DEPARTMENT OF THE NAVY
CRANE DIVISION
NAVAL SURFACE WARFARE CENTER
300 HIGHWAY 361
CRANE INDIANA 47522-5001

N00164.AR.000850
NSWC CRANE
5090.3a

IN REPLY REFER TO:

5090/S4.7.3
Ser RP3/3392

18 NOV 2003

U.S. Environmental Protection Agency, Region V
Waste, Pesticides, & Toxics Division
Waste Management Branch
Corrective Action Section
Attn: Mr. Peter Ramanauskas (DW-8J)
77 West Jackson Blvd.
Chicago, IL 60604

Dear Mr. Ramanauskas:

Crane Division, Naval Surface Warfare Center (NSWC Crane) submits for review and incorporation the response to comments and replacement pages for the Mine Fill B (MFB) Revision 1 Interim Measures Report (IMR) dated April 2003. Two copies of the responses to comments and replacement pages labeled Revision 2 November 2003 are included as enclosure (1). Enclosure (2) is the required certification statement.

NSWC Crane point of contact is Ms. Christine D. Freeman, Code 09511, telephone 812-854-4423.

Sincerely,

for JAMES M. HUNSICKER
Manager, Environmental Protection
By direction of the Commanding Officer

Encl:
(1) Response to Comments/Replacement pages- MFB Revision 2 IMR
(2) Certification Statement

Copy to:
Administrative Record
IDEM (D. Griffin)
SOUTHNAVFACENGCOM (ES32)
TOLTEST Odon (w/o encls)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jerry M. Cracker

SIGNATURE

MANAGER, ENVIRONMENTAL PROTECTION
BY DIRECTION OF THE COMMANDING OFFICER

TITLE

11/18/03

DATE

5090
Ser 095/3392

18 Nov 2003

The letter Ser 095/3392 was for the submittal of the Mine Fill B Revision 2 IMR, response to comments and replacement pages. The updated pages have been incorporated into the previously submitted Draft Report dated 8/1/02.

TOLTEST, INC.

Solutions for Your Site Development, Construction, and Environmental Projects.

November 10, 2003, Project No: 37324.01

Mr. Peter Ramanauskas
U.S. EPA Region 5
Waste Management Branch/Corrective Action Section
77 West Jackson Boulevard
Chicago, IL 60604-3590

RE: Crane Mine Fill B Interim Measures Report-Response to Comments

Dear Mr. Ramanauskas:

TolTest is providing the responses to the comments received regarding the Crane Mine Fill B Interim Measures Report. TolTest's responses immediately follow the EPA comments:

1. EPA comment: Practically all of the post-excavation soil data was qualified as 'J*', so this is still a matter of concern especially if the samples were held longer than, say, (arbitrarily speaking) 7 days-data representing samples approaching these time frames probably should have been considered for rejection. What were the actual holding times for data flagged 'J*'?

   TolTest response: The holding times for the Mine Fill B (MFB) post excavation samples that were flagged have been provided in the revised Table H-3. Table H-3 contains the sample preparation dates along with the dates for sample analysis for the samples that were qualified. Please note that the sample flags have been removed from the majority of the samples. The reason for removing the flags is because the lab recently provided preparation log documentation for Method 5035, which was not originally included in the final data package. The original sample preparation date listed on the Form Is indicated the instrument log dates according to the lab, and was not the actual date the samples were prepared by Method 5035. In summary, the data should never have been flagged.

   Only samples that were flagged have the prep and analysis dates listed. Samples that do not have the prep and analysis dates listed were analyzed within the hold times. Please note that MFBPES samples 048-074 and 348 do not have the sample preparation dates listed. The sample preparation logs could not be located by the lab, therefore the sample preparation date is not available. In addition, MFBPES samples 118-128 and 247-253 were received by the lab outside the recommended holding times due to a delay in the shipment. Section 6.2.4 of the Interim Measures Report will be revised accordingly:

The table for the MFB initial characterization samples, Table E-3, has also been updated for the volatile sample results and has been attached. Please note the sample flags have been removed from the majority of the samples. Again, the sample preparation log documentation was provided by the lab for Method 5035, which was not originally in the final data package. Only samples that were flagged have the prep and analysis dates listed. Samples that do not have the prep and analysis dates listed were analyzed within the hold times. For samples MFBICS 547-573, the laboratory could not find the sample preparation logs, therefore the sample preparation date is not available. Samples MFBICS 751, 754, 757-763 do not have the prep dates listed because these samples were analyzed within the hold time and were inadvertently flagged originally. These samples should not have been flagged. Please note that MFBICS samples 357-392, 422-455 were prepared by Method 5030, which states in section 6.2 the holding time is 14-days from sample collection. The Interim Measures Report Section 6.2.3.1 has been revised accordingly.

TolTest is submitting two sets of tables: one set for this response to comments and one set to be included in the IMR. The tables submitted with this response to comments includes the above mentioned sample preparation and analysis dates in order to clarify the holding time issue. However, it is not necessary to include these dates for most samples in the IMR tables since, as described above, the hold times were ultimately not an issue. Therefore, for all samples except those that exceeded the hold times, the preparation and analysis dates have been removed in the tables to be included with the IMR.

2. EPA comment: Precision of MFB explosives data for field duplicates was often very poor – (i.e. 200%). What is missing here are the units and to what extent these particular field QC samples were used in making management decisions when precision was poor. For example, there were several cases where the %RPD for a compound was 200% with '0' reported in the results column and a high level reported in the results column for the same compound. Especially if the field duplicate result exceeded the target level for soil for any respective compound, then what was the decision made if there was nothing detected in the non-QC sample corresponding to its field duplicate?

   TolTest response: The units have been added to the tables for the windrow duplicate results. After adding the units, there are no specific cases where the duplicate results exceeded the industrial target cleanup goals and the non-QC sample corresponding to its field duplicate was reported with a '0'. In most instances where a 200% RPD was calculated, the levels detected were far below cleanup goals and thus had little bearing on the ultimate disposition of the windrow.

   The RPD variability is not unexpected, given the heterogeneity of the compost mixture. Because of this heterogeneity, all sample locations within a windrow were averaged together to determine the average concentration of the windrow. This process is briefly described in Section 4.4 of the Quality Assurance Project Plan for Full-Scale Operations at the Biofacility (QAPP) and discussed in detail in Field Standard Operating Procedure QAPP-3.0 Compost Sample Collection. It was the average concentration that was used to determine whether or not clean-up goals were achieved.

3. EPA comments: TolTest should be encouraged to label their tables more fully and present units of measure as well as annotate all qualifiers used, including such pseudo-qualifiers as

the 'NO' code seen in Table H-3. Also if the data quality seemed poor, then resampling should have been ordered instead of simply writing up the report after back-filling had already occurred.

