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DATE: September 11, 2009
TO: R. Singhvi, EPA/ERT Work Assignment Manager
FROM: V. Kansal, REAC Analytical Section Leader *V. Kansal*
SUBJECT: DOCUMENT TRANSMITTAL UNDER WORK ASSIGNMENT # 0-393

Attached please find the following document prepared under this work assignment:

Drywall Investigation Analytical Report

V. Kansal Task Leader w/o attachment)
J. Soroka Data Validation and Report Writing Group Leader (w/o attachment)
Central File WA # 0-393 (w/attachment)

ANALYTICAL REPORT

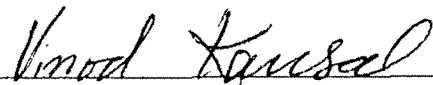
Prepared by
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Drywall Investigation

September 2009

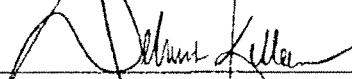
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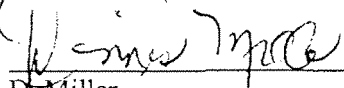
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Introduction

REAC personnel, in response to WA# 0-393, provided analytical support for the Drywall Investigation project as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and the QA/QC results.

The samples were treated with procedures consistent with those specified in REAC SOP #1008.

COC #	Number of Samples	Sampling Date	Date Received	Matrix	Analysis/ Method	Laboratory	Data Package
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	VOC/REAC SOP 1807	REAC	U 274
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					
07108 and 07110 (01809&01718)	1	04/07/09	07/22/09	Gypsum & Paper	BNA + Total S/ Modified REAC SOP 1805		U 302
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					

COC #	Number of Samples	Sampling Date	Date Received	Matrix	Analysis/ Method	Laboratory	Data Package
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	Sulfate/SW846 3051A + Modified EPA 375.4 pH/Modified EPA 9045C	REAC	U 283
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					
07109 (01809&01718))	1	04/07/09	08/13/09	Gypsum	Acid-Soluble Sulfide/SW846 9030B + 9034	REAC	U 284
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	Fluoride/Ion Selective Electrode	REAC	U 280
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					

COC #	Number of Samples	Sampling Date	Date Received	Matrix	Analysis/ Method	Laboratory	Data Package
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	Metals/REAC SOP 1811/1832	REAC	U 281
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					
07119 (01809&01718))	1	04/07/09	08/12/09	Gypsum	Ore Type/XRD	H&M Analytical Services	U299
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	Chloride/Modified SM 4500 Cl ⁻ /E	REAC	U 309
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					

COC #	Number of Samples	Sampling Date	Date Received	Matrix	Analysis/ Method	Laboratory	Data Package
02285 (01809&01718))	1	04/07/09	07/17/09	Gypsum	Loss On Ignition/SM 2540G	REAC	U 308
	1	04/08/09					
	1	04/23/09					
	1	05/14/09					
	3	05/18/09					
	2	05/19/09					
	1	05/20/09					
	1	05/22/09					
	1	06/08/09					
	1	06/11/09					
	1	06/18/09					
	1	07/11/09					

Case Narrative

The data in this report have been validated to two or three significant figures. Any other representation of the data is the responsibility of the user. All data validation flags have been inserted into the results tables.

Due to the nature of the matrix, traditional holding times for solid matrices were not used until the samples were prepared/digested and/or extracted for analysis.

VOC in Gypsum Package U 274

The 5 ppb calibration standard for acetone, 1,1-dichloropropene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, dibromochloromethane, bromoform, 2-methyl-2-pentanone, isopropylbenzene, p-isopropyltoluene, n-butylbenzene, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene and naphthalene were not used to generate the initial calibration curve of 07/06/09. The RLs for these compounds were raised to the next calibration standard (20 ppb).

BNA in Gypsum and Paper Package U 302

For gypsum sample 09-304-6226-03, three surrogates had recoveries below 10%; all results for this sample are qualified estimated (J) and data should be used with caution. For gypsum sample, 09-810-8213-04, four surrogates were below acceptable QC criteria; all results are qualified estimated (U or UJ). For gypsum sample, 09-810-8037-10, four surrogates were below 10%; all results are qualified estimated (UJ) and data should be used with caution.

For paper sample, 09-302-1379-05, several internal standards were below QC criteria. Affected results for this sample are reported from a 20x dilution. For paper sample, 09-810-7639-10, internal standard chrysene-d5 failed QC criteria; results for butylbenzylphthalate and bis(2-ethylhexyl)phthalate are qualified estimated (J) and results for benz(a)anthracene, 3,3-dichlorobenzidine and chrysene are qualified estimated (UJ) and data should be used with caution.

Total Sulfur in Gypsum and Paper Package U 302

The internal standard area count was below QC criteria for paper sample 09-302-1379-05. Results for this sample are qualified estimated (J).

Sulfur recoveries for sample 09-810-7339-04 MS/MSD were <0%; results for sulfur in this sample are qualified estimated (J).

Metals in Gypsum Package U 281

The serial dilution of sample 09-810-7639-10 exceeded the acceptable limits for zinc. Zinc results for all samples are qualified estimated (J). The MSD for aluminum in sample 09-810-7639-10 exceeded the acceptable QC limits. Aluminum results in all samples are qualified estimated high (J+).

Chloride in Gypsum Package U 309

The linear regression correlation coefficient was below the acceptable QC limit of 0.995. All sample results were qualified estimated (J). In addition, the chloride stock standard and color reagents exceeded the good laboratory practice of 6 months. The MS/MSD spike standard was from the same source as that used for calibration.

Fluoride in Gypsum Package U 280

The MS/MSD recoveries for fluoride were outside QC limits for samples 09-810-7639-10 and 09-302-1429-03. Fluoride results for all samples are qualified estimated (J).

Sulfate and pH in Gypsum Package U 283

The data package was examined and found to be acceptable.

Acid-Soluble Sulfide in Gypsum Package U 284

The data package was examined and found to be acceptable.

Loss on Ignition in Gypsum Package U 308

The data package was examined and found to be acceptable

Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
REAC	Response Engineering and Analytical Contract
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m ³	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09

Table 1.1 Results of the Analysis for VOC in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Soil Blank 072009-1		09-810-7069-03		09-304-6226-03		09-810-7639-10		09-840-9139-09	
Sample Location			N/A		N/A		N/A		N/A	
Percent Solids	100		89		87		86		87	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Chloromethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Vinyl Chloride	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Bromomethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Chloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Trichlorofluoromethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Acetone	U	20.0	16.9 J	44.9	U	46.0	U	46.5	29.7 J	46.0
1,1-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Methylene Chloride	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Carbon Disulfide	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Methyl tert-Butyl Ether	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
trans-1,2-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,1 Dichloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
2-Butanone	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
2,2-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
cis-1,2-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Chloroform	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,1-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,2-Dichloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,1,1-Trichloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Carbon Tetrachloride	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Benzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Trichloroethene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,2-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Bromodichloromethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Dibromomethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
cis-1,3-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
trans-1,3-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,1,2-Trichloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,3-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Dibromochloromethane	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,2-Dibromoethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Bromoform	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
4-Methyl-2-Pentanone	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
Toluene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
2-Hexanone	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Tetrachloroethene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Chlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,1,1,2-Tetrachloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Ethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
p&m-Xylene	U	10.0	U	22.5	U	23.0	U	23.3	U	23.0
o-Xylene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Styrene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Isopropylbenzene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,1,1,2,2-Tetrachloroethane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,2,3-Trichloropropane	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
n-Propylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Bromobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,3,5-Trimethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
2-Chlorotoluene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
4-Chlorotoluene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
tert-Butylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,2,4-Trimethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
sec-Butylbenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
p-Isopropyltoluene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,3-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,4-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
n-Butylbenzene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,2-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
1,2-Dibromo-3-Chloropropane	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,2,4-Trichlorobenzene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
Hexachlorobutadiene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5
Naphthalene	U	20.0	U	44.9	U	46.0	U	46.5	U	46.0
1,2,3-Trichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6	U	11.5

Table 1.1 (cont) Results of the Analysis for VOC in Gypsum
 WA# 0-393 Drywall Investigation
 Results Based on Dry Weight

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Sample Number	09-810-8235-10		09-810-8213-04		09-840-9858-08		09-810-8036-01		09-302-1379-05	
Sample Location:	N/A		N/A		N/A		N/A		N/A	
Percent_Solids	86		86		86		87		88	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Analyte	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Dichlorodifluoromethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Chloromethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Vinyl Chloride	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Bromomethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Chloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Trichlorofluoromethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Acetone	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,1-Dichloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Methylene Chloride	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Carbon Disulfide	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Methyl tert-Butyl Ether	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
trans-1,2-Dichloroethene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,1 Dichloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
2-Butanone	U	11.6	U	11.6	U	11.6	6.44 J	11.5	U	11.4
2,2-Dichloropropane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
cis-1,2-Dichloroethene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Chloroform	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,1-Dichloropropene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,2-Dichloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,1,1-Trichloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Carbon Tetrachloride	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Benzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Trichloroethene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,2-Dichloropropane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Bromodichloromethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Dibromomethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
cis-1,3-Dichloropropene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
trans-1,3-Dichloropropene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,1,2-Trichloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,3-Dichloropropane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Dibromochloromethane	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,2-Dibromoethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Bromoform	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
4-Methyl-2-Pentanone	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
Toluene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
2-Hexanone	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Tetrachloroethene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Chlorobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,1,1,2-Tetrachloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Ethylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
p&m-Xylene	U	23.3	U	23.3	U	23.3	U	23.0	U	22.7
o-Xylene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Styrene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Isopropylbenzene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,1,2,2-Tetrachloroethane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,2,3-Trichloropropane	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
n-Propylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Bromobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,3,5-Trimethylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
2-Chlorotoluene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
4-Chlorotoluene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
tert-Butylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,2,4-Trimethylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
sec-Butylbenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
p-Isopropyltoluene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,3-Dichlorobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,4-Dichlorobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
n-Butylbenzene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,2-Dichlorobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
1,2-Dibromo-3-Chloropropane	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,2,4-Trichlorobenzene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
Hexachlorobutadiene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4
Naphthalene	U	46.5	U	46.5	U	46.5	U	46.0	U	45.5
1,2,3-Trichlorobenzene	U	11.6	U	11.6	U	11.6	U	11.5	U	11.4

Table 1.1 (cont) Results of the Analysis for VOC in Gypsum
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Sample Number	09-810-8236-10		09-810-8037-10		09-810-8357-08	
Sample Location:	N/A		N/A		N/A	
Percent_Solids	86		89		89	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	11.6	U	11.2	U	11.2
Chloromethane	U	11.6	U	11.2	U	11.2
Vinyl Chloride	U	11.6	U	11.2	U	11.2
Bromomethane	U	11.6	U	11.2	U	11.2
Chloroethane	U	11.6	U	11.2	U	11.2
Trichlorofluoromethane	U	11.6	U	11.2	U	11.2
Acetone	U	46.5	U	44.9	U	44.9
1,1-Dichloroethene	U	11.6	U	11.2	U	11.2
Methylene Chloride	U	11.6	U	11.2	U	11.2
Carbon Disulfide	U	11.6	U	11.2	U	11.2
Methyl tert-Butyl Ether	U	11.6	U	11.2	U	11.2
trans-1,2-Dichloroethene	U	11.6	U	11.2	U	11.2
1,1 Dichloroethane	U	11.6	U	11.2	U	11.2
2-Butanone	U	11.6	U	11.2	U	11.2
2,2-Dichloropropane	U	11.6	U	11.2	U	11.2
cis-1,2-Dichloroethene	U	11.6	U	11.2	U	11.2
Chloroform	U	11.6	U	11.2	U	11.2
1,1-Dichloropropene	U	46.5	U	44.9	U	44.9
1,2-Dichloroethane	U	11.6	U	11.2	U	11.2
1,1,1-Trichloroethane	U	11.6	U	11.2	U	11.2
Carbon Tetrachloride	U	11.6	U	11.2	U	11.2
Benzene	U	11.6	U	11.2	U	11.2
Trichloroethene	U	11.6	U	11.2	U	11.2
1,2-Dichloropropane	U	11.6	U	11.2	U	11.2
Bromodichloromethane	U	11.6	U	11.2	U	11.2
Dibromomethane	U	11.6	U	11.2	U	11.2
cis-1,3-Dichloropropene	U	46.5	U	44.9	U	44.9
trans-1,3-Dichloropropene	U	46.5	U	44.9	U	44.9
1,1,2-Trichloroethane	U	11.6	U	11.2	U	11.2
1,3-Dichloropropane	U	11.6	U	11.2	U	11.2
Dibromochloromethane	U	46.5	U	44.9	U	44.9
1,2-Dibromoethane	U	11.6	U	11.2	U	11.2
Bromoform	U	46.5	U	44.9	U	44.9
4-Methyl-2-Pentanone	U	46.5	U	44.9	U	44.9
Toluene	U	11.6	U	11.2	U	11.2
2-Hexanone	U	11.6	U	11.2	U	11.2
Tetrachloroethene	U	11.6	U	11.2	U	11.2
Chlorobenzene	U	11.6	U	11.2	U	11.2
1,1,1,2-Tetrachloroethane	U	11.6	U	11.2	U	11.2
Ethylbenzene	U	11.6	U	11.2	U	11.2
p&m-Xylene	U	23.3	U	22.5	U	22.5
o-Xylene	U	11.6	U	11.2	U	11.2
Styrene	U	11.6	U	11.2	U	11.2
Isopropylbenzene	U	46.5	U	44.9	U	44.9
1,1,2,2-Tetrachloroethane	U	11.6	U	11.2	U	11.2
1,2,3-Trichloropropane	U	11.6	U	11.2	U	11.2
n-Propylbenzene	U	11.6	U	11.2	U	11.2
Bromobenzene	U	11.6	U	11.2	U	11.2
1,3,5-Trimethylbenzene	U	11.6	U	11.2	U	11.2
2-Chlorotoluene	U	11.6	U	11.2	U	11.2
4-Chlorotoluene	U	11.6	U	11.2	U	11.2
tert-Butylbenzene	U	11.6	U	11.2	U	11.2
1,2,4-Trimethylbenzene	U	11.6	U	11.2	U	11.2
sec-Butylbenzene	U	11.6	U	11.2	U	11.2
p-Isopropyltoluene	U	46.5	U	44.9	U	44.9
1,3-Dichlorobenzene	U	11.6	U	11.2	U	11.2
1,4-Dichlorobenzene	U	11.6	U	11.2	U	11.2
n-Butylbenzene	U	46.5	U	44.9	U	44.9
1,2-Dichlorobenzene	U	11.6	U	11.2	U	11.2
1,2-Dibromo-3-Chloropropane	U	46.5	U	44.9	U	44.9
1,2,4-Trichlorobenzene	U	46.5	U	44.9	U	44.9
Hexachlorobutadiene	U	11.6	U	11.2	U	11.2
Naphthalene	U	46.5	U	44.9	U	44.9
1,2,3-Trichlorobenzene	U	11.6	U	11.2	U	11.2

Table 1.1 (cont) Results of the Analysis for VOC in Gypsum
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Sample Number	Soil Blank C072109-1		09-810-7339-04		09-840-9707-01		09-302-1429-03	
Sample Location:			N/A		N/A		N/A	
Percent_Solids	100		89		87		86	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	11.2	U	11.5	U	11.6
Chloromethane	U	5.00	U	11.2	U	11.5	U	11.6
Vinyl Chloride	U	5.00	U	11.2	U	11.5	U	11.6
Bromomethane	U	5.00	U	11.2	U	11.5	U	11.6
Chloroethane	U	5.00	U	11.2	U	11.5	U	11.6
Trichlorofluoromethane	U	5.00	9.30 J	11.2	U	11.5	U	11.6
Acetone	U	20.0	11.5 J	44.9	U	46.0	U	46.5
1,1-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6
Methylene Chloride	U	5.00	U	11.2	U	11.5	U	11.6
Carbon Disulfide	U	5.00	3.64 J	11.2	U	11.5	U	11.6
Methyl tert-Butyl Ether	U	5.00	U	11.2	U	11.5	U	11.6
trans-1,2-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6
1,1 Dichloroethane	U	5.00	U	11.2	U	11.5	U	11.6
2-Butanone	U	5.00	U	11.2	U	11.5	U	11.6
2,2-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6
cis-1,2-Dichloroethene	U	5.00	U	11.2	U	11.5	U	11.6
Chloroform	U	5.00	U	11.2	U	11.5	U	11.6
1,1-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5
1,2-Dichloroethane	U	5.00	U	11.2	U	11.5	U	11.6
1,1,1-Trichloroethane	U	5.00	U	11.2	U	11.5	U	11.6
Carbon Tetrachloride	U	5.00	U	11.2	U	11.5	U	11.6
Benzene	U	5.00	U	11.2	U	11.5	U	11.6
Trichloroethene	U	5.00	U	11.2	U	11.5	U	11.6
1,2-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6
Bromodichloromethane	U	5.00	U	11.2	U	11.5	U	11.6
Dibromomethane	U	5.00	U	11.2	U	11.5	U	11.6
cis-1,3-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5
trans-1,3-Dichloropropene	U	20.0	U	44.9	U	46.0	U	46.5
1,1,2-Trichloroethane	U	5.00	U	11.2	U	11.5	U	11.6
1,3-Dichloropropane	U	5.00	U	11.2	U	11.5	U	11.6
Dibromochloromethane	U	20.0	U	44.9	U	46.0	U	46.5
1,2-Dibromoethane	U	5.00	U	11.2	U	11.5	U	11.6
Bromoform	U	20.0	U	44.9	U	46.0	U	46.5
4-Methyl-2-Pentanone	U	20.0	U	44.9	U	46.0	U	46.5
Toluene	U	5.00	U	11.2	U	11.5	U	11.6
2-Hexanone	U	5.00	U	11.2	U	11.5	U	11.6
Tetrachloroethene	U	5.00	U	11.2	U	11.5	U	11.6
Chlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6
1,1,1,2-Tetrachloroethane	U	5.00	U	11.2	U	11.5	U	11.6
Ethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
p&m-Xylene	U	10.0	U	22.5	U	23.0	U	23.3
o-Xylene	U	5.00	U	11.2	U	11.5	U	11.6
Styrene	U	5.00	U	11.2	U	11.5	U	11.6
Isopropylbenzene	U	20.0	U	44.9	U	46.0	U	46.5
1,1,2,2-Tetrachloroethane	U	5.00	U	11.2	U	11.5	U	11.6
1,2,3-Trichloropropane	U	5.00	U	11.2	U	11.5	U	11.6
n-Propylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
Bromobenzene	U	5.00	U	11.2	U	11.5	U	11.6
1,3,5-Trimethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
2-Chlorotoluene	U	5.00	U	11.2	U	11.5	U	11.6
4-Chlorotoluene	U	5.00	U	11.2	U	11.5	U	11.6
tert-Butylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
1,2,4-Trimethylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
sec-Butylbenzene	U	5.00	U	11.2	U	11.5	U	11.6
p-Isopropyltoluene	U	20.0	U	44.9	U	46.0	U	46.5
1,3-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6
1,4-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6
n-Butylbenzene	U	20.0	U	44.9	U	46.0	U	46.5
1,2-Dichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6
1,2-Dibromo-3-Chloropropane	U	20.0	U	44.9	U	46.0	U	46.5
1,2,4-Trichlorobenzene	U	20.0	U	44.9	U	46.0	U	46.5
Hexachlorobutadiene	U	5.00	U	11.2	U	11.5	U	11.6
Naphthalene	U	20.0	U	44.9	U	46.0	U	46.5
1,2,3-Trichlorobenzene	U	5.00	U	11.2	U	11.5	U	11.6

