

550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V1

SDG: IMI0838 Matrix: Soil and Water

No. of Samples: 6
No. of Reanalyses/Dilutions: 0

Date Reviewed: January 16, 2004
Reviewer: M. Pokorny

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT690, MT691, MT692, MT693, MT694, MT695

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel and accounted for the samples and analyses presented in this SDG. In a memo from MW personnel the Client ID for sample MT695 was changed from BLQW12S01 to BLQW12T01. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C.  No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	Two method blanks were analyzed with this SDG. No target compounds were reported in either method blank.	No qualifications were required.
5. <u>LCS/BS</u>	One soil LCS and one water LCS were analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. <u>Surrogates</u>	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0838 Analysis: VOA

		Findings	Qualifications
7.	MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8.	Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT695 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9.	<u>Other</u>	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene and performed only a TIC search for these compounds. Although the laboratory calibrated for 2-chloroethyl vinyl ether, it was not reported as a target compound in sample MT695. 2-Chloroethyl vinyl ether was reported as a target compound in the soil samples of this SDG.  Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane and chlorotrifluoroethene were qualified as estimated, "UJ," in the site samples.
Cor	nments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03

Received: 09/15/03

# VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyz	ed Qu	)ata alifiers
Sample ID: IMI0838-01 (MT69 Reporting Units: ug/kg dry	90 - Soil)								SEV SUAL	QUAL CODE
2-Chloroethyl vinyl ether	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03	09/20/03	U	
Trichlorotrifluoroethane (Freon 1	113) EPA 8260B	3I19016	N/A	9.2	ND	0.828		09/20/03	i	4XX
Acetone	EPA 8260B	3I19016	N/A	9.2	ND	0.828		09/20/03	12	77
Benzene	EPA 8260B	3119016	N/A	1.8	ND	0.828			Market Services	
Bromobenzene	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03		Acceptance	
Bromochloromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03			
Bromodichloromethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		ON THE REAL PROPERTY.	
Bromoform	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03		OCH CALLES	
Bromomethane	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		To the same of the	
2-Butanone (MEK)	EPA 8260B	3119016	N/A	9.2	ND	0.828	09/19/03		100	
n-Butylbenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		CBC CERCUS CO.	
sec-Butylbenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		PARKTOCES	
tert-Butylbenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		BAZZANIZA	
Carbon tetrachloride	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03			
Chlorobenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.828	09/19/03		AVEROTI GENERAL	
Chloroethane	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03		0000	
Chloroform	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		and the same of th	
Chloromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		Name of the last o	
2-Chlorotoluene	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03			
4-Chlorotoluene	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03			
Dibromochloromethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		200	
Dibromomethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		. CONTRACTOR	
1,2-Dichlorobenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.828	09/19/03		AUTOTO NO	
1,3-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
1,4-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		and the second	
Dichlorodifluoromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03		200000000000000000000000000000000000000	
1,1-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		MANAGEMENT OF THE PERSON NAMED OF THE PERSON N	
1,2-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		A STOCKER	
1,1-Dichloroethene	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03		1 Statement	
cis-1,2-Dichloroethene	EPA 8260B	3I19016	N/A	1.8	ND	0.828	09/19/03		liverance of the second	
trans-1,2-Dichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		11111 INC.	
1,2-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
1,3-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
2,2-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
1,1-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
cis-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		METABLE	
trans-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
Ethylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		¥ 1	

Del Mar Analytical, Irvine Michele Harper

Project Manager

**AMEC VALIDATED** 

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03

Received: 09/15/03

# **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzec		ata lifiers
Sample ID: IMI0838-01 (MT690 Reporting Units: ug/kg dry	- Soil) - cont.							Nonco	ZEV ZUAL	CODE
Hexachlorobutadiene	EPA 8260B	3I19016	N/A	4.6	ND	0.828	09/19/03	09/20/03	U	
2-Hexanone	EPA 8260B	3119016	N/A	9.2	ND	0.828	09/19/03	09/20/03	1	
Isopropylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			
p-Isopropyltoluene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		Nation of the last	
Methylene chloride	EPA 8260B	3119016	N/A	18	ND	0.828	09/19/03			
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3119016	N/A	4.6	ND	0.828	09/19/03		SEC.	THE STATE OF THE S
Naphthalene	EPA 8260B	3119016	N/A	4.6	ND	0.828				and the second
n-Propylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03	09/20/03	Pinkanana Pinkanananananananananananananananananana	
Styrene	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03			CONTRACTOR CONTRACTOR
1,1,2-Tetrachloroethane	EPA 8260B	3119016	N/A	4.6	ND	0.828		09/20/03	100	
1,1,2,2-Tetrachloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.828	09/19/03		Management of the Control of the Con	
Tetrachloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03	equipment of the control of the cont	
Toluene	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03		
1,2,3-Trichlorobenzene	EPA 8260B	3119016	N/A	4.6	ND	0.828		09/20/03	COCCA PORTION	
1,2,4-Trichlorobenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.828		09/20/03	Morrando	
1,1,1-Trichloroethane	EPA 8260B	3I19016	N/A	1.8	ND	0.828		09/20/03	-	
1,1,2-Trichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03	NI CONTRACTOR OF THE CONTRACTO	
Trichloroethene	EPA 8260B	3I19016	N/A	1.8	ND	0.828		09/20/03	E CONTRACTOR DE	
Trichlorofluoromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.828		09/20/03	-	YV
1,2,3-Trichloropropane	EPA 8260B	3I19016	N/A	9.2	ND	0.828	Commercial Control of the Control of	09/20/03	7	ryı
1,2,4-Trimethylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03		
1,3,5-Trimethylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03	Margareta de la constanta de l	
Vinyl chloride	EPA 8260B	3I19016	N/A	4.6	ND			09/20/03	TO THE REAL PROPERTY.	
o-Xylene	EPA 8260B	3119016	N/A	1.8	ND	0.828		09/20/03		
m,p-Xylenes	EPA 8260B	3119016	N/A	1.8	ND		09/19/03		J	
Surrogate: Dibromofluoromethane				1.0	107 %	4.020	U7/17/U3	09/20/03	* 1	
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				87%					

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**Del Mar Analytical, Irvine**Michele Harper
Project Manager

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

				UU UJ	G C, 1, 1, 1, 1		033/02	ioobj			
	Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyze		ata lifiers
	Sample ID: IMI0838-02 (MT691 -	- Soil)								REV	QUA
	Reporting Units: ug/kg dry	,							*to	QUAL	COD
	2-Chloroethyl vinyl ether	EPA 8260B	3I19016	N/A	4.6	ND	0.838	09/19/03	09/20/03	U	
	Trichlorotrifluoroethane (Freon 113	B) EPA 8260B	3119016	N/A	9.1	ND	0.838	09/19/03		17	XX
	Acetone	EPA 8260B	3I19016	N/A	9.1	ND	0.838		09/20/03	17	1
	Benzene	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03		
	Bromobenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03	1	
	Bromochloromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03	NAME OF TAXABLE PARTY.	
	Bromodichloromethane	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03		#E PAC
	Bromoform	EPA 8260B	3I19016	N/A	4.6	ND.	0.838		09/20/03		
	Bromomethane	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03		NAME OF THE PROPERTY OF THE PR
	2-Butanone (MEK)	EPA 8260B	3119016	N/A	9.1	ND	0.838		09/20/03	ON COLUMN	
	n-Butylbenzene	EPA 8260B	3119016	N/A	4.6	ND	0.838		09/20/03	1	
	sec-Butylbenzene	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03			
	tert-Butylbenzene	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03			-
	Carbon tetrachloride	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03			
	Chlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		See Control	
1	Chloroethane	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03		W. C.	
-	Chloroform	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
- (	Chloromethane	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03		e construir	
2	2-Chlorotoluene	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03		
4	4-Chlorotoluene	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03	2000	
]	Dibromochloromethane	EPA 8260B	3I19016	N/A	1.8	ND	0.838		09/20/03		*
	1,2-Dibromo-3-chloropropane	EPA 8260B	3119016	N/A	4.6	ND	0.838		09/20/03	20000000	
	1,2-Dibromoethane (EDB)	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03	THE STATE OF THE S	
]	Dibromomethane	EPA 8260B	3I19016	N/A	1.8	ND	0.838		09/20/03		
]	1,2-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03	Jan State St	
]	1,3-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03	and the same of th	
]	l,4-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03		
I	Dichlorodifluoromethane	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03		
1	1,1-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.838		09/20/03		
]	1,2-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
1	l,l-Dichloroethene	EPA 8260B	3I19016	N/A	4.6	ND	0.838	09/19/03			
C	cis-1,2-Dichloroethene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03		AU PARTIES	
t	rans-1,2-Dichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		and the same of th	
1	1,2-Dichloropropane	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03		Messago	
	,3-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		OTHER DESIGNATION OF THE PERSON OF THE PERSO	
2	2,2-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		The state of the s	
	,1-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		Name of the last o	
	cis-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
	rans-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
	Ethylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03		V	
										,	

Del Mar Analytical, Irvine

Michele Harper Project Manager

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851

2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze		ata difiers
Sample ID: IMI0838-02 (MT691 Reporting Units: ug/kg dry	l - Soil) - cont.								Sev Sev	QUA
Hexachlorobutadiene	EPA 8260B	3I19016	N/A	4.6	ND	0.838	09/19/03	09/20/03	$\boldsymbol{\omega}$	Nation of the Control
2-Hexanone	EPA 8260B	3I19016	N/A	9.1	ND	0.838	09/19/03	09/20/03	1	
Isopropylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03	09/20/03	1	
p-Isopropyltoluene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03	09/20/03		
Methylene chloride	EPA 8260B	3119016	N/A	18	ND	0.838	09/19/03	09/20/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03	09/20/03		The second secon
Naphthalene	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03	09/20/03		
n-Propylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03	09/20/03		No.
Styrene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03	09/20/03		DEPOSITION OF THE PROPERTY OF
1,1,1,2-Tetrachloroethane	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03	09/20/03		500.00
1,1,2,2-Tetrachloroethane	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03	09/20/03	Weight	CONTRACTOR (CONTRACTOR CONTRACTOR
Tetrachloroethene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03	09/20/03		ecentricia e
Toluene	EPA 8260B	3119016	N/A	1.8	ND	0.838				MODEL STATE OF THE
1,2,3-Trichlorobenzene	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03	09/20/03	Accession of	300033011
1,2,4-Trichlorobenzene	EPA 8260B	3I19016	N/A	4.6	ND	0.838		09/20/03		
1,1,1-Trichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.838			and the same of th	
1,1,2-Trichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.838			The state of the s	
Trichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.838			- College	
Trichlorofluoromethane	EPA 8260B	3119016	N/A	4.6	ND	0.838			Sherconsta	
1,2,3-Trichloropropane	EPA 8260B	3119016	N/A	9.1	ND	0.838			Post Charles	
1,2,4-Trimethylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.838				
1,3,5-Trimethylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.838	09/19/03		Office and a second	
Vinyl chloride	EPA 8260B	3119016	N/A	4.6	ND	0.838	09/19/03		200	
o-Xylene	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
m,p-Xylenes	EPA 8260B	3119016	N/A	1.8	ND	0.838	09/19/03			
Surrogate: Dibromofluoromethane	(80-125%)				112 %				*	
Surrogate: Toluene-d8 (80-120%)					103 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				85 %					

Del Mar Analytical, Irvine Michele Harper Project Manager



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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed		ata lifiers
Sample ID: IMI0838-03 (MT6 Reporting Units: ug/kg dry	92 - Soil)								RONT Sev	QUA1
2-Chloroethyl vinyl ether	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03	U	
Trichlorotrifluoroethane (Freon	113) EPA 8260B	3119016	N/A	8.9	ND	0.832	09/19/03		· 1	#18
Acetone	EPA 8260B	3119016	N/A	8.9	ND	0.832	09/19/03		14	17
Benzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
Bromobenzene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
Bromochloromethane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
Bromodichloromethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
Bromoform	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03			
Bromomethane	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03			
2-Butanone (MEK)	EPA 8260B	3119016	N/A	8.9	ND	0.832			200	
n-Butylbenzene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
sec-Butylbenzene	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03		7	
tert-Butylbenzene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
Carbon tetrachloride	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03		100	
Chlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
Chloroethane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03		***************************************	
Chloroform	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
Chloromethane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03		and the second	
2-Chlorotoluene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
4-Chlorotoluene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03		The Contract	
Dibromochloromethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
Dibromomethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
1,2-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
1,3-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03		NACORATION AND ADDRESS OF THE PERSONS AND ADDRESS AND ADDRESS OF THE PERSONS AND ADDRESS AND ADDRESS OF THE PERSONS AND ADDRESS AND ADDRES	
1,4-Dichlorobenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03	N. P. C.	
Dichlorodifluoromethane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03	The state of the s	
1,1-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
1,2-Dichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03	as production of the contract	
1,1-Dichloroethene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03	***************************************	
cis-1,2-Dichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
trans-1,2-Dichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03	1000	
1,2-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03		The state of the s	
1,3-Dichloropropane	EPA 8260B	3I19016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
2,2-Dichloropropane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
1,1-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03			
cis-1,3-Dichloropropene	EPA 8260B	3I19016	N/A	1.8	ND	0.832	09/19/03			
trans-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03		1. 1	
Ethylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.832	09/19/03	•	Ψ	

Del Mar Analytical, Irvine



MWH-San Diego

San Diego, CA 92101

Attention: Lisa J. Tucker

1230 Columbia Street, Suite 750

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03

Received: 09/15/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze	Da d Quali	
Sample ID: IMI0838-03 (MT692 Reporting Units: ug/kg dry	- Soil) - cont.								QU×L QU×L	GUAL
Hexachlorobutadiene	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03	09/20/03	$\cup$	
2-Hexanone	EPA 8260B	3119016	N/A	8.9	ND	0.832	09/19/03	09/20/03	1	
Isopropylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.832	09/19/03	09/20/03	-	
p-Isopropyltoluene	EPA 8260B	3I19016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
Methylene chloride	EPA 8260B	3I19016	N/A	18	ND	0.832	09/19/03	09/20/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03		
Naphthalene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03		
n-Propylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
Styrene	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03	09/20/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.832	09/19/03	09/20/03		
Tetrachloroethene	EPA 8260B	3I19016	N/A	1.8	ND	0.832		09/20/03		
Toluene	EPA 8260B	3I19016	N/A	1.8	ND	0.832		09/20/03		
1,2,3-Trichlorobenzene	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03		
1,2,4-Trichlorobenzene	EPA 8260B	3I19016	N/A	4.4	ND	0.832	09/19/03	09/20/03	No.	
1,1,1-Trichloroethane	EPA 8260B	3I19016	N/A	1.8	ND	0.832		09/20/03		
1,1,2-Trichloroethane	EPA 8260B	3119016	N/A	1.8	ND	0.832		09/20/03	400	
Trichloroethene	EPA 8260B	3119016	N/A	1.8	ND	0.832		09/20/03	TO THE REAL PROPERTY.	
Trichlorofluoromethane	EPA 8260B	3119016	N/A	4.4	ND	0.832	09/19/03	09/20/03		
1,2,3-Trichloropropane	EPA 8260B	3119016	N/A	8.9	ND	0.832		09/20/03	TACTORIAN TACTORIAN	
1,2,4-Trimethylbenzene	EPA 8260B	3I19016	N/A	1.8	ND	0.832		09/20/03	Acresonation	
1,3,5-Trimethylbenzene	EPA 8260B	3119016	N/A	1.8	ND	0.832		09/20/03	-	
Vinyl chloride	EPA 8260B	3119016	N/A	4.4	ND	0.832		09/20/03		
o-Xylene	EPA 8260B	3119016	N/A	1.8	ND	0.832		09/20/03		
m,p-Xylenes	EPA 8260B	3119016	N/A	1.8	ND	0.832		09/20/03	*	
Surrogate: Dibromofluoromethane	(80-125%)				103 %		· · · •		•	
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				86 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03

Received: 09/15/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze	ed Qu	Data alifiers
Sample ID: IMI0838-04 (MT69 Reporting Units: ug/kg dry	3 - Soil)								ea/ Zual	CCD
2-Chloroethyl vinyl ether	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03	09/20/03	15	N PAGE AND A STATE
Trichlorotrifluoroethane (Freon 1	13) EPA 8260B	3I19016	N/A	9.5	ND	0.88		09/20/03	17	YV
Acetone	EPA 8260B	3119016	N/A	9.5	ND	0.88		09/20/03	) ×	/ / /
Benzene	EPA 8260B	3I19016	N/A	1.9	ND	0.88		09/20/03	and the same of	
Bromobenzene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03			
Bromochloromethane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		ACCU-MINES	Chitelean
Bromodichloromethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		of Conference of	00000000000000000000000000000000000000
Bromoform	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		TA's summer	
Bromomethane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		TO AND A COLUMN	400 CL
2-Butanone (MEK)	EPA 8260B	3I19016	N/A	9.5	ND	0.88	09/19/03		EGTEN-209	
n-Butylbenzene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		DATE OF THE PARTY	
sec-Butylbenzene	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03		S Newscare, and a second	
tert-Butylbenzene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		Quantitative Quantita Quantita Quantita Qu	
Carbon tetrachloride	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		Magazin	
Chlorobenzene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		Melicore	
Chloroethane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		The state of the s	
Chloroform	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		Tri Classica	
Chloromethane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		all transcoon	
2-Chlorotoluene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		TOTAL STATE OF THE PARTY OF THE	
4-Chlorotoluene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		TOMOTHER.	
Dibromochloromethane	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		Annual School	
1,2-Dibromo-3-chloropropane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		AND DESCRIPTIONS	
1.2-Dibromoethane (EDB)	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		MISSERGO	
Dibromomethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		TANKARAN I	
1,2-Dichlorobenzene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03			
1,3-Dichlorobenzene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		PROTESTION IN	
1,4-Dichlorobenzene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		THE STATE OF THE S	
Dichlorodifluoromethane	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		Name of the last o	
1,1-Dichloroethane	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		ALCONOMINATE OF THE PROPERTY O	
1,2-Dichloroethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		Str. Charge	
1,1-Dichloroethene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03		0.700.000	
cis-1,2-Dichloroethene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03			
trans-1,2-Dichloroethene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
1,2-Dichloropropane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		PERSONAL PROPERTY.	
1,3-Dichloropropane	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		New parketing	
2,2-Dichloropropane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		Parameter Communication of the	
1,1-Dichloropropene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		Total Laboration of the Control Laboration o	
cis-1,3-Dichloropropene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		Nothing and Assessment of the Control of the Contro	
trans-1,3-Dichloropropene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		The state of the s	
Ethylbenzene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		V	

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze		ata lifiers
Sample ID: IMI0838-04 (MT693 Reporting Units: ug/kg dry	3 - Soil) - cont.							. 4	Zev Zual	QUA
Hexachlorobutadiene	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03		じ	
2-Hexanone	EPA 8260B	3I19016	N/A	9.5	ND	0.88	09/19/03	09/20/03	<u> </u>	
Isopropylbenzene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03	09/20/03	- 1	
p-Isopropyltoluene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03	09/20/03		
Methylene chloride	EPA 8260B	3119016	N/A	19	ND	0.88	09/19/03	09/20/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3119016	N/A	4.8	ND	0.88		09/20/03		
Naphthalene	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03	09/20/03		
n-Propylbenzene	EPA 8260B	3119016	N/A	1.9	ND	0.88		09/20/03		
Styrene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03	09/20/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3119016	N/A	4.8	ND	0.88		09/20/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
Tetrachloroethene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
Toluene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
1,2,3-Trichlorobenzene	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I19016	N/A	4.8	ND	0.88	09/19/03			
1,1,1-Trichloroethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		-   -	
1,1,2-Trichloroethane	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
Trichloroethene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
Trichlorofluoromethane	EPA 8260B	3119016	N/A	4.8	ND	0.88	09/19/03			
1,2,3-Trichloropropane	EPA 8260B	3119016	N/A	9.5	ND	0.88	09/19/03			
1,2,4-Trimethylbenzene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		1 1	
1,3,5-Trimethylbenzene	EPA 8260B	3I19016	N/A	1.9	ND	0.88	09/19/03		1 1	
Vinyl chloride	EPA 8260B	3I19016	N/A	4.8	ND	0.88		09/20/03		
o-Xylene	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03			
m,p-Xylenes	EPA 8260B	3119016	N/A	1.9	ND	0.88	09/19/03		1	
Surrogate: Dibromofluoromethane	(80-125%)				104 %				•	
Surrogate: Toluene-d8 (80-120%)					103 %	,				
Surrogate: 4-Bromofluorobenzene	(80-120%)				86 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

			J		(	000,02	,002)			
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze		ata difiers
Sample ID: IMI0838-05 (MT69 Reporting Units: ug/kg dry	94 - Soil)								ZEV ZUAL	QUAL
2-Chloroethyl vinyl ether	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Trichlorotrifluoroethane (Freon		3120007	N/A	8.7	ND	0.845	09/20/03		$\cup_{\perp}$	2.1
Acetone	EPA 8260B	3120007	N/A	8.7	ND	0.845	09/20/03		17	*M
Benzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
Bromobenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Bromochloromethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Bromodichloromethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
Bromoform	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Bromomethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
2-Butanone (MEK)	EPA 8260B	3120007	N/A	8.7	ND	0.845	09/20/03			
n-Butylbenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
sec-Butylbenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03		930	
tert-Butylbenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Carbon tetrachloride	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
Chlorobenzene	EPA 8260B	3120007	N/A	1.7	ND .	0.845	09/20/03		- Constant	
Chloroethane	EPA 8260B	3120007	N/A	4.4	ND	0.845				
Chloroform	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03		
Chloromethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03		POTESTION OF	
2-Chlorotoluene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03		ALIVE CONTRACTOR OF THE PERSON NAMED IN	
4-Chlorotoluene	EPA 8260B	3120007	N/A	4.4	ND	0.845		09/20/03	operation of the contract of t	
Dibromochloromethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		000	
1,2-Dibromo-3-chloropropane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03		Water and the second	
1,2-Dibromoethane (EDB)	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
Dibromomethane	EPA 8260B	3120007	N/A	1.7	ND	0.845		09/20/03		
1,2-Dichlorobenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845		09/20/03		
1,3-Dichlorobenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845		09/20/03	Pater Same	
1,4-Dichlorobenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
Dichlorodifluoromethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03			
1,1-Dichloroethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		CONTRACTOR OF THE PERSON OF TH	
1,2-Dichloroethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		-	
1,1-Dichloroethene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03		and the state of t	
cis-1,2-Dichloroethene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		2	
trans-1,2-Dichloroethene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
1,2-Dichloropropane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		a affectively	
1,3-Dichloropropane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		Manual Property and Company	
2,2-Dichloropropane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
1,1-Dichloropropene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		The second secon	
cis-1,3-Dichloropropene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		2000	
trans-1,3-Dichloropropene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03			
Ethylbenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03		1	
									•	

Del Mar Analytical, Irvine

Michele Harper Project Manager

AMEC VALIDATED

154P 160

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze		ata llifiers
Sample ID: IMI0838-05 (MT694 Reporting Units: ug/kg dry	- Soil) - cont.								RA/ ZVAL	QUAL
Hexachlorobutadiene	EPA 8260B	3I20007	N/A	4.4	ND	0.845	09/20/03	09/20/03	U	
2-Hexanone	EPA 8260B	3I20007	N/A	8.7	ND	0.845	09/20/03	09/20/03		TANAMATAN TANAMATANAMATAN TANAMATAN
Isopropylbenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03		
p-Isopropyltoluene	EPA 8260B	3I20007	N/A	1.7	ND	0.845	09/20/03	09/20/03	447	
Methylene chloride	EPA 8260B	3I20007	N/A	17	ND	0.845	09/20/03		The second	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03		
Naphthalene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03		
n-Propylbenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	WDOODS	
Styrene	EPA 8260B	3I20007	N/A	1.7	ND	0.845	09/20/03	09/20/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03	and the state of t	
1,1,2,2-Tetrachloroethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	- 10	
Tetrachloroethene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	DAYMAN CONTRACTOR	
Toluene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03		
1,2,3-Trichlorobenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03	March Control	
1,2,4-Trichlorobenzene	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03	Mirror of the	
1,1,1-Trichloroethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	BUCCOST SA	
1,1,2-Trichloroethane	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	200	
Trichloroethene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	and the second	
Trichlorofluoromethane	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03	00400000000000000000000000000000000000	
1,2,3-Trichloropropane	EPA 8260B	3120007	N/A	8.7	ND	0.845	09/20/03	09/20/03	and the second	
1,2,4-Trimethylbenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	and the second	
1,3,5-Trimethylbenzene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	Ontonenco	
Vinyl chloride	EPA 8260B	3120007	N/A	4.4	ND	0.845	09/20/03	09/20/03	ANALYSIS OF THE PROPERTY OF TH	
o-Xylene	EPA 8260B	3120007	N/A	1.7	ND	0.845	09/20/03	09/20/03	Security of the security of th	
m,p-Xylenes	EPA 8260B	3120007	N/A	1.7	ND	0.845		09/20/03	$\downarrow$ 1	
Surrogate: Dibromofluoromethane	(80-125%)				109 %			<del>-</del>		
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				87 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze		Data alifiers
Sample ID: IMI0838-06 (MT69: Reporting Units: ug/l	5 - Water)								SEV SUAL	QUA
Acetone	EPA 8260B	3121007	N/A	10	ND	1	09/21/03	09/21/03	U	
Benzene	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		Y	
Bromobenzene	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03			en interesse
Bromochloromethane	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03		7	energy and the second
Bromodichloromethane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		and the same	one-service and the service an
Bromoform	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03		and the same of th	
Bromomethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		SPANISTICS.	
2-Butanone (MEK)	EPA 8260B	3I21007	N/A	10	ND	1	09/21/03			
n-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		Mentifican	70000000000000000000000000000000000000
sec-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		The suggestion of the suggesti	
tert-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		<b>GANDALON</b>	
Carbon tetrachloride	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		W-Venanze	
Chlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
Chloroethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		anno consens	
Chloroform	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		and the second	
Chloromethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		D. Marie Co.	
2-Chlorotoluene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		en e	
4-Chlorotoluene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		STALLED SELECTION	
Dibromochloromethane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		200	
1,2-Dibromoethane (EDB)	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		CHARACTE	
Dibromomethane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		nanci Digita	-
1,2-Dichlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	. 1	09/21/03		reason and	
1,3-Dichlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		Decree of the second	
1,4-Dichlorobenzene	EPA 8260B	3I21007	N/A	2.0	ND	1.	09/21/03		100	
Dichlorodifluoromethane	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03			
1,1-Dichloroethane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		· · · · · · · · · · · · · · · · · · ·	
1,2-Dichloroethane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		postuliano. Zhennian	
1,1-Dichloroethene	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03			
cis-1,2-Dichloroethene	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		O O O O O O O O O O O O O O O O O O O	
trans-1,2-Dichloroethene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		ON COMPANY OF STREET	
1,2-Dichloropropane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		CONTRACTOR SHARE	
1,3-Dichloropropane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		AND CONTRACTOR OF THE PERSON O	
2,2-Dichloropropane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		The state of the s	
1,1-Dichloropropene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		Medical lines	
cis-1,3-Dichloropropene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		Nilling and State of the State	
trans-1,3-Dichloropropene	EPA 8260B	3121007	Ñ/A	2.0	ND	1	09/21/03		The same of the sa	
Ethylbenzene	EPA 8260B	3121007	N/A	2.0	ND	î	09/21/03		Problection of	
Hexachlorobutadiene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
2-Hexanone	EPA 8260B	3121007	N/A	10	ND	1	09/21/03		¥ [	

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

VOLATILI	ONGAMIC	S WILL I	XE I O	MES by (	JC/IVIS	(EPA	2030R/8	260B)		10
Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed		ata lifiers
Sample ID: IMI0838-06 (MT695 Reporting Units: ug/l	- Water) - cont.							_	EV UAL	QUAL
Isopropylbenzene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03	09/21/03	U	
p-Isopropyltoluene	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03	09/21/03		
Methylene chloride	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03	09/21/03	-	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3121007	N/A	10	ND	1		09/21/03		
Naphthalene	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03			
n-Propylbenzene	EPA 8260B	3I21007	N/A	2.0	ND	1				
Styrene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
1,1,1,2-Tetrachloroethane	EPA 8260B	3I21007	N/A	5.0	ND	. 1	09/21/03			
1,1,2,2-Tetrachloroethane	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
Tetrachloroethene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
Toluene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
1,2,3-Trichlorobenzene	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03			
1,2,4-Trichlorobenzene	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03	1 1	
1,1,1-Trichloroethane	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
1,1,2-Trichloroethane	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03	Design Street	
Trichloroethene	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03	***************************************	
Trichlorofluoromethane	EPA 8260B	3I21007	N/A	5.0	ND	1		09/21/03		
1,2,3-Trichloropropane	EPA 8260B	3I21007	N/A	10	ND	1		09/21/03		
1,2,4-Trimethylbenzene	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03	Married Annual Control of Control	
1,3,5-Trimethylbenzene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
Vinyl chloride	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
o-Xylene	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
m,p-Xylenes	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
Trichlorotrifluoroethane (Freon 113	) EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03		V 7	*\L
Surrogate: Dibromofluoromethane	(80-120%)				114%			03.21.03	' 7'	7
Surrogate: Toluene-d8 (80-120%)					110%					
Surrogate: 4-Bromofluorobenzene (	80-120%)				109 %					

mP 1.16.04

Del Mar Analytical, Irvine

Michele Harper Project Manager

AMEC VALIDATED

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

### PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyz	ed Qua	ata lifiers
Sample ID: IMI0838-01 (MT690 Reporting Units: ug/kg dry	- Soil)								REV	QUAL CEDE
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3119016	N/A	180	ND	0.828	09/19/03	09/20/03	UI	1211
Chlorotrifluoroethene	EPA 8260B	3119016	N/A	180	ND	0.828	09/19/03	09/20/03	UT	×11
Sample ID: IMI0838-02 (MT691 Reporting Units: ug/kg dry	- Soil)									esamonios productivos producti
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3I19016	N/A	180	ND	0.838	09/19/03	09/20/03	U.T	*11
Chlorotrifluoroethene	EPA 8260B	3119016	N/A	180	ND	0.838	09/19/03	09/20/03	UI	XII
Sample ID: IMI0838-03 (MT692 Reporting Units: ug/kg dry	- Soil)									week of the control o
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3119016	N/A	180	ND	0.832	09/19/03	09/20/03	UJ	XII
Chlorotrifluoroethene	EPA 8260B	3119016	N/A	180	ND	0.832	09/19/03	09/20/03	UI	1411
Sample ID: IMI0838-04 (MT693 Reporting Units: ug/kg dry	- Soil)					,				occommentation
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3119016	N/A	190	ND	0.88	09/19/03	09/20/03	しゴ	*11
Chlorotrifluoroethene	EPA 8260B	3I19016	N/A	190	ND	0.88	09/19/03		UĨ	<b>*</b> * (
Sample ID: IMI0838-05 (MT694 Reporting Units: ug/kg dry	- Soil)									* Camalina de Cama
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3I20007	N/A	170	ND	0.845	09/20/03	09/20/03	UJ	¥11
Chlorotrifluoroethene	EPA 8260B	3120007	N/A	170	ND	0.845	09/20/03		UJ	<b> </b> * 11
Sample ID: IMI0838-06 (MT695 Reporting Units: ug/l	- Water)									ovident the consequence of the c
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3121007	N/A	200	ND	1	09/21/03	09/21/03	U7.	YX
Chlorotrifluoroethene	EPA 8260B	3I21007	N/A	200	ND	1	09/21/03	09/21/03	U.7	4V
								_	*	1

Del Mar Analytical, Irvine

Michele Harper Project Manager

ANEC VALIDATED

WP 1.16.04



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>

SDG: IMI1169 Matrix: Soil/Water

No. of Reanalyses/Dilutions: 9

<u>Date Reviewed</u>: January 16, 2004 <u>Reviewer</u>: K. Shadowlight

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT699, MT700, MT701, MT702, MT703, MT705, MT707, MT708, MT709

#### **Data Validation Findings**

		Findings	Qualifications
1. Sample Man	nagement	The COC was signed by field and laboratory personnel. The volatile analysis of sample MT704 was not received at the labortory and was canceled per a memo from MWH personnel dated 9/19/03. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Bla	<u>nks</u>	Six soil method blanks and one water method blank were analyzed with this SDG. No target compounds were reported in any of the method blanks.	No qualifications were required.
5. LCS/BS		One water LCS, five soil LCS, and one soil LCS/LCSD pair were analyzed with this SDG. All spiked compounds were recovered within the QC limits and all RPDs were within the QC limit for the pair.	No qualifications were required.

		Findings	Qualifications
6.	Surrogates	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.
7.	MS/MSDs	None performed.	No qualifications were required.
8.	Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT709 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: MT702/MT705	Acetone was reported in several field QC samples.  There were no target compounds reported in either of the field duplicate samples.	The result for acetone was qualified as estimated, "J," in sample MT703.
9.	Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene for all samples. The laboratory performed only a TIC search for these compounds. 2-Chloroethyl vinyl ether was reported as a target compound for the soil site samples and was calibrated but not reported for water sample MT709.  Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane and chlorotri-fluoroethene were qualified as estimated, "UJ," in the site samples.
Co	mments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Sampled: 09/16/03-09/17/03 Report Number: IMI1169

Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz	ed Qua	
Sample ID: IMI1169-01 (MT699 - Reporting Units: ug/kg dry	Soil)				Samj	oled: 09	/16/03		SONF SPA	QU4
2-Chloroethyl vinyl ether	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03	l	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3122082	N/A	9.6	ND	0.888	09/22/03	09/23/03		- Postone
Acetone	EPA 8260B	3122082	N/A	9.6	ND	0.888	09/22/03	09/23/03	1	reserved in the second
Benzene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		PASSESSED A
Bromobenzene	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03		dodos
Bromochloromethane	EPA 8260B	3122082	N/A.	4.8	ND	0.888	09/22/03	09/23/03		
Bromodichloromethane	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Bromoform	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03			
Bromomethane	EPA 8260B	3122082	N/A.	4.8	ND	0.888	09/22/03		NATURAL DESCRIPTION OF THE PROPERTY OF THE PRO	
2-Butanone (MEK)	EPA 8260B	3I22082	N/A	9.6	ND	0.888	09/22/03			
n-Butylbenzene	EPA 8260B	3122082	N/A.	4.8	ND	0.888	09/22/03			
sec-Butylbenzene	EPA 8260B	3I22082	N/A	4.8	ND	0.888	09/22/03		Medical	
tert-Butylbenzene	EPA 8260B	3122082	N/A	4.8	ND	0.888	*	09/23/03		
Carbon tetrachloride	EPA 8260B	3122082	N/A	4.8	ND	0.888		09/23/03		
Chlorobenzene	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03		
Chloroethane	EPA 8260B	3122082	N/A	4.8	ND	0.888		09/23/03		
Chloroform	EPA 8260B	3122082	N/A.	1.9	ND	0.888	09/22/03		Torqueta.	
Chloromethane	EPA 8260B	3122082	N/A	4.8	ND	0.888		09/23/03	The state of the s	
2-Chlorotoluene	EPA 8260B	3I22082	N/A	4.8	ND	0.888	09/22/03	09/23/03	1000	
4-Chlorotoluene	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03	NA WALLOWS	
Dibromochloromethane	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03	001007/12010	
1,2-Dibromo-3-chloropropane	EPA 8260B	3122082	N/A.	4.8	ND	0.888		09/23/03	THE PERSON NAMED IN COLUMN 1	
1,2-Dibromoethane (EDB)	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03		
Dibromomethane	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03		
1,2-Dichlorobenzene	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03	open and a second	
1,3-Dichlorobenzene	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03	The state of the s	
1,4-Dichlorobenzene	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03		
Dichlorodifluoromethane	EPA 8260B	3I22082	N/A	4.8	ND	0.888		09/23/03	10000	
1,1-Dichloroethane	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03	Total Control	
1,2-Dichloroethane	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03	AVERSON S	
1,1-Dichloroethene	EPA 8260B	3122082	N/A	4.8	ND	0.888		09/23/03	The state of the s	
cis-1,2-Dichloroethene	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03	Whenever	
trans-1,2-Dichloroethene	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03		
1,2-Dichloropropane	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03		
1,3-Dichloropropane	EPA 8260B	3I22082	N/A	1.9	ND	0.888		09/23/03		
2,2-Dichloropropane	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03		
1,1-Dichloropropene	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03		
cis-1,3-Dichloropropene	EPA 8260B	3122082	N/A	1.9	ND	0.888		09/23/03	The state of the s	
trans-1,3-Dichloropropene	EPA 8260B	3122082	N/A	1.9	ND ND	0.888		09/23/03		
Ethylbenzene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03		<b>L</b>	
•		J 200 40 C O 40	4 11 4 1	1.7	1417	0.000	07122103	02/43/03	v [	

Del Mar Analytical, Irvine









MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyz	Da: ed Quali	
Sample ID: IMI1169-01 (MT699 Reporting Units: ug/kg dry	- Soil) - cont.				Samp	oled: 09	/16/03	•	REV	QUA
Hexachlorobutadiene	EPA 8260B	3I22082	N/A	4.8	ND	0.888	09/22/03	09/23/03	U	
2-Hexanone	EPA 8260B	3122082	N/A	9.6	ND	0.888	09/22/03	09/23/03	00	
Isopropylbenzene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
p-Isopropyltoluene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Methylene chloride	EPA 8260B	3122082	N/A.	19	ND	0.888	09/22/03			
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03		
Naphthalene	EPA 8260B	3122082	N/A.	4.8	ND	0.888	09/22/03	09/23/03		
n-Propylbenzene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Styrene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I22082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Tetrachloroethene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Toluene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I22082	N/A	4.8	ND	0.888	09/22/03	09/23/03		
1,2,4-Trichlorobenzene	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03	200	
1,1,1-Trichloroethane	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03	DAME A COMMAND OF THE PARTY OF	
1,1,2-Trichloroethane	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Trichloroethene	EPA 8260B	3I22082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
Trichlorofluoromethane	EPA 8260B	3122082	N/A	4.8	ND	0.888	09/22/03	09/23/03		
1,2,3-Trichloropropane	EPA 8260B	3122082	N/A	9.6	ND	0.888	09/22/03	09/23/03	Total Company	
1,2,4-Trimethylbenzene	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03	T. CORPORATION OF THE PARTY OF	
1,3,5-Trimethylbenzene	EPA 8260B	3I22082	N/A	1.9	ND	0.888	09/22/03	09/23/03	DATE OF THE PERSON NAMED IN COLUMN 1	
Vinyl chloride	EPA 8260B	3I22082	N/A	4.8	ND	0.888	09/22/03	09/23/03	and the second	
o-Xylene	EPA 8260B	3I22082	N/A	1.9	ND	0.888	09/22/03	09/23/03		
m,p-Xylenes	EPA 8260B	3122082	N/A	1.9	ND	0.888	09/22/03	09/23/03	\	
Surrogate: Dibromofluoromethane	(80-125%)				120 %				-	
Surrogate: Toluene-d8 (80-120%)					110 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				110 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

				0 0/1/20	(*****	02010	000)			
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz	ed Qua	ata lifiers
Sample ID: IMI1169-02 (MT700 - Reporting Units: ug/kg dry	Soil)				Sam	pled: 09	/17/03	*****	REV QUAL	COS
2-Chloroethyl vinyl ether	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03	09/24/03	U	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3124014	N/A	10	ND	0.942	09/24/03			
Acetone	EPA 8260B	3124014	N/A	10	ND	0.942	09/24/03		Ì	
Benzene	EPA 8260B	3124014	N/A	2.1	ND	0.942		09/24/03		
Bromobenzene	EPA 8260B	3I24014	N/A	5.2	ND	0.942		09/24/03		
Bromochloromethane	EPA 8260B	3124014	N/A	5.2	ND	0.942		09/24/03		
Bromodichloromethane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Bromoform	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03			
Bromomethane	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03		and the state of t	
2-Butanone (MEK)	EPA 8260B	3I24014	N/A	10	ND	0.942	09/24/03			
n-Butylbenzene	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03		MILITARIO DE CONTRACTOR DE CON	
sec-Butylbenzene	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03		erionida.	
tert-Butylbenzene	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03			
Carbon tetrachloride	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03			
Chlorobenzene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Chloroethane	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03			
Chloroform	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Chloromethane	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03			DAY DO COLOR
2-Chlorotoluene	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03			d d
4-Chlorotoluene	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03			-
Dibromochloromethane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Dibromomethane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			deployed with
1,2-Dichlorobenzene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
1,3-Dichlorobenzene	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03			
1,4-Dichlorobenzene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Dichlorodifluoromethane	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03			description
1,1-Dichloroethane	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03		eca-co-care	800000000000000000000000000000000000000
1,2-Dichloroethane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
1,1-Dichloroethene	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03		Supplied to Company	
cis-1,2-Dichloroethene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
trans-1,2-Dichloroethene	EPA 8260B	3124014	N/A	2.1	ND		09/24/03			
1,2-Dichloropropane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
1,3-Dichloropropane	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
2,2-Dichloropropane	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03			
1,1-Dichloropropene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
cis-1,3-Dichloropropene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03		1	
trans-1,3-Dichloropropene	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03			
Ethylbenzene	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03			
ч								SHATION	•	•

Del Mar Analytical, Irvine







MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze	Da ed Qual	
Sample ID: IMI1169-02 (MT700 Reporting Units: ug/kg dry	- Soil) - cont.				Samp	oled: 09	/17/03		REV	CCC
Hexachlorobutadiene	EPA 8260B	3I24014	N/A	5.2	ND	0.942	09/24/03	09/24/03	W	
2-Hexanone	EPA 8260B	3I24014	N/A	10	ND	0.942		09/24/03	W	NEAD STATE
Isopropylbenzene	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03	1	A CONTRACTOR OF THE CONTRACTOR
p-Isopropyltoluene	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03			
Methylene chloride	EPA 8260B	3124014	N/A	21	ND	0.942	09/24/03	09/24/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03	09/24/03		
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	3124014	N/A	5.2	ND	0.942	09/24/03	09/24/03		
Naphthalene	EPA 8260B	3I24014	N/A	5.2	ND	0.942		09/24/03		
n-Propylbenzene	EPA 8260B	3124014	N/A	2.1	ND	0.942		09/24/03		
Styrene *	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03	09/24/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3124014	N/A	5.2	ND	0.942		09/24/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03		
Tetrachloroethene	EPA 8260B	3124014	N/A	2.1	ND	0.942		09/24/03		
Toluene	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I24014	N/A	5.2	ND	0.942		09/24/03		
1,2,4-Trichlorobenzene	EPA 8260B	3I24014	N/A	5.2	ND	0.942		09/24/03		
1,1,1-Trichloroethane	EPA 8260B	3I24014	N/A	2.1	ND	0.942	09/24/03			
1,1,2-Trichloroethane	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03		
Trichloroethene	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03		
Trichlorofluoromethane	EPA 8260B	3I24014	N/A	5.2	ND	0.942		09/24/03	Accountance of the contract of	
1,2,3-Trichloropropane	EPA 8260B	3I24014	N/A	10	ND	0.942		09/24/03	NEO CONTRACTOR OF CONTRACTOR O	
1,2,4-Trimethylbenzene	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03	Office and a second	
1,3,5-Trimethylbenzene	EPA 8260B	3I24014	N/A	2.1	ND	0.942		09/24/03	0	
Vinyl chloride	EPA 8260B	3124014	N/A.	5.2	ND	0.942		09/24/03		
o-Xylene	EPA 8260B	3124014	N/A	2.1	ND	0.942		09/24/03		
m,p-Xylenes	EPA 8260B	3124014	N/A	2.1	ND	0.942	09/24/03	09/24/03	$\downarrow$	
Surrogate: Dibromofluoromethane	(80-125%)				113 %				B	
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				95 %					

Del Mar Analytical, Irvine

Michele Harper Project Manager

This report shall not be some

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

# **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

	Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz	ed Qual	
	Sample ID: IMI1169-03 (MT701 -	Soil)				Samı	oled: 09	/17/03		REV QUAL	Que
	Reporting Units: ug/kg dry								***	KUML	CU
	2-Chloroethyl vinyl ether	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03	u	THE PARTY OF THE P
	Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3123007	N/A	10	ND	0.975		09/23/03	1	
	Acetone	EPA 8260B	3123007	N/A	10	ND	0.975	09/23/03	09/23/03	,	40.00
	Benzene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
	Bromobenzene	EPA 8260B	3123007	N/A.	5.2	ND	0.975	09/23/03	09/23/03		
	Bromochloromethane	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03		constitution of the consti
	Bromodichloromethane	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
	Bromoform	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
	Bromomethane	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
	2-Butanone (MEK)	EPA 8260B	3I23007	N/A	10	ND	0.975	09/23/03	09/23/03		
	n-Butylbenzene	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
	sec-Butylbenzene	EPA 8260B	3123007	N/A.	5.2	ND	0.975	09/23/03	09/23/03	COMMENT	
	tert-Butylbenzene	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03	Own	
	Carbon tetrachloride	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
	Chlorobenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03	ELECTRONIC STATE OF THE STATE O	
	Chloroethane	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
	Chloroform	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
	Chloromethane	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03	100	
	2-Chlorotoluene	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03	200	
	4-Chlorotoluene	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03	and the same of th	
	Dibromochloromethane	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
	1,2-Dibromo-3-chloropropane	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03	100	
	1,2-Dibromoethane (EDB)	EPA 8260B	3I23007	N/A	2.1	ND	0.975		09/23/03		
	Dibromomethane	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
	1,2-Dichlorobenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03	Manager Manage	
	1,3-Dichlorobenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
	1,4-Dichlorobenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
]	Dichlorodifluoromethane	EPA 8260B	3123007	N/A	5.2	ND	0.975		09/23/03	770	
	l,l-Dichloroethane	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
	1,2-Dichloroethane	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
	l,l-Dichloroethene	EPA 8260B	3123007	N/A	5.2	ND	0.975		09/23/03	17.00	
(	cis-1,2-Dichloroethene	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03	200	
t	rans-1,2-Dichloroethene	EPA 8260B	3123007	N/A	2.1	ND	0.975		09/23/03		
	1,2-Dichloropropane	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03			
	1,3-Dichloropropane	EPA 8260B	3123007	N/A	2.1	ND		09/23/03		2007 III	
	2,2-Dichloropropane	EPA 8260B	3123007	N/A	2.1	ND		09/23/03			
	1,1-Dichloropropene	EPA 8260B	3123007	N/A	2.1	ND		09/23/03		- Anna Anna Anna Anna Anna Anna Anna Ann	
	cis-1,3-Dichloropropene	EPA 8260B	3123007	N/A	2.1	ND		09/23/03			
	rans-1,3-Dichloropropene	EPA 8260B	3123007	N/A	2.1	ND		09/23/03			
	Ethylbenzene	EPA 8260B	3123007	N/A	2.1	ND			09/23/03		
	•		J	A 1/ Z A	4.1	1 11	0.713	U7143/U3	<i>いフ/ムン/</i> (リン	w	

Del Mar Analytical, Irvine

Michele Harper Project Manager

EVEL



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

#### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilution Factor	Date Extracted	Date Analyze		ata lifiers
Sample ID: IMI1169-03 (MT701 Reporting Units: ug/kg dry	- Soil) - cont.					oled: 09			REV QUAL	Co
Hexachlorobutadiene	EPA 8260B	3I23007	N/A	5.2	ND	0.975	09/23/03	09/23/03	u	
2-Hexanone	EPA 8260B	3123007	N/A	10	ND	0.975	09/23/03	09/23/03	u	1
Isopropylbenzene	EPA 8260B	3I23007	N/A	2.1	ND	0.975	09/23/03	09/23/03	1	
p-Isopropyltoluene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Methylene chloride	EPA 8260B	3123007	N/A	21	ND	0.975	09/23/03	09/23/03	i	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
Naphthalene	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
n-Propylbenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Styrene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Tetrachloroethene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Toluene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
1,2,3-Trichlorobenzene	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
1,2,4-Trichlorobenzene	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
1,1,1-Trichloroethane	EPA 8260B	3I23007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
1,1,2-Trichloroethane	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Trichloroethene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Trichlorofluoromethane	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
1,2,3-Trichloropropane	EPA 8260B	3123007	N/A	10	ND	0.975	09/23/03	09/23/03		
1,2,4-Trimethylbenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
1,3,5-Trimethylbenzene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
Vinyl chloride	EPA 8260B	3123007	N/A	5.2	ND	0.975	09/23/03	09/23/03		
o-Xylene	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03		
m,p-Xylenes	EPA 8260B	3123007	N/A	2.1	ND	0.975	09/23/03	09/23/03	4	
Surrogate: Dibromofluoromethane	(80-125%)				108 %				j	
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogate: 4-Bromofluorobenzene (	80-120%)				86 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Report Number: IMI1169

Boeing SSFL

Sampled: 09/16/03-09/17/03

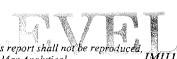
Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	-		Date Extracted	Date Analyz	ed Quali	ifiers
Sample ID: IMI1169-04 (MT702 - Reporting Units: ug/kg dry	Soil)				Sam	pled: 09	/17/03	,	ROL	CC
2-Chloroethyl vinyl ether	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03	W	100 COO CO
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3123007	N/A	11	ND	0.916		09/23/03	ı	ON THE PROPERTY OF THE PROPERT
Acetone	EPA 8260B	3I23007	N/A	11	ND	0.916	09/23/03		reguera de la companya de la company	decimen
Benzene	EPA 8260B	3I23007	N/A	2.2	ND	0.916		09/23/03		
Bromobenzene	EPA 8260B	3123007	N/A	5.4	ND	0.916		09/23/03	and the second	
Bromochloromethane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03			
Bromodichloromethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03	2000	
Bromoform	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03			
Bromomethane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03			
2-Butanone (MEK)	EPA 8260B	3I23007	N/A	11	ND	0.916	09/23/03		Construction of the constr	
n-Butylbenzene	EPA 8260B	3I23007	N/A	5.4	ND	0.916	09/23/03			
sec-Butylbenzene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03		100000000000000000000000000000000000000	
tert-Butylbenzene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03		(Threezes	
Carbon tetrachloride	EPA 8260B	3123007	N/A	5.4	ND	0.916			***************************************	
Chlorobenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
Chloroethane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03		11577100000	
Chloroform	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
Chloromethane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03		and the same of th	
2-Chlorotoluene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03	2000	
4-Chlorotoluene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03	TO THE PARTY OF TH	
Dibromochloromethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
Dibromomethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
1,2-Dichlorobenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916			22.70.700	
1,3-Dichlorobenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916			AND SOUTH THE SECOND SE	
1,4-Dichlorobenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916		09/23/03	THE CONTRACT OF THE CONTRACT O	
Dichlorodifluoromethane	EPA 8260B	3I23007	N/A	5.4	ND	0.916	09/23/03			
1,1-Dichloroethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		Management of the Control of the Con	
1,2-Dichloroethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
1,1-Dichloroethene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03		TOTAL MARKET	
cis-1,2-Dichloroethene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		and the same of th	
trans-1,2-Dichloroethene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03		
1,2-Dichloropropane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
1,3-Dichloropropane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
2,2-Dichloropropane	EPA 8260B	3I23007	N/A	2.2	ND	0.916				
1,1-Dichloropropene	EPA 8260B	3123007	N/A	2.2	ND	0.916		09/23/03		
cis-1,3-Dichloropropene	EPA 8260B	3123007	N/A	2.2	ND	0.916				
trans-1,3-Dichloropropene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		7	
Ethylbenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		V 1	