TolTest response: TolTest concurs with the first part of EPA comment 3. The tables have been revised to indicate the units of measure and annotation for the qualifiers that are used. Based on the project QAPP, the quality of the data was acceptable. Continuous contact with the laboratory was maintained so that when samples arrived at the laboratory any problems with the sample integrity, temperatures or hold times could be addressed immediately and resolved prior to further sample analysis and field activities continuing. The preliminary data was reviewed and verified using the project QAPP to determine whether the samples were received intact at the laboratory, hold times were met, correct temperatures were maintained etc. If any discrepancies were noted on the laboratory sample log-in sheets or the prep/analysis dates were not within hold times, the laboratory was contacted to clarify the discrepancies. The Project Manager was kept abreast of data problems, so that management decisions could be made as to whether project objectives could still be achieved and determine whether corrective actions were required. The final data package was validated to further review the data for any errors. If discrepancies were noted the laboratory was contacted to clarify the discrepancies. If the final data did not meet the requirements of the QAPP, National Functional Guidelines or Navy guidelines, the Project Manager was notified of the data problems.

Sincerely,

TOLTEST INC

Peter J. Chevalier
Project Manager

TABLE E-3
MINE FILL B INITIAL CHARACTERIZATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS002	5/18/1998	1	12	0.01 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			
MFBICS004	5/18/1998	1	12	0.008 U	0.009 U	0.009 U	0.008 U	0.009 U	0.009 U			
MFBICS005	5/18/1998	1	12	0.014 U	0.006 U	0.006 U	4 U	0.006 U	0.006 U			
MFBICS006	5/18/1998	1	12	0.053	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			
MFBICS007	5/18/1998	1	12	0.011 U	0.006 U	0.006 U	0.011 U	0.006 U	0.006 U			
MFBICS008	5/18/1998	1	12	0.064	0.006 U	0.006 U	0.013 U	0.006 U	0.006 U			
MFBICS011	5/18/1998	2	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS014	5/18/1998	3	12	0.011 U	0.006 U	0.006 U	0.011 U	0.006 U	0.006 U			
MFBICS017	5/19/1998	4	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS021	5/19/1998	5	12	0.013 U	0.006 U	0.006 U	0.013 U	0.006 U	0.006 U			
MFBICS024	5/19/1998	6	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS027	5/19/1998	7	12	0.012 U	0.006 U	0.009	0.012 U	0.006 U	0.006 U			
MFBICS031	5/19/1998	8	12	0.021	0.007 U	0.007 U	0.013 U	0.007 U	0.007 U			
MFBICS034	5/19/1998	9	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS037	5/19/1998	10	12	0.014 U	0.007 U	0.007 U	0.014 U	0.007 U	0.007 U			
MFBICS041	5/20/1998	11	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS043	5/20/1998	11	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS045	5/20/1998	12	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS048	5/20/1998	13	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS052	5/20/1998	14	12	0.012 U	0.006 U	0.009	0.012 U	0.006 U	0.006 U			
MFBICS055	5/20/1998	15	12	0.013 U	0.006 U	0.005 J	0.013 U	0.006 U	0.006 U			
MFBICS058	5/21/1998	16	12	0.012 U	0.006 U	0.018	0.012 U	0.006 U	0.006 U			
MFBICS061	5/21/1998	17	12	0.012 U	0.006 U	0.018	0.012 U	0.006 U	0.006 U			
MFBICS064	5/21/1998	18	12	0.012 U	0.006 U	0.019	0.012 U	0.006 U	0.006 U			
MFBICS067	5/21/1998	19	12	0.012 U	0.006 U	0.017	0.012 U	0.006 U	0.006 U			
MFBICS070	6/10/1998	20	12	0.065 J	0.005 U	0.008 U	0.011 U	0.005 U	0.005 U			
MFBICS073	6/10/1998	21	12	0.026 J	0.005 U	0.01 U	0.011 U	0.005 U	0.005 U			
MFBICS076	6/10/1998	22	12	0.007 U	0.011 U	0.022 U	0.022 U	0.011 U	0.011 U			
MFBICS079	6/15/1998	23	12	0.007 U	0.007 U	0.007 U	0.014 U	0.007 U	0.007 U			
MFBICS082	6/15/1998	24	12	0.017 U	0.008 U	0.008 U	0.017 U	0.008 U	0.008 U			
MFBICS085	6/23/1998	94	12	0.016	0.006 U	0.006 U	0.013 U	0.006 U	0.006 U			
MFBICS088	6/23/1998	95	12	0.005 J	0.006 U	0.006 U	0.013 U	0.006 U	0.006 U			
MFBICS091	7/20/1998	96	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS094	7/21/1998	97	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS097	7/21/1998	98	12	0.013 U	0.006 U	0.006 U	0.013 U	0.006 U	0.006 U			
MFBICS100	7/21/1998	99	12	4 U	0.007 U	0.007 U	4 U	0.007 U	0.007 U			
MFBICS103	7/21/1998	100	12	0.012 U	0.006 U	0.006 U	0.012 U	0.006 U	0.006 U			
MFBICS106	7/23/1998	101	12	0.009 U	0.005 U	0.005 U	0.01 U	0.005 U	0.005 U			
MFBICS109	8/5/1998	38	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS112	8/6/1998	29	12	0.008	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS115	8/6/1998	30	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS118	11/16/1998	26	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS121	11/16/1998	25	12	0.006	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS124	11/16/1998	41	12	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U			
MFBICS127	11/16/1998	40	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS130	11/16/1998	50	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS133	11/16/1998	49	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS136	11/18/1998	48	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			

