1,2-Trichloroethane	3.	U
71-43-2	Benzene	3.	U
10061-02-6	trans-1,3-Dichloropropene	3.	U
75-25-2	Bromoform	3.	U
108-10-1	4-Methyl-2-pentanone	5.	U
591-78-6	2-Hexanone	5.	U
127-18-4	Tetrachloroethene	3.	U
79-34-5	1,1,2,2-Tetrachloroethane	3.	U
108-88-3	Toluene	3.	U
108-90-7	Chlorobenzene	3.	U
100-41-4	Ethylbenzene	3.	U
100-42-5	Styrene	3.	U
133-02-7	Xylene (total)	3.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKAF

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAF

Sample wt/vol: 10 (g/mL) mL Lab File ID: >BB144

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 2/26/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	7.05	3.	J
2.	67630	2-Propanol (9CI)	10.15	8.	J
3.		Unknown hydrocarbon	16.68	1.	J
4.	110543	Hexane (8CI9CI)	20.68	10.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKAG

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAG

Sample wt/vol: 10 (g/mL) mL Lab File ID: >CB021

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 3/06/91

Column: (pack/cap) PACK Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
74-87-3	Chloromethane	5.	U	
74-83-9	Bromomethane	5.	U	
75-01-4	Vinyl Chloride	5.	U	
75-00-3	Chloroethane	5.	U	
75-09-2	Methylene Chloride	3.	B	
67-64-1	Acetone	6.	B	
75-15-0	Carbon Disulfide	3.	U	
75-35-4	1,1-Dichloroethene	3.	U	
75-34-3	1,1-Dichloroethane	3.	U	
540-59-0	1,2-Dichloroethene (total)	3.	U	
67-66-3	Chloroform	3.	U	
107-02-2	1,2-Dichloroethane	3.	U	
78-93-3	2-Butanone	5.	U	
71-55-6	1,1,1-Trichloroethane	3.	U	
56-23-5	Carbon Tetrachloride	3.	U	
108-05-4	Vinyl Acetate	5.	U	
75-27-4	Bromodichloromethane	3.	U	
78-87-5	1,2-Dichloropropane	3.	U	
10061-01-5	cis-1,3-Dichloropropene	5.	U	X
79-01-6	Trichloroethene	5.	U	X
124-48-1	Dibromochloromethane	5.	U	X
79-00-5	1,1,2-Trichloroethane	3.	U	
71-43-2	Benzene	3.	U	
10061-02-6	trans-1,3-Dichloropropene	3.	U	
75-25-2	Bromoform	3.	U	
108-10-1	4-Methyl-2-pentanone	5.	U	
591-78-6	2-Hexanone	10.	U	X
127-18-4	Tetrachloroethene	3.	U	
79-34-5	1,1,2,2-Tetrachloroethane	3.	U	
108-88-3	Toluene	3.	U	
108-90-7	Chlorobenzene	3.	U	
100-41-4	Ethylbenzene	3.	U	
100-42-5	Styrene	3.	U	
133-02-7	Xylene (total)	3.	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
VBLKAG

Lab Name: CEP Contract: -------

Lab Code: ------- Case No.: ----- SAS No.: ----- SDG No.: ------

Matrix: (soil/water) WATER Lab Sample ID: VBLKAG

Sample wt/vol: 10 (g/mL) mL Lab File ID: >CB021

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.____ Date Analyzed: 3/06/91

Column: PACK Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	6.44	4.	J
2.		Unknown	7.10	6.	J
3.	67630	2-Propanol (9CI)	10.21	8.	J
4.	110543	Hexane (8CI9CI)	20.77	7.	J
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APPENDIX G

HEALTH AND ENVIRONMENTAL ASSESSMENT

G. HEALTH AND ENVIRONMENTAL ASSESSMENT

The Health and Environmental Assessment (HEA) is conducted to evaluate the impact of hazardous constituents present at the site. The HEA involves identifying the contaminants of concern, the concentrations of these compounds in the affected environmental media, and the risk to exposed or potentially exposed human or environmental receptors. The essential element of this assessment is the development of an appropriate set of health and environmental criteria to which the measured or predicted concentrations of toxic contaminants are compared. These criteria are primarily based on EPA-established chronic exposure limits. When the criteria are exceeded, there is a likelihood of adverse health or environmental effects, and additional measures may be required to prevent or reduce these effects.