Table 1.2 Results of the TICs for VOC in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sampler Number	Analyte	Concentration*, µg/Kg
Soil Blank 072009-1	No TICs Detected	
09-304-6226-03	Hexanal	3.58
	Unknown	1.30
	Heptanal	2.32
	Octanal	12.0
	1-Hexanol, 2-ethyl-	18.6
	Unknown	8.98
	Nonanal	87.2
	Acetic acid, 2-ethylhexyl ester	59.3
	Dodecane	6.19
	Unknown	1.27
	Unknown	2.30
	C10H18 Cycloalkene	3.02
	Decanal	24.7
	Unknown	8.35
	Naphthalene	1.32
	Cyclodecane	19.7
	Unknown Aldehyde	11.7
	Unknown	5.05
	Unknown	1.52
	Unknown	1.63
	Unknown	1.43
	Unknown	2.20
	Unknown Aldehyde	7.96
09-810-7639-10	Pentanal	6.59
	2-Propenoic acid, 2-methyl, methyl ester	27.0
	Hexanal	111
	2-Propenoic acid, butyl ester	7.08
	Heptanal	15.0
	Unknown	3.29
	1-Hexanol, 2-ethyl-	6.40
	Unknown	3.09
	Nonanal	10.9
	Acetophenone	2.17
	Unknown	2.31
	Unknown alkene/Cycloalkane	4.67
09-840-9139-09	Pentanal	2.51
	2-Propenoic acid, 2-methyl, methyl ester	28.5
	Hexanal	58.1
	2-Propenoic acid, butyl ester	9.38
	Heptanal	6.56
	Unknown Aldehyde	2.10
	Octanal	11.1
	1-Hexanol, 2-ethyl	5.08
	Octane, 1-chloro-	7.83
	Octanol	22.9
	Nonanal	18.5
	Unknown	1.45
	Unknown	1.45
	Decanal	5.32
	Cyclodecane	40.9
	Unknown	3.54

* Estimated Concentration

Table 1.2 (cont) Results of the TICs for VOC in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sampler Number	Analyte	Concentration*, µg/Kg
09-810-7069-03	Hexanal	14.7
	C7 Ketone/Unknown	8.08
	Heptanal	9.01
	Unknown	1.22
	Unknown	1.27
	C7 Ketone	2.38
	Octanal	27.6
	1-Hexanol, 2-ethyl	6.44
	Octanol	12.3
	Unknown	2.98
	2-Nonanone	2.36
	Nonanal	43.3
	Unknown	3.71
	Unknown	1.57
	Unknown	2.09
	Unknown	1.22
	Unknown ester	1.57
	Decanal	17.1
	C10 Alkene/Cycloalkane	19.9
	Unknown Aldehyde	5.48
	2H-Pyran, 2-(bromomethyl)tetrahydro-	17.4
	Furan, 2-butyltetrahydro-	20.2
	Unknown Aldehyde	10.8
09-810-8235-10	Pentanal	3.09
	2-Propenoic acid, 2-methyl, methyl ester	1.97
	Hexanal	43.1
	2-Propenoic acid, butyl ester	7.05
	Heptanal	5.77
	Octanal	5.33
	1-Hexanol, 2-ethyl-	8.25
	Unknown	2.74
	2-Octenal, (E)-	6.71
	Nonanal	13.5
	Acetic acid, 2-ethylhexyl ester	2.98
	Decanal	2.53
	C10Alkene/Cycloalkane	36.7
	Unknown	1.42
09-810-8213-04	2-Propenoic acid, 2-methyl, methyl ester	32.8
	Hexanal	10.7
	Heptanal	2.30
	Unknown	1.54
	1-Hexanol, 2-ethyl-	3.72
	Unknown	1.46
09-840-9858-08	C10Alkene/Cycloalkane	4.72
	Hexanal	11.3
	Unknown	1.37
	Unknown	2.03
	1-Hexanol, 2-ethyl-	5.55
	Unknown	8.96
	Acetophenone	1.92
	Decanal	2.53
	Octane, 1-chloro	64.1
	Cyclodecane	30.5

* Estimated Concentration

Table 1.2 (cont) Results of the TICs for VOC in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sampler Number	Analyte	Concentration*, µg/Kg
09-302-1379-05	Hexanal	1.35
	2-Propenoic acid, butyl ester	4.50
	Unknown	1.27
	1-Hexanol, 2-methyl	4.14
	Unknown	6.83
	Unknown	1.64
	Decanal	2.60
	Cyclodecane	14.3
	Unknown aldehyde	1.52
09-810-8036-01	2-Propenoic acid, 2-methyl, methyl ester	49.8
	Hexanal	8.95
	2-Propenoic acid, butyl ester	2.26
	Heptanal	4.00
	Octanal	9.64
	1-Hexanol, 2-ethyl-	6.83
	Unknown	2.25
	Octanol	10.4
	Nonanal	17.9
	Unknown	1.38
	Decanal	12.3
	Octane, 1-chloro-	6.30
	Cyclodecane	42.8
	Unknown	1.94
	Unknown	13.6
09-810-8236-10	Pentanal	1.96
	Hexanal	26.6
	2-Propenoic acid, butyl ester	3.28
	Heptanal	5.21
	Octanal	7.43
	2-ethyl-1-Hexanol	5.09
	Octanol	2.46
	Unknown	2.26
	Nonanal	20.5
	Unknown	2.03
	Unknown	2.47
	Cyclodecane	8.72
	Unknown	4.48
	Unknown	1.74
09-810-8037-10	Pentanal	5.81
	2-Propenoic acid, 2-methyl, methyl ester	43.0
	Hexanal	41.3
	2-Propenoic acid, butyl ester	15.4
	Heptanal	10.1
	Octanal	6.79
	1-Hexanol, 2-ethyl-	5.31
	Octanol	2.65
	Unknown	3.51
	Nonanal	10.7
	Unknown	2.27
	Unknown	2.93
	Cyclodecane	10.1
	Unknown	1.31

* Estimated Concentration

Table 1.2 (cont) Results of the TICs for VOC in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sampler Number	Analyte	Concentration*, µg/Kg
09-810-8357-08	Unknown	2.20
	Unknown	1.33
	Unknown cycloalkane	7.19
<hr/>		
Soil Blank C 072109-1	Unknown	2.51
<hr/>		
09-810-7339-04	Hexanal	1.93
	Unknown	3.68
	Unknown	1.38
	Unknown	1.26
	Unknown	21.9
	1-Octanol	5.32
	Nonanal	2.07
	Unknown	2.60
	Decanal	35.6
	Cyclodecane	4.60
	Unknown	5.17
	Unknown	2.21
	Unknown	1.53
<hr/>		
09-840-9707-01	Hexanal	2.25
	Octanal	4.86
	1-Hexanol, 2-ethyl-	2.68
	Octanol	16.2
	Nonanal	12.3
	Unknown	3.05
	Unknown	1.80
	Unknown	4.62
	Decanal	55.9
	Cyclodecane	1.57
	Unknown	4.15
	Unknown	4.35
	Unknown	1.52
	Unknown	2.56
	Dodecane, 1-chloro-	7.12
<hr/>		
09-302-1429-03	Hexanal	13.6
	Heptanal	2.57
	Octanal	7.77
	1-Hexanol, 2-ethyl-	9.70
	Octanol	3.26
	Nonanal	57.5
	Unknown	1.87
	Unknown	2.38
	Unknown	8.94
	Unknown	31.9
	Decanal	1.53
	Unknown	59.5
	Cyclodecane	3.46
	Unknown	3.86
	Unknown	1.37

* Estimated Concentration

Table 1.3 Results of the Analysis for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method REAC SOP 1805

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Sample No.	0900179-BLK1		09-840-9707-01		09-840-9139-09		09-810-7339-04		09-810-8357-08	
Sample Location	Method Blank									
Percent Solids	100		87		87		89		89	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Phenol	U	333	U	382	U	383	U	373	U	373
bis-(2-Chloroethyl)Ether	U	333	U	382	U	383	U	373	U	373
2-Chlorophenol	U	333	U	382	U	383	U	373	U	373
1,3-Dichlorobenzene	U	333	U	382	U	383	U	373	U	373
1,4-Dichlorobenzene	U	333	U	382	U	383	U	373	U	373
Benzyl alcohol	U	333	U	382	U	383	U	373	U	373
1,2-Dichlorobenzene	U	333	U	382	U	383	U	373	U	373
2-Methylphenol	U	333	U	382	U	383	U	373	U	373
bis(2-Chloroisopropyl)ether	U	333	U	382	U	383	U	373	U	373
4-Methylphenol	U	333	U	382	U	383	U	373	U	373
N-Nitroso-Di-n-propylamine	U	333	U	382	U	383	U	373	U	373
Hexachloroethane	U	333	U	382	U	383	U	373	U	373
Nitrobenzene	U	333	U	382	U	383	U	373	U	373
Isophorone	U	333	U	382	U	383	U	373	U	373
2-Nitrophenol	U	333	U	382	U	383	U	373	U	373
2,4-Dimethylphenol	U	333	U	382	U	383	U	373	U	373
bis(2-Chloroethoxy)methane	U	333	U	382	U	383	U	373	U	373
2,4-Dichlorophenol	U	333	U	382	U	383	U	373	U	373
1,2,4-Trichlorobenzene	U	333	U	382	U	383	U	373	U	373
Naphthalene	U	333	U	382	U	383	U	373	U	373
4-Chloroaniline	U	333	U	382	U	383	U	373	U	373
Hexachlorobutadiene	U	333	U	382	U	383	U	373	U	373
4-Chloro-3-methylphenol	U	333	U	382	U	383	U	373	U	373
2-Methylnaphthalene	U	333	U	382	U	383	U	373	U	373
Hexachlorocyclopentadiene	U	333	U	382	U	383	U	373	U	373
2,4,6-Trichlorophenol	U	333	U	382	U	383	U	373	U	373
2,4,5-Trichlorophenol	U	333	U	382	U	383	U	373	U	373
2-Chloronaphthalene	U	333	U	382	U	383	U	373	U	373
2-Nitroaniline	U	333	U	382	U	383	U	373	U	373
Dimethylphthalate	U	333	U	382	U	383	U	373	U	373
2,6-Dinitrotoluene	U	333	U	382	U	383	U	373	U	373
Acenaphthylene	U	333	U	382	U	383	U	373	U	373
3-Nitroaniline	U	333	U	382	U	383	U	373	U	373
Acenaphthene	U	333	U	382	U	383	U	373	U	373
2,4-Dinitrophenol	U	333	U	382	U	383	U	373	U	373
4-Nitrophenol	U	333	U	382	U	383	U	373	U	373
Dibenzofuran	U	333	U	382	U	383	U	373	U	373
2,4-Dinitrotoluene	U	333	U	382	U	383	U	373	U	373
Diethylphthalate	U	333	U	382	U	383	U	373	U	373
4-Chlorophenyl-phenylether	U	333	U	382	U	383	U	373	U	373
Fluorene	U	333	U	382	U	383	U	373	U	373
4-Nitroaniline	U	333	U	382	U	383	U	373	U	373
4,6-Dinitro-2-methylphenol	U	333	U	382	U	383	U	373	U	373
N-Nitrosodiphenylamine	U	333	U	382	U	383	U	373	U	373
4-Bromophenyl-phenylether	U	333	U	382	U	383	U	373	U	373
Hexachlorobenzene	U	333	U	382	U	383	U	373	U	373
Pentachlorophenol	U	333	U	382	U	383	U	373	U	373
Phenanthrene	U	333	U	382	U	383	U	373	U	373
Anthracene	U	333	U	382	U	383	U	373	U	373
Carbazole	U	333	U	382	U	383	U	373	U	373
Di-n-butylphthalate	U	333	150 J	382	131 J	383	157 J	373	160 J	373
Fluoranthene	U	333	U	382	U	383	U	373	U	373
Pyrene	U	333	U	382	U	383	U	373	U	373
Butylbenzylphthalate	U	333	U	382	U	383	U	373	U	373
Benzo(a)anthracene	U	333	U	382	U	383	U	373	U	373
3,3'-Dichlorobenzidine	U	333	U	382	U	383	U	373	U	373
Chrysene	U	333	U	382	U	383	U	373	U	373
Bis(2-Ethylhexyl)phthalate	U	333	318 J	382	222 J	383	271	373	445	373
Di-n-octylphthalate	U	333	U	382	U	383	U	373	U	373
Benzo(b)fluoranthene	U	333	U	382	U	383	U	373	U	373
Benzo(k)fluoranthene	U	333	U	382	U	383	U	373	U	373
Benzo(a)pyrene	U	333	U	382	U	383	U	373	U	373
Indeno(1,2,3-cd)pyrene	U	333	U	382	U	383	U	373	U	373
Dibenzo(a,h)anthracene	U	333	U	382	U	383	U	373	U	373
Benzo(g,h,i)perylene	U	333	U	382	U	383	U	373	U	373

Table 1.3 (cont) Results of the Analysis for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample No.	09-810-8236-10		09-810-8036-01		09-810-7639-10		09-810-8213-04		09-840-0856-08	
Sample Location	86		87		86		86		86	
Percent Solids	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Analyte	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Phenol	U	386	U	383	U	386	U J	389	U	386
bis(2-Chloroethyl)Ether	U	386	U	383	U	386	U J	389	U	386
2-Chlorophenol	U	386	U	383	U	386	U J	389	U	386
1,3-Dichlorobenzene	U	386	U	383	U	386	U J	389	U	386
1,4-Dichlorobenzene	U	386	U	383	U	386	U J	389	U	386
Benzyl alcohol	U	386	U	383	U	386	U J	389	U	386
1,2-Dichlorobenzene	U	386	U	383	U	386	U J	389	U	386
2-Methylphenol	U	386	U	383	U	386	U J	389	U	386
bis(2-Chloroisopropyl)ether	U	386	U	383	U	386	U J	389	U	386
4-Methylphenol	U	386	U	383	U	386	U J	389	U	386
N-Nitroso-Di-n-propylamine	U	386	U	383	U	386	U J	389	U	386
Hexachloroethane	U	386	U	383	U	386	U J	389	U	386
Nitrobenzene	U	386	U	383	U	386	U J	389	U	386
Isophorone	U	386	U	383	U	386	U J	389	U	386
2-Nitrophenol	U	386	U	383	U	386	U J	389	U	386
2,4-Dimethylphenol	U	386	U	383	U	386	U J	389	U	386
bis(2-Chloroethoxy)methane	U	386	U	383	U	386	U J	389	U	386
2,4-Dichlorophenol	U	386	U	383	U	386	U J	389	U	386
1,2,4-Trichlorobenzene	U	386	U	383	U	386	U J	389	U	386
Naphthalene	U	386	U	383	U	386	U J	389	U	386
4-Chloroaniline	U	386	U	383	U	386	U J	389	U	386
Hexachlorobutadiene	U	386	U	383	U	386	U J	389	U	386
4-Chloro-3-methylphenol	U	386	U	383	U	386	U J	389	U	386
2-Methylnaphthalene	U	386	U	383	U	386	U J	389	U	386
Hexachlorocyclopentadiene	U	386	U	383	U	386	U J	389	U	386
2,4,6-Trichlorophenol	U	386	U	383	U	386	U J	389	U	386
2,4,5-Trichlorophenol	U	386	U	383	U	386	U J	389	U	386
2-Chloronaphthalene	U	386	U	383	U	386	U J	389	U	386
2-Nitroaniline	U	386	U	383	U	386	U J	389	U	386
Dimethylphthalate	U	386	U	383	U	386	U J	389	U	386
2,6-Dinitrotoluene	U	386	U	383	U	386	U J	389	U	386
Acenaphthylene	U	386	U	383	U	386	U J	389	U	386
3-Nitroaniline	U	386	U	383	U	386	U J	389	U	386
Acenaphthene	U	386	U	383	U	386	U J	389	U	386
2,4-Dinitrophenol	U	386	U	383	U	386	U J	389	U	386
4-Nitrophenol	U	386	U	383	U	386	U J	389	U	386
Dibenzofuran	U	386	U	383	U	386	U J	389	U	386
2,4-Dinitrotoluene	U	386	U	383	U	386	U J	389	U	386
Diethylphthalate	U	386	U	383	U	386	U J	389	U	386
4-Chlorophenyl-phenylether	U	386	U	383	U	386	U J	389	U	386
Fluorene	U	386	U	383	U	386	U J	389	U	386
4-Nitroaniline	U	386	U	383	U	386	U J	389	U	386
4,6-Dinitro-2-methylphenol	U	386	U	383	U	386	U J	389	U	386
N-Nitrosodiphenylamine	U	386	U	383	U	386	U J	389	U	386
4-Bromophenyl-phenylether	U	386	U	383	U	386	U J	389	U	386
Hexachlorobenzene	U	386	U	383	U	386	U J	389	U	386
Pentachlorophenol	U	386	U	383	U	386	U J	389	U	386
Phenanthrene	U	386	U	383	U	386	U J	389	U	386
Anthracene	U	386	U	383	U	386	U J	389	U	386
Carbazole	U	386	U	383	U	386	193 J	389	179 J	386
Di-n-butylphthalate	209 J	386	255 J	383	283 J	386	U J	389	U	386
Fluoranthene	U	386	U	383	U	386	U J	389	U	386
Pyrene	U	386	U	383	U	386	U J	389	U	386
Butylbenzylphthalate	U	386	U	383	U	386	U J	389	U	386
Benzo(a)anthracene	U	386	U	383	U	386	U J	389	U	386
3,3'-Dichlorobenzidine	U	386	U	383	U	386	U J	389	U	386
Chrysene	162 J	386	U	383	149 J	386	174 J	389	U	386
Bis(2-Ethylhexyl)phthalate	111 J	383	U	383	U	386	U J	389	U	386
Di-n-octylphthalate	U	386	U	383	U	386	U J	389	U	386
Benzo(b)fluoranthene	U	386	U	383	U	386	U J	389	U	386
Benzo(k)fluoranthene	U	386	U	383	U	386	U J	389	U	386
Benzo(a)pyrene	U	386	U	383	U	386	U J	389	U	386
Indeno(1,2,3-cd)pyrene	U	386	U	383	U	386	U J	389	U	386
Dibenzo(a,h)anthracene	U	386	U	383	U	386	U J	389	U	386
Benzo(g,h,i)perylene	U	386	U	383	U	386	U J	389	U	386

Table 1.3 (cont) Results of the Analysis for BNA in Gypsum
 WA# 0-383 Drywall Investigation
 Results Based on Dry Weight

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Sample No 09-810-8037-10
 Sample Location
 Percent Solids 89

Analyte	Result µg/Kg	RL µg/Kg
Phenol	U J	375
bis(2-Chloroethyl)Ether	U J	375
2-Chlorophenol	U J	375
1,3-Dichlorobenzene	U J	375
1,4-Dichlorobenzene	U J	375
Benzyl alcohol	U J	375
1,2-Dichlorobenzene	U J	375
2-Methylphenol	U J	375
bis(2-Chloroisopropyl)ether	U J	375
4-Methylphenol	U J	375
N-Nitroso-Di-n-propylamine	U J	375
Hexachloroethane	U J	375
Nitrobenzene	U J	375
Isophorone	U J	375
2-Nitrophenol	U J	375
2,4-Dimethylphenol	U J	375
bis(2-Chloroethoxy)methane	U J	375
2,4-Dichlorophenol	U J	375
1,2,4-Trichlorobenzene	U J	375
Naphthalene	U J	375
4-Chloroaniline	U J	375
Hexachlorobutadiene	U J	375
4-Chloro-3-methylphenol	U J	375
2-Methylnaphthalene	U J	375
Hexachlorocyclopentadiene	U J	375
2,4,6-Trichlorophenol	U J	375
2,4,5-Trichlorophenol	U J	375
2-Chloronaphthalene	U J	375
2-Nitroaniline	U J	375
Dimethylphthalate	U J	375
2,6-Dinitrotoluene	U J	375
Acenaphthylene	U J	375
3-Nitroaniline	U J	375
Acenaphthene	U J	375
2,4-Dinitrophenol	U J	375
4-Nitrophenol	U J	375
Dibenzofuran	U J	375
2,4-Dinitrotoluene	U J	375
Diethylphthalate	U J	375
4-Chlorophenyl-phenylether	U J	375
Fluorene	U J	375
4-Nitroaniline	U J	375
4,6-Dinitro-2-methylphenol	U J	375
N-Nitrosodiphenylamine	U J	375
4-Bromophenyl-phenylether	U J	375
Hexachlorobenzene	U J	375
Pentachlorophenol	U J	375
Phenanthrene	U J	375
Anthracene	U J	375
Carbazole	U J	375
Di-n-butylphthalate	U J	375
Fluoranthene	U J	375
Pyrene	U J	375
Butylbenzylphthalate	U J	375
Benzo(a)anthracene	U J	375
3,3'-Dichlorobenzidine	U J	375
Chrysene	U J	375
Bis(2-Ethylhexyl)phthalate	U J	375
Di-n-octylphthalate	U J	375
Benzo(b)fluoranthene	U J	375
Benzo(k)fluoranthene	U J	375
Benzo(a)pyrene	U J	375
Indeno(1,2,3-cd)pyrene	U J	375
Dibenzo(a,h)anthracene	U J	375
Benzo(g,h,i)perylene	U J	375