TABLE E-3
MINE FILL B INITIAL CHARACTERIZATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS139	11/18/1998	47	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS142	11/18/1998	46	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS145	11/18/1998	45	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS148	11/23/1998	44	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS151	11/23/1998	43	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS154	11/23/1998	42	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS157	11/23/1998	39	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS160	11/24/1998	57	12	0.005 U	0.005 U	0.009	0.005 U	0.005 U	0.005 U			
MFBICS163	11/24/1998	56	12	0.005 U	0.005 U	0.002 J	0.005 U	0.005 U	0.005 U			
MFBICS166	11/24/1998	58	12	0.004 U	0.004 U	0.002J	0.004 U	0.004 U	0.004 U			
MFBICS169	11/24/1998	59	12	0.006 U	0.006 U	0.003 J	0.006 U	0.006 U	0.006 U			
MFBICS172	12/1/1998	60	12	0.012 U	0.006 U	0.014	0.006 U	0.006 U	0.079			
MFBICS175	12/1/1998	61	12	0.004 U	0.006 U	0.006 U	0.006 U	0.006 U	0.03			
MFBICS178	12/1/1998	51	12	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U	0.014			
MFBICS181	12/2/1998	52	12	0.009 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS184	12/8/1998	53	12	0.018	0.005 J	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS187	12/9/1998	54	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS190	12/9/1998	55	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS193	12/9/1998	88	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS196	12/10/1998	89	12	0.026	0.005 U	0.003 U	0.005 U	0.005 U	0.005 U			
MFBICS198	12/10/1998	89	24	0.028	0.005 U	0.002 U	0.005 U	0.005 U	0.005 U			
MFBICS200	12/10/1998	93	12	0.022	0.005 U	0.003 U	0.005 U	0.005 U	0.005 U			
MFBICS203	12/10/1998	68	12	0.02	0.005 U	0.003 U	0.005 U	0.005 U	0.005 U			
MFBICS206	12/14/1998	69	12	0.004 U	0.004 U	0.002 J	0.004 U	0.004 U	0.004 U			
MFBICS209	12/14/1998	66	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS212	12/14/1998	67	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS215	12/16/1998	92	12	0.009	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS218	12/16/1998	91	12	0.007	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS221	12/16/1998	90	12	0.008 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U			
MFBICS224	12/17/1998	65	12	0.008	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS226	12/17/1998	64	12	0.004	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS228	12/17/1998	81	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS231	12/17/1998	82	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS234	12/28/1998	139	12	0.009 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			
MFBICS237	12/29/1998	62	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS240	12/29/1998	63	12	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			
MFBICS243	1/20/1999	124	12	0.005 J	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS246	1/26/1999	123	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS249	1/26/1999	140	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS251	1/26/1999	122	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS254	1/26/1999	128	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS257	1/27/1999	127	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS260	1/27/1999	125	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS263	1/27/1999	126	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS266	1/27/1999	141	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS269	1/28/1999	142	12	0.011	0.005 U	0.006 U	0.005 U	0.005 U	0.005 U			
MFBICS272	1/28/1999	144	12	0.01	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS275	1/28/1999	143	12	0.008	0.005 U	0.007 U	0.005 U	0.005 U	0.005 U			

TABLE E-3
MINE FILL B INITIAL CHARACTERIZATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS278	1/28/1999	145	12	0.005 U	0.005 U	0.006 U	0.005 U	0.005 U	0.005 U			
MFBICS281	1/28/1999	146	12	0.012	0.005 U	0.006 U	0.005 U	0.005 U	0.005 U			
MFBICS284	2/3/1999	102	12	0.008	0.005 U	0.006 U	0.005 U	0.005 U	0.005 U			
MFBICS287	2/3/1999	113	12	0.007	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS290	2/3/1999	112	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS292	2/3/1999	107	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS295	2/3/1999	120	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS298	2/3/1999	121	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS301	2/9/1999	138	12	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U			
MFBICS304	2/9/1999	129	12	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U	0.008 U			
MFBICS307	2/17/1999	130	12	0.008	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS310	2/17/1999	131	12	0.018	0.005 U	0.005 U	0.005 U	0.005 U	0.006			
MFBICS313	2/17/1999	132	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
MFBICS316	2/25/1999	137	12	0.026 U	0.005 U	0.02 U	0.005 U	0.005 U	0.005 U			
MFBICS318	2/25/1999	133	12	0.009 U	0.006 U	0.035	0.006 U	0.006 U	0.006 U			
MFBICS321	3/1/1999	134	12	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			
MFBICS323	3/1/1999	135	12	4 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS325	3/1/1999	136	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS327	3/2/1999	103	12	0.053	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS330	3/2/1999	149	12	0.019	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			
MFBICS333	3/4/1999	150	12	0.019	0.004 U	0.006 U	0.004 U	0.004 U	0.004 U			
MFBICS336	3/4/1999	148	12	0.009	0.005 U	0.006 U	0.005 U	0.005 U	0.005 U			
MFBICS339	3/4/1999	115	12	0.005 U	0.005 U	0.004 U	0.005 U	0.005 U	0.005 U			
MFBICS343	3/24/1999	151	12	0.016 U	0.006 U	0.002 J	0.006 U	0.006 U	0.006 U			
MFBICS345	6/7/1999	152	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		06/09/99	06/11/99
MFBICS348	6/7/1999	74	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U		06/09/99	06/11/99
MFBICS351	6/9/1999	153	12	0.014	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS354	6/9/1999	154	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS357	6/10/1999	72	12	0.01	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U		06/14/99	06/14/99
MFBICS360	6/10/1999	75	12	0.014	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		06/14/99	06/14/99
MFBICS363	6/10/1999	76	12	0.023	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U		06/14/99	06/14/99
MFBICS366	6/10/1999	77	12	0.01	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U		06/14/99	06/14/99
MFBICS369	6/10/1999	79	12	0.016	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U		06/14/99	06/14/99
MFBICS372	6/17/1999	155	12	0.005 U	0.005 U	0.006 B	0.005 U	0.005 U	0.005 U		06/22/99	06/22/99
MFBICS375	6/17/1999	156	12	0.005 U	0.005 U	0.008 B	0.005 U	0.005 U	0.005 U		06/22/99	06/22/99
MFBICS378	6/18/1999	157	12	0.005 U	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U		06/22/99	06/22/99
MFBICS381	6/18/1999	158	12	0.006 U	0.006 U	0.012 B	0.006 U	0.006 U	0.006 U		06/22/99	06/22/99
MFBICS384	6/18/1999	159	12	0.006 U	0.006 U	0.014 B	0.006 U	0.006 U	0.006 U		06/22/99	06/22/99
MFBICS387	6/18/1999	160	12	0.007 U	0.007 U	0.021 B	0.007 U	0.007 U	0.007 U		06/22/99	06/22/99
MFBICS390	6/18/1999	161	12	0.03	0.006 U	0.017 B	0.006 U	0.006 U	0.006 U		06/22/99	06/22/99
MFBICS392	6/18/1999	162	12	0.005 U	0.005 U	0.012 B	0.005 U	0.005 U	0.005 U		06/22/99	06/22/99
MFBICS395	6/22/1999	163	12	0.006 U	0.006 U	0.003 JB	0.006 U	0.006 U	0.006 U		06/24/99	06/25/99
MFBICS398	6/22/1999	164	12	0.005 U	0.005 U	0.002 JB	0.005 U	0.005 U	0.005 U		06/24/99	06/25/99
MFBICS401	6/23/1999	165	12	0.005 U	0.005 U	0.003 JB	0.005 U	0.005 U	0.005 U		06/24/99	06/25/99
MFBICS404	6/23/1999	166	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		06/24/99	06/25/99
MFBICS407	6/23/1999	167	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		06/24/99	06/25/99
MFBICS410	6/30/1999	70	12	0.005 U	0.005 U	0.017 B	0.005 U	0.005 U	0.005 U			
MFBICS413	6/30/1999	147	12	0.0051	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U			