Del Mar Analytical, Irvine







MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

#### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz		ata ifiers
Sample ID: IMI1169-04 (MT702	- Soil) - cont.					pled: 09		Mary	REV	QUA
Reporting Units: ug/kg dry	FD + 00 (05								QUAL	Coc
Hexachlorobutadiene	EPA 8260B	3123007	N/A	5.4	ND	0.916		09/23/03	u	
2-Hexanone	EPA 8260B	3I23007	N/A	11	ND	0.916	09/23/03		į	
Isopropylbenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03	- 1	
p-Isopropyltoluene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03		
Methylene chloride	EPA 8260B	3123007	N/A	22	ND	0.916	09/23/03	09/23/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03	1	
Naphthalene	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03		
n-Propylbenzene	EPA 8260B	3I23007	N/A	2.2	ND	0.916	09/23/03	09/23/03	1	
Styrene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3123007	N/A	5.4	ND	0.916	09/23/03	09/23/03	The same of the sa	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I23007	N/A	2.2	ND	0.916	09/23/03			
Tetrachloroethene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03	09/23/03		
Toluene	EPA 8260B	3I23007	N/A	2.2	ND	0.916	09/23/03			
1,2,3-Trichlorobenzene	EPA 8260B	3I23007	N/A	5.4	ND	0.916	09/23/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I23007	N/A.	5.4	ND	0.916	09/23/03	09/23/03		
1,1,1-Trichloroethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
1,1,2-Trichloroethane	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03			
Trichloroethene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		1000	
Trichlorofluoromethane	EPA 8260B	3123007	N/A.	5.4	ND	0.916	09/23/03		The second secon	
1,2,3-Trichloropropane	EPA 8260B	3123007	N/A	11	ND	0.916		09/23/03	and the second	
1,2,4-Trimethylbenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916	09/23/03		CHICAGO CONTRACTOR	
1,3,5-Trimethylbenzene	EPA 8260B	3123007	N/A	2.2	ND	0.916		09/23/03		
Vinyl chloride	EPA 8260B	3123007	N/A	5.4	ND	0.916		09/23/03		
o-Xylene	EPA 8260B	3123007	N/A.	2.2	ND	0.916		09/23/03		
m,p-Xylenes	EPA 8260B	3123007	N/A	2.2	ND	0.916		09/23/03		
Surrogate: Dibromofluoromethane	(80-125%)				104 %	2., 23	33743702	07123103	*	
Surrogate: Toluene-d8 (80-120%)					101 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				84 %					

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch		Reporting Limit			n Date Extracted	Date Analyzo	Da ed Quali	
Sample ID: IMI1169-05 (MT703 - Reporting Units: ug/kg dry	Soil)				Samp	pled: 09	/16/03		QUAL	QUA
2-Chloroethyl vinyl ether	EPA 8260B	3I22014	N/A	2.4	ND	0.853	09/22/03	09/22/03	U	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3I22014	N/A	2.4	ND	0.853		09/22/03	11	
Acetone	EPA 8260B	3122014	N/A	9.5	14	0.853	09/22/03		7	16
Benzene	EPA 8260B	3I22014	N/A	1.9	ND	0.853		09/22/03	7	
Bromobenzene	EPA 8260B	3I22014	N/A	4.8	ND	0.853		09/22/03	4	
Bromochloromethane	EPA 8260B	3I22014	N/A	4.8	ND	0.853		09/22/03		
Bromodichloromethane	EPA 8260B	3I22014	N/A	1.9	ND	0.853		09/22/03		
Bromoform	EPA 8260B	3122014	N/A	4.8	ND	0.853		09/22/03		
Bromomethane	EPA 8260B	3122014	N/A	4.8	ND	0.853		09/22/03	4	
2-Butanone (MEK)	EPA 8260B	3122014	N/A	9.5	ND	0.853	09/22/03		NA SANGERS	
n-Butylbenzene	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03			
sec-Butylbenzene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03		and Bloom	200
tert-Butylbenzene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03			TI STREET
Carbon tetrachloride	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03		and the same of th	
Chlorobenzene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		THE PERSON NAMED IN COLUMN NAM	BRITTOCO NO
Chloroethane	EPA 8260B	3122014	N/A.	4.8	ND	0.853	09/22/03		900	The state of the s
Chloroform	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		TO THE PERSON NAMED IN COLUMN	
Chloromethane	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03		por a service of the	
2-Chlorotoluene	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03		SA PERSONAL PROPERTY OF THE PERSONAL PROPERTY	
4-Chlorotoluene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03			
Dibromochloromethane	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03			
Dibromomethane	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		2207/38/603	
1,2-Dichlorobenzene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		- Anna San	
1,3-Dichlorobenzene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03			
1,4-Dichlorobenzene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03	Manage Ma	
Dichlorodifluoromethane	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
1,1-Dichloroethane	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03	ED TOTAL CONTRACT	
1,2-Dichloroethane	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03			
1,1-Dichloroethene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03			
cis-1,2-Dichloroethene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
trans-1,2-Dichloroethene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
1,2-Dichloropropane	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
1,3-Dichloropropane	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03		Witten	
2,2-Dichloropropane	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		Crack desirate	
1,1-Dichloropropene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03			
cis-1,3-Dichloropropene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03		No.	
trans-1,3-Dichloropropene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		The state of the s	
Ethylbenzene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03		<b>V</b>	

Del Mar Analytical, Irvine

Michele Harper Project Manager

19

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 2652 ARIGH AVE., INVIRIE, CA 92000 (549) 261-1022 FAX (949) 261-1228 (1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 (909) 370-4667 FAX (909) 370-1046 (9

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Report Number: IMI1169

Boeing SSFL

Sampled: 09/16/03-09/17/03

Received: 09/17/03

#### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze	Da ed Quali	
Sample ID: IMI1169-05 (MT703	- Soil) - cont.					oled: 09/		1 111111 / 20	Vasi	QUAL
Reporting Units: ug/kg dry	,				~ ~~~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10,00	,	QUAL	COD
Hexachlorobutadiene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03	09/22/03	$\mathcal{U}$	
2-Hexanone	EPA 8260B	3I22014	N/A	9.5	ND	0.853		09/22/03	1	
Isopropylbenzene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
p-Isopropyltoluene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Methylene chloride	EPA 8260B	3I22014	N/A	19	ND	0.853	09/22/03	09/22/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
Naphthalene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
n-Propylbenzene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Styrene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Tetrachloroethene	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Toluene	EPA 8260B	3122014	N/A.	1.9	ND	0.853	09/22/03	09/22/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
1,2,4-Trichlorobenzene	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
1,1,1-Trichloroethane	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
1,1,2-Trichloroethane	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Trichloroethene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
Trichlorofluoromethane	EPA 8260B	3I22014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
1,2,3-Trichloropropane	EPA 8260B	3122014	N/A	9.5	ND	0.853	09/22/03	09/22/03		
1,2,4-Trimethylbenzene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
1,3,5-Trimethylbenzene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03	-	
Vinyl chloride	EPA 8260B	3122014	N/A	4.8	ND	0.853	09/22/03	09/22/03		
o-Xylene	EPA 8260B	3122014	N/A	1.9	ND	0.853	09/22/03	09/22/03		
m,p-Xylenes	EPA 8260B	3I22014	N/A	1.9	ND	0.853	09/22/03	09/22/03	$\lor$	
Surrogate: Dibromofluoromethane	(80-125%)				111%				•	
Surrogate: Toluene-d8 (80-120%)					104 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				98 %					

Del Mar Analytical, Irvine







MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

#### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze	Da ed Qual	
Sample ID: IMI1169-06 (MT705 - Reporting Units: ug/kg dry	Soil)				Sam	pled: 09/	17/03		QUAL	CODE
2-Chloroethyl vinyl ether	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03	U	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3122082	N/A	10	ND	0.949		09/22/03		
Acetone	EPA 8260B	3122082	N/A	10	ND	0.949	09/22/03	09/22/03	-	
Benzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
Bromobenzene	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03		
Bromochloromethane	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03		
Bromodichloromethane	EPA 8260B	3I22082	N/A	2.1	ND	0.949		09/22/03	MOTERA AND AND AND AND AND AND AND AND AND AN	
Bromoform	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03		
Bromomethane	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03		
2-Butanone (MEK)	EPA 8260B	3122082	N/A	10	ND	0.949		09/22/03		
n-Butylbenzene	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03	The state of the s	
sec-Butylbenzene	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03	AL PROPERTY OF THE PARTY OF THE	
tert-Butylbenzene	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03		
Carbon tetrachloride	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03		
Chlorobenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03	THE PROPERTY OF THE PROPERTY O	
Chloroethane	EPA 8260B	3I22082	N/A	5.1	ND	0.949		09/22/03	THE STREET	
Chloroform	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03		
Chloromethane	EPA 8260B	3122082	N/A	5. I	ND	0.949		09/22/03	200000000000000000000000000000000000000	
2-Chlorotoluene	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03	ALITY COMMENDED IN	
4-Chlorotoluene	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03	CANDINIS	
Dibromochloromethane	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03	roll of comments	
1,2-Dibromo-3-chloropropane	EPA 8260B	3122082	N/A	5.1	ND	0.949		09/22/03	***************************************	
1,2-Dibromoethane (EDB)	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03	2000	
Dibromomethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
1,2-Dichlorobenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
1,3-Dichlorobenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03		***************************************	
1,4-Dichlorobenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
Dichlorodifluoromethane	EPA 8260B	3I22082	N/A	5.1	ND	0.949	09/22/03			
1,1-Dichloroethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
1,2-Dichloroethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03		Distriction of the second	
1,1-Dichloroethene	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03		ESCHIPTIVA WIN	
cis-1,2-Dichloroethene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03		THE LOCAL CONTRACT OF THE PARTY	
trans-1,2-Dichloroethene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03		and the same of th	
1,2-Dichloropropane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
1,3-Dichloropropane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
2,2-Dichloropropane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
1,1-Dichloropropene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
cis-1,3-Dichloropropene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03		755	
trans-1,3-Dichloropropene	EPA 8260B	3122082	N/A	2.1	ND		09/22/03			
Ethylbenzene	EPA 8260B	3I22082	N/A	2.1	ND		09/22/03		1	

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze		
Sample ID: IMI1169-06 (MT705 - Reporting Units: ug/kg dry	Soil) - cont.				Samj	pled: 09	/17/03		GUAL GUAL	Qu Lee
Hexachlorobutadiene	EPA 8260B	3I22082	N/A	5.1	ND	0.949	09/22/03	09/22/03	U	
2-Hexanone	EPA 8260B	3122082	N/A	10	ND	0.949	09/22/03	09/22/03	i	
Isopropylbenzene	EPA 8260B	3I22082	N/A	2.1	ND	0.949	09/22/03	09/22/03		
p-Isopropyltoluene	EPA 8260B	3I22082	N/A	2.1	ND	0.949	09/22/03	09/22/03		
Methylene chloride	EPA 8260B	3122082	N/A	21	ND	0.949	09/22/03	09/22/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I22082	N/A	5.1	ND	0.949	09/22/03	09/22/03	The state of the s	
Naphthalene	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03	0,000	
n-Propylbenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03		
Styrene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03	The state of the s	
1,1,1,2-Tetrachloroethane	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03	The state of the s	
1,1,2,2-Tetrachloroethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03		
Tetrachloroethene	EPA 8260B	3I22082	N/A	2.1	ND	0.949	09/22/03	09/22/03	D. D	
Toluene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03	Zermann z	
1,2,3-Trichlorobenzene	EPA 8260B	3I22082	N/A	5.1	ND	0.949	09/22/03	09/22/03		
1,2,4-Trichlorobenzene	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03	100	
1,1,1-Trichloroethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03		
1,1,2-Trichloroethane	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03	2000	
Trichloroethene	EPA 8260B	3I22082	N/A	2.1	ND	0.949	09/22/03	09/22/03	and the second	
Trichlorofluoromethane	EPA 8260B	3122082	N/A	5.1	ND	0.949	09/22/03	09/22/03	CONTRACTOR	
1,2,3-Trichloropropane	EPA 8260B	3122082	N/A	10	ND	0.949	09/22/03	09/22/03	Strangering	
1,2,4-Trimethylbenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03	09/22/03	200000000	
1,3,5-Trimethylbenzene	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03	STATE OF THE PERSON NAMED IN COLUMN NAMED IN C	
Vinyl chloride	EPA 8260B	3I22082	N/A	5.1	ND	0.949	09/22/03	09/22/03	100000000000000000000000000000000000000	
o-Xylene	EPA 8260B	3122082	N/A	2.1	ND	0.949		09/22/03	The state of the s	
m,p-Xylenes	EPA 8260B	3122082	N/A	2.1	ND	0.949	09/22/03			
Surrogate: Dibromofluoromethane (8	0-125%)				110 %				₩	
Surrogate: Toluene-d8 (80-120%)	-				109 %					
Surrogate: 4-Bromofluorobenzene (8)	0-120%)				103 %					

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

23

Received: 09/17/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilution Factor	Date Extracted	Date Analyze		ata lifiers
Sample ID: IMI1169-08 (MT707 - Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09	/17/03		Red	100 20
2-Chloroethyl vinyl ether	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03	09/23/03	U	
Acetone	EPA 8260B	3I23027	N/A	9.1	ND	0.868		09/23/03	1	
Benzene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			MCHCHC
Bromobenzene	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03			
Bromochloromethane	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03			***************************************
Bromodichloromethane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03	09/23/03		D. Control of the Con
Bromoform	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03	09/23/03	l	No.
Bromomethane	EPA 8260B	3123027	N/A	4.5	ND	0.868		09/23/03		and the same of th
2-Butanone (MEK)	EPA 8260B	3123027	N/A	9.1	ND	0.868		09/23/03		Prioritiments
n-Butylbenzene	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
sec-Butylbenzene	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
tert-Butylbenzene	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03	09/23/03	egypholygia a de la companya a de la com	
Carbon tetrachloride	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
Chlorobenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03	09/23/03		
Chloroethane	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
Chloroform	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03	09/23/03	Transaction of the state of the	270000000000000000000000000000000000000
Chloromethane	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
2-Chlorotoluene	EPA 8260B	3123027	N/A	4.5	ND	0.868		09/23/03		
4-Chlorotoluene	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03	THE STATE OF THE S	2000
Dibromochloromethane	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03	EE Wasserger	1000
1,2-Dibromo-3-chloropropane	EPA 8260B	3123027	N/A	4.5	ND	0.868		09/23/03	ga-pa-pa-pa-pa-pa-pa-pa-pa-pa-pa-pa-pa-pa	Appropriate the second
1,2-Dibromoethane (EDB)	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
Dibromomethane	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
1,2-Dichlorobenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
1,3-Dichlorobenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
1,4-Dichlorobenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
Dichlorodifluoromethane	EPA 8260B	3123027	N/A	4.5	ND	0.868		09/23/03		
1,1-Dichloroethane	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		TO COMPANY OF THE PARTY OF THE
1,2-Dichloroethane	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		OTHER DESIGNATION OF THE PERSON OF THE PERSO
1,1-Dichloroethene	EPA 8260B	3123027	N/A	4.5	ND	0.868		09/23/03		T GROUP CO.
cis-1,2-Dichloroethene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
trans-1,2-Dichloroethene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
1,2-Dichloropropane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			TOTAL STATE OF THE
1,3-Dichloropropane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
2,2-Dichloropropane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
1,1-Dichloropropene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
cis-1,3-Dichloropropene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03		1	
trans-1,3-Dichloropropene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			- CONTROL OF THE PERSON
Ethylbenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			THE PERSON NAMED IN COLUMN NAM
Hexachlorobutadiene	EPA 8260B	3123027	N/A	4.5	ND		09/23/03		$\bigvee$	

Del Mar Analytical, Irvine

Michele Harper Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced except in full, without written permission from Del Mar Analytical.

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

## **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyz		
Sample ID: IMI1169-08 (MT707 - Reporting Units: ug/kg dry	Soil) - cont.				Samj	oled: 09	/17/03	J. 2	REV	QUAL
	FD + 00 (0P			_						COE
2-Hexanone	EPA 8260B	3123027	N/A	9.1	ND	0.868		09/23/03	U	Automotive and the second
Isopropylbenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03	,	
p-Isopropyltoluene	EPA 8260B	3123027	N/A	1.8	ND	0.868		09/23/03		
Methylene chloride	EPA 8260B	3123027	N/A	18	ND	0.868		09/23/03	San	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
Naphthalene	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03	09/23/03		
n-Propylbenzene	EPA 8260B	3I23027	N/A	1.8	ND	0.868	09/23/03	09/23/03		
Styrene	EPA 8260B	3I23027	N/A	1.8	ND	0.868	09/23/03	09/23/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03		Cl System	
1,1,2,2-Tetrachloroethane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
Tetrachloroethene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
Toluene	EPA 8260B	3I23027	N/A	1.8	ND	0.868	09/23/03		O Average and a second	
1,2,3-Trichlorobenzene	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I23027	N/A	4.5	ND	0.868	09/23/03			
1,1,1-Trichloroethane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
1,1,2-Trichloroethane	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
Trichloroethene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
Trichlorofluoromethane	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03			
1,2,3-Trichloropropane	EPA 8260B	3123027	N/A	9.1	ND	0.868	09/23/03			
1,2,4-Trimethylbenzene	EPA 8260B	3I23027	N/A	1.8	ND	0.868	09/23/03		1000	
1,3,5-Trimethylbenzene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03		Continue	
Vinyl chloride	EPA 8260B	3123027	N/A	4.5	ND	0.868	09/23/03			
o-Xylene	EPA 8260B	3123027	N/A	1.8	ND	0.868	09/23/03			
m,p-Xylenes	EPA 8260B	3I23027	N/A	1.8	ND	0.868	09/23/03		1	
Surrogate: Dibromofluoromethane (8	30-125%)				104 %	0.000	07/23/03	07123103	<b>V</b>	
Surrogate: Toluene-d8 (80-120%)	,				105 %					
Surrogate: 4-Bromofluorobenzene (8	0-120%)				101 %					
Sample ID: IMI1169-08RE1 (MT76 Reporting Units: ug/kg dry	97 - Soil)				Samp	led: 09/	17/03			
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3I24014	N/A	9.4	ND	0.898	09/24/03	00/24/02	u	
Surrogate: Dibromofluoromethane (8				· · ·	109 %	V.070	V)1471U3	U3124/U3	Pres.	
Surrogate: Toluene-d8 (80-120%)	· · · · · · · · · · · · · · · · · · ·				101 %					
Surrogate: 4-Bromofluorobenzene (88	0-120%)				99 %					

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyz		Da Quali	
Sample ID: IMI1169-09 (MT708 - Reporting Units: ug/kg dry	Soil)				Sam	pled: 09/	16/03		12E		20
Acetone	EPA 8260B	3125005	N/A	13	ND	1	09/25/03	09/26/03	U		
Benzene	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	i		
Bromobenzene	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03	- 1		
Bromochloromethane	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03			
Bromodichloromethane	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	-		
Bromoform	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03	- 1		
Bromomethane	EPA 8260B	3125005	N/A	6.5	ND	î		09/26/03	1	· I	
2-Butanone (MEK)	EPA 8260B	3125005	N/A	13	ND	1		09/26/03	1		
n-Butylbenzene	EPA 8260B	3125005	N/A	6.5	ND	i		09/26/03	1		
sec-Butylbenzene	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03			
tert-Butylbenzene	EPA 8260B	3125005	N/A	6.5	ND			09/26/03			
Carbon tetrachloride	EPA 8260B	3I25005	N/A	6.5	ND			09/26/03			
Chlorobenzene	EPA 8260B	3125005	N/A	2.6	ND			09/26/03			
Chloroethane	EPA 8260B	3125005	N/A	6.5	ND			09/26/03			
Chloroform	EPA 8260B	3125005	N/A	2.6	ND			09/26/03			
Chloromethane	EPA 8260B	3125005	N/A	6.5	ND			09/26/03			
2-Chlorotoluene	EPA 8260B	3125005	N/A	6.5	ND			09/26/03			
4-Chlorotoluene	EPA 8260B	3125005	N/A	6.5	ND			09/26/03		1	
Dibromochloromethane	EPA 8260B	3125005	N/A	2.6	ND			09/26/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I25005	N/A	6.5	ND			09/26/03	- 1		
1,2-Dibromoethane (EDB)	EPA 8260B	3125005	N/A	2.6	ND			09/26/03	-		
Dibromomethane	EPA 8260B	3125005	N/A	2.6	ND			09/26/03	-		
1,2-Dichlorobenzene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03		1	-	
1,3-Dichlorobenzene	EPA 8260B	3I25005	N/A	2.6	ND		09/25/03				
1,4-Dichlorobenzene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
Dichlorodifluoromethane	EPA 8260B	3125005	N/A	6.5	ND		09/25/03			ı	
1,1-Dichloroethane	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
1,2-Dichloroethane	EPA 8260B	3125005	N/A	2.6	ND		09/25/03			i	
1,1-Dichloroethene	EPA 8260B	3125005	N/A	6.5	ND		09/25/03		1		
cis-1,2-Dichloroethene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03		1		
trans-1,2-Dichloroethene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
1,2-Dichloropropane	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
1,3-Dichloropropane	EPA 8260B	3I25005	N/A	2.6	ND		09/25/03				
2,2-Dichloropropane	EPA 8260B	3125005	N/A	2.6	ND		09/25/03			- 1	
1,1-Dichloropropene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
cis-1,3-Dichloropropene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
trans-1,3-Dichloropropene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
Ethylbenzene	EPA 8260B	3125005	N/A	2.6	ND		09/25/03				
Hexachlorobutadiene	EPA 8260B	3125005	N/A	6.5	ND		09/25/03				
2-Hexanone	EPA 8260B	3125005	N/A	13	ND		09/25/03		V		

Del Mar Analytical, Irvine



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Received: 09/17/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyzeo	Da I Quali	
Sample ID: IMI1169-09 (MT708 Reporting Units: ug/kg dry	- Soil) - cont.				Sam	pled: 09	)/16/03		QUAL	QUA COD
Isopropylbenzene	EPA 8260B	3I25005	N/A	2.6	ND	1	09/25/03	09/26/03	u	
p-Isopropyltoluene	EPA 8260B	3125005	N/A	2.6	ND	1	09/25/03	09/26/03	1	
Methylene chloride	EPA 8260B	3125005	N/A	26	ND	1	09/25/03	09/26/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03	grand and a second	
Naphthalene	EPA 8260B	3125005	N/A	6.5	ND	1	09/25/03			
n-Propylbenzene	EPA 8260B	3I25005	N/A	2.6	ND	1			and Comments	
Styrene	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3125005	N/A	6.5	ND	1	09/25/03	09/26/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3125005	N/A	2.6	ND	I	09/25/03	09/26/03	AND THE PROPERTY OF THE PROPER	
Tetrachloroethene	EPA 8260B	3125005	N/A	2.6	ND	1	09/25/03		Constitution of the Consti	WHEN
Toluene	EPA 8260B	3125005	N/A	2.6	ND	1	09/25/03	09/26/03		
1,2,3-Trichlorobenzene	EPA 8260B	3125005	N/A	6.5	ND	1	09/25/03	09/26/03	NAME OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OWNE	CERTIFICATION
1,2,4-Trichlorobenzene	EPA 8260B	3I25005	N/A	6.5	ND	1		09/26/03	THE PERSONNEL PROPERTY OF THE PERSONNEL PROP	
1,1,1-Trichloroethane	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03		
1,1,2-Trichloroethane	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	10 mg/g/m	
Trichloroethene	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	000	
Trichlorofluoromethane	EPA 8260B	3125005	N/A	6.5	ND	1		09/26/03	4	
1,2,3-Trichloropropane	EPA 8260B	3125005	N/A	13	ND	1		09/26/03		
1,2,4-Trimethylbenzene	EPA 8260B	3I25005	N/A	2.6	ND	1		09/26/03	SUL COMMISSION OF THE PROPERTY	
1,3,5-Trimethylbenzene	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	and control of the co	
Vinyl chloride	EPA 8260B	3I25005	N/A	6.5	ND	1		09/26/03		
o-Xylene	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03	***	
m,p-Xylenes	EPA 8260B	3125005	N/A	2.6	ND	1		09/26/03		
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3125005	N/A	13	ND	1		09/26/03	$\bigvee$	ı
Surrogate: Dibromofluoromethane (	(80-125%)				98 %			02,20,00		
Surrogate: Toluene-d8 (80-120%)					98 %					
Surrogate: 4-Bromofluorobenzene (	80-120%)				95 %					

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# VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	-		Date Extracted	Date Analyze	Da d Quali	
Sample ID: IMI1169-09 (MT708 Reporting Units: ug/kg dry	- Soil) - cont.				Samı	pled: 09/	16/03		REV	CODE
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene	,	3I25005	N/A	6.5	ND 98 % 98 % 95 %	1	09/25/03	09/26/03	U	





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Received: 09/17/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyz	ed Qual	
Sample ID: IMI1169-10 (MT709 · Reporting Units: ug/l	- Water) +6				Samj	pled: 09	9/16/03		REN QUAL	1 2
Acetone	EPA 8260B	3I22026	N/A	10	ND	1	09/22/03	09/23/03	u	
Benzene	EPA 8260B	3122026	N/A	2.0	ND	1		09/23/03		
Bromobenzene	EPA 8260B	3I22026	N/A	5.0	ND	1		09/23/03		1
Bromochloromethane	EPA 8260B	3122026	N/A	5.0	ND	1		09/23/03		1
Bromodichloromethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03		1	
Bromoform	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Bromomethane	EPA 8260B	3I22026	N/A	5.0	ND	1	09/22/03			
2-Butanone (MEK)	EPA 8260B	3I22026	N/A	10	ND	1	09/22/03			ļ
n-Butylbenzene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
sec-Butylbenzene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
tert-Butylbenzene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Carbon tetrachloride	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Chlorobenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Chloroethane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Chloroform	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Chloromethane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
2-Chlorotoluene	EPA 8260B	3122026	N/A	5.0	ND	î		09/23/03		
4-Chlorotoluene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Dibromochloromethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Dibromomethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,2-Dichlorobenzene	EPA 8260B	3122026	N/A	2.0	ND	1		09/23/03		
1,3-Dichlorobenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,4-Dichlorobenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Dichlorodifluoromethane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
1,1-Dichloroethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,2-Dichloroethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,1-Dichloroethene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
cis-1,2-Dichloroethene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
trans-1,2-Dichloroethene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,2-Dichloropropane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,3-Dichloropropane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
2,2-Dichloropropane	EPA 8260B	3122026	N/A	2.0	ND	i	09/22/03		1 1	
1,1-Dichloropropene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
cis-1,3-Dichloropropene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
trans-1,3-Dichloropropene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Ethylbenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Hexachlorobutadiene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
2-Hexanone	EPA 8260B	3122026	N/A	10	ND	1	09/22/03		1	

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San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Sampled: 09/16/03-09/17/03 Report Number: IMI1169 Received: 09/17/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilution Factor	Date Extracted	Date Analyze	Dat ed Qualif	
Sample ID: IMI1169-10 (MT709 Reporting Units: ug/l	- Water) - cont.				Samı	oled: 09/	16/03		QUAL	QUAL
Isopropylbenzene	EPA 8260B	3122026	N/A.	2.0	ND	1	09/22/03	09/23/03	V	
p-Isopropyltoluene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03	09/23/03	3	
Methylene chloride	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03	09/23/03	and the same of th	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I22026	N/A	10	ND	1				
Naphthalene	EPA 8260B	3I22026	N/A	5.0	ND	1				
n-Propylbenzene	EPA 8260B	3I22026	N/A	2.0	ND	1	09/22/03	09/23/03		
Styrene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03	09/23/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03	09/23/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03	09/23/03		
Tetrachloroethene	EPA 8260B	3122026	N/A	2.0	ND	1		09/23/03		
Toluene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03	09/23/03		
1,2,3-Trichlorobenzene	EPA 8260B	3122026	N/A	5.0	ND	1		09/23/03	The state of the s	
1,2,4-Trichlorobenzene	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
1,1,1-Trichloroethane	EPA 8260B	3122026	N/A	2.0	ND	1		09/23/03		
1,1,2-Trichloroethane	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Trichloroethene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03		100	
Trichlorofluoromethane	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
1,2,3-Trichloropropane	EPA 8260B	3122026	N/A	10	ND	1	09/22/03		7(7777	
1,2,4-Trimethylbenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
1,3,5-Trimethylbenzene	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03			
Vinyl chloride	EPA 8260B	3I22026	N/A	5.0	ND	1	09/22/03		AD COLUMN TO SERVICE AND COLUMN TO SERVICE A	
o-Xylene	EPA 8260B	3122026	N/A	2.0	ND	1		09/23/03		
m,p-Xylenes	EPA 8260B	3122026	N/A	2.0	ND	1	09/22/03		ON THE PERSON NAMED OF THE	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3122026	N/A	5.0	ND	1	09/22/03			
Surrogate: Dibromofluoromethane	(80-120%)				109 %			03/23/03	* 1	
Surrogate: Toluene-d8 (80-120%)					99 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				102 %					

Del Mar Analytical, Irvine





2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

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Sampled: 09/16/03-09/17/03

Received: 09/17/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed		iers
Sample ID: IMI1169-01 (MT699 Reporting Units: ug/kg dry	- Soil)				Samı	pled: 09	/16/03		QUAL	QUA C00
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I22082 3I22082	N/A N/A	48 48	ND ND	0.888 0.888		09/23/03 09/23/03	иъ	*11
Sample ID: IMI1169-02 (MT700 - Reporting Units: ug/kg dry	- Soil)				Samp	pled: 09/	17/03			1
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3124014	N/A	52	ND	0.942	09/24/03	09/24/03		
Chlorotrifluoroethene	EPA 8260B	3I24014	N/A	52	ND	0.942	09/24/03			İ
Sample ID: IMI1169-03 (MT701 - Reporting Units: ug/kg dry	· Soil)				Samp	oled: 09/	17/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3I23007	N/A	52	ND	0.975	09/23/03	09/23/03		
Chlorotrifluoroethene	EPA 8260B	3123007	N/A	52	ND	0.975	09/23/03	09/23/03		
Sample ID: IMI1169-04 (MT702 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/	17/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3123007	N/A	54	ND	0.916	09/23/03	09/23/03		
Chlorotrifluoroethene	EPA 8260B	3123007	N/A	54	ND	0.916	09/23/03	09/23/03		
Sample ID: IMI1169-05 (MT703 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/	16/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3I22014	N/A.	48	ND	0.853	09/22/03	09/22/03	and to an	
Chlorotrifluoroethene	EPA 8260B	3I22014	N/A	48	ND	0.853	09/22/03	09/22/03		
Sample ID: IMI1169-06 (MT705 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/	17/03		A STATE OF THE STA	New York (SOCIETY OF THE PARTY
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3I22082	N/A	51	ND	0.949	09/22/03	09/22/03	A Particular	
Chlorotrifluoroethene	EPA 8260B	3122082	N/A	51	ND	0.949	09/22/03	09/22/03		
Sample ID: IMI1169-08 (MT707 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/1	17/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3123027	N/A	45	ND	0.868	09/23/03	09/23/03		
Chlorotrifluoroethene	EPA 8260B	3I23027	N/A	45	ND	0.868	09/23/03	09/23/03		
Sample ID: IMI1169-09 (MT708 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/1	16/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3125005	N/A	65	ND	1	09/25/03	09/26/03		
Chlorotrifluoroethene	EPA 8260B	3125005	N/A	65	ND		09/25/03		V	$\downarrow$

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750 San Diego, CA 92101

Attention: Lisa J. Tucker

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Sampled: 09/16/03-09/17/03

Received: 09/17/03

### PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyzed	Data Qualifie	
Sample ID: IMI1169-10 (MT709 Reporting Units: ug/l	- Water)				Samı	oled: 09	/16/03		QUAL	CODE
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3I22026	N/A	50	ND	1	09/22/03	09/23/03	4	
Chlorotrifluoroethene	EPA 8260B	3I22026	N/A	50	ND	1	09/22/03	09/23/03	u	





550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V1

SDG: IMI0247

Matrix: Soil and Water

No. of Samples: 8
No. of Reanalyses/Dilutions: 0

Date Reviewed: January 16, 2004
Reviewer: M. Pokorny

Reference: National Functional Guidelines for Organic Data Review (2/94)
Samples Reviewed: MT533, MT534, MT535, MT536, MT537, MT538, MT539, MT540

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel and accounted for the samples and analyses presented in this SDG. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	Five method blanks were analyzed with this SDG. No target compounds were reported in the method blanks.	No qualifications were required.
5. LCS/BS	Three soil LCS and two water LCS were analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. Surrogates	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.
7. MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.

Project: Rocketdyne SDG: IMI0247 Analysis: VOA

		Findings	Qualifications
8.	Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT533 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples.	Acetone was qualified as estimated, "J," in samples MT539 and MT540.
9.	Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene and performed only a TIC search for these compounds. Although the laboratory calibrated for 2-chloroethyl vinyl ether, it was not reported as a target compound in samples MT533, MT539, and MT540. 2-Chloroethyl vinyl ether was reported as a target compound in the remaining soil samples of this SDG. Although the laboratory calibrated for Freon 113, it was not reported as a target compound in samples MT539 and MT540. Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane and chlorotrifluoroethene were qualified as estimated, "UJ," in the site samples.
Co	mments	None.	None.

Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Sampled: 09/04/03 Report Number: IMI0247 Received: 09/04/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Sample ID: IMI0247-01 (MTS33 - Water)   Reporting Units: urg/1	Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Factor	n Date rExtracted	Date Analyz	D ed Qua	ata lifiers
Benzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03         ∪           Bromochloromethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03         09/13/03         9/13/03           Bromochloromethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03         09/13/03           Bromochloromethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03         09/13/03           Bromomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Bromomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Bromomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Bromomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Carbon terrachl	Sample ID: IMI0247-01 (MT53 Reporting Units: ug/l	33 - Water)				Samj	pled: 09	0/04/03			1
Bromochorzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         O9/13/03           Bromochiomomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Bromoform         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           Bromomethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           2-Butanone (MEK)         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           a-Butylbenzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           see-Butylbenzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           tetr-Butylbenzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           tetratylbenzene         EPA 8260B         3113012         N/A         5.0         ND <td></td> <td>EPA 8260B</td> <td>3I13012</td> <td>N/A</td> <td>2.0</td> <td>ND</td> <td>1</td> <td>09/13/03</td> <td>1940</td> <td></td> <td></td>		EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03	1940		
Bromochloromethane		EPA 8260B								4	
Bromodichioromethane		EPA 8260B									
Bromoferm	Bromodichloromethane	EPA 8260B					-			- 1	
Bromomethane	Bromoform										
2-Butanone (MEK)	Bromomethane										
a-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 sec-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 5.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A 2.0 ND 1 09/13/03 09/13/03 veta-Butylbenzene EPA 8260B 3113012 N/A	2-Butanone (MEK)										
sec-Butylbenzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03 </td <td>n-Butylbenzene</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>- Talenta</td> <td></td>	n-Butylbenzene									- Talenta	
Eth-Butylbenzene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Carbon tetrachloride         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09	sec-Butylbenzene										l
Carbon tetrachloride         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Chlorobenzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           Chloroform         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Chloroform         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Chlorotoluene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           4-Chlorotoluene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           4-Chlorotoluene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           1,2-Dibromo-3-chloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichlorobenzene         EPA 8260B         3113012         N/A         2.0	tert-Butylbenzene										
Chloroethane	Carbon tetrachloride										
Chlorothane	Chlorobenzene										
Chloroform	Chloroethane										
Chloromethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           2-Chlorotoluene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           4-Chlorotoluene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           Dibromochloromethane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           1,2-Dibromo-3-chloropropane         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           1,2-Dibromoethane (EDB)         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichlorobenzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,3-Dichlorobenzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,4-Dichlorobenzene         EPA 8260B         3113012         N/A <td>Chloroform</td> <td></td>	Chloroform										
2-Chlorotoluene	Chloromethane									TO THE PERSON NAMED IN COLUMN	
A-Chlorotoluene	2-Chlorotoluene									Territoria de la constanta de	
Dibromochloromethane	4-Chlorotoluene										
1,2-Dibromo-3-chloropropane	Dibromochloromethane									ANNUAL PORT	
1,2-Dibromoethane (EDB)											
Dibromomethane											
1,2-Dichlorobenzene										10	
1,3-Dichlorobenzene	1,2-Dichlorobenzene										
1,4-Dichlorobenzene	1,3-Dichlorobenzene										
Dichlorodifluoromethane         EPA 8260B         3I13012         N/A         5.0         ND         1         09/13/03         09/13/03           1,1-Dichloroethane         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloroethane         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,1-Dichloroethene         EPA 8260B         3I13012         N/A         5.0         ND         1         09/13/03         09/13/03           cis-1,2-Dichloroethene         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloroptopane         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloropropane         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloropropane         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           1,1-Dichloropropene         EPA 8260B         3I13012         N/	1,4-Dichlorobenzene										
1,1-Dichloroethane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloroethane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,1-Dichloroethene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           cis-1,2-Dichloroethene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           trans-1,2-Dichloroethene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,3-Dichloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           2,2-Dichloropropene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,1-Dichloropropene         EPA 8260B         3113012         N	Dichlorodifluoromethane									Section and an artist of the section and an artist of the section and artist of the section artist of the section and artist of the section artist of the section and artist o	
1,2-Dichloroethane	1,1-Dichloroethane									The state of the s	
1,1-Dichloroethene	1,2-Dichloroethane										
cis-1,2-Dichloroethene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           trans-1,2-Dichloroethene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,2-Dichloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,3-Dichloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           2,2-Dichloropropane         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           1,1-Dichloropropene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           cis-1,3-Dichloropropene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           Ethylbenzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           Ethylbenzene         EPA 8260B         3113012         N/A	1,1-Dichloroethene										
trans-1,2-Dichloroethene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 1,3-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 2.2-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 2.2-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 1,1-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 cis-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 trans-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 trans-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03	cis-1,2-Dichloroethene										
1,2-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 2.2-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 2.2-Dichloropropane EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 1,1-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 cis-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 trans-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 5.0 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03	trans-1,2-Dichloroethene										
1,3-Dichloropropane       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         2,2-Dichloropropane       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         1,1-Dichloropropene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         cis-1,3-Dichloropropene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         Ethylbenzene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         Hexachlorobutadiene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         2-Hexanone       EPA 8260B       3I13012       N/A       5.0       ND       1       09/13/03       09/13/03         Isopropullbangana       EPA 8260B       3I13012       N/A       10       ND       1       09/13/03       09/13/03	1,2-Dichloropropane										
2.2-Dichloropropane       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         1,1-Dichloropropene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         cis-1,3-Dichloropropene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         trans-1,3-Dichloropropene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         Ethylbenzene       EPA 8260B       3I13012       N/A       2.0       ND       1       09/13/03       09/13/03         Hexachlorobutadiene       EPA 8260B       3I13012       N/A       5.0       ND       1       09/13/03       09/13/03         2-Hexanone       EPA 8260B       3I13012       N/A       10       ND       1       09/13/03       09/13/03											
1,1-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 cis-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 trans-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Hexachlorobutadiene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 - 2-Hexanone EPA 8260B 3I13012 N/A 5.0 ND 1 09/13/03 09/13/03	2.2-Dichloropropane										
cis-1,3-Dichloropropene         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           trans-1,3-Dichloropropene         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           Ethylbenzene         EPA 8260B         3I13012         N/A         2.0         ND         1         09/13/03         09/13/03           Hexachlorobutadiene         EPA 8260B         3I13012         N/A         5.0         ND         1         09/13/03         09/13/03           2-Hexanone         EPA 8260B         3I13012         N/A         10         ND         1         09/13/03         09/13/03							•				
trans-1,3-Dichloropropene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Ethylbenzene EPA 8260B 3I13012 N/A 2.0 ND 1 09/13/03 09/13/03 Hexachlorobutadiene EPA 8260B 3I13012 N/A 5.0 ND 1 09/13/03 09/13/03 2-Hexanone EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03 Isopropyllbenzene										1 1	
Ethylbenzene         EPA 8260B         3113012         N/A         2.0         ND         1         09/13/03         09/13/03           Hexachlorobutadiene         EPA 8260B         3113012         N/A         5.0         ND         1         09/13/03         09/13/03           2-Hexanone         EPA 8260B         3113012         N/A         10         ND         1         09/13/03         09/13/03           Isopropylbengene         EPA 8260B         3113012         N/A         10         ND         1         09/13/03         09/13/03											
Hexachlorobutadiene EPA 8260B 3I13012 N/A 5.0 ND 1 09/13/03 09/13/03 2-Hexanone EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03 EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03											
2-Hexanone EPA 8260B 3I13012 N/A 10 ND 1 09/13/03 09/13/03											
Teopropythangene EDA 20 COD 2773012 TVA 10 ND 1 09/13/03 09/13/03											
										1	

Del Mar Analytical, Irvine



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date	Da	
•			Limit	Limit	Result	ractor	Extracteu	Analyze		
Sample ID: IMI0247-01 (MT53 Reporting Units: ug/l	3 - Water) - cont.				Sam	pled: 09	/04/03		Rev CUAL	QUA
p-Isopropyltoluene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03	09/13/03	U	Mary Control
Methylene chloride	EPA 8260B	3113012	N/A	5.0	ND	1		09/13/03		T CONTRACTOR OF THE CONTRACTOR
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113012	N/A	10	ND	1		09/13/03	A STATE OF S	
Naphthalene	EPA 8260B	3I13012	N/A	5.0	ND	1		09/13/03	***************************************	
n-Propylbenzene	EPA 8260B	3113012	N/A	2.0	ND	1		09/13/03		
Styrene	EPA 8260B	3113012	N/A	2.0	ND	1		09/13/03	A CONTRACTOR OF THE CONTRACTOR	
1,1,1,2-Tetrachloroethane	EPA 8260B	3I13012	N/A	5.0	ND	1	09/13/03			
1,1,2,2-Tetrachloroethane	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03			
Tetrachloroethene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03			
Toluene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03			
1,2,3-Trichlorobenzene	EPA 8260B	3I13012	N/A	5.0	ND	1	09/13/03		PRETRANSIA CANADA	
1,2,4-Trichlorobenzene	EPA 8260B	3I13012	N/A	5.0	ND	1	09/13/03		Shermon Cr	
1,1,1-Trichloroethane	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03	09/13/03	Section 2000	
1,1,2-Trichloroethane	EPA 8260B	3113012	N/A	2.0	ND	1	09/13/03	09/13/03		
Trichloroethene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03	09/13/03	Calcumpages	
Trichlorofluoromethane	EPA 8260B	3I13012	N/A	5.0	ND	1	09/13/03	09/13/03	100/02/2009	
1,2,3-Trichloropropane	EPA 8260B	3113012	N/A	10	ND	1			SUPERSTANCE	
1,2,4-Trimethylbenzene	EPA 8260B	3113012	N/A	2.0	ND	1	09/13/03	09/13/03	40.000	
1,3,5-Trimethylbenzene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03		A 10	
Vinyl chloride	EPA 8260B	3I13012	N/A	5.0	ND	1	09/13/03		TA THE STATE OF	
o-Xylene	EPA 8260B	3I13012	N/A	2.0	ND	1	09/13/03	09/13/03	00000	
m,p-Xylenes	EPA 8260B	3113012	N/A	2.0	ND	1	09/13/03	09/13/03	of the latest state of the	
Trichlorotrifluoroethane (Freon 1		3113012	N/A	5.0	ND	I	09/13/03		<b>√</b>	
Surrogate: Dibromofluoromethan	'				113 %				\$	
Surrogate: Toluene-d8 (80-120%)					107 %				OF THE PERSON	
Surrogate: 4-Bromofluorobenzen	e (80-120%)				107 %				NATIONAL PROPERTY OF	
Sample ID: IMI0247-01RE1 (M Reporting Units: ug/l	T533 - Water)				Samp	led: 09/	04/03		Electronic and progression	
Acetone	EPA 8260B	3115012	N/A	10	ND	1	09/15/03	09/15/03	υl	
Surrogate: Dibromofluoromethan			2 77 2 2	**	118 %	1	07/13/03	07113103	~ m	
Surrogate: Toluene-d8 (80-120%)	• /				112 %				1	
Surrogate: 4-Bromofluorobenzene					111 %					



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed	Qual	ata lifiers
Sample ID: IMI0247-02 (MT53 Reporting Units: ug/kg dry	34 - Soil)				Samj	oled: 09/	/04/03		EV EVAL	QUA
Acetone	EPA 8260B	3I11015	7.3	11	ND	1	09/11/03	09/11/03	U	
Benzene	EPA 8260B	3I11015	0.53	2.1	ND	1		09/11/03		
Bromobenzene	EPA 8260B	3I11015	0.90	5.3	ND	1		09/11/03	)	
Bromochloromethane	EPA 8260B	3I11015	0.47	5.3	ND	1	09/11/03			
Bromodichloromethane	EPA 8260B	3I11015	0.45	2.1	ND	1	09/11/03			
Bromoform	EPA 8260B	3I11015	0.86	5.3	ND	1	09/11/03			
Bromomethane	EPA 8260B	3111015	0.98	5.3	ND	1	09/11/03			
2-Butanone (MEK)	EPA 8260B	3I11015	7.8	11	ND	1 ·	09/11/03		The state of the s	
n-Butylbenzene	EPA 8260B	3I11015	0.77	5.3	ND	1	09/11/03			
sec-Butylbenzene	EPA 8260B	3111015	0.72	5.3	ND	1	09/11/03			
tert-Butylbenzene	EPA 8260B	3111015	0.66	5.3	ND	1	09/11/03		A STATE OF THE STA	
Carbon tetrachloride	EPA 8260B	3111015	0.71	5.3	ND	1	09/11/03			
Chlorobenzene	EPA 8260B	3111015	0.56	2.1	ND	1	09/11/03			
Chloroethane	EPA 8260B	3I11015	1.2	5.3	ND	1	09/11/03		and the same of th	
Chloroform	EPA 8260B	3111015	0.43	2.1	ND	1	09/11/03			
Chloromethane	EPA 8260B	3111015	1.5	5.3	ND	1	09/11/03		7773470	
2-Chlorotoluene	EPA 8260B	3111015	0.93	5.3	ND	1	09/11/03		A CALLONDING	
4-Chlorotoluene	EPA 8260B	3111015	0.79	5.3	ND	1	09/11/03		Transcourage of the second	
Dibromochloromethane	EPA 8260B	3111015	0.60	2.1	ND	1	09/11/03		challenchers.	
1,2-Dibromo-3-chloropropane	EPA 8260B	3111015	1.6	5.3	ND	1	09/11/03		Annual Contraction of the Contra	
1,2-Dibromoethane (EDB)	EPA 8260B	3111015	0.71	2.1	ND	1	09/11/03		The state of the s	
Dibromomethane	EPA 8260B	3111015	0.66	2.1	ND	1	09/11/03		- Political	
1,2-Dichlorobenzene	EPA 8260B	3I11015	1.0	2.1	ND	1	09/11/03		deminifolities or	
1,3-Dichlorobenzene	EPA 8260B	3I11015	0.90	2.1	ND	1	09/11/03		Annual Community of	
1,4-Dichlorobenzene	EPA 8260B	3111015	1.0	2.1	ND	1	09/11/03		#EXPANTIONS	
Dichlorodifluoromethane	EPA 8260B	3111015	0.88	5.3	ND	1	09/11/03		-months	
1,1-Dichloroethane	EPA 8260B	3111015	0.40	2.1	ND	1	09/11/03		000000	
1,2-Dichloroethane	EPA 8260B	3111015	0.62	2.1	ND	1	09/11/03		- Contraction	
1,1-Dichloroethene	EPA 8260B	3111015	0.48	5.3	ND	1	09/11/03		THE REAL PROPERTY.	
cis-1,2-Dichloroethene	EPA 8260B	3111015	0.37	2.1	ND	1	09/11/03		all desired	
trans-1,2-Dichloroethene	EPA 8260B	3111015	0.44	2.1	ND	1	09/11/03		-	
1,2-Dichloropropane	EPA 8260B	3111015	0.32	2.1	ND	1	09/11/03			
1,3-Dichloropropane	EPA 8260B	3111015	0.67	2.1	ND	1	09/11/03			
2,2-Dichloropropane	EPA 8260B	3111015	0.48	2.1	ND	1	09/11/03		ARTICLE STATE	
1,1-Dichloropropene	EPA 8260B	3I11015	0.30	2.1	ND	1	09/11/03		Total Control	
cis-1,3-Dichloropropene	EPA 8260B	3I11015	0.47	2.1	ND	1	09/11/03		ersone.	
trans-1,3-Dichloropropene	EPA 8260B	3111015	0.55	2.1	ND	1	09/11/03		The second	
Ethylbenzene	EPA 8260B	3111015	0.55	2.1	ND	1	09/11/03			
Hexachlorobutadiene	EPA 8260B	3111015	0.78	5.3	ND	1	09/11/03			
2-Hexanone	EPA 8260B	3111015	9.7	11	ND	1	09/11/03		<b>V</b>	

Del Mar Analytical, Irvine







1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

				• •		•		,		
Analyte	Method	Batch	MDL Limit	Reporting Limit	_		Date Extracted	Date Analyzed	Da l Quali	
Sample ID: IMI0247-02 (MT534 Reporting Units: ug/kg dry	4 - Soil) - cont.				Samı	oled: 09/	04/03		ZEV ZUAL	Col
Isopropylbenzene	EPA 8260B	3I11015	0.58	2.1	ND	1	09/11/03	09/11/03	じ	
p-Isopropyltoluene	EPA 8260B	3I11015	0.77	2.1	ND	1	09/11/03	09/11/03	1	
Methylene chloride	EPA 8260B	3I11015	6.9	21	ND	1	09/11/03	09/11/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11015	3.4	5.3	ND	1	09/11/03	09/11/03	- 1	
Naphthalene	EPA 8260B	3I11015	1.2	5.3	ND	1	09/11/03	09/11/03		
n-Propylbenzene	EPA 8260B	3I11015	0.65	2.1	ND	1	09/11/03	09/11/03		
Styrene	EPA 8260B	3111015	0.62	2.1	ND	1	09/11/03	09/11/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3111015	0.61	5.3	ND	1	09/11/03	09/11/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11015	0.82	2.1	ND	1	09/11/03	09/11/03		
Tetrachloroethene	EPA 8260B	3I11015	0.52	2.1	ND	1	09/11/03	09/11/03		
Toluene	EPA 8260B	3I11015	0.97	2.1	ND	1	09/11/03	09/11/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I11015	1.1	5.3	ND	1	09/11/03	09/11/03	SPORTS STATE	
1,2,4-Trichlorobenzene	EPA 8260B	3I11015	1.1	5.3	ND	1	09/11/03	09/11/03	9	
1,1,1-Trichloroethane	EPA 8260B	3111015	0.42	2.1	ND	1	09/11/03	09/11/03	-	
1,1,2-Trichloroethane	EPA 8260B	3111015	0.81	2.1	ND	1	09/11/03	09/11/03		
Trichloroethene	EPA 8260B	3I11015	0.36	2.1	ND	1	09/11/03	09/11/03	***************************************	
Trichlorofluoromethane	EPA 8260B	3I11015	0.58	5.3	ND	1	09/11/03	09/11/03	7000 C	
1,2,3-Trichloropropane	EPA 8260B	3111015	1.8	11	ND	1	09/11/03	09/11/03	900	
1,2,4-Trimethylbenzene	EPA 8260B	3111015	0.83	2.1	ND	1	09/11/03	09/11/03		
1,3,5-Trimethylbenzene	EPA 8260B	3111015	0.67	2.1	ND	1	09/11/03	09/11/03		
Vinyl chloride	EPA 8260B	3I11015	0.97	5.3	ND	1	09/11/03	09/11/03	Company Company	
o-Xylene	EPA 8260B	3111015	0.50	2.1	ND	1	09/11/03	09/11/03	No.	
m,p-Xylenes	EPA 8260B	3I11015	0.80	2.1	ND	1	09/11/03	09/11/03	Olympia and the second	
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3I11015	1.3	11	ND	1	09/11/03	09/11/03	V	
Surrogate: Dibromofluoromethan					107 %			o.	i	
Surrogate: Toluene-d8 (80-120%)					104 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				95 %					



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### **VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)**

, , , , , , , , , , , , , , , , , , , ,	OXIONATIC	, , , , , , , ,		LIES Dy C	J C/11115		202010	2000)		
Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze	Da ed Quali	
Sample ID: IMI0247-03 (MT535 - Reporting Units: ug/kg dry	Soil)				Samj	oled: 09	/04/03	and a	RO/ QUAL	QUA
Acetone	EPA 8260B	3I11015	7.5	11	ND	1	09/11/03	09/11/03	U	
Benzene	EPA 8260B	3I11015	0.55	2.2	ND	1	09/11/03		Marine 2	
Bromobenzene	EPA 8260B	3I11015	0.92	5.5	ND	î		09/11/03	The state of the s	
Bromochloromethane	EPA 8260B	3111015	0.48	5.5	ND	1		09/11/03	The state of the s	
Bromodichloromethane	EPA 8260B	3I11015	0.46	2.2	ND	1		09/11/03	A STATE OF THE STA	
Bromoform	EPA 8260B	3I11015	0.88	5.5	ND	ì		09/11/03	Through the same of the same o	
Bromomethane	EPA 8260B	3I11015	1.0	5.5	ND	1		09/11/03	Patricipping Special Control	
2-Butanone (MEK)	EPA 8260B	3I11015	8.0	11	ND	1	09/11/03		denteration of	
n-Butylbenzene	EPA 8260B	3I11015	0.79	5.5	ND	1	09/11/03			
sec-Butylbenzene	EPA 8260B	3I11015	0.74	5.5	ND	1	09/11/03			
tert-Butylbenzene	EPA 8260B	3I11015	0.68	5.5	ND	1	09/11/03		West States	
Carbon tetrachloride	EPA 8260B	3I11015	0.73	5.5	ND	1	09/11/03		Statute	
Chlorobenzene	EPA 8260B	3111015	0.57	2.2	ND	ī	09/11/03		actionage 	
Chloroethane	EPA 8260B	3111015	1.2	5.5	ND	1	09/11/03			
Chloroform	EPA 8260B	3I11015	0.44	2.2	ND	1	09/11/03			
Chloromethane	EPA 8260B	3111015	1.5	5.5	ND	1			TOWNS THE PERSON NAMED IN COLUMN NAMED IN COLU	
2-Chlorotoluene	EPA 8260B	3I11015	0.96	5.5	ND	i			Approximation (Sp)	
4-Chlorotoluene	EPA 8260B	3111015	0.81	5.5	ND	1	09/11/03		and the same of th	
Dibromochloromethane	EPA 8260B	3I11015	0.62	2.2	ND	1	09/11/03		ALL PROPERTY OF THE PROPERTY O	
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11015	1.6	5.5	ND	1	09/11/03		and the same	
1,2-Dibromoethane (EDB)	EPA 8260B	3I11015	0.73	2.2	ND	1	09/11/03		25 cm 1 cm 25	
Dibromomethane	EPA 8260B	3111015	0.68	2.2	ND	1	09/11/03		No.	
1,2-Dichlorobenzene	EPA 8260B	3I11015	1.0	2.2	ND	ī			The Charles	
1,3-Dichlorobenzene	EPA 8260B	3I11015	0.92	2.2	ND	1	09/11/03		Antonia Maria	
1,4-Dichlorobenzene	EPA 8260B	3I11015	1.0	2.2	ND	1	09/11/03		Maritan	
Dichlorodifluoromethane	EPA 8260B	3111015	0.90	5.5	ND	1	09/11/03			
1,1-Dichloroethane	EPA 8260B	3I11015	0.41	2.2	ND	1	09/11/03		College Control of the Control of th	
1,2-Dichloroethane	EPA 8260B	3111015	0.64	2.2	ND	1	09/11/03			
1,1-Dichloroethene	EPA 8260B	3111015	0.49	5.5	ND	1	09/11/03		1	
cis-1,2-Dichloroethene	EPA 8260B	3111015	0.38	2.2	ND	1	09/11/03		American de la constanta de la	
trans-1,2-Dichloroethene	EPA 8260B	3I11015	0.45	2.2	ND	1	09/11/03		Sold of the second	
1,2-Dichloropropane	EPA 8260B	3I11015	0.33	2.2	ND	1	09/11/03		The state of the s	
1,3-Dichloropropane	EPA 8260B	3I11015		2.2	ND	î	09/11/03		LONG-DAVIDOR DE LA CONTRACTOR DE LA CONT	
2,2-Dichloropropane	EPA 8260B	3I11015	0.49	2.2	ND	1	09/11/03		0000	
1,1-Dichloropropene	EPA 8260B	3111015	0.31	2.2	ND	1	09/11/03			
cis-1,3-Dichloropropene	EPA 8260B	3I11015	0.48	2.2	ND	1	09/11/03			
trans-1,3-Dichloropropene	EPA 8260B	3I11015	0.56	2.2	ND	1	09/11/03		Taraca Constitution (Constitution Constitution Constituti	
Ethylbenzene	EPA 8260B	3I11015	0.56	2.2	ND	1	09/11/03		THE STATE OF THE S	
Hexachlorobutadiene	EPA 8260B	3I11015	0.80	5.5	ND	1	09/11/03		renderenses	
2-Hexanone	EPA 8260B	3I11015	10	11	ND	1	09/11/03		V I	
						~	22.22.02	-5 1.00	ė.	

