UNDERGROUND
ENGINEERING &
ENVIRONMENTAL
SOLUTIONS

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HALEY & ALDRICH

Letter of Transmittal

Date	17 April 2002
File Number	27285-013
From	Beth Breitenbach
To	The Boeing Company 3855 Lakewood Blvd., M/C D036-009 Long Beach, CA 90846
Attention	Marcia Taleff
Subject	C-6 Laboratory Reports for IDW

Copies	Date	Description
1	17 April 2002	Laboratory Reports E2C260271, E2C210335, E2C270258, E2C220334, E2C250195, and E2C270261

Transmitted via ☐ First class mail ☐ Overnight express ☐ Hand delivery ☐ Other

Marcia:
Attached please find the laboratory reports for the 20 drums generated by Tait during the annual groundwater monitoring and sampling event at the Former C-6 Facility.

Lot #	Date	Groundwater Monitoring Well Purge Water
E2C210335	3/21/02	XMW_9, WCC_5S, TMW_16, TWM_10, WCC_3D
E2C220334	3/22/02	XMW_19, WCC_9S, TMW_13, WCC_11S, TWM_15, TMW_11, TMW_14
E2C250195	3/25/02	WCC_12S, WCC_7S, WCC_3S, TWM_12, TMW_1
E2C270261	3/26/02	TMW_6, BL_3, TMW_9, WCC_4S, TMW_4, TMW_7, WCC_6S, TMW_8, TMW_5, TMW_3, TWM_2
E2C270258	3/27/02	XMW_18, DAC_P1

Please arrange for disposal of the 20 drums and notify us of the schedule at your earliest convenience. If you have any questions, please call me at (619) 285-7109.

Sincerely,

Beth Breitenbach

Beth Breitenbach
Geologist

GW Drums @ C-6

TAIT Environmental Management, Inc

Investigation Derived Waste (IDW) Inventory Record

Project Name: GW Sampling - Boeing - Torrance **Project No.:** EM2303

Accumulation Date	Drum/Bin	Identifier	Waste Origination	Contents	Accumulation Depth (feet-bgs)	Container Location	Inventoried By	Labeled By
3/21/02	Drum	—	WCC-5S	Groundwater	—	Adj to WCC-5S	NC	NC
3/21/02	"	—	WCC-3D	GW	—	Adj to WCC-3D	"	"
3/21/02	"	—	"	GW	—	"	"	"
3/21/02	"	—	"	GW	—	"	"	"
3/22/02	"	—	WCC-11S	GW	—	Adj to WCC-11S	"	"
↓	"	—	XMW-19	GW	—	Adj to XMW-19	"	"
	"	—	WCC-9S	GW	—	Adj to WCC-9S	"	"
3/25/02	"	—	WCC-12S	GW	—	~~Lot~~ Vacant Lot	"	RK
↓	"	—	WCC-7S	GW	—	Adj to WCC-7S	"	NC
	"	—	WCC-3S	GW	—	Adj to WCC-3S	"	NC
	"	—	TMW-12/TMW-1	GW	—	Vacant Lot	"	RK
3/26/02	"	—	—	GW	—	—	"	"
3/27/02	8 drums	—	near TMW-8 and TMW-7	GW + decon	—	TMW-8 & TMW-7	"	"

Drum Total = 20 drums, labeled w/ white Pending Analysis Labels

BOE-C6-0231415

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HALEY & ALDRICH

Fax Transmittal Sheet

Date	24 April 2002
File Number	27285-001
From	Beth Breitenbach
To	The Boeing Company
Attention	Marcia Taleff
Fax Number	(562) 593-4285
Page 1 of	18

Message

Marcia,
Attached are the data for the decon water from the Building 1/36 SVE well installation. This data is for the following drums:

HA-114;
HA-116;
HA-117;
HA-118; and
HA-124.
Please arrange for prompt disposal. Call me at (619) 285-7109 to notify us of your schedule or to answer any questions.