TABLE E-3
MINE FILL B INITIAL CHARACTERIZATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS416	6/30/1999	168	12	0.014	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U			
MFBICS419	6/30/1999	169	12	0.005 U	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U			
MFBICS422	7/6/1999	170	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		07/10/99	07/10/99
MFBICS425	7/6/1999	171	12	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U		07/10/99	07/10/99
MFBICS428	7/6/1999	172	12	0.005 U	0.005 U	0.002 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS431	7/7/1999	173	12	0.006 U	0.006 U	0.001 JB	0.006 U	0.006 U	0.006 U		07/12/99	07/12/99
MFBICS434	7/7/1999	174	12	0.085	0.005 U	0.002 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS437	7/8/1999	176	12	0.005 U	0.005 U	0.002 JB	0.005 U	0.005 U	0.005 U		07/13/99	07/13/99
MFBICS440	7/8/1999	177	12	0.004 U	0.004 U	0.002 JB	0.004 U	0.004 U	0.004 U		07/13/99	07/13/99
MFBICS443	7/8/1999	175	12	0.004 U	0.004 U	0.002 JB	0.004 U	0.004 U	0.004 U		07/13/99	07/13/99
MFBICS446	7/9/1999	178	12	0.005 U	0.005 U	0.002 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS449	7/9/1999	179	12	0.005 U	0.005 U	0.01 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS452	7/9/1999	180	12	0.005 U	0.005 U	0.004 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS455	7/9/1999	181	12	0.005 U	0.005 U	0.01 JB	0.005 U	0.005 U	0.005 U		07/12/99	07/12/99
MFBICS458	7/13/1999	31	12	0.006 U	0.006 U	0.011 B	0.006 U	0.006 U	0.006 U			
MFBICS461	7/13/1999	33	12	0.005 U	0.005 U	0.011 B	0.005 U	0.005 U	0.005 U			
MFBICS464	7/13/1999	27	12	0.005 U	0.005 U	0.011 B	0.005 U	0.005 U	0.005 U			
MFBICS467	7/14/1999	182	12	0.009 U	0.009 U	0.002 JB	0.009 U	0.009 U	0.009 U			
MFBICS470	7/14/1999	183	12	0.005 U	0.005 U	0.006 B	0.005 U	0.005 U	0.005 U			
MFBICS473	7/14/1999	105	12	0.006 U	0.006 U	0.006 B	0.006 U	0.006 U	0.006 U			
MFBICS476	7/15/1999	184	12	0.005 U	0.005 U	0.01 JB	0.005 U	0.005 U	0.005 U			
MFBICS479	7/15/1999	185	12	0.005 U	0.005 U	0.004 JB	0.005 U	0.005 U	0.005 U			
MFBICS482	8/10/1999	186	12	0.024 U	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
MFBICS485	8/16/1999	187	12	0.013 J	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		08/17/99	08/19/99
MFBICS488	8/16/1999	188	12	0.01 J	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		08/17/99	08/19/99
MFBICS491	8/16/1999	189	12	0.01 J	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		08/17/99	08/19/99
MFBICS494	8/18/1999	190	12	0.022 U	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U		08/19/99	08/24/99
MFBICS497	8/18/1999	191	12	0.011 J	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		08/19/99	08/25/99
MFBICS500	8/18/1999	192	12	0.014 J	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		08/19/99	08/25/99
MFBICS503	8/18/1999	193	12	0.066 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		08/19/99	08/25/99
MFBICS506	8/18/1999	118	12	0.13 B	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U		08/19/99	08/25/99
MFBICS509	8/26/1999	194	12	0.0191 JB	0.0114 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		08/27/99	09/01/99
MFBICS512	9/8/1999	196	12	0.0134 JB	0.00892 J	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
MFBICS515	9/8/1999	198	12	0.00952 JB	0.011 U	0.00549 U	0.00549 U	0.00549 U	0.00549 U			
MFBICS518	9/8/1999	197	12	0.00633 JB	0.011 U	0.00552 U	0.00552 U	0.00552 U	0.00552 U			
MFBICS521	9/8/1999	199	12	0.0091 JB	0.0112 U	0.00559 U	0.00559 U	0.00559 U	0.00559 U			
MFBICS524	9/8/1999	200	12	0.0138 JB	0.0116 U	0.00581 U	0.00581 U	0.00581 U	0.00581 U			
MFBICS527	9/9/1999	201	12	0.0207 JB	0.00726 JB	0.00608 U	0.00608 U	0.00608 U	0.00608 U			
MFBICS530	9/9/1999	202	12	0.0167 JB	0.0121 U	0.00605 U	0.00605 U	0.00605 U	0.00605 U			
MFBICS533	9/9/1999	203	12	0.0126 JB	0.0111 U	0.00555 U	0.00555 U	0.00555 U	0.00555 U			
MFBICS536	9/14/1999	204	12	0.0266	0.0115 U	0.00577 U	0.00577 U	0.00577 U	0.00577 U			
MFBICS539	9/14/1999	195	12	0.148	0.0259	0.00571 U	0.00571 U	0.00571 U	0.00571 U			
MFBICS542	9/15/1999	205	12	0.0325	0.0215	0.00528 U	0.00528 U	0.00528 U	0.00528 U			
MFBICS545	9/15/1999	206	12	0.0242	0.0105 J	0.00575 U	0.00575 U	0.00435 J	0.00575 U			