Del Mar Analytical, Irvine

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 2852 Alton Ava., Irvine, AA 92000 (949) 261-1022 PAX (949) 261-1028 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03

Received: 09/04/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed	Da Quali	
Sample ID: IMI0247-03 (MT535 Reporting Units: ug/kg dry	- Soil) - cont.				Samj	pled: 09/	04/03		SONF FOR	QUA Cat
Isopropylbenzene	EPA 8260B	3I11015	0.59	2.2	ND	1	09/11/03	09/11/03		
p-Isopropyltoluene	EPA 8260B	3I11015	0.79	2.2	ND	1	09/11/03	09/11/03	1	
Methylene chloride	EPA 8260B	3I11015	7.1	22	ND	1	09/11/03	09/11/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11015	3.5	5.5	ND	1	09/11/03	09/11/03	***************************************	
Naphthalene	EPA 8260B	3I11015	1.2	5.5	ND	1	09/11/03	09/11/03	Directions	
n-Propylbenzene	EPA 8260B	3I11015	0.67	2.2	ND	1	09/11/03	09/11/03		
Styrene	EPA 8260B	3111015	0.64	2.2	ND	1	09/11/03	09/11/03	SECTION SILE	
1,1,1,2-Tetrachloroethane	EPA 8260B	3I11015	0.63	3. <b>5</b>	ND	1	09/11/03	09/11/03	SÉ-VILLES SANS	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11015	0.85	2.2	ND	1	09/11/03	09/11/03	or Girmenton	
Tetrachloroethene	EPA 8260B	3111015	0.54	2.2	ND	1	09/11/03	09/11/03	STEEL ST	
Toluene	EPA 8260B	3111015	1.0	2.2	ND	1	09/11/03	09/11/03	distance of the second	
1,2,3-Trichlorobenzene	EPA 8260B	3111015	1.1	5.5	ND	1	09/11/03	09/11/03	A) months of the	
1,2,4-Trichlorobenzene	EPA 8260B	3111015	1.1	5.5	ND	1	09/11/03	09/11/03	Management of the Control of the Con	
1,1,1-Trichloroethane	EPA 8260B	3I11015	0.43	2.2	ND	1	09/11/03	09/11/03	ALL STATES OF THE STATES OF TH	
1,1,2-Trichloroethane	EPA 8260B	3I11015	0.83	2.2	ND	1	09/11/03	09/11/03	esevimes	
Trichloroethene	EPA 8260B	3I11015	0.37	2.2	ND	1	09/11/03	09/11/03	- Andreas	
Trichlorofluoromethane	EPA 8260B	3I11015	0.59	5.5	ND	1	09/11/03	09/11/03	COLUMN CO	
1,2,3-Trichloropropane	EPA 8260B	3I11015	1.9	11	ND	1	09/11/03	09/11/03	econocies	
1,2,4-Trimethylbenzene	EPA 8260B	3111015	0.86	2.2	ND	1	09/11/03	09/11/03	**************************************	
1,3,5-Trimethylbenzene	EPA 8260B	3111015	0.69	2.2	ND	1	09/11/03	09/11/03	THE STATE OF THE S	
Vinyl chloride	EPA 8260B	3111015	1.0	5.5	ND	1	09/11/03	09/11/03	REGERMAN THE	
o-Xylene	EPA 8260B	3111015	0.52	2.2	ND	1	09/11/03	09/11/03	SPECKERS.	
m,p-Xylenes	EPA 8260B	3111015	0.82	2.2	ND	1	09/11/03	09/11/03	Witnest Steel	
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3I11015	1.3	11	ND	1	09/11/03	09/11/03	$\forall$	
Surrogate: Dibromofluoromethane	(80-125%)				107 %			**	Strikenes	
Surrogate: Toluene-d8 (80-120%)					103 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				93 %					



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			_			(	000000	<b>-00</b> D)		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze	Da d Quali	
Sample ID: IMI0247-04 (MT5. Reporting Units: ug/kg dry	36 - Soil)				Sam	pled: 09	/04/03		RAV QUAL	Qua CC1
Acetone	EPA 8260B	3I11015	7.4	11	ND	1	09/11/03	09/11/03	U	and a second
Benzene	EPA 8260B	3I11015	0.55	2.2	ND	1		09/11/03		
Bromobenzene	EPA 8260B	3I11015	0.92	5.5	ND	1		09/11/03	- Land	
Bromochloromethane	EPA 8260B	3I11015	0.48	5.5	ND	1		09/11/03	an and an	
Bromodichloromethane	EPA 8260B	3I11015	0.46	2.2	ND	1		09/11/03	TOTAL COLUMN	
Bromoform	EPA 8260B	3111015	0.87	5.5	ND	î		09/11/03		
Bromomethane	EPA 8260B	3111015	1.0	5.5	ND	1		09/11/03	000 000 000 000 000 000 000 000 000 00	
2-Butanone (MEK)	EPA 8260B	3111015	8.0	11	ND	1		09/11/03	NE LINGUAGE DE L'ALTERNATION DE L'ALTERN	
n-Butylbenzene	EPA 8260B	3111015	0.79	5.5	ND	l		09/11/03	2.22000E2500	
sec-Butylbenzene	EPA 8260B	3111015	0.73	5.5	ND	l		09/11/03	MATERIAL SERVICES	
tert-Butylbenzene	EPA 8260B	3I11015	0.68	5.5	ND	1	09/11/03		aven's season	
Carbon tetrachloride	EPA 8260B	3I11015	0.72	5.5	ND	î	09/11/03			
Chlorobenzene	EPA 8260B	3I11015	0.57	2.2	ND	1	09/11/03		CHANGE CONTRACTOR	
Chloroethane	EPA 8260B	3I11015	1.2	5.5	ND	1	09/11/03		2000 Marie 1	
Chloroform	EPA 8260B	3I11015	0.44	2.2	ND	1	09/11/03		Management of the Contract of	
Chloromethane	EPA 8260B	3111015	1.5	5.5	ND	1	09/11/03		**************************************	
2-Chlorotoluene	EPA 8260B	3111015	0.95	5.5	ND	1	09/11/03		der de la company de la compan	
4-Chlorotoluene	EPA 8260B	3111015	0.81	5.5	ND	1	09/11/03		STEEDOOD TO	
Dibromochloromethane	EPA 8260B	3I11015	0.61	2.2	ND	1	09/11/03		1000000	
1,2-Dibromo-3-chloropropane	EPA 8260B	3111015	1.6	5.5	ND	1	09/11/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3111015	0.72	2.2	ND	1	09/11/03		and a second	
Dibromomethane	EPA 8260B	3I11015	0.68	2.2	ND	1	09/11/03		day of the same	
1,2-Dichlorobenzene	EPA 8260B	3111015	1.0	2.2	ND	1	09/11/03		Phintenson and	
1,3-Dichlorobenzene	EPA 8260B	3111015	0.92	2.2	ND	1	09/11/03		Witnesses,	
1,4-Dichlorobenzene	EPA 8260B	3111015	1.0	2.2	ND	1	09/11/03		MANAGE CONTRACTOR OF THE PARTY	
Dichlorodifluoromethane	EPA 8260B	3I11015	0.89	5.5	ND	1	09/11/03		TO THE PERSON OF	
1,1-Dichloroethane	EPA 8260B	3I11015	0.40	2.2	ND	1	09/11/03		72.00	
1,2-Dichloroethane	EPA 8260B	3111015	0.63	2.2	ND	1	09/11/03		000	
1,1-Dichloroethene	EPA 8260B	3111015	0.49	5.5	ND	1	09/11/03		MANAGEMENT OF THE PROPERTY OF	
cis-1,2-Dichloroethene	EPA 8260B	3I11015	0.38	2.2	ND	1	09/11/03		CANDON CON	
trans-1,2-Dichloroethene	EPA 8260B	3I11015	0.45	2.2	ND	1	09/11/03		1300	
1,2-Dichloropropane	EPA 8260B	3I11015	0.33	2.2	ND	1	09/11/03		B## 1000	
1,3-Dichloropropane	EPA 8260B	3I11015	0.69	2.2	ND	1	09/11/03		7.000	
2,2-Dichloropropane	EPA 8260B	3111015	0.49	2.2	ND	1	09/11/03			
1,1-Dichloropropene	EPA 8260B	3I11015	0.31	2.2	ND	1	09/11/03		000	
cis-1,3-Dichloropropene	EPA 8260B	3111015	0.48	2.2	ND	1	09/11/03		100	
trans-1,3-Dichloropropene	EPA 8260B	3111015	0.56	2.2	ND	1	09/11/03		City and City	
Ethylbenzene	EPA 8260B	3I11015	0.56	2.2	ND	1	09/11/03		Tall the same of t	
Hexachlorobutadiene	EPA 8260B	3I11015	0.80	5.5	ND	1	09/11/03		The section of the se	
2-Hexanone	EPA 8260B	3111015	9.9	11	ND	1	09/11/03		- Company	
									Special Control of the Control of th	

Del Mar Analytical, Irvine

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 980 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03

Received: 09/04/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze	Da d Quali	
Sample ID: IMI0247-04 (MT536 Reporting Units: ug/kg dry	- Soil) - cont.				Sampled: 09/04/03				RD/ QUAL	QUAL
Isopropylbenzene	EPA 8260B	3111015	0.59	2.2	ND	1	09/11/03	09/11/03	()	Description.
p-Isopropyltoluene	EPA 8260B	3111015	0.79	2.2	ND	1	09/11/03		$\sim$	P COMPLEXION
Methylene chloride	EPA 8260B	3111015	7.1	22	ND	1	09/11/03		ACCIONISTS.	o-annumeros
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11015	3.5	5.5	ND	1		09/11/03		TELEFORM STATES
Naphthalene	EPA 8260B	3111015	1.2	5.5	ND	1		09/11/03	ale and a second	
n-Propylbenzene	EPA 8260B	3I11015	0.67	2.2	ND	1		09/11/03	Contract Con	arcasomics and a second
Styrene	EPA 8260B	3I11015	0.63	2.2	ND	1		09/11/03	Para Para Para Para Para Para Para Para	
1,1,1,2-Tetrachloroethane	EPA 8260B	3111015	0.62	5.5	ND	1	09/11/03	09/11/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11015	0.84	2.2	ND	1		09/11/03	one and	
Tetrachloroethene	EPA 8260B	3111015	0.53	2.2	ND	1		09/11/03	Agenta Maria	
Toluene	EPA 8260B	3111015	0.99	2.2	ND	1	09/11/03	09/11/03	OHI or to get	
1,2,3-Trichlorobenzene	EPA 8260B	3I11015	1.1	5.5	ND	1	09/11/03		Machania	
1,2,4-Trichlorobenzene	EPA 8260B	3I11015	1.1	5.5	ND	1		09/11/03	throsing co.	
1,1,1-Trichloroethane	EPA 8260B	3111015	0.43	2.2	ND	1	09/11/03	09/11/03	Tata consumption of	
1,1,2-Trichloroethane	EPA 8260B	3111015	0.83	2.2	ND	1			No.	
Trichloroethene	EPA 8260B	3I11015	0.37	2.2	ND	1			-	
Trichlorofluoromethane	EPA 8260B	3I11015	0.59	5.5	ND	1	09/11/03		AGRICA STATE OF THE STATE OF TH	
1,2,3-Trichloropropane	EPA 8260B	3I11015	1.9	11	ND	1	09/11/03			
1,2,4-Trimethylbenzene	EPA 8260B	3I11015	0.85	2.2	ND	1			demonstration of the state of t	
1,3,5-Trimethylbenzene	EPA 8260B	3I11015	0.69	2.2	ND	1	09/11/03	09/11/03	Beselfours vons	
Vinyl chloride	EPA 8260B	3I11015	0.99	5.5	ND	1	09/11/03	09/11/03	- Company	
o-Xylene	EPA 8260B	3I11015	0.51	2.2	ND	1		09/11/03		
m,p-Xylenes	EPA 8260B	3I11015	0.82	2.2	ND	1		09/11/03	TO THE STATE OF TH	
Trichlorotrifluoroethane (Freon 113	) EPA 8260B	3111015	1.3	11	ND	1	09/11/03		$\downarrow$	
Surrogate: Dibromofluoromethane	(80-125%)				109 %				A	
Surrogate: Toluene-d8 (80-120%)	• *				104 %			v		
Surrogate: 4-Bromofluorobenzene (	(80-120%)				93 %					



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			on Date orExtracted	Date Analyz		
Sample ID: IMI0247-05 (MT537 Reporting Units: ug/kg dry	- Soil)				Sam	pled: (	09/04/03	ь	REV QUAL	Qui
Acetone	EPA 8260B	3I11015	7.6	11	ND	1	09/11/03	09/11/03	ا	WEED COLUMN
Benzene	EPA 8260B	3111015	0.56	2.2	ND	1		09/11/03		
Bromobenzene	EPA 8260B	3111015	0.94	5.6	ND	1		09/11/03		
Bromochloromethane	EPA 8260B	3111015	0.49	5.6	ND	1		09/11/03	Meconomy	Para Para Para Para Para Para Para Para
Bromodichloromethane	EPA 8260B	3111015	0.47	2.2	ND	1	09/11/03			electronic de la company de la
Bromoform	EPA 8260B	3111015	0.90	5.6	ND	1		09/11/03	Office/service	
Bromomethane	EPA 8260B	3I11015	1.0	5.6	ND	1	09/11/03		or con party or	500000000000000000000000000000000000000
2-Butanone (MEK)	EPA 8260B	3I11015	8.2	11	ND	1	09/11/03		The state of the s	
n-Butylbenzene	EPA 8260B	3I11015	0.81	5.6	ND	1	09/11/03		4114	0
sec-Butylbenzene	EPA 8260B	3111015	0.75	5.6	ND	1	09/11/03		COMPONENT COMPON	
tert-Butylbenzene	EPA 8260B	3111015	0.70	5.6	ND	1	09/11/03		dental and	
Carbon tetrachloride	EPA 8260B	3I11015	0.74	5.6	ND	1	09/11/03		700	
Chlorobenzene	EPA 8260B	3I11015	0.58	2.2	ND	1	09/11/03		7,000	
Chloroethane	EPA 8260B	3I11015	1.2	5.6	ND	1	09/11/03			
Chloroform	EPA 8260B	3I11015	0.45	2.2	ND	1	09/11/03		700	
Chloromethane	EPA 8260B	3111015	1.6	5.6	ND	1	09/11/03			
2-Chlorotoluene	EPA 8260B	3I11015	0.98	5.6	ND	1	09/11/03		And control of the co	
4-Chlorotoluene	EPA 8260B	3I11015	0.83	5.6	ND	1	09/11/03			
Dibromochloromethane	EPA 8260B	3I11015	0.63	2.2	ND	1	09/11/03		- September 1	
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11015	1.7	5.6	ND	1	09/11/03		7.00	
1,2-Dibromoethane (EDB)	EPA 8260B	3I11015	0.74	2.2	ND	1	09/11/03		1000	
Dibromomethane	EPA 8260B	3111015	0.70	2.2	ND	1	09/11/03		Property or an artist of the second	
1,2-Dichlorobenzene	EPA 8260B	3111015	1.1	2.2	ND	1	09/11/03		400	
1,3-Dichlorobenzene	EPA 8260B	3111015	0.94	2.2	ND	1	09/11/03		Vincentary ( s	
1,4-Dichlorobenzene	EPA 8260B	3I11015	1.1	2.2	ND	1	09/11/03		STANCE CONTRACTOR	
Dichlorodifluoromethane	EPA 8260B	3I11015	0.92	5.6	ND	1	09/11/03	09/11/03	912000	
1,1-Dichloroethane	EPA 8260B	3111015	0.42	2.2	ND	1	09/11/03	09/11/03	Andreas	
1,2-Dichloroethane	EPA 8260B	3111015	0.65	2.2	ND	1	09/11/03	09/11/03	Shalledunki Challedunki Challedunki	
1,1-Dichloroethene	EPA 8260B	3111015	0.50	5.6	ND	1	09/11/03	09/11/03		
cis-1,2-Dichloroethene	EPA 8260B	3111015	0.39	2.2	ND	1	09/11/03	09/11/03	and the second second	
trans-1,2-Dichloroethene	EPA 8260B	3I11015	0.46	2.2	ND	1	09/11/03		Windowski wa	
1,2-Dichloropropane	EPA 8260B	3I11015	0.34	2.2	ND	1	09/11/03	09/11/03	C-ANDERSON DESCRIPTION OF THE PERSON DESCRIP	
1,3-Dichloropropane	EPA 8260B	3111015	0.71	2.2	ND	1	09/11/03	09/11/03	- CONTRACTOR	
2,2-Dichloropropane	EPA 8260B	3111015	0.50	2.2	ND	1	09/11/03		den skelende	
1,1-Dichloropropene	EPA 8260B	3111015	0.31	2.2	ND	1	09/11/03	09/11/03	WASSERSE	
cis-1,3-Dichloropropene	EPA 8260B	3111015	0.49	2.2	ND	1	09/11/03		90000000000000000000000000000000000000	
trans-1,3-Dichloropropene	EPA 8260B	3I11015	0.57	2.2	ND	1	09/11/03		Wildowskic	
Ethylbenzene	EPA 8260B	3I11015	0.57	2.2	ND	1	09/11/03		Manager of Assessed Principles	
Hexachlorobutadiene	EPA 8260B	3I11015	0.82	5.6	ND	1	09/11/03		odinessamina simple simple sim	
2-Hexanone	EPA 8260B	3I11015	10	. 11	ND	1	09/11/03		1	

Del Mar Analytical, Irvine

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

				•		`		/		
Amaluta	Mathad	Datah		Reporting	-			Date	Da	
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyz	~ ,	
Sample ID: IMI0247-05 (MT537	- Soil) - cont.				Sami	pled: 09/	04/03		SEN	QUAL
Reporting Units: ug/kg dry	,				•				QUAL	CCDE
Isopropylbenzene	EPA 8260B	3I11015	0.61	2.2	ND	1	09/11/03	09/11/03	U	
p-Isopropyltoluene	EPA 8260B	3111015	0.81	2.2	ND	1	09/11/03	09/11/03	1	
Methylene chloride	EPA 8260B	3111015	7.3	22	ND	1	09/11/03	09/11/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11015	3.6	5.6	ND	1	09/11/03	09/11/03		
Naphthalene	EPA 8260B	3111015	1.2	5.6	ND	1	09/11/03	09/11/03		
n-Propylbenzene	EPA 8260B	3I11015	0.68	2.2	ND	1	09/11/03	09/11/03		
St <sub>y</sub> rene	EPA 8260B	3111015	0.65	2.2	ND	1	09/11/03	09/11/03	-	
1,1,1,2-Tetrachloroethane	EPA 8260B	3I11015	0.64	5.6	ND	1	09/11/03	09/11/03	İ	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11015	0.86	2.2	ND	1	09/11/03	09/11/03		
Tetrachloroethene	EPA 8260B	3111015	0.55	2.2	ND	1	09/11/03	09/11/03		
Toluene	EPA 8260B	3111015	1.0	2.2	ND	1	09/11/03	09/11/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I11015	1.1	5.6	ND	1	09/11/03	09/11/03		
1,2,4-Trichlorobenzene	EPA 8260B	3111015	1. I	5.6	ND	1	09/11/03	09/11/03		
1,1,1-Trichloroethane	EPA 8260B	3111015	0.44	2.2	ND	1	09/11/03	09/11/03		
1,1,2-Trichloroethane	EPA 8260B	3111015	0.85	2.2	ND	1	09/11/03	09/11/03	- Annual Control	
Trichloroethene	EPA 8260B	3I11015	0.38	2.2	ND	1	09/11/03	09/11/03		
Trichlorofluoromethane	EPA 8260B	3111015	0.61	5.6	ND	1	09/11/03	09/11/03		
1,2,3-Trichloropropane	EPA 8260B	3111015	1.9	11	ND	1	09/11/03	09/11/03		
1,2,4-Trimethylbenzene	EPA 8260B	3I11015	0.87	2.2	ND	1	09/11/03	09/11/03		
1,3,5-Trimethylbenzene	EPA 8260B	3I11015	0.71	2.2	ND	1	09/11/03	09/11/03		
Vinyl chloride	EPA 8260B	3111015	1.0	5.6	ND	1	09/11/03	09/11/03		
o-Xylene	EPA 8260B	3111015	0.53	2.2	ND	1	09/11/03	09/11/03		
m,p-Xylenes	EPA 8260B	3111015	0.84	2.2	ND	1	09/11/03	09/11/03		
Trichlorotrifluoroethane (Freon 113	3) EPA 8260B	3I11015	1.3	11	ND	1	09/11/03	09/11/03	<b>J</b> 1	
Surrogate: Dibromofluoromethane	(80-125%)				106 %			**	1	
Surrogate: Toluene-d8 (80-120%)					104 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				94 %					
1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride o-Xylene m,p-Xylenes Trichlorotrifluoroethane (Freon 112 Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%)	EPA 8260B EPA 8260B	3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015 3I11015	0.86 0.55 1.0 1.1 1.1 0.44 0.85 0.38 0.61 1.9 0.87 0.71 1.0 0.53 0.84	2.2 2.2 2.2 5.6 5.6 2.2 2.2 2.2 5.6 11 2.2 2.2 5.6 2.2	ND ND ND ND ND ND ND ND ND ND ND ND ND N	1 1 1 1 1 1 1 1 1 1 1 1	09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03	09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03 09/11/03	***************************************	

Del Mar Analytical, Irvine Michele Harper

Project Manager



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			on Date rExtracted	Date Analyze	~ /	fiers
Sample ID: IM10247-06 (MT538 Reporting Units: ug/kg dry	8 - Soil)				Samj	pled: 0	9/04/03	_	QUA L	QUA
Acetone	EPA 8260B	3I11015	7.0	10	ND	1	09/11/03	09/11/03	ا ں	
Benzene	EPA 8260B	3I11015	0.51	2.1	0.58	1		09/11/03	J	
Bromobenzene	EPA 8260B	3I11015	0.86	5.1	ND	1		09/11/03	U	
Bromochloromethane	EPA 8260B	3I11015	0.45	5.1	ND	1		09/11/03	7 1	
Bromodichloromethane	EPA 8260B	3I11015	0.43	2.1	ND	1		09/11/03		
Bromoform	EPA 8260B	3I11015	0.82	5.1	ND	1		09/11/03		
Bromomethane	EPA 8260B	3I11015	0.95	5.1	ND	1	09/11/03			
2-Butanone (MEK)	EPA 8260B	3111015	7.5	10	ND	1	09/11/03			
n-Butylbenzene	EPA 8260B	3111015	0.74	5.1	ND	1	09/11/03			
sec-Butylbenzene	EPA 8260B	3111015	0.69	5.1	ND	1	09/11/03			
tert-Butylbenzene	EPA 8260B	3I11015	0.64	5.1	ND	1	09/11/03			
Carbon tetrachloride	EPA 8260B	3I11015	0.68	5.1	ND	1	09/11/03			
Chlorobenzene	EPA 8260B	3I11015	0.54	2.1	ND	1	09/11/03			
Chloroethane	EPA 8260B	3I11015	1.1	5.1	ND	1	09/11/03			
Chloroform	EPA 8260B	3I11015	0.41	2.1	ND	1	09/11/03			
Chloromethane	EPA 8260B	3I11015	1.4	5.1	ND	1	09/11/03			
2-Chlorotoluene	EPA 8260B	3I11015	0.90	5.1	ND	1	09/11/03			
4-Chlorotoluene	EPA 8260B	3I11015	0.76	5.1	ND	1	09/11/03			
Dibromochloromethane	EPA 8260B	3I11015	0.58	2.1	ND	1	09/11/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11015	1.5	5.1	ND	1	09/11/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3I11015	0.68	2.1	ND	1	09/11/03			
Dibromomethane	EPA 8260B	3I11015	0.64	2.1	ND	1	09/11/03			
1,2-Dichlorobenzene	EPA 8260B	3111015	0.98	2.1	ND	1	09/11/03			
1,3-Dichlorobenzene	EPA 8260B	3111015	0.86	2.1	ND	1	09/11/03			
1,4-Dichlorobenzene	EPA 8260B	3111015	0.97	2.1	ND	1	09/11/03			
Dichlorodifluoromethane	EPA 8260B	3I11015	0.84	5.1	ND	1	09/11/03	09/11/03		
1,1-Dichloroethane	EPA 8260B	3111015	0.38	2.1	ND	1	09/11/03	09/11/03		
1,2-Dichloroethane	EPA 8260B	3111015	0.60	2.1	ND	1	09/11/03	09/11/03		
1,1-Dichloroethene	EPA 8260B	3 <b>I</b> 11015	0.46	5.1	ND	1	09/11/03	09/11/03		
cis-1,2-Dichloroethene	EPA 8260B	3I11015	0.36	2.1	ND	1	09/11/03	09/11/03		
trans-1,2-Dichloroethene	EPA 8260B	3I11015	0.42	2.1	ND	1	09/11/03	09/11/03		
1,2-Dichloropropane	EPA 8260B	3I11015	0.31	2.1	ND	1	09/11/03	09/11/03		
1,3-Dichloropropane	EPA 8260B	3I11015	0.65	2.1	ND	1	09/11/03	09/11/03		
2,2-Dichloropropane	EPA 8260B	3I11015	0.46	2.1	ND	1	09/11/03	09/11/03		
1,1-Dichloropropene	EPA 8260B	3I11015	0.29	2.1	ND	1	09/11/03	09/11/03	1	
cis-1,3-Dichloropropene	EPA 8260B	3111015	0.45	2.1	ND	1	09/11/03		1 1	
trans-1,3-Dichloropropene	EPA 8260B	3I11015	0.52	2.1	ND	1	09/11/03			
Ethylbenzene	EPA 8260B	3I11015	0.52	2.1	ND	1	09/11/03			
Hexachlorobutadiene	EPA 8260B	3I11015	0.75	5.1	ND	1	09/11/03			
2-Hexanone	EPA 8260B	3I11015	9.4	10	ND	1	09/11/03	09/11/03	Ψ	

Del Mar Analytical, Irvine



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### **VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed		ata difiers
Sample ID: IMI0247-06 (MT538 Reporting Units: ug/kg dry	- Soil) - cont.				Samp	oled: 09/	04/03		CEV UAL	QUAL
Isopropylbenzene	EPA 8260B	3111015	0.56	2.1	ND	1	09/11/03	09/11/03	U	
p-Isopropyltoluene	EPA 8260B	3I11015	0.74	2.1	ND	1	09/11/03	09/11/03	1	and beautiful and a second
Methylene chloride	EPA 8260B	3I11015	6.7	21	ND	1	09/11/03		Die Roman	-
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11015	3.3	5.1	ND	1	09/11/03	09/11/03	The state of the s	
Naphthalene	EPA 8260B	3I11015	1.1	5.1	ND	1	09/11/03	09/11/03	and the same of th	44000000
n-Propylbenzene	EPA 8260B	3I11015	0.63	2.1	ND	1	09/11/03	09/11/03	The state of the s	no canada de la ca
Styrene	EPA 8260B	3I11015	0.60	2.1	ND	1	09/11/03	09/11/03	207/01/10	OWN-DOWN-DOWN-DOWN-DOWN-DOWN-DOWN-DOWN-D
1,1,1,2-Tetrachloroethane	EPA 8260B	3I11015	0.59	5.1	ND	1	09/11/03	09/11/03	100000000000000000000000000000000000000	10000000000000000000000000000000000000
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11015	0.79	2.1	ND	1	09/11/03	09/11/03	1000550med)	TTX Regulación
Tetrachloroethene	EPA 8260B	3I11015	0.50	2.1	ND	1	09/11/03	09/11/03	V	
Toluene	EPA 8260B	3111015	0.94	2.1	1.4	1	09/11/03	09/11/03	J	I
1,2,3-Trichlorobenzene	EPA 8260B	3111015	1.0	5.1	ND	1	09/11/03	09/11/03	U	in the state of th
1,2,4-Trichlorobenzene	EPA 8260B	3I11015	1.0	5.1	ND	1	09/11/03	09/11/03	1	SERVICE
1,1,1-Trichloroethane	EPA 8260B	3111015	0.40	2.1	ND	1	09/11/03	09/11/03	OCCUPATION OF THE PARTY OF THE	
1,1,2-Trichloroethane	EPA 8260B	3111015	0.78	2.1	ND	1	09/11/03	09/11/03	Programme and the second	
Trichloroethene	EPA 8260B	3111015	0.35	2.1	ND	1		09/11/03	deren sense	
Trichlorofluoromethane	EPA 8260B	3I11015	0.56	5.1	ND	1	09/11/03	09/11/03	andonum	
1,2,3-Trichloropropane	EPA 8260B	3I11015	1.7	10	ND	1	09/11/03	09/11/03	SSSSSS AND AND AND AND AND AND AND AND AND AND	
1,2,4-Trimethylbenzene	EPA 8260B	3I11015	0.80	2.1	ND	1	09/11/03	09/11/03	Deliver and	
1,3,5-Trimethylbenzene	EPA 8260B	3111015	0.65	2.1	ND	1	09/11/03	09/11/03	Minimum	
Vinyl chloride	EPA 8260B	3111015	0.94	5.1	ND	1	09/11/03	09/11/03	SACORODIA DE LA CONTRACTOR DE LA CONTRAC	
o-Xylene	EPA 8260B	3I11015	0.48	2.1	ND	1	09/11/03	09/11/03	1	
m,p-Xylenes	EPA 8260B	3111015	0.77	2.1	ND	1	09/11/03	09/11/03		
Trichlorotrifluoroethane (Freon 113	3) EPA 8260B	3111015	1.2	10	ND	1	09/11/03	09/11/03	W	
Surrogate: Dibromofluoromethane	(80-125%)				110 %				4.	
Surrogate: Toluene-d8 (80-120%)					103 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				91%					



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

	_		MDL	Reporting	•			Date	1	Data
Analyte	Method	Batch	Limit	Limit			Extracted	Analyzeo	l Qu	alifiers
Sample ID: IMI0247-07 (MT539 Reporting Units: ug/kg dry	9 - Soil)				Samj	pled: 09	/04/03	R	SV UAL	QUA COD
Acetone	EPA 8260B	3109024	8.6	13	10	0.928	09/09/03	09/09/03 <b>J</b>		18
Benzene	EPA 8260B	3109024	0.63	2.5	ND	0.928		09/09/03	اعرا	
Bromobenzene	EPA 8260B	3109024	1.1	6.3	ND	0.928		09/09/03	<u> </u>	The state of the s
Bromochloromethane	EPA 8260B	3109024	0.56	6.3	ND	0.928	09/09/03		1	
Bromodichloromethane	EPA 8260B	3109024	0.53	2.5	ND	0.928	09/09/03		No.	- Section
Bromoform	EPA 8260B	3109024	1.0	6.3	ND	0.928	09/09/03			
Bromomethane	EPA 8260B	3109024	1.2	6.3	ND	0.928	09/09/03		A STATE OF THE STA	Transport of the Control of the Cont
2-Butanone (MEK)	EPA 8260B	3109024	9.3	13	ND	0.928	09/09/03		Contract of the Contract of th	
n-Butylbenzene	EPA 8260B	3109024	0.91	6.3	ND	0.928		09/09/03	No.	
sec-Butylbenzene	EPA 8260B	3109024	0.85	6.3	ND	0.928		09/09/03		Section 1990
tert-Butylbenzene	EPA 8260B	3109024	0.79	6.3	ND	0.928	09/09/03			
Carbon tetrachloride	EPA 8260B	3I09024	0.84	6.3	ND	0.928	09/09/03		APPLICATION AND ADDRESS OF THE PERSON AND AD	
Chlorobenzene	EPA 8260B	3I09024	0.66	2.5	ND	0.928	09/09/03		NATIONAL DESCRIPTION OF THE PERSON OF THE PE	
Chloroethane	EPA 8260B	3I09024	1.4	6.3	ND	0.928	09/09/03			
Chloroform	EPA 8260B	3109024	0.51	2.5	ND	0.928	09/09/03			
Chloromethane	EPA 8260B	3109024	1.8	6.3	ND	0.928	09/09/03			
2-Chlorotoluene	EPA 8260B	3109024	1.1	6.3	ND	0.928	09/09/03		The state of the s	
4-Chlorotoluene	EPA 8260B	3109024	0.94	6.3	ND	0.928	09/09/03		The state of the s	_
Dibromochloromethane	EPA 8260B	3109024	0.71	2.5	ND	0.928	09/09/03		NAVORE STATE OF THE PARTY OF TH	
1,2-Dibromo-3-chloropropane	EPA 8260B	3109024	1.9	6.3	ND	0.928	09/09/03		STATE OF THE PARTY	
1,2-Dibromoethane (EDB)	EPA 8260B	3I09024	0.84	2.5	ND	0.928	09/09/03		T.Thursday	
Dibromomethane	EPA 8260B	3109024	0.79	2.5	ND	0.928	09/09/03		MAZTO SECTION	
1,2-Dichlorobenzene	EPA 8260B	3109024	1.2	2.5	ND	0.928	09/09/03			
1,3-Dichlorobenzene	EPA 8260B	3109024	1.1	2.5	ND	0.928	09/09/03			
1,4-Dichlorobenzene	EPA 8260B	3109024	1.2	2.5	ND	0.928	09/09/03			
Dichlorodifluoromethane	EPA 8260B	3109024	1.0	6.3	ND	0.928	09/09/03		Contractor Contractor	
1,1-Dichloroethane	EPA 8260B	3109024	0.47	2.5	ND	0.928	09/09/03		The second secon	
1,2-Dichloroethane	EPA 8260B	3109024	0.74	2.5	ND	0.928	09/09/03			
1,1-Dichloroethene	EPA 8260B	3109024	0.57	6.3	ND	0.928	09/09/03		- Todayara	
cis-1,2-Dichloroethene	EPA 8260B	3109024	0.44	2.5	ND	0.928	09/09/03		Approximation of the second	
trans-1,2-Dichloroethene	EPA 8260B	3109024	0.52	2.5	ND	0.928	09/09/03			
1,2-Dichloropropane	EPA 8260B	3109024	0.38	2.5	ND	0.928	09/09/03		CONTRACTOR OF THE PARTY OF THE	
1,3-Dichloropropane	EPA 8260B	3109024	0.80	2.5	ND	0.928	09/09/03			
2,2-Dichloropropane	EPA 8260B	3109024	0.57	2.5	ND	0.928	09/09/03		Constant of the Constant of th	
1,1-Dichloropropene	EPA 8260B	3109024	0.36	2.5	ND	0.928	09/09/03			
cis-1,3-Dichloropropene	EPA 8260B	3I09024	0.56	2.5	ND	0.928	09/09/03		ACCUPATION AND ADDRESS OF THE PERSON ADDRESS O	
trans-1,3-Dichloropropene	EPA 8260B	3109024	0.65	2.5	ND	0.928	09/09/03		200	
Ethylbenzene	EPA 8260B	3I09024	0.65	2.5	ND	0.928	09/09/03		Olivernia de la companya de la compa	
Hexachlorobutadiene	EPA 8260B	3109024	0.93	6.3	ND	0.928	09/09/03			
2-Hexanone	EPA 8260B	3109024	12	13	ND	0.928	09/09/03	00/00/03	1	

Del Mar Analytical, Irvine



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

#### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Dat Qualif	
Sample ID: IMI0247-07 (MT539 - Soil) - cont. Reporting Units: ug/kg dry				Samp	oled: 09/	04/03		RD QUAL	QUA
Isopropylbenzene EPA 8260B	3109024	0.68	2.5	ND	0.928	09/09/03	09/09/03	U	
p-Isopropyltoluene EPA 8260B	3109024	0.91	2.5	ND	0.928	09/09/03	09/09/03		
Methylene chloride EPA 8260B	3109024	8.2	25	ND	0.928	09/09/03	09/09/03		
4-Methyl-2-pentanone (MIBK) EPA 8260B	3109024	4.1	6.3	ND	0.928	09/09/03	09/09/03		
Methyl-tert-butyl Ether (MTBE) EPA 8260B	3109024	1.3	6.3	ND	0.928	09/09/03	09/09/03	1 1	
Naphthalene EPA 8260B	3109024	1.4	6.3	ND	0.928	09/09/03	09/09/03		
n-Propylbenzene EPA 8260B	3109024	0.77	2.5	ND	0.928	09/09/03	09/09/03	1 1	
Styrene EPA 8260B	3109024	0.74	2.5	ND	0.928	09/09/03	09/09/03		
1,1,1,2-Tetrachloroethane EPA 8260B	3109024	0.72	6.3	ND	0.928	09/09/03	09/09/03		
1,1,2,2-Tetrachloroethane EPA 8260B	3109024	0.98	2.5	ND	0.928	09/09/03	09/09/03		
Tetrachloroethene EPA 8260B	3109024	0.62	2.5	ND	0.928	09/09/03	09/09/03		
Toluene EPA 8260B	3109024	1.2	2.5	ND	0.928	09/09/03	09/09/03	\	
1,2,3-Trichlorobenzene EPA 8260B	3109024	1.3	6.3	ND	0.928	09/09/03	09/09/03	\	
1,2,4-Trichlorobenzene EPA 8260B	3109024	1.3	6.3	ND	0.928	09/09/03	09/09/03		
1,1,1-Trichloroethane EPA 8260B	3109024	0.49	2.5	ND	0.928	09/09/03	09/09/03	\	
1,1,2-Trichloroethane EPA 8260B	3109024	0.96	2.5	ND	0.928	09/09/03	09/09/03	11	
Trichloroethene EPA 8260B	3109024	0.43	2.5	ND	0.928	09/09/03	09/09/03		
Trichlorofluoromethane EPA 8260B	3I09024	0.68	6.3	ND	0.928	09/09/03	09/09/03		
1,2,3-Trichloropropane EPA 8260B	3109024	2.2	13	ND	0.928	09/09/03	09/09/03		
1,2,4-Trimethylbenzene EPA 8260B	3109024	0.99	2.5	ND	0.928	09/09/03	09/09/03	- 11	
1,3,5-Trimethylbenzene EPA 8260B	3109024	0.80	2.5	ND	0.928	09/09/03	09/09/03	11	
Vinyl chloride EPA 8260B	3109024	1.2	6.3	ND	0.928	09/09/03	09/09/03	- / /	
o-Xylene EPA 8260B	3109024	0.60	2.5	ND	0.928	09/09/03	09/09/03	- /	
m,p-Xylenes EPA 8260B	3109024	0.95	2.5	ND	0.928	09/09/03	09/09/03	V	
Surrogate: Dibromofluoromethane (80-125%)				115 %			***		
Surrogate: Toluene-d8 (80-120%)				107 %				•	
Surrogate: 4-Bromofluorobenzene (80-120%)				102 %					



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker

Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

				C C/11/10 (	(2222	000000	vo <i>D</i>			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze	ed Qual	ata lifier:
Sample ID: IMI0247-08 (MT54 Reporting Units: ug/kg dry	0 - Soil)				Sam	pled: 09	/04/03	Gention	ROUPL	Q 0
Acetone	EPA 8260B	3109026	6.8	10	13	0.888	09/09/03	09/09/03	J	F
Benzene	EPA 8260B	3109026	0.50	2.0	ND	0.888		09/09/03	ပိ	97
Bromobenzene	EPA 8260B	3109026	0.84	5.0	ND	0.888		09/09/03	1	
Bromochloromethane	EPA 8260B	3109026	0.44	5.0	ND	0.888	09/09/03	09/09/03	Pittonggolaci	
Bromodichloromethane	EPA 8260B	3109026	0.42	2.0	ND	0.888	09/09/03			
Bromoform	EPA 8260B	3109026	0.80	5.0	ND	0.888	09/09/03		T SAMPLE	electron/despte
Bromomethane	EPA 8260B	3109026	0.92	5.0	ND	0.888	09/09/03			
2-Butanone (MEK)	EPA 8260B	3109026	7.3	10	ND	0.888	09/09/03			entre-conce.
n-Butylbenzene	EPA 8260B	3109026	0.72	5.0	ND	0.888	09/09/03		TITY SAME	e construction of the cons
sec-Butylbenzene	EPA 8260B	3109026	0.67	5.0	ND	0.888	09/09/03		- Section 1	n name and a second
tert-Butylbenzene	EPA 8260B	3109026	0.62	5.0	ND	0.888	09/09/03	09/09/03	No.	Winds and a second
Carbon tetrachloride	EPA 8260B	3109026	0.66	5.0	ND	0.888	09/09/03	09/09/03	Mark to the	distribution of the control of the c
Chlorobenzene	EPA 8260B	3109026	0.52	2.0	ND	0.888	09/09/03	09/09/03	and and and and and and and and and and	The state of the s
Chloroethane	EPA 8260B	3109026	1.1	5.0	ND	0.888	09/09/03	09/09/03	SPERITOR STATE OF THE STATE OF	The state of the s
Chloroform	EPA 8260B	3109026	0.40	2.0	ND	0.888	09/09/03	09/09/03		THE REAL PROPERTY.
Chloromethane	EPA 8260B	3109026	1.4	5.0	ND	0.888	09/09/03	09/09/03	9000	No. of Contract of
2-Chlorotoluene	EPA 8260B	3109026	0.87	5.0	ND	0.888	09/09/03	09/09/03	- Paris (1971)	cecuivan
4-Chlorotoluene	EPA 8260B	3109026	0.74	5.0	ND	0.888	09/09/03	09/09/03		MEDICZINA
Dibromochloromethane	EPA 8260B	3109026	0.56	2.0	ND	0.888	09/09/03	09/09/03	10000000	en octobrane
1,2-Dibromo-3-chloropropane	EPA 8260B	3109026	1.5	5.0	ND	0.888	09/09/03	09/09/03	Name of the last o	AL PROPERTY OF THE PROPERTY OF
1,2-Dibromoethane (EDB)	EPA 8260B	3109026	0.66	2.0	ND	0.888	09/09/03	09/09/03	4	minute in the second
Dibromomethane	EPA 8260B	3109026	0.62	2.0	ND	0.888	09/09/03	09/09/03	2000 A 20	appropriate and a second
1,2-Dichlorobenzene	EPA 8260B	3109026	0.95	2.0	ND	0.888		09/09/03	1000	an administration
1,3-Dichlorobenzene	EPA 8260B	3109026	0.84	2.0	ND	0.888		09/09/03	SAN INCOME	Month and Month
1,4-Dichlorobenzene	EPA 8260B	3109026	0.94	2.0	ND	0.888		09/09/03	OPPRENTITION	X CONTRACTOR OF THE PERSON OF
Dichlorodifluoromethane	EPA 8260B	3109026	0.82	5.0	ND	0.888		09/09/03		The state of the s
1,1-Dichloroethane	EPA 8260B	3109026	0.37	2.0	ND	0.888		09/09/03	Portmondo	NO STATE OF THE PERSON NA
1,2-Dichloroethane	EPA 8260B	3109026	0.58	2.0	ND	0.888		09/09/03	TOURNAGE	The state of the s
1,1-Dichloroethene	EPA 8260B	3109026	0.45	5.0	ND	0.888		09/09/03		765
cis-1,2-Dichloroethene	EPA 8260B	3109026	0.35	2.0	ND	0.888		09/09/03	1	0.000
trans-1,2-Dichloroethene	EPA 8260B	3109026	0.41	2.0	ND	0.888	09/09/03			2000000
1,2-Dichloropropane	EPA 8260B	3109026	0.30	2.0	ND	0.888	09/09/03		NOONE NAME OF THE OWNER OWNER O	edifference edifference
1,3-Dichloropropane	EPA 8260B	3109026	0.63	2.0	ND		09/09/03		No.	
2,2-Dichloropropane	EPA 8260B	3109026	0.45	2.0	ND	0.888	09/09/03		on the second	Name of the last
1,1-Dichloropropene	EPA 8260B	3109026	0.28	2.0	ND	0.888	09/09/03		MAN TO SERVICE STATE OF THE SE	
cis-1,3-Dichloropropene	EPA 8260B	3109026	0.44	2.0	ND	0.888		09/09/03		
trans-1,3-Dichloropropene	EPA 8260B	3109026	0.51	2.0	ND	0.888		09/09/03	100	Measura
Ethylbenzene	EPA 8260B	3109026	0.51	2.0	ND	0.888		09/09/03	a-vectorization	DECEMBER OF STREET
Hexachlorobutadiene	EPA 8260B	3109026	0.73	5.0	ND	0.888		09/09/03	DOVERTIGES	THE COURSE
2-Hexanone	EPA 8260B	3109026	9.1	10	ND	0.888		09/09/03	V	
				10		0.000	07/07/03	07/07/03		₹.