Thank you,
Beth Breitenbach
Beth Breitenbach
Geologist

NOTICE: The information contained in this communication is confidential and privileged proprietary information intended only for the individual or entity to whom it is addressed. Any unauthorized use, distribution, copying or disclosure of this communication is prohibited. If you have received this communication in error, please contact the sender immediately.

Please call 619.280.9210 if there is a problem with this fax transmission.

ANALYTICAL REPORT

BRC C-6, Torrance HaleyAldrich

Lot #: E2D120188

Scott Zachary

Haley & Aldrich Inc

SEVERN TRENT LABORATORIES, INC.

Diane Suzuki
Project Manager

April 22, 2002

EXECUTIVE SUMMARY - Detection Highlights

E2D120188

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
HA_114_041102_0001 04/11/02 20:15 001				
1,1-Dichloroethene	1.0 J	2.5	ug/L	SW846 8260B
Methyl tert-butyl ether	110	2.5	ug/L	SW846 8260B
Acetone	400	25	ug/L	SW846 8260B
1,1-Dichloroethane	1.2 J	2.5	ug/L	SW846 8260B
1,1,1-Trichloroethane	150	2.5	ug/L	SW846 8260B
2-Butanone	1000	12	ug/L	SW846 8260B
Trichloroethene	4.1	2.5	ug/L	SW846 8260B
4-Methyl-2-pentanone	20	12	ug/L	SW846 8260B
Toluene	2.1 J	2.5	ug/L	SW846 8260B
1,1,2-Trichloroethane	6.5	2.5	ug/L	SW846 8260B
1,2-Dichloroethane	2.1	1.2	ug/L	SW846 8260B
Ethylbenzene	0.53 J	2.5	ug/L	SW846 8260B
Xylenes (total)	2.6	2.5	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	3.0	2.5	ug/L	SW846 8260B
n-Butylbenzene	1.1 J	2.5	ug/L	SW846 8260B

METHODS SUMMARY

E2D120188

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Volatile Organics by GC/MS	SW846 8260B	SW846 5030B/826

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E2D120188

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
EXTL9	001	HA_114_041102_0001	04/11/02	20:15
EXTME	003	TRIP BLANK	07/30/01	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

HALEY & ALDRICH INC

Client Sample ID: HA_114_041102_0001

GC/MS Volatiles

Lot-Sample #...: E2D120188-001 Work Order #...: EXTL91AA Matrix.....: WATER
Date Sampled...: 04/11/02 20:15 Date Received..: 04/12/02 08:10 MS Run #.....: 2102334
Prep Date.....: 04/12/02 Analysis Date..: 04/12/02
Prep Batch #...: 2102531 Analysis Time..: 19:48
Dilution Factor: 2.5
Analyst ID.....: 015590 Instrument ID..: MSH
Method.....: SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	2.5	ug/L	1.0
Chloromethane	ND	5.0	ug/L	0.75
Vinyl chloride	ND	1.2	ug/L	0.75
Chloroethane	ND	5.0	ug/L	0.75
Bromomethane	ND	5.0	ug/L	2.5
Trichlorofluoromethane	ND	5.0	ug/L	0.75
1,1-Dichloroethene	**1.0 J**	**2.5**	**ug/L**	**0.75**
Methylene chloride	ND	2.5	ug/L	0.75
Methyl tert-butyl ether	**110**	**2.5**	**ug/L**	**1.2**
Carbon disulfide	ND	2.5	ug/L	0.75
Acetone	**400**	**25**	**ug/L**	**7.5**
trans-1,2-Dichloroethene	ND	2.5	ug/L	0.75
1,1-Dichloroethane	**1.2 J**	**2.5**	**ug/L**	**0.50**
2,2-Dichloropropane	ND	2.5	ug/L	0.75
cis-1,2-Dichloroethene	ND	2.5	ug/L	0.75
Chloroform	ND	2.5	ug/L	0.75
Bromochloromethane	ND	2.5	ug/L	0.75
1,1,1-Trichloroethane	**150**	**2.5**	**ug/L**	**0.50**
2-Butanone	**1000**	**12**	**ug/L**	**7.5**
1,1-Dichloropropene	ND	2.5	ug/L	0.75
Carbon tetrachloride	ND	1.2	ug/L	0.75
1,2-Dibromoethane	ND	2.5	ug/L	0.75
Benzene	ND	2.5	ug/L	0.75
Trichloroethene	**4.1**	**2.5**	**ug/L**	**0.75**
Bromodichloromethane	ND	2.5	ug/L	0.75
4-Methyl-2-pentanone	**20**	**12**	**ug/L**	**7.5**
Toluene	**2.1 J**	**2.5**	**ug/L**	**0.75**
1,1,2-Trichloroethane	**6.5**	**2.5**	**ug/L**	**0.75**
1,2-Dichloroethane	**2.1**	**1.2**	**ug/L**	**1.0**
Tetrachloroethene	ND	2.5	ug/L	0.75
2-Hexanone	ND	12	ug/L	7.5
Dibromochloromethane	ND	2.5	ug/L	1.0
Chlorobenzene	ND	2.5	ug/L	0.75
1,1,1,2-Tetrachloroethane	ND	2.5	ug/L	0.75
Ethylbenzene	**0.53 J**	**2.5**	**ug/L**	**0.50**
Xylenes (total)	**2.6**	**2.5**	**ug/L**	**2.0**
Styrene	ND	2.5	ug/L	0.75