Table 1.4 Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
0900179-BLK1	Propylene glycol	30.3
	3-Penten-2-one, 4-methyl-	31.3
	2-Pentanone, 4-hydroxy-4-methyl	4000
	Unknown	87.3
	Phthalate isomer	27.3
09-840-9707-01	2-Furancarboxylic acid	234
	2-Furancarboxaldehyde, 5-(hydroxymethyl)-	270
	1-Dodecanol	1670
	1-Dodecanethiol	623
	Molecular Sulfur	624
	Hexadecanoic Acid	1470
	n-Eicosane C20H42	393
	Molecular Sulfur	1320
	1-Cyclohexene-1-carboxylic acid, 4-(1,5-dimethyl-3-oxohexyl)-, methyl ester	1720
	n-Tricosane C23H48	344
	n-Tetracosane C24H50	716
	Unknown alkane	213
	n-Pentacosane C25H52	836
	Diethylene glycol dibenzoate/Unknown	263
	n-Hexacosane C26H54	995
	Unknown	233
	Unknown alkane	252
	Unknown alkane	213
	n-Heptacosane C27H56	1060
	Unknown alkane	277
	Unknown alkane	230
	Unknown alkane	268
	Organic Acid/Unknown	1010
	n-Octacosane C28H58	689
	n-Nonacosane C29H60	310
	Unknown plant sterane	211
	Unknown alkane	329
	Unknown alkane	375
	Binaphthyl Sulfone isomer	400
	Binaphthyl Sulfone isomer	
09-840-9139-09	1-Octanol/C9 Alkyl benzene	242
	Isoquinoline	145
	Decane, 1-(ethenoxy)-	438
	Unknown	871
	Unknown	448
	Unknown	244
	Unknown	337
	Unknown	133
	Unknown	282
	n-Hexadecanoic acid	318
	cis-9,12-Octadecadienoic acid	194
	n-Docosane C22H46	593
	n-Tricosane C23H48	135
	Unknown	1190
	n-Tetracosane C24H50	1730
	n-Pentacosane C25H52	245
	Diethylene glycol dibenzoate/Unknown	1670
	n-Hexacosane C26H54	148
	Unknown	145
	Unknown alkane	1330
	n-Heptacosane C27H56	133
	Unknown	135
	Unknown alkane	871
	n-Octacosane C28H58	150
	Unknown	518
	n-Nonacosane C29H60	131
	Unknown alkane	449
	Binaphthyl Sulfone isomer	230
	Binaphthyl Sulfone isomer	326
	Unknown	

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-7339-04	Disulphide compound	427
	1-Dodecanol	4240
	1-Dodecanethiol	1690
	Unknown	578
	Unknown	431
	Tetradecanethiol	970
	n-Octadecane C18H38/Unknown	447
	Unknown alkane	397
	Molecular Sulfur	1790
	Phthalate isomer	900
	Molecular Sulfur	7480
	Disulfide compound	9280
	n-Tricosane C23H48	627
	Unknown	494
	n-Tetracosane C24H50	1090
	n-Pentacosane C25H52	1110
	n-Hexacosane C26H54	1040
	n-Heptacosane C27H56	1140
	n-Octacosane C28H58	1160
	n-Nonacosane C29H60	859
	Unknown sulfide compound/Unknown	428
	Disulfide, didodecyl	1170
	Unknown alkane	499
	Unknown	543
	Binaphthyl Sulfone isomer	398
	Binaphthyl Sulfone isomer	546
	Unknown	426
	Unknown	928
	Unknown	538
09-810-8357-08	Disulfide isomer	428
	Disulfide isomer	438
	Disulfide isomer	404
	Vanillin	553
	1-Dodecanol	3030
	1-Dodecanethiol	2820
	Unknown	528
	Tetradecanethiol	941
	Unknown	531
	Unknown alkane	391
	Molecular Sulfur	1960
	Unknown phthalate	1140
	Molecular Sulfur	9740
	Molecular Sulfur	5370
	Disulfide compound	11900
	Unknown	428
	n-Tricosane C23H48	549
	n-Tetracosane C24H50	963
	n-Pentacosane C25H52	1340
	n-Hexacosane C26H54	1210
	n-Heptacosane C27H56	1280
	Unknown	423
	n-Octacosane C28H58	1020
	n-Nonacosane C29H60	739
	Disulfide, didodecyl	966
	Unknown alkane	428
	Unknown	509
	Binaphthyl Sulfone isomer	463
	Unknown	642

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-302-1429-03	1-Decene	132
	1-Decanol	248
	Hexadecanoic Acid	95
	n-Docosane C22H46	138
	n-Tricosane C23H48	368
	n-Tetracosane C24H50	699
	n-Pentacosane C25H52	983
	Diethylene glycol dibenzoate	176
	n-Hexacosane C26H54	948
	Unknown alkane	80
	Unknown alkane	58
	n-Heptacosane C27H56	786
	Unknown alkane	74
	Unknown alkane	98
	Unknown alkane	84
	Unknown alkane	632
	n-Octacosane C28H58	107
	Unknown	80
	Unknown alkane	87
	Unknown alkane	389
	n-Nonacosane C29H60	73
	Unknown	142
	Unknown alkane	100
	Binaphthyl Sulfone isomer	77
	n-Dotriacontane C32H66	686
	Binaphthyl Sulfone isomer	472
	Binaphthyl Sulfone isomer	213
	Unknown alkane	147
	Unknown	749
	Unknown	
09-302-1379-05	Vanillin	622
	Molecular Sulfur	219
	Unknown	178
	Molecular Sulfur/Unknown	384
	Phthalate isomer	333
	Unknown alkane	837
	Hexadecanoic acid, methyl ester	1530
	Molecular Sulfur	3660
	n-Icosane C20H42	11700
	8,11-Octadecadienoic acid, methyl ester	990
	Octadecanoic acid, methyl ester	229
	n-Docosane C22H46	541
	n-Tricosane C23H48	1150
	n-Tetracosane C24H50	1940
	Unknown alkane	241
	Unknown alkane	2400
	n-Pentacosane C25H52	283
	Diethylene glycol dibenzoate	2210
	n-Hexacosane C26H54	2080
	n-Heptacosane C27H56	208
	Unknown alkane	1330
	n-Octacosane C28H58	971
	n-Nonacosane C29H60	499
	Unknown alkane	241
	n-Dotriacontane C32H66	218
	Unknown alkane	200
	Unknown	233
	Unknown	837
	Unknown	227
	Unknown	

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
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Sample Number	Analyte	Concentration*, µg/Kg
09-810-7069-03	Vanillin	333
	1-Dodecanol	1340
	Hexadecanoic Acid	298
	n-Docosane C22H46	461
	n-Tricosane C23H48	1070
	n-Tetracosane C24H50	1990
	Unknown alkane	321
	Unknown alkane	356
	n-Pentacosane C25H52	2050
	Diethylene glycol dibenzoate	433
	n-Hexacosane C26H54	2460
	Unknown/Dehydroabietic acid, methyl ester	412
	Unknown alkane	464
	Unknown alkane	399
	n-Heptacosane C27H56	2490
	Sterane (Cholestane) isomer	480
	Unknown alkane	379
	Unknown alkane (CnH2n+2)	292
	n-Octacosane C28H58	1740
	n-Nonacosane C29H60	1230
	Unknown	335
	Unknown alkane	634
	Hopane isomer	341
	Unknown	283
	n-Dotriacontane C32H66	277
	Binaphthyl Sulfone isomer	592
	Binaphthyl Sulfone isomer	496
	Hopane isomer	293
	Unknown	486
09-304-6226-03	Quinoline	234
	n-Docosane C22H46	189
	n-Tricosane C23H48	558
	n-Tetracosane C24H50	1290
	n-Pentacosane C25H52	2330
	Unknown alkane	196
	n-Hexacosane C26H54	2710
	Unknown	167
	Unknown alkane	212
	Unknown alkane	132
	n-Heptacosane C27H56	2840
	Unknown	223
	Unknown alkane	256
	n-Octacosane C28H58	1440
	Unknown	162
	Unknown alkane	145
	Unknown alkane	128
	n-Nonacosane C29H60	1150
	Unknown	184
	Unknown alkane	140
	Unknown alkane	131
	Unknown alkane	562
	Binaphthyl Sulfone isomer	276
	n-Dotriacontane C32H66	290
	Binaphthyl Sulfone isomer	1360
	Unknown	122
	Binaphthyl Sulfone isomer	797
	Unknown	122
	Unknown	251

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-8235-10	1-Hexanal	98
	Unknown	101
	Unknown	103
	Unknown	266
	Unknown	339
	n-Docosane C22H46	857
	n-Tricosane C23H48	1670
	n-Tetracosane C24H50	2400
	n-Pentacosane C25H52	217
	Diethylene glycol dibenzoate	2850
	n-Hexacosane C26H54	154
	Unknown alkane	3040
	n-Heptacosane C27H56	231
	Unknown alkane	1050
	n-Octacosane C28H58	1130
	n-Nonacosane C29H60	115
	Unknown alkane	127
	Unknown alkane	113
	Unknown alkane	1130
	n-Hentriacontane C31H64	162
	Binaphthyl Sulfone isomer	127
	Unknown alkane	111
	Unknown alkane	920
	n-Dotriacontane C32H66	330
	Binaphthyl Sulfone isomer	153
	Unknown	824
	Unknown alkane	472
	Unknown alkane	317
	Unknown alkane	167
09-810-8236-10	n-Nonadecane C19H40	259
	n-Eicosane C20H42	269
	n-Heneicosane C21H44	340
	n-Docosane C22H46	302
	n-Tricosane C23H48	438
	n-Tetracosane C24H50	746
	Dimethyl Pyrene Isomer C18H14/Unknown	302
	n-Pentacosane C25H52	1100
	n-Hexacosane C26H54	1500
	Unknown	271
	Unknown	299
	Unknown alkane	406
	PAH Isomer C19H14	302
	PAH Isomer C19H14	1550
	n-Heptacosane C27H56	339
	Unknown	312
	Benzonaphtho thiopene -dimethyl isomer	678
	Unknown	1180
	n-Octacosane C28H58	289
	PAH Isomer C20H16	467
	PAH Isomer C20H16	269
	Unknown alkane/PAH isomer	323
	Unknown alkane	991
	n-Nonacosane C29H60	298
	Unknown	619
	PAH Isomer C20H12/Unknown alkane	757
	n-Hentriacontane C31H64	528
	n-Dotriacontane C32H66	432
	Unknown alkane	255
	Unknown alkane	

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-8036-01	Unknown	226
	Unknown	325
	Unknown	202
	Diethylene glycol monododecyl ether	330
	Unknown	282
	Hexadecanoic Acid	256
	Unknown	489
	Linoleic acid	305
	n-Docosane C22H46	316
	n-Tricosane C23H48	729
	n-Tetracosane C24H50	1290
	n-Pentacosane C25H52	1650
	Diethylene glycol dibenzoate	286
	Phthalate isomer	328
	n-Hexacosane C26H54	1790
	Unknown	239
	Unknown alkane	220
	n-Heptacosane C27H56	1910
	Unknown	249
	Unknown alkane	231
	n-Octacosane C28H58	991
	n-Nonacosane C29H60	935
	Unknown alkane	748
	Unknown alkane	596
	Unknown alkane	398
	Unknown alkane	287
	Unknown alkane	192
	Unknown	195
	Unknown alkane	271
09-810-7639-10	1-Hexanal	180
	Acetophenone	159
	Hexadecanoic Acid	531
	n-Henicosane C21H44	163
	9-Octadecenoic acid, (E)-	482
	n-Docosane C22H46	364
	n-Tricosane C23H48	692
	n-Tetracosane C24H50	1200
	Unknown alkane	140
	n-Pentacosane C25H52	1550
	Diethylene glycol dibenzoate	265
	n-Hexacosane C26H54	1480
	Unknown alkane	152
	Unknown alkane	149
	n-Heptacosane C27H56	1250
	Unknown alkane/Unknown	193
	Unknown alkane	137
	n-Octacosane C28H58	865
	Unknown	220
	Unknown alkane	177
	n-Nonacosane C29H60	536
	Unknown	232
	Unknown alkane	236
	Binaphthyl Sulfone isomer	385
	Binaphthyl Sulfone isomer	2100
	Binaphthyl Sulfone isomer	1050
	Unknown	151
	Unknown	469
	Unknown	210

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
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Sample Number	Analyte	Concentration*, µg/Kg
09-810-8213-04		197
	n-Heneicosane C21H44	448
	n-Docosane C22H46	824
	n-Tricosane C23H48	1500
	n-Tetracosane C24H50	1760
	n-Pentacosane C25H52	172
	Diethylene glycol dibenzoate	1730
	n-Hexacosane C26H54	184
	Unknown alkane	201
	Unknown alkane	147
	Unknown alkane	1540
	n-Heptacosane C27H56	210
	Unknown alkane	209
	Unknown alkane	177
	Unknown alkane	873
	n-Octacosane C28H58	226
	Unknown	133
	Unknown alkane	179
	Unknown alkane	698
	n-Nonacosane C29H60	140
	Unknown	132
	Unknown alkane	141
	Unknown	417
	Unknown alkane	225
	Unknown alkane	232
	Binaphthyl Sulfone isomer	148
	Binaphthyl Sulfone isomer/Unknown	131
	Unknown alkane	208
	Unknown alkane/Unknown	184
	Unknown alkane	
09-840-9858-08		94
	Acetophenone	129
	Decane, 1-chloro-	86
	1-Decanol	87
	n-Docosane C22H46	253
	n-Tricosane C23H48	515
	n-Tetracosane C24H50	889
	n-Pentacosane C25H52	283
	Diethylene glycol dibenzoate	152
	Phthalate isomer	905
	n-Hexacosane C26H54	57
	Unknown alkane	869
	n-Heptacosane C27H56	63
	Unknown alkane	647
	n-Octacosane C28H58	468
	n-Nonacosane C29H60	227
	Unknown alkane	71
	Binaphthyl Sulfone isomer	125
	Unknown alkane	453
	Binaphthyl Sulfone isomer	79
	Unknown	328
	Binaphthyl Sulfone isomer	63
	Unknown	62
	Unknown alkane	80
	Unknown alkane	109
	Unknown	160
	Unknown alkane	67
	Unknown	59
	Unknown	

*Estimated Concentration

Table 1.4 (cont) Results of the TICs for BNA in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-B10-8037-10	Unknown	253
	Unknown	269
	Unknown	419
	Hexadecanoic Acid	906
	n-Heneicosane C21H44	248
	9-Octadecenoic acid, (E)-	1240
	C10 Organic Acid, C10 ester	279
	n-Docosane C22H46	428
	Unknown	241
	n-Tricosane C23H48	739
	n-Tetracosane C24H50	1440
	Unknown alkane	396
	n-Pentacosane C25H52	1370
	Diethylene glycol dibenzoate	262
	Unknown alkane	330
	n-Hexacosane C26H54	1590
	Unknown/Dehydroabiatic acid, methyl ester	300
	Unknown alkane	259
	Unknown alkane/Unknown	201
	n-Heptacosane C27H56	1630
	Unknown alkane	304
	Unknown alkane	234
	n-Octacosane C28H58	1080
	Unknown	241
	n-Nonacosane C29H60	791
	Unknown alkane	506
	Unknown alkane	345
	Unknown alkane	210
	Unknown	326

Table 1.5 Results of the Analysis for BNA in Paper
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Sample No. Sample Location Percent Solids	0900206-BLK1 Method Blank 100		09-840-9707-01 100		09-810-7339-04 100		09-810-8036-01 100		09-302-1379-05 100	
Analyte	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Phenol	U	2000	U	2000	U	2000	U	2000	U	2000
bis(-2-Chloroethyl)Ether	U	2000	U	2000	U	2000	U	2000	U	2000
2-Chlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
1,3-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
1,4-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
Benzyl alcohol	U	2000	U	2000	U	2000	U	2000	U	2000
1,2-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
2-Methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
bis(2-Chloroisopropyl)ether	U	2000	U	2000	U	2000	U	2000	U	2000
4-Methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
N-Nitroso-Di-n-propylamine	U	2000	U	2000	U	2000	U	2000	U	2000
Hexachloroethane	U	2000	U	2000	U	2000	U	2000	U	40000
Nitrobenzene	U	2000	U	2000	U	2000	U	2000	U	40000
Isophorone	U	2000	U	2000	U	2000	U	2000	U	40000
2-Nitrophenol	U	2000	U	2000	U	2000	U	2000	U	40000
2,4-Dimethylphenol	U	2000	U	2000	U	2000	U	2000	U	40000
bis(2-Chloroethoxy)methane	U	2000	U	2000	U	2000	U	2000	U	40000
2,4-Dichlorophenol	U	2000	U	2000	U	2000	U	2000	U	40000
1,2,4-Trichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	40000
Naphthalene	U	2000	U	2000	U	2000	U	2000	U	40000
4-Chloroaniline	U	2000	U	2000	U	2000	U	2000	U	40000
Hexachlorobutadiene	U	2000	U	2000	U	2000	U	2000	U	40000
4-Chloro-3-methylphenol	U	2000	U	2000	U	2000	U	2000	U	40000
2-Methylnaphthalene	U	2000	U	2000	U	2000	U	2000	U	40000
Hexachlorocyclopentadiene	U	2000	U	2000	U	2000	U	2000	U	40000
2,4,6-Trichlorophenol	U	2000	U	2000	U	2000	U	2000	U	40000
2,4,5-Trichlorophenol	U	2000	U	2000	U	2000	U	2000	U	40000
2-Chloronaphthalene	U	2000	U	2000	U	2000	U	2000	U	40000
2-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	40000
Dimethylphthalate	U	2000	U	2000	U	2000	U	2000	U	40000
2,6-Dinitrotoluene	U	2000	U	2000	U	2000	U	2000	U	40000
Acenaphthylene	U	2000	U	2000	U	2000	U	2000	U	40000
3-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	40000
Acenaphthene	U	2000	U	2000	U	2000	U	2000	U	40000
2,4-Dinitrophenol	U	2000	U	2000	U	2000	U	2000	U	40000
4-Nitrophenol	U	2000	U	2000	U	2000	U	2000	U	40000
Dibenzofuran	U	2000	U	2000	U	2000	U	2000	U	40000
2,4-Dinitrotoluene	U	2000	U	2000	U	2000	U	2000	U	40000
Diethylphthalate	U	2000	U	2000	U	2000	U	2000	U	40000
4-Chlorophenyl-phenylether	U	2000	U	2000	U	2000	U	2000	U	40000
Fluorene	U	2000	U	2000	U	2000	U	2000	U	40000
4-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	40000
4,6-Dinitro-2-methylphenol	U	2000	U	2000	U	2000	U	2000	U	40000
N-Nitrosodiphenylamine	U	2000	U	2000	U	2000	U	2000	U	40000
4-Bromophenyl-phenylether	U	2000	U	2000	U	2000	U	2000	U	40000
Hexachlorobenzene	U	2000	U	2000	U	2000	U	2000	U	40000
Pentachlorophenol	U	2000	U	2000	U	2000	U	2000	U	40000
Phenanthrene	U	2000	U	2000	U	2000	U	2000	U	40000
Anthracene	U	2000	U	2000	U	2000	U	2000	U	40000
Carbazole	U	2000	U	2000	U	2000	U	2000	U	40000
Di-n-butylphthalate	U	2000	1460 J	2000	1610 J	2000	906 J	2000	263000	40000
Fluoranthene	U	2000	U	2000	U	2000	U	2000	U	40000
Pyrene	U	2000	U	2000	U	2000	U	2000	584 J	2000
Butylbenzylphthalate	U	2000	U	2000	U	2000	U	2000	U	40000
Benzo(a)anthracene	U	2000	U	2000	U	2000	1070 J	2000	U	40000
3,3'-Dichlorobenzidine	U	2000	U	2000	U	2000	U	2000	U	40000
Chrysene	U	2000	U	2000	U	2000	U	2000	3510 J	2000
Bis(2-Ethylhexyl)phthalate	U	2000	1620 J	2000	1230 J	2000	1910 J	2000	U	40000
Di-n-octylphthalate	U	2000	U	2000	U	2000	U	2000	U	40000
Benzo(b)fluoranthene	U	2000	U	2000	U	2000	U	2000	U	40000
Benzo(k)fluoranthene	U	2000	U	2000	U	2000	U	2000	U	40000
Benzo(a)pyrene	U	2000	U	2000	U	2000	U	2000	U	40000
indeno(1,2,3-cd)pyrene	U	2000	U	2000	U	2000	U	2000	U	40000
Dibenzo(a,h)anthracene	U	2000	U	2000	U	2000	U	2000	U	40000
Benzo(g,h,i)perylene	U	2000	U	2000	U	2000	U	2000	U	40000