G-1 Identification of Toxic Contaminants

Analyses of soil samples from a single borehole located near the northeast corner of building CPP-604 were conducted to determine the presence and concentration of inorganics, organics, and radionuclides in the soil at LDU CPP-33. The inorganic analysis results are presented in Table 6-2. Five of the analytes, arsenic, barium, chromium, selenium, and silver, did not exceed background concentrations or were not detected and are not included in this HEA. Cadmium, lead, and mercury were detected at concentrations greater than the background upper tolerance limit (UTL). A brief discussion of each contaminant is provided below.

Within the borehole, cadmium was detected at concentrations exceeding background at a depth of 21 to 25 feet and at all sampling depths from 39 feet to 113 feet. The maximum concentration detected was 11.2 mg/Kg (see Table 6-2). The primary route of exposure to cadmium for most people is from naturally occurring concentrations in food. Cigarette smoking is another nonoccupational source of cadmium. Cadmium can cause acute toxicity seen as respiratory distress and chemical pneumonitis from exposure to cadmium fumes. Acute toxicity from ingestion produces severe nausea and vomiting. Once cadmium enters the body by any route, it is strongly retained in the body and low doses accumulate, especially in the kidney. Long-term effects include kidney disease, lung cancer (from inhalation exposures), and possibly prostrate cancer. Cadmium is evaluated further in this HEA.

Lead was detected at a maximum concentration of 31.7 mg/Kg from a sample at a depth of 112 feet (see Table 6-2). Toxic effects can occur at blood lead levels so low as to be essentially without a threshold. The EPA recommends that neither a chronic reference dose nor a numerical cancer risk be used at this time to evaluate lead exposures (EPA, 1990a). However, epidemiological evidence indicates that a lead soil concentration of >500 mg/Kg is necessary to produce an increase in blood lead levels in children exposed to lead-containing soil (EPA, 1989b). Children are an example of a sensitive population because they are particularly susceptible to neurological changes from excess lead intake. Although the soil lead concentration of 31.7 mg/Kg at LDU CPP-33 exceeds the background UTL, this concentration is

significantly less than 500 mg/Kg. Therefore, lead is not considered further in this HEA.

Mercury is present at a concentration greater than the background UTL. This compound has a number of inorganic and organic derivatives, and toxicity is highly dependent on the form and route of exposure. Organic (alkyl) mercury compounds are generally more toxic by ingestion than inorganic (metallic) mercury. Target organs for toxic effects are the central nervous system and the kidney. Mercury has not been classified as to human carcinogenicity. Mercury is included in the HEA for LDU CPP-33.

One organic contaminant, trichloroethene, was detected during the sampling analyses for LDU CPP-33 at a very low concentration at a depth of 7 feet (see Table 6-3). Trichloroethene is a man-made solvent with multiple industrial and consumer product uses. High concentrations of trichloroethene, when inhaled, produce central nervous system effects such as dizziness, headache, and sleepiness. Chronic exposure in animals has produced liver, kidney, and lung cancer. However, this adverse effect has not been documented in humans (Proctor et al., 1988). Trichloroethene is included in the HEA for LDU
CPP-33.

Results of the radiochemistry analysis are presented in Table 6-5 and Appendix E and are discussed in Section 6.5.4. A summary of the maximum concentrations of radionuclides detected at LDU CPP-33 and the threshold concentrations for these radionuclides is presented in Table G-1. The threshold concentration is that concentration of a radionuclide in soil that under any reasonable scenario (e.g., inadvertent ingestion, inhalation from resuspension, ingestion of food crops, and direct radiation) would result in an individual effective dose equivalent no greater than 25 mrem/yr (.25 msy/yr) (WHC-CM-7-5, Part K, Oct. 1, 1988).