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HALEY & ALDRICH INC

Client Sample ID: HA_114_041102_0001

GC/MS Volatiles

Lot-Sample #...: E2D120188-001 Work Order #...: EXTL91AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromoform	ND	2.5	ug/L	0.75
Isopropylbenzene	ND	2.5	ug/L	0.75
1,1,2,2-Tetrachloroethane	ND	2.5	ug/L	1.0
1,2,3-Trichloropropane	ND	2.5	ug/L	1.0
n-Propylbenzene	ND	2.5	ug/L	1.0
Bromobenzene	ND	2.5	ug/L	0.75
1,3,5-Trimethylbenzene	**3.0**	**2.5**	**ug/L**	**0.50**
2-Chlorotoluene	ND	2.5	ug/L	0.75
4-Chlorotoluene	ND	2.5	ug/L	0.75
tert-Butylbenzene	ND	2.5	ug/L	0.50
1,2,4-Trimethylbenzene	ND	2.5	ug/L	0.75
sec-Butylbenzene	ND	2.5	ug/L	0.75
p-Isopropyltoluene	ND	2.5	ug/L	0.75
1,3-Dichlorobenzene	ND	2.5	ug/L	0.75
1,4-Dichlorobenzene	ND	2.5	ug/L	0.75
n-Butylbenzene	**1.1 J**	**2.5**	**ug/L**	**0.75**
1,2-Dichlorobenzene	ND	2.5	ug/L	0.75
1,2-Dibromo-3-chloro-propane	ND	5.0	ug/L	1.8
1,2,4-Trichloro-benzene	ND	2.5	ug/L	0.75
Hexachlorobutadiene	ND	2.5	ug/L	0.75
1,2,3-Trichlorobenzene	ND	2.5	ug/L	1.0
Acrolein	ND	50	ug/L	30
Tert-amyl methyl ether	ND	5.0	ug/L	1.2
Acrylonitrile	ND	50	ug/L	25
Tert-butyl ethyl ether	ND	5.0	ug/L	1.2
t-Butanol	ND	62	ug/L	15
Iodomethane	ND	5.0	ug/L	2.5
Isopropyl ether	ND	5.0	ug/L	1.2
2-Chloroethyl vinyl ether	ND	12	ug/L	5.0
Tetrahydrofuran	ND	25	ug/L	5.0
Vinyl acetate	ND	12	ug/L	5.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	116	(65 - 135)
Toluene-d8	95	(80 - 130)

NOTE(S):

J Estimated result. Result is less than RL.