Table 1.5 (cont) Results of the Analysis for BNA in Paper
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Sample No. Sample Location	09-810-7069-03		09-304-6226-03		09-810-8235-10		09-810-8236-10		09-810-7639-10	
Analyte	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg
Phenol	U	2000	U	2000	U	2000	U	2000	U	2000
bis-(2-Chloroethyl)Ether	U	2000	U	2000	U	2000	U	2000	U	2000
2-Chlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
1,3-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
1,4-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
Benzyl alcohol	U	2000	U	2000	U	2000	U	2000	U	2000
1,2-Dichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
2-Methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
bis(2-Chloroisopropyl)ether	U	2000	U	2000	U	2000	U	2000	U	2000
4-Methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
N-Nitroso-Di-n-propylamine	U	2000	U	2000	U	2000	U	2000	U	2000
Hexachlorocyclopentadiene	U	2000	U	2000	U	2000	U	2000	U	2000
Nitrobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
Isophorone	U	2000	U	2000	U	2000	U	2000	U	2000
2-Nitrophenol	U	2000	U	2000	U	2000	U	2000	U	2000
2,4-Dimethylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
bis(2-Chloroethoxy)methane	U	2000	U	2000	U	2000	U	2000	U	2000
2,4-Dichlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
1,2,4-Trichlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
Naphthalene	U	2000	U	2000	U	2000	U	2000	U	2000
4-Chloroaniline	U	2000	U	2000	U	2000	U	2000	U	2000
Hexachlorobutadiene	U	2000	U	2000	U	2000	U	2000	U	2000
4-Chloro-3-methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
2-Methylnaphthalene	U	2000	U	2000	U	2000	U	2000	U	2000
Hexachlorocyclopentadiene	U	2000	U	2000	U	2000	U	2000	U	2000
2,4,6-Trichlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
2,4,5-Trichlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
2-Chloronaphthalene	U	2000	U	2000	U	2000	U	2000	U	2000
2-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	2000
Dimethylphthalate	U	2000	U	2000	U	2000	U	2000	U	2000
2,6-Dinitrotoluene	U	2000	U	2000	U	2000	U	2000	U	2000
Acenaphthylene	U	2000	U	2000	U	2000	U	2000	U	2000
3-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	2000
Acenaphthene	U	2000	U	2000	U	2000	U	2000	U	2000
2,4-Dinitrophenol	U	2000	U	2000	U	2000	U	2000	U	2000
4-Nitrophenol	U	2000	U	2000	U	2000	U	2000	U	2000
Dibenzofuran	U	2000	U	2000	U	2000	U	2000	U	2000
2,4-Dinitrotoluene	U	2000	U	2000	U	2000	U	2000	U	2000
Diethylphthalate	U	2000	U	2000	U	2000	U	2000	U	2000
4-Chlorophenyl-phenylether	U	2000	U	2000	U	2000	U	2000	U	2000
Fluorene	U	2000	U	2000	U	2000	U	2000	U	2000
4-Nitroaniline	U	2000	U	2000	U	2000	U	2000	U	2000
4,6-Dinitro-2-methylphenol	U	2000	U	2000	U	2000	U	2000	U	2000
N-Nitrosodiphenylamine	U	2000	U	2000	U	2000	U	2000	U	2000
4-Bromophenyl-phenylether	U	2000	U	2000	U	2000	U	2000	U	2000
Hexachlorobenzene	U	2000	U	2000	U	2000	U	2000	U	2000
Pentachlorophenol	U	2000	U	2000	U	2000	U	2000	U	2000
Phenanthrene	U	2000	U	2000	U	2000	U	2000	U	2000
Anthracene	U	2000	U	2000	U	2000	U	2000	U	2000
Carbazole	U	2000	U	2000	U	2000	U	2000	U	2000
Di-n-butylphthalate	2050	2000	1790	J 2000	624	J 2000	524	J 2000	814	J 2000
Fluoranthene	U	2000	U	2000	U	2000	U	2000	U	2000
Pyrene	U	2000	U	2000	U	2000	U	2000	U	2000
Butylbenzylphthalate	524	J 2000	526	J 2000	614	J 2000	U	2000	928	J 2000
Benzo(a)anthracene	U	2000	U	2000	U	2000	U	2000	U	J 2000
3,3'-Dichlorobenzidine	U	2000	U	2000	U	2000	U	2000	U	J 2000
Chrysene	U	2000	U	2000	U	2000	U	2000	U	J 2000
Bis(2-Ethylhexyl)phthalate	1770	J 2000	4200	2000	3150	2000	3210	2000	3850	2000
Di-n-octylphthalate	U	2000	U	2000	U	2000	U	2000	U	2000
Benzo(b)fluoranthene	U	2000	U	2000	U	2000	U	2000	U	2000
Benzo(k)fluoranthene	U	2000	U	2000	U	2000	U	2000	U	2000
Benzo(a)pyrene	U	2000	U	2000	U	2000	U	2000	U	2000
Indeno(1,2,3-cd)pyrene	U	2000	U	2000	U	2000	U	2000	U	2000
Dibenzo(a,h)anthracene	U	2000	U	2000	U	2000	U	2000	U	2000
Benzo(g,h,i)perylene	U	2000	U	2000	U	2000	U	2000	U	2000

Table 1.5 (cont) Results of the Analysis for BNA in Paper
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Sample No. Sample Location	09-810-8357-08		0900193-BLK1 Method Blank		09-810-8213-04		09-840-9858-08	
	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg	Result. µg/Kg	RL µg/Kg
Analyte								
Phenol	U	2000	U	2000	U	4000	U	4000
bis-(2-Chloroethyl)Ether	U	2000	U	2000	U	4000	U	4000
2-Chlorophenol	U	2000	U	2000	U	4000	U	4000
1,3-Dichlorobenzene	U	2000	U	2000	U	4000	U	4000
1,4-Dichlorobenzene	U	2000	U	2000	U	4000	U	4000
Benzyl alcohol	U	2000	U	2000	U	4000	U	4000
1,2-Dichlorobenzene	U	2000	U	2000	U	4000	U	4000
2-Methylphenol	U	2000	U	2000	U	4000	U	4000
bis(2-Chloroisopropyl)ether	U	2000	U	2000	U	4000	U	4000
4-Methylphenol	U	2000	U	2000	U	4000	U	4000
N-Nitroso-Di-n-propylamine	U	2000	U	2000	U	4000	U	4000
Hexachloroethane	U	2000	U	2000	U	4000	U	4000
Nitrobenzene	U	2000	U	2000	U	4000	U	4000
Isophorone	U	2000	U	2000	U	4000	U	4000
2-Nitrophenol	U	2000	U	2000	U	4000	U	4000
2,4-Dimethylphenol	U	2000	U	2000	U	4000	U	4000
bis(2-Chloroethoxy)methane	U	2000	U	2000	U	4000	U	4000
2,4-Dichlorophenol	U	2000	U	2000	U	4000	U	4000
1,2,4-Trichlorobenzene	U	2000	U	2000	U	4000	U	4000
Naphthalene	U	2000	U	2000	U	4000	U	4000
4-Chloroaniline	U	2000	U	2000	U	4000	U	4000
Hexachlorobutadiene	U	2000	U	2000	U	4000	U	4000
4-Chloro-3-methylphenol	U	2000	U	2000	U	4000	U	4000
2-Methylnaphthalene	U	2000	U	2000	U	4000	U	4000
Hexachlorocyclopentadiene	U	2000	U	2000	U	4000	U	4000
2,4,6-Trichlorophenol	U	2000	U	2000	U	4000	U	4000
2,4,5-Trichlorophenol	U	2000	U	2000	U	4000	U	4000
2-Chloronaphthalene	U	2000	U	2000	U	4000	U	4000
2-Nitroaniline	U	2000	U	2000	U	4000	U	4000
Dimethylphthalate	U	2000	U	2000	U	4000	U	4000
2,6-Dinitrotoluene	U	2000	U	2000	U	4000	U	4000
Acenaphthylene	U	2000	U	2000	U	4000	U	4000
3-Nitroaniline	U	2000	U	2000	U	4000	U	4000
Acenaphthene	U	2000	U	2000	U	4000	U	4000
2,4-Dinitrophenol	U	2000	U	2000	U	4000	U	4000
4-Nitrophenol	U	2000	U	2000	U	4000	U	4000
Dibenzofuran	U	2000	U	2000	U	4000	U	4000
2,4-Dinitrotoluene	U	2000	U	2000	U	4000	U	4000
Diethylphthalate	U	2000	U	2000	U	4000	U	4000
4-Chlorophenyl-phenylether	U	2000	U	2000	U	4000	U	4000
Fluorene	U	2000	U	2000	U	4000	U	4000
4-Nitroaniline	U	2000	U	2000	U	4000	U	4000
4,6-Dinitro-2-methylphenol	U	2000	U	2000	U	4000	U	4000
N-Nitrosodiphenylamine	U	2000	U	2000	U	4000	U	4000
4-Bromophenyl-phenylether	U	2000	U	2000	U	4000	U	4000
Hexachlorobenzene	U	2000	U	2000	U	4000	U	4000
Pentachlorophenol	U	2000	U	2000	U	4000	U	4000
Phenanthrene	U	2000	U	2000	U	4000	U	4000
Anthracene	U	2000	U	2000	U	4000	U	4000
Carbazole	U	2000	U	2000	3200 J	4000	U	4000
Di-n-butylphthalate	1570 J	2000	U	2000	U	4000	U	4000
Fluoranthene	U	2000	U	2000	U	4000	U	4000
Pyrene	U	2000	U	2000	1300 J	4000	U	4000
Butylbenzylphthalate	U	2000	U	2000	U	4000	U	4000
Benzo(a)anthracene	U	2000	U	2000	U	4000	U	4000
3,3'-Dichlorobenzidine	U	2000	U	2000	U	4000	U	4000
Chrysene	1580 J	2000	U	2000	5760	4000	2270 J	4000
Bis(2-Ethylhexyl)phthalate	U	2000	U	2000	U	4000	U	4000
Di-n-octylphthalate	U	2000	U	2000	U	4000	U	4000
Benzo(b)fluoranthene	U	2000	U	2000	U	4000	U	4000
Benzo(k)fluoranthene	U	2000	U	2000	U	4000	U	4000
Benzo(a)pyrene	U	2000	U	2000	U	4000	U	4000
Indeno(1,2,3-cd)pyrene	U	2000	U	2000	U	4000	U	4000
Dibenzo(a,h)anthracene	U	2000	U	2000	U	4000	U	4000
Benzo(g,h,i)perylene	U	2000	U	2000	U	4000	U	4000

Table 1.5 (cont) Results of the Analysis for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Method REAC SOP 1805
Sample No. -
Sample Location

09-810-8037-10

09-840-9139-09

09-302-1429-03

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Analyte	Result, µg/Kg	RL µg/Kg	Result, µg/Kg	RL µg/Kg	Result, µg/Kg	RL µg/Kg
Phenol	U	4000	U	4000	U	4000
bis(2-Chloroethyl)Ether	U	4000	U	4000	U	4000
2-Chlorophenol	U	4000	U	4000	U	4000
1,3-Dichlorobenzene	U	4000	U	4000	U	4000
1,4-Dichlorobenzene	U	4000	U	4000	U	4000
Benzyl alcohol	U	4000	U	4000	U	4000
1,2-Dichlorobenzene	U	4000	U	4000	U	4000
2-Methylphenol	U	4000	U	4000	U	4000
bis(2-Chloroisopropyl)ether	U	4000	U	4000	U	4000
4-Methylphenol	U	4000	U	4000	U	4000
N-Nitroso-Di-n-propylamine	U	4000	U	4000	U	4000
Hexachloroethane	U	4000	U	4000	U	4000
Nitrobenzene	U	4000	U	4000	U	4000
Isophorone	U	4000	U	4000	U	4000
2-Nitrophenol	U	4000	U	4000	U	4000
2,4-Dimethylphenol	U	4000	U	4000	U	4000
bis(2-Chloroethoxy)methane	U	4000	U	4000	U	4000
2,4-Dichlorophenol	U	4000	U	4000	U	4000
1,2,4-Trichlorobenzene	U	4000	U	4000	U	4000
Naphthalene	U	4000	U	4000	U	4000
4-Chloroaniline	U	4000	U	4000	U	4000
Hexachlorobutadiene	U	4000	U	4000	U	4000
4-Chloro-3-methylphenol	U	4000	U	4000	U	4000
2-Methylnaphthalene	U	4000	U	4000	U	4000
Hexachlorocyclopentadiene	U	4000	U	4000	U	4000
2,4,6-Trichlorophenol	U	4000	U	4000	U	4000
2,4,5-Trichlorophenol	U	4000	U	4000	U	4000
2-Chloronaphthalene	U	4000	U	4000	U	4000
2-Nitroaniline	U	4000	U	4000	U	4000
Dimethylphthalate	U	4000	U	4000	U	4000
2,6-Dinitrotoluene	U	4000	U	4000	U	4000
Acenaphthylene	U	4000	U	4000	U	4000
3-Nitroaniline	U	4000	U	4000	U	4000
Acenaphthene	U	4000	U	4000	U	4000
2,4-Dinitrophenol	U	4000	U	4000	U	4000
4-Nitrophenol	U	4000	U	4000	U	4000
Dibenzofuran	U	4000	U	4000	U	4000
2,4-Dinitrotoluene	U	4000	U	4000	U	4000
Diethylphthalate	U	4000	U	4000	U	4000
4-Chlorophenyl-phenylether	U	4000	U	4000	U	4000
Fluorene	U	4000	U	4000	U	4000
4-Nitroaniline	U	4000	U	4000	U	4000
4,6-Dinitro-2-methylphenol	U	4000	U	4000	U	4000
N-Nitrosodiphenylamine	U	4000	U	4000	U	4000
4-Bromophenyl-phenylether	U	4000	U	4000	U	4000
Hexachlorobenzene	U	4000	U	4000	U	4000
Pentachlorophenol	U	4000	U	4000	U	4000
Phenanthrene	U	4000	U	4000	U	4000
Anthracene	U	4000	U	4000	U	4000
Carbazole	U	4000	U	4000	U	4000
Di-n-butylphthalate	2720 J	4000	3130 J	4000	2650 J	4000
Fluoranthene	U	4000	U	4000	U	4000
Pyrene	U	4000	U	4000	U	4000
Butylbenzylphthalate	U	4000	U	4000	3700 J	4000
Benzo(a)anthracene	U	4000	U	4000	U	4000
3,3'-Dichlorobenzidine	U	4000	U	4000	U	4000
Chrysene	U	4000	U	4000	U	4000
Bis(2-Ethylhexyl)phthalate	4990	4000	6800	4000	6540	4000
Di-n-octylphthalate	U	4000	U	4000	U	4000
Benzo(b)fluoranthene	U	4000	U	4000	U	4000
Benzo(k)fluoranthene	U	4000	U	4000	U	4000
Benzo(a)pyrene	U	4000	U	4000	U	4000
Indeno(1,2,3-cd)pyrene	U	4000	U	4000	U	4000
Dibenzo(a,h)anthracene	U	4000	U	4000	U	4000
Benzo(g,h,i)perylene	U	4000	U	4000	U	4000

Table 1.6 Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Page 1 of 8

Sample Number	Analyte	Concentration*, µg/Kg
Blank 0900206-BLK1	3-Penten-2-one, 4-methyl-	104
	2-Pentanone-4-hydroxy-4-methyl	15700
	Unknown	1180
09-840-9707-01	5-(hydroxymethyl)-2-furfural	1530
	Vanillin	2960
	1-Dodecanol	4210
	Hexadecanoic Acid	6450
	9-Octadecenoic acid	3790
	Stearic Acid	3620
	n-Tricosane C23H48	3160
	Phthalate isomer	1480
	n-Tetracosane C24H50	5330
	Unknown	2290
	Unknown alkane/Unknown	2800
	n-Pentacosane C25H52	5620
	Diethylene glycol dibenzoate	5880
	n-Hexacosane C26H54	6540
	Unknown alkane	2750
	n-Heptacosane C27H56	7570
	Unknown	2840
	n-Octacosane C28H58	6080
	n-Nonacosane C29H60	5130
	Unknown alkane	4100
	Unknown alkane	3670
	Unknown alkane	3350
	Unknown alkane	2450
	Unknown	3560
	Stigmast-4-en-3-one	2030
	Unknown	2110
	Unknown alkane	3640
	Unknown	1930
	Unknown alkane	1590
09-810-7339-04	1-Dodecanol	9100
	1-Hexadecanamine, N,N-dimethyl-	3090
	Hexadecanoic Acid	8420
	Unknown ester	9670
	9-Octadecenoic acid	6710
	Stearic Acid	5280
	n-Tricosane C23H48	3410
	n-Tetracosane C24H50	11000
	Unknown alkane/Unknown	4850
	n-Pentacosane C25H52	5930
	Diethylene glycol dibenzoate	6580
	n-Hexacosane C26H54	9510
	Unknown alkane	6810
	n-Heptacosane C27H56	8870
	Unknown	6470
	n-Octacosane C28H58	6960
	n-Nonacosane C29H60	5700
	Unknown	3350
	Disulfide, didodecyl	3750
	Unknown	3400
	Unknown alkane	5000
	Unknown	3210
	n-Dotriacontane C32H66	4670
	Hopane Isomer	4520
	Unknown alkane	10300
	Unknown alkane	3900
	Unknown alkane	3000
	Unknown	3220
	Unknown alkane	3160

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-8036-01	Aniline	2610
	Vanillin	4440
	Hexadecanoic Acid	10300
	Unknown ester	2030
	9-Octadecenoic acid	7330
	Stearic Acid	11800
	Unknown	6440
	Unknown	2470
	Unknown	2800
	n-Tetracosane C24H50	3940
	Unknown	2640
	Unknown	1940
	n-Pentacosane C25H52/Unknown	8440
	Diethylene glycol dibenzoate	8460
	n-Hexacosane C26H54	11100
	Unknown alkane	4460
	n-Heptacosane C27H56	15000
	Unknown alkane	2480
	n-Octacosane C28H58	6500
	n-Nonacosane C29H60	6040
	Unknown alkane	5440
	Unknown	2050
	n-Dotriacontane C32H66	4360
	Unknown alkane	2720
	Unknown alkane	2700
	Unknown	4910
	Unknown	2030
	Unknown alkane	2180
	Unknown	2150
09-302-1379-05	4-Hydroxybenzaldehyde	1270
	Vanillin	3270
	Unknown	1650
	Benzophenone	797
	2-Propenal, 3-(4-hydroxy-3-methoxyphenyl)-	908
	Hexadecanoic Acid	2070
	8,11-Octadecadienoic acid, methyl ester	5310
	Stearic Acid	2010
	n-Docosane C22H46	2530
	n-Tricosane C23H48	5410
	Unknown	4530
	Unknown	1370
	n-Tetracosane C24H50	8030
	Unknown	940
	n-Pentacosane C25H52	12100
	Diethylene glycol dibenzoate	7960
	n-Hexacosane C26H54	13400
	n-Heptacosane C27H56	14900
	Unknown	1820
	n-Octacosane C28H58	5720
	n-Nonacosane C29H60	5980
	n-Hentriacontane C31H64	5470
	Unknown	940
	n-Dotriacontane C32H66	4860
	Unknown alkane	4170
	Unknown alkane	3100
	Unknown alkane	751
	Unknown alkane	1230
	Unknown	1420