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03

Received: 09/04/03

#### **VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)**

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze		ita ifiers
Sample ID: IMI0247-08 (MT540 Reporting Units: ug/kg dry	- Soil) - cont.				Samp	pled: 09/	04/03		REV QUAL	CODE
Isopropylbenzene	EPA 8260B	3109026	0.54	2.0	ND	0.888	09/09/03	09/09/03	U	
p-Isopropyltoluene	EPA 8260B	3109026	0.72	2.0	ND	0.888	09/09/03	09/09/03	1	
Methylene chloride	EPA 8260B	3109026	6.5	20	ND	0.888	09/09/03	09/09/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3109026	3.2	5.0	ND	0.888	09/09/03	09/09/03		
Methyl-tert-butyl Ether (MTBE)	EPA 8260B	3109026	1.0	5.0	ND	0.888	09/09/03	09/09/03	1	
Naphthalene	EPA 8260B	3109026	1.1	5.0	ND	0.888	09/09/03	09/09/03	and the same of th	
n-Propylbenzene	EPA 8260B	3109026	0.61	2.0	ND	0.888	09/09/03	09/09/03		
Styrene	EPA 8260B	3109026	0.58	2.0	ND	0.888	09/09/03	09/09/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3109026	0.57	5.0	ND	0.888	09/09/03	09/09/03	9	
1,1,2,2-Tetrachloroethane	EPA 8260B	3109026	0.77	2.0	ND	0.888	09/09/03	09/09/03		
Tetrachloroethene	EPA 8260B	3109026	0.49	2.0	ND	0.888	09/09/03	09/09/03		
Toluene	EPA 8260B	3109026	0.91	2.0	ND	0.888	09/09/03	09/09/03		
1,2,3-Trichlorobenzene	EPA 8260B	3109026	1.0	5.0	ND	0.888	09/09/03	09/09/03		
1,2,4-Trichlorobenzene	EPA 8260B	3109026	1.0	5.0	ND	0.888	09/09/03	09/09/03		
1,1,1-Trichloroethane	EPA 8260B	3109026	0.39	2.0	ND	0.888	09/09/03	09/09/03	F-STORAGE	
1,1,2-Trichloroethane	EPA 8260B	3109026	0.76	2.0	ND	0.888	09/09/03	09/09/03	and the same of th	
Trichloroethene	EPA 8260B	3109026	0.34	2.0	ND	0.888	09/09/03	09/09/03	OVOCETODES ON THE PROPERTY OF	
Trichlorofluoromethane	EPA 8260B	·3I09026	0.54	5.0	ND	0.888	09/09/03	09/09/03	SOUTH STATE OF THE	
1,2,3-Trichloropropane	EPA 8260B	3109026	1.7	10	ND	0.888	09/09/03	09/09/03	2000	
1,2,4-Trimethylbenzene	EPA 8260B	3109026	0.78	2.0	ND	0.888	09/09/03	09/09/03	and the same of th	
1,3,5-Trimethylbenzene	EPA 8260B	3109026	0.63	2.0	ND	0.888	09/09/03	09/09/03	and the second s	
Vinyl chloride	EPA 8260B	3109026	0.91	5.0	ND	0.888	09/09/03	09/09/03	And the state of t	
o-Xylene	EPA 8260B	3109026	0.47	2.0	ND	0.888	09/09/03	09/09/03		
m,p-Xylenes	EPA 8260B	3109026	0.75	2.0	ND	0.888	09/09/03	09/09/03	4	
Surrogate: Dibromofluoromethane	(80-125%)				124 %				*	
Surrogate: Toluene-d8 (80-120%)	•				111 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				106 %					

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (868) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

# VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzeo		fiers
Sample ID: IMI0247-02 (MT534 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09/	04/03	7400	REV	CODE
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene	•	3I11015	4.1	5.3	ND 107 % 104 % 95 %	1	09/11/03	09/11/03	U	
Sample ID: IMI0247-03 (MT535 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09/0	04/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene		3I11015	4.2	5.5	ND 107 % 103 % 93 %	1	09/11/03	09/11/03	U	
Sample ID: IMI0247-04 (MT536 Reporting Units: ug/kg dry	- Soil)				Samp	led: 09/0	04/03		TO PARTIE AND PRODUCTION OF THE PARTIE AND PARTIES.	
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene		3I11015	4.1	5.5	ND 109 % 104 % 93 %	1	09/11/03	09/11/03	U	
Sample ID: IMI0247-05 (MT537 - Reporting Units: ug/kg dry	- Soil)				Samp	led: 09/0	04/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (		3111015	4.3	5.6	ND 106 % 104 % 94 %	1	09/11/03	09/11/03	U	
Sample ID: IMI0247-06 (MT538 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/0	4/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (		3111015	3.9	5.1	ND 110 % 103 % 91 %	1	09/11/03	09/11/03	U	



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

### PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze		
Sample ID: IMI0247-01 (MT533 - Reporting Units: ug/l	- Water)				Samj	pled: 09/	04/03	delephone	REV QUAL	CODE
2-chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I15012 3I15012	N/A N/A	50 50	ND ND	1 1	09/15/03 09/15/03	09/15/03 09/15/03	CC	
Sample ID: IMI0247-02 (MT534 - Reporting Units: ug/kg dry	· Soil)				Samj	pled: 09/	04/03			- Parking and participation of the participation of
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11015 3I11015	N/A N/A	53 53	ND ND	1 1	09/11/03 09/11/03		ひよ	*11
Sample ID: IMI0247-03 (MT535 - Reporting Units: ug/kg dry	· Soil)				Samp	oled: 09/	04/03			eman management (color) (color
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11015 3I11015	N/A N/A	55 55	ND ND	1 1	09/11/03 09/11/03		い い び び	*!! *!!
Sample ID: IMI0247-04 (MT536 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/	04/03			with a common and the
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11015 3I11015	N/A N/A	55 55	ND ND	1	09/11/03 09/11/03		ロゴ	*!\ *!\
Sample ID: IMI0247-05 (MT537 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/	04/03			manda artista con control de la control de l
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11015 3I11015	N/A N/A	56 56	ND ND	1 1	09/11/03 09/11/03		U 7	* !! * !!
Sample ID: IMI0247-06 (MT538 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/	04/03			li
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11015 3I11015	N/A N/A	51 51	ND ND	1 1	09/11/03 09/11/03		ひて ひご	***
Sample ID: IMI0247-07 (MT539 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/	04/03			6
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3109024 3109024	N/A N/A	63 63	ND ND	0.928 0.928	09/09/03 09/09/03		ひて	* ! [ * ] [
Sample ID: IMI0247-08 (MT540 - Reporting Units: ug/kg dry	Soil)				Samp	oled: 09/0			Communitation	. 5. 5. 6
2-Chloro-1,1,1-trifluroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3109026 3109026	N/A N/A	50 50	ND ND	0.888 0.888	09/09/03 09/09/03		ロゴ	*11
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550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>

SDG: IMH1307 Matrix: Soil

No. of Reanalyses/Dilutions: 0

Date Reviewed: January 16, 2004

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT504

#### **Data Validation Findings**

		Findings	Qualifications
1.	Sample Management	The COC was signed by field and laboratory personnel. The EPA ID for the sample was changed from BLBIN01S01 to BLBN01S01 memo from MWH personnel dated 8/25/03 The volatile analyses was not requested on the COC. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4.	Method Blanks	One method blank was analyzed with this SDG. No target compounds were reported in the method blank.	No qualifications were required.
5.	LCS/BS	One LCS was analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6.	Surrogates	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMH1307 Analysis: VOA

		Findings	Qualifications
7.	MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8.	Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: None FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9.	Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene and performed only a TIC search for these compounds. Although the laboratory was calibrated for 2-chloroethyl vinlyl ether it was not reported at a target compound in sample MT504.  The soil sample was reported on a dryweight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane and chlorotrifluoro-ethene were qualified as estimated, "UJ," in the site samples.
Co	mments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMH1307

Sampled: 08/22/03 Received: 08/22/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

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Del Mar Analytical, Irvine

Michele Harper Project Manager

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMH1307

Sampled: 08/22/03

Received: 08/22/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyze		Data alifiers
Sample ID: IMH1307-01 (MT504 Reporting Units: ug/kg dry	4 - Soil) - cont.							•	Rev	Code
Isopropylbenzene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03	U	
p-Isopropyltoluene	EPA 8260B	3H27031	N/A	2.1	ND	I	08/27/03	08/27/03	i	i
Methylene chloride	EPA 8260B	3H27031	N/A	21	ND	1	08/27/03	08/27/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3H27031	N/A	5.3	ND	1	08/27/03		1	
Naphthalene	EPA 8260B	3H27031	N/A	5.3	ND	1	08/27/03	08/27/03		
n-Propylbenzene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03	ı	<b>.</b>
Styrene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03	1	
1,1,1,2-Tetrachloroethane	EPA 8260B	3H27031	N/A	5.3	ND	1	08/27/03	08/27/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03		
Tetrachloroethene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03		
Toluene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03	1	
1,2,3-Trichlorobenzene	EPA 8260B	3H27031	N/A	5.3	ND	1	08/27/03	08/27/03		
1,2,4-Trichlorobenzene	EPA 8260B	3H27031	N/A	5.3	ND	]		08/27/03		
1,1,1-Trichloroethane	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03		
1,1,2-Trichloroethane	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03	08/27/03		
Trichloroethene	EPA 8260B	3H27031	N/A	2.1	ND	1		08/27/03		
Trichlorofluoromethane	EPA 8260B	3H27031	N/A	5.3	ND	1		08/27/03		
1,2,3-Trichloropropane	EPA: 8260B	3H27031	N/A	11	ND	1	08/27/03			
1,2,4-Trimethylbenzene	EPA 8260B	3H27031	N/A	2.1	ND	1		08/27/03		
1,3,5-Trimethylbenzene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03		1 1	
Vinyl chloride	EPA 8260B	3H27031	N/A	5.3	ND	1		08/27/03	1 1	
o-Xylene	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03			
m,p-Xylenes	EPA 8260B	3H27031	N/A	2.1	ND	1	08/27/03		1 1	
Trichlorotrifluoroethane (Freon 113	B) EPA 8260B	3H27031	N/A	11	ND	1	08/27/03			
	Surrogate: Dibromofluoromethane (80-125%)				103 %	•	00/11/03	00/2//02	٠ ١	
Surrogate: Toluene-d8 (80-120%)				100 %						
Surrogate: 4-Bromofluorobenzene (			99 %							

AMEC VALDAILD

Del Mar Analytical, Irvine Michele Harper Project Manager





2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Collon, CA 92324 (909) 370-4667 FAX (909) 770-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMH1307

Sampled: 08/22/03

Received: 08/22/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilution Date FactorExtracted	Date Data Analyzed Qualifiers
Sample ID: IMH1307-01 (MT50- Reporting Units: ug/kg dry	·						fee aval
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3H27031 3H27031	N/A N/A	210 210	ND ND		08/27/03 UT *!! 08/27/03 V

AMEC VALIDATED

Del Mar Analytical, Irvine Michele Harper Project Manager





550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V1

SDG: IMI0405

Matrix: Soil and Water

No. of Samples: 9
No. of Reanalyses/Dilutions: 0

Date Reviewed: January 16, 2004 Reviewer: M. Pokorny

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT549, MT541, MT542, MT543, MT544, MT545, MT546, MT547, MT548

#### **Data Validation Findings**

		Findings	Qualifications
1. Sample Man	agement	The COC was signed by field and laboratory personnel and accounted for the samples and analyses presented in this SDG. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blan	<u>ks</u>	Seven method blanks were analyzed with this SDG. No target compounds were reported in the method blanks.	No qualifications were required.
5. LCS/BS		Three soil LCS/LCSD pairs, three soil LCS and one water LCS/LCSD pair were analyzed with this SDG. All spike compounds were recovered within the QC limits and all RPDs for the pairs were within the QC limits.	No qualifications were required.
6. <u>Surrogates</u>		All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

	Findings	Qualifications
7. MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8. Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT549 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9. Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane and chlorotrifluoroethene and performed only a TIC search for these compounds. Although the laboratory calibrated for 2-chloroethyl vinylchloride as a target compound, it was not reported in the water sample of this SDG. 2-Chloroethyl vinyl ether was reported as a target compound in the soil samples of this SDG. Soil samples were reported on a dryweight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane, chlorotrifluoroethene, and trichlorotri-fluoroethane (Freon 113) were qualified as estimated, "UJ," in the site samples.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting			n Date	Date		ata
•		Daten	Lume .	Limit	Result	Factor	Extracted	Analyz	ed Qua	lifiers
Sample ID: PMI0405-02 (MT541 Reporting Units: ug/kg dry	Soil)				Sam	pled: 09	/05/03		REV QUAL	QUAL
2-Chloroethyl vinyl ether	ED 4 0070D	2711026	37/4						**************************************	SONE
Acetone	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03	09/12/03	U	
Benzene	EPA 8260B	3I11026	N/A	9.2	ND	0.899	09/11/03	09/12/03	)	
Bromobenzene	EPA 8260B	3II1026	N/A	1.8	ND	0.899	09/11/03		- 1	
Bromochloromethane	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03		
Bromodichloromethane	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03	-	
Bromoform	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03		
Bromomethane	EPA 8260B	3111026	N/A	4.6	ND	0.899		09/12/03		
	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03	09/12/03	The state of the s	
2-Butanone (MEK)	EPA 8260B	3111026	N/A	9.2	ND	0.899	09/11/03	09/12/03	THE STATE OF THE S	
n-Butylbenzene	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03	09/12/03		
sec-Butylbenzene	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03	09/12/03	000000000000000000000000000000000000000	
tert-Butylbenzene	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03	09/12/03	Workship Workship	
Carbon tetrachloride	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03	09/12/03	The state of the s	
Chlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03	09/12/03	III Disking	
Chloroethane	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03	09/12/03	Complements of the Complements o	
Chloroform	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03	09/12/03	The second	
Chloromethane	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03		torange of	
2-Chlorotoluene	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03		The state of	
4-Chlorotoluene	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03	0.1000000000000000000000000000000000000	
Dibromochloromethane	EPA 8260B	3111026	N/A	1.8	ND ·	0.899	09/11/03	09/12/03	And and and and and and and and and and a	
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03	PERSONAL PROPERTY.	
1,2-Dibromoethane (EDB)	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03	Piltonega	
Dibromomethane	EPA 8260B	3J11026	N/A	1.8	ND	0.899	09/11/03		and the same of th	
1,2-Dichlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03	PART CHARGE	
1,3-Dichlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03	Personal Per	
1,4-Dichlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03	Address of the second s	
Dichlorodifluoromethane	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03		Mediation 2	
1,1-Dichloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.899		09/12/03	and the same of th	
1,2-Dichloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		- Conception	
1,1-Dichloroethene	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03		THOU WAS	
cis-1,2-Dichloroethene	EPA 8260B	3I11026	N/A	1.8	ND	0.899		09/12/03		
trans-1,2-Dichloroethene	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03		377	
1,2-Dichloropropane	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		and the second	
1,3-Dichloropropane	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03			
2,2-Dichloropropane	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		imostennis (ili	
1,1-Dichloropropene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		No.	
cis-1,3-Dichloropropene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		EMBRIDGES.	
trans-1,3-Dichloropropene	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03		Transaction	
Ethylbenzene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03			
Hexachlorobutadiene	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03 (		<b>V</b>	

Del Mar Analytical, Irvine







1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03

Received: 09/05/03

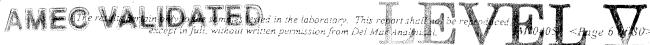
## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

			•		(	000,00	002)			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutior Factor	Date Extracted	Date Analyz		ata lifiers
Sample ID: IMI0405-02 (MT54 Reporting Units: ug/kg dry	41 - Soil) - cont.				Samj	oled: 09	/05/03		RUAL	QUAL
2-Hexanone	EPA 8260B	3111026	N/A	9.2	ND	0.899	09/11/03	09/12/03	()	
Isopropylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.899		09/12/03	Ÿ	
p-Isopropyltoluene	EPA 8260B	3I11026	N/A	1.8	ND	0.899		09/12/03	- 1	
Methylene chloride	EPA 8260B	3I11026	N/A	18	ND	0.899		09/12/03	- 1	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03	- 1	
Naphthalene	EPA 8260B	3I11026	N/A	4.6	ND	0.899		09/12/03	- 1	
n-Propylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.899		09/12/03		
Styrene	EPA 8260B	3I11026	N/A	1.8	ND	0.899		09/12/03	1	
1,1,1,2-Tetrachloroethane	EPA 8260B	3J11026	N/A	4.6	ND	0.899	09/11/03			
1,1.2,2-Tetrachloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.899				
Tetrachloroethene	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03	09/12/03		
Toluene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03			
1,2,3-Trichlorobenzene	EPA 8260B	3111026	N/A	4.6	ND	0.899	09/11/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03			
1,1,1-Trichloroethane	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03			
1,1,2-Trichloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03			
Trichloroethene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03			
Trichlorofluoromethane	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03			
1,2,3-Trichloropropane	EPA 8260B	3I11026	N/A	9.2	ND	0.899	09/11/03		1 1	
1,2,4-Trimethylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03		1 1	
1,3,5-Trimethylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.899	09/11/03		\	
Vinyl chloride	EPA 8260B	3I11026	N/A	4.6	ND	0.899	09/11/03		\ [	
o-Xylene	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03			
m,p-Xylenes	EPA 8260B	3111026	N/A	1.8	ND	0.899	09/11/03		<b>V</b>	
Surrogate: Dibromofluoromethan					94 %				- 1	
Surrogate: Toluene-d8 (80-120%)					100 %					
Surrogate: 4-Bromofluorobenzene	e (80-120%)				98 %				İ	
Sample ID: IMI0405-02RE1 (M Reporting Units: ug/kg dry	T541 - Soil)				Sampl	led: 09/0	05/03			
Trichlorotrifluoroethane (Freon 1)	13) EPA 8260B	3I12013	N/A	10	ND	0.911	09/12/03	00/12/03	117	#11
Surrogate: Dibromofluoromethan	e (80-125%)			10	109 %	V-211	V2/12/03	UF-12/US	7	<i>7 9</i> 1
Surrogate: Toluene-d8 (80-120%)					107 %					•
Surrogate: 4-Bromofluorobenzene					101 %					
·	,								1	

W 1.16.01

Del Mar Analytical, Irvine Michele Harper

Project Manager





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

				00,1,20	•					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyz		Data alifiers
Sample ID: IMI0405-03 (MT542	2 - Soil)				Sami	oled: 09	/05/03		REV	QUAL
Reporting Units: ug/kg dry									QUAL	<u> </u>
2-Chloroethyl vinyl ether	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03	09/11/03	U	
Acetone	EPA 8260B	3111006	N/A	12	ND	0.924	09/11/03	09/11/03		
Benzene	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03		- 1	
Bromobenzene	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03	09/11/03		
Bromochloromethane	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03	09/11/03	- 1	
Bromodichloromethane	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03	09/11/03		
Bromoform	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03	09/11/03		
Bromomethane	EPA 8260B	3111006	N/A	5.8	ND	0.924		09/11/03		
2-Butanone (MEK)	EPA 8260B	3I11006	N/A	12	ND	0.924		09/11/03		
n-Butylbenzene	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03		
sec-Butylbenzene	EPA 8260B	3111006	N/A	5.8	ND	0.924		09/11/03		
tert-Butylbenzene	EPA 8260B	3111006	N/A	5.8	ND	0.924		09/11/03	l	
Carbon tetrachloride	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03	- 1	
Chlorobenzene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03		
Chloroethane	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03		
Chloroform	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03		
Chloromethane	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03		
2-Chlorotoluene	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03			
4-Chlorotoluene	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03			
Dibromochloromethane	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03		
Dibromomethane	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
1,2-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03		
1,3-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03		
1,4-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03		
Dichlorodifluoromethane	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03			
1,1-Dichloroethane	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03			
1,2-Dichloroethane	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03			
1,1-Dichloroethene	EPA 8260B	3I11006	N/A	5.8	ND	0.924		09/11/03		
cis-1,2-Dichloroethene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03		
trans-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
1,2-Dichloropropane	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
1,3-Dichloropropane	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03			
2,2-Dichloropropane	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03			
1,1-Dichloropropene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03		
cis-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03	1 1	
trans-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03		
Ethylbenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
Hexachlorobutadiene	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03		1 1	
		2111000		2.0	ملانة	0.24	07/11/03	U2/11/U2	T	

Del Mar Analytical, Irvine



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A. Colton, CA 92524 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

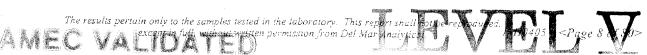
Sampled: 09/05/03 Received: 09/05/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

				O O / 1 . 1 . 2	(*****	00000	oob)			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyz		Data alifiers
Sample ID: IMI0405-03 (MT542 Reporting Units: ug/kg dry	- Soil) - cont.				Samp	pled: 09/	05/03		REV QUAL	QUAL CODE
2-Hexanone	EPA 8260B	3111006	N/A	12	ND	0.924	09/11/03	09/11/03	U	
Isopropylbenzene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03	Ÿ	ļ,
p-Isopropyltoluene	EPA 8260B	3I11006	N/A	2.3	ND	0.924		09/11/03	- 1	-
Methylene chloride	EPA 8260B	3I11006	N/A	23	ND	0.924		09/11/03	ı	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3111006	N/A	5.8	ND	0.924		09/11/03		
Naphthalene	EPA 8260B	3111006	N/A	5.8	ND	0.924		09/11/03	İ	
n-Propylbenzene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03	1	
Styrene	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03	- 1	
1,1,1,2-Tetrachloroethane	EPA 8260B	3I11006	N/A	5.8	ND	0.924				
1,1,2,2-Tetrachloroethane	EPA 8260B	3111006	N/A	2.3	ND	0.924		09/11/03	1	
Tetrachloroethene	EPA 8260B	3I11006	N/A	2.3	ND	0.924				
Toluene	EPA 8260B	3I11006	N/A	2.3	ND	0.924			1	
1,2,3-Trichlorobenzene	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03		1	
1,2,4-Trichlorobenzene	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03			
1,1,1-Trichloroethane	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
1,1,2-Trichloroethane	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
Trichloroethene	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03			
Trichlorofluoromethane	EPA 8260B	3I11006	N/A	5.8	ND	0.924	09/11/03		1 1	•
1,2,3-Trichloropropane	EPA 8260B	3I11006	N/A	12	ND	0.924	09/11/03			
1,2,4-Trimethylbenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03		- 1	
1,3,5-Trimethylbenzene	EPA 8260B	3I11006	N/A	2.3	ND	0.924	09/11/03			
Vinyl chloride	EPA 8260B	3111006	N/A	5.8	ND	0.924	09/11/03		- 11	
o-Xylene	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03		- 11	
m,p-Xylenes	EPA 8260B	3111006	N/A	2.3	ND	0.924	09/11/03		1	
Surrogate: Dibromofluoromethane	(80-125%)				103 %		0 / 1 2 / 0 3	-	<b>V</b>	
Surrogate: Toluene-d8 (80-120%)					106 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				104 %				l	
Sample ID: IMI0405-03RE1 (MT Reporting Units: ug/kg dry	542 - Soil)					led: 09/(	5/03			
Trichlorotrifluoroethane (Freon 113 Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (	(80-125%)	3112027	N/A	10	ND 105 % 102 % 86 %	0.896	09/12/03	09/12/03	U.7	MX

WP 1.16.04

Del Mar Analytical, Irvine





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

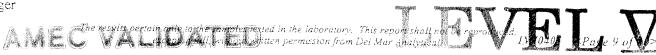
Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyzo		ata llifiers
Sample ID: IMI0405-04 (MT543 Reporting Units: ug/kg dry	- Soil)				Samı	Sampled: 09/05/03			REV	QUA
2-Chloroethyl vinyl ether	EPA 8260B	3I11006	N/A	5.4	ND	0.942	09/11/03	09/11/03	()	
Acetone	EPA 8260B	3111006	N/A	11	ND	0.942		09/11/03	7	1
Benzene	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03	- 1	
Bromobenzene	EPA 8260B	3111006	N/A	5.4	ND	0.942		09/11/03		]
Bromochloromethane	EPA 8260B	3111006	N/A	5.4	ND	0.942		09/11/03		
Bromodichloromethane	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03	ı	
Bromoform	EPA 8260B	3I11006	N/A	5.4	ND	0.942	09/11/03			
Bromomethane	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03			ł
2-Butanone (MEK)	EPA 8260B	3I11006	N/A	I 1	ND	0.942	09/11/03		1	1
n-Butylbenzene	EPA 8260B	3I11006	N/A	5.4	ND	0.942	09/11/03		1	
sec-Butylbenzene	EPA 8260B	3I11006	N/A	5.4	ND	0.942	09/11/03		1	
tert-Butylbenzene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		1	
Carbon tetrachloride	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		- 1	
Chlorobenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Chloroethane	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03			l
Chloroform	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Chloromethane	EPA 8260B	3111006	NA	5.4	ND	0.942	09/11/03			
2-Chlorotoluene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03			
4-Chlorotoluene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03			
Dibromochloromethane	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03		- 1	
1,2-Dibromo-3-chloropropane	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		- 1	
1,2-Dibromoethane (EDB)	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03		İ	
Dibromomethane	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
1,2-Dichlorobenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03		- 1	
1,3-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03		-	
1,4-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03		ı	
Dichlorodifluoromethane	EPA 8260B	3111006	N/A	5.4	ND	0.942		09/11/03		
1,1-Dichloroethane	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03	1.	
1,2-Dichloroethane	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
l,l-Dichloroethene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		- 1	
cis-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
trans-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
1,2-Dichloropropane	EPA 8260B	3111006	N/A	2.2	ND		09/11/03			
1,3-Dichloropropane	EPA 8260B	3111006	N/A	2.2	ND -	0.942	09/11/03			
2,2-Dichloropropane	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
1,1-Dichloropropene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
cis-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
trans-1,3-Dichloropropene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Ethylbenzene	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
Hexachlorobutadiene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		₩	

Del Mar Analytical, Irvine



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Coton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9668 9630 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0857 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed		ita ifiers
Sample ID: IMI0405-04 (MT543 Reporting Units: ug/kg dry	- Soil) - cont.				Samj	oled: 09	/05/03		RW Qual	QUA
2-Hexanone	EPA 8260B	3I11006	N/A	11	ND	0.942	09/11/03	09/11/03	U	
Isopropylbenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03		
p-Isopropyltoluene	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03	"	1
Methylene chloride	EPA 8260B	3111006	N/A	22	ND	0.942		09/11/03	- 1	1
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11006	N/A	5.4	ND	0.942		09/11/03	-	1
Naphthalene	EPA 8260B	3111006	N/A	5.4	ND	0.942		09/11/03		
n-Propylbenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942		09/11/03		
Styrene	EPA 8260B	3111006	N/A	2.2	ND	0.942				
1,1,1,2-Tetrachloroethane	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03	09/11/03	-	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03	09/11/03		
Tetrachloroethene	EPA 8260B	3I11006	N/A	2.2	ND	0.942		09/11/03		
Toluene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
1,2,3-Trichlorobenzene	EPA 8260B	3I11006	N/A	5.4	ND	0.942	09/11/03			
1,2,4-Trichlorobenzene	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03			
1,1,1-Trichloroethane	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03			
1,1,2-Trichloroethane	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Trichloroethene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Trichlorofluoromethane	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		No.	
1,2,3-Trichloropropane	EPA 8260B	3111006	N/A	11	ND	0.942	09/11/03		West of the second	
1,2,4-Trimethylbenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
1,3,5-Trimethylbenzene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
Vinyl chloride	EPA 8260B	3111006	N/A	5.4	ND	0.942	09/11/03		1 1	
o-Xylene	EPA 8260B	3111006	N/A	2.2	ND	0.942	09/11/03			
m,p-Xylenes	EPA 8260B	3I11006	N/A	2.2	ND	0.942	09/11/03		<i>J</i>	
Surrogate: Dibromofluoromethane	(80-125%)				105 %				•	
Surrogate: Toluene-d8 (80-120%)					106 %				1	
Surrogate: 4-Bromofluorobenzene	(80-120%)				101%					
Sample ID: IMI0405-04RE1 (MT Reporting Units: ug/kg dry	543 - Soil)				Samp	led: 09/0	05/03			
Trichlorotrifluoroethane (Freon 113	B) EPA 8260B	3112027	N/A	9.2	ND	0.852	09/12/03	09/12/03 <b>L</b>	V-1-	VIC
Surrogate: Dibromofluoromethane	(80-125%)	,		·-	108 %	ندران.∪	07:12:03	09/12/03	4	γ,
Surrogate: Toluene-d8 (80-120%)	· · · · · · · · · · · · · · · · · · ·				102 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				87 %				ı	
	~ ~				0170					

WP 1.16.04

Del Mar Analytical, Irvine



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

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Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Facto	n Date rExtracted	Date Analyze		ata difiers
Sample ID: IMI0405-05 (MT5- Reporting Units: ug/kg dry	44 - Soil)				Sam	pled: 09	9/05/03		REV QUAL	Qu Cc
2-Chloroethyl vinyl ether	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03	-	U	
Acetone	EPA 8260B	3111006	N/A	9.3	ND	0.864		_	Ċ	l
Benzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03		- 1	
Bromobenzene	EPA 8260B	3I11006	N/A	4.6	ND	0.864			- 1	
Bromochloromethane	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03		- 1	
Bromodichloromethane	EPA 8260B	3111006	N/A	1.9	ND	0.864		09/11/03	- 1	
Bromoform	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03		1	
Bromomethane	EPA 8260B	3I11006	N/A	4.6	ND	0.864	09/11/03	09/11/03	1	
2-Butanone (MEK)	EPA 8260B	3111006	N/A	9.3	ND	0.864	09/11/03	09/11/03	1	
n-Butylbenzene	EPA 8260B	3I11006	N/A	4.6	ND	0.864	09/11/03	09/11/03		
sec-Butylbenzene	EPA 8260B	3I11006	N/A	4.6	ND	0.864	09/11/03	09/11/03		
tert-Butylbenzene	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03	09/11/03		
Carbon tetrachloride	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03	09/11/03		
Chlorobenzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03			7
Chloroethane	EPA 8260B	3111006	N/A	4.6	ND	0.864	09/11/03	09/11/03 09/11/03		
Chloroform	EPA 8260B	3II1006	N/A	1.9	ND	0.864	09/11/03			
Chloromethane	EPA 8260B	3I11006	N/A	4.6	ND	0.864	09/11/03	09/11/03 09/11/03		
2-Chlorotoluene	EPA 8260B	3I11006	N/A	4.6	ND	0.864	09/11/03			
4-Chlorotoluene	EPA 8260B	3I11006	N/A	4.6	ND	0.864		09/11/03 09/11/03		
Dibromochloromethane	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11006	N/A	4.6	ND	0.864		09/11/03 09/11/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3I11006	N/A	1.9	ND	0.864				
Dibromomethane	EPA 8260B	3111006	N/A	1.9	ND	0.864		09/11/03 09/11/03		
1,2-Dichlorobenzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864		09/11/03		
1,3-Dichlorobenzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864		09/1-1/03		
1,4-Dichlorobenzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864		09/11/03		
Dichlorodifluoromethane	EPA 8260B	3111006	N/A	4.6	ND	0.864		09/11/03		
1,1-Dichloroethane	EPA 8260B	3I11006	N/A	1.9	ND	0.864		09/11/03		
1,2-Dichloroethane	EPA 8260B	3I11006	N/A	1.9	ND	0.864		09/11/03		
1,1-Dichloroethene	EPA 8260B	3I11006	N/A	4.6	ND	0.864		09/11/03		
cis-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	1.9	ND	0.864				
trans-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03	09/11/03		,
1,2-Dichloropropane	EPA 8260B	3111006	N/A	1.9	ND	0.864	09/11/03			
1,3-Dichloropropane	EPA 8260B	3111006	N/A	1.9	ND	0.864	09/11/03			
2,2-Dichloropropane	EPA 8260B	3111006	N/A	1.9	ND	0.864				
1,1-Dichloropropene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03			
cis-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03			
trans-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03		***************************************	
Ethylbenzene	EPA 8260B	3I11006	N/A	1.9	ND	0.864	09/11/03		1	
Hexachlorobutadiene	EPA 8260B	3111006	N/A	4.6	ND ND		09/11/03		7 I	
		2111000	A 1/ 2 %	7.0	1417	0.864	09/11/03	U9/11/U3	4	

Del Mar Analytical, Irvine



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

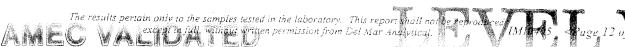
Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

	lifiers
Sample ID: IMI0405-05 (MT544 - Soil) - cont.  Reporting Units: ug/kg dry  Sampled: 09/05/03	QUAL
2-Hexanone EPA 8260B 3I11006 N/A 9.3 ND 0.864 09/11/03 09/11/03 U	MARKET STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,
Isopropylbenzene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03 1	
p-Isopropyltoluene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	-
Methylene chloride EPA 8260B 3II1006 N/A 19 ND 0.864 09/11/03 09/11/03	
4-Methyl-2-pentanone (MIBK) EPA 8260B 3I11006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
Naphthalene EPA 8260B 3111006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
n-Propylbenzene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Styrene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
1,1,1,2-Tetrachloroethane EPA 8260B 3I11006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
1,1,2,2-Tetrachloroethane EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Tetrachloroethene EPA 8260B 3111006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Toluene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
1,2,3-Trichlorobenzene EPA 8260B 3I11006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
1,2,4-Trichlorobenzene EPA 8260B 3I11006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
1,1,1-Trichloroethane EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
1,1,2-Trichloroethane EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Trichloroethene EPA 8260B 3111006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Trichlorofluoromethane EPA 8260B 3111006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
1,2,3-Trichloropropane EPA 8260B 3111006 N/A 9.3 ND 0.864 09/11/03 09/11/03	
1,2,4-Trimethylbenzene EPA 8260B 3111006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
1,5,5-1 rimethylbenzene EPA 8260B 3111006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Vinyl chloride EPA 8260B 3I11006 N/A 4.6 ND 0.864 09/11/03 09/11/03	
o-Xylene EPA 8260B 3I11006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
m,p-Xylenes EPA 8260B 3111006 N/A 1.9 ND 0.864 09/11/03 09/11/03	
Surrogate: Dibromofluoromethane (80-125%)	
Surrogate: Toluene-d8 (80-120%) 105 %	
Surrogate: 4-Bromofluorobenzene (80-120%)	
Sample ID: IMI0405-05RE1 (MT544 - Soil) Reporting Units: ug/kg dry  Sampled: 09/05/03	
Trick love trifferent the company of	V.1
Surrogate: Dibromofluoromethane (80-125%)  11 ND 0.94 09/12/03/03 09/12/03 09/12/03 09/12/03 09/12/03 09/12/03 09/12/03 09/12/03/00 09/12/03/00 09/12/03/00 09/12/03/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/00 09/12/	r yr
Surrogate: Toluene-d8 (80-120%) 102 %	-
Surrogate: 4-Bromofluorobenzene (80-120%) 82 %	

MA 1.16.04

Del Mar Analytical, Irvine



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (558) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3. Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

				/		(******	055/02	,00 <i>D</i> )			
	Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyzeo	Da I Quali	
	Sample ID: IMI0405-06 (MT545 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/05/03		Rev Qual	QUA
	2-Chloroethyl vinyl ether	EPA 8260B	3111026	N/A	4.5	ND	0.855	09/11/03	09/12/03	U	SON CONTRACTOR OF THE PARTY OF
	Acetone	EPA 8260B	3111026	N/A	9.0	ND	0.855		09/12/03	Ų	
	Benzene	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03	1	
	Bromobenzene	EPA 8260B	3[11026	N/A	4.5	ND	0.855		09/12/03	1	
	Bromochloromethane	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03	1	
	Bromodichloromethane	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03	l	
	Bromoform	EPA 8260B	3111026	N/A	4.5	ND	0.855				
	Bromomethane	EPA 8260B	3111026	N/A	4.5	ND	0.855	09/11/03			
	2-Butanone (MEK)	EPA 8260B	3111026	N/A	9.0	ND	0.855	09/11/03			NATION TO SEE
	n-Butylbenzene	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		Tar No.
	sec-Burylbenzene	EPA 8260B	3111026	N/A	4.5	ND	0.855	09/11/03			
	tert-Butylbenzene	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03			Typic and the second se
	Carbon tetrachloride	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03			
	Chlorobenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
	Chloroethane	EPA 8260B	3I11026	N/A	4.5	ND	0.855		09/12/03		
	Chloroform	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	Chloromethane	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		
	2-Chlorotoluene	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03	PACK OF THE PACK O	
	4-Chlorotoluene	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		
	Dibromochloromethane	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	1,2-Dibromo-3-chloropropane	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		
	1,2-Dibromoethane (EDB)	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03	STATE OF THE PARTY	
	Dibromomethane	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
	1,2-Dichlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	1,3-Dichlorobenzene	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	1,4-Dichlorobenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
	Dichlorodifluoromethane	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		
	1,1-Dichloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	1,2-Dichloroethane	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
	1,1-Dichloroethene	EPA 8260B	3111026	N/A	4.5	ND	0.855	09/11/03			
i	cis-1,2-Dichloroethene	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
1	trans-1,2-Dichloroethene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
	1,2-Dichloropropane	EPA 8260B	3111026	N/A	1.8	ND		09/11/03			
	1,3-Dichloropropane	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
	2,2-Dichloropropane	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
	1,1-Dichloropropene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
(	cis-1,3-Dichloropropene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
ţ	rans-1,3-Dichloropropene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03 (			
I	Ethylbenzene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03 (			
F	Hexachlorobutadiene	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03 (		4	
											1

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

				00/11/10	-		/			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyze	Da ed Quali	
Sample ID: IMI0405-06 (MT54 Reporting Units: ug/kg dry	5 - Soil) - cont.				Samj	pled: 09/	/05/03		REV	QUAL
2-Hexanone	EPA 8260B	3I11026	N/A	9.0	ND	0.855	09/11/03	09/12/03	11	
Isopropylbenzene	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03	Ų	
p-Isopropyltoluene	EPA 8260B	3111026	N/A	. 1.8	ND	0.855		09/12/03		
Methylene chloride	EPA 8260B	3111026	N/A	18	ND	0.855		09/12/03	- 1	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11026	N/A	4.5	ND	0.855		09/12/03	-	
Naphthalene	EPA 8260B	3111026	N/A	4.5	ND	0.855		09/12/03		
n-Propylbenzene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03	09/12/03		
Styrene	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03		/	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03			
Tetrachloroethene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			İ
Toluene	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03			ı
1,2,3-Trichlorobenzene	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03			1
1,2,4-Trichlorobenzene	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03			
1,1,1-Trichloroethane	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03			
1,1,2-Trichloroethane	EPA 8260B	3I11026	N/A	1.8	ND	0.855		09/12/03		
Trichloroethene	EPA 8260B	3111026	N/A	1.8	ND	0.855		09/12/03		
Trichlorofluoromethane	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03		THE STATE OF THE S	
1,2,3-Trichloropropane	EPA 8260B	3I11026	N/A	9.0	ND	0.855	09/11/03			
1,2,4-Trimethylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03			
1,3,5-Trimethylbenzene	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03			
Vinyl chloride	EPA 8260B	3I11026	N/A	4.5	ND	0.855	09/11/03			
o-Xylene	EPA 8260B	3111026	N/A	1.8	ND	0.855	09/11/03			
m,p-Xylenes	EPA 8260B	3I11026	N/A	1.8	ND	0.855	09/11/03		1 1	
Surrogate: Dibromofluoromethane	e (80-125%)	5211020	- 11 - 1	1.0	103 %	0.055	09/11/03	09/12/03	1	
Surrogate: Toluene-d8 (80-120%)	(				99 %					
Surrogate: 4-Bromofluorobenzene					96 %					
Sample ID: IMI0405-06RE1 (MT Reporting Units: ug/kg dry	Γ545 - Soil)				Samp	led: 09/(	)5/03			
Trichlorotrifluoroethane (Freon 11 Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene	e (80-125%)	3112013	N/A	9.5	ND 110 % 107 % 94 %	0.907	09/12/03	09/12/03	D\$	*\X
	, = 0 , 2 = 0 / 0/				24 /O				Ì	

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Gooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (853) 505-9689 9830 South 51st St., Suite 5-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

				0 0/1/20 (		0001020	3015)			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor I	Date Extracted	Date Analyz		ata alifier
Sample ID: IMI0405-07 (MT546 Reporting Units: ug/kg dry	5 - Soil)				Sam	oled: 09/0	05/03		REV	QU
2-Chloroethyl vinyl ether	EPA 8260B	3I11006	N/A	5.4	ND	1.1	09/11/03	09/11/03	11	
Acetone	EPA 8260B	3111006	N/A	11	ND	1.1		09/11/03	U	
Benzene	EPA 8260B	3111006	N/A	2.2	ND	1.1		09/11/03	1	
Bromobenzene	EPA 8260B	3111006	N/A	5.4	ND	1.1		09/11/03		
Bromochloromethane	EPA 8260B	3111006	N/A	5.4	ND			09/11/03		
Bromodichloromethane	EPA 8260B	3I11006	N/A	2.2	ND			09/11/03		
Bromoform	EPA 8260B	3111006	N/A	5.4	ND			09/11/03		
Bromomethane	EPA 8260B	3I11006	N/A	5.4	ND			09/11/03		
2-Butanone (MEK)	EPA 8260B	3I11006	N/A	11	ND			09/11/03		
n-Butylbenzene	EPA 8260B	3I11006	N/A	5.4	ND			09/11/03		
sec-Butylbenzene	EPA 8260B	3I11006	N/A	5.4	ND			09/11/03		
tert-Butylbenzene	EPA 8260B	3I11006	N/A	5.4	ND			09/11/03		
Carbon tetrachloride	EPA 8260B	3111006	N/A	5.4	ND			09/11/03		
Chlorobenzene	EPA 8260B	3I11006	N/A	2.2	ND			09/11/03		
Chloroethane	EPA 8260B	3111006	N/A	5.4	ND			09/11/03		
Chloroform	EPA 8260B	3I11006	N/A	2.2	ND					
Chloromethane	EPA 8260B	3111006	N/A	5.4	ND		09/11/03	09/11/03		
2-Chlorotoluene	EPA 8260B	3111006	N/A	5.4	ND		09/11/03		Paragraphic (do)	
4-Chlorotoluene	EPA 8260B	3111006	N/A	5.4	ND					
Dibromochloromethane	EPA 8260B	3111006	N/A	2.2	ND			09/11/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3I11006	N/A	5.4	ND			09/11/03	and the same of th	
1,2-Dibromoethane (EDB)	EPA 8260B	3111006	N/A	2.2	ND			09/11/03		
Dibromomethane	EPA 8260B	3I11006	N/A	2.2	ND			09/11/03		
1,2-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.2	ND			09/11/03		
1,3-Dichlorobenzene	EPA 8260B	3I11006	N/A	2.2	ND			09/11/03		
1,4-Dichlorobenzene	EPA 8260B	3111006	N/A	2.2	ND			09/11/03		
Dichlorodifluoromethane	EPA 8260B	3I11006	N/A	5.4	ND		09/11/03	09/11/03	100	
1,1-Dichloroethane	EPA 8260B	3I11006	N/A	2.2	ND		09/11/03		1 1	
1,2-Dichloroethane	EPA 8260B	3111006	N/A	2.2	ND		09/11/03			
1,1-Dichloroethene	EPA 8260B	3I11006	N/A	5.4	ND		09/11/03			
cis-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	2.2	ND		09/11/03			
trans-1,2-Dichloroethene	EPA 8260B	3I11006	N/A	2.2	ND		09/11/03			
1,2-Dichloropropane	EPA 8260B	3111006	N/A	2.2	ND					
1,3-Dichloropropane	EPA 8260B	3111006	N/A	2.2	ND		09/11/03			
2,2-Dichloropropane	EPA 8260B	3111006	N/A	2.2	ND		09/11/03			
1,1-Dichloropropene	EPA 8260B	3111006	N/A	2.2	ND		09/11/03			
cis-1,3-Dichloropropene	EPA 8260B	3I11006	N/A	2.2			09/11/03			
trans-1,3-Dichloropropene	EPA 8260B	3I11006 3I11006	N/A	2.2	ND		09/11/03			
Ethylbenzene	EPA 8260B	3I11006 3I11006	N/A	2.2	ND		09/11/03			
Hexachlorobutadiene	EPA 8260B				ND		09/11/03		1	
	LI A 0200B	3111006	N/A	5.4	ND	1.1	9/11/03	09/11/03	V	

Del Mar Analytical, Irvine



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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

· ·		/ X C O / X X \ X	$CDD_J$	COMIS		033/02	(dub)			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyzed	Da Quali	
Sample ID: IMI0405-07 (MT54 Reporting Units: ug/kg dry	6 - Soil) - cont.				Samp	oled: 09	/05/03		ZEN LUAL	QUAL
2-Hexanone	EPA 8260B	3I11006	N/A	11	ND	1.1	09/11/03	09/11/03	U	
Isopropylbenzene	EPA 8260B	3I11006	N/A	2.2	ND	1.1		09/11/03	_	
p-Isopropyltoluene	EPA 8260B	3111006	N/A	2.2	ND	1.1		09/11/03		l
Methylene chloride	EPA 8260B	3I11006	N/A	22	ND	1.1	09/11/03		- 1	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I11006	N/A	5.4	ND	1.1	09/11/03		- 1	
Naphthalene	EPA 8260B	3I11006	N/A	5.4	ND.	1.1	09/11/03		- 1	
n-Propylbenzene	EPA 8260B	3I11006	N/A	2.2	ND	1.1	09/11/03		- 1	
Styrene	EPA 8260B	3I11006	N/A	2.2	ND	1.1	09/11/03		- [	
1,1,1,2-Tetrachloroethane	EPA 8260B	3111006	N/A	5.4	ND	1.1	09/11/03		1	
1,1,2,2-Tetrachloroethane	EPA 8260B	3I11006	N/A	2.2	ND	1.1	09/11/03		-	
Tetrachloroethene	EPA 8260B	3I11006	N/A	2.2	ND	1.1	09/11/03			
Toluene	EPA 8260B	3111006	N/A	2.2	ND	1.1	09/11/03			
1,2,3-Trichlorobenzene	EPA 8260B	3I11006	N/A	5.4	ND	1,1	09/11/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I11006	N/A	5.4	ND	1.1	09/11/03			
1,1,1-Trichloroethane	EPA 8260B	3I11006	N/A	2.2	ND	1.1		09/11/03		
1,1,2-Trichloroethane	EPA 8260B	3I11006	N/A	2.2	ND	1.1		09/11/03		
Trichloroethene	EPA 8260B	3I11006	N/A	2.2	ND	1.1		09/11/03		
Trichlorofluoromethane	EPA 8260B	3I11006	N/A	5.4	ND	1.1	09/11/03			
1,2,3-Trichloropropane	EPA 8260B	3I11006	N/A	11	ND	1.1	09/11/03			
1,2,4-Trimethylbenzene	EPA 8260B	3111006	N/A	2.2	ND	1.1	09/11/03			
1,3,5-Trimethylbenzene	EPA 8260B	3111006	N/A	2.2	ND	1.1	09/11/03			
Vinyl chloride	EPA 8260B	3I11006	N/A	5.4	ND	1.1		09/11/03		
o-Xylene	EPA 8260B	3111006	N/A	2.2	ND	1.1	09/11/03			
m,p-Xylenes	EPA 8260B	3I11006	N/A	2.2	ND	1.1	09/11/03		L 1	
Surrogate: Dibromofluoromethane	(80-125%)				104 %	1.1	07/11/03	09/11/03	<b>Y</b>	
Surrogate: Toluene-d8 (80-120%)	,				105 %				1	
Surrogate: 4-Bromofluorobenzene	(80-120%)				101%					
Sample ID: IMI0405-07RE1 (MT Reporting Units: ug/kg dry	7546 - Soil)					led: 09/	05/03			
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3I12027	N/A	1 1	ND	1.04	09/12/03	00:13:03	/	X.V
Surrogate: Dibromofluoromethane	(80-125%)	/		. * *	110 %	1.04	UZI 12/U3	09/17/03	ا مون	<i>ሮ ሀ</i>
Surrogate: Toluene-d8 (80-120%)	• • • • • • •				103 %					•
Surrogate: 4-Bromofluorobenzene	(80-120%)				85 %					
-					00 70				)	

WP 11/6

Del Mar Analytical, Irvine







MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

						(~~~~	202027	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyz	D ed Qua	ata difiers
Sample ID: IMI0405-08 (MT54 Reporting Units: ug/kg dry	17 - Soil)				Sam	pled: 09	/05/03		REV GUAL	QUE
Acetone	EPA 8260B	3115016	N/A	11	ND	1	09/15/03		Ü	
Benzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		Ÿ	
Bromobenzene	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03		1	
Bromochloromethane	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03	- 1	
Bromodichloromethane	EPA 8260B	3I15016	· N/A	2.2	ND	1	09/15/03			
Bromoform	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03		
Bromomethane	EPA 8260B	3J15016	N/A	5.4	ND.	1		09/16/03		
2-Butanone (MEK)	EPA 8260B	3115016	N/A	. 11	ND	1	09/15/03	09/16/03		
n-Butylbenzene	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03	09/16/03		
sec-Butylbenzene	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03	09/16/03		
tert-Butylbenzene	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03		
Carbon tetrachloride	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03	09/16/03		
Chlorobenzene	EPA 8260B	3I15016	N/A	2.2	ND	ĺ	09/15/03	09/16/03	-	
Chloroethane	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03	09/16/03	1 1	
Chloroform	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03		-   -	
Chloromethane	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03		-	
2-Chlorotoluene	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03			
4-Chlorotoluene	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03		1. 1	
Dibromochloromethane	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3I15016	N/A	5.4	ND	ı J	09/15/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03		1 1	
Dibromomethane	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		1 1	
1,2-Dichlorobenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03			
1,3-Dichlorobenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		1 1	
1,4-Dichlorobenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03			
Dichlorodifluoromethane	EPA 8260B	3I15016	N/A	5.4	ND	ì		09/16/03		
1,1-Dichloroethane	EPA 8260B	3I15016	N/A	2.2	ND	1		09/16/03	1 1	
1,2-Dichloroethane	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03			
1,1-Dichloroethene	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03			
cis-1,2-Dichloroethene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03			
trans-1,2-Dichloroethene	EPA 8260B	3115016	N/A	2.2	ND		09/15/03			
1,2-Dichloropropane	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		1 1	
1,3-Dichloropropane	EPA 8260B	3I15016	N/A	2.2	ND		09/15/03		1 1	
2,2-Dichloropropane	EPA 8260B	3115016	N/A	2.2	ND		09/15/03		1 1	
1,1-Dichloropropene	EPA 8260B	3I15016	N/A	2.2	ND		09/15/03			
cis-1,3-Dichloropropene	EPA 8260B	3115016	N/A	2.2	ND		09/15/03			
trans-1,3-Dichloropropene	EPA 8260B	3I15016	N/A	2.2	ND					
Ethylbenzene	EPA 8260B	3115016	N/A	2.2	ND		09/15/03			
Hexachlorobutadiene	EPA 8260B	3115016	N/A	5.4			09/15/03			
2-Hexanone	EPA 8260B	3115016	N/A	11	ND ND		09/15/03   09/15/03		<b>V</b>	
							•		- 1	

Del Mar Analytical, Irvine





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

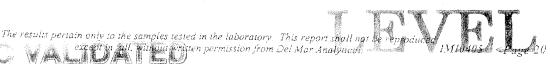
Report Number: IMI0405

Received: 09/05/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

OXISTER OS WILL TO THE BY GC/MIS (ET A 5050B/8200B)											
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample	Dilution	n Date	Date		ita	
		Daten	Limit	LAIIII L	Nesun	Factor	Extracted	•	`.	ifiers	
Sample ID: IMI0405-08 (MT54 Reporting Units: ug/kg dry	7 - Soil) - cont.				Samj	pled: 09	/05/03		UAL.	CODE	
Isopropylbenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03	09/16/03			
p-Isopropyltoluene	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03		Ņ		
Methylene chloride	EPA 8260B	3115016	N/A	22	ND	1	09/15/03		)		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3115016	Ñ/A	5.4	ND	1	09/15/03				
Naphthalene	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03				
n-Propylbenzene	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03				
Styrene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		1		
1,1,1,2-Tetrachloroethane	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03				
1,1,2,2-Tetrachloroethane	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03				
Tetrachloroethene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03		1 1		
Toluene	EPA 8260B	3I15016	N/A	2.2	ND	1		09/16/03			
1,2,3-Trichlorobenzene	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03			
1,2,4-Trichlorobenzene	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03			
1,1,1-Trichloroethane	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03			
1,1,2-Trichloroethane	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03			
Trichloroethene	EPA 8260B	3I15016	N/A	2.2	ND	1		09/16/03			
Trichlorofluoromethane	EPA 8260B	3I15016	N/A	5.4	ND	1		09/16/03			
1,2,3-Trichloropropane ·	EPA 8260B	3115016	N/A	11	ND	1		09/16/03			
1,2,4-Trimethylbenzene	EPA 8260B	3115016	N/A	2.2	ND	ì		09/16/03			
1,3,5-Trimethylbenzene	EPA 8260B	3I15016	N/A	2.2	ND	1		09/16/03			
Vinyl chloride	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03			
o-Xylene	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03			
m,p-Xylenes	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03	1		
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3I15016	N/A	11	ND	1	09/15/03			*II	
Surrogate: Dibromofluoromethane	(80-125%)				110 %	1	09/13/03	09:10/03	7	ry	
Surrogate: Toluene-d8 (80-120%)					102 %					•	
Surrogate: 4-Bromofluorobenzene	(80-120%)				94%						
					- / / 0						