HALEY & ALDRICH INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: E2D120188-003
Date Sampled...: 07/30/01
Prep Date.....: 04/12/02
Prep Batch #...: 2102531
Dilution Factor: 1
Analyst ID.....: 015590

Work Order #...: EXTME1AA
Date Received..: 04/12/02 08:10
Analysis Date..: 04/12/02
Analysis Time..: 19:18

Instrument ID..: MSH
Method.....: SW846 8260B

Matrix.....: WATER
MS Run #.....: 2102334

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Dichlorodifluoromethane	ND	1.0	ug/L	0.40
Chloromethane	ND	2.0	ug/L	0.30
Vinyl chloride	ND	0.50	ug/L	0.30
Chloroethane	ND	2.0	ug/L	0.30
Bromomethane	ND	2.0	ug/L	1.0
Trichlorofluoromethane	ND	2.0	ug/L	0.30
1,1-Dichloroethene	ND	1.0	ug/L	0.30
Methylene chloride	ND	1.0	ug/L	0.30
Methyl tert-butyl ether	ND	1.0	ug/L	0.50
Carbon disulfide	ND	1.0	ug/L	0.30
Acetone	ND	10	ug/L	3.0
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.30
1,1-Dichloroethane	ND	1.0	ug/L	0.20
2,2-Dichloropropane	ND	1.0	ug/L	0.30
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.30
Chloroform	ND	1.0	ug/L	0.30
Bromochloromethane	ND	1.0	ug/L	0.30
1,1,1-Trichloroethane	ND	1.0	ug/L	0.20
2-Butanone	ND	5.0	ug/L	3.0
1,1-Dichloropropene	ND	1.0	ug/L	0.30
Carbon tetrachloride	ND	0.50	ug/L	0.30
1,2-Dibromoethane	ND	1.0	ug/L	0.30
Benzene	ND	1.0	ug/L	0.30
Trichloroethene	ND	1.0	ug/L	0.30
Bromodichloromethane	ND	1.0	ug/L	0.30
4-Methyl-2-pentanone	ND	5.0	ug/L	3.0
Toluene	ND	1.0	ug/L	0.30
1,1,2-Trichloroethane	ND	1.0	ug/L	0.30
1,2-Dichloroethane	ND	0.50	ug/L	0.40
Tetrachloroethene	ND	1.0	ug/L	0.30
2-Hexanone	ND	5.0	ug/L	3.0
Dibromochloromethane	ND	1.0	ug/L	0.40
Chlorobenzene	ND	1.0	ug/L	0.30
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.30
Ethylbenzene	ND	1.0	ug/L	0.20
Xylenes (total)	ND	1.0	ug/L	0.80
Styrene	ND	1.0	ug/L	0.30

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HALEY & ALDRICH INC

Client Sample ID: TRIP BLANK

GC/MS Volatiles

Lot-Sample #...: E2D120188-003 Work Order #...: EXTME1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Bromoform	ND	1.0	ug/L	0.30
Isopropylbenzene	ND	1.0	ug/L	0.30
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.40
1,2,3-Trichloropropane	ND	1.0	ug/L	0.40
n-Propylbenzene	ND	1.0	ug/L	0.40
Bromobenzene	ND	1.0	ug/L	0.30
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.20
2-Chlorotoluene	ND	1.0	ug/L	0.30
4-Chlorotoluene	ND	1.0	ug/L	0.30
tert-Butylbenzene	ND	1.0	ug/L	0.20
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.30
sec-Butylbenzene	ND	1.0	ug/L	0.30
p-Isopropyltoluene	ND	1.0	ug/L	0.30
1,3-Dichlorobenzene	ND	1.0	ug/L	0.30
1,4-Dichlorobenzene	ND	1.0	ug/L	0.30
n-Butylbenzene	ND	1.0	ug/L	0.30
1,2-Dichlorobenzene	ND	1.0	ug/L	0.30
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.70
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.30
Hexachlorobutadiene	ND	1.0	ug/L	0.30
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.40
Acrolein	ND	20	ug/L	12
Tert-amyl methyl ether	ND	2.0	ug/L	0.50
Acrylonitrile	ND	20	ug/L	10
Tert-butyl ethyl ether	ND	2.0	ug/L	0.50
t-Butanol	ND	25	ug/L	6.0
Iodomethane	ND	2.0	ug/L	1.0
Isopropyl ether	ND	2.0	ug/L	0.50
2-Chloroethyl vinyl ether	ND	5.0	ug/L	2.0
Tetrahydrofuran	ND	10	ug/L	2.0
Vinyl acetate	ND	5.0	ug/L	2.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	94	(75 - 130)
1,2-Dichloroethane-d4	113	(65 - 135)
Toluene-d8	93	(80 - 130)