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-7069-03	Aniline	1170
	Vanillin	3490
	Phthalate isomer	743
	Hexadecanoic Acid	5560
	Unknown	1100
	n-Heneicosane C21H44	787
	9-Octadecenoic acid	3000
	Stearic Acid	4820
	n-Docosane C22H46	2910
	Unknown	1860
	n-Tricosane C23H48	5070
	Unknown	3250
	Unknown	739
	n-Tetracosane C24H50	6480
	n-Pentacosane C25H52	9750
	Diethylene glycol dibenzoate	10200
	n-Hexacosane C26H54	8330
	n-Heptacosane C27H56	8330
	n-Octacosane C28H58	4090
	n-Nonacosane C29H60	4700
	n-Hentriacontane C31H64	5690
	Unknown	1510
	n-Dotriacontane C32H66	5380
	Unknown alkane	5150
	Unknown alkane	3960
	Unknown alkane	1080
	Unknown alkane	1800
	Unknown	2080
	Unknown alkane	736
09-304-6226-03	Vanillin	2650
	Hexadecanoic Acid	6870
	9-Octadecenoic acid	5780
	Stearic Acid	5950
	n-Docosane C22H46	1620
	Unknown	2010
	n-Tricosane C23H48	3500
	Unknown	2170
	Unknown	962
	n-Tetracosane C24H50	5740
	Unknown	749
	Unknown	681
	n-Pentacosane C25H52/Unknown	11200
	Diethylene glycol dibenzoate	10000
	Unknown	686
	n-Hexacosane C26H54	12300
	Unknown alkane	1680
	n-Heptacosane C27H56	14600
	Unknown alkane /Unknown	796
	n-Octacosane C28H58	4650
	n-Nonacosane C29H60	5900
	n-Hentriacontane C31H64	6050
	Unknown	828
	n-Dotriacontane C32H66	5110
	n-Tritriacontane C33H68	5370
	Unknown alkane	3150
	Unknown alkane/Unknown	5380
	Unknown alkane	1160
	Unknown alkane/Unknown	1990

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Page 4 of 8
Concentration*, µg/Kg

Sample Number	Analyte	
09-810-8235-10	Vanillin	4280
	Unknown	1990
	Hexadecanoic Acid	6810
	Unknown	618
	9-Octadecenoic acid	6280
	Stearic Acid	3880
	n-Docosane C22H46	2360
	Unknown	3740
	n-Tricosane C23H48	5310
	2-Furanone, dihydro-5-tetradecyl-	1270
	Unknown	2570
	n-Tetracosane C24H50	9390
	Unknown alkane	644
	n-Pentacosane C25H52	17600
	Diethylene glycol dibenzoate	15900
	n-Hexacosane C26H54	19600
	Unknown alkane	1900
	n-Heptacosane C27H56	20900
	Unknown alkane	1060
	n-Octacosane C28H58	7050
	n-Nonacosane C29H60	6670
	n-Hentriacontane C31H64	4750
	Unknown	907
	Unknown alkane	3490
	Unknown alkane	1290
	Unknown alkane	1870
	Unknown alkane	4510
	Unknown	734
	Unknown alkane	2320
	Unknown ketone/Unknown alkane	
09-810-8236-10	Vanillin	2980
	Hexadecanoic Acid	5060
	n-Eicosane C20H42	727
	n-Heneicosane C21H44	941
	9-Octadecenoic acid	4900
	Stearic Acid	3310
	n-Docosane C22H46	2310
	Unknown	2920
	n-Tricosane C23H48	3500
	2-Furanone, dihydro-5-tetradecyl-	996
	Unknown	1060
	n-Tetracosane C24H50	5840
	n-Pentacosane C25H52	10600
	Diethylene glycol dibenzoate	11000
	n-Hexacosane C26H54	11300
	Unknown	770
	n-Heptacosane C27H56	12000
	Unknown alkane	700
	n-Octacosane C28H58	6360
	n-Nonacosane C29H60	5740
	n-Hentriacontane C31H64	4360
	Unknown	921
	n-Dotriacontane C32H66	3350
	16-Hentriacontanone	700
	Unknown alkane	1170
	Unknown alkane	1860
	Alkane/Unknown	4880
	Unknown alkane	765
	Unknown Organic Acid /Alkane	2450

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-7639-10	o-Toluidine	674
	Vanillin	2740
	Unknown	888
	Hexadecanoic Acid	7680
	9-Octadecenoic acid	7220
	Stearic Acid	4290
	n-Docosane C22H46	2130
	Unknown	2350
	n-Tricosane C23H48	4550
	Unknown	3150
	Unknown	827
	n-Tetracosane C24H50	8140
	Unknown	716
	n-Pentacosane C25H52	14400
	Diethylene glycol dibenzoate	11700
	n-Hexacosane C26H54	16500
	n-Heptacosane C27H56	20800
	Unknown alkane	955
	n-Octacosane C28H58	6690
	n-Nonacosane C29H60	6980
	n-Hentriacontane C31H64	5630
	Unknown	842
	n-Dotriacontane C32H66	4490
	16-Hentriacontanone	932
	Unknown alkane	1550
	Unknown alkane	2580
	Alkane/Unknown	5800
	Unknown alkane	1070
	Unknown alkane	2180
09-810-8357-08	Vanillin	2940
	1-Dodecanethiol	2300
	Nonyl-phenol Isomer	1140
	Tetradecene	1870
	Hexadecanoic Acid	6970
	Unknown	1080
	9-Octadecenoic acid	5160
	Stearic Acid	4230
	n-Docosane C22H46	1820
	Unknown	1010
	n-Tricosane C23H48	4380
	Unknown	988
	n-Tetracosane C24H50	6530
	Unknown alkane/Unknown	1100
	n-Pentacosane C25H52	9760
	Diethylene glycol dibenzoate	7170
	n-Hexacosane C26H54	9270
	Unknown alkane	1310
	n-Heptacosane C27H56	10900
	Unknown	1670
	n-Octacosane C28H58	5380
	n-Nonacosane C29H60	5890
	n-Hentriacontane C31H64	5660
	n-Dotriacontane C32H66	4500
	Unknown alkane	4120
	Unknown alkane	3220
	Unknown alkane	3700
	Unknown alkane	1960
	Unknown alkane	1970

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
Blank 0900193-BLK1	Propylene Glycol	170
	4-methyl-3-Penten-2-one	170
	2-Pentanone, 4-hydroxy-4-methyl	18100
	Unknown	308
	Phthalate isomer	266
09-510-8213-04	2-Pentenoic acid	1760
	Unknown	1950
	Vanillin	4300
	Unknown	1380
	Unknown	1330
	Hexadecanoic Acid	5970
	9-Octadecenoic acid	4360
	Stearic Acid	4280
	n-Docosane C22H46	2640
	Unknown	2940
	n-Tricosane C23H48	7350
	Unknown	3880
	n-Tetracosane C24H50	13300
	n-Pentacosane C25H52	27100
	Diethylene glycol dibenzoate	18400
	n-Hexacosane C26H54	34500
	Unknown alkane	3500
	n-Heptacosane C27H56	41300
	Unknown alkane	2090
	n-Octacosane C28H58	13300
	n-Nonacosane C29H60	13200
	n-Hentriacontane C31H64	10800
	n-Dotriacontane C32H66	8480
	16-Hentriacontanone	1800
	Unknown alkane	3220
	Unknown alkane	4630
	Unknown	11900
	Unknown alkane	3220
	Unknown	4450
09-840-9658-08	Acetophenone	1190
	Vanillin	5190
	Unknown	1100
	Hexadecanoic Acid	7690
	9-Octadecenoic acid	7770
	Stearic Acid	3430
	n-Docosane C22H46	1460
	Unknown	3050
	n-Tricosane C23H48	3150
	2(3H)-Furanone, dihydro-5-tetradecyl-	1070
	Unknown	1580
	n-Tetracosane C24H50	5880
	n-Pentacosane C25H52	12800
	Diethylene glycol dibenzoate	16400
	Unknown	875
	n-Hexacosane C26H54	14700
	Unknown alkane	1590
	n-Heptacosane C27H56	18000
	n-Octacosane C28H58	9770
	C30H50 Alkene	1220
	n-Nonacosane C29H60	10000
	n-Hentriacontane C31H64	8240
	n-Dotriacontane C32H66	7010
	16-Hentriacontanone	1040
	Unknown alkane	2930
	Unknown alkane	4570
	Unknown	8360
	Unknown alkane	2070
	Unknown	3280

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-810-8037-10	Aniline	1270
	Tridecane	1240
	Unknown	3120
	Vanillin	4520
	Unknown	1970
	Hexadecanoic Acid	9790
	9-Octadecenoic acid	7770
	Stearic Acid	7440
	Unknown	3140
	n-Tricosane C23H48	2820
	Unknown	10200
	Unknown	3230
	Unknown	4810
	n-Tetracosane C24H50	5240
	n-Pentacosane C25H52/Unknown	13600
	Diethylene glycol dibenzoate	23000
	n-Hexacosane C26H54	12500
	n-Heptacosane C27H56	18200
	n-Octacosane C28H58	9730
	n-Nonacosane C29H60	10900
	n-Hentriacontane C31H64	9860
	Unknown	1480
	n-Dotriacontane C32H66	8190
	16-Hentriacontanone	1680
	n-Tritriacontane C33H68	3520
	Unknown alkane	5850
	Unknown	12000
	Unknown alkane	2800
	Unknown	4080
09-840-9139-09	Aniline	2640
	Vanillin	4850
	Unknown	2110
	Unknown	1420
	Hexadecanoic Acid	4840
	9-Octadecenoic acid	3320
	Stearic Acid	4980
	n-Docosane C22H46	1810
	Unknown	2820
	n-Tricosane C23H48	2960
	Unknown	9100
	Unknown	3010
	Unknown	4020
	n-Tetracosane C24H50	4590
	Unknown	2250
	n-Pentacosane C25H52/Unknown	17300
	Diethylene glycol dibenzoate	37100
	n-Hexacosane C26H54	13500
	n-Heptacosane C27H56	21400
	n-Octacosane C28H58	10700
	n-Nonacosane C29H60	11900
	n-Hentriacontane C31H64	10100
	n-Dotriacontane C32H66	7940
	16-Hentriacontanone	1700
	Unknown alkane	3150
	Unknown alkane	5670
	Unknown	13400
	Unknown alkane	2540
	Unknown	6400

*Estimated Concentration

Table 1.6 (cont) Results of the TICs for BNA in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Sample Number	Analyte	Concentration*, µg/Kg
09-302-1429-03	o-Toluidine	1760
	Cyclodecane	1690
	Vanillin	8170
	1-Tetradecanamine, N,N-dimethyl-	4220
	Unknown	2250
	1-Hexadecanamine, N,N-dimethyl-	2610
	Hexadecanoic Acid	9900
	9-Octadecenoic acid	5960
	Stearic Acid	8940
	n-Docosane C22H48	2850
	Unknown	3580
	n-Tricosane C23H48	5430
	Unknown	2080
	Unknown	5020
	Unknown	1680
	n-Tetracosane C24H50	9370
	n-Pentacosane C25H52	22000
	Diethylene glycol dibenzoate	23500
	n-Hexacosane C26H54	26300
	n-Heptacosane C27H56	34800
	n-Octacosane C28H58	13000
	n-Nonacosane C29H60	12500
	n-Hentriacontane C31H64	9960
	n-Dotriacontane C32H66	8040
	Unknown alkane	2880
	Unknown alkane	5090
	Unknown	10100
	Unknown alkane	2320
	Unknown	3810

Table 1.7 Results of the Analysis for Metals in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method REAC SOP 1811/1832

Page 1 of 2

Sample Number Sample Location Percent Solids	Method Blank-073109 Lab NA		09-840-9707-01 NA 87		09-810-7339-04 NA 89		09-810-8357-08 NA 89		09-302-1379-05 NA 88		09-810-7069-03 NA 89	
Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	U	20.0	771 J+ 24.5		845 J+ 22.9		726 J+ 22.5		800 J+ 23.7		1750 J+ 22.9	
Antimony	U	1.90	U	2.32	U	2.18	U	2.13	U	2.25	U	2.18
Arsenic	U	2.00	2.93 2.45		U	2.29	U	2.25	U	2.37	U	2.29
Barium	U	0.200	229 0.245		98.1 0.229		80.3 0.225		38.8 0.237		47.4 0.229	
Beryllium	U	0.200	U	0.245	U	0.229	U	0.225	U	0.237	U	0.229
Cadmium	U	0.200	U	0.245	U	0.229	U	0.225	U	0.237	U	0.229
Calcium	5.13	5.00	246000 30.6		252000 28.7		252000 28.1		257000 29.5		257000 28.7	
Chromium	U	0.600	1.87 0.734		1.73 0.688		1.20 0.674		2.11 0.71		2.12 0.688	
Cobalt	U	0.400	0.744 0.489		1.05 0.459		0.773 0.449		0.56 0.473		1.07 0.459	
Copper	U	0.400	4.69 0.489		2.86 0.459		2.45 0.449		1.78 0.473		2.41 0.459	
Iron	U	10.0	1860 12.2		2310 11.5		1620 11.2		1350 11.8		1820 11.5	
Lead	U	1.20	16.4 1.47		1.96 1.38		U	1.35	U	1.42	U	1.38
Magnesium	U	10.0	5330 12.2		17800 11.5		18200 11.2		7830 11.8		4840 11.5	
Manganese	U	0.300	36.7 0.367		101 0.344		86.1 0.337		70.6 0.355		78.4 0.344	
Mercury	U	0.0400	1.24 0.0960		0.178 0.0470		0.156 0.0470		0.119 0.0450		U	0.0440
Nickel	U	0.600	1.31 0.734		1.83 0.688		1.31 0.674		1.30 0.71		2.19 0.688	
Potassium	U	30.0	252 36.7		344 34.4		280 33.7		264 35.5		602 34.4	
Selenium	U	1.80	U	2.20	U	2.06	U	2.02	U	2.13	U	2.06
Silver	U	0.500	U	0.611	U	0.573	U	0.562	U	0.592	U	0.573
Sodium	U	100	371 122		553 115		517 112		509 118		284 115	
Strontium	U	0.200	1530 1.22		3680 1.15		4310 1.12		2860 1.18		4220 1.15	
Thallium	U	2.30	U	2.81	U	2.64	U	2.58	U	2.72	U	2.64
Vanadium	U	0.300	1.70 0.367		2.6 0.344		2.13 0.337		2.19 0.355		2.65 0.344	
Zinc	U	0.700	4.43 J 0.856		2.66 J 0.803		1.77 J 0.787		1.24 J 0.829		2.60 J 0.803	

Table 1.7 (cont) Results of the Analysis for Metals in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method REAC SOP 1811/1832

Sample Number Sample Location Percent Solids	09-304-6226-03 NA 87		09-810-8235-10 NA 86		09-810-8236-10 NA 86		09-810-8036-01 NA 87		09-810-7639-10 NA 86		09-810-8213-04 NA 86	
Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	318 J+ 22.5		289 J+ 22.8		2220 J+ 21.9		485 J+ 23.9		230 J+ 22.8		179 J+ 22.4	
Antimony	U	2.14	U	2.17	U	2.08	U	2.27	U	2.17	U	2.12
Arsenic	U	2.25	U	2.28	U	2.19	3.22 2.39		U	2.28	U	2.24
Barium	7.46 0.225		13.3 0.228		96.7 0.219		5.18 0.239		5.74 0.228		2.50 0.224	
Beryllium	U	0.225	U	0.228	U	0.219	U	0.239	U	0.228	U	0.224
Cadmium	U	0.225	U	0.228	U	0.219	U	0.239	U	0.228	U	0.224
Calcium	242000 28.2		257000 28.5		255000 27.4		264000 29.9		245000 28.5		264000 28.0	
Chromium	U	0.676	2.78 0.684		17.7 0.658		1.42 0.718		2.68 0.684		1.40 0.671	
Cobalt	U	0.451	U	0.456	5.4 0.439		U	0.479	U	0.456	U	0.447
Copper	1.07 0.451		1.42 0.456		3.3 0.439		0.937 0.479		1.97 0.456		1.62 0.447	
Iron	663 11.3		626 11.4		3270 11.0		808 12.0		757 11.4		533 11.2	
Lead	2.11 1.35		U	1.37	U	1.32	U	1.44	U	1.37	U	1.34
Magnesium	471 11.3		1010 11.4		3080 11.0		943 12.0		1720 11.4		989 11.2	
Manganese	93.5 0.338		9.25 0.342		65 0.329		3.92 0.359		14.1 0.342		7.39 0.335	
Mercury	U	0.0450	0.107 0.0480		0.112 0.0480		0.327 0.0450		0.305 0.0470		0.261 0.0470	
Nickel	1.33 0.676		0.955 0.684		5.46 0.658		0.820 0.718		1.86 0.684		1.58 0.671	
Potassium	340 33.8		98.7 34.2		1320 32.9		586 35.9		78.5 34.2		380 33.5	
Selenium	U	2.03	3.46 2.05		3.43 1.97		12.2 2.16		4.93 2.05		4.11 2.01	
Silver	U	0.563	U	0.57	U	0.548	U	0.599	U	0.57	U	0.559
Sodium	257 113		U	114	U	110	U	120	162 114		114 112	
Strontium	776 0.225		580 0.228		633 0.219		175 0.239		185 0.228		140 0.224	
Thallium	U	2.59	U	2.62	U	2.52	U	2.75	U	2.62	U	2.57
Vanadium	0.643 0.338		3.19 0.342		11.2 0.329		0.791 0.359		3.6 0.342		2.31 0.335	
Zinc	3.60 J 0.789		3.99 J 0.798		8.52 J 0.768		U J 0.838		6.53 J 0.798		5.31 J 0.783	

Table 1.7 (cont) Results of the Analysis for Metals in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Method REAC SOP 1811/1832

Sample Number	09-840-9858-08		09-810-8037-10		09-840-9139-09		09-302-1429-03	
Sample Location	NA		NA		NA		Canada	
Percent Solids	86		89		87		86	
Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	216 J+	21.5	2720 J+	22.9	1330 J+	23.9	234 J+	22.8
Antimony	U	2.05	U	2.18	U	2.27	U	2.17
Arsenic	U	2.15	U	2.29	5.70	2.39	U	2.28
Barium	13.8	0.215	9.51	0.229	20.7	0.239	17.5	0.228
Beryllium	U	0.215	U	0.229	U	0.239	U	0.228
Cadmium	U	0.215	U	0.229	U	0.239	U	0.228
Calcium	262000	26.9	221000	28.7	216000	29.9	257000	28.5
Chromium	0.824	0.646	2.97	0.688	1.09	0.718	2.05	0.684
Cobalt	U	0.431	3.20	0.459	U	0.479	0.537	0.456
Copper	0.670	0.431	6.86	0.459	1.12	0.479	3.22	0.456
Iron	344	10.8	2700	11.5	1020	12.0	1520	11.4
Lead	U	1.29	2.38	1.38	U	1.44	2.02	1.37
Magnesium	7270	10.8	4800	11.5	6590	12.0	185	11.4
Manganese	8.97	0.323	73.3	0.344	24.9	0.359	46	0.342
Mercury	0.200	0.0460	U	0.0470	U	0.0460	0.119	0.0470
Nickel	U	0.646	4.54	0.688	0.894	0.718	2.45	0.684
Potassium	41.4	32.3	736	34.4	336	35.9	388	34.2
Selenium	12.2	1.94	U	2.06	U	2.16	3.82	2.05
Silver	U	0.538	U	0.573	U	0.599	U	0.57
Sodium	U	108	U	115	239	120	131	114
Strontium	926	0.215	662	0.229	2890	1.20	303	0.228
Thallium	U	2.48	U	2.64	U	2.75	U	2.62
Vanadium	2.00	0.323	1.98	0.344	2.15	0.359	2.89	0.342
Zinc	U	0.754	4.22 J	0.803	1.91 J	0.838	2.86 J	0.798

Table 1.8 Results of the Analysis for Total Sulfur in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: Modified REAC SOP 1805

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Sample No.	Method Blank		09-840-9707-01		09-840-9139-09		09-810-7339-04		09-810-8357-08	
Sample Location										
Percent Solids	100		87		87		89		89	
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	U	6.67	35.7	7.64	U	7.65	182 J	7.45	213	7.46

Table 1.8 (cont) Results of the Analysis for Total Sulfur in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sample No.	09-302-1429-03		09-302-1379-05		09-810-7069-03		09-304-6226-03		09-810-8235-10	
Sample Location										
Percent Solids	86		88		89		87		86	
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	U	7.72	175	7.57	15.2	7.52	U	7.71	U	7.72

Table 1.8 (cont) Results of the Analysis for Total Sulfur in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sample No.	09-810-8236-10		09-810-8036-01		09-810-7639-10		09-810-8213-04		09-840-9858-08	
Sample Location										
Percent Solids	86		87		86		86		86	
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	U	7.72	U	7.65	U	7.72	U	7.78	U	7.73

Table 1.8 (cont) Results of the Analysis for Total Sulfur in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sample No.	09-810-8037-10	
Sample Location		
Percent Solids	89	
	Result.	RL
Analyte	mg/Kg	mg/Kg
Sulfur	U	7.50

Table 1.9 Results of the Analysis for Total Sulfur in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

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Method: Modified REAC SOP 1805

Sample No.	0900206-BLK1		09-840-9707-01		09-810-7339-04		09-810-8036-01		09-302-1379-05	
Sample Location	Method Blank									
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	U	40.0	82.8	40.0	207	40.0	U	40.0	59.5 J	40.0