The soil concentrations of cesium-137 and strontium-90 detected at LDU CPP-33 exceed their respective threshold concentrations. The maximum concentration of cesium-137 was 606 pCi/g, detected at a depth of 25 feet. The maximum concentration of strontium-90 was 328.8 pCi/g, detected at a depth of 17 feet. Both radionuclides exceeded their respective threshold concentrations at multiple depths within the borehole. Cesium-137 and strontium-90 are evaluated in this HEA.

TABLE G-1

SUMMARY OF RADIONUCLIDES
DETECTED AT LDU CPP-33

Radionuclide	Maximum Concentration Detected (pCi/g)	Depth (feet)	Threshold Concentration[a] (pCi/g)
Cesium 137	606	25	3
Neptunium 237	1.14	37	NA
Strontium 90	328.8	17	13
Uranium 234	0.51	47	100
Uranium 238	0.54	41	50
Americium 241	9.59	11	20
Plutonium 238	0.46	1	75
Plutonium 239/240	0.34	1	75

a From WHC-CM-7-5, Part K, October 1, 1988.
Also see "Development of Criteria for Release of INEL Sites Following Decontamination and Decommissioning (EG&G, Idaho, Inc. 1986).
b See Table 6-4, Results of clayey fracture fill material.
NA Not Available

G.2 Identification of Exposure Pathways

The contaminants of interest detected at LDU CPP-33 are cadmium, mercury, and trichloroethene. Soil samples were obtained at predetermined intervals from a single borehole. All contaminants were detected at very low concentrations. Mercury was the only contaminant for which the maximum concentration detected was in surface soils. In addition, within the borehole, there does not appear to be any trend with depth for the contaminants detected (i.e., increasing or decreasing concentrations with depth, or maximum concentrations for all contaminants detected at the same depth). Exposure through soil ingestion or dermal contact with the soils could occur for mercury. For cadmium and trichloroethene, found well below surface soils, this route of exposure is not viable unless the soils are disturbed or moved to the surface where more frequent contact would be possible.

The depth to groundwater (approximately 450 feet), the lack of surface water bodies in the vicinity of the disposal area, the apparently limited areal extent of associated contamination (based on site size and disposal

activities), and the low concentrations of contaminants detected preclude any significant impact on water from LDU CPP-33. Thus, neither surface water nor groundwater are considered as potentially viable exposure pathways.

The inhalation pathway is also an exposure route of minimal importance unless the soils are exposed, and even then an exposure scenario that would result in significant health risks due to contaminated airborne particulate is difficult to conceive given the low concentrations of contaminants detected in the soils and limited areal extent of contamination (i.e., absence of a significant source). For similar reasons, volatilization of trichloroethene from the soil could not occur at concentrations that would cause adverse health effects.

Although no exposure pathway is likely due to the depth to contamination for most contaminants, this HEA evaluates the ingestion and inhalation pathways to determine the health impacts from exposure to LDU CPP-33. Use of these pathways indicates the soils would have to be excavated or moved where workers at the ICPP could have frequent and ongoing exposure to the contaminants. Adverse health effects associated with exposure to the contaminants detected in the soil are inconceivable in the absence of direct, long term exposure to the soil itself.

G.3 Identification of Receptor Populations

The ICPP is a secured industrial site with limited access. LDU CPP-33 is located within a fenced area of the ICPP. The most likely receptors for contaminants present at LDU CPP-33 are maintenance and construction workers at the Tank Farm with direct access to the soil in the immediate vicinity of LDU CPP-33.

G.4 Human Health Assessment

As discussed in Section G-2, the soils would have to be excavated or moved where workers at the ICPP could have frequent and ongoing exposure to the contaminants through incidental soil ingestion, dermal contact, or inhalation, the potentially operative exposure pathways. Adverse health effects associated with exposure to the contaminants detected in the soil are inconceivable in the absence of direct, long-term exposure to the soil itself.