QC DATA ASSOCIATION SUMMARY

E2D120188

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		2102531	2102334
003	WATER	SW846 8260B		2102531	2102334

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D120188
MB Lot-Sample #: E2D120000-531

Work Order #...: EXVVE1AA

Matrix.....: WATER

Analysis Date..: 04/12/02
Dilution Factor: 1

Prep Date.....: 04/12/02
Prep Batch #...: 2102531

Analyst ID.....: 015590

Analysis Time..: 11:17
Instrument ID..: MSH

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	2.0	ug/L	SW846 8260B
Vinyl chloride	ND	0.50	ug/L	SW846 8260B
Chloroethane	ND	2.0	ug/L	SW846 8260B
Bromomethane	ND	2.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	2.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	1.0	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Acetone	ND	10	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
2,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Bromochloromethane	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	5.0	ug/L	SW846 8260B
1,1-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	0.50	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	5.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	0.50	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	5.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E2D120188 Work Order #...: EXVVE1AA Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,3-Trichloropropane	ND	1.0	ug/L	SW846 8260B
n-Propylbenzene	ND	1.0	ug/L	SW846 8260B
Bromobenzene	ND	1.0	ug/L	SW846 8260B
1,3,5-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
4-Chlorotoluene	ND	1.0	ug/L	SW846 8260B
tert-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2,4-Trimethylbenzene	ND	1.0	ug/L	SW846 8260B
sec-Butylbenzene	ND	1.0	ug/L	SW846 8260B
p-Isopropyltoluene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
n-Butylbenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
Hexachlorobutadiene	ND	1.0	ug/L	SW846 8260B
1,2,3-Trichlorobenzene	ND	1.0	ug/L	SW846 8260B
Acrolein	ND	20	ug/L	SW846 8260B
Tert-amyl methyl ether	ND	2.0	ug/L	SW846 8260B
Acrylonitrile	ND	20	ug/L	SW846 8260B
Tert-butyl ethyl ether	ND	2.0	ug/L	SW846 8260B
t-Butanol	ND	25	ug/L	SW846 8260B
Iodomethane	ND	2.0	ug/L	SW846 8260B
Isopropyl ether	ND	2.0	ug/L	SW846 8260B
2-Chloroethyl vinyl ether	ND	5.0	ug/L	SW846 8260B
Tetrahydrofuran	ND	10	ug/L	SW846 8260B
Vinyl acetate	ND	5.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	97	(75 - 130)
1,2-Dichloroethane-d4	109	(65 - 135)
Toluene-d8	98	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E2D120188
LCS Lot-Sample#: E2D120000-531
Prep Date.....: 04/12/02
Prep Batch #...: 2102531
Dilution Factor: 1
Analyst ID.....: 015590

Work Order #...: EXVVE1AC
Analysis Date..: 04/12/02
Analysis Time..: 10:43
Instrument ID..: MSH

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
1,1-Dichloroethene	**102**	**(70 - 140)**	**SW846 8260B**
Benzene	**95**	**(75 - 120)**	**SW846 8260B**
Trichloroethene	**109**	**(70 - 130)**	**SW846 8260B**
Toluene	**94**	**(75 - 125)**	**SW846 8260B**
Chlorobenzene	**94**	**(75 - 120)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(75 - 130)
1,2-Dichloroethane-d4	120	(65 - 135)
Toluene-d8	100	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2D120188
LCS Lot-Sample#: E2D120000-531
Prep Date.....: 04/12/02
Prep Batch #...: 2102531
Dilution Factor: 1
Analyst ID.....: 015590