Table 1.9 (cont) Results of the Analysis for Sulfur in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Sample No.	09-810-7069-03		09-304-6226-03		09-810-8235-10		09-810-8236-10		09-810-7639-10	
Sample Location										
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	9.84 J	40.0	U	40.0	U	40.0	U	40.0	U	40.0

Table 1.9 (cont) Results of the Analysis for Sulfur in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Sample No.	09-810-8357-08		0900193-BLK1		09-810-8213-04		09-840-9858-08		09-810-8037-10	
Sample Location			Method Blank							
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	130	40.0	U	40.0	U	80.0	U	80.0	U	80.0

Table 1. (cont) Results of the Analysis for Sulfur in Paper
WA# 0-393 Drywall Investigation
Results Based on Wet Weight

Sample No.	09-840-9139-09		09-302-1429-03	
Sample Location				
Analyte	Result. mg/Kg	RL mg/Kg	Result. mg/Kg	RL mg/Kg
Sulfur	U	80.0	U	80.0

Table 1.10 Results of the Analysis for Acid-Soluble Sulfide in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/9030B+9034

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Sample Number	09-840-9707-01		09-810-7339-04		09-810-6357-08		09-302-1379-05		09-810-7069-03	
Sample Location	NA		NA		NA		NA		NA	
Percent Solids	87		89		89		88		89	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfide	U	25.0	U	23.8	U	24.1	U	24.7	U	24.4

Table 1.10 (cont) Results of the Analysis for Acid-Soluble Sulfide in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/9030B+9034

Sample Number	09-304-6226-03		09-810-8235-10		09-810-8236-10		09-810-8036-01		09-810-7639-10		09-810-8213-04	
Sample Location	NA		NA		NA		NA		NA		NA	
Percent Solids	87		86		88		87		86		86	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfide	U	25.0	U	24.7	U	25.9	U	24.6	U	24.7	U	25.3

Table 1.10 Results of the Analysis for Acid-Soluble Sulfide in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/9030B+9034

Sample Number	09-840-9858-08		09-810-8037-10		09-840-9139-09		09-302-1429-03	
Sample Location	NA		NA		NA		Canada	
Percent Solids	86		89		87		86	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfide	U	25.6	U	25.0	U	24.7	U	25.6

Table 1.11 Results of the Analysis for Sulfate in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

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Sulfate as SO₄²⁻ SW846 3051A +EPA Method 375.4

Sample Number	Method Blank-073109		09-840-9707-01		09-810-7339-04		09-810-8357-08		09-302-1379-05		09-810-7069-03	
Sample Location	Lab		NA		NA		NA		NA		NA	
Percent Solids	NA		87		89		89		88		89	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfate	U	100000	587000	115000	504000	112000	517000	110000	569000	107000	482000	112000

Table 1.11 (cont) Results of the Analysis for Sulfate in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sulfate as SO₄²⁻ SW846 3051A +EPA Method 375.4

Sample Number	09-304-6226-03		09-810-8235-10		09-810-8236-10		09-810-8036-01		09-810-7639-10		09-810-8213-04	
Sample Location	NA		NA		NA		NA		NA		NA	
Percent Solids	87		86		86		87		86		86	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfate	587000	115000	605000	114000	640000	112000	691000	113000	665000	116000	674000	112000

Table 1.11 Results of the Analysis for Sulfate in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sulfate as SO₄²⁻ SW846 3051A +EPA Method 375.4

Sample Number	09-840-9858-08		09-810-8037-10		09-840-9139-09		09-302-1429-03	
Sample Location	NA		NA		NA		Canada	
Percent Solids	86		89		87		86	
	Result	RL	Result	RL	Result	RL	Result	RL
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Sulfate	663000	112000	574000	110000	632000	111000	617000	114000

Table 1.12 Results of the Analysis for Fluoride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: Ion-Selective Electrode

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Sample Number		09-840-9707-01	09-810-7339-04	09-810-8357-08	09-302-1379-05	09-810-7069-03
Sample Location	Method Blank	NA	NA	NA	NA	NA
Percent Solids		87	89	89	88	89
Analyte	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg
Fluoride	U J 1.00	192 J 5.75	30.1 J 1.10	18.4 J 1.12	43.2 J 1.13	12.2 J 1.12

Table 1.12 (cont) Results of the Analysis for Fluoride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: Ion-Selective Electrode

Sample Number	09-304-6226-03	09-810-8235-10	09-810-8236-10	09-810-8036-01	09-810-7639-10	09-810-8213-04
Sample Location	NA	NA	NA	NA	NA	NA
Percent Solids	87	86	86	87	86	86
Analyte	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg
Fluoride	U J 1.15	54.2 J 1.14	54.6 J 1.16	52.8 J 1.14	52.4 J 1.16	270 J 5.70

Table 1.12 (cont) Results of the Analysis for Fluoride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: Ion-Selective Electrode

Sample Number	09-840-9858-08	09-810-8037-10	09-840-9139-09	09-302-1429-03
Sample Location	NA	NA	NA	Canada
Percent Solids	86	89	87	86
Analyte	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg	Result RL mg/kg mg/kg
Fluoride	103 J 1.15	3.30 J 1.11	10.4 J 1.14	48.8 J 1.16

Table 1.13 Results of the Analysis for Chloride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on "As Is" Received Basis

Method: Modified SM 4500 Cl-/E

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Sample Number Sample Location	09-840-9707-01 NA	09-810-7339-04 NA	09-810-8357-08 NA	09-302-1379-05 NA	09-810-7069-03 NA
	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg
Chloride	110 J 10		72 J 10	72 J 10	44 J 10

Table 1.13 (cont) Results of the Analysis for Chloride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on "As Is" Received Basis

Method: Modified SM 4500 Cl-/E

Sample Number Sample Location	09-304-6226-03 NA	09-810-8235-10 NA	09-810-8236-10 NA	09-810-8036-01 NA	09-810-7639-10 NA
	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg
Chloride	21 J 10		13 J 10	U J 10	22 J 10

Table 1.13 (cont) Results of the Analysis for Chloride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on "As Is" Received Basis

Method: Modified SM 4500 Cl-/E

Sample Number Sample Location	09-810-8213-04 NA	09-840-9858-08 NA	09-810-8037-10 NA	09-840-9139-09 NA	09-302-1428-03 Canada
	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg
Chloride	32 J 10		22 J 10	28 J 10	92 J 10

Table 1.14 Results of the Analysis for pH in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/Modified 9045C

Page 1 of 1

Sample Number	8/4/2009	09-840-9707-01	09-810-7339-04	09-810-8357-08	09-302-1379-05	09-810-7069-03
Sample Location	Method Blank	NA	NA	NA	NA	NA
Percent Solids		87	89	89	88	89
	Result	Result	Result	Result	Result	Result
pH	4.26	6.71	7.84	8.11	8.20	8.31

Table 1.14 (cont) Results of the Analysis for pH in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/Modified 9045C

Sample Number	09-304-6226-03	09-810-8235-10	09-810-8236-10	09-810-8036-01	09-810-7639-10	09-810-8213-04
Sample Location	NA	NA	NA	NA	NA	NA
Percent Solids	87	86	86	87	86	86
	Result	Result	Result	Result	Result	Result
pH	8.59	7.78	7.75	7.03	6.88	7.92

Table 1.14 (cont) Results of the Analysis for pH in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SW846/Modified 9045C

Sample Number	09-840-9858-08	09-810-8037-10	09-840-9139-09	09-302-1429-03
Sample Location	NA	NA	NA	Canada
Percent Solids	86	89	87	86
	Result	Result	Result	Result
pH	8.24	7.24	8.23	6.86

Table 1.15 Results of the Analysis for Loss on Ignition in Gypsum
WA# 0-393 Drywall Investigation

Method: SM 2540G

Page 1 of 1

Sample Number Sample Location	09-840-9707-01 NA	09-810-7339-04 NA	09-810-8357-08 NA	09-302-1379-05 NA	09-810-7069-03 NA
	Result	Result	Result	Result	Result
Average LOI @ 200 °C	18	14	15	17	17
Percent LOI after 8 hours @ 750 °C	20	25	25	23	23

Table 1.15 (cont) Results of the Analysis for Loss on Ignition in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SM 2540G

Sample Number Sample Location	09-304-6226-03 NA	09-810-8235-10 NA	09-810-8236-10 NA	09-810-8036-01 NA	09-810-7639-10 NA
Analyte	Result	Result	Result	Result	Result
Average LOI @ 200 °C	19	19	19	18	19
Percent LOI after 8 hours @ 750 °C	21	21	20	20	22

Table 1.15 (cont) Results of the Analysis for Loss on Ignition in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Method: SM 2540G

Sample Number Sample Location	09-810-8213-04 NA	09-840-9858-08 NA	09-810-8037-10 NA	09-840-9139-09 NA	09-302-1429-03 Canada
Analyte	Result	Result	Result	Result	Result
Average LOI @ 200 °C	20	18	16	18	20
Percent LOI after 8 hours @ 750 °C	21	22	18	19	21



Analytical Services, Inc.

35 Hutchinson Road ▼ Allentown, NJ 08501-1415 ▼ Tel: (609) 758-5700 ▼ Fax: (609) 758-5708

August 16, 2009

Mr. Lawrence W. Martin
Lockheed Martin – REAC
Woodbridge Avenue
Edison, NJ 08837
e-mail: Lawrence.w.martin@lmco.com

Ref: XRD tests of Gypsum Samples (#1 - #15)

Dear Mr. Martin:

As you requested, I have run XRD analyses on the 15 submitted samples itemized above, which were received as coarse powders and identified only as #1 - #15. Before testing, each sample was lightly ground by hand with a mortar and pestle to break up the agglomerates. The fine powders were then placed into a standard sample holder and loaded into a Panalytical X'Pert MPD Pro diffractometer using Cu radiation at 45KV/40mA. Scans were run over the range of 10° - 80° with a step size of 0.0158° and a counting time of 500 seconds per step.

Once the diffraction pattern had been obtained, I identified the phases with the aid of the Powder Diffraction File (PDF) published by the International Centre for Diffraction Data. This database is the world's most comprehensive source of diffraction data with over 650,000 entries.

The experimental patterns are shown in Figures 1-12 at full scale along with the stick patterns for the identified phases. A total of seven phases were found – $\text{Ca}(\text{SO}_4)(\text{H}_2\text{O})_2$ (Gypsum); CaCO_3 (Calcite); $\text{CaMg}(\text{CO}_3)$ (Dolomite); SiO_2 (Quartz); CaSO_4 (Anhydrite); $\text{Ca}(\text{SO}_4)(\text{H}_2\text{O})_{0.5}$ (Bassanite); and $\text{K}(\text{Al},\text{Fe})(\text{Al},\text{Si}_3\text{O}_{10})(\text{OH})_2$ (Muscovite). The confidence level in the first six phases is very high and I have very little doubt about their identification. But the seventh phase (Muscovite) is very weak and many of its lines are obscured by the other phases. Therefore, I have less confidence in this phase.

A quantitative analysis was then run using a Rietveld refinement, which is considered the gold standard for quantitative analysis. The results (in weight percent) are summarized in the attached table.

U299-01

I hope that these data will be of use to you in your project. Please feel free to call me at (609) 758-5700 (Lab) or (609) 658-0810 (Cell) if you have any questions.

Sincerely,

William E. Mayo

William E. Mayo, Ph.D.
Chief Scientist

U299-02

0393-DAR-091109

050

Table I
Quantitative Phase Analysis of Gypsum Samples #1 - #12

Weight Fraction (%)							
	Ca(SO ₄)(H ₂ O) ₂ (Gypsum)	CaCO ₃ (Calcite)	CaMg(CO ₃) (Dolomite)	SiO ₂ (Quartz)	CaSO ₄ (Anhydrite)	Ca(SO ₄)(H ₂ O) _{0.5} (Bassanite)	K(Al,Fe)(Al ₃ Si ₃ O ₁₀)(OH) ₂ (Muscovite)
#1	90.8(5)			2.4(1)	2.6(1)	4.2(1)	
#2	74.7(5)	6.0(1)	12.2(2)	1.3(1)	0.9(1)	4.5(1)	0.5(1)
#3	76.9(4)	3.9(1)	12.8(1)	0.8(1)	1.0(1)	2.8(1)	1.7(1)
#4	82.6(4)	5.4(1)	5.2(1)	0.5(1)	0.6(1)	4.0(1)	1.8(1)
#5	78.7(4)	10.3(1)	5.0(2)	1.0(1)	0.6(1)	2.2(1)	2.2(1)
#6	90.0(4)	4.5(1)		0.5(1)	0.5(1)	4.4(1)	
#7	94.3(4)	0.9(1)	0.8(1)	0.9(1)	0.2(1)	2.9(1)	
#8	96.1(5)		0.3(1)	0.9(1)	0.4(1)	2.3(1)	
#9	87.2(4)		0.7(1)		1.8(1)	10.3(1)	
#10	93.5(4)	2.0(1)		0.3(1)	0.3(1)	4.0(1)	
#11	96.8(4)				0.3(1)	3.0(1)	
#12	91.7(6)	1.3(1)		0.2(1)	1.0(1)	4.2(1)	1.5(1)
#13	85.6(5)	0.3(1)		5.3(1)	2.7(1)	6.1(1)	
#14	91.1(5)			2.1(1)	2.2(1)	4.6(1)	
#15	92.9(5)			2.5(1)	0.4(1)	3.4(1)	0.9(1)
Note: The number in parentheses is the estimated standard deviation. For example, 77.5(6) represents 77.5 ± 0.6%							

U299-03

Table 2.1 Results of the MS/MSD Analysis for VOC in Gypsum
WA# 0-393 Drywall Investigation
Based on Dry Weight

Sample No. : 09-810-7339

Analyte	Sample Conc. µg/kg	MS/MSD Spike Added µg/kg	MS Conc. µg/kg	MS % Recovery		MSD Conc. µg/kg	MSD % Recovery	RPD	QC Limits	
									RPD	% Recovery
1,1-Dichloroethene	U	112.4	81.2	72		74.0	66	9	22	59 - 172
Benzene	U	112.4	76.7	68		70.8	63	8	21	66 - 142
Trichloroethene	U	112.4	66.7	59	*	63.6	57	5	24	62 - 137
Toluene	U	112.4	69.3	62		65.6	58	5	21	59 - 139
Chlorobenzene	U	112.4	65.3	58	*	60.9	54	7	21	60 - 133

Sample No. : 09-840-9707

Analyte	Sample Conc. µg/kg	MS/MSD Spike Added µg/kg	MS Conc. µg/kg	MS % Recovery		MSD Conc. µg/kg	MSD % Recovery	RPD	QC Limits	
									RPD	% Recovery
1,1-Dichloroethene	U	114.9	70.1	61		70.8	62	1	22	59 - 172
Benzene	U	114.9	65.9	57	*	67.8	59	3	21	66 - 142
Trichloroethene	U	114.9	58.5	51	*	60.8	53	4	24	62 - 137
Toluene	U	114.9	61.8	54	*	63.6	55	3	21	59 - 139
Chlorobenzene	U	114.9	58.0	50	*	59.6	52	3	21	60 - 133

Table 2.2 Results of the LCS Analysis for VOC in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

Sample ID: LCS CS 072009

Analyte	LCS Spike Added µg/Kg	LCS Conc. µg/Kg	LCS % Recovery	QC Limits % Recovery
Dichlorodifluoromethane	50.0	38.6	77	15 - 108
Chloromethane	50.0	45.6	91	55 - 109
Vinyl Chloride	50.0	59.8	120	67 - 150
Bromomethane	50.0	51.8	104	48 - 133
Chloroethane	50.0	50.0	100	68 - 125
Trichlorofluoromethane	50.0	48.4	97	63 - 154
Acetone	50.0	77.9	156	40 - 334
1,1-Dichloroethene	50.0	48.9	98	59 - 161
Methylene Chloride	50.0	48.2	96	66 - 133
Carbon Disulfide	50.0	45.0	90	52 - 126
Methyl-t-butyl Ether	50.0	44.0	88	63 - 122
trans-1,2-Dichloroethene	50.0	48.9	98	74 - 132
1,1-Dichloroethane	50.0	48.3	97	74 - 133
2-Butanone	50.0	66.8	134	51 - 249
2,2-Dichloropropane	50.0	44.4	89	72 - 134
cis-1,2-Dichloroethene	50.0	47.1	94	74 - 125
Chloroform	50.0	48.6	97	79 - 129
1,1-Dichloropropene	50.0	43.9	88	75 - 128
1,2-Dichloroethane	50.0	47.6	95	80 - 123
1,1,1-Trichloroethane	50.0	43.5	87	81 - 120
Carbon Tetrachloride	50.0	44.3	89	81 - 124
Benzene	50.0	47.0	94	79 - 124
Trichloroethene	50.0	45.1	90	80 - 118
1,2-Dichloropropane	50.0	46.5	93	77 - 120
Bromodichloromethane	50.0	45.0	90	76 - 116
Dibromomethane	50.0	46.7	93	73 - 126
cis-1,3-Dichloropropene	50.0	43.1	86	76 - 124
trans-1,3-Dichloropropene	50.0	46.0	92	80 - 133
1,1,2-Trichloroethane	50.0	46.8	94	76 - 123
1,3-Dichloropropane	50.0	46.8	94	76 - 121
Dibromochloromethane	50.0	43.1	86	75 - 120
1,2-Dibromoethane	50.0	46.7	93	74 - 124
Bromoform	50.0	41.1	82	69 - 124
4-Methyl-2-Pentanone	50.0	40.5	81	67 - 134
Toluene	50.0	45.8	92	82 - 125
2-Hexanone	50.0	56.8	114	63 - 211
Tetrachloroethene	50.0	43.3	87	78 - 129
Chlorobenzene	50.0	46.3	93	81 - 125
1,1,1,2-Tetrachloroethane	50.0	46.5	93	82 - 125
Ethylbenzene	50.0	45.2	90	82 - 125
p&m-Xylene	100	90.4	90	22 - 167
o-Xylene	50.0	47.3	95	83 - 128
Styrene	50.0	44.5	89	80 - 123
Isopropylbenzene	50.0	45.7	91	89 - 133
1,1,2,2-Tetrachloroethane	50.0	47.1	94	74 - 129
1,2,3-Trichloropropane	50.0	46.4	93	74 - 129
n-Propylbenzene	50.0	45.1	90	79 - 130
Bromobenzene	50.0	45.7	91	79 - 123
1,3,5-Trimethylbenzene	50.0	45.6	91	83 - 129
2-Chlorotoluene	50.0	46.2	92	81 - 128
4-Chlorotoluene	50.0	43.8	88	71 - 133
tert-Butylbenzene	50.0	46.6	93	84 - 126
1,2,4-Trimethylbenzene	50.0	44.2	88	79 - 126
sec-Butylbenzene	50.0	46.1	92	83 - 130
p-Isopropyltoluene	50.0	42.7	85	80 - 131
1,3-Dichlorobenzene	50.0	44.7	89	75 - 131
1,4-Dichlorobenzene	50.0	44.8	90	75 - 132
n-Butylbenzene	50.0	41.1	82	72 - 135
1,2-Dichlorobenzene	50.0	45.1	92	78 - 128
1,2-Dibromo-3-chloropropane	50.0	43.8	88	66 - 119
1,2,4-Trichlorobenzene	50.0	38.2	76	59 - 141
Hexachlorobutadiene	50.0	39.3	79	70 - 126
Naphthalene	50.0	43.0	86	56 - 131
1,2,3-Trichlorobenzene	50.0	41.7	83	66 - 130

* indicates out of the criteria

Table 2.3 Results of the MS/MSD Analysis for BNA in Gypsum
WA# 0-393 Drywall Investigation
Based on Dry Weight

REAC SOP# 1805

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Sample Number: 09-840-9707-01

Analyte	Sample Conc. µg/Kg	MS/MSD Spike Added µg/Kg	MS Conc. µg/Kg	MS % Recovery	MSD Conc. µg/Kg	MSD % Recovery	RPD	QC LIMITS	
								RPD	% Recovery
Phenol	U	3820	2710	71	2300	60	16	35	26 - 90
2-Chlorophenol	U	3820	2750	72	2320	61	17	50	25 - 102
1,4-Dichlorobenzene	U	1910	1370	72	1130	59	19	27	28 - 104
N-Nitroso-di-n-propylamine	U	1910	1340	70	1100	58	20	38	41 - 126
1,2,4-Trichlorobenzene	U	1910	1510	79	1230	64	20	23	38 - 107
4-Chloro-3-methylphenol	U	3820	2770	73	2260	59	20	33	26 - 103
Acenaphthene	U	1910	1550	81	1270	66	20	19	31 - 137
4-Nitrophenol	U	3820	2800	73	2360	62	17	50	11 - 114
2,4-Dinitrotoluene	U	1910	1420	75	1140	60	22	47	28 - 89
Pentachlorophenol	U	3820	3170	83	2580	68	20	47	17 - 109
Pyrene	U	1910	1390	73	1240	65	12	36	35 - 142

* QC criteria not established for drywall matrices.