For the purposes of an initial screening, it is conservatively assumed that the soil is accessible to workers. Based on this assumption, the potential human health effects from the maximum concentrations of the contaminants of interest identified at LDU CPP-33 are assessed. The results of the assessment are summarized in Table G-2.

Cadmium and mercury are known to have systemic toxic effects if exposures are great enough. The soil concentrations, if ingested, that would result in an oral dose equivalent to the applicable chronic reference dose (RfD) for each contaminant were calculated as part of the assessment. The RfD for

TABLE G-2

SUMMARY OF HEALTH AND ENVIRONMENTAL ASSESSMENT FOR LDU CPP-33

Constituent	Maximum Detected Soil Concentration (mg/Kg)	Screening Criteria				
		Chronic Oral RfD (mg/Kg/d)	Soil Concentration = RfD (mg/Kg)	Oral Slope Factor $(mg/Kg/d)^{-1}$	Soil Concentration = 1E-06 Risk (mg/Kg)	TLV [a] (mg/m^3)
Inorganics						
Cadmium	11.2	1E-03[b]	80	-	-	0.01[c]
Mercury	1.51	3E-04[b]	24	-	-	0.1
Organics						
Trichloroethene	0.001	-	-	1.1E-02[b]	64	269[d]

(a) Threshold Limit Value (ACGIH, 1990-1991)
(b) EPA 1990b
(c) Proposed value for cadmium dusts and salts, as cadmium.
(d) NIOSH Recommended Exposure Limit is 25 ppm (135 mg/m^3)

a contaminant is the daily intake of the contaminant to which even a sensitive individual might be exposed without developing associated critical toxic effects. The following screening has been conducted in accordance with the RCRA Facility Investigation Guidance (EPA, 1989c) and the proposed rule for Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities (FR Vol. 55, No. 145 30798-30884).

The equation for calculating the soil screening criterion for systemic toxins (non-carcinogens) is given below:

$$CS = \frac{RfD \times BW}{IR \times CF}$$

where:

CS = Soil concentration screening criterion
RfD = Chronic Reference Dose
BW = Body Weight (16 kg)
IR = Ingestion Rate (200mg/day)
CF = Conversion Factor (1E-06 Kg/mg)

None of the soil concentrations detected exceed the maximum allowable soil concentrations based on the RfD (see Table G-2). Therefore, systemic adverse health effects should not occur in even sensitive individuals exposed to soil contaminants at the levels detected in the soils at LDU CPP-33.

If contaminants are carcinogens, then a second criterion is also calculated to evaluate the concentration of the contaminant present in the soil. For carcinogens, the criterion is based on the soil concentration, if ingested, that would be equivalent to an incremental cancer risk of 1E-06. An incremental cancer risk of 1E-06 or less is generally considered insignificant for regulatory purposes (40 CFR 300.430), and a risk between 1E-04 and 1E-06 is frequently the target level for remedial actions.

The equation for calculating the soil screening criterion for carcinogens is given below:

$$CS = \frac{Risk \times BW}{CSF \times IR \times CF}$$

where:

CS = Soil concentration screening criterion
Risk = Incremental Cancer Risk (1E-06)
BW = Body Weight (70 Kg)
CSF = Cancer potency factor
IR = Ingestion Rate (100 mg/day)
CF = Conversion Factor (1E-06 Kg/mg)

The carcinogenic screening process is conducted as recommended in the RCRA guidance and proposed rule as referenced above.

Cadmium and trichloroethene are the human carcinogens detected in the soil at LDU CPP-33. Cadmium, however, is only known to be carcinogenic when inhaled. Given the route-specific carcinogenic nature of cadmium and that the concentrations of cadmium that exceeded background are found at a depth greater than 41 feet, a cancer risk for the ingestion exposure route for cadmium is not provided. The concentration of trichloroethene detected in the soil does not exceed the screening criterion and thus does not pose an unacceptable cancer risk.