Del Mar Analytical, Irvine Michele Harper Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1226 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Benzene		3 (2	00 1,1011						200D)		
Samplet D: IMI0405-09 (MT548 - Soil)   Reporting Units: ug/kg dry   Acetone	Analyte	Method	Batch	MDL Limit							
Reporting Units: ug/kg dry	Sample ID: IMI0405-09 (MT548	8 - Soil)				S 0	t	1/05/03	-		
Benzene		5 5011)				Sam	piea: vy	9/05/03			ii .
Benzene	Acetone	EPA 8260B	3115016	N/A	1.1	NID	1	00/15/02	~~~~	The second second	
Bromochioromethane	Benzene						_			Ÿ	
Bromodichloromethane	Bromobenzene									-	
Bromoform	Bromochloromethane									1	
Bromoform	Bromodichloromethane									1	
Bromomethane	Bromoform										
2-Butanone (MEK)	Bromomethane										
n-Burylbenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 sec-Burylbenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 tert-Burylbenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Carbon tetrachloride EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Dibromochloromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chioromethane EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.2 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.2 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobenzene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03 Chiorobe	2-Butanone (MEK)									1	
Sec-Butylbenzene	n-Butylbenzene										
terr-Burylbenzene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           Carbon tetrachloride         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           Chloroethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Chloroethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Chloroethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Chlorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           4-Chiorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1.2-Dibromochloromethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1.2-Dibromochlane (EDB)         EPA 8260B         3115016         N/A         2.2	sec-Butylbenzene										
Carbon tetrachloride	tert-Butylbenzene										
Chlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Chloroethane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           Chloroform         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Chlorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           2-Chiorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           4-Chiorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dibromordhane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dibromorthane (EDB)         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2 <t< td=""><td>Carbon tetrachloride</td><td>EPA 8260B</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Carbon tetrachloride	EPA 8260B									
Chloroethane	Chlorobenzene									on the second	
Chloroform	Chloroethane										
Chloromethane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           2-Chlorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           4-Chlorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dibromochloromethane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dibromochloromethane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichloroethane         EPA 8260B         3115016         N/A	Chloroform								1	20.00	
2-Chlorotoluene	Chloromethane								3	to a second	
4-Chiorotoluene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           Dibromochloromethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dibromo-3-chloropropane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dibromoethane (EDB)         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dibromoethane (EDB)         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,4-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichlorothane         EPA 8260B         3115016	2-Chlorotoluene									of cells.	
Dibromochloromethane	4-Chlorotoluene										
1,2-Dibromo-3-chloropropane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,2-Dibromoethane (EDB)         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Dibromomethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,4-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,4-Dichlorobenzene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,1-Dichlorobenzene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichlorobenzene         EPA 8260B         3115016 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>i i</td><td>- Adject or A</td><td></td></td<>									i i	- Adject or A	
1,2-Dibromoethane (EDB)	1,2-Dibromo-3-chloropropane	EPA 8260B							i	NA STATE OF THE ST	
Dibromomethane	1,2-Dibromoethane (EDB)	EPA 8260B								State Contract	
1,2-Dichlorobenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichlorobenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,4-Dichlorobenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Dichlorodifluoromethane       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03         1,1-Dichloroethane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloroethane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dich	Dibromomethane	EPA 8260B								418	
1,3-Dichlorobenzene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,4-Dichlorobenzene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         Dichlorodifluoromethane       EPA 8260B       3I15016       N/A       5.4       ND       1       09/15/03       09/16/03         1,1-Dichloroethane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloroethane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloropropane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichloropropane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dich	1,2-Dichlorobenzene	EPA 8260B	3115016							2	
1,4-Dichlorobenzene	1,3-Dichlorobenzene	EPA 8260B	3I15016	N/A						The state of the s	
Dichlorodifluoromethane         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           1,1-Dichloroethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichloroethane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichloroethene         EPA 8260B         3115016         N/A         5.4         ND         1         09/15/03         09/16/03           cis-1,2-Dichloroethene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           trans-1,2-Dichloroethene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichloropropane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichloropropane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichloropropene         EPA 8260B         3115016         <		EPA 8260B	3115016	N/A						THE MILESTON	
1,1-Dichloroethane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloroethane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03         cis-1,2-Dichloroethene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         2,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         cis-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         tran		EPA 8260B	3115016	N/A						Toward confin	
1,2-Dichloroethane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloroethene       EPA 8260B       3I15016       N/A       5.4       ND       1       09/15/03       09/16/03         cis-1,2-Dichloroethene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         trans-1,2-Dichloroethene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloropropane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichloropropane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         2,2-Dichloropropane       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloropropene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03         cis-1,3-Dichloropropene       EPA 8260B       3I15016       N/A       2.2       ND       1       09/15/03       09/16/03 <t< td=""><td></td><td>EPA 8260B</td><td>3115016</td><td>N/A</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></t<>		EPA 8260B	3115016	N/A						-	
1,1-Dichloroethene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03         cis-1,2-Dichloroethene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         trans-1,2-Dichloroethene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         2,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         cis-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         trans-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03		EPA-8260B	3115016	N/A	2.2					Pod Marino	
cis-1,2-Dichloroethene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           trans-1,2-Dichloroethene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,2-Dichloropropane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,3-Dichloropropane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           2,2-Dichloropropane         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           1,1-Dichloropropene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           cis-1,3-Dichloropropene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           trans-1,3-Dichloropropene         EPA 8260B         3115016         N/A         2.2         ND         1         09/15/03         09/16/03           Ethylbenzene         EPA 8260B         3115016		EPA 8260B	3I15016	N/A	5.4	ND	1		1	- Parket Programme	
trans-1,2-Dichloroethene EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 1,2-Dichloropropane EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 1.3-Dichloropropane EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 2,2-Dichloropropane EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 1,1-Dichloropropene EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 cis-1,3-Dichloropropene EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 trans-1,3-Dichloropropene EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03 EPA 8260B 3115016 N/A 2.2 ND 1 09/15/03 09/16/03		EPA 8260B	3115016	N/A	2.2		1			Stifference (Common	
1,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,3-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         2,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         cis-1.3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         trans-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Ethylbenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Alexachlorobutadiene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03		EPA 8260B	3115016	N/A	2.2		1			) special party	
L3-Dichloropropane			3I15016	N/A	2.2	ND	1			We constitute the	
2,2-Dichloropropane       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         1,1-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         cis-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         trans-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Ethylbenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Hexachlorobutadiene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03		EPA 8260B	3115016	N/A	2.2	ND	1			Principles	
Cis-1.3-Dichloropropene		EPA 8260B	3115016	N/A	2.2		1			, Line of the Line	
Cis-1.3-Dichloropropene         EPA 8260B         3I15016         N/A         2.2         ND         1         09/15/03         09/16/03           trans-1.3-Dichloropropene         EPA 8260B         3I15016         N/A         2.2         ND         1         09/15/03         09/16/03           Ethylbenzene         EPA 8260B         3I15016         N/A         2.2         ND         1         09/15/03         09/16/03           Hexachlorobutadiene         EPA 8260B         3I15016         N/A         5.4         ND         1         09/15/03         09/16/03		EP.A. 8260B	3115016	N/A	2.2	ND	1			abyther.co	
trans-1,3-Dichloropropene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Ethylbenzene       EPA 8260B       3115016       N/A       2.2       ND       1       09/15/03       09/16/03         Hexachlorobutadiene       EPA 8260B       3115016       N/A       5.4       ND       1       09/15/03       09/16/03		EPA 8260B	3I15016	N/A	2.2	ND	1				
Ethylbenzene EPA 8260B 3I15016 N/A 2.2 ND 1 09/15/03 09/16/03 Hexachlorobutadiene EPA 8260B 3I15016 N/A 5.4 ND 1 09/15/03 09/16/03		EPA 8260B	3115016	N/A							
Hexachlorobutadiene EPA 8260B 3115016 N/A 5.4 ND 1 09/15/03 09/16/03	•	EPA 8260B	3115016	N/A							
7 Howards			3115016	N/A						and the second	
	2-Hexanone	EPA 8260B	3115016	N/A	11	ND	1			<i>'</i>	

Del Mar Analytical, Irvine



2852 Altor, Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suits A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suits 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suits B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

							-0019			
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyze	Da ed Qual	
Sample ID: IMI0405-09 (MT548 Reporting Units: ug/kg dry	3 - Soil) - cont.				Samp	pled: 09/	05/03		REV	CODE
Isopropylbenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03	09/16/03	U	
p-lsopropyltoluene	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03	Ò	
Methylene chloride	EPA 8260B	3115016	N/A	22	ND	1	09/15/03	09/16/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3115016	N/A	5.4	ND	1	09/15/03	09/16/03		
Naphthalene	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03	09/16/03		
n-Propylbenzene	EPA 8260B	3115016	N/A	2.2	ND	ì	09/15/03	09/16/03		
Styrene	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03	09/16/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3I15016	N/A	5.4	ND	1	09/15/03	09/16/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03	09/16/03		
Tetrachloroethene	EPA 8260B	3I15016	N/A	2.2	ND	1	09/15/03	09/16/03		
Toluene	EPA 8260B	3I15016	N/A	2.2	ND	ì		09/16/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I15016	N/A	5.4	ND	1		09/16/03	1 1	
1,2,4-Trichlorobenzene	EPA 8260B	3I15016	N/A	5.4	ND	1		09/16/03		
1,1,1-Trichloroethane	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03	-	
1,1,2-Trichloroethane	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03		
Trichloroethene	EPA 8260B	3I15016	N/A	2.2	ND	1		09/16/03		
Trichlorofluoromethane	EPA 8260B	3115016	N/A	5.4	ND	1		09/16/03		
1,2,3-Trichloropropane	EPA 8260B	3I15016	N/A	11	ND	1		09/16/03		
1,2,4-Trimethylbenzene	EPA 8260B	3115016	N/A	2.2	ND	1		09/16/03		
1,3,5-Trimethylbenzene	EPA 8260B	3115016	N/A	2.2	ND	1	09/15/03			
Vinyl chloride	EPA 8260B	3I15016	N/A	5.4	ND	1		09/16/03		
o-Xylene	EPA 8260B	3115016	N/A	2.2	ND		09/15/03			
m,p-Xylenes	EPA 8260B	3115016	N/A	2.2	ND		09/15/03		4	
Trichlorotrifluoroethane (Freon 113	3) EPA 8260B	3I15016	N/A	11	ND		09/15/03		ind	XIX
Surrogate: Dibromofluoromethane	(80-125%)				109 %	•	07/13/03	09/10/03	ا م	r yı
Surrogate: Toluene-d8 (80-120%)					103 %			49		
Surrogate: 4-Bromofluorobenzene				99 %						

WP of



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IM10405

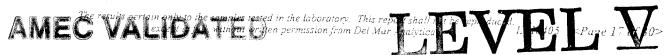
Sampled: 09/05/03

Received: 09/05/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyze		Data alifiers
Sample ID: IMI0405-01 (MT54 Reporting Units: ug/l	19 - Water)				Samı	oled: 09	/05/03	8	2 UPL	QUAL
Acetone	EPA 8260B	3117009	N/A	10	ND	1	00/17/02	09/17/03		
Benzene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03		Ų	
Bromobenzene	EPA 8260B	3I17009	N/A	5.0	ND	1		09/17/03	- 1	
Bromochloromethane	EPA 8260B	3117009	N/A	5.0	ND	1		09/17/03	- 1 -	ł
Bromodichloromethane	EPA 8260B	3I17009	N/A	2.0	ND	l		09/17/03	- [	İ
Bromoform	EPA 8260B	3117009	N/A	5.0	ND	1	09/17/03			
Bromomethane	EPA 8260B	3117009	N/A	5.0	ND	l		09/17/03 09/17/03		
2-Butanone (MEK)	EPA 8260B	3I17009	N/A	10	ND	1		09/17/03		
n-Butylbenzene	EPA 8260B	3I17009	N/A	5.0	ND	1		09/17/03		
sec-Butylbenzene	EPA 8260B	3I17009	N/A	5.0	ND	l		09/17/03		
tert-Butylbenzene	EPA 8260B	3I17009	N/A	5.0	ND	l l		09/17/03	1 1	
Carbon tetrachloride	EPA 8260B	3117009	N/A	5.0	ND	1	09/17/03			
Chlorobenzene	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03		1 1	
Chloroethane	EPA 8260B	3I17009	N/A	5.0	ND	ŀ				
Chloroform	EPA 8260B	3I17009	N/A	2.0	ND	1		09/17/03		
Chloromethane	EPA 8260B	3117009	N/A	5.0	ND	1	09/17/03			
2-Chlorotoluene	EPA 8260B	3I17009	N/A	5.0	ND	1	09/17/03		1	
4-Chlorotoluene	EPA 8260B	3117009	N/A	5.0	ND	1	09/17/03 09/17/03			
Dibromochloromethane	EPA 8260B	3I17009	N/A	2.0	ND	1		09/17/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3117009	N/A	5.0	ND	1		09/17/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3I17009	N/A	2.0	ND	1		09/17/03		
Dibromomethane	EPA 8260B	3117009	N/A	2.0	ND	I		09/17/03		
1,2-Dichlorobenzene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03 09/17/03			
1,3-Dichlorobenzene	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03		
1,4-Dichlorobenzene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03	09/17/03	1	
Dichlorodifluoromethane	EPA 8260B	3I17009	N/A	5.0	ND	1	09/17/03			
1,1-Dichloroethane	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03			
1,2-Dichloroethane	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03	1 1	
1,1-Dichloroethene	EPA 8260B	3I17009	N/A	5.0	ND	1	09/17/03			
cis-1,2-Dichloroethene	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03			
trans-1,2-Dichloroethene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03			
1,2-Dichloropropane	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03			
1,3-Dichloropropane	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03			
2,2-Dichloropropane	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03			
I,l-Dichloropropene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03		1	
cis-1,3-Dichloropropene	EPA 8260B	3117009	N/A	2.0	ND	1		1		
trans-1,3-Dichloropropene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03			
Ethylbenzene	EPA 8260B	3117009	N/A	2.0	ND ND	1	09/17/03 ( 09/17/03 (			
Hexachlorobutadiene	EPA 8260B	3I17009	N/A	5.0	ND		09/17/03 ( 09/17/03 (			
2-Hexanone	EPA 8260B	3117009	N/A	10	ND		09/17/03 ( 09/17/03 (		,	
					البلاد	L	47/11/100 Y	J7/17/UD 📑	1	

Del Mar Analytical, Irvine



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Cnesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunser Rd. #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			-			(~~	5050000	moonj		
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Facto	n Date rExtracted	Date Analyzed	_	ata lifiers
Sample ID: IMI0405-01 (MT54 Reporting Units: ug/l	9 - Water) - cont.				Samı	pled: 0	9/05/03		ييک ره بدر	QUAL
Isopropylbenzene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03			1 200
p-Isopropyltoluene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03	09/17/03	U	ĺ
Methylene chloride	EPA 8260B	3I17009	N/A	5.0	ND	1	09/17/03	09/17/03	1	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3117009	N/A	10	ND	1	09/17/03	09/17/03		
Naphthalene	EPA 8260B	3I17009	N/A	5.0	ND	. 1	09/17/03	09/17/03		
n-Propylbenzene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03	09/17/03		
Styrene	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03	09/17/03	1	İ
1,1,1,2-Tetrachloroethane	EPA 8260B	3117009	N/A	5.0	ND	1	09/17/03	09/17/03	1	
1,1,2,2-Tetrachloroethane	EPA 8260B	3117009	N/A	2.0	ND	1	09/17/03	09/17/03	1	
Tetrachloroethene	EPA 8260B	3I17009	N/A	2.0	ND	1			1	
Toluene	EPA 8260B	3I17009	N/A	2.0	ND	1	09/17/03	09/17/03		Ì
1,2,3-Trichlorobenzene	EPA 8260B	3117009	N/A	5.0	ND	1		09/17/03 09/17/03		
1,2,4-Trichlorobenzene	EPA 8260B	3I17009	N/A	5.0	ND	1				
1,1,1-Trichloroethane	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03		
1,1,2-Trichloroethane	EPA 8260B	3I17009	N/A	2.0	ND	1		09/17/03		
Trichloroethene	EPA 8260B	3I17009	N/A	2.0	ND	1		09/17/03		
Trichlorofluoromethane	EPA 8260B	3117009	N/A	5.0	ND	1		09/17/03		
1,2,3-Trichloropropane	EPA 8260B	3117009	N/A	10	ND	1		09/17/03		
1,2,4-Trimethylbenzene	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03		
1,3,5-Trimethylbenzene	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03	•	
Vinyl chloride	EPA 8260B	3117009	N/A	5.0	ND	1		09/17/03		
o-Xylene	EPA 8260B	3117009	N/A	2.0	ND	. 1		09/17/03		
m,p-Xylenes	EPA 8260B	3117009	N/A	2.0	ND	1		09/17/03	<b>/</b>	
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3I17009	N/A	5.0	ND	1		02/11/02	ا ر_`	1.1
Surrogate: Dibromofluoromethane	(80-120%)	5117005	1021	2.0	117 %	1	09/17/03	09/17/03	עלי.	T M
Surrogate: Toluene-d8 (80-120%)					111 %			**		
Surrogate: 4-Bromofluorobenzene	(80-120%)				108 %					
	,				100 /0					

1.16-04

Del Mar Analytical, Irvine Michele Harper Project Manager





2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9589 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0651 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor I	Date Extracted	Date Analyz		Data ialifiers
Sample ID: IMI0405-08 (MT54 Reporting Units: ug/kg dry	7 - Soil)				Samj	oled: 09/0	)5/03	19	2UNL	, QUAL
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethar Surrogate: Toluene-d8 (80-120% Surrogate: 4-Bromofluorobenzen	)	3115016	N/A	5.4	ND 110 % 102 % 94 %	1	09/15/03	09/16/03	U	
Sample ID: IMI0405-09 (MT54) Reporting Units: ug/kg dry	8 - Soil)				Samp	oled: 09/0	5/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethan Surrogate: Toluene-d8 (80-120%, Surrogate: 4-Bromofluorobenzene		3115016	N/A	5.4	ND 109 % 103 % 99 %	1	09/15/03	09/16/03	U	

Del Mar Analytical, Irvine Michele Harper Project Manager

2 at 80 >



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

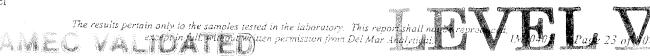
Sampled: 09/05/03 Received: 09/05/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilutio Facto	n Date rExtracted	Date Analyz	Da ed Quali	
Sample ID: IMI0405-01 (MT54 Reporting Units: ug/l	9 - Water)				Samj	pled: 09	9/05/03		REV	CODE
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I17009 3I17009	N/A N/A	200 200	ND ND	1		09/17/03 09/17/03	7.0	*11
Sample ID: IMI0405-02 (MT54 Reporting Units: ug/kg dry	1 - Soil)					oled: 09		00/17/03	いて	<b>*</b> 11
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11026 3I11026	N/A N/A	180 180	ND ND	0.899 0.899		09/12/03	いユ	*11
Sample ID: IMI0405-03 (MT54) Reporting Units: ug/kg dry		2111020	17/21			0.899 1ed: 09		09/12/03	UJ	*11
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11006 3I11006	N/A N/A	230 230	ND ND	0.924 0.924	09/11/03 09/11/03		レゴ	*11
Sample ID: IMI0405-04 (MT543 Reporting Units: ug/kg dry	3 - Soil)				Samp	led: 09		0 7 / 1 1 / 0 3	<b>U</b> J	
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11006 3I11006	N/A N/A	220 220	ND ND	0.942 0.942	09/11/03 09/11/03	09/11/03 09/11/03	ひて	*11 *11
Sample ID: IMI0405-05 (MT544 Reporting Units: ug/kg dry	- Soil)				Samp	led: 09.		00/11/03	<i>U</i> 3	~ • (
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11006 3I11006	N/A N/A	190 190	ND ND	0.864 0.864	09/11/03 09/11/03		Ω <u>1</u> Δ4	* L1
Sample ID: IMI0405-06 (MT545 Reporting Units: ug/kg dry	- Soil)				Samp	led: 09/		03/11/02	03	* ! (
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11026 3I11026	N/A N/A	180 180	ND ND	0.855 0.855	09/11/03 09/11/03		ひて	*!! *!!
Sample ID: IM10405-07 (MT546 Reporting Units: ug/kg dry	- Soil)				Sampl	led: 09/	05/03			. • • •
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I11006 3I11006	N/A N/A	220 220	ND ND	1.1 1.I	09/11/03 09/11/03		いて	*11
Sample ID: IMI0405-08 (MT547 Reporting Units: ug/kg dry	- Soil)				Sampl	ed: 09/	05/03			
2-chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I15016 3I15016	N/A N/A	220 220	ND ND	1	09/15/03 09/15/03		0 <u>7</u>	*11

Del Mar Analytical, Irvine Michele Harper

Project Manager





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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

## PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyze	Data d Qualifi	
Sample ID: IMI0405-09 (MT548 Reporting Units: ug/kg dry	3 - Soil)				Samp	led: 09	0/05/03		REV	QUAL
2-chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3I15016 3I15016	N/A N/A	220 220	ND ND	1		09/16/03 09/16/03	UJ.	* 11 * 11

### CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

AMEC Earth & Environmental	Package ID T707VO6
550 South Wadsworth Boulevard	Task Order
Suite 500	SDG No. MF003
Lakewood, CO 80226	No. of Analyses 2
Laboratory Ceimic	Date: January 16, 2004
Reviewer E. Wessling	Reviewer's Signature
Analysis/Method Volatiles	- 21 A. W.
	75
ACTION ITEMS <sup>a</sup>	
1. Case Narrative	
Deficiencies	
2. Out of Scope	
Analyses	
3. Analyses Not Conducted	
· · · · · · · · · · · · · · · · · · ·	
4. Missing Hardcopy	
Deliverables	
***************************************	
5. Incorrect Hardcopy	
Deliverables	
6. Deviations from Analysis	Southern South
Protocol, e.g.,	Cele We
Holding Times	1.0
GC/MS Tune/Inst. Perform	
Calibrations	
Blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification and	
Quantitation	
System Performance	
COMMENTS <sup>b</sup>	
a Subcontracted analytical laboratory is not meeting contract and/or method requ	
b Differences in protocol have been adopted by the laboratory but no action again	inst the laboratory is required.



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>
SDG: MF003

Matrix: Soil/Water

No. of Samples: 2
No. of Reanalyses/Dilutions: 0

<u>Date Reviewed</u>: January 15, 2004 <u>Reviewer</u>: E.Wessling

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MF004, and MF005

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	One method blank was analyzed with this SDG. Methylene chloride was present in the method blank. No other target compounds were reported in the method blank.	Samples MF004 and MF005 were qualified as estimated nondetects, "UJ," for methlyene chloride.  No further qualifications were required.
5. LCS/BS	One LCS was analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. Surrogates	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.
7. MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.

Project: Rocketdyne SDG: MF003 Analysis: VOA

	Findings	Qualifications
8. Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: M004 FB: MT667 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, and was detected in site sample MF005.	Acetone in MF005 was qualified as estimated, "J." No further qualifications were required.
9. Other	None.	None.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

MWH SAMPLE NO.

MF004

Lab Name: CEIMIC CORP

Project: BOEING SSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF003

Matrix: (soil/water) SOIL

Lab Sample ID: 031290-02

Sample wt/vol:

5.00(g/mL) G

LOW

Lab File ID: OC639

Level: (low/med)

Date Received: 09/19/03

% Moisture: not dec.

Date Analyzed: 10/01/03

GC Column: RTX-VOL

ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UN (ug/L or ug/Kg)		Qua)	Oual	
75-71-8 74-87-3 75-01-4 75-00-3 75-69-4 75-69-4 75-35-4 75-35-4 75-35-4 75-34-3 75-34-3 75-34-3 75-66-3 56-23-5 71-55-66-2 71-43-2 71-43-2 71-43-2 710-75-8 75-27-4 10061-01-5 108-88-3 10061-02-6 79-00-5 127-18-4	1,1-DichloroethMethylene ChlorCarbon Disulfidtrans-1,2-Dichl1,1-Dichloroeth2-Butanonecis-1,2-DichloroethChloroform1,1,1-TrichloroCarbon Tetrachl1,2-DichloroethBenzeneTrichloroethene1,2-DichloroproBromodichlorome2-Chloroethylvicis-1,3-DichlorToluenetrans-1,3-Dichl1,1,2-TrichloroTetrachloroethe	methane trifluoroetha ene ide e oroethene ane oethene ene (total) ethane oride ane  pane thane nyl ether opropene oropropene ethane ne	55555555555555555555555555555555555555		ß	1000 1000 1000 1000 1000 1000 1000 100
591-78-6	4-Methyl-2-Pent 2-Hexanone FORM I		10 1	1 1		



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MWH SAMPLE NO.

MF004

Lab Name: CEIMIC CORP

Project: BOEING SSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF003

Matrix: (soil/water) SOIL

Lab Sample ID: 031290-02

Sample wt/vol:

5.00(g/mL) G

Lab File ID: OC639

Level: (low/med)

LOW

Date Received: 09/19/03

% Moisture: not dec.

Date Analyzed: 10/01/03

GC Column: RTX-VOL ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNI		o Q	na)	Ortobe
544-10-5 108-90-7 630-20-6 100-41-4 1330-20-7 108-38-3 95-47-6 75-25-2 79-34-5 96-18-4 108-67-8 95-63-6 541-73-1 95-50-1	-Chlorobenzene -1,1,1,2-Tetrach -Ethylbenzene -Xylenes (total) -m,p-Xylenes -o-Xylene -Styrene	loroethane loroethane propane benzene benzene zene zene zene	<u>,                                    </u>	ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט ט		

FORM I VOA



LEVEL V

MWH SAMPLE NO.

MF005

Lab Name: CEIMIC CORP

Project: BOEING SSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF003

Matrix: (soil/water) SOIL

Lab Sample ID: 031290-03

Sample wt/vol:

5.50(g/mL) G

Lab File ID:

OC650

Level:

(low/med)

LOW

Date Received: 09/19/03

% Moisture: not dec. 13

Date Analyzed: 10/01/03

GC Column: RTX-VOL

ID: 0.53 (mm)

Dilution Factor: 1.0

CONCENTRATION UNITS: COMPOUND (uq/L or uq/Kq) UG/KG CAS NO. U 5 U 79-38-9-----Chlorotrifluoroethene 5 75-71-8-----Dichlorodifluoromethane U 5 5 U 74-87-3-----Chloromethane U 75-01-4-----Vinyl Chloride 5 U 74-83-9-----Bromomethane 5 U 75-00-3-----Chloroethane 2 J 75-69-4-----Trichlorofluoromethane 76-13-1----1,1,2-Trichlorotrifluoroetha 5 U u 67-64-1-----Acetone 22 7 Ū 75-35-4-----1,1-Dichloroethene 5 UJ B 75-09-2-----Methylene Chloride 18 B 5 U 75-15-0-----Carbon Disulfide 5 U 156-60-5----trans-1,2-Dichloroethene 5 U 75-34-3----1,1-Dichloroethane\_ 10 U 78-93-3----2-Butanone 156-59-2----cis-1,2-Dichloroethene 5 U 10 U 540-59-0----1,2-Dichloroethene (total) 67-66-3-----Chloroform 71-55-6----1,1,1-Trichloroethane 56-23-5-----Carbon Tetrachloride 107-06-2----1,2-Dichloroethane 71-43-2-----Benzene 79-01-6-----Trichloroethene 78-87-5----1,2-Dichloropropane 75-27-4-----Bromodichloromethane 110-75-8----2-Chloroethylvinyl ether 10061-01-5----cis-1,3-Dichloropropene 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 5 U 5 79-00-5-----1,1,2-Trichloroethane U 5 127-18-4----Tetrachloroethene U 10 U 108-10-1----4-Methyl-2-Pentanone 591-78-6----2-Hexanone 10 U FORM I VOA

MWH SAMPLE NO.

MF005

Lab Name: CEIMIC CORP

Project: BOEING SSFL

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Lab Code: CEIMIC

IC Case No.: BOEING

SDG No.: MF003

Matrix: (soil/water) SOIL

^TT

Lab Sample ID: 031290-03

Sample wt/vol:

5.50(g/mL) G

Lab File ID: OC650

Level: (low

(low/med) LOW

Date Received: 09/19/03

% Moisture: not dec. 13

Date Analyzed: 10/01/03

GC Column: RTX-VOL

ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION (ug/L or ug/l	Q V	Sho)	Or Orde	<u>.</u>
544-10-5 108-90-7 630-20-6 100-41-4 1330-20-7 108-38-3 95-47-6 75-25-2 79-34-5 96-18-4 108-67-8 541-73-1 106-46-7	Styrene	chloroethane  chloroethane  chloroethane  chloroethane  cropropane  cylbenzene  cylbenzene  cenzene  cenzene  cenzene	0 0 0 0 0 0	3		1960년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1964년 1





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## DATA ASSESSMENT FORM

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>

SDG: MF001

Matrix: Soil/Water

No. of Samples: 2

No. of Reanalyses/Dilutions: 1

Date Reviewed: January 15, 2004

Reviewer: E.Wessling

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MF001, MF001RE, MF002

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	One method blank was analyzed with this SDG. Methylene chloride was present in the method blank. No other target compounds were reported in the method blank.	Sample MF001 and MF002 were qualified as estimated nondetects, "UJ," for methlyene chloride.  No further qualifications were required.
5. LCS/BS	One LCS was analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. Surrogates	All surrogate recoveries were within the laboratory-established QC limits with the exception of BFB in sample MF001 and MF001RE.	Sample MF001 was qualified as estimated, "UJ," MF001RE was rejected. "R," for all target compounds in favor of the original analysis. No further qualifications were required.

Project: Rocketdyne SDG: MF001 Analysis: VOA

		Findings	Qualifications
7.	MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8.	Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MF002 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9.	Other		
Co	<u>mments</u>	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

MWH SAMPLE NO.

MF001

Lab Name: CEIMIC CORP

Project: BOEINGSSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF001

Matrix: (soil/water) SOIL

Lab Sample ID: 031213-01

Sample wt/vol:

5.00(g/mL) G

Lab File ID: OC384

Level: (low/med)

LOW

Date Received: 09/06/03

% Moisture: not dec. 5

Date Analyzed: 09/17/03

GC Column: RTX-VOL I

ID: 0.53 (mm)

Dilution Factor: 1.0

	NTRATION UNITS: or ug/Kg) UG/KG	2 Coud	Ovale
79-38-9	e 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5 U 5	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	S N N N N N N N N N N N N N N N N N N N

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LEVEL V

MWH SAMPLE NO.

MF001

Lab Name: CEIMIC CORP

Project: BOEINGSSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF001

Matrix: (soil/water) SOIL

Lab Sample ID: 031213-01

Sample wt/vol:

5.00(g/mL) G

Lab File ID: OC384

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. 5

Date Analyzed: 09/17/03

GC Column: RTX-VOL ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATIO		Q Lo	$v_0$	Code
124-48-1	1-Chlorohexane Chlorobenzene 1,1,1,2-Tetrac Ethylbenzene Xylenes (total m,p-Xylenes o-Xylene Styrene Bromoform 1,1,2,2-Tetrac 1,2,3-Trichlor 1,3,5-Trimethy 1,2,4-Trimethy 1,3-Dichlorobe 1,4-Dichlorobe	hloroethane ) hloroethane opropane lbenzene lbenzene nzene nzene nzene	5 5 5 5 5 16 11 5 5 5 5 5 5 5 5 5 5 5 5	บ บ บ บ	us	\$

MWH SAMPLE NO.

MF001RE

Lab Name: CEIMIC CORP

Project: BOEINGSSFL

Lab Code: CEIMIC

Case No.: BOEING

SDG No.: MF001

Matrix: (soil/water) SOIL

Lab Sample ID: 031213-01RE

Sample wt/vol:

4.60(g/mL) G

Lab File ID:

OC386

Level: (low/med)

LOW

% Moisture: not dec. 5

Date Received: 09/06/03

Date Analyzed: 09/17/03

GC Column: RTX-VOL ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.		RATION UNITS: r ug/Kg) UG/KG	Q <sub>(</sub>	for a	Cod	1 : Q
75-71-8	Chlorotrifluoroethene Dichlorodifluoromethane		6 U	R	O	
74-87-3	Chloromethane		6 U	\	-	
75-01-4	Vinyl Chloride		6 U		ACCUPATION OF THE PROPERTY OF	
74-83-9	Bromomethane		6 U			
75-00-3	Chloroethane		6 U			
75-69-4	Trichlorofluoromethane		6 U			
76-13-1	1,1,2-Trichlorotrifluoro		6 U			
67-64-1	Acetone		11 U	1 (	Total Control of the	
75-35-4	1,1-Dichloroethene		6 U		and and and and and and and and and and	
/5-09-2	Methylene Chloride		12 B			
75-15-0	Carbon Disulfide		6 U		To the second se	
156-60-5	trans-1,2-Dichloroethene		6 U			
/5-34-3	1,1-Dichloroethane		6 U			
/8-93-3	2-Butanone		11 U			
156-59-2	cis-1,2-Dichloroethene		6 U			
540-59-0	1,2-Dichloroethene (total	1)	11 U			
	Chloroform	White American	6 U			
71-55-6	1,1,1-Trichloroethane		6 U			
56-23-5	Carbon Tetrachloride		6 U			
10/-06-2	1,2-Dichloroethane		6 U			
71-43-2			6 U		120	
/9-01-6	Trichloroethene		6 U			
/8-8/-5	1,2-Dichloropropane	Photo and the second	6 U			
15-27-4	Bromodichloromethane		6 U			
110-/5-8	2-Chloroethylvinyl ether		6 U		200	
10061-01-2	cis-1,3-Dichloropropene_		6 U			
108-88-3	Toluene		6 U			
10001-05-0	trans-1,3-Dichloropropend	e	6 U		Constitution of the Consti	
/9-00-5	1,1,2-Trichloroethane		6 U			
12/-18-4	Tetrachloroethene	***************************************	6 U		E COLUMN TO THE TOTAL THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TO THE TOTAL TOTAL TO THE	
102-10-1	4-Methyl-2-Pentanone		11  U			
JAT- \8-P	2-Hexanone		11 U	4	•	
	TOTAL T MOOT			_1		





MWH SAMPLE NO.

MF001RE

Lab Name: CEIMIC CORP

Project: BOEINGSSFL

Lab Code: CEIMIC Case No.: BOEING

SDG No.: MF001

Matrix: (soil/water) SOIL

Lab Sample ID: 031213-01RE

Sample wt/vol:

4.60(g/mL) G

Lab File ID:

OC386

Level: (low/med)

LOW

Date Received: 09/06/03

% Moisture: not dec. 5

Date Analyzed: 09/17/03

GC Column: RTX-VOL ID: 0.53 (mm)

Dilution Factor: 1.0

	CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		o b	nol	Ou of
терий бара шений бараження турь такження подать него подат	544-10-5 108-90-7 630-20-6 100-41-4 1330-20-7 108-38-3 95-47-6 75-25-2 79-34-5 96-18-4 108-67-8 95-63-6 541-73-1 95-50-1	-Chlorobenzene -1,1,1,2-Tetrachlo -Ethylbenzene -Xylenes (total) -m,p-Xylenes -o-Xylene -Styrene	proethane proethane proethane proethane propane propane proethane propane proethane propane proethane proe	66666666666666666666666666666666666666	מממממממממממממממממממממממממממממממממממממממ	£	D

MWH SAMPLE NO.

MF002

Project: BOEINGSSFL

Lab Name: CEIMIC CORP

Lab Code: CEIMIC Case No.: BOEING SDG No.: MF001

Matrix: (soil/water) SOIL Lab Sample ID: 031213-02

Sample wt/vol: 5.00(g/mL) G Lab File ID: OC385

Level: (low/med) LOW Date Received: 09/06/03

% Moisture: not dec. Date Analyzed: 09/17/03

GC Column: RTX-VOL ID: 0.53 (mm) Dilution Factor: 1.0

CAS NO.		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Qual	Qual
75-71-8 74-87-3 75-01-4 74-83-9 75-00-3 75-69-4 75-35-4 75-35-4 75-35-4 75-34-3 75-34-3 75-34-3 76-63-5 71-55-6 71-55-6 71-43-2	1,1-DichloroetheneMethylene ChlorideCarbon Disulfidetrans-1,2-Dichloroethane2-Butanonecis-1,2-Dichloroethene1,2-Dichloroethene1,1,1-Trichloroethene1,2-Dichloroethane1,2-Dichloroethane1,2-Dichloroethane1,2-DichloroproparBenzeneTrichloroethene1,2-DichloroproparBromodichloromethe2-Chloroethylvinylcis-1,3-DichloroproparToluenetrans-1,3-Dichloroethenetrans-1,2-Trichloroethene1,1,2-Trichloroethene4-Methyl-2-Pentand	thane ifluoroetha  e e coethene e thene e thene e thene e thene e thene e there copene copene copene	5 T		O
	FORM I VOA	1		•	

IFVEI V

MWH SAMPLE NO.

MF002

Lab Name: CEIMIC CORP

Project: BOEINGSSFL

Lab Code: CEIMIC Case No.: BOEING

SDG No.: MF001

Matrix: (soil/water) SOIL

Lab Sample ID: 031213-02

Sample wt/vol:

5.00(g/mL) G

Lab File ID: OC385

Level: (low/med)

LOW

Date Received: 09/06/03

% Moisture: not dec.

Date Analyzed: 09/17/03

GC Column: RTX-VOL ID: 0.53 (mm)

Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION		Q)	wal	Oud	1.7 2.7 3.8
544-10-5 108-90-7 630-20-6 100-41-4 1330-20-7 108-38-3 95-47-6 75-25-2 79-34-5 96-18-4 95-63-6 541-73-1 95-50-1	1,1,1,2-Tetrach Ethylbenzene Xylenes (total) m,p-Xylenes o-Xylene Styrene	loroethane loroethane propane benzene benzene zene zene	15		4		



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>

SDG: IMI0763 Matrix: Soil and Water

No. of Samples: 5
No. of Reanalyses/Dilutions: 0

Date Reviewed: January 15, 2004

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT684, MT685, MT686, MT687, MT688

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel and accounted for the samples and analyses presented in this SDG. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	Two method blanks were analyzed with this SDG. No target compounds were reported in either method blank.	No qualifications were required.
5. <u>LCS/BS</u>	One LCS and one LCS/LCSD pair were analyzed with this SDG. All spike compounds were recovered within the QC limits and all RPDs were within the QC limits.	No qualifications were required.
6. Surrogates	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0763 Analysis: VOA

	Findings	Qualifications
7. MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8. Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT684 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9. Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene and performed only a TIC search for these compounds. The laboratory did not report 2-chloroethyl vinyl ether for water sample MT684.  Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane and chlorotrifluoroethene were qualified as estimated, "UJ," in the site samples.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

2652 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9669 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 796-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101

Attention: Lisa J. Tucker

Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			ı Date Extracted	Date Analyz		ata difiers
Sample ID: IMI0763-20 (MT684 Reporting Units: ug/l	- Water)			Sampled: 09/08/03				Rev	aval Code	
Acetone	EPA 8260B	3121007	N/A	10	13	1 -	09/21/03		et a chit	1000
Benzene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		U	
Bromobenzene	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03	i	1
Bromochloromethane	EPA 8260B	3I21007	N/A	5.0	ND	1		09/21/03		
Bromodichloromethane	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
Bromoform	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03		
Bromomethane	EPA 8260B	3I21007	N/A	5.0	ND	1	09/21/03		l	
2-Butanone (MEK)	EPA 8260B	3121007	N/A	10	ND	1	09/21/03			
n-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
sec-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			The state of the s
tert-Butylbenzene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			000000000000000000000000000000000000000
Carbon tetrachloride	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
Chlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
Chloroethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
Chloroform	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
Chloromethane	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03		
2-Chlorotoluene	EPA 8260B	3I21007	N/A	5.0	ND	1		09/21/03		
4-Chlorotoluene	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03		
Dibromochloromethane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3121007	N/A	5.0	ND	]		09/21/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		100	
Dibromomethane	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
1.2-Dichlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	ì		09/21/03	7	
1,3-Dichlorobenzene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
1,4-Dichlorobenzene	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
Dichlorodifluoromethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03		The state of the s	
1,1-Dichloroethane	EPA 8260B	3121007	N/A	2.0	ND	ĺ		09/21/03	-	
1,2-Dichloroethane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
1,1-Dichloroethene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
cis-1,2-Dichloroethene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		Management of the Control	
trans-1,2-Dichloroethene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03		TOTAL STREET	
1,2-Dichloropropane	EPA 8260B	3I21007	N/A	2.0	ND	1	09/21/03		1	
1.3-Dichloropropane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
2,2-Dichloropropane	EPA 8260B	3121007	N/A	2.0	ND		09/21/03			
1,1-Dichloropropene	EPA 8260B	3121007	N/A	2.0	ND		09/21/03		and the same of	
cis-1,3-Dichloropropene	EPA 8260B	3121007	N/A	2.0	ND		09/21/03		Total Control	
trans-1,3-Dichloropropene	EPA 8260B	3121007	N/A	2.0	ND		09/21/03			
Ethylbenzene	EPA 8260B	3I21007	N/A	2.0	ND		09/21/03		T PARTY OF THE PAR	
Hexachlorobutadiene	EPA 8260B	3I21007	N/A	5.0	ND		09/21/03		- Indiana	
2-Hexanone	EPA 8260B	3121007	N/A	10	ND		09/21/03		V	

Del Mar Analytical, Irvine

Fred Haley For Michele Harper

Project Manager

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 6-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-085: 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

THE STATE OF THE S

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Report Number: IMI0763

Boeing SSFL

Sampled: 09/08/03-09/11/03

Received: 09/12/03

## VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyze		Data alifiers
Sample ID: IMI0763-20 (MT684 Reporting Units: ug/l	- Water) - cont.				Sampled: 09/08/03			Analyze	en Roof	
Isopropylbenzene	EPA 8260B	3121007	N/A	2.0	ND	ī	09/21/03	09/21/03	U	100
p-Isopropyltoluene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03	09/21/03	ì	
Methylene chloride	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03	09/21/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I21007	N/A	10	ND	1	09/21/03	09/21/03		
Naphthalene	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03	09/21/03		
n-Propylbenzene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
Styrene	EPA 8260B	3I21007	N/A	2.0	ND	Í	09/21/03	09/21/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03	09/21/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03			
Tetrachloroethene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03	09/21/03		
Toluene	EPA 8260B	3121007	N/A	2.0	ND	1	09/21/03	09/21/03		
1,2,3-Trichlorobenzene	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03	- 1	
1.2,4-Trichlorobenzene	EPA 8260B	3121007	N/A	5.0	ND	l	09/21/03	09/21/03	l	
1,1,1-Trichloroethane	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
1,1,2-Trichloroethane	EPA 8260B	3I21007	N/A	2.0	ND	l		09/21/03		
Trichloroethene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03	_	
Trichlorofluoromethane	EPA 8260B	3I21007	N/A	5.0	ND	1		09/21/03		
1,2,3-Trichloropropane	EPA 8260B	3121007	N/A	10	ND	1		09/21/03		
1,2,4-Trimethylbenzene	EPA 8260B	3I21007	N/A	2.0	ND	1		09/21/03		
1,3,5-Trimethylbenzene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03	-	
Vinyl chloride	EPA 8260B	3121007	N/A	5.0	ND	1		09/21/03		
o-Xylene	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03		
m,p-Xylenes	EPA 8260B	3121007	N/A	2.0	ND	1		09/21/03	- 1	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3121007	N/A	5.0	ND	1	09/21/03			
Surrogate: Dibromofluoromethane (	80-120%)				115 %	,	07.41.05	02, 21, 02	4	
Surrogate: Toluene-d8 (80-120%)					110 %					
Surrogate: 4-Bromofluorobenzene (80-120%)					111 %					

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager AMEC VALIDADED



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Cotton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-869 9830 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample	Dilutio	n Date Extracted	Date		Data
Sample ID: IMI0763-21 (MT685	Coill							Analy2	_	alifiers
Reporting Units: ug/kg dry	- 3011)				Sam	pled: 09	/11/03		Rev	Qual
2-Chloroethyl vinyl ether	EPA 8260B	3I16015	N/A	4.5	X77\	0.054	00:11.6:00	00/- 1 1-	Qual	Code
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3J16015	N/A	4.3 9.1	ND	0.874		09/16/03	Ų	
Acetone	EPA 8260B	3I16015	N/A	9.1	ND	0.874		09/16/03	adular-	
Benzene	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03			
Bromobenzene	EPA 8260B	3116015	N/A	4.5	ND	0.874		09/16/03		
Bromochloromethane	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
Bromodichloromethane	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03			
Bromoform	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03		1	
Bromomethane	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
2-Butanone (MEK)	EPA 8260B	3116015	N/A	9.1	ND	0.874	09/16/03		age and a second	
n-Butylbenzene	EPA 8260B	3116015	N/A	9.1 4,5	ND	0.874	09/16/03			
sec-Butylbenzene	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
tert-Butylbenzene	EPA 8260B	3I16015 3I16015	N/A	4.5 4.5	ND	0.874	09/16/03		Management 1	ı
Carbon tetrachloride	EPA 8260B	3116015 3116015	N/A		ND	0.874	09/16/03			
Chlorobenzene	EPA 8260B	3116015 3116015		4.5	ND	0.874	09/16/03			
Chloroethane	EPA 8260B		N/A	1.8	ND	0.874	09/16/03			
Chloroform	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
Chloromethane	EPA 8260B	3[16015	N/A	1.8	ND	0.874	09/16/03			
2-Chlorotoluene	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
4-Chlorotoluene	EPA 8260B	3I16015	N/A	4.5	ND	0.874	09/16/03			
Dibromochloromethane	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03		OCCUPANT OF THE PARTY OF THE PA	
1,2-Dibromoethane (EDB)	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			
Dibromomethane	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03		2000 E	
1,2-Dichlorobenzene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03		7777	
1,3-Dichlorobenzene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03		***************************************	
1,4-Dichlorobenzene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03		parameters.	
Dichlorodifluoromethane	EPA 8260B	3116015	N/A	1.8	ND.	0.874	09/16/03		TOWNS CO.	
1,1-Dichloroethane	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03			•
1,2-Dichloroethane	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03		-	
1,1-Dichloroethene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03		OD TO THE PERSON	
cis-1,2-Dichloroethene	EPA 8260B	3116015	N/A:	4.5	ND	0.874	09/16/03		Annual Company	
trans-1,2-Dichloroethene		3116015	N/A	1.8	ND	0.874	09/16/03			
1,2-Dichloropropane	EPA 8260B	3116015	N/A	1.8	ND		09/16/03			
1,3-Dichloropropane	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03			
2,2-Dichloropropane	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03			
1,1-Dichloropropene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
	EPA 8260B	3116015	N/A .	1.8	ND	0.874		09/16/03		
cis-1,3-Dichloropropene	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03	The state of the s	
trans-1,3-Dichloropropene Ethylbenzene	EPA 8260B	3I16015	N/A	1.8	ND	0.874		09/16/03		
Daily inclinence	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03	09/16/03	*	
75 4 5 7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		24 63 6575556.	an 20172	SECOND TURBON					25	

Del Mar Analytical, Irvine Fred Haley For Michele Harper

Project Manager

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (999) 370-4667 FAX (999) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-8689 9830 South 51st St., Suite B-120, Phoenix, AZ 35044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 99120 (702) 798-3620 FAX (702) 796-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date		ata
-		2000	ZIIII	Dimit	resuit	ractor	EXII acteu	Analyze	~	difiers
Sample ID: IM10763-21 (MT685 Reporting Units: ug/kg dry	- Soil) - cont.			Sampled: 09/11/03			/11/03		Rev Qual	Qual
Hexachlorobutadiene	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03	09/16/03	U	
2-Hexanone	EPA 8260B	3116015	N/A	9. i	ND	0.874	09/16/03	09/16/03	ĺ	
lsopropylbenzene	EPA 8260B	3116015	N/A	1.8	ND -	0.874	09/16/03	09/16/03		
p-Isopropyltoluene	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
Methylene chloride	EPA 8260B	3I16015	N/A	18	ND	0.874	09/16/03	09/16/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03	09/16/03		
Naphthalene	EPA 8260B	3I16015	N/A	4.5	ND	0.874	09/16/03	09/16/03		
n-Propylbenzene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
Styrene	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03	09/16/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
Tetrachloroethene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
Toluene	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03	09/16/03		
1.2,3-Trichlorobenzene	EPA 8260B	3116015	N/A	4.5	ND	0.874	09/16/03	09/16/03		
1,2,4-Trichlorobenzene	EPA 8260B	3I16015	N/A	4.5	ND	0.874		09/16/03		
1,1,1-Trichloroethane	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
1,1,2-Trichloroethane	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
Trichloroethene	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
Trichlorofluoromethane	EPA 8260B	3116015	N/A	4.5	ND	0.874		09/16/03		
1,2,3-Trichloropropane	EPA 8260B	3116015	N/A	9.1	ND	0.874		09/16/03		
1,2,4-Trimethylbenzene	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
1,3,5-Trimethylbenzene	EPA 8260B	3I16015	N/A	1.8	ND	0.874	09/16/03			
Vinyl chloride	EPA 8260B	3116015	N/A	4.5	ND	0.874		09/16/03		
o-Xylene	EPA 8260B	3116015	N/A	1.8	ND	0.874		09/16/03		
m,p-Xylenes	EPA 8260B	3116015	N/A	1.8	ND	0.874	09/16/03			
Surrogate: Dibromofluoromethane	(80-125%)				110 %		03.10.05	02/10/05	,	
Surrogate: Toluene-d8 (80-120%)					100 %					
Surrogate: 4-Bromofluorobenzene (	(80-120%)				86 %					

AMEC VALIDATED

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager 26

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

					(	000.0.				
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Factor	n Date Extracted	Date Analyz		Data ualifiers
Sample ID: IMI0763-22 (MT686 Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09	/11/03		Rev Qual	Qua
2-Chloroethyl vinyl ether	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03	09/16/03	300	Code
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3116015	N/A	10	ND	0.965		09/16/03	ĭ	
Acetone	EPA 8260B	3116015	N/A	10	ND .	0.965	09/16/03			
Benzene	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03		
Bromobenzene	EPA 8260B	3116015	N/A	5.2	ND	0.965		09/16/03		
Bromochloromethane	EPA 8260B	3I16015	N/A	5.2	ND	0.965		09/16/03		
Bromodichloromethane	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03	İ	
Bromoform	EPA 8260B	3116015	N/A	5.2	ND	0.965	.09/16/03			
Bromomethane	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03		l	
2-Butanone (MEK)	EPA 8260B	3I16015	N/A	10	ND	0.965	09/16/03			of at life
n-Butylbenzene	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03			COMPANY
sec-Butylbenzene	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03			Constitution Co.
tert-Butylbenzene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03			
Carbon tetrachloride	EPA 8260B	3I16015	N/A	5.2	ND -	0.965	09/16/03	09/16/03		
Chlorobenzene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03		
Chloroethane	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03	09/16/03	ĺ	
Chloroform	EPA 8260B	3116015	N/A	2.1	ND	0.965				444
Chloromethane	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03		l	
2-Chlorotoluene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03			
4-Chlorotoluene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03		1	
Dibromochloromethane	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3116015	N/A	5.2	ND	0.965		09/16/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03			
Dibromomethane	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03			NATION AND AND AND AND AND AND AND AND AND AN
1,2-Dichlorobenzene	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03		SAMONS
1,3-Dichlorobenzene	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03			Maraban
1,4-Dichlorobenzene	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03 -			
Dichlorodifluoromethane	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03			OTTO
1,1-Dichloroethane	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03			
1,2-Dichloroethane	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03			
I, l-Dichloroethene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03			
cis-1,2-Dichloroethene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03			
trans-1.2-Dichloroethene	EPA 8260B	3I16015	N/A	2.1	ND		09/16/03			
1,2-Dichloropropane	EP.A 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03			
1,3-Dichloropropane	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03	Service Servic	
2,2-Dichloropropane	EPA 8260B	3I16015	N/A	2.1	ND	0.965			Deer Land	
1,1-Dichloropropene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03	Non-state (	
cis-1,3-Dichloropropene	EPA 8260B	3116015	N/A	2.1	ND	0.965			No.	
trans-1,3-Dichloropropene	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03	09/16/03	Michigan	
Ethylbenzene	EPA 8260B	3I16015	N/A	2.1	ND	0.965				
•		2110012	7 O 🗇	±.1	1117	0.903	09/16/03	09/10/03	V	1

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager AMEC VALIDATED

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2852 Alton Ave., Irvine. CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9659 9830 South 51st St., Suite 6-120, Phoenix, AZ 85044 (480) 735-0043 FAX (480) 735-0351 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL	Reporting	Sample	Dilution	n Date	Date		Data
•		Daten	Limit	Limit	Result	Factor	Extracted	Analyz	ed Qu	alifiers
Sample ID: IMI0763-22 (MT68	6 - Soil) - cont.				Samj	oled: 09	/11/03		Rev	1Qual
Reporting Units: ug/kg dry	T730								Qual	Cods
Hexachlorobutadiene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03	09/16/03	Ų	
2-Hexanone	EPA 8260B	3116015	N/A	10	ND	0.965	09/16/03	09/16/03	1	
Isopropylbenzene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03		
p-Isopropyltoluene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03		
Methylene chloride	EPA 8260B	3116015	N/A	21	ND	0.965	09/16/03	09/16/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03	09/16/03		
Naphthalene	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03	09/16/03	- 1	Í
n-Propylbenzene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03		
Styrene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03	09/16/03		
1,1,1,2-Tetrachloroethane	EPA_8260B	3116015	N/A	5.2	ND	0.965	09/16/03		I	
1,1,2,2-Tetrachloroethane	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03	- 1	
Tetrachloroethene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03			
Toluene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03			
1,2,3-Trichlörobenzene	EPA 8260B	3116015	N/A	5.2	ND	0.965	09/16/03			
1,2,4-Trichlorobenzene	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03			
1,1,1-Trichloroethane	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03		İ	
1,1,2-Trichloroethane	EPA 8260B	3I16015	N/A	2.1	ND .	0.965	09/16/03		1	
Trichloroethene	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03		- 1	
Trichlorofluoromethane	EPA 8260B	3I16015	N/A	5.2	ND	0.965	09/16/03			
1,2,3-Trichloropropane	EPA 8260B	3116015	N/A	10	ND	0.965	09/16/03		ł	
1,2,4-Trimethylbenzene	EPA 8260B	3I16015	N/A	2.1	ND	0.965	09/16/03		- 1	
1,3,5-Trimethylbenzene	EPA 8260B	3116015	N/A	2.1	ND	0.965		09/16/03	- 1	
Vinyl chloride	EPA 8260B	3116015	N/A	5.2	ND	0.965		09/16/03		
o-Xylene	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03		- 1	
m,p-Xylenes	EPA 8260B	3116015	N/A	2.1	ND	0.965	09/16/03		$\downarrow$	
Surrogate: Dibromofluoromethane	? (80-125%)				108 %		02/10/02/	07/10/05	•	1.
Surrogate: Toluene-d8 (80-120%)					101%					
Surrogate: 4-Bromofluorobenzene	(80-120%)				88 %					

AMEC VALIDATED

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 8-120, Phoenix, AZ 95044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

# VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz		Data ualifiers
Sample ID: IMI0763-23 (MT687 - Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09	/11/03	Rev Qua		
2-Chloroethyl vinyl ether	EPA 8260B	3I16015	N/A	5.4	ND	0.938	09/16/03		U	7007
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3116015	N/A	11	ND	0.938	09/16/03	09/16/03	7	
Acetone	EPA 8260B	3I16015	N/A	11	ND	0.938	09/16/03	09/16/03		
Benzene	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03		
Bromobenzene	EPA 8260B	3I16015	N/A	5.4	ND	0.938		09/16/03	1	
Bromochloromethane	EPA 8260B	3I16015	N/A	5.4	ND	0.938		09/16/03		
Bromodichloromethane	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
Bromoform	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
Bromomethane	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
2-Butanone (MEK)	EPA 8260B	3116015	N/A	11	ND	0.938		09/16/03		
n-Butylbenzene	EPA 8260B	3116015	N/A	5.4	ND	0.938	09/16/03	09/16/03		
sec-Butylbenzene	EPA 8260B	3I16015	N/A	5.4	ND	0.938	09/16/03	09/16/03		
tert-Butylbenzene	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
Carbon tetrachloride	EPA 8260B	3I16015	N/A	5.4	ND	0.938		09/16/03		
Chlorobenzene	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03		
Chloroethane	EPA 8260B	3I16015	N/A	5.4	ND	0.938		09/16/03		
Chloroform	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
Chloromethane	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
2-Chlorotoluene	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
4-Chlorotoluene	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
Dibromochloromethane	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03	1	
1,2-Dibromoethane (EDB)	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
Dibromomethane	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
1,2-Dichlorobenzene	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03		
1,3-Dichlorobenzene	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
1,4-Dichlorobenzene	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		- House
Dichlorodifluoromethane	EPA 8260B	3I16015	N/A	5.4	ND	0.938	09/16/03			
1,1-Dichloroethane	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03			
1,2-Dichloroethane	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03			etoria male
1,1-Dichloroethene	EPA 8260B	3116015	N/A	5.4	ND	0.938	09/16/03			
cis-1,2-Dichloroethene	EPA 8260B	3I16015	NΑ	2.2	ND	0.938	09/16/03			
trans-1,2-Dichloroethene	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03			
1,2-Dichloropropane	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03			C-070
1,3-Dichloropropane	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03			
2,2-Dichloropropane	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03		-	
1,1-Dichloropropene	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03		9	
cis-1,3-Dichloropropene	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03			
trans-1,3-Dichloropropene	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03			
Ethylbenzene	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03		V	
Del Mar Analytical, Irvine			*		1.40	0.220		02/10/03	29	!