Sample Number: 09-840-9139-09

Analyte	Sample Conc. µg/Kg	MS/MSD Spike Added µg/Kg	MS Conc. µg/Kg	MS % Recovery	MSD Conc. µg/Kg	MSD % Recovery	RPD	QC LIMITS	
								RPD	% Recovery
Phenol	U	3820	2040	53	2020	53	1	35	26 - 90
2-Chlorophenol	U	3820	2030	53	1970	52	3	50	25 - 102
1,4-Dichlorobenzene	U	1910	964	50	916	48	5	27	28 - 104
N-Nitroso-di-n-propylamine	U	1910	985	52	942	49	4	38	41 - 126
1,2,4-Trichlorobenzene	U	1910	1050	55	983	51	7	23	38 - 107
4-Chloro-3-methylphenol	U	3820	2060	54	2080	54	1	33	26 - 103
Acenaphthene	U	1910	1110	58	1090	57	1	19	31 - 137
4-Nitrophenol	U	3820	1750	46	1910	50	9	50	11 - 114
2,4-Dinitrotoluene	U	1910	974	51	991	52	2	47	28 - 89
Pentachlorophenol	U	3820	1740	46	1560	41	11	47	17 - 109
Pyrene	U	1910	1050	55	1190	62	12	36	35 - 142

* QC criteria not established for drywall matrices.

Table 2.4 Results of the LCS Analysis for BNA in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

LCS 0900179-BS1 7/22/09

Analyte	LCS Spike Added µg/kg	LCS Recovered µg/kg	LCS % Recovery	QC Limits % Recovery
Phenol	2000	1590	80	35 - 124
Bis-(2-chloroethyl) ether	2000	1570	79	36 - 120
2-Chlorophenol	2000	1630	82	38 - 120
1,3-Dichlorobenzene	2000	1530	77	30 - 115
1,4-Dichlorobenzene	2000	1550	78	31 - 116
Benzyl alcohol	2000	1590	80	34 - 124
1,2-Dichlorobenzene	2000	1550	78	32 - 119
2-Methylphenol	2000	1500	75	39 - 121
Bis-(2-chloroisopropyl) ether	2000	1310	66	16 - 103
4-Methylphenol	2000	1550	78	39 - 120
N-Nitroso-di-n-propylamine	2000	1500	75	39 - 119
Hexachloroethane	2000	1600	80	29 - 117
Nitrobenzene	2000	1690	85	36 - 122
Isophorone	2000	1240	62	29 - 124
2-Nitrophenol	2000	1720	86	10 - 135
2,4-Dimethylphenol	2000	1780	89	35 - 115
Bis-(2-chloroethoxy) methane	2000	1650	83	40 - 109
2,4-Dichlorophenol	2000	1700	85	32 - 129
1,2,4-Trichlorobenzene	2000	1730	87	37 - 122
Naphthalene	2000	1890	85	37 - 121
4-Chloroaniline	2000	717	36	10 - 110
Hexachlorobutadiene	2000	1730	87	36 - 117
4-Chloro-3-methylphenol	2000	1600	80	42 - 123
2-Methylnaphthalene	2000	1620	81	39 - 118
Hexachlorocyclopentadiene	2000	1660	83	17 - 122
2,4,6-Trichlorophenol	2000	1780	88	10 - 159
2,4,5-Trichlorophenol	2000	1690	85	10 - 155
2-Chloronaphthalene	2000	1750	88	41 - 129
2-Nitroaniline	2000	1560	78	41 - 129
Dimethylphthalate	2000	1610	81	46 - 130
Acenaphthylene	2000	1680	84	41 - 124
2,6-Dinitrotoluene	2000	1650	83	38 - 139
3-Nitroaniline	2000	1340	67	39 - 125
Acenaphthene	2000	1670	84	43 - 126
2,4-Dinitrophenol	2000	368	18	10 - 128
4-Nitrophenol	2000	1320	66	29 - 138
Dibenzofuran	2000	1680	84	43 - 128
2,4-Dinitrotoluene	2000	1470	74	46 - 127
Diethylphthalate	2000	1590	80	43 - 127
4-Chlorophenyl-phenylether	2000	1670	84	47 - 128
Fluorene	2000	1630	82	47 - 125
4-Nitroaniline	2000	1280	64	44 - 128
4,6-Dinitro-2-methylphenol	2000	599	30	10 - 139
N-Nitrosodiphenylamine	2000	1830	92	43 - 134
4-Bromophenyl-phenylether	2000	1930	97	49 - 130
Hexachlorobenzene	2000	1890	95	51 - 128
Pentachlorophenol	2000	1150	58	10 - 154
Phenanthrene	2000	1700	85	50 - 127
Anthracene	2000	1740	87	51 - 125
Carbazole	2000	1640	82	56 - 120
Di-n-butylphthalate	2000	1810	91	59 - 130
Fluoranthene	2000	1550	78	52 - 131
Pyrene	2000	1530	77	58 - 122
Butylbenzylphthalate	2000	1980	99	56 - 137
Benzo(a)anthracene	2000	1850	93	59 - 131
3,3'-Dichlorobenzidine	2000	1450	73	37 - 131
Chrysene	2000	1850	93	66 - 127
Bis-(2-ethylhexyl) phthalate	2000	1930	97	58 - 136
Di-n-octylphthalate	2000	2070	104	45 - 156
Benzo(b)fluoranthene	2000	1770	89	50 - 145
Benzo(k)fluoranthene	2000	1960	98	60 - 139
Benzo(a)pyrene	2000	2090	105	56 - 146
Indeno(1,2,3-cd)pyrene	2000	1800	90	55 - 143
Dibenzo(a,h)anthracene	2000	1810	91	45 - 145
Benzo(g,h,i)perylene	2000	1800	90	67 - 119

*Indicates out of the criteria

Table 2.5 Results of the MS/MSD Analysis for BNA in Paper
WA# 0-383 Drywall Investigation
Based on Wet Weight

REAC SOP# 1805

Page 1 of 1

Sample Number: 09-810-7339-04

Analyte	Sample Conc. µg/Kg	MS/MSD Spike Added µg/Kg	MS Conc. µg/Kg	MS % Recovery	MSD Conc. µg/Kg	MSD % Recovery	RPD	QC LIMITS	
								RPD	% Recovery
Phenol	U	20000	10700	53	10600	52	2	36	26 - 90
2-Chlorophenol	U	20000	10400	52	10600	53	2	50	25 - 102
1,4-Dichlorobenzene	U	10000	4650	47	4870	48	5	27	28 - 104
N-Nitroso-di-n-propylamine	U	10000	4940	49	5160	52	5	38	41 - 128
1,2,4-Trichlorobenzene	U	10000	5660	57	6210	62	9	23	38 - 107
4-Chloro-3-methylphenol	U	20000	14000	70	12300	62	13	33	26 - 103
Acenaphthene	U	10000	6670	67	6510	65	3	19	31 - 137
4-Nitrophenol	U	20000	14700	73	12200	61	18	50	11 - 114
2,4-Dinitrotoluene	U	10000	7470	75	6770	68	10	47	28 - 89
Pentachlorophenol	U	20000	15500	78	14900	74	4	47	17 - 109
Pyrene	U	10000	8030	80	7080	71	13	36	35 - 142

Sample Number: 09-840-9858-08

Analyte	Sample Conc. µg/Kg	MS/MSD Spike Added µg/Kg	MS Conc. µg/Kg	MS % Recovery	MSD Conc. µg/Kg	MSD % Recovery	RPD	QC LIMITS	
								RPD	% Recovery
Phenol	U	20000	12500	63	14100	71	12	35	26 - 90
2-Chlorophenol	U	20000	12300	62	13600	68	10	50	25 - 102
1,4-Dichlorobenzene	U	10000	5000	50	5270	53	5	27	28 - 104
N-Nitroso-di-n-propylamine	U	10000	5520	55	6350	64	14	38	41 - 126
1,2,4-Trichlorobenzene	U	10000	6020	60	6450	64	7	23	38 - 107
4-Chloro-3-methylphenol	U	20000	14700	73	17100	85	15	33	26 - 103
Acenaphthene	U	10000	6640	66	7800	78	12	19	31 - 137
4-Nitrophenol	U	20000	17400	87	18900	94	8	50	11 - 114
2,4-Dinitrotoluene	U	10000	7370	74	8070	81	9	47	28 - 89
Pentachlorophenol	U	20000	18100	91	18500	93	2	47	17 - 109
Pyrene	U	10000	9440	94	9990	100	6	36	35 - 142

Table 2.6 Results of the LCS Analysis for BNA in Paper
WA# 0-393 Drywall Investigation

Page 1 of 2

LCS 0900206-BS1 7/24/09

Analyte	LCS Spike Added µg/kg	LCS Recovered µg/kg	LCS % Recovery	QC Limits % Recovery
Phenol	12000	8720	73	35 - 124
Bis-(2-chloroethyl) ether	12000	8370	70	36 - 120
2-Chlorophenol	12000	8960	75	38 - 120
1,3-Dichlorobenzene	12000	8610	72	30 - 115
1,4-Dichlorobenzene	12000	8760	73	31 - 116
Benzyl alcohol	12000	8790	73	34 - 124
1,2-Dichlorobenzene	12000	8730	73	32 - 119
2-Methylphenol	12000	8220	69	39 - 121
Bis-(2-chloroisopropyl) ether	12000	6750	56	16 - 103
4-Methylphenol	12000	8610	72	39 - 120
N-Nitroso-di-n-propylamine	12000	8230	69	39 - 119
Hexachloroethane	12000	8660	72	29 - 117
Nitrobenzene	12000	8930	74	36 - 122
Isophorone	12000	6520	54	29 - 124
2-Nitrophenol	12000	9250	77	10 - 135
2,4-Dimethylphenol	12000	9710	81	35 - 115
Bis-(2-chloroethoxy) methane	12000	8790	73	40 - 109
2,4-Dichlorophenol	12000	9850	82	32 - 129
1,2,4-Trichlorobenzene	12000	9630	80	37 - 122
Naphthalene	12000	9090	76	37 - 121
4-Chloroaniline	12000	3930	33	10 - 110
Hexachlorobutadiene	12000	9730	81	36 - 117
4-Chloro-3-methylphenol	12000	9220	77	42 - 123
2-Methylnaphthalene	12000	8980	75	39 - 118
Hexachlorocyclopentadiene	12000	7500	63	17 - 122
2,4,6-Trichlorophenol	12000	8950	75	10 - 159
2,4,5-Trichlorophenol	12000	9220	77	10 - 155
2-Chloronaphthalene	12000	9410	78	41 - 129
2-Nitroaniline	12000	8460	71	41 - 129
Dimethylphthalate	12000	9210	77	46 - 130
Acenaphthylene	12000	8930	74	41 - 124
2,6-Dinitrotoluene	12000	9590	80	38 - 139
3-Nitroaniline	12000	7630	64	39 - 125
Acenaphthene	12000	8600	74	43 - 126
2,4-Dinitrophenol	12000	2820	24	10 - 128
4-Nitrophenol	12000	7810	65	29 - 138
Dibenzofuran	12000	9070	76	43 - 128
2,4-Dinitrotoluene	12000	9050	75	46 - 127
Diethylphthalate	12000	9180	77	43 - 127
4-Chlorophenyl-phenylether	12000	9240	77	47 - 128
Fluorene	12000	9140	76	47 - 125
4-Nitroaniline	12000	7690	64	44 - 128
4,6-Dinitro-2-methylphenol	12000	5390	45	10 - 139
N-Nitrosodiphenylamine	12000	9680	81	43 - 134
4-Bromophenyl-phenylether	12000	10900	91	49 - 130
Hexachlorobenzene	12000	10500	88	51 - 128
Pentachlorophenol	12000	4370	36	10 - 154
Phenanthrene	12000	9870	82	50 - 127
Anthracene	12000	10100	84	51 - 125
Carbazole	12000	9710	81	56 - 120
Di-n-butylphthalate	12000	10400	87	59 - 130
Fluoranthene	12000	9590	80	52 - 131
Pyrene	12000	9540	80	58 - 122
Butylbenzylphthalate	12000	10400	87	56 - 137
Benzo(a)anthracene	12000	10200	85	59 - 131
3,3'-Dichlorobenzidine	12000	7600	63	37 - 131
Chrysene	12000	10300	86	66 - 127
Bis-(2-ethylhexyl) phthalate	12000	9970	83	58 - 136
Di-n-octylphthalate	12000	11900	99	45 - 156
Benzo(b)fluoranthene	12000	10700	89	50 - 145
Benzo(k)fluoranthene	12000	11300	94	60 - 139
Benzo(a)pyrene	12000	12200	102	58 - 146
Indeno(1,2,3-cd)pyrene	12000	9880	82	55 - 143
Dibenzo(a,h)anthracene	12000	9840	82	45 - 145
Benzo(g,h,i)perylene	12000	9760	81	67 - 119

*Indicates out of the criteria

Table 2.6 (cont) Results of the LCS Analysis for BNA in Paper
WA# 0-393 Drywall Investigation

Page 2 of 2

LCS 0900193-BS1 8/18/09

Analyte	LCS Spike Added µg/kg	LCS Recovered µg/kg	LCS % Recovery	QC Limits % Recovery
Phenol	12000	10600	88	35 - 124
Bis-(2-chloroethyl) ether	12000	9170	76	36 - 120
2-Chlorophenol	12000	10900	91	38 - 120
1,3-Dichlorobenzene	12000	9760	81	30 - 115
1,4-Dichlorobenzene	12000	10000	83	31 - 116
Benzyl alcohol	12000	10900	91	34 - 124
1,2-Dichlorobenzene	12000	9930	83	32 - 119
2-Methylphenol	12000	10300	86	39 - 121
Bis-(2-chloroisopropyl) ether	12000	7120	59	16 - 103
4-Methylphenol	12000	11000	92	39 - 120
N-Nitroso-di-n-propylamine	12000	9740	81	39 - 119
Hexachloroethane	12000	10100	84	29 - 117
Nitrobenzene	12000	10300	86	36 - 122
Isophorone	12000	7120	59	29 - 124
2-Nitrophenol	12000	11500	96	10 - 135
2,4-Dimethylphenol	12000	12500	104	35 - 115
Bis-(2-chloroethoxy) methane	12000	10400	87	40 - 109
2,4-Dichlorophenol	12000	12300	103	32 - 129
1,2,4-Trichlorobenzene	12000	10700	89	37 - 122
Naphthalene	12000	10900	91	37 - 121
4-Chloroaniline	12000	4470	37	10 - 110
Hexachlorobutadiene	12000	10600	88	36 - 117
4-Chloro-3-methylphenol	12000	12100	101	42 - 123
2-Methylnaphthalene	12000	11100	93	39 - 118
Hexachlorocyclopentadiene	12000	8440	70	17 - 122
2,4,6-Trichlorophenol	12000	12300	103	10 - 159
2,4,5-Trichlorophenol	12000	12000	100	10 - 155
2-Chloronaphthalene	12000	11400	95	41 - 129
2-Nitroaniline	12000	10800	90	41 - 129
Dimethylphthalate	12000	12100	101	46 - 130
Acenaphthylene	12000	10900	91	41 - 124
2,6-Dinitrotoluene	12000	12500	104	38 - 139
3-Nitroaniline	12000	10200	85	39 - 125
Acenaphthene	12000	11000	92	43 - 128
2,4-Dinitrophenol	12000	3210	27	10 - 128
4-Nitrophenol	12000	12000	100	29 - 138
Dibenzofuran	12000	11400	95	43 - 128
2,4-Dinitrotoluene	12000	12200	102	46 - 127
Diethylphthalate	12000	12300	103	43 - 127
4-Chlorophenyl-phenylether	12000	11500	96	47 - 128
Fluorene	12000	11800	98	47 - 125
4-Nitroaniline	12000	10700	89	44 - 128
4,6-Dinitro-2-methylphenol	12000	7080	59	10 - 139
N-Nitrosodiphenylamine	12000	12300	103	43 - 134
4-Bromophenyl-phenylether	12000	12700	106	49 - 130
Hexachlorobenzene	12000	12400	103	51 - 128
Pentachlorophenol	12000	9970	83	10 - 154
Phenanthrene	12000	12400	103	50 - 127
Anthracene	12000	12600	105	51 - 125
Carbazole	12000	13200	110	56 - 120
Di-n-butylphthalate	12000	14800	123	59 - 130
Fluoranthene	12000	12800	107	52 - 131
Pyrene	12000	12900	108	58 - 122
Butylbenzylphthalate	12000	15700	131	56 - 137
Benzo(a)anthracene	12000	13500	113	59 - 131
3,3'-Dichlorobenzidine	12000	10400	87	37 - 131
Chrysene	12000	13400	112	66 - 127
Bis-(2-ethylhexyl) phthalate	12000	15000	125	58 - 136
Di-n-octylphthalate	12000	17700	148	45 - 156
Benzo(b)fluoranthene	12000	14400	120	50 - 145
Benzo(k)fluoranthene	12000	14200	118	60 - 139
Benzo(a)pyrene	12000	16000	133	56 - 146
Indeno(1,2,3-cd)pyrene	12000	13300	111	55 - 143
Dibenzo(a,h)anthracene	12000	13400	112	45 - 145
Benzo(g,h,i)perylene	12000	13100	109	67 - 119

*Indicates out of the criteria

Table 2.7 Results of the MS/MSD Analysis for Metals in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Sample No. 09-810-7639-10

Page 1 of 1

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	Recommended QC Limits % Recovery	RPD
Aluminum	230	233	512	121	224	518	129	1	75-125	20
Antimony	U	46.5	47.4	102	44.7	44.9	100	5	0-130	20
Arsenic	U	46.5	48.4	104	44.7	46.0	103	5	75-125	20
Barium	5.74	46.5	53.7	103	44.7	50.5	100	6	75-125	20
Beryllium	U	46.5	45.7	98	44.7	43.2	97	6	75-125	20
Cadmium	U	46.5	44.2	95	44.7	41.9	94	5	75-125	20
Calcium	245000	233	262000	NC	224	249000	NC	5	75-125	20
Chromium	2.68	46.5	47.9	97	44.7	45.6	96	5	75-125	20
Cobalt	U	46.5	44.9	97	44.7	42.5	95	5	75-125	20
Copper	1.97	46.5	51.5	107	44.7	48.5	104	6	75-125	20
Iron2714	757	233	1010	109	224	1010	113	0	75-125	20
Lead	U	46.5	45.6	98	44.7	43.0	96	6	75-125	20
Magnesium	1720	233	1970	NC	224	1910	NC	3	75-125	20
Manganese	14.1	46.5	61.1	101	44.7	57.5	97	6	75-125	20
Mercury	0.305	0.447	0.740	97	0.439	0.742	100	0	75-125	20
Nickel	1.86	46.5	47.2	98	44.7	44.7	98	5	75-125	20
Potassium	78.5	233	333	109	224	324	110	3	75-125	20
Selenium	4.93	23.3	29.5	105	22.4	28.0	103	5	75-125	20
Silver	U	46.5	47.7	103	44.7	44.8	100	6	75-125	20
Sodium	162	930	1120	103	894	1050	99	6	75-125	20
Strontium	185	46.5	229	NC	44.7	214	NC	7	75-125	20
Thallium	U	23.3	19.4	83	22.4	18.2	81	6	75-125	20
Vanadium	3.60	46.5	49.5	99	44.7	46.9	97	5	75-125	20
Zinc	6.53	46.5	51.5	97	44.7	49.8	97	3	75-125	20