The airborne exposure pathway is potentially operative for both mercury-contaminated particulate since mercury is present in surface soils at levels exceeding background and for a volatile organic because trichloroethene was detected in the surface soil. Therefore, a third screening criterion is used to evaluate the soil concentrations of contaminants with respect to their potential contribution to airborne contamination levels. A commonly accepted occupational limit for substances in air is given by the Threshold Limit Value (TLV). The TLV is a recommended exposure level in air expressed as mg/M^3 (mass/volume) or ppm (volume/volume). The TLVs for all of the contaminants of interest are provided in Table G-2.

For mercury and cadmium, the contaminant concentrations detected in soil at LDU CPP-33 do not pose an inhalation toxicity hazard. Based on soil concentrations of these contaminants detected at LDU CPP-33, total airborne particulates (dust) would exceed the National Ambient Air Quality Standards for Particulates by at least four orders of magnitude before these contaminants would pose a health risk.

The TLV for trichloroethene is 269 mg/m^3 (ACGIH, 1990), and the maximum concentration preliminarily identified is 0.001 mg/Kg. Given this low soil concentration, the limited area of potential soil contamination (i.e., total mass of contaminated soil) and the published exposure limit for this compound, dispersion and diffusion of this volatile contaminant in the ambient air would result in air concentrations far below the TLV.

The contribution of dermal contact exposures to the overall health risk, although not quantitatively evaluated, would be inappreciable compared to the ingestion or inhalation routes because of the low levels of soil contamination, the lack of ongoing access to the soils, and the depth of the soil contamination, especially for cadmium and trichloroethene.

Based on the results of the screening presented above, adverse health impacts to workers in the vicinity of or with direct access to LDU CPP-33 would not occur from the contaminant concentrations detected for non-radioactive contaminants.

G.4.2 Radioactive Contaminants

Cesium-137 and strontium-90 were detected at concentrations exceeding their respective threshold concentrations. All radionuclides are classified by EPA as human carcinogens. Acceptable exposure levels based on carcinogenic risk for a specific substance are typically much lower than those based on systemic toxicity for the same substance and hence, only carcinogenic risk is evaluated. The standard equation for evaluating risk from exposure to radioactive contaminants, as presented in EPA 1991, is:

$$\text{Medium-specific activity} = \frac{\text{RISK}}{\text{Unit risk}}$$

where:

Medium-specific activity = pCi/m^3 in air or
pCi/g in soil or
pCi/g in soil (external exposure)

RISK = Increased lifetime cancer risk
Unit risk = Medium-specific and radionuclide specific unit risk

As with chemical carcinogens, the target risk for screening purposes is the 1E-06 excess individual cancer risk. All parameters required for use of the above equations are provided in EPA 1991. The EPA does not recommend replacing or substituting other default values at this time. The slope factors and unit risks are derived from models that consider pathways of exposure, the distinct metabolic behavior of each element by compound, and the radiological characteristics of each nuclide, the time and duration of exposure, the radiosensitivity of each target organ in the body, the latency period of cancer expression in these organs, and the age and sex of individuals in exposed populations. Therefore, for purposes of evaluating the radioactive contaminants detected at LDU CPP-33, all exposure parameters are identical for either an occupational or a residential scenario. The assessment of risk from external exposure should also include a calculation of the risk from any radionuclides formed during radioactive decay since the external exposure factors presented in EPA 1991 do not include contributions from decay products.

The risk from the inhalation of radioactively contaminated respirable particulate is based on the measured concentration of respirable particulate matter in the air at the INEL as provided in "The Idaho National Engineering Laboratory Site Environmental Report for Calendar Year 1989," DOE/ID-12082(89), June 1989. The 95% upper confidence interval for the mean air respirable particulate concentration is 0.019 mg/m^3. It is conservatively assumed that all particulates in the air are derived from the LDU CPP-33 soil and that the contaminant concentration of the particulate in the air directly corresponds to the contaminant concentration in the soil.