Del Mar Analytical, Irvine Fred Haley For Michele Harper

Project Manager

2352 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1226 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 905, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (490) 785-0043 FAX (480) 785-0851 . 2520 E. Sunsel Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	16 of . al 1	70. 1	MDL	Reporting				Date		Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyze	d Qu	alifiers
Sample ID: IMI0763-23 (MT687 -	Soil) - cont.				Sampled: 09/11/03				Rev 1Qi	
Reporting Units: ug/kg dry					•			(	Jour	Code
Hexachlorobutadiene	EPA 8260B	3116015	N/A	5.4	ND	0.938	09/16/03		U	
2-Hexanone	EPA 8260B	3116015	N/A	11	ND	0.938	09/16/03	09/16/03	İ	-
Isopropylbenzene	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03	09/16/03		
p-lsopropyltoluene	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03		
Methylene chloride	EPA 8260B	3116015	N/A	. 22	ND.	0.938			1	ĺ
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I16015	N/A	5.4	· ND	0.938		09/16/03		
Naphthalene	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03	l	
n-Propylbenzene	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03	09/16/03	- 1	
Styrene	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03	09/16:03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3116015	N/A	5.4	ND	0.938	09/16/03	09/16/03	1	
1,1,2,2-Tetrachloroethane	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
Tetrachloroethene	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
Toluene	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03	ĺ	
1.2,3-Trichlorobenzene	EPA 8260B	3I16015	N/A	5.4	ND	0.938		09/16/03		
1,2,4-Trichlorobenzene	EPA 8260B	3I16015	N/A	5.4	ND	0.938	09/16/03			
1,1,1-Trichloroethane	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
1,1,2-Trichloroethane	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03	1	
Trichloroethene	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03			
Trichlorofluoromethane	EPA 8260B	3116015	N/A	5.4	ND	0.938		09/16/03		
1,2,3-Trichloropropane	EPA 8260B	3I16015	N/A	11	ND	0.938		09/16/03		
1,2,4-Trimethylbenzene	EPA 8260B	3116015	N/A	2.2	ND	0.938		09/16/03		
1.3,5-Trimethylbenzene	EPA 8260B	3I16015	N/A	2.2	ND	0.938		09/16/03		
Vinyl chloride	EPA 8260B	3116015	N/A	5.4	ND	0.938	09/16/03			
o-Xylene	EPA 8260B	3116015	N/A	2.2	ND	0.938	09/16/03			·
m,p-Xylenes	EPA 8260B	3I16015	N/A	2.2	ND	0.938	09/16/03		$\downarrow$	San Color Color
Surrogate: Dibromofluoromethane (	80-125%)				109 %			0, 10,00	-	
Surrogate: Toluene-d8 (80-120%)					101%					
Surrogate: 4-Bromofluorobenzene (8	80-120%)				89 %					

AMECVILLATED

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager 30

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 95044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101

Attention: Lisa J. Tucker

Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyz	ed Qu	Data Ialifiers
Sample ID: IMI0763-24 (MT688 - Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09	/11/03		Rev	1 Code
2-Chloroethyl vinyl ether	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03	09/16/03	U	
Trichlorotrifiuoroethane (Freon 113)	EPA 8260B	3116015	N/A	10	ND	0.978		09/16/03	i	
Acetone	EPA 8260B	3116015	N/A	10	ND	0.978		09/16/03		
Benzene	EPA 8260B	3I16015	N/A	2.0	ND	0.978		09/16/03		
Bromobenzene	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		
Bromochloromethane	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		
Bromodichloromethane	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03			
Bromoform	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		
Bromomethane	EPA 8260B	3116015	$N_{\ell}A$	5.1	ND	0.978	09/16/03	09/16/03		
2-Butanone (MEK)	EPA 8260B	3116015	N/A	10	ND	0.978		09/16/03		
n-Butylbenzene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03			
sec-Butylbenzene	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		
tert-Butylbenzene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03			
Carbon tetrachloride	EPA 8260B	3I16015	N/A	5.1	ND	0.978	09/16/03	09/16/03		
Chlorobenzene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03			
Chloroethane	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03			
Chloroform	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03	09/16/03	ļ	
Chloromethane	EPA 8260B	3116015	N/A	5.1	ND	0.978				
2-Chlorotoluene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03			
4-Chlorotoluene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03		1	
Dibromochloromethane	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		-	
1,2-Dibromo-3-chloropropane	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03		- 1	
1,2-Dibromoethane (EDB)	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		- 1	
Dibromomethane	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		1	
1,2-Dichlorobenzene	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03	-	
1,3-Dichlorobenzene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		- 1	
1,4-Dichlorobenzene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		-	
Dichlorodifluoromethane	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03	l	
1,1-Dichloroethane	EPA 8260B	3I16015	N/A	2.0	ND	0.978		09/16/03		
1,2-Dichloroethane	EPA 8260B	3I16015	N/A	2.0	ND	0.978		09/16/03	1	
l,l-Dichloroethene	EPA 8260B	3116015	NA	5.1	ND	0.978		09/16/03	ı	
cis-1,2-Dichloroethene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		l	
trans-1,2-Dichloroethene	EPA 8260B	3I16015	N/A	2.0	ND		09/16/03		]	
1,2-Dichloropropane	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03			1
1,3-Dichloropropane	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03			
2,2-Dichloropropane	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		1	
1,1-Dichloropropene	EPA 8260B	3116015	N/A	2.0	ND	0.978				
cis-1,3-Dichloropropene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03		1.	electronic de la constante de
trans-1,3-Dichloropropene	EPA 8260B	3116015	N/A	2.0	ND ND	0.978	09/16/03			
Ethylbenzene	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03			
-	.54 2 2 3 200 20	2110012	1 1/2 1	٠.٧	-111	0.7/0	09/16/03	C0/01/60	0.4	

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

### VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyze		Data alifiers
Sample ID: IM10763-24 (MT688 Reporting Units: ug/kg dry	- Soil) - cont.				Sampled: 09/11/03				Reval	Code
Hexachlorobutadiene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03	09/16/03	U	
2-Hexanone	EPA 8260B	3116015	N/A	10	ND	0.978	09/16/03	09/16/03	ĺ	1
Isopropylbenzene	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03	09/16/03		
p-Isopropyltoluene	EPA 8260B	3I16015	N/A	2.0	ND	0.978		09/16/03		
Methylene chloride	EPA 8260B	3116015	N/A	20	ND	0.978		09/16/03	ļ	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		Ì
Naphthalene	EPA 8260B	3116015	N/A	5.1	ND	0.978	09/16/03			
n-Propylbenzene	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03	09/16/03		
Styrene	EPA 8260B	3116015	N/A	2.0	ND	0.978	09/16/03	09/16/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3116015	N/A	- 5.1	ND	0.978	09/16/03	09/16/03	ı	
1,1,2,2-Tetrachloroethane	EPA 8260B	3[16015	N/A	2.0	ND	0.978	09/16/03	09/16/03	- 1	
Tetrachloroethene	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03	09/16/03		
Toluene	EPA 8260B	3I16015	N/A	2.0	ND	0.978	09/16/03	09/16/03		
1,2,3-Trichlorobenzene	EPA 8260B	3I16015	N/A	5.1	ND	0.978	09/16/03	09/16/03		
1,2,4-Trichlorobenzene	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03		
1,1,1-Trichloroethane	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03		
1,1.2-Trichloroethane	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03		
Trichloroethene	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03		
Trichlorofluoromethane	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03	- [	
1,2,3-Trichloropropane	EPA 8260B	3116015	N/A	10	ND	0.978		09/16/03		1
1,2,4-Trimethylbenzene	EPA 8260B	3I16015	N/A	2.0	ND	0.978		09/16/03	- 1	
1,3,5-Trimethylbenzene	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03	1	
Vinyl chloride	EPA 8260B	3116015	N/A	5.1	ND	0.978		09/16/03	1	
o-Xylene	EPA 8260B	3[160]5	N/A	2.0	ND	0.978		09/16/03	-	1
m,p-Xylenes	EPA 8260B	3116015	N/A	2.0	ND	0.978		09/16/03		
Surrogate: Dibromofluoromethane	(80-125%)	•			106 %				•	1
Swrogate: Toluene-d8 (80-120%)					101 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				87 %					

ANCOVALDATA

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		n Date Extracted	Date Analyz		Data aliñers	
Sample ID: IM10763-20 (MT684 Reporting Units: ug/l	- Water)				Sampled: 09/08/03				Qual Code		
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3121007	N/A	200	ND	1	09/21/03	09/21/03	07	* X11	
Chlorotrifluoroethene	EPA 8260B	3121007	N/A	200	ND	1	09/21/03		1		
Sample ID: IMI0763-21 (MT685 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/11/03				
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3I16015	N/A	180	ND	0.874	09/16/03	09/16:03			
Chlorotrifluoroethene	EPA 8260B	3116015	N/A	180	ND	0.874	09/16/03				
Sample ID: IMI0763-22 (MT686 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09/					
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3I16015	N/A	210	ND	0.965	09/16/03	09/16/03			
Chlorotrifluoroethene	EPA 8260B	3I16015	N/A	210	ND	0.965	09/16/03				
Sample ID: IMI0763-23 (MT687 Reporting Units: ug/kg dry	- Soil)				Samı	oled: 09/	11/03				
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3116015	N/A	220	ND	0.938	09/16/03	09/16/03	l	1 1	
Chlorotrifluoroethene	EPA 8260B	3116015	N/A	220	ND	0.938	09/16/03	09/16/03			
Sample ID: IMI0763-24 (MT688 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09/	11/03				
2-chloro-1,1,1-trifluoroethane	EPA 8260B	3116015	N/A	200	ND	0.978	09/16/03	09/16/03			
Chlorotrifluoroethene	EPA 8260B	3116015	N/A	200	ND	0.978	09/16/03		$\downarrow$	1	
						Pm	1/16/04				

Del Mar Analytical, Irvine Fred Haley For Michele Harper Project Manager



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V<sup>1</sup>

SDG: IMI0126
Matrix: Soil
No. of Samples: 3

No. of Reanalyses/Dilutions: 0

Date Reviewed: January 15, 2004

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT522, MT523, MT524

#### **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. All samples were received at the laboratory on HOLD. A memo from MWH personnel dated 9/11/03 removed the HOLD status and requested the volatile analyses. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	One method blank was analyzed with this SDG. No target compounds were reported in the method blank.	No qualifications were required.
5. LCS/BS	One LCS was analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. <u>Surrogates</u>	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0126 Analysis: VOA

	Findings	Qualifications
7. MS/MSDs	No MS/MSD analyses were associated with this SDG.	No qualifications were required.
8. Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT520 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI1005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9. Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane, 2-chloroethyl vinyl ether, or chlorotrifluoroethene and performed only a TIC search for these compounds. Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane, 2-chloroethyl vinyl ether, and chlorotrifluoroethene were qualified as estimated, "UJ," in the site samples.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

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9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E., Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

Sampled: 09/02/03

Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

					- (	- 00 022,0	_002)		
Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Qua	ata difiers
Sample ID: IMI0126-02 (MT522 - Soil) Reporting Units: ug/kg dry				Sam	oled: 09/0	2/03		Qual	Col
Acetone	EPA 8260B	3113011	. 10	ND	1	9/13/2003	9/13/2003	U	
Benzene	EPA 8260B	3113011	2.1	ND	]		9/13/2003	1	
Bromobenzene	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Bromochloromethane	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Bromodichloromethane	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
Bromoform	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Bromomethane	EPA 8260B	3113011	5.1	ND	1		9/13/2003	- 1	
2-Butanone (MEK)	EPA 8260B	3113041	10	ND	1		9/13/2003		
n-Butylbenzene	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
sec-Butylbenzene	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
tert-Butylbenzene	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Carbon tetrachloride	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Chlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Chloroethane	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Chloroform	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	l	
Chloromethane	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	l	
2-Chlorotoluene	EPA 8260B	3I13011	5.1	ND	1		9/13/2003		
4-Chlorotoluene	EPA 8260B	3113011	5.1	ND	1		9/13/2003		
Dibromochloromethane	EPA 8260B	3113011	2.1	ND .	1	9/13/2003	9/13/2003		
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	1	
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ŀ	
Dibromomethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,3-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,4-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	İ	
Dichlorodifluoromethane	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	1 .	
1,1-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ļ	
1,1-Dichloroethene	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		
cis-1,2-Dichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
trans-1,2-Dichloroethene	EPA 8260B	3I13011	2.1	ND -	1	9/13/2003	9/13/2003		
1,2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,3-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
2,2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ļ	
1,1-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
cis-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
trans-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Ethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Hexachlorobutadiene	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	1	
2-Hexanone	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003	$\checkmark$	

Del Mar Analytical, Irvine Michele Harper

Project Manager



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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (938) 505-8596 FAX (858) 505-9689
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

Sampled: 09/02/03

Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			Reporting	-	Dilution		Date	Da	ita
Analyte	Method	Batch	Limit	Result	Factor	Extracted	Analyzed		ifiers
Sample ID: IMI0126-02 (MT522 - Soil) Reporting Units: ug/kg dry	- cont.			Samp	oled: 09/0	2/03		Ru Qual	Code
Isopropylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	O	
p-Isopropyltoluene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	İ	
Methylene chloride	EPA 8260B	3113011	21	ND	1	9/13/2003	9/13/2003		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	ı	1
Naphthalene	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		]
n-Propylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	1	ļ
Styrene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	- 1	
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		1
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		1
Tetrachloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		1
Toluene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1.2.3-Trichlorobenzene	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		
1,1,1-Trichloroethane	EPA 8260B	3113011	2.1	ND	1.	9/13/2003	9/13/2003		
1,1,2-Trichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Trichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ļ	
Trichlorofluoromethane	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003	1	
1,2.3-Trichloropropane	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003	İ	
1,2,4-Trimethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,3,5-Trimethylbenzene	EPA 8260B	3I13011	2.1	ND	1	9/13/2003	9/13/2003	ļ	
Vinyl chloride	EPA 8260B	3113011	5.1	ND	1	9/13/2003	9/13/2003		
o-Xylene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
m,p-Xylenes	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ļ	
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003	V	
Surrogate: Dibromofluoromethane (80-12	5%)			104 %					•
Surrogate: Toluene-d8 (80-120%)				104 %					
Surrogate: 4-Bromofluorobenzene (80-120	7%)			85 %					

Del Mar Analytical, Irvine Michele Harper Project Manager



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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (999) 370-4667 FAX (989) 570-1046, 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

Project ID: Building 56 Landfill

1230 Columbia Street, Suite 750

Boeing SSFL

Sampled: 09/02/03

San Diego, CA 92101 Attention: Lisa J. Tucker

Report Number: IMI0126

Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed		Data alifiers
Sample ID: IMI0126-03 (MT523 - Soil)				Samp	oled: 09/0	2/03		Rev	, Qual
Reporting Units: ug/kg dry								Qual	(ody
Acetone	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003	U	
Benzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	, Constant	
Bromobenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	·	Seats verificans
Bromochloromethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	and the same	d) de la company
Bromodichloromethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	. Education	need to the second
Bromoform	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	9	old plants
Bromomethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		ECANODIST OF THE PERSON OF THE
2-Butanone (MEK)	EPA 8260B	3113011	10	ND	]	9/13/2003	9/13/2003	document	
n-Butylbenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	·	a cuorense par
sec-Butylbenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		
tert-Butylbenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	- Participated	All Property and the Pr
Carbon tetrachloride	EPA 8260B	3113011	5.2	ND	]	9/13/2003	9/13/2003	·	NAME AND ADDRESS OF THE PARTY O
Chlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	. Government	o de la composição de l
Chloroethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	- Adherman	NAME OF TAXABLE PARTY.
Chloroform	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		open parameters of the second
Chloromethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	· September	N. Control of the Con
2-Chlorotoluene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		OFFICE AND ASSOCIATION OF THE PROPERTY OF THE
4-Chlorotoluene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	NU NO DE LA COLOR	No.
Dibromochloromethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	. Organization	arres (NOTATE
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	TEACON .	NAME OF THE PERSON OF THE PERS
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		AMONASTIC O
Dibromomethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		Adecise
1,2-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	3500000	
1,3-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	n n n n n n n n n n n n n n n n n n n	
1,4-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		DE CONTRACTOR DE
Dichlorodifluoromethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	promptes	
1,1-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		100
1,1-Dichloroethene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	- Opportunity	No.
cis-1,2-Dichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	, and the second	residente de la constante de l
trans-1,2-Dichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	-	O. Marrison
1.2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		2000
1,3-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		2000
2,2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	. 1	000000000000000000000000000000000000000
1,1-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
cis-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	W	
trans-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	On the same	and the same of th
Ethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		C Proposition of the Control of the
Hexachlorobutadiene	EPA 8260B	3113011	5.2	ND	1		9/13/2003	. Second	POTENTIANO
2-Hexanone	EPA 8260B	3113011	10	ND	1		9/13/2003		D)

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 3014 E. Cooley Dr., Suite A, Cotton, CA 92324 (999) 370-4667 FAX (999) 370-1046 9484 Cnesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9659 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: 1MI0126

Sampled: 09/02/03 Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			Reporting	-	Dilution		Date		Data
Analyte	Method	Batch	Limit	Result	Factor	Extracted	Analyzed	. Qu	alifiers
Sample ID: IMI0126-03 (MT523 - Soil)	- cont.			Samp	pled: 09/0	2/03		lee	الإناوا
Reporting Units: ug/kg dry								<u>અલ</u>	<u>Con</u>
Isopropylbenzene	EPA 8260B	3113011	2.1	ND	1		9/13/2003	Ų	
p-lsopropyltoluene	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
Methylene chloride	EPA 8260B	3113011	21	ND	1	9/13/2003	9/13/2003		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		
Naphthalene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		
n-Propylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	1	
Styrene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Tetrachloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	- 1	
Toluene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2,3-Trichlorobenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003		1
1.1,1-Trichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,1,2-Trichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Trichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Trichlorofluoromethane	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	1	
1,2,3-Trichloropropane	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003		
1,2,4-Trimethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,3,5-Trimethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Vinyl chloride	EPA 8260B	3113011	5.2	ND	1	9/13/2003	9/13/2003	- 1	
o-Xylene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		SAD PROPERTY.
m,p-Xylenes	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3113011	10	ND	1	9/13/2003	9/13/2003	$\Psi$	
Surrogate: Dibromofluoromethane (80-12	5%)			113 %					
Surrogate: Toluene-d8 (80-120%)				103 %					
Surrogate: 4-Bromofluorobenzene (80-12)	0%)			81%					

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Del Mar Analytical, Irvine

2852 Alton Ave., Irvine. CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton. CA 92324 (909) 370-4667 FAX (909) 376-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9589 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

Sampled: 09/02/03 Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

					Dilution		Date		ata
Analyte	Method	Batch	Limit	Result	Factor	Extracted	Analyzed	_	lifiers
Sample ID: IMI0126-04 (MT524 - Soil)				Samp	oled: 09/0	2/03		Revol	Qual
Reporting Units: ug/kg dry									Code
Acetone	EPA 8260B	3113011	11	ND	J		9/13/2003		Į.
Benzene	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
Bromobenzene	EPA 8260B	3113011	5.3	ND	1		9/13/2003	1	1
Bromochloromethane	EPA 8260B	3113011	5.3	ND	1		9/13/2003	1	İ
Bromodichloromethane	EPA 8260B	3113011	2.1	ND	. 1		9/13/2003		
Bromoform	EPA 8260B	3113011	5.3	ND	l		9/13/2003		
Bromomethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	1	1
2-Butanone (MEK)	EPA 8260B	3113011	11	ND	l	9/13/2003	9/13/2003		
n-Butylbenzene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
sec-Butylbenzene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
tert-Butylbenzene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
Carbon tetrachloride	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	- 1	
Chlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Chloroethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		1
Chloroform	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Chloromethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	1	
2-Chlorotoluene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	l	1
4-Chlorotoluene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
Dibromochloromethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	ľ	
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
1.2-Dibromoethane (EDB)	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		-
Dibromomethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		1
1,2-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1.3-Dichlorobenzene	EPA 8260B	3113011	-2.1	ND	1	9/13/2003	9/13/2003		
1,4-Dichlorobenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		Į
Dichlorodifluoromethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
1,1-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		1
1,2-Dichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		1
1,1-Dichloroethene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	- 1	
cis-1,2-Dichloroethene	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
trans-1,2-Dichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
1,3-Dichloropropane	EPA 8260B	3I13011	2,1	ND	1		9/13/2003	- 1	
2,2-Dichloropropane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,1-Dichloropropene	EPA 8260B	3113011	2.1	ND	1		9/13/2003	,	l
cis-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	.	
trans-1,3-Dichloropropene	EPA 8260B	3113011	2.1	ND	1		9/13/2003	1	
Ethylbenzene	EPA 8260B	3113011	2.1	ND	1		9/13/2003		
Hexachlorobutadiene	EPA 8260B	3113011	5.3	ND	1		9/13/2003		İ
2-Hexanone	EPA 8260B	3113011	+ 11	ND	Î		9/13/2003		

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dt., Suite A, Colton, CA 92324 (909) 37C-4667 FAX (909) 370-1046. 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite 8-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3620

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

Sampled: 09/02/03 Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			Reporting				Date		ata
Analyte	Method	Batch	Limit	Result	Factor	Extracted	Analyzed	Qua	lifiers
Sample ID: IMI0126-04 (MT524 - Soil)	- cont.			Samp	oled: 09/0	2/03		Rev	Roal
Reporting Units: ug/kg dry								Qoal	Code
lsopropylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	U	
p-lsopropyltoluene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Methylene chloride	EPA 8260B	3113011	21	ND	}	9/13/2003	9/13/2003		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
Naphthalene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
n-Propylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Styrene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	- 1	
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	1	
Tetrachloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Toluene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,2,3-Trichlorobenzene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003	1	
1,1,1-Trichloroethane	EPA 8260B	3113011	2.1	ND	]	9/13/2003	9/13/2003		
1,1,2-Trichloroethane	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003	- 1	
Trichloroethene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Trichlorofluoromethane	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
1,2,3-Trichloropropane	EPA 8260B	3113011	11	ND	1	9/13/2003	9/13/2003		
1,2,4-Trimethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
1,3,5-Trimethylbenzene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
Vinyl chloride	EPA 8260B	3113011	5.3	ND	1	9/13/2003	9/13/2003		
o-Xylene	EPA 8260B	3113011	2.1	ND	1	9/13/2003	9/13/2003		
m,p-Xylenes	EPA 8260B	3113011	2.1	ND	1		9/13/2003		APPANE DE LA COMPANSION
Trichlorotrifluoroethane (Freon 113)	EPA 8260B	3113011	11	ND	1	9/13/2003	9/13/2003	$\checkmark$	5-6565T@ea
Surrogate: Dibromofluoromethane (80-12	5%)			114 %					Para .
Surrogate: Toluene-d8 (80-120%)	•			103 %					
Surrogate: 4-Bromofluorobenzene (80-120	0%)			80 %					

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0051 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

Sampled: 09/02/03 Received: 09/03/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	Reporting Limit	Sample Result		Date Extracted	Date Analyzed		ata lifiers
Sample ID: IMI0126-02 (MT522 - Soil) Reporting Units: ug/kg dry		Sampled: 09/02/03							Qual Cobe
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003	O2	K811
Chlorotrifluoroethene	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003	1 1	. 1
Sample ID: IMI0126-03 (MT523 - Soil) Reporting Units: ug/kg dry				Samp	oled: 09/0	2/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003		
Chlorotrifluoroethene	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003	ĺ	
Sample ID: IMI0126-04 (MT524 - Soil) Reporting Units: ug/kg dry				Samp	oled: 09/0	2/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003		
Chlorotrifluoroethene	EPA 8260B	3113011	210	ND	1	9/13/2003	9/13/2003	$\downarrow$	↓

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0126

。 如果我们是是一大小时的影响,我们就是是一个数据的工程的知识,这是我们的影響是一种的影響的影響,但如果你的人,是我们是一个人,我们就是一个人的人,但是一个人的人的人,也是一个人,也是一个人,这一个人,

Sampled: 09/02/03 Received: 09/03/03

#### VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Da Qual	ita ifiers
Sample ID: IMI0126-02 (MT522 - Soil) Reporting Units: ug/kg dry				Samp	led: 09/02	2/03		Per Oval	Qual Code
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane (80-125 Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (80-120%)	•	3113011	5.1	ND 104 % 104 % 85 %	1	9/13/2003	9/13/2003	03	*()
Sample ID: IMI0126-03 (MT523 - Soil) Reporting Units: ug/kg dry	-			Samp	led: 09/02	2/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane (80-125 Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (80-120%)		3113011	5.2	ND 113 % 103 % 81 %	1	9/13/2003	9/13/2003		
Sample ID: IMI0126-04 (MT524 - Soil) Reporting Units: ug/kg dry				Samp	led: 09/02	2/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane (80-125 Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (80-120%)		3113011	5.3	ND 114 % 103 % 80 %	1	9/13/2003	9/13/2003	The Wilder Company and Association and Associa	

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Del Mar Analytical, Irvine Michele Harper

Project Manager



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

#### **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Volatiles by Method 8260B

QC Level: V1

SDG: IMI0125 Matrix: Water and Soil

No. of Samples: 7

No. of Reanalyses/Dilutions: 0

Date Reviewed: January 15, 2004

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT525, MT526, MT527, MT528, MT529, MT530, MT531

#### **Data Validation Findings**

	71.11	
	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. All samples were received at the laboratory on HOLD. A memo from MWH personnel dated 9/11/03 removed the HOLD status and requested the volatile analyses. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C. No custody seal information was provided.  The analyses of the samples were performed within 14 days of sample collection.	No qualifications were required.
4. Method Blanks	Three method blanks were analyzed with this SDG. No target compounds were reported in any of the method blanks.	No qualifications were required.
5. <u>LCS/BS</u>	Three LCSs were analyzed with this SDG. All spike compounds were recovered within the QC limits.	No qualifications were required.
6. <u>Surrogates</u>	All surrogate recoveries were within the laboratory-established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0125 Analysis: VOA

	Findings	Qualifications
7. <u>MS/MSDs</u> MT526	All spiked compound recoveries and RPDs were within the laboratory-established QC limits.	No qualifications were required.
8. Field QC Samples  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) TB: MT525 FB: MT967 (SDG IMI0935) and MT711 (SDG IMI005) FD: None	Acetone was reported in several field QC samples, but was not reported in any site samples in this SDG.	No qualifications were required.
9. Other	The laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane or chlorotrifluoroethene for all samples, and 2-chloroethyl vinyl ether for the soil samples. The laboratory performed only a TIC search for these compounds. 2-Chloroethyl vinyl ether was not reported as either a target compound or a TIC for water sample MT525.  Soil samples were reported on a dry-weight basis.	The nondetect results for 2-chloro-1,1,1-trifluoroethane, 2-chloroethyl vinyl ether, and chlorotrifluoroethene were qualified as estimated, "UJ," in the site samples.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

2852 Alton Ave., Irvine. CA 92506 (949) 261-1022 FAX (949) 261-1026 1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-4667 FAX (909) 370-4669 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-3596 FAX (858) 505-9696 9530 Souin 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-043 FAX (480) 785-051 2520 E. Sunset Rd, #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Beeing SSFL

Report Number: IMI0125

Sampled: 09-03-03 Received: 09-03/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted		ed Qua	ata lifier:
Sample ID: IM0125-01 (MT52: Reporting Units: ug/l	5 - Water)				Sam	pled: 09	0/03/03		REV Qual	0
Acetone	EPA 8260B	3/11/003	NA	10	ND	1	09/11/03	09/11/03	U	
Benzene	EPA 8260B	3011003	NA	2.0/	ND	1	09/11/03		i	
Bromobenzene	EPA 8260B	3111003	N/A	5.0	ND.	1	09/11/03			
Bromochloromethane	EPA 8260B	3111003	NA	5.0	ND	1	09/11/03			
Bromodichloromethane	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03		1	
Bromoform	EPA 8260B	3111003	N/A	. 5.0	ND	1	09/11/03			
Bromomethane	EPA 8260B	3111003	NA	5.0	ND	1	09/11/03			
2-Butanone (MEK)	EPA \$260B	3111003	N/A	10	ND	1	09/11/03		1	
n-Butylbenzene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03		1	
sec-Butylbenzene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
tert-Butylbenzene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03		1	
Carbon tetrachloride	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
Chlorobenzene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
Chloroethane	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
Chloroform	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
Chloromethane	EPA 8260B	3[11003	N/A	5.0	ND	1		09/11/03		1
2-Chlorotoluene	EPA 8260B	- 3111003	N/A	5.0	ND	1	09/11/03			
4-Chlorotoluene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
Dibromochloromethane	EPA 8260B	3111003	NVA	2.0	ND	1	09/11/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3111003	N/A	5.0	ND	I		09/11/03	1	
1,2-Dibromoethane (EDB)	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
Dibromomethane	EPA 8260B	3111003	NLA	2.0	ND	1	09/11/03			
1,2-Dichlorobenzene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
1,3-Dichlorobenzene	EPA 8260B	3111003	NA	2.0	ND	1		09/11/03	İ	
1,4-Dichlorobenzene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
Dichlorodifluoromethane	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
1,1-Dichloroethane	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03	l	
1,2-Dichloroethane	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
1,1-Dichloroethene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03		1	
cis-1.2-Dichloroethene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
trans-1,2-Dichloroethene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
1,2-Dichloropropane	EPA 8260B	3111003	NA	2.0	ND	1	09/11/03			
1,3-Dichloropropane	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
2,2-Dichloropropane	EPA 8260B	3111003	NA	2.0	ND	1	09/11/03			
1,1-Dichloropropene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
cis-1,3-Dichloropropene	EPA 8260B	3111003	NA	2.0	ND	1	09/11/03			
trans-1,3-Dichloropropene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			
Ethylbenzene	EPA-8260B	3111003	N/A	2.0	ND	1	09/11/03			
Hexachlorobutadiene	EPA 8260B	3111003	NA	5.0	ND	-1	09/11/03			
2-Hexanone	EPA 8260B	3111003	NA	10	ND	1	09/11/03		<b>V</b>	•

Del Mar Analytical, Irvine

Michele Harper Project Manager ANEC VALIDATED



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1036 1614 E. Cooley Dr., Suite A., Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9464 Chesapsake Dr., Suite 805. San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9699 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0045 FAX (480) 785-0851 2820 E. Sunset Rd #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03

Received: 09/03/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MIDE Limit	Reporting Limit			n Date rExtracted	Date Analyzed	Da Quai	ita ifiers
Sample ID: IMI0125-01 (MT52: Reporting Units: ug/l	5 - Water) - cont.				Sam	pled: 09	9/03/03		REV Qual	QUA
Isopropylbenzene	EPA 8260B	3111003	NA	2.0	ND	1	09/11/03	09/11/03	U	
p-Isopropyltoluene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03	ì	l
Methylene chloride	EPA 8260B	3111003	\ A	5.0	ND	1		09/11/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3111003	N/A	10	ND	1		09/11/03		
Naphthalene	EPA 8260B	3111003	N/A	5.0	ND	1		09/11/03		· · ·
n-Propylbenzene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		İ
Styrene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3111003	N/A	5.0	ND	1		09/11/03	1	-
1.1,2.2-Tetrachloroethane	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
Tetrachloroethene	EPA 8260B	3111003	N/A	2.0	ND	1		09/11/03		
Toluene	EPA 8260B	3111003	N/A	2.0	ND	l	09/11/03			
1.2,3-Trichlorobenzene	EPA 8260B	3111003	NA	5.0	ND	1	09/11/03		Ì	
1,2,4-Trichlorobenzene	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03		l	
1,1,1-Trichloroethane	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03		-	
1,1,2-Trichloroethane	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03		1	Į
Trichloroethene	EPA 8260B	3111003	$N/\Delta$	2.0.	ND	1		09/11/03	-	
Trichlorofluoromethane	EPA 8260B	3111003	N/A	5.0	ND	1	09/11/03			
1,2,3-Trichloropropane	EPA 8260B	3111003	N/A	10	ND	1	09/11/03		1	
1,2,4-Trimethylbenzene	EPA 8260B	3111003	$N_{i}^{T}/\Delta_{i}$	2.0	ND	1	09/11/03		1	
1,3,5-Trimethylbenzene	EPA 8260B	3111003	NA	2.0	ND	1	09/11/03			
Vinyl chloride	EPA 8260B	3111003	NA	5.0	ND	1	09/11/03			
o-Xylene	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03		Į	
m,p-Xylenes	EPA 8260B	3111003	N/A	2.0	ND	1	09/11/03			1
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3111003	NA	5.0	ND	1	09/11/03		$\downarrow$	
Surrogate: Dibromofluoromethane	e (80-120%)				111 %				¥	ŧ
Surrogate: Toluene-d8 (80-120%)					108 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				107 %					I





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09-03/03 Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed	Dar Quali	
Sample ID: IMI0125-02 (MT526 Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09.	/03/03	<u></u>	REV Qual	CODE CODE
Acetone	EPA 8260B	3113011	MA	10	ND	1	09/13/03	09/13/03	U	
Benzene	EPA 8260B	3113011	N/A	2.1	ND	Ī		09/13/03	ī	j
Bromobenzene	EPA 8260B	3113011	N/A	5.2	ND	ì		09/13/03	1	
Bromochloromethane	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
Bromodichloromethane	EPA 8260B	3(13011	N/A	2.1	ND	ì		09/13/03		
Bromoform	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
Bromomethane	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
2-Butanone (MEK)	EPA 8260B	3[13011	N/A	10	ND	1		09/13/03	ł	
n-Butylbenzene	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
sec-Butylbenzene	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
tert-Butylbenzene	EPA 8260B	3113011	N/A	5.2	ND	i		09/13/03	1	
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.2	ND	l	09/13/03			
Chlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Chloroethane	EPA 8260B	3[1301]	N/A	5.2	ND	1	09/13/03			
Chloroform	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03			
Chloromethane	EPA 8260B	3113011	NA	5.2	ND	1	09/13/03			
2-Chlorotoluene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
4-Chlorotoiuene	EPA 8260B	3113011	N/LA	5.2	ND	1	09/13/03			
Dibromochloromethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	NA	5.2	ND	1	09/13/03			
1.2-Dibromoethane (EDB)	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03			
Dibromomethane	EPA 8260B	3113011	$M/\Delta$	2.1	ND	1	09/13/03			
1,2-Dichlorobenzene	EPA 8260B	3113011	N.A.	2.1	ND	1	09/13/03	09/13/03		
1.3-Dichlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,4-Dichlorobenzene	EPA.8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03		
Dichlorodifluoromethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
1,1-Dichloroethane	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03		
1,2-Dichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,1-Dichloroethene	EPA 8260B	3113011	$N_{\ell}A$	5.2	ND	1	09/13/03	09/13/03		
cis-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
trans-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND.	1	09/13/03	09/13/03		
1,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,3-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
2.2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,1-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
cis-1,3-Dichloropropene	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	()9/13:03		
trans-1,3-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Ethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Hexachlorobutadiene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
2-Hexanone	EPA 8260B	3113011	-N/A	10	ND	1	09/13/03		<b>V</b>	

Del Mar Analytical, Irvine Michele Harper

Project Manager

ANEC VALUATED



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03

Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed	Data Qualifi	
Sample ID: IMI0125-02 (MT520 Reporting Units: ug/kg dry	6 - Soil) - cont.			Sampled: 09/03/03					REV QUAL	Qui
lsopropylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1 .	09/13/03	09/13/03	U	
p-lsopropyltoluene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	1	
Methylene chloride	EPA 8260B	3113011	N/A	21	ND	1.		09/13/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	NA	5.2	ND	1		09/13/03		
Naphthalene	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
n-Propylbenzene	EPA 8260B	3113011	NA	2.1	ND	1		09/13/03		
Styrene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	NA	5.2	ND	1	09/13/03.			
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03		
Tetrachloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Toluene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.2	ND	I	09/13/03			
1,2,4-Trichlorobenzene	EPA 8260B	3113011	NA	5.2	ND	1	09/13/03			
1,1,1-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1.1,2-Trichloroethane	EPA 8260B	3113011	ÑΑ	2.1	ND	1	09/13/03			
Trichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		1 1	
Trichlorofluoromethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03		1 1	
1,2,3-Trichloropropane	EPA 8260B	3113011	. N/A	10	ND	l	09/13/03		1 1	
1,2,4-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,3,5-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		1	
Vinyl chloride	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03		1 1	
o-Xylene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	1.	
m,p-Xylenes	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3113011	N/A	10	ND	1	09/13/03			
Surrogate: Dibromofluoromethane	e (80-125%)				105 %			37.13.05	* 1	
Surrogate: Toluene-d8 (80-120%)	•				102 %					
Surrogate: 4-Bromofiuorobenzene	(80-120%)				87 %					

Del Mar Analytical, Irvine Michele Harper Project Manager AMEC VALIDATES

2852 Alton Ave., Irvine, CA \$2506 (949) 261-1022 FAX (949) 261-1026 1014 E. Cociey Dr., Suite A, Colton, CA \$2324 (909) 370-4667 FAX (909) 370-1046 9484 Chesaneake Dr., Suite 805, San Diego, CA \$2123 (858) 505-8596 FAX (858) 505-9539 9830 South 51st St., Suite 5-120, Phoenix, AZ 55044 (480) 785-0043 FAX (480) 785-0651 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Factor	n Date Extracted	Date Analyze	d Quai	
Sample ID: IMI0125-03 (MT52 Reporting Units: ug/kg dry	7 - Soil)				Sam	pled: 09	9/03/03	<u>.                                    </u>	BEV	- C
Acetone	EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	U	-
Benzene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	ì	
Bromobenzene	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
Bromochloromethane	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
Bromodichloromethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03		
Bromoform	EPA 8260B	3113011	N-A	5.3	ND	1		09/13/03		
Bromomethane	EPA 8260B	3113011	MA	5.3	ND	1		09/13/03		
2-Butanone (MEK)	EPA 8260B	3113011	N/A	11	ND	1		09/13/03		
n-Butylbenzene	EPA 8260B	3113011	N/A	5.3	ND	I		09/13/03	-	
sec-Butylbenzene	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
tert-Butylbenzene	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		l
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
Chlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	l	-
Chloroethane	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
Chloroform	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			1
Chloromethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03			
2-Chlorotoluene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03			
4-Chlorotoluene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03		ŀ	
Dibromochloromethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2-Dibromo-3-chloropropane	EPA \$260B	3113011	N/A	5.3	ND	1	09/13/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Dibromomethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		ŀ	
1,2-Dichlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,3-Dichlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,4-Dichlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Dichlorodifluoromethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03			
1,1-Dichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			1
1.2-Dichloroethane	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03			
1,1-Dichloroethene	EPA 8260B	3113011	N/A	5.3	MD	1	09/13/03	09/13/03		
cis-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
trans-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,3-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	. 1	09/13/03	09/13/03		Ì
2,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			1
1,1-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			1
cis-1,3-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		1
trans-1.3-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Ethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		1	
Hexachlorobutadiene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03			
2-Hexanone	EPA 8260B	3113011	N/A	11	ND	l	09/13/03		$\downarrow$	ļ

Del Mar Analytical, Irvine Michele Harper

Project Manager

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2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949): 261-1218
1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-4567 FAX (909): 370-1046
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858): 505-8596 FAX (858): 505-9639
9830 South 51st St., Suite E-120, Phoenix, AZ 95044 (480): 785-0043 FAX (460): 785-0631
2520 E. Sunset Ro. #3; Las Vegas, NV 89120 (702): 798-3620 FAX (702): 796-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

#### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

	Note at a	265	MDL	Reporting				Date		ata
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyz		ifiers
Sample ID: IMI0125-03 (MT527 Reporting Units: ug/kg dry	' - Soil) - cont.				Samp	oled: 09/	03/03		QUAL-	CODI
[sopropy]benzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03	U	
p-Isopropyltoluene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03	1	
Methylene chloride	EPA 8260B	3113011	NA	21	ND	]	09/13/03	09/13/03		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3[13011	N/A	5.3	ND	1	09/13/03	09/13/03		
Naphthalene	EPA 8260B	3113011	$N/\Delta$	5.3	ND	1	09/13/03	09/13/03		
n-Propylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Styrene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03		
Tetrachloroethene	EPA 8260B	3[1301]	N/A	2.1	ND	1	09/13/03	09/13/03	l` l	
Toluene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
1,1,1-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,1,2-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Trichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Trichlorofluoromethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
1,2,3-Trichloropropane	EPA 8260B	3113011	N/A	. 11	ND	1	09/13/03	09/13/03		
1,2,4-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,3,5-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Vinyl chloride	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
o-Xylene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
m,p-Xylenes	EPA 8260B	3113011	$\sqrt{A}$	2.1	ND	. 1	09/13/03	09/13/03		
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	<b>↓</b>	
Surrogate: Dibromofluoromethane	(80-125%)				106 %					
Surrogate: Toluene-d8 (80-120%)					101 %					
Surrogate: 4-Bromofluorobenzene	(80-120%)				87 %					

Del Mar Analytical, Irvine Michele Harper Project Manager AVECVALDADA

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1226 1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-1667 FAX (909) 370-1646 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9639 9830 South 51st St., Suite S-120, Phoenix, AZ 25044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunsei Rd. #3, Las Vegas, NV 99120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyze		fier
Sample ID: IMI0125-04 (MT528 Reporting Units: ug/kg dry	- Soil)				Samj	oled: 09	9/03/03		QUAL	G
Acetone	EP.A. 8260B	3113011	N/A	. 10	ND	. 1	09/13/03	09/13/03	V	
Benzene	EPA 8260B	3113011	N/A	2.1	ND .	1	09/13/03		1	
Bromobenzene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
Bromochloromethane	EPA 8260B	3113011	N/A	5.2	ND	1				
Bromodichloromethane	EPA 8260B	3[13011]	N/A	2.1	ND	1		09/13/03		
Bromoform	EPA 8260B	3[1301]	N/A	5.2	ND	]		09/13/03		
Bromomethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
2-Butanone (MEK)	EPA 8260B	3113011	N/A	10	ND	1	09/13/03			
n-Butylbenzene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03	Martiness .	
sec-Butylbenzene	EPA 8260B	3113011	$N/\Delta$	5.2	ND	1	09/13/03	09/13/03		
tert-Burylbenzene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.2	ND	1				
Chlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	l				
Chloroethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
Chloroform	EPA 8260B	3[13011	1/1	2.1	ND	1	09/13/03			
Chloromethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
2-Chlorotoluene	EPA 8260B	3113011	N/A	5.2	ND	1		09/13/03		
4-Chlorotoluene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
Dibromochloromethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03		
1,2-Dibromo-3-chioropropane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Dibromomethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2-Dichlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03	-	
1.3-Dichlorobenzene	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03		
1,4-Dichlorobenzene	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03	and the same of th	
Dichlorodifluoromethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
1,1-Dichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,2-Dichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,1-Dichloroethene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
cis-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
trans-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1.2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,3-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
2,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
I,1-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
cis-1,3-Dichloropropene	EP.A 8260B	3113011	N/A	2.1	ND	1	09/13/03	09:13:03		
trans-1,3-Dichloropropene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Ethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Hexachlorobutadiene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			
2-Hexanone	EPA 8260B	3113011	N/A	10	ND	1	09/13/03		$\downarrow$	

Del Mar Analytical, Irvine





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyzed	Da Qual	ifier
Sample ID: IMI0125-04 (MT52) Reporting Units: ug/kg dry	8 - Soil) - cont.				Sam	oled: 09	/03/03		REV	
Isopropylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03	Ú	
p-Isopropyltoluene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	1	
Methylene chloride	EPA 8260B	3113011	NA	21	ND	1		09/13/03	İ	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	NA	5.2	ND	1		09/13/03		
Naphthalene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
n-Propylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Styrene	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03			
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03			1
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		İ	
Tetrachloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Toluene	EPA 8260B	3113011	N/A	2.1	ND	4	09/13/03	09/13/03		
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		
1,1,1-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		ł	
1,1,2-Trichloroethane	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03	09/13/03		
Trichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Trichlorofluoromethane	EPA 8260B	3113011	N/A	5.2	ND	}	09/13/03	09/13/03		
1,2,3-Trichloropropane	EPA 8260B	3113011	N/A	10	ND	. 1	09/13/03	09/13/03		1
1,2,4-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
1,3.5-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		
Vinyl chloride	EPA 8260B	3113011	N/A	5.2	ND	1	09/13/03	09/13/03		l
o-Xylene	EP.A 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		İ
m,p-Xylenes	EP.A 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03		l
Trichlorotrifluoroethane (Freon 11	13) EPA 8260B	3113011	N/A	10	ND	1	09/13/03	09/13/03	<b>↓</b>	
Surrogate: Dibromofluoromethan	e (80-125%)				103 %				'	
Surrogate: Toluene-d8 (80-120%)				102 %						
Surrogate: 4-Bromofluorobenzene	(80-120%)				85 %				t	





Project ID: Building 56 Landfill

1230 Columbia Street, Suite 750

Beeing SSFL

San Diego, CA 92101 Attention: Lisa J. Tucker

Report Number: IMI0125

Sampled: 09/03/03 Received: 09-03/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyzed		ata lifiers
Sample 1D: IM10125-05 (MT529 Reporting Units: ug/kg dry	- Soil)				Sam	pled: 09	/03/03	-	QUAL	- C
Acetone	EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	U	
Benzene	EPA 8260B	3113011	NA	2.1	ND	.1	09/13/03	09/13/03	ī	
Bromobenzene	EPA 8260B	3113011	NA	5.3	ND	1	09/13/03	09/13/03		
Bromochloromethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
Bromodichloromethane	EPA 8260B	3013011	NA	2.1	ND	1		09/13/03		
Bromoform	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03		
Bromomethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
2-Butanone (MEK)	EPA 8260B	3113011	NA	11	ND	1		09/13/03		
n-Butylbenzene	EPA 8260B	3113011	A/A	5.3	ND	1		09/13/03	1	
sec-Butylbenzene	EPA 8260B	3113011	NA	5.3	ND	1		09/13/03	ı	
tert-Butylbenzene	EPA 8260B	3113011	NA	5.3	ND	1		09/13/03		
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.3	ND	]		09/13/03		
Chlorobenzene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03		
Chloroethane	EPA 8260B	3113011	14. 4	5.3	ND	1		09/13/03		
Chloroform	EPA 8260B	3113011	NA	2.1	ND	1		09/13/03		
Chloromethane	EPA 8260B	3713011	N/A	5.3	ND	1		09/13/03		
2-Chlorotoluene	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
4-Chlorotoluene	EPA 8260B	3113011	NA	5.3	ND	1		09/13/03		
Dibromochloromethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	-	
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03	09/13/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	ĺ	
Dibromomethane	EPA 8260B	3(13011	N/A	2.1	ND	1	09/13/03		1	
1,2-Dichlorobenzene	EPA \$260B	3113011	NA	2.1	ND	1 -	09/13/03		1 .	
1.3-Dichlorobenzene	EPA 8260B	3113011	NA	2.1	ND	1	09/13/03			
I,4-Dichlorobenzene	EPA 8260B	3113011	MA	2.1	ND	1	09/13/03			
Dichlorodifluoromethane	EPA 8260B	3/13011	N/A	5.3	ND	1	09/13/03			
1,1-Dichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1,2-Dichloroethane	EPA 8260B	3113011	M/A	2.1	ND	1	09/13/03			l
1,1-Dichloroethene	EPA 8260B	3113011	W.A	5.3	ND	1	09/13/03			1
cis-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		1 1	İ
trans-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		1 1	
1,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
1.3-Dichloropropane	EPA 8260B	3113011	N/.4	2.1	ND	1	09/13/03			
2,2-Dichloropropane	EPA 8260B	3113011	N/A	2.1	ND	ì	09/15/03			
1,1-Dichloropropene	EPA 8260B	3(1301)	N/A	2.1	ND	I	09/13/03			
cis-1,3-Dichloropropene	EPA 8260B	3113011	N.A	2.1	ND	1	09/13/03			
trans-1,3-Dichloropropene	EPA 8260B	3113011	$N_{\ell}A$	2.1	ND	1	09/13/03			
Ethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03			
Hexachlorobutadiene	EPA 8260B	3113011	NA	5.3	ND	1	09/13/03			
2-Hexanone	EPA 8260B	3113011	N/A	1 i	ND	1	09/13/03		1,	

Del Mar Analytical, Irvine Michele Harper

Project Manager

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX 1949) 261-1018 1014 E. Cooley Dr., Suite A. Cotton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9669 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-043 FAX (480) 785-0861 2520 E. Sunsel Rd, #3, Las Vegas, NV 89120 (702) 796-3620 FAX (702) 798-3641

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA-92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09-03-03 Received: 09-03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyze	Data d Ouglifie
Sample ID: IMH0125-05 (MT529 Reporting Units: ug/kg dry	9 - Soil) - cont.					pled: 09/		, 2	Qualific
Isopropylbenzene	EPA 8260B	3113011	NA	2.1	ND	1	09/13:03	09/13/03	u l
p-Isopropyltoluene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	ī
Methylene chloride	EPA 8260B	3113011	N/A	21	ND	}		09-13/03	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	NA	5.3	ND	1		09/13/03	
Naphthalene	EPA 8260B	3113011	NA	5.3	ND	1	09/13/03		
n-Propylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	
Styrene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03	
1,1.2,2-Tetrachioroethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	
Tetrachloroethene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	
Toluene	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.3	ND	l	09/13/03		
1,2,4-Trichlorobenzene	EPA 8260B	3113011	N/A	5.3	ND	1		09/13/03	
1,1.1-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1		09/13/03	
1,1,2-Trichloroethane	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		
Trichloroethene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03		
Trichlorofluoromethane	EPA 8260B	3113011	N/A	5.3	ND	1	09/13/03		
1,2,3-Trichloropropane	EPA 8260B	3113011	NA	11	ND	1	09/13/03		
1.2,4-Trimethylbenzene	EPA 8260B	3113011	$N/\Lambda$	2.1	ND	1	09/13/03		
1,3,5-Trimethylbenzene	EPA 8260B	3113011	N/A	2.1	ND	1	09:13/03	09/13/03	
Vinyl chloride	EPA 8260B	3113011	NA	5.3	ND	1	09/13/03	09/13/03	
o-Xylene	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09/13/03	
m,p-Xylenes	EPA 8260B	3113011	N/A	2.1	ND	1	09/13/03	09.13/03	
Trichlorotrifluoroethane (Freon 11	3) EPA 8260B	3113011	NA	11	ND	1	09/13/03	09/13/03	<b>1</b>
Surrogate: Dibromofluoromethan	e (80-125%)				106 %				
Surrogate: Toluene-d8 (80-120%)					102 %				
Surrogate: 4-Bromofluorobenzene	(80-120%)				87 %				•