Sample No. 09-840-9139-09

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	Recommended QC Limits % Recovery	RPD
Aluminum	1330	235	1590	NC	235	1580	NC	1	75-125	20
Antimony	U	46.9	46.2	99	46.9	45.9	98	1	0-130	20
Arsenic	5.70	46.9	54.4	104	46.9	54.1	103	1	75-125	20
Barium	20.7	46.9	67.2	99	46.9	68.6	102	2	75-125	20
Beryllium	U	46.9	46.5	99	46.9	46.3	99	0	75-125	20
Cadmium	U	46.9	44.7	95	46.9	44.5	95	0	75-125	20
Calcium	216000	235	203000	NC	235	242000	NC	18	75-125	20
Chromium	1.09	46.9	46.5	97	46.9	46.1	96	1	75-125	20
Cobalt	U	46.9	45.4	97	46.9	45.2	96	0	75-125	20
Copper	1.12	46.9	51.0	108	46.9	50.3	105	1	75-125	20
Iron2714	1020	235	1270	NC	235	1250	NC	2	75-125	20
Lead	U	46.9	45.1	96	46.9	45.4	97	1	75-125	20
Magnesium	6590	235	6920	NC	235	6860	NC	1	75-125	20
Manganese	24.9	46.9	71.3	99	46.9	71.7	100	1	75-125	20
Mercury	U	0.469	0.443	94	0.469	0.432	92	3	75-125	20
Nickel	0.894	46.9	46.7	98	46.9	46.5	97	0	75-125	20
Potassium	336	235	582	105	235	584	106	0	75-125	20
Selenium	U	23.5	24.7	105	23.5	24.9	106	1	75-125	20
Silver	U	46.9	47.9	102	46.9	47.9	102	0	75-125	20
Sodium	239	938	1160	98	938	1190	101	3	75-125	20
Strontium	2890	46.9	2700	NC	46.9	3210	NC	17	75-125	20
Thallium	U	23.5	19.8	84	23.5	18.9	80	5	75-125	20
Vanadium	2.15	46.9	48.1	98	46.9	47.7	97	1	75-125	20
Zinc	1.91	46.9	48.2	99	46.9	47.6	97	1	75-125	20

Table 2.8 Results of the LCS Analysis for Metals in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

LCS Standard: ERA Lot No. D064-540-073109
Date Analyzed: 08/05/2009

Mercury: ERA Lot No. D064-540-073109
Date Analyzed: 07/31/09

Analyte	Conc. Recovered mg/kg	Certified Value mg/kg	% Recovery	PALs mg/kg
Aluminum	7790	11000	71	6130 - 15800
Antimony	156	81.5	191	D.L. - 166
Arsenic	140	158	89	129 - 187
Barium	335	348	96	281 - 415
Beryllium	103	106	97	86.5 - 126
Cadmium	182	187	97	154 - 220
Calcium	9020	9650	93	7800 - 11500
Chromium	91.8	89.5	103	70.5 - 108
Cobalt	277	277	100	224 - 330
Copper	128	129	99	108 - 151
Iron	15400	18600	83	9380 - 27700
Lead	152	172.0	88	136 - 207
Magnesium	4500	5030	89	3960 - 6100
Manganese	596	633	94	518 - 747
Mercury	7.59	7.34	103	5.26 - 9.41
Nickel	101	99	102	80.4 - 118
Potassium	3040	4010	76	2950 - 5070
Selenium	137	148	93	116 - 179
Silver	62.2	66	94	43.7 - 88.2
Sodium	763	883	86	651 - 1110
Strontium	172	176	98	143 - 209
Thallium	236	268	88	208 - 328
Vanadium	184	194	95	154 - 233
Zinc	374	394	95	317 - 470

PAL - Performance Acceptance Limits

Table 2.10 Results of the LCS/LCSD Analysis for Sulfate in Gypsum
WA# 0-393 Drywall Investigation

Sample ID: LCS CS 072009

Page 1 of 1

Analyte	LCS Spike Added µg/Kg	LCS Conc. µg/Kg	LCS % Recovery	LCS Spike Added µg/Kg	LCS Conc. µg/Kg	LCS % Recovery	%RPD	QC Limits	
								% Recovery	RPD
Sulfate	558000	511000	92	558000	551000	99	0	75-125	20

LCS Standard: Calcium Sulfate

* True value based on molecular weight of $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ (172 gms)

Table 2.11 Results of the Post Digestion Spike for Sulfate in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

Analyte: Sulfate
Date Analyzed: 08/10/09

Sample	Sample Result mg/L	PDS Spike Added mg/L	PDS Result mg/L	PDS % Recovery	QC Limits %Recovery
09-810-7639-10x100	28.6	10.0	38.9	103	75-125
09-302-1429-03x100	27.1	10.0	35.8	87	75-125

PDS Preparation: 25 ml aliquote of designated sample (diluted x100) spiked with 0.25 ml of 1000 ppm sulfate standard

Table 2.12 Results of the MS/MSD Analysis for Acid-Soluble Sulfide in Gypsum
WAF 0-393 Drywall Investigation
Results Based on Dry Weight

Page 1 of 1

Sample Number 09-810-7639-10

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
									% Recovery	RPD
Sulfide	U	308	256	86	309	256	83	4	75-125	20

Sample Number 09-840-9139-09

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
									% Recovery	RPD
Sulfide	U	309	271	88	309	273	88	1	75-125	20

Table 2.13 Results of the LCS Analysis for Acid-Soluble Sulfide in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

Date Analyzed: 08/13/09

Sample	Conc. Recovered mg	LCS Value mg	% Recovery	QC Limits
				% Recovery
LCS	12.4	15.0	82	75-125

Table 2.14 Results of the Reporting Limit Standard for Acid-Soluble Sulfide in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

Date Analyzed: 8/17/2009

Sample	Conc. Recovered mg	LCS Value mg	% Recovery
RL	0.341	0.400	85
RL dup	0.301	0.400	75

Table 2.16 Results of the MS/MSD Analysis for Fluoride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on Dry Weight

Page 1 of 1

Sample Number 09-810-7639-10

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery		MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
										% Recovery	RPD
Fluoride	52.4	23.3	66.3	60	*	23.3	67.4	64	*	2	75-125 20

Sample Number 09-302-1429-03

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery		MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
										% Recovery	RPD
Fluoride	48.8	23	62.4	59	*	23	61.6	56	*	1	75-125 20

Table 2.17 Results of the LCS Analysis for Fluoride in Gypsum
WA# 0-393 Drywall Investigation

Page 1 of 1

LCS Standard: ERA 2nd source
Date Analyzed: 07/29/2009

Analyte	Conc. Recovered mg/kg	True Value mg/kg	% Recovery	Recommended QC Limits % Recovery
Fluoride	18.0	20.0	90	75 - 125
PAL - Performance Acceptance Limits				

Table 2.18 Results of the MS/MSD Analysis for Chloride in Gypsum
WA# 0-393 Drywall Investigation
Results Based on "As Is" Weight

Sample Number 09-810-7639-10

Page 1 of 1

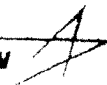
Analyte	Sample Result mg/kg	MS/MSD Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
								% Recovery	RPD
Chloride	6.5	5.0	10.9	88	10.9	88	0	80-120	25

Sample No. 09-840-9858-08

Analyte	Sample Result mg/kg	MS/MSD Spike Added mg/kg	MS Result mg/kg	MS % Recovery	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits	
								% Recovery	RPD
Chloride	5.7	5	10.5	96	11.4	113	8	80-120	25

Lockheed Martin
Response Engineering Analytical Contract
2890 Woodbridge Avenue Building 209 Annex
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED MARTIN



H&M Analytical Services, Inc.
35 Hutchinson Road
Arlentown, NJ 08501

Attn: Walter F. Helfrecht

10 August 2009

As per Lockheed Martin / REAC Credit Card ending -1884, name on card Benjamin P. Beauchaine, exp. 06/12, for Project 393. Please analyze samples according to the following parameters.

Analysis/Method	Matrix	# of samples
XRD Quantitative Phase ID	Gypsum	15

The samples arrived at your laboratory on August 10th, 2009. All applicable QA/QC (eg: BS/BSD, LCS, Duplicates, and Blanks) **analysis as per method, will be performed on our sample matrix.** Preliminary results with a signed copy of our chain of custody must be sent to REAC within 5 business days after sample receipt. The final data package is due 10 business days after sample receipt. The final data package must include all applicable items on the deliverables checklist.

Please submit all reports concerning this project to Lawrence Martin at (732) 321-4213 or fax to (732) 494-4020 or lawrence.w.martin@lmco.com.

Sincerely,

Vinod Kansal
Analytical Section Leader
Lockheed Martin / REAC Project

Attachments

cc. R. Singhvi
Subcontracting File
393-nonmem\0908\sub\XRD393CON2

V. Kansal
J. Soroka

B. Beauchaine

DELIVERABLES REQUIREMENTS

I. Please be advised that samples are not to be subcontracted to other laboratories without written consent from Lockheed Martin/REAC.

II. Checklists for applicable sample analyses are attached for your use. **Please complete and return checklists along with the data package.**

All other data packages are to include the following (where applicable)

1. Case Narrative
2. Analytical Procedure
3. Chain of Custody
4. Copies of all analysts' notebook and bench sheets.
5. Tabulated sample results (including a per sample method detection limit taking into account dilution, sample weight, extraction volumes, and % solids).
6. Tabulated QA/QC results including QC limits.
7. Calculation sheet(at least one example of the calculation per analyte must be provided)
8. Copies of the standard curve used.
9. Copies of all instrument printout.
10. Copies of all raw data.

III. **Electronic Data Deliverable**

1. Provide electronic deliverable in ExCel or tab delimited file.
2. Electronic compound list should be in the same order as hard copy report.
3. Column headers must be formatted as follows: Samp_No , Location, Matrix, Analyte, Result, Result_Units, Result_Qualifier, Analytical_Method, Reporting_Limit, Reporting_Limit_Units, Analysis, Percent_Solids, WA#, QC_Type, Spike_Amount, Spike_Amount_Units, Date_Analyzed, Result_Type_Code, Percent_Recovery, Percent_Recovery_Limits, RPD, and RPD_Limits

TURN AROUND TIME

The turn around time begins with the date your laboratory takes custody of the samples. If the receipt of the samples is after 10:30AM, the turn-around time will begin on the following day, unless fast turn around is specified in writing.

Project Name: _____
Project Number: 0-343
LM Contact: V. Kense Phone: _____

No: 01809
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

W0# R907008

Sample Identification

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative
01	09-840-9707-01		PR	4/23/09	12	500ml glass jar / NA
02	09-810-9339-04		PR	4/7/09	12	500ml glass jar / NA
03	09-810-8357-08		PR	4/8/09	12	500ml glass jar / NA
04	09-802-1374-05		PR	6/18/09	NA-1	Tedlar bag / NA
05	09-810-7069-03		PR	6/8/09	NA-1 bag	Tedlar bag / NA
06	09-804-6036-01		PR	5/14/09	NA-1 bag	Tedlar bag / NA
07	09-810-5035-10		PR	5/18/09	NA-1 bag	Tedlar bag / NA
08	09-810-8236-10		PR	5/18/09	NA-1 bag	Tedlar bag / NA
09	09-810-8036-01		PR	5/14/09	NA-1 bag	Tedlar bag / NA
10	09-810-7639-10		PR	5/19/09	NA-1 bag	Tedlar bag / NA
11	09-810-8213-04		PR	6/11/09	NA-1 bag	Tedlar bag / NA
12	09-840-4858-08		PR	5/20/09	NA-1 bag	Tedlar bag / NA
13	09-810-8037-10		PR	5/22/09	NA-1 bag	Tedlar bag / NA
14	09-840-9134-09		PR	5/18/09	NA-1 bag	Tedlar bag / NA

Analyses Requested

Some Samples are being analyzed for H5N1
Quota 22 samples
Some Samples are being analyzed for H5N1

Matrix:

- A- Air
- AT- Animal Tissue
- DL- Drum Liquids
- DS- Drum Solids
- GW- Groundwater
- O- Oil
- PR- Product
- PT- Plant Tissue
- PW- Potable Water
- S- Soil
- SD- Sediment
- SL- Sludge
- SW- Surface Water
- TX- TCLP Extract
- W- Water
- X- Other

Special Instructions:

Semi volatile organic compounds formaldehyde, metals, volatile organic compounds, sulfide, water soluble chlorides total organic carbon, pH loss on ignition, alkalinity, sulfate. Also optical microscopic examination. Thank you.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Items/Reason	Relinquished by	Date	Received by	Date	Relinquished by	Items/Reason	Date	Received by	Date	Time
1) Above Analysis	John A. Lee	6/22/09	1 for	7/13/09	10:10	Analysis	RAJ Singh	7/18/09	7/18/09	10:15

03991109

(732) 321-421

EPA Contract # 600-321-3M 7/17/09
EP-C-04-032

Project Name:

Project Number: M-43-4002
LM Contact: V. Kansa Phone: 732-321-4200

No: 02185
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

NO R907008

Sample Identification

* Analyses Requested See below

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	FDIR	TA/ML	* X
05	09-810-7019-03	N/A	X	6/8/09	1	4oz Amber/Dark	✓	✓	✓
06	09-804-6226-03			5/19/09			✓	✓	✓
10	09-810-7621-10			5/19/09			✓	✓	✓
14	09-840-9131-09			5/18/09			✓	✓	✓
07	09-810-8235-10			5/18/09			✓	✓	✓
11	09-810-8213-04			6/11/09			✓	✓	✓
12	09-840-9858-08			5/20/09			✓	✓	✓
09	09-810-8036-01			5/14/09			✓	✓	✓
04	09-802-1371-05			6/18/09			✓	✓	✓
08	09-810-8236-10			5/18/09			✓	✓	✓
13	09-810-8037-10			5/22/09			✓	✓	✓
02	09-810-7354-04	94101		4/17/09			✓	✓	✓
03	09-810-8357-08	94107		4/18/09			✓	✓	✓
01	09-840-9707-01	94103	✓	4/23/09	✓	✓	✓	✓	✓
15	09-302-1424-03	Canada	X	7/11/09	1	4oz Amber/Dark	✓	✓	✓

Matrix: * No Qa/Qc required for FDIR

Special Instructions:

- A - Air
- AT - Animal Tissue
- DL - Drum Liquids
- DS - Drum Solids
- GW - Groundwater
- O - Oil
- PR - Product
- PT - Plant Tissue
- PW - Potable Water
- S - Soil
- SD - Sediment
- SL - Sludge
- SW - Surface Water
- TX - TCLP Extract
- W - Water
- X - Other

* * Sulfate, pH, H₂O Soluble Fluoride, XRF Metals
to be done by REAC Inorganic Lab. Tail metals
includes Strontium.

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

01809, 01718

Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL Analysis's	James Thompson	7/18/09	James Thompson	7/17/09	15:00
ALL VOC	James Thompson	7/20/09	James Thompson	7/20/09	16:05
ALL Analysis's	James Thompson	7/21/09	James Thompson	7/21/09	14:15

CHAIN OF CUSTODY RECORD

Project Name: 4002
Project Number: 4002
LM Contact: V. Kanas Phone: 732-321-4200

EP-C-04-032

No: 07110
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

NO# R907008 Sample Identification

REACH	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
05	09-810-7069-03	N/A	X	6/8/09	1	32oz Jar/Cold 4°C	BNA % Solid TOC
06	09-804-6226-03			5/19/09			
10	09-810-7639-10			↓			
14	09-840-9139-09			5/18/09			
07	09-810-8235-10			↓			
11	09-810-8213-04			6/11/09			
12	09-840-9858-08			5/20/09			
09	09-810-8036-01			5/14/09			
04	09-302-1579-05			6/18/09			
08	09-810-6236-10			5/18/09			
13	09-810-8037-10			5/22/09			
02	09-810-7339-04			4/17/09			
01	09-810-9707-04			4/23/09			
15	09-302-1429-03	Canada	↓	7/11/09			
03	09-810-8357-08	N/A		4/8/09			
		JM 7/9/09					

Matrix:

- PW - Potable Water
- S² - Soil
- SD - Sediment
- SL - Sludge
- SW - Surface Water
- TX - TCLP Extract
- W - Water
- X - Other = Gypsum

* An aliquot in a 40ml vial was generated for TOC Analysis, 1 vial for each sample.

Special Instructions:

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #:

01809, 01718

Item/Reason	Relinquished by	Date	Received by	Date	Time
All Analysis	Jerry Thomas	7/22/09	Jerry Thomas	7/22/09	10:20
All Analysis	Jerry Thomas	7/22/09	Jerry Thomas	7/22/09	10:30
All Analysis	Jerry Thomas	7/31/09	Jerry Thomas	7/31/09	13:50
15 Hic Ar	Jerry Thomas	7/31/09	Jerry Thomas	7/31/09	15:20

CHAIN OF CUSTODY RECORD
Name: _____

LM Contact:

Phone:

No: 01718

Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

Sample Identification

Sample Identification				Analyses Requested																	
REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles																
	04-302-1429-03	Canada	PR	7/11/09	NA-1 bag																
				Container/Preservative Tedlar Bag/NA																	
				Please see special instructions; the same analysis employed (other than formaldehyde) for ATSDR samples of July 7, 2009.																	
<p>Matrix:</p> <table border="0"> <tr> <td>A- Air</td> <td>PW- Potable Water</td> </tr> <tr> <td>AT- Animal Tissue</td> <td>S- Soil</td> </tr> <tr> <td>DL- Drum Liquids</td> <td>SD- Sediment</td> </tr> <tr> <td>DS- Drum Solids</td> <td>SL- Sludge</td> </tr> <tr> <td>GW- Groundwater</td> <td>SW- Surface Water</td> </tr> <tr> <td>O- Oil</td> <td>TX- TCLP Extract</td> </tr> <tr> <td>PR- Product</td> <td>W- Water</td> </tr> <tr> <td>PT- Plant Tissue</td> <td>X- Other</td> </tr> </table> <p>Special Instructions:</p> <p>Semi volatile organic compounds, metals, volatile organic compounds, sulfide, water soluble chlorides, total organic carbon, pH, loss on ignition, alkalinity, sulfate. Also optical, microscopic examination. Thank you.</p>						A- Air	PW- Potable Water	AT- Animal Tissue	S- Soil	DL- Drum Liquids	SD- Sediment	DS- Drum Solids	SL- Sludge	GW- Groundwater	SW- Surface Water	O- Oil	TX- TCLP Extract	PR- Product	W- Water	PT- Plant Tissue	X- Other
						A- Air	PW- Potable Water														
						AT- Animal Tissue	S- Soil														
						DL- Drum Liquids	SD- Sediment														
						DS- Drum Solids	SL- Sludge														
						GW- Groundwater	SW- Surface Water														
						O- Oil	TX- TCLP Extract														
						PR- Product	W- Water														
						PT- Plant Tissue	X- Other														
						<p>Item/Reason Refined/Reason Date Time</p> <p>11 Above Analysis 7/11/09 15:00</p>															
<p>Received by Date Time</p> <p>7/11/09 15:00</p>																					
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<p>Received by Date Time</p>																					
<p>Received by Date Time</p>																					

0393-DAR-091109

No: 01718

Sheet 01 of 01 (Do not copy)

(for addnl. samples use new form)

078

Project Name: 292-274002
Project Number: 4002
LM Contact: V. Karsal Phone: 732-321-4200

No: 07109
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

R907008

Sample Identification

Analyses Requested

REACH	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Sulfide
05	09-810-7069-08	N/A	X	6/8/09	1	400 Amber / Zn Acetate	✓
06	09-810-7639-03			5/17/09			✓
10	09-810-7639-10			5/19/09			✓
14	09-810-7639-04			5/18/09			✓
07	09-810-8235-10			5/19/09			✓
11	09-810-8213-04			6/11/09			✓
12	09-810-9188-08			5/20/09			✓
09	09-810-8636-01			5/14/09			✓
04	09-302-1379-05			6/18/09			✓
08	09-810-8236-10			5/18/09			✓
13	09-810-8037-10			5/22/09			✓
02	09-810-7331-04	04 M94104		4/7/09			✓
03	09-810-8357-08	08 M94104		4/8/09			✓
01	09-810-9107-01	01 M94104		4/23/09			✓
15	09-302-1729-03	Canada	✓	7/11/09	✓		✓

- Matrix: X = Gypsum
- A-Air
 - AT-Air/Tissue
 - DL-Drum Liquids
 - DS-Drum Solids
 - GW-Groundwater
 - O-Oil
 - PR-Product
 - PT-Plant Tissue
 - PW-Potable Water
 - S-Soil
 - SD-Settlement
 - SL-Sludge
 - SW-Surface Water
 - TX-TCLP Extract
 - W-Water
 - X-Other

Special Instructions:

* Samples preserved with Zinc Acetate, refrigerated to 4°C with no headspace.

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #:

01809, 01718

0390-BAR-091109

Item/Reason	Refused by	Date	Received by	Date	Refused by	Date	Time
All/Analysis's	Jimmy Thomas	8/13/09	Chasen	8/13/09			10:00