TABLE E-3
MINE FILL B INITIAL CHARACTERIZATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS547	9/22/1999	207	12	0.023 JB	0.0062 J	0.0059 U	0.0059 U	0.0059 U	0.0059 U	J*	+	09/28/99
MFBICS550	9/22/1999	208	12	0.023 U	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	J*	+	09/28/99
MFBICS553	9/22/1999	209	12	0.041 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U	J*	+	09/28/99
MFBICS556	9/22/1999	210	12	0.031 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	J*	+	09/28/99
MFBICS559	9/22/1999	211	12	0.055 B	0.014	0.0057 U	0.0057 U	0.0057 U	0.0057 U	J*	+	09/28/99
MFBICS562	9/22/1999	212	12	0.022 U	0.012	0.0054 U	0.0054 U	0.0036 J	0.0054 U	J*	+	09/28/99
MFBICS564	9/22/1999	213	12	0.022 JB	0.0064 J	0.0062 U	0.0062 U	0.0062 U	0.0062 U	J*	+	09/28/99
MFBICS567	9/22/1999	214	12	0.086 B	0.0099 J	0.0054 U	0.0054 U	0.0054 U	0.0054 U	J*	+	09/28/99
MFBICS570	9/22/1999	215	12	0.021 JB	0.0083 J	0.0056 U	0.0056 U	0.0056 U	0.0056 U	J*	+	09/28/99
MFBICS573	9/22/1999	216	12	0.095 B	0.021	0.0054 U	0.0054 U	0.0054 U	0.0054 U	J*	+	09/28/99
MFBICS576	9/24/1999	217	12	0.039 B	0.01 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U		09/25/99	10/02/99
MFBICS578	9/24/1999	218	12	0.022 U	0.011 U	0.0055 U	0.0055 U	0.0027 J	0.0055 U		09/25/99	09/30/99
MFBICS581	9/27/1999	219	12	0.018 JB	0.011 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U		09/29/99	10/02/99
MFBICS584	9/27/1999	220	12	0.026 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		09/29/99	09/30/99
MFBICS587	9/27/1999	221	12	0.033 B	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		09/29/99	09/30/99
MFBICS590	9/27/1999	222	12	0.022 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		09/29/99	09/30/99
MFBICS593	9/27/1999	223	12	0.038 B	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U		09/29/99	10/02/99
MFBICS596	9/27/1999	224	12	0.033 B	0.011 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U		09/29/99	10/02/99
MFBICS599	9/27/1999	225	12	0.017 JB	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U		09/29/99	10/02/99
MFBICS602	9/28/1999	226	12	0.027 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		09/29/99	10/02/99
MFBICS605	9/28/1999	227	12	0.024 B	0.012 U	0.0058 U	0.0058 U	0.0014 J	0.0058 U		09/29/99	10/02/99
MFBICS608	9/28/1999	228	12	0.031 B	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		09/29/99	10/02/99
MFBICS611	9/28/1999	229	12	0.009 JB	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U		09/29/99	10/02/99
MFBICS614	9/28/1999	230	12	0.041 B	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U		09/29/99	10/02/99
MFBICS617	9/28/1999	231	12	0.056 B	0.011 U	0.0054 U	0.0054 U	0.0014 J	0.0054 U		09/29/99	10/02/99
MFBICS619	9/30/1999	232	12	0.17 B	0.013 U	0.0063 U	0.0063 U	0.0095	0.0059 J		10/01/99	10/06/99
MFBICS622	9/30/1999	233	12	0.022 U	0.011 U	0.0055 U	0.0055 U	0.0041 J	0.0033 J		10/01/99	10/06/99
MFBICS624	9/30/1999	234	12	0.024 U	0.012 U	0.0061 U	0.0061 U	0.0065	0.0041 J		10/01/99	10/07/99
MFBICS626	9/30/1999	235	12	0.11 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/01/99	10/08/99
MFBICS629	9/30/1999	236	12	0.093 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/01/99	10/07/99
MFBICS632	10/1/1999	238	12	0.063 B	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		10/02/99	10/07/99
MFBICS635	10/1/1999	239	12	0.014 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/02/99	10/07/99
MFBICS638	10/1/1999	237	12	0.11 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		10/02/99	10/08/99
MFBICS641	10/18/1999	240	12	0.104 B	0.0119 U	0.00596 U	0.00596 U	0.00707	0.00476 J		10/19/99	10/22/99
MFBICS644	10/18/1999	241	12	1.23 U	0.616 U	0.308 U	0.308 U	0.308 U	0.308 U		10/19/99	10/24/99
MFBICS647	10/12/1999	242	12	0.097 B	0.012 U	0.0058 U	0.0058 U	0.0011 J	0.0058 U		10/13/99	10/18/99
MFBICS650	10/12/1999	243	12	0.082 B	0.011 U	0.0057 U	0.0057 U	0.0042 J	0.0032 J		10/13/99	10/19/99
MFBICS653	10/12/1999	244	12	0.022 U	0.011 U	0.0056 U	0.0056 U	0.0033 J	0.0022 J		10/13/99	10/19/99
MFBICS656	10/12/1999	245	12	0.099 B	0.011 U	0.0057 U	0.0057 U	0.0014 J	0.0057 U		10/13/99	10/19/99
MFBICS659	10/12/1999	246	12	0.038 B	0.012 U	0.0061 U	0.0061 U	0.0044 J	0.0021 J		10/13/99	10/19/99
MFBICS662	10/12/1999	247	12	0.1 B	0.012 U	0.0062 U	0.0062 U	0.0011 J	0.0062 U		10/13/99	10/19/99
MFBICS665	10/12/1999	248	12	0.065 B	0.013 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U		10/13/99	10/19/99
MFBICS667	10/18/1999	249	12	0.00958 JB	0.0121 U	0.00607 U	0.00607 U	0.00607 U	0.00607 U		10/19/99	10/22/99
MFBICS670	10/18/1999	250	12	0.0171 JB	0.0118 U	0.00591 U	0.00591 U	0.00591 U	0.00591 U		10/19/99	10/23/99
MFBICS673	10/19/1999	251	12	0.095	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/20/99	10/27/99
MFBICS676	10/19/1999	252	12	0.08	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/20/99	10/27/99
MFBICS679	10/19/1999	253	12	0.018 J	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/20/99	10/27/99
MFBICS682	10/19/1999	254	12	0.03	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/20/99	10/27/99

TABLE E-3
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VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				ACETONE	MEK	METH. CHL.	MIBK	TOLUENE	XYLENES			
IM Industrial Cleanup Goal (Human Health)				8,800	27,000	18	2,800	880	320			
IM Residential Cleanup Goal (Human Health)				2,000	7,100	7.8	770	790	320	Qualifiers	Sample Prep Date	Sample Analysis Date
MFB ICS #	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			
MFBICS685	10/19/1999	255	12	0.042	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		10/20/99	10/27/99
MFBICS688	10/20/1999	256	12	0.021 J	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/21/99	10/27/99
MFBICS691	10/20/1999	257	12	0.056	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		10/21/99	10/27/99
MFBICS694	10/21/1999	258	12	0.058	0.012 U	0.0058 U	0.0058 U	0.0076	0.0019 J		10/22/99	10/28/99
MFBICS697	10/21/1999	259	12	0.025	0.011 U	0.0057 U	0.0057 U	0.0047 J	0.0053 J		10/22/99	10/28/99
MFBICS700	10/21/1999	260	12	0.021 J	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/22/99	10/28/99
MFBICS703	10/21/1999	261	12	0.033	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		10/22/99	10/28/99
MFBICS706	10/21/1999	262	12	0.037	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		10/22/99	10/28/99
MFBICS709	10/26/1999	263	12	0.056	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/27/99	10/28/99
MFBICS712	10/26/1999	264	12	0.13 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/27/99	11/02/99
MFBICS715	11/3/1999	265	12	0.06 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/04/99	11/05/99
MFBICS718	11/3/1999	266	12	0.039 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		11/04/99	11/05/99
MFBICS721	11/3/1999	267	12	0.026 B	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/04/99	11/05/99
MFBICS724	11/3/1999	268	12	0.054 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		11/04/99	11/05/99
MFBICS727	11/4/1999	269	12	0.027 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		11/05/99	11/06/99
MFBICS730	11/4/1999	270	12	0.035 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/05/99	11/06/99
MFBICS733	11/4/1999	271	12	0.044 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/05/99	11/06/99
MFBICS736	11/4/1999	272	12	0.035 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/05/99	11/06/99
MFBICS742	1/26/2000	273	12	0.081 B	0.013 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U		01/27/00	01/28/00
MFBICS745	1/26/2000	274	12	0.032 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		01/27/00	01/28/00
MFBICS748	3/29/2000	276	12	0.043 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		03/30/00	04/03/00
MFBICS751	10/31/2000	277	12	0.007	0.006 U	0.004 BJ	0.006 U	0.006 U	0.006 U		+	11/01/00
MFBICS754	10/31/2000	278	12	0.006 U	0.006 U	0.003 BJ	0.006 U	0.006 U	0.006 U		+	11/01/00
MFBICS756	11/2/2000	279	12	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
MFBICS757	10/31/2000	279	18	0.02	0.005 U	0.002 J	0.005 U	0.005 U	0.077		+	11/02/00
MFBICS760	11/1/2000	280	12	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U		+	11/02/00
MFBICS763	11/1/2000	281	12	0.032	0.006 U	0.002 J	0.006 U	0.03	0.006 U		+	11/02/00