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03-03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzed	
Sample ID: IMI0125-06 (MT530	0 - Soil)				Sam	oled: 09/	03/03		BUAL (
Reporting Units: ug/kg dry								-	
Acetone	EPA 8260B	3113011	N/A	1 !	ND	1	09/13/03	09:13/03	U
Benzene	EPA 8260B	3113011	NoA	2.2	ND	1	09/13/03	09/13/03	i l
Bromobenzene	EPA 8260B	3113011	N/A	5.5	ND	1		09/13/03	
Bromochloromethane	EPA 8260B	3113011	N/A	5.5	ND	1			
Bromodichloromethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
Bromoform	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03	09/13/03	
Bromomethane	EPA 8260B	31:3011	N/A	5.5	ND	1	09/13/03	09/13/03	
2-Butanone (MEK)	EPA 8260B	3113011	NA	11	ND	1	09/13/03	09/13/03	
n-Butylbenzene	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03		
sec-Butylbenzene	EPA 8260B	3113011	NA	5.5	ND	1	09/13/03	09/13/03	
tert-Butylbenzene	EPA 8260B	3/13011	N/A	5.5	ND	1	09/13/03	09/13/03	
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03	09/13/03	
Chlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Chloroethane	EPA 8260B	3113011	NA	5.5	ND	1		09/13/03	
Chloroform	EP.A 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Chloromethane	EPA 8260B	3113011	NA	5.5	ND	1	09/13/03		
2-Chlorotoluene	EPA 8260B	3113011	NA	5.5	ND	1	09/13/03		
4-Chlorotoluene	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03		
Dibromochloromethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1,2-Dibrome-3-chloropropane	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Dibromomethane	EPA 8260B	3/13011	N/A	2.2	ND	1	09/13/03		
1.2-Dichlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1,3-Dichlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1,4-Dichlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Dichlorodifluoromethane	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03		
1,1-Dichloroethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1,2-Dichloroethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1.1-Dichloroethene	EPA 8260B	3[1301]	N/A	5.5	ND	1	09/13/03		
cis-1,2-Dichloroethene .	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
trans-1,2-Dichloroethene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1.2-Dichloropropane	EPA 8260B	3113011	N/A	2.2	ND	1 -	09/13/03		
1.3-Dichloropropane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
2,2-Dichloropropane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		1
1,1-Dichloropropene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
cis-1,3-Dichloropropene	EPA 8260B	3413011	N/A	2.2	ND		09/13/03		
trans-1.3-Dichloropropene	EPA 8260B	3113011	NA	2.2	ND		09/13/03		
Ethylbenzene	EPA 8260B	3113011	N/A	2.2	ND		09/13/03		
Hexachlorobutadiene	EPA 8260B	3113011	N/A	5.5	ND		09/13/03		
2-Hexanone	EPA \$260B	3113011	NA	11	ND		09/13/03		<b>↓</b>

Del Mar Analytical, Irvine



1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyzed	
Sample ID: LMI0125-06 (MT530 Reporting Units: ug/kg dry	) - Soil) - cont.				Sam	pled: 09	/03/03		REV G
Isopropylbenzene	EPA 8260B	3113011	N/A	2.2	ND	]	09/13/03	09/13/03	U
p-Isopropyltoluene	EPA 8260B	3113011	NA	2.2	ND	I	09/13/03	09/13/03	1 1
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	N/A	5.5	ND	J		09/13/03	
Naphthalene	EPA 8260B	3113011	N/A	5.5	ND	l		09/13/03	.
n-Propylbenzene	EPA 8260B	3113011	N/A	2.2	ND	1		09/13/03	
Styrene	EPA 8260B	3113011	N/A	2.2	ND	1		09/13/03	
1,1,1,2-Tetrachloroethane	EPA 8260B	3113011	N/A	5.5	ND	1		09/13/03	
1,1,2,2-Tetrachloroethane	EPA 8260B	3113011	NA	2.2	ND	1		09/13/03	
Tetrachioroethene	EPA 8260B	3113011	N/A	2.2	ND	1		09/13/03	
Toluene	EPA 8260B	3113011	N/A	2.2	ND	1		09/13/03	
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.5	ND	1		09/13/03	
1,2,4-Trichlorobenzene	EPA 8260B	3113011	N/A	<b>5</b> .5	ND	1	09/13/03	09/13/03	
1,1,1-Trichloroethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
1,1,2-Trichloroethane	EPA 8260B	3113011	N/A	2.2	ND	l	09/13/03	09/13/03	
Trichloroethene	EPA 8260B	3113011	NA	2.2	ND	1	09/13/03	09/13/03	
Trichiorofluoromethane	EPA 8260B	3113011	N/A	5.5	ND	1	09/13/03	09/13:03	
1,2,3-Trichloropropane	EPA 8260B	3113011	N/A	11	ND	1	09/13/03		
1,2,4-Trimethylbenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
1,3,5-Trimethylbenzene	EPA 8260B	3113011	NA	2.2	ND	1	09/13/03	09/13/03	
Vinyl chloride	EPA 8260B	31.13011	N/A	5.5	ND	1	09/13/03	09/13/03	
o-Xylone	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
m,p-Xylenes	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
Trichlorotrifluoroethane (Freon 11	(3) EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	$\Psi$
Surrogate: Dibromofluoromethan	e (80-125%)				110 %				
Surrogate: Toluene-d8 (80-120%)					103 %				
Surrogate: 4-Bromofluorobenzene	: (80-120%)				85 %				
Sample ID: IMI0125-06RE1 (M' Reporting Units: ug/kg dry	T530 - Soil)				Samp	oled: 09	/03/03		
Methylene chloride -	EPA 8260B	3116014	N/A	20	ND	1	09/16/03	09/17/03	
Surrogate: Dibromofluoromethan	e (80-125%)				104 %				
Surrogate: Toiuene-d8 (80-120%)					101 %				•
Surrogate: 4-Bromofiuorobenzene	(80-120%)				98 %				

# ANEC VALIDATED





San Diego, CA 92101

Attention: Lisa J. Tucker

1230 Columbia Street, Suite 750

Project ID: Building 56 Landfill

Beeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyzed	Data Qualifie
Sample ID: IMI0125-07 (MT531 Reporting Units: ug/kg dry	Soil)				Sam	pled: 09	9/03/03	***************************************	REV
Acetone	EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	U
Benzene	EPA 8260B	3113011	KA	2.2	ND	1		09/13/03	1
Bromobenzene	EPA 8260B	3113011	N/A	5.4	ND	1		09/13/03	
Bromochloromethane	EPA 8260B	3113011	N/A	5.4	ND	1		09/13/03	
Bromodichloromethane	EPA 8260B	3113011	NA	2.2	ND	- 1		09/13/03	
Bromoform	EPA 8260B	3113011	N/A	5.4	ND	1		09/13/03	
Bromomethane	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03	09/13/03	
2-Butanone (MEK)	EPA 8260B	3113011	N/A	11	ND	1		09/13/03	
n-ButyIbenzene	EPA 8260B	3113011	NA	5.4	ND	1	09/13/03		
sec-Butylbenzene	EPA 8260B	3/13011	N/A	5.4	ND	I	09/13/03		
tert-Butylbenzene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
Carbon tetrachloride	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
Chlorobenzene	EPA 8260B	3/13011	N/A	2.2	ND	1	09/13/03		
Chloroethane	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
Chloroform	EPA 8260B	3313011	N/A	2.2	ND	1	09/13/03		
Chloromethane	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
2-Chlorotoluene	EPA 8260B	3/13011	N/A	5.4	ND	1	09/13/03		
4-Chlorotoluene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
Dibromochloromethane	EPA 8260B	3/13011	M/A	2.2	ND	1	09/13/03		
1,2-Dibromo-3-chloropropane	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
1,2-Dibromoethane (EDB)	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Dibromomethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
1.2-Dichlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	l	09/13/03	09/13/03	
1,3-Dichlorobenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
1.4-Dichlorobenzene	EP.A 8260B	3[13011	N/A	2.2	ND	1	09/13/03	09/13/03	
Dichlorodifluoromethane	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03	09/13/03	
1,1-Dichloroethane	EPA 8260B	3[13011	N/A	2.2	ND	1	09/13/03	09/13/03	
1,2-Dichloroethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09:13/03	
1,1-Dichloroethene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03	09/13/03	
cis-1,2-Dichloroethene	EPA 8260B	3113011	M/A	2.2	ND	. 1	09/13/03	09/13/03	
trans-1.2-Dichloroethene	EPA 8260B	3113011	NA	2.2	ND	1	09/13/03	09/13/03	
1.2-Dichloropropane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	
1.3-Dichloropropane	EPA 8260B	3113011	WA	2.2	ND	1	09/13/03	09:13:03	
2.2-Dichloropropane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
1,1-Dichloropropene	EPA 8260B	3113011	$N_{\rm c}/A_{\rm c}$	2.2	ND	1	09/13/03		
cis-1,3-Dichloropropene	EPA 8260B	3113011	$N/A_{\rm C}$	2.2	ND	1	09/13/03		
trans-1,3-Dichloropropene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Ethylbenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03		
Hexachlorobutadiene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03		
2-Hexanone	EPA 8260B	3113011	N/A	11	ND	1	09/13/03	09/13/03	$V \perp$

Dei Mar Analytical, Irvine Michele Harper Project Manager

AMEC VALIDATED



1230 Columbia Street. Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IM:10125

Sampled: 09 03.03 Received: 09/03/03

### VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			MDL	Reporting		Dilution		Date		ata
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyze		lifier
Sample ID: IMI0125-07 (MT531 Reporting Units: ug/kg dry	- Soil) - cont.				Samj	pled: 09	/03/03		QUAL	S.
lsopropylbenzene	EPA 8260B	3113011	$N_0/A$	2.2	ND	1	09/13/03	09/13/03	U	
p-lsopropyltoluene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	ı	
Methylene chloride	EPA 8260B	3113011	N/A	22	ND	1		09/13/03	ļ	
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3113011	NJ.A	5.4	ND	1	09/13/03	09/13/03	:	
Naphthalene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03	09/13/03	į	
n-Propylbenzene	EPA 8260B	3113011	NIA	2.2	ND	1		09/13/03	ı	
Styrene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03	Ì	
1,1,1.2-Tetrachloroethane	EPA 8260B	3313011	N/A	5.4	ND	1	09/13/03	09/13/03		
1,1.2.2-Tetrachloroethane	EPA 8260B	3113011	NA	2.2	ND	1		09/13/03		
Tetrachloroethene	EPA 8260B	3113011	NA	2.2	ND	1	09/13/03	09/13/03		ĺ
Toluene	EPA 8260B	3113011	MA	2.2	ND	1	09/13/03	09/13/03		
1,2,3-Trichlorobenzene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03			
1,2,4-Trichlorobenzene	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03			
1,1,1-Trichloroethane	EPA 8260B	3[13011	N/A	2.2	ND	1	09/13/03	09/13/03		
1,1,2-Trichloroethane	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03		
Trichloroethene	EPA 8260B	3I13011	NΑ	2.2	ND	1	09/13/03	09/13/03		
Trichlorofluoromethane	EPA 8260B	3113011	NA	5.4	ND	1	09/13/03			
1,2,3-Trichloropropane	EPA 8260B	3113011	NA	11	ND	1	09/13/03	09/13/03		
1,2,4-Trimethylbenzene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03		
1,3,5-Trimethylbenzene	EPA 8260B	3113011	$\mathcal{N}/\Delta$	2.2	ND	1	09/13/03	09/13/03		
Vinyl chloride	EPA 8260B	3113011	N/A	5.4	ND	1	09/13/03	09:13/03		
o-Xylene	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03	09/13/03		
m,p-Xylenes	EPA 8260B	3113011	N/A	2.2	ND	1	09/13/03			
Trichlorotrifluoroethane (Freon 11		3113011	N/A	11	ND	1	09/13/03	09 13/03		
Surrogåte: Dibromofluoromethane	(80-125%)				111%					
Surrogate: Toluene-d8 (80-120%)					102 %					
Surrogaie: 4-Bromofluorobenzene	(80-120%)				86 %					

AMEC VALIDATED





1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IM10125

Sampled: 09/03/03 Received: 09/03/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch		Reporting Limit	Sample	Dilutio		Date Analyz	ed Qua	
Sample ID: IMI0125-01 (MT525 Reporting Units: ug/l	- Water)				Sam	oled: 09	9/03/03		SE!	COOP
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3111003	N/A	200	ND	1	09/11/03	09/11/03	$O_2$	*11
Chlorotrifluoroethene	EPA 8260B	3111003	NA	200	ND	1	09/11/03	09/11/03		١,
Sample ID: IMI0125-02 (MT526 Reporting Units: ug/kg dry	- Soil)				Samı	oled: 09	9/03/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Chlorotrifluoroethene	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Sample ID: LMI0125-03 (MT527 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Chlorotrifluoroethene	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Sample ID: IMI0125-04 (MT528 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloro-1.1.1-trifluoroethane	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Chlorotrifluoroethene	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Sample ID: IMI0125-05 (MT529 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Chlorotrifiuoroethene	EPA 8260B	3113011	N/A	210	ND	1	09/13/03	09/13/03		
Sample ID: IMI0125-06 (MT530 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09.	/03/03			
2-Chloro-1,1.1-trifluoroethane	EPA 8260B	3113011	N/A	220	ND	I	09/13/03	09/13/03		
Chlorotrifluoroethene	EPA 8260B	3(13011	M/A	220	ND	1	09/13/03	09/13/03		
Sample ID: IMI0125-07 (MT531 Reporting Units: ug/kg dry	- Soil)				Samp	led: 09/	/03/03			
2-Chloro-1,1,1-trifluoroethane	EPA 8260B	3113011	N/A	220	ND	1	09/13/03	09/13/03		
Chlorotrifiuoroethene	EPA 8260B	3113011	N/A	220	ND	1	09/13/03	09/13/03	$\downarrow$	' ↓

ANEC VALUATED

2852 Alton Ave., Irvine, CA 92806 (949) 261-1022 54X (049) 261-1028 1014 E. Cooley Dr., Suite A. Colton, CA 92924 (909) 370-4667 FAX, 809) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 54X (858) 505-9659 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0040 FAX (480) 785-0651 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101

Attention: Lisa J. Tucker

Project ID: Building 55 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03 Received: 09/03/03

VOLATILE ORGANICS by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze	Da d Quali	
Sample ID: IMI0125-02 (MT526 Reporting Units: ug/kg dry	- Soil)				Samı	oled: 09	/03/03		REV	Q'CC
2-Chloroethyl vinyl ether Surrogate: Dibromofiuoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene	,	3113011	NIA	5.2	ND 105 % 102 % 87 %	l	09/13/03	09/13/03	07	* (
Sample ID: IMI0125-03 (MT527 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene		3[130]]	N/A	5.3	ND 106 % 101 % 87 %	1	09/13/03	09/13/03		
Sample ID: IMI0125-04 (MT528 Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene	ŕ	3[1301]	N/A	5.2	ND 103 % 102 % 85 %	1	09/13/03	09/13/03		
Sample ID: IMI0125-05 (MT529 - Reporting Units: ug/kg dry	- Soil)				Samp	oled: 09	/03/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (		3113011	N/A	5.3	ND 106 % 102 % 87 %	I	09/13/03	09/13/03		
Sample ID: IMI0125-06 (MT530 - Reporting Units: ug/kg dry	- Soil)				Samp	led: 09	/03/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toiuene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (	•	3113011	WA	5.5	ND 110 % 103 % 85 %	1	09/13/03	09/13/03		
Sample ID: IMI0125-07 (MT531 - Reporting Units: ug/kg dry	Soil)				Samp	led: 09/	03/03			
2-Chloroethyl vinyl ether Surrogate: Dibromofluoromethane Surrogate: Toluene-d8 (80-120%) Surrogate: 4-Bromofluorobenzene (		3113011	N/As	5.4	ND 111 % 102 % 86 %	1	09/13/03	09/13/03	<b>↓</b>	1
									1	

Del Mar Analytical, Irvine

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

Package ID T707VO1 \*

550	South Wadsworth Boulevard	Task Order 31350010
Suit	e 500	SDG No. HMH522 IMH1522
Lake	ewood, CO 80226	No. of Analyses 2
	Laboratory Del Mar A	
	Reviewer K. Shadov	
	Analysis/Method Volatiles	11167
	7 Mary 515/14 Tetriod Volatiles	- Shada gill
ACT	TION ITEMS <sup>a</sup>	<b>V</b>
1.	Case Narrative	
	Deficiencies	
2.	Out of Scope	
	Analyses	
	·	
3.	Analyses Not Conducted	
٥.	rinary ses 1101 Conducted	
4	Missing Haydoon	
4.	Missing Hardcopy	
	Deliverables	
5.	Incorrect Hardcopy	
	Deliverables	
6.	<b>Deviations from Analysis</b>	Qualifications were assigned for the following:
	Protocol, e.g.,	* Initial calibration average RRF outlier
	Holding Times	* %RSD initial calibration outlier
	GC/MS Tune/Inst. Perform	* Continuing calibration RRF outlier
	Calibrations	* %D calibration outliers
	Blanks	
	Surrogates	
	Matrix Spike/Dup LCS	
	Field QC	
	Internal Standard Performance	
	Compound Identification and	
	Quantitation	
007	System Performance	
CON	4MENTS <sup>b</sup>	
		eeting contract and/or method requirements.
" Di	tterences in protocol have been adopted b	y the laboratory but no action against the laboratory is required.

AMEC Earth & Environmental

# **Data Qualifier Reference Table**

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. (Note: Analyte may or may not be present).

# **Qualification Code Reference Table**

Qualifier	Organics	Inorganics
Н	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards us for the calibration was incorrect
С	Calibration %RSD or %D were noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within cont limits.
3	Presumed contamination from preparation (method) blank.	Presumed contamination from preparat (method) or calibration blank.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
Ξ	Not applicable.	Duplicates showed poor agreement.
	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not wit control limits.
М	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
	Presumed contamination from trip blank.	Not applicable.
-	False positive – reported compound was not present. Not applicable.	
	False negative – compound was present but not reported.	Not applicable.
7	Presumed contamination from FB, or ER.	Presumed contamination from FB or ER.
	Reported result or other information was incorrect.	Reported result or other information vincorrect.
)	TIC identity or reported retention time has been changed.	Not applicable.
)	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not used because another more technically sou analysis is available.
	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was within control limits.
*#	Unusual problems found with the data that have been described in Section 1, "Data Validation Findings." The number following the asterisk (*) will indicate the subsection where a description of the problem can be found.	Unusual problems found with the data thave been described in Section 1, "D Validation Findings." The number following the asterisk (*) will indicate the subsection where a description of the problem can found.



# DATA VALIDATION REPORT

# Rocketdyne SSFL RFI Program

**ANALYSIS: VOLATILES** 

SAMPLE DELIVERY GROUP: IMH1522

Prepared by

AMEC Denver Operations 550 South Wadsworth Boulevard, Suite 500 Lakewood, Colorado 80226

Rocketdyne IMH1522 Analysis: VOC

Revision I

#### 1. INTRODUCTION

Task Order Title: Rocketdyne SSFL RFI Program

Contract Task Order #: 313150010

SDG#: IMH1522

Project Manager: D. Hambrick

Matrix: Water/Soil Analysis: Volatiles QC Level: Level IV

No. of Samples: 2

No. of Reanalyses/Dilutions: 0

> Reviewer: K. Shadowlight

Date of Review: January 12, 2003

The samples listed in Table 1 were validated based on the guidelines outlined in the AMEC Data Validation Procedure for Levels C and D Volatile Organics (DVP-2, Rev. 2) and the National Functional Guidelines For Organic Data Review (2/94). Any deviations from these procedures are documented herein. This procedure is designed to meet the data quality objectives required by the Camp Edwards Impact Area Groundwater Quality Study Quality Assurance/Quality Control Plan for all analyses at the requested QC level. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

DATA VALIDATION REPORT

Project: SDG: Analysis:

Rocketdyne IMH1522 VOC

Table 1. Sample identification

Client ID	EPA ID	Lab No.	Matrix	Method
BLTS11S01	MT515	IMH1522-02	soil	8260B
BLQW07T01	MT516	IMH1522-03	water	8260B

Rocketdyne IMH1522

### 2. DATA VALIDATION FINDINGS

### 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

### 2.1.1 Sample Preservation, Handling, and Transport

The samples in this SDG were received at the laboratory within the temperature limits of  $4^{\circ}$ C  $\pm 2^{\circ}$ C. According to the laboratory login sheet, the samples were received intact and in good condition, with no headspace present in the VOA vials. No qualifications were required.

## 2.1.2 Chain of Custody

According to a memo from Montgomery Watson personnel dated 09/04/03, the Client ID for sample MT516 was changed from TB082703 to BLQW07T01. The COC was signed by field and laboratory personnel and accounted for the analyses presented in this SDG. Custody seals were not present on the cooler. No qualifications were required.

### 2.1.3 Holding Times

The samples were analyzed within 14 days of collection. No qualifications were required.

### 2.2 GC/MS TUNING

The ion abundance windows shown on the quantitation report were consistent with those specified in the EPA Method 8260B. All ion abundances were within the established windows and were therefore acceptable. All samples were analyzed within 12 hours of the BFB injection times. The Form Vs were verified from the raw data and no discrepancies between the summary forms and the raw data were noted. No qualifications were required.

### 2.3 CALIBRATION

Two initial calibrations, dated 08/12/03 and 08/27/03, were associated with the samples in this SDG. The average RRF for 2-butanone was less than 0.05 in both initial calibrations. The nondetect results for 2-butanone were therefore rejected, "R," in both samples.

The %RSDs for acetone, 2-butanone, 4-methyl-2-pentanone, and 2-hexanone were >15% in the initial calibration dated 08/12/03. Nondetect results for the aforementioned target compounds were qualified as estimated, "UJ," in associated site sample MT515, unless otherwise rejected (see above). The %RSDs for dichlorodifluoromethane, acetone, 2-hexanone, bromoform, and 1,2-dibromo-3-chloropropane were >15%; however, associated sample MT516 was a field QC samples and as such was not qualified for %RSD outliers. The %RSDs were  $\leq$ 15% or  $r^2$  values were >0.995 for the remaining target compounds in both initial calibrations.

Two continuing calibrations dated 08/30/03 and 09/04/03 were associated with the sample analyses in this SDG. All RRFs were greater than 0.05, with the exception of the RRF for 2-

DATA VALIDATION REPORT

butanone in both calibrations. The nondetect results for 2-butanone were rejected, "R," in both samples.

In the calibration analyzed 09/04/03, associated with the analysis of soil sample MT515, %Ds exceeded the QC limit of 20% for acetone, 2-butanone, carbon tetrachloride, 1,2-dichloroethane, 2,2-dichloropropane, 2-hexanone, 4-methyl-2-pentanone, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, trichlorofluoromethane, and 1,2,3-trichloropropane. Nondetect results for the aforementioned compounds were qualified as estimated, "UJ," in site sample MT515, unless otherwise rejected (see above). The %Ds for several target compounds exceeded 20% in the calibration dated 08/30/03; however associated sample MT516 was identified as field QC and as such was not qualified for %D outliers.

A representative number of %RSDs and average RRFs for the initial calibration, and %Ds and RRFs for the continuing calibration were recalculated from the raw data, and no calculation or transcription errors were found. No further qualifications were required.

### 2.4 BLANKS

One water method blank and one soil method blank were associated with the samples in this SDG. No target compounds were reported in either of the method blanks. The method blank raw data showed no evidence of false negatives or false positives. No qualifications were required.

### 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One water blank spike and one soil blank spike were associated with this SDG. All recoveries were within the respective laboratory-established QC limits for waters and soils. A representative number of percent recoveries and RPDs were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

### 2.6 SURROGATE RECOVERY

All sample surrogate recoveries were within the respective water and soil laboratory-established QC limits. A representative number of surrogate recoveries were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

### 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy was based on the blank spike results. No qualifications were required.

### 2.8 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:

Project: Rocketdyne SDG: IMH1522 Analysis: VOC

DATA VALIDATION REPORT

## 2.8.1 Trip Blanks

Sample MT516 was identified as the trip blank associated with this SDG. No target compounds were reported in the trip blank. 2-Butanone was rejected in sample MT516; therefore, the site sample could not be evaluated for possible trip blank contamination of this compound. No qualifications were required.

## 2.8.1 Field Blanks and Equipment Rinsates

Samples MT696 (SDG IMI0935) and MT711 (SDG IMI1005) were the field blanks and MT697 (SDG IMI0935) and MT710 (IMI1005) were the equipment rinsates associated with this SDG. Acetone was reported at concentration above the reporting limit in samples MT696, MT697, and MT710. As acetone was not reported in the samples of this SDG, no qualifications were required. There were no other target compounds reported in any of the field QC samples. No qualifications were required.

### 2.8.2 Field Duplicates

There were no field duplicate samples associated with this SDG. Field duplicate samples are required at a rate of 10% per matrix for site samples only and may not be present in every data package. No qualifications were required.

#### 2.9 INTERNAL STANDARDS PERFORMANCE

Internal standard area counts and retention times for all samples were within the control limits established by the continuing calibration standards, of +100%/-50% for internal standard areas and  $\pm0.50$  minutes for retention times. A representative number of internal standard areas and retention times were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

### 2.10 COMPOUND IDENTIFICATION

Target compound identification was verified at a Level IV data validation. The laboratory analyzed for the SW-846 Method 8260B volatile target compounds. For both samples only a TIC search was performed for target compounds 2-chloro-1,1,1-trifluoroethane and chlorotrifluorethene, and also trichlorotrifluoroethane (Freon 113) for soil sample MT515 only. Although the laboratory was calibrated for 2-chloroethyl vinyl ether it was not reported in this SDG. 2-Chloroethyl vinyl ether does appear in some subsequent samples. Chromatograms, retention times, and spectra for all samples and QC were examined and no target compound identification problems were noted. No qualifications were required.

### 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. The reporting limits were supported by the lowest concentration of the initial calibration standards. A notation on the sample raw data indicated that "due to restrictions of the initial calibration" dated 08/12/03, the laboratory raised the reporting limit for acetone to 20ug/kg in sample MT515. The reviewer noted that the low

Project: Rocketdyne SDG: IMH1522

DATA VALIDATION REPORT

Analysis: VOC

point of acetone in the initial calibration was 10 ppb. As the laboratory did not calibrate for 2-chloro-1,1,1-trifluoroethane, chlorotrifluorethene, or trichlorotrifluoroethane (Freon 113), the nondetect results for the aforementioned target compounds were qualified as estimated, "UJ," in site sample MT515. Soil samples were reported on a dry-weight basis. As there were no detects reported in the samples of this SDG, compound quantitation was verified by recalculating a representative number of blank spike and surrogate recoveries from the raw data and no calculation or transcription errors were noted. No further qualifications were required.

### 2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for the samples in this SDG. No qualifications were required.

### 2.13 SYSTEM PERFORMANCE

A review of the chromatograms and other raw data showed no identifiable problems with system performance. No qualifications were required.

2852 Alton Ave., Irvine, CA 92606 [949] 261-1022 FAX [949] 261-1028 FA

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Boeing SSFL

Report Number: IMH1522

Sampled: 08/26/03-08/27/03

Received: 08/27/03

# VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte	Method		Reporting	Sample	Dilutio	on Date	Date	1	Data
₹		Batch	Limit	Result	Facto	r Extracted	Analyze		oata alifiers
Sample ID: IMH1522-02 (MT515 - Reporting Units: ug/kg dry	Soil)			Sam	pled: 08		4	es)	
Acetone Acetone					F	20,03	V	D	
Benzene	EPA 8260E		22	ND	0.931	8/30/3003	8/30/000	qual	Cde
	EPA 8260E	3H30015	2.2	ND	0.931		8/30/200		C
Bromobenzene	EPA 8260B	3H30015	5.6	ND	0.931		8/30/200	3 U	
Bromochloromethane	EPA 8260B	3H30015	5.6	ND	0.931		8/30/200	3	
Bromodichloromethane	EPA 8260B	3H30015	2.2	ND	0.931		8/30/200	3	
Bromoform	EPA 8260B		5.6	ND			8/30/200	3	
Bromomethane	EPA 8260B		5.6	ND	0.931		8/30/2003	3	
2-Butanone (MEK)	EPA 8260B		11		0.931		8/30/2001	3 🗸	
n-Butylbenzene	EPA 8260B		5.6	ND	0.931	8/30/2003	8/30/2003	R	R
sec-Butylbenzene	EPA 8260B		5.6	ND	0.931	8/30/2003			
tert-Butylbenzene	EPA 8260B	3H30015	5.6	ND	0.931	8/30/2003			
Carbon tetrachloride	EPA 8260B	3H30015	5.6 5.6	ND	0.931	8/30/2003	8/30/2003	1	
Chlorobenzene	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003	8/30/2003	uJ	c
Chloroethane	EPA 8260B	3H30015		ND	0.931	8/30/2003	8/30/2003	u	
Chloroform	EPA 8260B		5.6	ND	0.931	8/30/2003	8/30/2003	1	
Chloromethane	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003	8/30/2003	and the same of th	
2-Chlorotoluene	EPA 8260B	3H30015	5.6	ND	0.931	8/30/2003	8/30/2003		-
4-Chlorotoluene	EPA 8260B	3H30015	5.6	ND	0.931	8/30/2003	8/30/2003		· ·
Dibromochloromethane		3H30015	5.6	ND	0.931	8/30/2003	8/30/2003		
1,2-Dibromo-3-chloropropane	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003	8/30/2003		TO THE PARTY OF TH
1,2-Dibromoethane (EDB)	EPA 8260B	3H30015	5.6	ND	0.931	8/30/2003 8	8/30/2003		Wilderman
Dibromomethane (EBB)	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	8/30/2003		***************************************
1,2-Dichlorobenzene	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	2/30/2003	ļ	
1,3-Dichlorobenzene	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	8/30/2003		
1,4-Dichlorobenzene	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	//30/2003 		
Dichlorodifluoromethane	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	730/2003		
1,1-Dichloroethane	EPA 8260B	3H30015	5.6	ND		8/30/2003 8	(30/2003		
1,2-Dichloroethane	EPA 8260B	3H30015	2.2	ND		8/30/2003 8	/30/2003		
1,1-Dichloroethene	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8	(30/2002 - (30/2003 -	Tű	c .
cis-1,2-Dichloroethene	EPA 8260B	3H30015	5.6	ND		8/30/2003 8	/20/2003	u	
trans-1,2-Dichloroethene		3H30015	2.2	ND	0.931	8/30/2003 8,	/30/2003 /30/3003	1	
		3H30015	2.2	ND	0.931	8/30/2003 8,	/30/2003 /30/2003	1	
1,2-Dichloropropane	EPA 8260B	3H30015	2.2	ND	0.931	8/30/2003 8,	30/2003 20/2003	1	
1,3-Dichloropropane		3H30015	2.2	ND		8/30/2003 8/	30/2003		
2,2-Dichloropropane		3H30015	2.2	ND	0.931	8/30/2003 8/	30/2003	<b>V</b>	_
1,1-Dichloropropene	EPA 8260B	3H30015	2.2	ND	0.931 8	8/30/2003 8/	30/2003	42	c
cis-1,3-Dichloropropene	take and	3H30015	2.2	ND		8/30/2003 8/	30/2003	u	
trans-1,3-Dichloropropene	No. 100	3H30015	2.2		0.931 8	8/30/2003 8/	30/2003		
Ethylbenzene		3H30015	2.2		0.931 8	8/30/2003 8/	30/2003		
Hexachlorobutadiene	Same and the same of the same	3H30015	5.6		0.931 8	3/30/2003 8/.	30/2003		
2-Hexanone	***	3H30015			0.931 8	8/30/2003 8/:	30/2003	<b>↓</b>	
Del Mar Analytical, Irvine			11	ND	0.931 8	3/30/2003 8/3		8 45	c

Michele Harper Project Manager The results pertain only to the samples tested

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Boeing SSFL

Report Number: IMH1522

Sampled: 08/26/03-08/27/03

Received: 08/27/03

# 。 一个年间对抗企业。但它们就是企业的特别和企业的企业的,并且是有的人们的企业的,但是不是一个企业的,但是是一个企业的人们是是一个企业的人们是一个企业的人们是一个企业的人们 VOLATILE ORGANICS by GC/MS (EPA 5035/8260B)

Analyte Sample ID: IMPLESS 02 0477515	Method	Batch	Reporting Limit	Result	Dilution Factor	Date Extracted	Date Analyzed		ita lifiers
Sample ID: IMH1522-02 (MT515 - S Reporting Units: ug/kg dry	Soil) - cont.			Samp	oled: 08/2		•	Per.	ا كأر
Isopropylbenzene p-Isopropyltoluene Methylene chloride 4-Methyl-2-pentanone (MIBK) Methyl-tert-butyl Ether (MTBE) Naphthalene n-Propylbenzene Styrene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane Trichloroethene Trichloroethene Trichloroethene Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,3-Trichloropropane 1,2,3-Trichloropropane 1,2,3-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride 0-Xylene n,p-Xylenes Surrogate: Dibromofluoromethane (80-Surrogate: Toiuene-d8 (80-120%)	EPA 8260B EPA 8260B	3H30015 3H30015 3H30015	2.2 2.2 2.2 5.6 5.6 5.6 2.2 2.2 2.2 5.6 5.6 2.2 2.2 2.2 5.6 11 2.2 2.2 5.6 2.2 2.2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931 0.931	8/30/2003 8/30/2003	8/30/2003 8/30/2003	マートロューー・ウェー・ウェー・ウリュー・	C C C C C C C C C C C C C C C C C C C
Surrogate: 4-Bromofluorobenzene (80-	120%)			111 % 105 %				J	



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 361-1225 1014 E. Cooley Dr., Suite A. Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesaoeake Dr., Suite 805, San Diego, CA 92123 (858) 505-3639 FAX (858) 505-9639 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker

Personal a south a selection of the least of the selection of the selectio Project ID: Boeing SSFL

Report Number: IMH1522

Sampled: 08/26/03-08/27/03

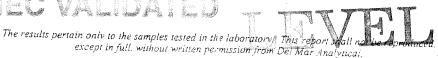
Received: 08/27/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	on Date or Extracted	Date	D	ata
Sample ID: IMH1522-03 (MT516 - Reporting Units: ug/l	Water)				led: 08		Anaryzeu	Bud	lifiers   Qu
Acetone	EPA 8260E	3104018	10	3.770				1000	Pa
Benzene	EPA 8260E			ND	1	9/4/2003	9/4/2003	L	
Bromobenzene	EPA 8260B		2.0 5.0	ND	1	9/4/2003	9/4/2003	Ì	
Bromochloromethane	EPA 8260B			ND	1	9/4/2003	9/4/2003		
Bromodichloromethane	EPA 8260B		5.0	ND	1	9/4/2003	9/4/2003	1000	
Bromoform	EPA 8260B	-	2.0	ND	1 -	9/4/2003	9/4/2003	O COLUMN TO THE	
Bromomethane	EPA 8260B	_	5.0	ND	1	9/4/2003	9/4/2003		
2-Butanone (MEK)	EPA 8260B		5.0	ND	I	9/4/2003	9/4/2003	<b>J</b>	
n-Butylbenzene	EPA 8260B	3104018	10	ND	l	9/4/2003	9/4/2003	e	R
sec-Butylbenzene		3104018	5.0	ND	l	9/4/2003	9/4/2003	U	
tert-Butylbenzene	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
Carbon tetrachloride	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
Chlorobenzene	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
Chloroethane	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
Chloroform	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
Chloromethane	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
2-Chlorotoluene	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
4-Chlorotoluene	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
Dibromochloromethane	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
1.2 Dibromo 2 -14	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
1,2-Dibromo-3-chloropropane	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
1,2-Dibromoethane (EDB) Dibromomethane	EPA 8260B	3104018	2.0	ND	1	_	9/4/2003		
	EPA 8260B	3104018	2.0	ND	1				
.2-Dichlorobenzene	EPA 8260B	3104018	2.0	ND	1		9/4/2003		
,3-Dichlorobenzene	EPA 8260B	3104018	2.0	ND	Ī		9/4/2003		
,4-Dichlorobenzene	EPA 8260B	3104018	2.0	ND	1		9/4/2003		
Dichlorodifluoromethane	EPA 8260B	3104018	5.0	ND	1	_	9/4/2003		
,1-Dichloroethane	EPA 8260B	3104018	2.0	ND	1	A	9/4/2003		
,2-Dichloroethane	EPA 8260B	3I04018	2.0	ND	1	_	9/4/2003		
,1-Dichloroethene	EPA 8260B	3104018	5.0	ND	_		9/4/2003		
is-1,2-Dichloroethene	EPA 8260B	3104018	2.0	ND	1		9/4/2003		
ans-1,2-Dichloroethene	EPA 8260B	3104018	2.0		1		9/4/2003		
,2-Dichloropropane	EPA 8260B	3104018	2.0	ND	i		9/4/2003		
3-Dichloropropane	EPA 8260B	3104018		ND	1		9/4/2003		
2-Dichloropropane	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
1-Dichloropropene	EPA 8260B	3104018	2.0	ND	I		9/4/2003		
s-1,3-Dichloropropene	EPA 8260B	3104018	2.0	ND	1		9/4/2003		
ans-1,3-Dichloropropene	EPA 8260B		2.0	ND	1		9/4/2003		
hylbenzene	EPA 8260B	3104018	2.0	ND	1	9/4/2003 9	9/4/2003		
exachlorobutadiene		3104018	2.0	ND	1		7/4/2003		
Hexanone	EPA 8260B EPA 8260B	3I04018 3I04018	5.0 10	ND	1		7/4/2003		
				ND					

Del Mar Analytical, Irvine

Michele Harper Project Manager





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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker

引起的智慧的自己自己的人,最高级的最高的实验的解析的。这种的人也就是是否的基础的的工作,但是是一个人,可是是人主动的中心。这个人一个人一个人一个人,一个人一个人 Project ID: Boeing SSFL

Report Number: IMH1522

Sampled: 08/26/03-08/27/03

Received: 08/27/03

# VOLATILE ORGANICS with KETONES by GC/MS (EPA 5030B/8260B)

			Reporting		Dilution	Date	,		
Analyte	Method	Batch	Limit	Result			Date Analyzed	Data	21
Sample ID: IMH1522-03 (MT516 - W	ater) - cont.							Qualif	
Reporting Units: ug/l	,			Samp	led: 08/2	7/03		Revolual	Qu
Isopropylbenzene	EPA 8260B	3104018	2.0	ND	•	0:4:0000		1	
p-Isopropyltoluene	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003	u	
Methylene chloride	EPA 8260B	3104018		ND	i	9/4/2003	9/4/2003		
4-Methyl-2-pentanone (MIBK)	EPA 8260B	3I04018		ND	į 1	9/4/2003	9/4/2003		
Naphthalene	EPA 8260B	3104018	5.0	ND ND	1	9/4/2003	9/4/2003		
n-Propylbenzene	EPA 8260B	3104018	2.0	ND ND	1	9/4/2003	9/4/2003		
Styrene	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003	- / 1	l
1,1,1,2-Tetrachloroethane	EPA 8260B	3104018	5.0		1	9/4/2003	9/4/2003		
1,1,2,2-Tetrachloroethane	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
Tetrachloroethene	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
Toluene	EPA 8260B	3I04018	2.0	ND	1	9/4/2003	9/4/2003		
,2,3-Trichlorobenzene	EPA 8260B	3I04018	5.0	ND	1	9/4/2003	9/4/2003		
,2,4-Trichlorobenzene	EPA 8260B	3104018	5.0	ND	1	9/4/2003	9/4/2003		
,1,1-Trichloroethane	EPA 8260B	3104018	2.0	ND		9/4/2003	9/4/2003		
,1,2-Trichloroethane	EPA 8260B	3104018	2.0	ND		9/4/2003	9/4/2003		A. C. C. C. C. C. C. C. C. C. C. C. C. C.
Trichloroethene	EPA 8260B	3104018	2.0	ND		9/4/2003	9/4/2003		
richlorofluoromethane	EPA 8260B	3104018	5.0	ND		9/4/2003	9/4/2003		The state of the s
,2,3-Trichloropropane	EPA 8260B	3I04018		ND		9/4/2003	9/4/2003		The same of the sa
,2,4-Trimethylbenzene	EPA 8260B	3104018	10 2.0	ND		9/4/2003	9/4/2003		Commence
,3,5-Trimethylbenzene	EPA 8260B	3104018		ND			9/4/2003		
inyl chloride	EPA 8260B	3104018	2.0	ND			9/4/2003		
-Xylene	EPA 8260B	3104018	5.0	ND			9/4/2003	Ì	
ı,p-Xylenes	EPA 8260B	3I04018	2.0	ND			9/4/2003		1
richlorotrifluoroethane (Freon 113)	EPA 8260B	3104018	2.0	ND	1	9/4/2003	9/4/2003		
urrogate: Dibromofluoromethane (80-	120%)	2104019	5.0	ND	1	9/4/2003	9/4/2003	y	
urrogate: Toluene-d8 (80-120%)	. 20,00			108 %					
urrogate: 4-Bromofluorobenzene (80-1	20%)			110 %					
2	-0/0/			107 %					

Del Mar Analytical, Irvine Michele Harper Project Manager









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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Boeing SSFL

Report Number: IMH1522

Sampled: 08/26/03-08/27/03

Received: 08/27/03

# PURGEABLES BY GC/MS, TENTATIVELY IDENTIFIED COMPOUNDS

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	n Date Extracted	Date Analyzed		ata lifiers	
Sample ID: IMH1522-02 (MT515 - Soil) Reporting Units: ug/kg dry	·			Samp	pled: 08/2		· K	ousl_	Qual	
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene Freon 113	EPA 8260B EPA 8260B EPA 8260B	3H30015 3H30015 3H30015	220 220 28	ND ND ND	0.931 0.931 0.931	8/30/2003	8/30/2003 8/30/2003 8/30/2003	uJ	*11	
Sample ID: IMH1522-03 (MT516 - Wate Reporting Units: ug/l	r)			Samp	oled: 08/2			•		
2-Chloro-1,1,1-trifluoroethane Chlorotrifluoroethene	EPA 8260B EPA 8260B	3104018 3104018	200 200	ND ND	1	9/4/2003 9/4/2003	9/4/2003 9/4/2003	Kn	X	
					1	97 <del>1</del> 7 2003	9/4/2003	n A		

10/11/04

Del Mar Analytical, Irvine Michele Harper Project Manager





550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V1

SDG: IMI0487 Matrix: Soil

No. of Samples: 11 Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT552, MT553, MT554, MT555, MT556, MT557, MT559, MT560, MT561,

MT562, MT563

## **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The EPA ID listed on the COC as MT558 was changed to MT563 per a memo from MWH personnel dated 9//03. The laboratory's case narrative noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 4°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	Two soil method blanks were extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blanks.	No qualifications were required.
4. LCS/BS	Two soil LCS were extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recoveries were within the laboratory-established control limits.	No qualifications were required.

Project: Rocketdyne SDG: IMl0487 Analysis: TFH

	Findings	Ovalifications
		Qualifications
5. <u>Surrogates</u>	The surrogate recovery for sample MT554 was above the control limit. The surrogate recoveries for the remaining samples were within the laboratory established QC limits.	As there were no detects in sample MT554, no qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI005) ER: MT696 (SDG IMI0935) and MT710 (SDG IMI005) Field Duplicates: MT553/MT557	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.  Carbon range C21-C30 was detected in both field duplicate samples with an RPD of 70%.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis. Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.  Due to matrix interference, samples MT552, MT554, MT559, and MT560 were analyzed at 2×, 5×, 4×, and 10× dilutions	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	respectively.  None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0487

Sampled: 09/05/03-09/09/03 Received: 09/09/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

122411	CACTABLE FOR				`			neuj		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyze	Data d Qualif	
Sample ID: IMI0487-03 (M	T552 - Soil)				Sami	pled: 09	/08/03		Rev	Qua
Reporting Units: mg/kg di					Dunn	pica. 0)	,00,05		Qual	Cod
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	11	23	2	09/15/03	09/17/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03	Ū	"
EFH (C12 - C14)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03	ĭ	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03		
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	. 11	22	2		09/17/03	v	
Surrogate: n-Octacosane (50	-125%)			-	73 %					
Sample ID: IMI0487-04 (M Reporting Units: mg/kg dr					Samp	pled: 09	/08/03			
EFH (C8 - C30)	EPA 8015 MOD.	3114004	N/A	5.2	17	1	09/14/03	09/16/03	R	P
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	Ü	
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	7	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	1.	
EFH (C21 - C30)	EPA 8015 MOD.		N/A	5.2	16	1	09/14/03		V	
Surrogate: n-Octacosane (50-					75 %		05/11/05	02/10/03	•	
Sample ID: IMI0487-05 (M Reporting Units: mg/kg dr					Samp	oled: 09	/08/03		RL-1	l
EFH (C8 - C30)	EPA 8015 MOD.	3114004	N/A	27	ND	5	00/14/02	00/16/02	R.	$ _{\mathcal{D}}$
EFH (C8 - C11)	EPA 8015 MOD.		N/A	27	ND	5 5	09/14/03 09/14/03		5	
EFH (C12 - C14)	EPA 8015 MOD.		N/A	27	ND	5	09/14/03		1	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	27	ND	5	09/14/03		WASHINGTON OF THE PROPERTY OF	
EFH (C21 - C30)	EPA 8015 MOD.		N/A	27	ND	5	09/14/03		1,	
Surrogate: n-Octacosane (50-		311 700 7	14/21	21	139 %	J	09/14/03	09/10/03	Z3	gram-Count
Sample ID: IMI0487-06 (M7					Samp	oled: 09/	08/03			Address and Color of The Color
Reporting Units: mg/kg dr		271 /004	<b>NT/</b> 4			_			O	1.
EFH (C8 - C30)	EPA 8015 MOD.		N/A	5.3	5.5	1	09/14/03		R	A
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.3	ND	l	09/14/03		4	
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.3	ND	1	09/14/03		1	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.3	ND	1	09/14/03			
EFH (C21 - C30)	EPA 8015 MOD.	3114004	N/A	5.3	ND	1	09/14/03	09/15/03	Ý	
Surrogate: n-Octacosane (50-	,				73 %					
Sample ID: IMI0487-07 (MT Reporting Units: mg/kg dr					Samp	oled: 09/	08/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	6.0	ND	1	09/15/03	09/17/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	6.0	ND	1	09/15/03	09/17/03	Ù	
EFH (C12 - C14)	EPA 8015 MOD.	3I15039	N/A	6.0	ND	1	09/15/03		1	
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	6.0	ND	1	09/15/03			
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	6.0	ND	1	09/15/03		V	1
Surrogate: n-Octacosane (50-	125%)				78 %				•	•

Del Mar Analytical, Irvine

Michele Harper Project Manager





MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0487

Sampled: 09/05/03-09/09/03

Received: 09/09/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

					(		TO THE OWN	anou,		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyzed	Dat: Qualif	
Sample ID: IMI0487-08 (MT5 Reporting Units: mg/kg dry	557 - Soil)				Samj	oled: 09	9/08/03		Rev Oval	Code
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	5.2	9.3	1	09/15/03	09/17/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	5.2	ND	1		09/17/03	Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I15039	N/A	5.2	ND	1		09/17/03	1	
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	5.2	ND	1		09/17/03	$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	5.2	7.7	1		09/17/03		
Surrogate: n-Octacosane (50-1.	25%)				69 %			03/1//03		
Sample ID: IMI0487-10 (MT5 Reporting Units: mg/kg dry	663 - Soil)				Samp	oled: 09	0/08/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03	09/17/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03		- 1	
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03			
Surrogate: n-Octacosane (50-12	25%)				81 %		V272070D	03/1//03	•	
Sample ID: IMI0487-11 (MT5 Reporting Units: mg/kg dry	59 - Soil)				Samp	led: 09	/05/03		RL-1	
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	25	ND	4	09/15/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	25	ND	4	09/15/03		7	
EFH (C12 - C14)	EPA 8015 MOD.	3I15039	N/A	25	ND	4	09/15/03		ì	
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	25	ND	4	09/15/03			]
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	25	ND	4	09/15/03			
Surrogate: n-Octacosane (50-12	25%)				89 %			03/10/03	V	
Sample ID: IMI0487-12 (MT50 Reporting Units: mg/kg dry	60 - Soil)				Samp	led: 09	/05/03		RL-1	
EFH (C8 - C30)	EPA 8015 MOD.	3115039	N/A	54	ND	10	09/15/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	54	ND	10	09/15/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I15039	N/A	54	ND	10	09/15/03		1	
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	54	ND	10	09/15/03		ł	
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	54	ND	10	09/15/03		V	1
Surrogate: n-Octacosane (50-12	5%)				67 %			05.10.00	<i>Z3</i>	P .
Sample ID: IMI0487-13 (MT56 Reporting Units: mg/kg dry	61 - Soil)				Samp	led: 09/	/09/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I15039	N/A	5.1	7.7	1	09/15/03	09/17/03	R	a
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.1	ND	1	09/15/03		Ü	1
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.1	ND	1	09/15/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.1	ND	1	09/15/03		1	
EFH (C21 - C30)	EPA 8015 MOD.		N/A	5.1	7.5	1	09/15/03		-	
Surrogate: n-Octacosane (50-12.					68 %	•	09/13/03	05/17/05		
- · · · · · · · · · · · · · · · · · · ·	The Marchael Looks on the second	Mr. W. Santo			• •					1

Del Mar Analytical, Irvine

Michele Harper Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, IMI0487 <Page 3 of 94>

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0487

Sampled: 09/05/03-09/09/03

Received: 09/09/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	-		Date Extracted	Date Analyze		Data alifierș
Sample ID: IMI0487-14 (MT50 Reporting Units: mg/kg dry	62 - Soil)				Samp	pled: 09/	09/03		lu Sval	Code
EFH (C8 - C30)	EPA 8015 MOD.	3115039	N/A	5.1	ND	1	09/15/03	09/17/03	R	0
EFH (C8 - C11)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03	09/17/03	U	
EFH (C12 - C14)	EPA 8015 MOD:	3I15039	N/A	5.1	ND	1	09/15/03	09/17/03	1	j
EFH (C15 - C20)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	1	09/15/03	09/17/03		
EFH (C21 - C30)	EPA 8015 MOD.	3I15039	N/A	5.1	ND	. 1	09/15/03	09/17/03	$\bigvee$	ļ
Surrogate: n-Octacosane (50-12	5%)				69 %					

Del Mar Analytical, Irvine

Michele Harper Project Manager



550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V<sup>1</sup>

SDG: IMI0838

Matrix: Soil

No. of Samples: 5

Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT690, MT691, MT692, MT693, MT694

## **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The laboratory's case narrative noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 5°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	Two soil method blanks were extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blanks.	No qualifications were required.
4. LCS/BS	Two soil LCS were extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recoveries were within the laboratory-established control limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0838 Analysis: TFH

	Findings	Qualifications
5. Surrogates	The surrogate recovery for sample MT694 was above the laboratory-established control limit. The remaining surrogate recoveries for the samples were within the laboratory-established QC limits.	The result for C21-C30 was qualified as estimated, "J," in sample MT694. As no other target hydrocarbon ranges were detected in sample MT694, no further qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI005)  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI005)  Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis. Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.  Due to matrix interference samples MT690 and MT694 were analyzed at 2× and 10× dilutions, respectively.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunsel Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0838

Sampled: 09/15/03 Received: 09/15/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