Work Order #...: EXVVE1AC

Analysis Date..: 04/12/02
Analysis Time..: 10:43
Instrument ID..: MSH

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
1,1-Dichloroethene	10.0	10.2	ug/L	102	SW846 8260B
Benzene	10.0	9.47	ug/L	95	SW846 8260B
Trichloroethene	10.0	10.9	ug/L	109	SW846 8260B
Toluene	10.0	9.42	ug/L	94	SW846 8260B
Chlorobenzene	10.0	9.44	ug/L	94	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	101	(75 - 130)
1,2-Dichloroethane-d4	120	(65 - 135)
Toluene-d8	100	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E2D120188
MS Lot-Sample #: E2D110329-006
Date Sampled...: 04/08/02 09:20
Prep Date.....: 04/12/02
Prep Batch #...: 2102531
Dilution Factor: 1

Work Order #...: EXRNC1AC-MS
EXRNC1AD-MSD
Date Received..: 04/11/02 18:45
Analysis Date..: 04/12/02
Analysis Time..: 18:18
Analyst ID.....: 015590

Matrix.....: WATER
MS Run #.....: 2102334
Instrument ID..: MSH

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,1-Dichloroethene	101	(70 - 140)			SW846 8260B
	103	(70 - 140)	1.7	(0-25)	SW846 8260B
Benzene	95	(75 - 120)			SW846 8260B
	94	(75 - 120)	1.2	(0-25)	SW846 8260B
Trichloroethene	97	(70 - 130)			SW846 8260B
	75	(70 - 130)	8.1	(0-25)	SW846 8260B
Toluene	93	(75 - 125)			SW846 8260B
	92	(75 - 125)	1.3	(0-25)	SW846 8260B
Chlorobenzene	95	(75 - 120)			SW846 8260B
	94	(75 - 120)	1.3	(0-25)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(75 - 130)
	100	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
	122	(65 - 135)
Toluene-d8	99	(80 - 130)
	98	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E2D120188
MS Lot-Sample #: E2D110329-006
Date Sampled...: 04/08/02 09:20
Prep Date.....: 04/12/02
Prep Batch #...: 2102531
Dilution Factor: 1

Work Order #...: EXRNC1AC-MS
EXRNC1AD-MSD
Date Received..: 04/11/02 18:45
Analysis Date..: 04/12/02
Analysis Time..: 18:18
Analyst ID.....: 015590

Matrix.....: WATER
MS Run #.....: 2102334
Instrument ID..: MSH

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
1,1-Dichloroethene	ND	10.0	10.1	ug/L	101		SW846 8260B
	ND	10.0	10.3	ug/L	103	1.7	SW846 8260B
Benzene	ND	10.0	9.54	ug/L	95		SW846 8260B
	ND	10.0	9.43	ug/L	94	1.2	SW846 8260B
Trichloroethene	19	10.0	28.3	ug/L	97		SW846 8260B
	19	10.0	26.1	ug/L	75	8.1	SW846 8260B
Toluene	ND	10.0	9.32	ug/L	93		SW846 8260B
	ND	10.0	9.20	ug/L	92	1.3	SW846 8260B
Chlorobenzene	ND	10.0	9.50	ug/L	95		SW846 8260B
	ND	10.0	9.38	ug/L	94	1.3	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Bromofluorobenzene	103	(75 - 130)
	100	(75 - 130)
1,2-Dichloroethane-d4	124	(65 - 135)
	122	(65 - 135)
Toluene-d8	99	(80 - 130)
	98	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY REPORT

Aquatic Testing Laboratories
"dedicated to providing quality aquatic toxicity testing"
4350 Transport Street, Unit 107
Ventura, CA 93003
(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Date: April 21, 2002

Client: STL - LA
1721 S. Grand Ave.
Santa Ana, CA 92705
Attn: Diane Suzuki

Laboratory No.: A-02041501-001
Project No.: E2D120188-002

Sample Control: The samples were received by ATL in a chilled state, seals intact and the chain of custody record attached.