NOTE: samples flagged with a "J*" were analyzed outside the EPA extended 54-hour hold time and are considered to be reported with a "low bias". Actual sample prep dates and sample analysis dates are provided for referencee.

+ - sample prep dates not available

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
002	8/23/1999	76	6	0.02 J,B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		8/24/1999	8/27/1999
004	8/23/1999	75	6	0.085 B	0.017 B	0.0057 U	0.0057 U	0.0057 U	0.0057 U		8/24/1999	8/29/1999
006	8/23/1999	77	6	0.052 B	0.012 B	0.0058 U	0.0058 U	0.0058 U	0.0058 U		8/24/1999	8/29/1999
008	8/23/1999	84	6	0.013 J,B	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U		8/24/1999	8/29/1999
010	8/23/1999	78	6	0.049 B	0.0087 J,B	0.0059 U	0.0059 U	0.0059 U	0.0059 U		8/24/1999	8/29/1999
012	8/23/1999	79	6	0.055 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		8/24/1999	8/29/1999
014	9/2/1999	63	6	0.0218 U	0.0109 U	0.00545 U	0.00545 U	0.00545 U	0.00545 U		9/3/1999	9/5/1999
016	9/2/1999	64	6	0.0213 U	0.0107 U	0.00533 U	0.00533 U	0.00533 U	0.00533 U		9/3/1999	9/5/1999
018	9/2/1999	65	6	0.0199 J	0.0122 U	0.00609 U	0.00609 U	0.00609 U	0.00609 U		9/3/1999	9/6/1999
020	9/2/1999	83	6	0.0248 U	0.0124 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		9/3/1999	9/6/1999
022	9/3/1999	58	6	0.0514	0.012 U	0.00598 U	0.00598 U	0.00598 U	0.00598 U		9/4/1999	9/6/1999
024	9/3/1999	59	6	0.0228 J	0.0116 U	0.00579 U	0.00579 U	0.00579 U	0.00579 U		9/4/1999	9/6/1999
026	9/3/1999	60	6	0.0309	0.0116 U	0.00581 U	0.00581 U	0.00581 U	0.00581 U		9/4/1999	9/6/1999
028	9/3/1999	61	6	0.0241 U	0.012 U	0.00602 U	0.00602 U	0.00602 U	0.00602 U		9/4/1999	9/6/1999
030	9/3/1999	79	6	0.0233 J	0.0122 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		9/4/1999	9/6/1999
032	9/3/1999	80	6	0.0219 J	0.0123 U	0.00614 U	0.00614 U	0.00614 U	0.00614 U		9/4/1999	9/6/1999
034	9/20/1999	200	6	0.014 J,B	0.012 B	0.0061 U	0.0061 U	0.0061 U	0.0061 U		9/21/1999	9/23/1999
036	9/20/1999	199	6	0.011 J,B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		9/21/1999	9/23/1999
038	9/20/1999	167	6	0.0071 J,B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		9/21/1999	9/23/1999
040	9/20/1999	164	6	0.011 J,B	0.0061 JB	0.0056 U	0.0056 U	0.0056 U	0.0056 U		9/21/1999	9/23/1999
042	9/20/1999	186	6	0.032 B	0.012 B	0.0056 U	0.0056 U	0.0056 U	0.0056 U		9/21/1999	9/23/1999
044	9/20/1999	143	6	0.012 JB	0.0077 JB	0.0056 U	0.0056 U	0.0056 U	0.0056 U		9/21/1999	9/23/1999
046	9/20/1999	187	6	0.016 JB	0.0099 JB	0.0065 U	0.0065 U	0.0065 U	0.0065 U		9/21/1999	9/23/1999
048	9/21/1999	189	6	0.0095 JB	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U	J*		9/24/1999
050	9/21/1999	166	6	15 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U	J*		9/25/1999
052	9/21/1999	165	6	0.021 JB	0.011 JB	0.006 U	0.006 U	0.006 U	0.006 U			
054	9/21/1999	188	6	0.017 JB	0.014 B	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
056	9/21/1999	163	6	0.039 B	0.015 B	0.0054 U	0.0054 U	0.0054 U	0.0054 U			
058	9/21/1999	190	6	0.044 B	0.0087 JB	0.0056 U	0.0056 U	0.0056 U	0.0056 U			
060	9/21/1999	191	6	0.024 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	J*		9/25/1999
062	9/21/1999	172	6	0.0094 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	J*		9/25/1999
064	9/21/1999	93	6	0.025 U	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U	J*		9/25/1999
066	9/21/1999	142	6	0.014 JB	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	J*		9/25/1999
068	9/21/1999	192	6	0.03 B	0.011 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U	J*		9/25/1999
070	9/21/1999	193	6	0.016 JB	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U	J*		9/25/1999
072	9/21/1999	170	6	0.024 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	J*		9/25/1999
074	9/21/1999	171	6	0.021 U	0.011 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U	J*		9/25/1999
076	9/24/1999	80	6	0.02 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		9/25/1999	9/30/1999
078	9/24/1999	83	6	0.043 B	0.012 U	0.0058 U	0.0058 U	0.0054 J	0.0058 U		9/25/1999	9/30/1999
080	9/24/1999	79	6	0.032 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		9/25/1999	9/30/1999
082	9/24/1999	81	6	0.022 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		9/25/1999	9/30/1999
084	9/24/1999	82	6	0.015 JB	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		9/25/1999	9/30/1999
086	10/4/1999	28	6	0.013 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/5/1999	10/8/1999
088	10/4/1999	27	6	0.035 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/5/1999	10/8/1999
090	10/4/1999	26	6	0.048 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		10/5/1999	10/8/1999
092	10/5/1999	168	6	0.018 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/7/1999	10/8/1999
094	10/5/1999	204	6	0.058 B	0.013 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U		10/7/1999	10/8/1999