				MON				neuj		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz	ed Qı	Data ualifiers
Sample ID: IMI0838-01 (MT Reporting Units: mg/kg dr									Per Dual	Cole
EFH (C8 - C30)	EPA 8015 MOD.	3117042	N/A	11	28	2	09/17/03	09/17/03	R	P
EFH (C8 - C11)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03	Ü	
EFH (C12 - C14)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03	Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	11	ND	2		09/17/03	V	
EFH (C21 - C30)	EPA 8015 MOD.	3I17042	N/A	11	27	$\frac{7}{2}$		09/17/03	•	
Surrogate: n-Octacosane (50-	125%)				89 %	_	03/1//03	05/17/05		
Sample ID: IMI0838-02 (MT Reporting Units: mg/kg dry										
EFH (C8 - C30)	EPA 8015 MOD.	3I17042	N/A	5.4	ND	1	09/17/03	09/17/03	R	(a)
EFH (C8 - C11)	EPA 8015 MOD.	3I17042	N/A	5.4	ND	1	09/17/03		ΰ	'-
EFH (C12 - C14)	EPA 8015 MOD.	3117042	· N/A	5.4	ND	1	09/17/03		1	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.4	ND	1	09/17/03			
EFH (C21 - C30)	EPA 8015 MOD.	3I17042	N/A	5.4	ND	1	09/17/03		$\downarrow$	
Surrogate: n-Octacosane (50-1	•				77 %				•	
Sample ID: IMI0838-03 (MT Reporting Units: mg/kg dry	692 - Soil)									
EFH (C8 - C30)	EPA 8015 MOD.	3117042	N/A	5.3	ND	1	09/17/03	09/18/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I17042	N/A	5.3	ND	1	09/17/03		Ū	
EFH (C12 - C14)	EPA 8015 MOD.	3117042	N/A	5.3	ND	1	09/17/03		ī	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.3	ND	1	09/17/03		-	
EFH (C21 - C30)	EPA 8015 MOD.	3I17042	N/A	5.3	ND	1	09/17/03		V	
Surrogate: n-Octacosane (50-1					71%					
Sample ID: IMI0838-04 (MT) Reporting Units: mg/kg dry										
EFH (C8 - C30)	EPA 8015 MOD.	3117049	N/A	5.4	ND	1	09/17/03	09/18/03	R	a
EFH (C8 - C11)	EPA 8015 MOD.	3117049	N/A	5.4	ND	. 1	09/17/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3117049	N/A	5.4	ND	1	09/17/03		1	
EFH (C15 - C20)	EPA 8015 MOD.	3117049	N/A	5.4	ND	1	09/17/03		1	
EFH (C21 - C30)	EPA 8015 MOD.	3117049	N/A	5.4	ND	1	09/17/03	09/18/03	$\downarrow$	
Surrogate: n-Octacosane (50-1)					71 %					
Sample ID: IMI0838-05 (MT6 Reporting Units: mg/kg dry	594 - Soil)									
EFH (C8 - C30)	EPA 8015 MOD.	3I17049	N/A	52	460	10	09/17/03	09/19/03	R	a
EFH (C8 - C11)	EPA 8015 MOD.		N/A	52	ND	10	09/17/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I17049	N/A	52	ND	10	09/17/03		1	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	52	ND	10	09/17/03		$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3117049	N/A	52	460	10	09/17/03		Ĭ	5
Surrogate: n-Octacosane (50-1.	25%)				154 %					Z3

Del Mar Analytical, Irvine

Michele Harper

Project Manager







550 South Wadsworth Boulevard, Suite 500, Lakewood, CO 80026 303.935.6505, Fax 303.935.6575

## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V1

SDG: IMI1169 Matrix: Soil

No. of Samples: 9
Dilutions/Reanalyses: 0

Date Reviewed: December 29, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT699, MT700, MT701, MT702, MT703, MT705, MT706, MT707, MT708

## **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. Sample MT704 was not received by the laboratory. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 2°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	Two soil method blanks were extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blanks.	No qualifications were required.
4. LCS/BS	Two soil LCSs were extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recoveries were within the laboratory-established control limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI1169 Analysis: TFH

	Findings	Qualifications
5. Surrogates	The surrogate recoveries for the samples were within the laboratory established QC limits.	No qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI1005)  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005)  Field Duplicates: MT702/MT705	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.  Target range C21-C30 was reported in sample MT702 but was not reported in sample MT705. None of the other target compound hydrocarbon ranges were reported in either of the field duplicate samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis.  Due to matrix interference, sample Mt702 was reported from a 2× dilution.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

			1100		(CIXE)	LLO, OU	LU-ITAGUI.	iicu)		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date Extracted	Date Analyz		Data nalifiers
Sample ID: IMI1169-01 (MT699 Reporting Units: mg/kg dry	- Soil)				Sam	pled: 09	/16/03		Ru Qual	(Code
EFH (C8 - C30)	EPA 8015 MOD.	3I21019	N/A	5.4	ND	1	09/21/03	09/25/03	R	P
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.4	ND	1		09/25/03	U	-
EFH (C12 - C14)	EPA 8015 MOD.	3I21019	N/A	5.4	ND.	1		09/25/03	Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3I21019	N/A	5.4	ND	1		09/25/03		
EFH (C21 - C30)	EPA 8015 MOD.	3I21019	N/A	5.4	ND	1		09/25/03	1.	
Surrogate: n-Octacosane (50-125	%)				66 %				V	
Sample ID: IMI1169-02 (MT700 Reporting Units: mg/kg dry	- Soil)				Samj	pled: 09	/17/03			REPORT OF THE PROPERTY OF THE
EFH (C8 - C30)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03	09/25/03	R	P
EFH (C8 - C11)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1		09/25/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03		İ	
EFH (C15 - C20)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03		1	
EFH (C21 - C30)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1		09/25/03	$\downarrow$	
Surrogate: n-Octacosane (50-125)	%)				70 %				•	
Sample ID: IMI1169-03 (MT701 Reporting Units: mg/kg dry	- Soil)				Samp	oled: 09	/17/03			AND HER CONTROL OF THE CONTROL OF TH
EFH (C8 - C30)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03	09/25/03	R	q
EFH (C8 - C11)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03		O	
EFH (C12 - C14)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3121019	N/A	5.2	ND	1	09/21/03			
EFH (C21 - C30)	EPA 8015 MOD.	3I21019	N/A	5.2	ND	1	09/21/03		J	*
Surrogate: n-Octacosane (50-1259	<b>%</b> )				69 %				•	
Sample ID: IMI1169-04 (MT702 Reporting Units: mg/kg dry	- Soil)				Samp	oled: 09/	/17/03			TO A STANSFER CONTRACT CONTRAC
EFH (C8 - C30)	EPA 8015 MOD.	3121019	N/A	11	44	2	09/21/03	09/25/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3121019	N/A	11	ND	2	09/21/03	09/25/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3I21019	N/A	11	ND	2	09/21/03	09/25/03	1	
EFH (C15 - C20)	EPA 8015 MOD.	3I21019	N/A	11	ND	2	09/21/03	09/25/03		
EFH (C21 - C30)	EPA 8015 MOD.	3121019	N/A	11	43	2	09/21/03	09/25/03	X	
Surrogate: n-Octacosane (50-125%)	6)				92 %					PORTON AND AND AND AND AND AND AND AND AND AN
Sample ID: IMI1169-05 (MT703 Reporting Units: mg/kg dry	- Soil)				Samp	oled: 09/	16/03			
EFH (C8 - C30)	EPA 8015 MOD.	3122039	N/A	5.6	ND	1	09/22/03	09/25/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.6	ND	1	09/22/03		U	
EFH (C12 - C14)	EPA 8015 MOD.	3122039	N/A	5.6	ND	1	09/22/03		1	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.6	ND	1	09/22/03			
EFH (C21 - C30)	EPA 8015 MOD.		N/A	5.6	ND	1	09/22/03			
Surrogate: n-Octacosane (50-125%	6)				88 %				•	
			to the party	PROPER DESIGN SECTION						

Del Mar Analytical, Irvine

Michele Harper Project Manager



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI1169

Sampled: 09/16/03-09/17/03

Received: 09/17/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit		Dilution Factor I		Date Analyzo	ed Qua	ata difiers ,
Sample ID: IM1169-06 (MT705 Reporting Units: mg/kg dry	- Soil)				Samj	pled: 09/	17/03		Rev Qual	Qual Code
EFH (C8 - C30)	EPA 8015 MOD.	3I22039	N/A	5.1	ND	ì	09/22/03	09/24/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I22039	N/A	5.1	ND	1		09/24/03	Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I22039	N/A	5.1	ND	1		09/24/03	Ī	
EFH (C15 - C20)	EPA 8015 MOD.	3I22039	N/A	5.1	ND	1		09/24/03		İ
EFH (C21 - C30)	EPA 8015 MOD.	3I22039	N/A	5.1	ND	1		09/24/03	1/	
Surrogate: n-Octacosane (50-1259	%)				77 %			02,2,03	V	
Sample ID: IMI1169-07 (MT706 Reporting Units: mg/kg dry	- Soil)				Samp	oled: 09/1	16/03			
EFH (C8 - C30)	EPA 8015 MOD.	3122039	N/A	5.2	ND	1	09/22/03	09/24/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3122039	N/A	5.2	ND		09/22/03		ΰ	
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.2	ND		09/22/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3122039	N/A	5.2	ND		09/22/03		Į	
EFH (C21 - C30)	EPA 8015 MOD.	3122039	N/A	5.2	ND		09/22/03		J	
Surrogate: n-Octacosane (50-125%	6)				71 %		03.22.03	07/21/05	•	of the second se
Sample ID: IMI1169-08 (MT707 Reporting Units: mg/kg dry	- Soil)				Samp	oled: 09/1	7/03			SOCIONAL DANGE SANCE SAN
EFH (C8 - C30)	EPA 8015 MOD.	3122039	N/A	5.2	ND	1	09/22/03	09/25/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.2	ND		09/22/03		Ü	V
EFH (C12 - C14)	EPA 8015 MOD.	3I22039	N/A	5.2	ND		09/22/03		Ĩ	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.2	ND		09/22/03		.	
EFH (C21 - C30)	EPA 8015 MOD.	3122039	N/A	5.2	ND		09/22/03		$\sqrt{}$	
Surrogate: n-Octacosane (50-125%)	6)				81 %	-	0 2 7 <b>2 2</b> 7 0 <b>2</b>	03723703	v	
Sample ID: IMI1169-09 (MT708 Reporting Units: mg/kg dry	- Soil)				Samp	led: 09/1	6/03			
EFH (C8 - C30)	EPA 8015 MOD.	3122039	N/A	6.5	ND	1	09/22/03	09/25/03	R	D
EFH (C8 - C11)			N/A	6.5	ND		09/22/03		Ü	*****
EFH (C12 - C14)	EPA 8015 MOD.		N/A	6.5	ND		09/22/03		Ì	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	6.5	ND		09/22/03			
EFH (C21 - C30)			N/A	6.5	ND			09/25/03		
Surrogate: n-Octacosane (50-125%					85 %	-		~,, <b>20</b> ,00	v	

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Del Mar Analytical, Irvine

Michele Harper Project Manager



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## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V1

SDG: IMI0247 Matrix: Soil

No. of Samples: 7 Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94) Samples Reviewed: MT534, MT535, MT536, MT537, MT538, MT539, MT540

## **Data Validation Findings**

		Findings	Qualifications
1.	Sample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ , at $6^{\circ}\text{C}$ . No custody seal information was provided by the laboratory.	No qualifications were required.
		According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	
3.	Method Blanks	Two soil method blanks were extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blanks.	No qualifications were required.
4.	LCS/BS	Two soil LCSs were extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recovery was within the laboratory-established control limits.	No qualifications were required.
5.	Surrogates	The surrogate recoveries for the samples were within the laboratory established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0247 Analysis: TFH

	Findings	Qualifications
6. MS/MSDs MT540	MS/MSD analyses were performed on sample MT540 in association with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recoveries were below the laboratory-established control limits.	All results for parent sample MT540 were qualified as estimated, "UJ."
7. Field QC Samples 8. FB: MT697 (SDG IMI0935) and MT711 (SDG IMI005) ER: MT696 (SDG IMI0935) and MT710 (SDG IMI005) Field Duplicates: none	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis.  Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected, "R," in favor of the individual n-alkane ranges.
Comments	None.	None.

Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03 Received: 09/04/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

					•		10 111041	iscu)		
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyze	d Qua	
Sample ID: IMI0247-02 (M Reporting Units: mg/kg d					Sam	pled: 09	9/04/03		Rev Qual	Cod
EFH (C8 - C30)	EPA 8015 MOD.	3111044	1.9	5.3	5.9	1	09/11/03	09/11/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3111044	1.9	5.3	ND	1		09/11/03	υ	
EFH (C12 - C14)	EPA 8015 MOD.	3111044	1.9	5.3	ND	1		09/11/03	1	
EFH (C15 - C20)	EPA 8015 MOD.	3I11044	1.9	5.3	ND	1		09/11/03	- ↓	1
EFH (C21 - C30)	EPA 8015 MOD.	3I11044	1.9	5.3	5.4	1		09/11/03		j
Surrogate: n-Octacosane (50	)-125%)				71 %					
Sample ID: IMI0247-03 (M Reporting Units: mg/kg d					Samı	oled: 09	0/04/03			
EFH (C8 - C30)	EPA 8015 MOD.	3109044	2.0	5.5	37	1	09/09/03	09/10/03	R	$ \mathcal{Z} $
EFH (C8 - C11)	EPA 8015 MOD.	3109044	2.0	5.5	ND	1		09/10/03	Ü	-
EFH (C12 - C14)	EPA 8015 MOD.	3I09044	2.0	5.5	ND	1		09/10/03	Ī	
EFH (C15 - C20)	EPA 8015 MOD.	3109044	2.0	5.5	ND	- 1		09/10/03	4	
EFH (C21 - C30)	EPA 8015 MOD.	3109044	2.0	5.5	36	1		09/10/03		
Surrogate: n-Octacosane (50	D-125%)				94 %			03710702		
Sample ID: IMI0247-04 (M Reporting Units: mg/kg di					Samp	oled: 09	0/04/03			
EFH (C8 - C30)	EPA 8015 MOD.	3109044	2.0	5.5	21	1	09/09/03	09/10/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3109044	2.0	5.5	ND	1	09/09/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3109044	2.0	5.5	ND	1	09/09/03		1	
EFH (C15 - C20)	EPA 8015 MOD.	3109044	2.0	5.5	ND	1	09/09/03		$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3109044	2.0	5.5	21	1	09/09/03			1
Surrogate: n-Octacosane (50	-125%)				87 %					
Sample ID: IMI0247-05 (M Reporting Units: mg/kg di					Samp	led: 09	0/04/03			
EFH (C8 - C30)	EPA 8015 MOD.	3109044	2.0	5.6	22	1	09/09/03	09/10/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03		U	1
EFH (C12 - C14)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03	09/10/03	1	1
EFH (C15 - C20)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03		Ų.	1
EFH (C21 - C30)	EPA 8015 MOD.	3109044	2.0	5.6	22	1	09/09/03			1
Surrogate: n-Octacosane (50-	-125%)				83 %					
Sample ID: IMI0247-06 (M' Reporting Units: mg/kg dr					Samp	led: 09.	/04/03			
EFH (C8 - C30)	EPA 8015 MOD.	3109044	1.9	5.1	10	1	09/09/03	09/10/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3109044	1.9	5.1	ND	1	09/09/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.		1.9	5.1	ND	1	09/09/03		ı	
EFH (C15 - C20)	EPA 8015 MOD.		1.9	5.1	ND	1	09/09/03			
EFH (C21 - C30)	EPA 8015 MOD.		1.9	5.1	10	1	09/09/03		₩	1
Surrogate: n-Octacosane (50-	1250%)		Prince		95 %		07,07,03	U2/10/02		
			The Body							•

Del Mar Analytical, Irvine

Michele Harper Project Manager





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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0247

Sampled: 09/04/03

Received: 09/04/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifi	
Sample ID: IMI0247-07 (MT53 Reporting Units: mg/kg dry	9 - Soil)				Samı	oled: 09/	04/03		Rev Qual	Qual
EFH (C8 - C30)	EPA 8015 MOD.	3109044	2.3	6.3	5.4	1	09/09/03	09/10/03	P. J	D
EFH (C8 - C11)	EPA 8015 MOD.	3109044	2.3	6.3	ND	1	09/09/03	09/10/03	υ ˙	
EFH (C12 - C14)	EPA 8015 MOD.	3109044	2.3	6.3	ND	1	09/09/03	09/10/03		
EFH (C15 - C20)	EPA 8015 MOD.	3109044	2.3	6.3	ND	1	09/09/03	09/10/03	1	
EFH (C21 - C30)	EPA 8015 MOD.	3109044	2.3	6.3	3.0	1	09/09/03	09/10/03	JI	
Surrogate: n-Octacosane (50-125	1%)				76 %		•			
Sample ID: IMI0247-08 (MT546 Reporting Units: mg/kg dry	0 - Soil)				Samp	oled: 09/	04/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I09044	2.0	5.6	19	1	09/09/03	09/10/03	R M2	D
EFH (C8 - C11)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03	09/10/03	UT	Q
EFH (C12 - C14)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03	09/10/03	1	l'
EFH (C15 - C20)	EPA 8015 MOD.	3109044	2.0	5.6	ND	1	09/09/03	09/10/03		
EFH (C21 - C30)	EPA 8015 MOD.	3109044	2.0	5.6	19	1	09/09/03	09/10/03	v	ľ
Surrogate: n-Octacosane (50-125	(%)				75 %				i	į

Del Mar Analytical, Irvine Michele Harper Project Manager





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## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V1

SDG: IMH1307
Matrix: Soil
No. of Samples: 2
Dilutions/Reanalyses: 0

Date Reviewed: December 29, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT504, MT505

## **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 4°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	One soil method blank was extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blank.	No qualifications were required.
4. LCS/BS	One soil LCS was extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recovery was within the laboratory-established control limits.	No qualifications were required.
5. <u>Surrogates</u>	The surrogate recoveries for the samples were within the laboratory established QC limits.	No qualifications were required.

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Project: Rocketdyne SDG: IMH1307 Analysis: TFH

	Findings	Qualifications
6. MS/MSDs MT505	MS/MSD analyses were performed on sample MT505. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recoveries and RPD were within the laboratory-established control limits.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI1005)  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005)  Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis.  Due to matrix interference, sample MT504 was reported from a 5× dilution.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

 $<sup>^{1}</sup>$  Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046 9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMH1307

Sampled: 08/22/03

Received: 08/22/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor l	Date Extracted	Date Analyzed	Dat Quali	
Sample ID: IMH1307-01 (M Reporting Units: mg/kg dr									ew Qual	Que Cod
EFH (C8 - C30)	EPA 8015 MOD.	3H25040	N/A	26	54	5	08/25/03	08/25/03	R	U C
EFH (C8 - C11)	EPA 8015 MOD.	3H25040	N/A	26	ND	5	08/25/03	08/25/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3H25040	N/A	26	ND	5	08/25/03	08/25/03	1	1
EFH (C15 - C20)	EPA 8015 MOD.	3H25040	N/A	26	ND	5	08/25/03	08/25/03	$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3H25040	N/A	26	52	5	08/25/03	08/25/03	-	
Surrogate: n-Octacosane (40-	140%)				101 %				<i>Z3</i>	
Sample ID: IMH1307-02 (M Reporting Units: mg/kg dr										
EFH (C8 - C30)	EPA 8015 MOD.	3H25040	N/A	5.5	ND	1	08/25/03	08/26/03	R	Q
EFH (C8 - C11)	EPA 8015 MOD.	3H25040	N/A	5.5	ND	1	08/25/03	08/26/03	Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3H25040	N/A	5.5	ND	1	08/25/03	08/26/03	i l	
EFH (C15 - C20)	EPA 8015 MOD.	3H25040	N/A	5.5	ND	1	08/25/03	08/26/03		
EFH (C21 - C30)	EPA 8015 MOD.	3H25040	N/A	5.5	ND	1	08/25/03	08/26/03	<b>↓</b>	
Surrogate: n-Octacosane (40-	I 40%)				81 %			- 5. 2 5. 0 2		
							·			

AMES VALIDATED



Del Mar Analytical, Irvine Michele Harper Project Manager



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## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V<sup>1</sup>

SDG: IMI0405
Matrix: Soil
No. of Samples: 6
Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT541, MT542, MT543, MT544, MT545, MT546

## **Data Validation Findings**

		Findings	Qualifications
1.	Sample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 4°C. No custody seal information was provided by the laboratory.	No qualifications were required.
		According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	
3.	Method Blanks	One soil method blank was extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blank.	No qualifications were required.
4.	LCS/BS	One soil LCS was extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recovery was within the laboratory-established control limits.	No qualifications were required.
5.	Surrogates	The surrogate recoveries for the samples were within the laboratory established QC limits.	No qualifications were required.

Project: Rocketdyne SDG: IMI0405 Analysis: TFH

	Findings	Qualifications
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI005) ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005) Field Duplicates: MT542/MT545	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.  None of the target compound hydrocarbon ranges were reported in either of the field duplicate samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis. Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.  Due to matrix interference, samples Mt541 and MT543 were reported from 2× dilutions.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Facto	n Date rExtracted	Date Analyz	D ed Qua	ata lifiers
Sample ID: IMI0405-02 (N Reporting Units: mg/kg					Samı	oled: 09	9/05/03		Qual	Cod
EFH (C8 - C30)	EPA 8015 MOD.	3110042	N/A	10	190	2	09/10/03	09/12/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.		N/A	10	ND	2		09/12/03	$\dot{o}$	
EFH (C12 - C14)	EPA 8015 MOD.	3110042	N/A	10	ND	2		09/12/03	- 1	1
EFH (C15 - C20)	EPA 8015 MOD.	3I10042	N/A	10	ND	2		09/12/03	$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3110042	N/A	10	190	2	09/10/03		•	
Surrogate: n-Octacosane (5	0-125%)		. "		125 %			***************************************		
Sample ID: IMI0405-03 (N Reporting Units: mg/kg of					Samp	oled: 09	9/05/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I10042	N/A	5.8	ND	1	09/10/03	09/13/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3110042	N/A	5.8	ND	1	09/10/03		ΰ	
EFH (C12 - C14)	EPA 8015 MOD.	3110042	N/A	5.8	ND	1	09/10/03		i	
EFH (C15 - C20)	EPA 8015 MOD.	3I10042	N/A	5.8	ND	1	09/10/03			
EFH (C21 - C30)	EPA 8015 MOD.	3I10042	N/A	5.8	ND	1	09/10/03		$\downarrow$	
Surrogate: n-Octacosane (5	0-125%)				67 %			73.23.22		
Sample ID: IMI0405-04 (N Reporting Units: mg/kg o	IT543 - Soil) dry				Samp	led: 09	/05/03			
EFH (C8 - C30)	EPA 8015 MOD.	3110042	N/A	11	<b>5</b> 7	2	09/10/03	09/12/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I10042	N/A	11	ND	2	09/10/03		U	
EFH (C12 - C14)	EPA 8015 MOD.	3110042	N/A	11	ND	2	09/10/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3I10042	N/A	11	ND	2	09/10/03		- ↓	
EFH (C21 - C30)	EPA 8015 MOD.	3I10042	N/A	11	55	2	09/10/03		-	
Surrogate: n-Octacosane (5)	0-125%)				102 %			07.12,00		
Sample ID: IMI0405-05 (M Reporting Units: mg/kg d					Samp	led: 09.	/05/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I10042	N/A	5.4	ND	1	09/10/03	09/12/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I10042	N/A	5.4	ND	1	09/10/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I10042	N/A	5.4	ND	1	09/10/03		Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3110042	N/A	5.4	ND	1	09/10/03			
EFH (C21 - C30)	EPA 8015 MOD.	3110042	N/A	5.4	ND	l	09/10/03			
Surrogate: n-Octacosane (50	7-125%)				66 %			13 12, 52	•	
Sample ID: IMI0405-06 (M Reporting Units: mg/kg d					Samp	led: 09/	/05/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I10042	N/A	5.2	ND	1	09/10/03	09/12/03	R	$\mathcal{A}$
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.2	ND	1	09/10/03		U	þ
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.2	ND	1	09/10/03		Y	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.2	ND	1	09/10/03			
EFH (C21 - C30)	EPA 8015 MOD.		N/A	5.2	ND	1	09/10/03		↓ '	
Surrogate: n-Octacosane (50				~	71%	1	031 1U/U3	0 <i>21</i> 12/03	•	
	. 4				11 70					

Del Mar Analytical, Irvine

Michele Harper Project Manager

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0405

Sampled: 09/05/03 Received: 09/05/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyze		ata difiers ,
Sample ID: IMI0405-07 (MT5- Reporting Units: mg/kg dry	46 - Soil)				Samj	pled: 09/	05/03		Dev Oval	Qual
EFH (C8 - C30)	EPA 8015 MOD.	3I10042	N/A	5.4	5.5	1	09/10/03	09/13/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3110042	N/A	5.4	ND	1	09/10/03		Ü	1
EFH (C12 - C14)	EPA 8015 MOD.	3I10042	N/A	5.4	ND	1	09/10/03		Ý	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	5.4	ND	1	09/10/03			ST-
EFH (C21 - C30) Surrogate: n-Octacosane (50-12)	EPA 8015 MOD. 5%)	3I10042	N/A	5.4	ND 59 %	1	09/10/03		V	And the contract of the contra





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## DATA ASSESSMENT FORM

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V<sup>1</sup>
SDG: MF003
Matrix: Soil
No. of Samples: 1

Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MF005

# **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. The EPA ID for sample MF005 was hand-corrected in the COC. It was determined that the ID was corrected by field personnel per a telephone conversation with E. Sarao of MWH dated 12/19/03. The laboratory's sample receipt checklist noted that the sample was received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 5°C. No custody seals were present on the cooler.  According to the sample result summary form, the sample was extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	One soil method blank was extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blank.	No qualifications were required.
4. LCS/BS	One soil LCS was extracted and analyzed with this SDG. The recovery for n-decane was above the control limit. The recoveries for all remaining ranges were within the laboratory-established control limits.	As none of the target compound hydrocarbon ranges were reported in sample MF005, no qualifications were required.

Project: Rocketdyne SDG: MF003 Analysis: TFH

	Findings	Qualifications
5. <u>Surrogates</u>	The surrogate recoveries for the sample were all within the laboratory-established QC limits.	No qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IM10935) and MT711 (SDG IM1005) ER: MT696 (SDG IM10935) and MT710 (SDG IM11005) Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	Soil sample results and reporting limits were reported on a dry-weight basis.	No qualifications were required.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

# TOTAL PETROLEUM HYDROCARBONS (TPH)

(Extractables)
by Modified EPA Method 8015B

Client: Montgomery Watson

Laboratory ID: 031290-03

Client Sample ID: MF005

Date Sample Extracted: 09/23/03

Date Sampled: 09/17/03

Date Sample Analyzed: 10/13/03

Date Sample Received: 09/19/03

•

Associated Method Blank: F0923-B4

Matrix: Soil

Dilution Factor: 1

Percent Solids: 87

Concentration in: mg/Kg (ppm)+

Target Analyte	Sample	Rew   Qual	Quantitation
	Concentration	Qual   Code	Limit
C08-C11 (Gasoline Range)	ND	0	4
C11-C14 (Kerosene Range)	ND		4
C14-C20 (Diesel Range)	ND		4
C20-C30 (Lubricant Oil Range)	ND		4

ND = Not detected + Dry weight basis.

### Surrogate Spike Recovery

Surrogate Compound	Recovery(%)	QC Limits(%)*	
n-Decane	85	49 - 102	
n-Eicosane	96	71 - 117	
p-Terphenyl-d14	65	62 - 121	

<sup>\*</sup> These limits are provided for advisory purposes.

Form I TPH



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## **DATA ASSESSMENT FORM**

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V<sup>1</sup>
SDG: MF001
Matrix: Soil

No. of Samples: 1 Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MF001

# **Data Validation Findings**

		Findings	Qualifications
1. <u>S</u>	ample Management	The COC was signed by field and laboratory personnel. The laboratory's sample receipt checklist noted that the sample was received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 6°C. No custody seal were present on the cooler.  According to the sample result summary form, the sample was extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. <u>M</u>	1ethod Blanks	One soil method blank was extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blank.	No qualifications were required.
4. <u>L</u> 0	CS/BS	One soil LCS was extracted and analyzed with this SDG. The recoveries for all ranges were within the laboratory-established control limits.	No qualifications were required.
5. <u>St</u>	urrogates	The surrogate recoveries for the sample were all below the laboratory-established QC limits, but greater than 10%.	The results for sample MF001 were qualified as estimated, "J," for detects and, "UJ," for nondetects.

Project: Rocketdyne SDG: MF001 Analysis: TFH

	Findings	Qualifications
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI1005)  ER: MT696 (SDG IMI0935) and MT710 (SDG IMI1005)  Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	Soil sample results and reporting limits were reported on a dry-weight basis. Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.	No qualifications were required.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

## TOTAL PETROLEUM HYDROCARBONS (TPH)

(Extractables)
by Modified EPA Method 8015B

Client: Montgomery	watson
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Laboratory ID: 031213-01

Client Sample ID: MF001

Date Sample Extracted: 09/10/03

Date Sampled: 09/05/03

Date Sample Analyzed: 09/15/03

Date Sample Received: 09/06/03

Associated Method Blank: F0910-B5

Matrix: Soil

Dilution Factor: 1

Percent Solids: 95

Concentration in: mg/Kg (ppm)+

Target Analyte	Sample	Rev Qual	Quantitation
	Concentration	Qual Code	Limit
C08-C11 (Gasoline Range) C11-C14 (Kerosene Range) C14-C20 (Diesel Range) C20-C30 (Lubricant Oil Range)	1.8J ND ND 13	7 03 5 05 5	4 4 4 4

ND = Not detected

### **Surrogate Spike Recovery**

Surrogate Compound	Recovery(%)	QC Limits(%)*	
n-Decane	31	49 - 102	
n-Eicosane	46	71 - 117	
p-Terphenyl-d14	45	62 - 121	

<sup>\*</sup> These limits are provided for advisory purposes.

Reported by:		/>	Approved by:	h	
	- /				

Form I TPH

<sup>+</sup> Dry weight basis.



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# DATA ASSESSMENT FORM

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V1

SDG: IMI0763 Matrix: Soil

No. of Samples: 5 Dilutions/Reanalyses: 0

Date Reviewed: December 29, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT685, MT686, MT687, MT688, MT689

# **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COCs were signed by field and laboratory personnel. The laboratory's sample receiving checklist noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 5°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	One soil method blank and one method blank associated with the product sample (MT689) were extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blanks.	No qualifications were required.
4. LCS/BS	One soil LCS was extracted and analyzed with the soil samples this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recovery was within the laboratory-established control limits.	No qualifications were required.

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Project: Rocketdyne SDG: IMI0763 Analysis: TFH

	Findings	Qualifications
5. Surrogates	The surrogate recoveries for the samples were within the laboratory-established QC limits.	No qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IMI0935) and MT711 (SDG IMI1005) ER: MT696 (SDG IMI10935) and MT710 (SDG IMI1005) Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis. Sample MT689, a product sample, was reported on a wet-weight basis.  Due to matrix interference, sample MT685, MT686, and MT687 were reported from 2× dilutions. The effective 300× dilution of sample MT689 reflected the sample preparation, including sample amount and final volume of the product sample.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.

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MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0763

Sampled: 09/08/03-09/11/03

Received: 09/12/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

					(Citt	115/00	15 Miour	neuj		
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilutio Facto	n Date rExtracted	Date Analyzed	Data Qualifi	
Sample ID: IM10763-21 (MT Reporting Units: mg/kg di	(685 - Soil) ry				Sam	ipled: 0	9/11/03		Ru	100
EFH (C8 - C30)	EPA 8015 MOD.	3117042	N/A	10	14	2	09/17/03	09/17/03	R	70
EFH (C8 - C11)	EPA 8015 MOD.	3117042	N/A	10	ND	2		09/17/03	ΰ	ا
EFH (C12 - C14)	EPA 8015 MOD.	3I17042	N/A	10	ND	2		09/17/03	i	1
EFH (C15 - C20)	EPA 8015 MOD.	3117042	N/A	10	ND	2		09/17/03	1	
EFH (C21 - C30)	EPA 8015 MOD.	3117042	N/A	10	14	2		09/17/03	•	
Surrogate: n-Octacosane (50-)	7 25%)				85 %		02/1//02	02/17/03		
Sample ID: IMI0763-22 (MT Reporting Units: mg/kg dr					Sam	pled: 09	9/11/03			
EFH (C8 - C30)	EPA 8015 MOD.	3117042	N/A	10	14	2	09/17/03	09/18/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3117042	N/A	10	ND	2.	09/17/03		Ü	1
EFH (C12 - C14)	EPA 8015 MOD.	3I17042	N/A	10	ND	2	09/17/03		ĩ	
EFH (C15 - C20)	EPA 8015 MOD.	3I17042	N/A	10	ND.		09/17/03		$\downarrow$	
EFH (C21 - C30)	EPA 8015 MOD.	3I17042	N/A	10	14	2	09/17/03		V	
Surrogate: n-Octacosane (50-1	25%)				82 %			02/10/03		
Sample ID: IMI0763-23 (MT) Reporting Units: mg/kg dr	687 - Soil) 'y				Sam	pled: 09	/11/03	a.	RL-1	
EFH (C8 - C30)	EPA 8015 MOD.	3117042	N/A	11	ND	2	09/17/03	09/17/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3117042	N/A	11	ND	2	09/17/03		Ü	
EFH (C12 - C14)	EPA 8015 MOD.	3I17042	N/A	11	ND	2	09/17/03		i	
EFH (C15 - C20)	EPA 8015 MOD.	3117042	N/A	11	ND	2	09/17/03			
EFH (C21 - C30)	EPA 8015 MOD.	3117042	N/A	- 11	ND	2	09/17/03		$\downarrow$	
Surrogate: n-Octacosane (50-1	25%)				92 %	-	027,777.03	05/17/05	V	
Sample ID: IMI0763-24 (MT6 Reporting Units: mg/kg dr					Samp	oled: 09	/11/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I17042	N/A	5.1	6.4	1	09/17/03	09/18/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3117042	N/A	5.1	ND	1	09/17/03		Ú	-
EFH (C12 - C14)	EPA 8015 MOD.	3I17042	N/A	5.1	ND	1	09/17/03		Ĭ	ļ
EFH (C15 - C20)	EPA 8015 MOD.	3I17042	N/A	5.1	ND	1	09/17/03			
EFH (C21 - C30)	EPA 8015 MOD.	3117042	N/A	5.1	5.6	1	09/17/03		•	
Surrogate: n-Octacosane (50-1.					71 %	•	07/17/05	02/10/03		
Sample ID: IMI0763-25 (MT6 Reporting Units: mg/kg	89 - Product)				Samp	oled: 09	/11/03			
EFH (C8 - C30)	EPA 8015 MOD.	3120058	N/A	1500	24000	1	09/20/03	09/25/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3120058	N/A	1500	ND	1	09/20/03		Ü	
EPH (C12 - C14)	EPA 8015 MOD.	3I20058	N/A	1500	ND	1	09/20/03		Ĭ l	
EFH (C15 - C20)	EPA 8015 MOD.		N/A	1500	ND	1	09/20/03		1	
EFH (C21 - C30)	EPA 8015 MOD.		N/A	1500	23000	1	09/20/03		-	
Surrogate: n-Octacosane (50-12	25%)				98 %	•	37,20,03	U) 10.00	ZX	
Dol Mar Analytical Tour						N 100		- veget	13	
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## DATA ASSESSMENT FORM

Project Title: Rocketdyne, SSFL RFI Program

Project Manager: D. Hambrick

Analysis/Method: Total Fuel Hydrocarbons by GC/EPA Method 8015M

QC Level: V<sup>1</sup>

SDG: IMI0126 Matrix: Soil

No. of Samples: 3
Dilutions/Reanalyses: 0

Date Reviewed: December 22, 2003

Reviewer: P. Meeks

Reference: National Functional Guidelines for Organic Data Review (2/94)

Samples Reviewed: MT522, MT523, MT524

# **Data Validation Findings**

	Findings	Qualifications
1. Sample Management	The COC was signed by field and laboratory personnel. All samples were received at the laboratory on HOLD. A memo from MWH personnel dated 9/11/02 released the HOLD status and requested the total petroleum hydrocarbon analyses. The laboratory's case narrative noted that the samples were received intact, with a cooler temperature within the limits of 4°C ± 2°C, at 5°C. No custody seal information was provided by the laboratory.  According to the sample result summary forms, the samples were extracted within 14 days of collection, and analyzed within 40 days of extraction.	No qualifications were required.
3. Method Blanks	One soil method blank was extracted and analyzed with this SDG. None of the target compound hydrocarbon ranges were reported in the method blank.	No qualifications were required.

Project: Rocketdyne SDG: IMI0126 Analysis: TFH

	Findings	Qualifications
4. LCS/BS	One soil LCS was extracted and analyzed with this SDG. The laboratory reported only a total of the hydrocarbon ranges (from spiked diesel). The total recovery was within the laboratory-established control limits.	No qualifications were required.
5. Surrogates	The surrogate recoveries for the samples were within the laboratory-established QC limits.	No qualifications were required.
6. MS/MSDs None	No MS/MSD analyses were performed in association with this SDG.	No qualifications were required.
7. Field QC Samples  FB: MT697 (SDG IM10935) and MT711 (SDG IM1005) ER: MT696 (SDG IM10935) and MT710 (SDG IM11005) Field Duplicates: None	None of the target compound hydrocarbon ranges were reported in any of the field QC samples.	No qualifications were required.
8. Other	The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 and also reported the total, C8-C30.  Soil sample results and reporting limits were reported on a dry-weight basis. Results reported below the reporting limit were qualified as estimated, "J," by the laboratory.  Due to matrix interference sample MT523 was analyzed at a 5× dilution.	As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges.
Comments	None.	None.

<sup>&</sup>lt;sup>1</sup> Level V Validation consists of cursory review of the summary forms only. The reported values on the summary forms are presumed to be correct and no verification of the values from the raw instrument output is performed.



2852 Alton Ave., Irvine, CA 92606 (949) 261-1022 FAX (949) 261-1228 2652 Alloff Ave., Invite: A 92006 (949) 261-1022 FAX (949) 261-1228 (909) 370-4667 FAX (909) 370-1046. 9484 Chesapeake Dr., Suite 805. San Diego, CA 92123 (658) 505-8596 FAX (858) 505-9689 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0651 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

####でいたが、中国は大学では、1994年によって、中国は大学には、1994年には MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Sampled: 09/02/03 Received: 09/03/03

Report Number: IMI0126

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor		Date Analyzed	Data Qualifi	-
Sample ID: IM10126-02 (MT522 - Soil) Reporting Units: mg/kg dry				Samp	oled: 09/0	2/03	-	Rev Qual	100de
EFH (C8 - C30)	EPA 8015 MOD.	3114004	5.1	ND	1	9/14/2003	9/16/2003	R	9
EFH (C8 - C11)	EPA 8015 MOD.	3114004	5.1	ND	1	9/14/2003	9/16/2003	U	
EFH (C12 - C14)	EPA 8015 MOD.	3114004	5.1	ND	1	9/14/2003	9/16/2003	1	
EFH (C15 - C20)	EPA 8015 MOD.	3114004	5.1	ND	1	9/14/2003	9/16/2003		
EFH (C21 - C30)	EPA 8015 MOD.	3114004	5.1	ND	1	9/14/2003	9/16/2003		
Surrogate: n-Octacosane (50-125%)				81 %				-	
Sample ID: IMI0126-03 (MT523 - Soil)				Samr	oled: 09/02	2/03		RL-	1
Reporting Units: mg/kg dry									
EFH (C8 - C30)	EPA 8015 MOD.	3114004	26	ND	5	9/14/2003	9/15/2003	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3114004	26	ND	5	9/14/2003	9/15/2003	U	
EFH (C12 - C14)	EPA 8015 MOD.	3114004	26	ND	5		9/15/2003	. 1	
EFH (C15 - C20)	EPA 8015 MOD.	3114004	26	ND	5		9/15/2003	- 1	
EFH (C21 - C30)	EPA 8015 MOD.	3114004	26	ND	5	9/14/2003	9/15/2003	$\checkmark$	}
Surrogate: n-Octacosane (50-125%)				86 %				<i>Z3</i>	
Sample ID: IMI0126-04 (MT524 - Soil) Reporting Units: mg/kg dry				Samp	oled: 09/02	2/03			
EFH (C8 - C30)	EPA 8015 MOD.	3I14004	5.3	ND	1	9/14/2003	9/15/2003	R	٥
EFH (C8 - C11)	EPA 8015 MOD.			ND	î		9/15/2003	C <sub>1</sub>	
EFH (C12 - C14)	EPA 8015 MOD.	3114004		ND	1		9/15/2003	Ĭ	
EFH (C15 - C20)	EPA 8015 MOD.	3114004	5.3	ND	1		9/15/2003	- 1	
EFH (C21 - C30)	EPA 8015 MOD.			ND	1		9/15/2003	1	
Surrogate: n-Octacosane (50-125%)				77 %	-		, 5, 2005	•	1



Del Mar Analytical, Irvine

Michele Harper Project Manager

# CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA AMEC Earth & Environmental Package ID T702TF2 T707TF2 Task Order 313150012 550 South Wadsworth Boulevard Suite 500 SDG No. IMI0125 Lakewood, CO 80226 No. of Analyses 6 Laboratory Del Mar Analytical Date: December 16, 2003 Reviewer K. Shadowlight Reviewer's Signature 4. Strador 1 Analysis/Method TPH **ACTION ITEMS**<sup>a</sup> **Case Narrative Deficiencies** Out of Scope **Analyses Analyses Not Conducted Missing Hardcopy Deliverables Incorrect Hardcopy Deliverables** Results for TPH totals (C8-C30) were rejected, "R," in favor of the **Deviations from Analysis** individual alkane ranges. Protocol, e.g., Holding Times GC/MS Tune/Inst. Perform Calibrations Blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification and Quantitation System Performance COMMENTS<sup>b</sup>

<sup>a</sup> Subcontracted analytical laboratory is not meeting contract and/or method requirements.



# DATA VALIDATION REPORT

# Rocketdyne SSFL RFI Program

ANALYSIS: Total Petroleum Hydrocarbons: Extractable

SAMPLE DELIVERY GROUP: IMI0125

Prepared by

AMEC Denver Operations 550 South Wadsworth Boulevard, Suite 500 Lakewood, Colorado 80226

Rocket IMI0125 TPH

## 1. INTRODUCTION

Task Order Title: Rocketdyne SSFL RFI Program

Contract Task Order #: 313150012

SDG#: IMI0125

Project Manager: D. Hambrick

Matrix: Soil

Analysis: TPH-Extractable

QC Level: Level IV

No. of Samples: 6

No. of Reanalyses/Dilutions: 0

Reviewer: K. Shadowlight

Date of Review: December 16, 2003

The samples listed in Table 1 were validated based on the general guidelines outlined in the AMEC Data Validation Procedure for Levels C and D Extractable Total Fuel Hydrocarbons by GC (DVP-8, Rev. 2), USEPA SW-846 Method 8015M, and validation guidelines outlined in the USEPA CLP National Functional Guidelines for Organic Data Review (2/94). Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Project; SDG: Analysis:

Rocket IMI0125 : TPH

Table 1. Sample identification

Client ID	EPA ID	Lab No.	Matrix	Method
BLTS25S01	MT526	IMI0125-02	soil	8015M
BLTS32S01	MT527	IMI0125-03	soil	8015M
BLTS23S01	MT528	IMI0125-04	soil	8015M
BLTS24S01	MT529	IMI0125-05	soil	8015M
BLTS20S01	MT530	IMI0125-06	soil	8015M
BLTS30S01	MT531	IMI0125-07	soil	8015M

Project: SDG: Analysis: Rocket IMI0125

#### 2. DATA VALIDATION FINDINGS

#### 2.1 SAMPLE MANAGEMENT

The following are findings associated with sample management:

#### 2.1.1 Sample Preservation, Handling, and Transport

The samples in this SDG were received at Del Mar Analytical laboratory within the temperature limits of  $4^{\circ}C \pm 2^{\circ}C$ . The analysis did not require preservation, and no preservation was noted in the field. The Del Mar Analytical case narrative noted that the samples were received intact. No qualifications were required.

#### 2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. According to a memo dated 09/11/03 from Montgomery Watson personnel, the TPH analysis by method 8015M was removed from "HOLD" status for all samples in this SDG. No custody seal information was provided. No qualifications were required.

#### 2.1.3 Holding Times

The soil samples were extracted within 14 days of sample collection and analyzed within 40 days of extraction. No qualifications were required.

#### 2.2 CALIBRATION

The initial calibrations associated with the soil analyses consisted of six point calibrations for alkane ranges C8-C28 and C29-C40, using an average RRF for C8-C40. The laboratory analyzed a single point calibration for alkane ranges C6-C44 and C8-C40 to establish the retention times for the individual alkane ranges (C8-C11, C12-C14, C15-C20, and C21-C30). The initial calibrations associated with the samples in this SDG were analyzed on 09/10/03 and 09/15/03. The %RSDs were within the QC limit of  $\leq 20\%$ . The %RSDs were recalculated from the raw data and no transcription or calculation errors were noted. No qualifications were required

An ICV was not analyzed with the initial calibration dated 09/15/03. An ICV was analyzed at the beginning of each of the remaining analytical sequences and continuing calibration standards were analyzed every ten samples bracketing the sample analyses of this SDG. The %Ds for the (CCVs) bracketing the analysis of sample MT530 exceeded the QC limit of 15%; therefore, the nondetect results were qualified as estimated, "UJ" in sample MT530, unless otherwise rejected, (see section 2.9). The %Ds for the ICV and CCVs were within the Method QC limit of  $\pm 15\%$  for the calibrations bracketing the sample analyses of this SDG.

A representative number of %Ds for the ICV and CCVs were recalculated from the raw data and no transcription or calculation errors were noted. No further qualifications were required.

Rocket IMI0125

#### 2.4 BLANKS

#### 2.4.1 Instrument Blanks

An instrument blank was analyzed at the beginning of each analytical sequence. Cross-contamination was not evident in the samples. No qualifications were necessary.

#### 2.4.2 Method Blanks

One soil method blank (3113010-BLK1) was extracted and analyzed with the samples in this SDG. No target compound detects were present at or above the reporting limits in the method blank. Review of the chromatograms showed no false negatives. No qualifications were required.

#### 2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One soil blank spike (3I13010-BS1) was extracted and analyzed with the samples in this SDG. The recovery of alkane range C8-C30 from spiked diesel was within the laboratory-established QC limit of 45-115%. The recovery was checked from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

#### 2.6 SURROGATE RECOVERY

All samples were fortified with the surrogate compound n-octacosane. Surrogate recoveries were within the laboratory-established QC of 50-125% for soil samples. A representative number of recoveries were calculated from the raw data and no transcription or calculation errors were noted. No qualifications were required.

#### 2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

There were no MS/MSD analyses associated with the samples of this SDG. Evaluation of method accuracy was based on the blank spike result. No qualifications were required.

#### 2.8 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based on method blanks and laboratory QC samples for usability. Any remaining detects are used to evaluate the associated samples. The following are findings associated with field QC samples:

#### 2.9.1 Field Blanks and Equipment Rinsates

Samples MT697 (SDG IMI0935) and MT711 (SDG IMI1005) were the field blanks and samples MT696 (IMI0935) and MT710 (IMI1005) were the equipment rinsates associated with the samples in this SDG. There were no target compounds reported in any of the field QC samples. No qualifications were required.

Project: Rocket
SDG: IMI0125
Analysis: TPH

DATA VALIDATION REPORT

## 2.9.2 Field Duplicates

There were no field duplicate samples associated with the samples in this SDG.

#### 2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for n-alkane ranges C8-C11, C12-C14, C15-C20, and C21-C30 by EPA SW846 Method 8015M. As the result for total TFH represents the sum of the individual hydrocarbon ranges, the results for total extractable fuel hydrocarbons (alkane range C8-C30) were rejected,"R," in favor of the individual n-alkane ranges. Compound identification is verified at a Level IV validation. Review of chromatograms and retention times indicated no problems with compound identification for the samples in this SDG. No qualifications were required.

#### 2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification was verified for this SDG by recalculating any sample detects, blank spike recoveries, and a representative number of surrogate recoveries. Reporting limits were supported by the low level standard of the initial calibration and by the MDL dated July, 2002. Soil reporting limits were adjusted for percent moisture. According to the Del Mar Analytical SOP for TPH by Method 8015M, the laboratory does not report "J," values below the low point of the initial calibration. No qualifications were required.



MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101 Attention: Lisa J. Tucker Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03

Received: 09/03/03

# EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Extract Tibes Tolle In Brooth (Chibis) 6013 Floatined)										
Analyte	Method	Batch	MDL Limit	Reporting Limit			n Date rExtracted	Date Analyze		Data ualifiers
Sample ID: IMI0125-02 (MT526 - Soil) Reporting Units: mg/kg dry				Sampled: 09/03/03						Qua
EFH (C8 - C30)	EPA 8015 MOD.	3713010	N/A	5.2	6.3	1	09/13/03	09/16/03	R	Dode
EFH (C8 - C11)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	Ū	الا
EFH (C12 - C14)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	Î	
EFH (C15 - C20)	EPA 8015 MOD.		NA	5.2	ND	1		09/16/03		
EFH (C21 - C30)	EPA 8015 MOD.		N/A	5.2	ND	1		09/16/03	$\checkmark$	
Surrogaie: n-Octacosane (50-1)			, .	2	79 %	•	0 > 1 2 / 0 3	09/10/03	-	
Sample ID: IMI0125-03 (MT5 Reporting Units: mg/kg dry	527 - Soil)				Samj	pled: 09	9/03/03			
EFH (C8 - C30)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3113010	NA	5.3	ND	I		09/16/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1		09/16/03	1	
EFH (C15 - C20)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03			
EFH (C21 - C30)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	$\downarrow$	
Surrogate: n-Octacosane (50-1.	25%)				77 %			-,,,,,,,		
Sample ID: IMI0125-04 (MT5 Reporting Units: mg/kg dry	(28 - Soil)				Samp	oled: 09	9/03/03			
EFH (C8 - C30)	EPA 8015 MOD.	3113010	N/A	5.2	11	1	09/13/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3I13010	N/A	5.2	ND	1	09/13/03	09/16/03	u	-
EFH (C12 - C14)	EPA 8015 MOD.	3113010	N/A	5.2	ND	1	09/13/03		- 1	
EFH (C15 - C20)	EPA 8015 MOD.	3I13010	N/A	5.2	ND	1	09/13/03		V	
EFH (C21 - C30)	EPA 8015 MOD.	3113010	N/A	5.2	7.2	1	09/13/03			
Surrogate: n-Octacosane (50-1.	25%)		anagamanan selatikan kaman dipin erilain belin belin belin be	oj – gojimmen nekonata a se Part II ser ili nekolik indeletje ili nekolik izvoje za venek liseri	68 %		elgenniges al nomen <b>eller</b> men del en sampe d'en la landage de la 1904 de 1900 de 1900 de 1900 de 1900 de 1900 de	and the second s		T
Sample ID: IVII0125-05 (MT5 Reporting Units: mg/kg dry	29 - Soil)				Samı	oled: 09	0/03/03			
EFH (C8 - C30)	EPA 8015 MOD.	3113010	NA	5.3	ND	. 1	09/13/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	1	
EFH (C15 - C20)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	-	
EFH (C21 - C30)	EPA 8015 MOD.	3113010	N/A	5.3	ND	1	09/13/03	09/16/03	1	
Surrogate: n-Octacosane (50-12	25%)				81 %					
Sample ID: IMI0125-06 (MT5 Reporting Units: mg/kg dry	30 - Soil)				Samp	oled: 09	0/03/03			
EFH (C8 - C30)	EPA 8015 MOD.	3113010	N/A	5.5	ND	1	09/13/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3113010	N/A	5.5	ND	1	09/13/03		us	IC.
EFH (C12 - C14)	EPA 8015 MOD.	3113010	N/A	5.5	ND	1	09/13/03		ری-	IT
EFH (C15 - C20)	EPA 8015 MOD.	3113010	N/A	5.5	ND	1	09/13/03			11
EFH (C21 - C30)	EPA 8015 MOD.	3113010	N/A	5.5	ND	1	09/13/03			
Surrogate: n-Octacosane (50-12	25%)	, ex		v (# 19 1	72,%				7	Į

Del Mar Analytical, Irvine

Michele Harper Project Manager









MWH-San Diego

1230 Columbia Street, Suite 750

San Diego, CA 92101

Attention: Lisa J. Tucker

Project ID: Building 56 Landfill

Boeing SSFL

Report Number: IMI0125

Sampled: 09/03/03

Received: 09/03/03

## EXTRACTABLE FUEL HYDROCARBONS (CADHS/8015 Modified)

Analyte	Method	Batch	MDL Limit	Reporting Limit			Date Extracted	Date Analyzeg		ata lifiers
Sample ID: IMI0125-07 (MT53 Reporting Units: mg/kg dry	1 - Soil)				Samı	oled: 09	/03/03	(-	eu Qual	Qua)
EFH (C8 - C30)	EPA 8015 MOD.	3113010	N/A	5.4	ND	1	09/13/03	09/16/03	R	D
EFH (C8 - C11)	EPA 8015 MOD.	3[13010	N/A	5.4	ND	1	09/13/03	09/16/03	U	
EFH (C12 - C14)	EPA 8015 MOD.	3113010	N/A	5.4	ND	1	09/13/03	09/16/03	- 1	
EFH (C15 - C20)	EPA 8015 MOD.	3113010	N/A	5.4	ND	1	09/13/03	09/16/03	- 1	
EFH (C21 - C30)	EPA 8015 MOD.	3113010	N/A	5.4	ND	1	09/13/03	09/16/03	V	
Surrogate: n-Octacosane (50-12.	5%)				65 %					
					-					