Date Sampled: 04/11/02
Date Received: 04/15/02
Dates Tested: 04/15/02 to 04/20/02

Sample Analysis: The following analyses were performed on your sample:

Fathead Minnow Hazardous Waste Screen Bioassay (Polisini and Miller 1988).

Attached are the test data generated from the analysis of your samples.

Result Summary:

STL ID.	Results
E2D120188-002	PASSED (LC50 > 750 mg/l)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the exclusive use of the client [illegible] of the Laboratory's name for advertising or exhibiting purposes without authorization is prohibited.

FATHEAD MINNOW HAZARDOUS WASTE SCREEN BIOASSAY

Lab No.: A0204150 1-001

Client/ID: STL E2D120188-002

TEST SUMMARY

Species: Pimephales promelas.
Fish length (mm): av: 31.5; min: 30; max: 33.
Fish weight (gm): av: .47; min: .39; max: .59.
Test Protocol: Calif. F&G/DOHS 1988.
Test type: Static.
Test chamber volume 10 l.
Mixing method: Mechanical shaking.
Acclimation/dilution water: Reconstituted soft water.
Aeration: Single bubble through narrow-bore tube.

Source: Thomas Fish.
Date fish received: 4-5-02.
Regulations: CCR Title 22.
Endpoints: LC50 at 96 hrs.
Temperature: 20 +/- 2°C.
Number of replicates: 2.
Number of fish per chamber: 10.
Water hardness: 40-48 mg/l $CaCO_3$.
QA/QC Batch No.: RTD204 09.

TEST DATA

	INITIAL			24 Hr				48 Hr				72 Hr				96 Hr			
DATE/TIME:	4-16-02 1000			4-17-02 1200				4-18-02 1030				4-19-02 1500				4-20-02 0930			
ANALYST:	[illegible]			[illegible]				[illegible]				[illegible]				[illegible]			
	°C	DO	pH	°C	DO	pH	#D	°C	DO	pH	#D	°C	DO	pH	#D	°C	DO	pH	#D
CONTROL A	19.2	9.1	7.7	20.2	8.4	7.5	0	20.1	7.4	7.4	0	20.3	7.0	7.6	0	20.5	6.8	7.5	0
CONTROL B	19.2	9.2	7.7	20.2	7.3	7.4	0	20.1	7.6	7.3	0	20.2	7.4	7.5	0	20.3	7.2	7.5	0
400 mg/l A	19.2	9.1	7.7	20.0	7.5	7.3	0	20.2	7.1	7.3	0	20.1	6.4	7.5	0	20.4	6.5	7.4	0
400 mg/l B	19.3	9.2	7.7	20.2	6.9	7.3	0	20.0	7.0	7.2	0	20.1	8.2	7.5	0	20.3	8.2	7.5	0
750 mg/l A	19.2	9.2	7.7	20.1	7.7	7.3	0	19.9	7.5	7.3	0	20.0	7.3	7.5	0	20.2	6.8	7.5	0
750 mg/l B	19.2	9.3	7.7	20.1	8.1	7.3	0	19.7	8.3	7.3	0	19.5	8.0	7.4	0	20.2	7.9	7.5	0

Comments:

	CONTROL		HIGH CONCENTRATION	
	Alkalin.	Hardness	Alkalin.	Hardness
Initial	30 mg/l	46 mg/l	30 mg/l	46 mg/l
Final	30 mg/l	46 mg/l	30 mg/l	46 mg/l

Total Number Dead	
CONTROL	0 /20
400 mg/l	0 /20
750 mg/l	0 /20

RESULTS

X	PASSED	LC50 > 750 mg/l (<40% dead in 750 mg/l conc.)
	FAILED	≥40% dead in 750 (Definitive Test Recommended)
	FAILED	LC50 < 400 mg/l (>60% dead in 400 mg/l conc.)