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
096	10/14/1999	207	6	0.022 JB	0.012 U	0.006 U	0.006 U	0.0021 J	0.006 U		10/15/1999	10/19/1999
098	10/14/1999	205	6	0.01 JB	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		10/15/1999	10/20/1999
100	10/14/1999	192	6	0.024 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/15/1999	10/20/1999
102	10/14/1999	193	6	0.028 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/15/1999	10/20/1999
104	10/15/1999	171	6	0.014 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		10/16/1999	10/20/1999
106	10/15/1999	154	6	0.024 U	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/16/1999	10/20/1999
108	10/15/1999	146	6	0.061 B	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U		10/16/1999	10/20/1999
110	10/15/1999	56	6	0.039 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/16/1999	10/20/1999
112	10/15/1999	66	6	0.018 JB	0.012 U	0.0062 U	0.0062 U	0.011	0.0064		10/16/1999	10/20/1999
114	10/15/1999	67	6	0.018 JB	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U		10/16/1999	10/20/1999
116	10/15/1999	145	6	0.031 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/16/1999	10/20/1999
118	10/15/1999	153	6	0.0245 U	0.0122 U	0.00612 U	0.00612 U	0.00612 U	0.00612 U	J*	10/19/1999	10/20/1999
120	10/15/1999	57	6	0.0475 B	0.0123 U	0.00616 U	0.00616 U	0.00616 U	0.00616 U	J*	10/19/1999	10/20/1999
122	10/16/1999	82	6	0.028 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U	J*	10/19/1999	10/23/1999
124	10/16/1999	210	6	0.12	0.013 U	0.0067 U	0.0067 U	0.0049 J	0.0062 J	J*	10/19/1999	10/27/1999
126	10/16/1999	139	6	0.044 B	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	J*	10/19/1999	10/23/1999
128	10/16/1999	211	6	0.023 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U	J*	10/19/1999	10/23/1999
130	10/19/1999	237	6	0.017 JB	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/20/1999	10/23/1999
132	10/19/1999	236	6	0.016 JB	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/20/1999	10/23/1999
134	10/22/1999	54	6	0.09	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/23/1999	10/27/1999
136	10/22/1999	55	6	0.028	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		10/23/1999	10/28/1999
138	10/26/1999	141	6	0.074	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
140	10/26/1999	251	6	0.076	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
142	10/26/1999	249	6	0.056	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
144	10/28/1999	186/194	sidewall	0.031 B	0.012 U	0.0021 J	0.0061 U	0.0024 J	0.0041 J		10/29/1999	11/2/1999
146	10/28/1999	187/196	sidewall	0.021 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		10/29/1999	11/2/1999
148	10/28/1999	249/250	sidewall	0.013 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		10/29/1999	11/2/1999
150	10/28/1999	236/250	sidewall	0.04 B	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		10/29/1999	11/2/1999
152	10/28/1999	251/235	sidewall	0.023 U	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		10/29/1999	11/3/1999
154	10/29/1999	187/197	sidewall	0.022 J	0.013 U	0.0019 J	0.0063 U	0.0014 J	0.0063 U		10/30/1999	11/3/1999
156	10/29/1999	188/197	sidewall	0.062	0.013 U	0.0063 U	0.0063 U	0.001 J	1.3		10/30/1999	11/3/1999
158	10/29/1999	188/198	sidewall	0.019 J	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		10/30/1999	11/3/1999
160	11/1/1999	199/198	sidewall	0.1 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		11/2/1999	11/5/1999
162	11/1/1999	205/198	sidewall	0.026	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/2/1999	11/4/1999
164	11/1/1999	207/208	sidewall	0.023 U	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/2/1999	11/4/1999
166	11/1/1999	211/235	sidewall	0.037	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
168	11/1/1999	210/235	sidewall	0.095 B	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U		11/2/1999	11/5/1999
170	11/1/1999	210/247	sidewall	0.072	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		11/2/1999	11/4/1999
172	11/1/1999	210/169	sidewall	0.059	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/2/1999	11/4/1999
174	11/1/1999	168/169	sidewall	0.078	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/2/1999	11/4/1999
176	11/2/1999	141/169	sidewall	0.03 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/3/1999	11/5/1999
178	11/2/1999	141/147	sidewall	0.077 B	0.012 U	0.0014 J	0.0059 U	0.0059 U	0.0059 U		11/3/1999	11/5/1999
180	11/2/1999	54/147	sidewall	0.04 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		11/3/1999	11/6/1999
182	11/2/1999	54/53	sidewall	0.037 B	0.013 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U		11/3/1999	11/5/1999
184	11/2/1999	32	6	0.021 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/3/1999	11/5/1999
186	11/2/1999	31	6	0.032 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/3/1999	11/5/1999
188	11/8/1999	30	6	0.03 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		11/9/1999	11/11/1999