Consequently, a factor of 0.000019 g/m^3 (0.019 mg/m^3) is used in calculating exposure to airborne radionuclide particulates.

The EPA has recently published new standard default exposure parameters for non-radioactive compounds that utilize an exposure duration of less than 70 years for both occupational and residential exposures. The HEA may require refinement as additional information is made available regarding the use of these new parameters for calculating unit risks and evaluation of risks associated with radionuclide exposures. The use of these new parameters would be expected to indicate that potential risks are less than those presented here.

A summary of the estimated incremental cancer risks for exposure to the maximum concentrations of cesium-137 an strontium-90 detected at LDU CPP-33 are presented in Table G-3. As discussed in Sections G-2 and G-4, the soils would have to be moved where workers at the ICPP could have frequent and ongoing exposure to the contaminants in order for adverse health effects associated with these radionuclides to occur. Therefore, the estimated risks presented in Table G-3 are much higher than will realistically occur because the maximum contaminant concentrations are not located at the surface where direct contact with contaminated soil or external exposure from gamma radiation would occur.

All risks are within the 1E-04 to 1E-06 range except the risk associated with external exposure to cesium-137 if the maximum concentration was located at the surface. However, cesium-137 was not detected in surface soils. Therefore, external exposure would not occur unless contaminated soil were excavated to the surface thus making external exposure possible.

G.5 Environmental Assessment

LDU CPP-33 is located within the controlled and fenced boundaries of the ICPP. The soil contaminants have been preliminarily identified in surface soils (mercury) and at varied depths for the other contaminants. LDU CPP-33 does not support any vegetation in the area of detected contamination. Large animals and migratory wildlife have no access to or are not known to frequent the immediate area surrounding LDU CPP-33. Consequently, no adverse impact on terrestrial biota should occur.

The airborne transport of contaminants located in the soils at LDU CPP-33 will be insignificant because of the low levels of contaminants present in the soil and the probable limited area of contamination (i.e. absence of a significant source). Thus, environments downwind from the area will not be significantly impacted via the air pathway.

Identification of contaminants and concentrations indicate that surface water and groundwater will not be significantly impacted by the levels of radioactive or non-radioactive soil contamination detected at LDU CPP-33.

TABLE G-3

SUMMARY OF HEALTH AND ENVIRONMENTAL ASSESSMENT FOR RADIOACTIVE CONTAMINANTS AT LDU CPP-33

Constituent	Maximum Detected Soil Concentration (pCi/g)	Depth (feet)	Incremental Cancer Risk[a]		
			Soil Ingestion[b]	Inhalation[c]	External Exposure[d]
Cesium-137	606	25	5E-05	1E-07	2E-01[e]
Strontium-90	328.8	17	3E-05	2E-07	NA

[a] Based on 70 years exposure

[b] Unit RisK: Cesium-137 = 7.6E-08 $(pCi/g)^{-1}$; Strontium-90 = 8.9E-08 $(pCi/g)^{-1}$

[c] Unit Risk: Cesium-137 = 9.6E-06 $(pCi/m^3)^{-1}$; Strontium-90 = 2.8E-05 $(pCi/m^3)^{-1}$

[d] Unit Risk: Cesium-137 = 3.4E-04 $(pCi/g)^{-1}$; Strontium-90 = 0.0E+00 $(pCi/g)^{-1}$

[e] Presented for information purposes only. Depth to maximum concentration precludes exposure that would result in this level of risk.

NA = Not applicable

The radioactive contaminants exceeding threshold concentrations have limited mobility in soil an relatively short half-lives. Without additional driving forces, these contaminants should not reach groundwater and, even at the concentrations detected, would not impact the groundwater sufficiently to produce a significant health risk. Low annual rainfall will result in little surface runoff or infiltration to transport contaminants, and noadditional release into the soil will occur. These conditions in addition to the depth to groundwater (approximately 450 feet) and low level of soil contamination will limit migration of contaminants and any adverse effects on surface waters or groundwater in the vicinity of LDU CPP-33.