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
190	11/8/1999	29	6	0.059 B	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/9/1999	11/11/1999
192	11/8/1999	38	6	0.015 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/9/1999	11/11/1999
194	11/8/1999	28	6	0.034 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/9/1999	11/11/1999
196	11/8/1999	37	6	0.04 B	0.016 U	0.008 U	0.008 U	0.008 U	0.008 U		11/9/1999	11/11/1999
198	11/8/1999	36	6	0.091 B	0.015 U	0.0077 U	0.0077 U	0.0077 U	0.0077 U		11/9/1999	11/11/1999
200	11/8/1999	35	6	0.13 B	0.016 U	0.008 U	0.008 U	0.008 U	0.008 U		11/9/1999	11/11/1999
202	11/8/1999	25	6	0.043 B	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		11/9/1999	11/11/1999
204	11/8/1999	28/27	sidewall	0.052 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		11/9/1999	11/11/1999
206	11/8/1999	37/201	sidewall	0.051 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/9/1999	11/11/1999
208	11/8/1999	36/202	sidewall	0.038 B	0.014 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U		11/9/1999	11/12/1999
210	11/8/1999	36/27	sidewall	laboratory failed to report VOC data for this sample								
213	11/9/1999	207/209	sidewall	0.028 U	0.014 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U		11/10/1999	11/12/1999
215	11/9/1999	262	6	0.025 U	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/10/1999	11/13/1999
217	11/9/1999	251/264	sidewall	0.029 U	0.015 U	0.0073 U	0.0073 U	0.0073 U	0.0073 U		11/10/1999	11/13/1999
219	11/9/1999	35/203	sidewall	0.096	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/10/1999	11/13/1999
221	11/9/1999	35/26	sidewall	0.024 U	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/10/1999	11/13/1999
223	11/9/1999	35/214	sidewall	0.024 U	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/10/1999	11/13/1999
225	11/9/1999	32/33	sidewall	0.085	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/10/1999	11/13/1999
227	11/9/1999	32/240	sidewall	0.1	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		11/10/1999	11/13/1999
229	11/9/1999	31/241	sidewall	0.14	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		11/10/1999	11/13/1999
231	11/9/1999	38/140	sidewall	0.085	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/10/1999	11/13/1999
233	11/9/1999	38/39	sidewall	0.098	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		11/10/1999	11/13/1999
235	11/9/1999	29/39	sidewall	0.18	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		11/10/1999	11/13/1999
237	1/18/2000	107	6	0.035	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
239	1/19/2000	231	6	0.0074 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
241	1/19/2000	181	6	0.0065 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
243	1/19/2000	220	6	0.014 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U			
245	1/19/2000	121	6	0.014 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
247	1/25/2000	177	6	0.018 JB	0.013 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U	J*	1/28/2000	1/28/2000
249	1/25/2000	181/231	sidewall	0.026 B	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U	J*	1/28/2000	1/28/2000
251	1/25/2000	181/220	sidewall	0.045 B	0.014 U	0.0072 U	0.0072 U	0.0018 J	0.0017 J	J*	1/28/2000	1/31/2000
253	1/25/2000	181/121	sidewall	0.023 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	J*	1/28/2000	1/31/2000
255	1/26/2000	220/221	sidewall	0.026 B	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
257	1/26/2000	121/221	sidewall	0.021 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
259	1/26/2000	177/176	sidewall	0.019 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
261	1/27/2000	177/219	sidewall	0.015 JB	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		1/28/2000	1/31/2000
263	2/17/2000	177/219	sidewall	0.0072 JB	0.014 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U		2/19/2000	2/20/2000
265	2/17/2000	120	6	0.025 U	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		2/19/2000	2/20/2000
267	2/17/2000	102	6	0.025 U	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		2/19/2000	2/20/2000
269	2/17/2000	113	6	0.0078 JB	0.013 U	0.0066 U	0.0066 U	0.0066 U	0.0066 U		2/19/2000	2/20/2000
271	3/1/2000	225	6	0.014 J	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		3/3/2000	3/6/2000
273	3/1/2000	225/224	sidewall	0.018 J	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		3/3/2000	3/6/2000
275	3/1/2000	225/242	sidewall	0.013 J	0.013 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U		3/3/2000	3/6/2000
277	3/1/2000	226	6	0.012 J	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/3/2000	3/6/2000
279	3/1/2000	226/243	sidewall	0.012 J	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		3/3/2000	3/7/2000
281	3/1/2000	105	6	0.057	0.056	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/3/2000	3/7/2000
283	3/1/2000	118	6	0.012 J	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/3/2000	3/7/2000

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
285	3/1/2000	118/223	sidewall	0.0078 J	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		3/3/2000	3/7/2000
287	3/1/2000	118/216	sidewall	0.011 J	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/3/2000	3/7/2000
289	3/2/2000	215	6	0.02 J	0.013 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U		3/3/2000	3/7/2000
291	3/2/2000	215/216	sidewall	0.02 J	0.013 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U		3/3/2000	3/7/2000
293	3/2/2000	246	6	0.019 J	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/3/2000	3/7/2000
295	3/2/2000	246/253	sidewall	0.015 J	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/3/2000	3/7/2000
297	3/2/2000	246/252	sidewall	0.022 J	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		3/3/2000	3/7/2000
299	3/2/2000	118/224	sidewall	0.037	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/3/2000	3/7/2000
301	3/7/2000	231/road	sidewall	0.12 B	0.013 U	0.0066 U	0.0066 U	0.0016 J	0.0066 U		3/8/2000	3/11/2000
303	3/7/2000	231/273	sidewall	0.024 U	0.012 U	0.0059 U	0.0059 U	0.0027 J	0.0059 U		3/8/2000	3/11/2000
305	3/7/2000	220/273	sidewall	0.035 B	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U		3/8/2000	3/11/2000
307	3/7/2000	120/238	sidewall	0.011 JB	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		3/8/2000	3/11/2000
309	3/7/2000	120/176	sidewall	0.0085 JB	0.012 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U		3/8/2000	3/11/2000
311	3/7/2000	113/112	sidewall	0.051 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/8/2000	3/11/2000
313	3/7/2000	113/179	sidewall	0.042 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/8/2000	3/11/2000
315	3/7/2000	113/180	sidewall	0.079 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/8/2000	3/11/2000
317	3/8/2000	103	6	0.022 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		3/10/2000	3/11/2000
319	3/8/2000	115	6	0.038 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/10/2000	3/11/2000
321	3/8/2000	115/182	sidewall	0.012 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/10/2000	3/12/2000
323	3/8/2000	115/183	sidewall	0.027 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/10/2000	3/13/2000
325	3/8/2000	115/229	sidewall	0.017 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/10/2000	3/13/2000
327	3/8/2000	228	0-6	0.011 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/10/2000	3/13/2000
329	3/8/2000	228/229	sidewall	0.024 U	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/10/2000	3/13/2000
331	3/8/2000	228/245	sidewall	0.094 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/10/2000	3/13/2000
333	3/8/2000	227	6	0.025 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/10/2000	3/13/2000
335	3/8/2000	244	6	0.15 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/10/2000	3/13/2000
337	3/8/2000	244/243	sidewall	0.064 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		3/10/2000	3/13/2000
339	3/10/2000	256	6	0.0087 J	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		3/11/2000	3/14/2000
341	3/10/2000	256/257	sidewall	0.037	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		3/11/2000	3/14/2000
343	3/10/2000	256/271	sidewall	0.01 J	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		3/11/2000	3/14/2000
345	3/10/2000	256/269	sidewall	0.011 J	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		3/11/2000	3/14/2000
348	5/18/2000	276	6	0.02 JB	0.0095 J	0.0062 U	0.0062 U	0.0062 U	0.0062 U	J*		5/23/2000
350	6/1/2000	128	6	0.14 B	0.0064 J	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
352	6/1/2000	128/127	sidewall	0.034 B	0.0084 J	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
354	6/1/2000	138	6	0.16 B	0.012	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
356	6/1/2000	138/127	sidewall	0.092 B	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U			
358	6/1/2000	138/239	sidewall	0.3 B	0.013 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U			
360	6/1/2000	138/173	sidewall	0.042 B	0.01 J	0.006 U	0.006 U	0.0021 J	0.006 U			
362	6/1/2000	137	6	0.02 JB	0.011 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U			
364	6/1/2000	137/258	sidewall	0.034 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
366	6/1/2000	137/260	sidewall	0.019 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U			
368	6/1/2000	137/239	sidewall	0.14 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
370	6/1/2000	137/127	sidewall	0.026 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
372	6/2/2000	122	6	0.012 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U		6/3/2000	6/5/2000
374	6/2/2000	123	6	0.01 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U			
376	6/2/2000	124	6	0.15 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
378	6/2/2000	131	6	0.13 B	0.011 J	0.0059 U	0.0059 U	0.0059 U	0.0059 U		6/3/2000	6/7/2000

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
380	6/2/2000	131/175	sidewall	0.024 B	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U		6/3/2000	6/7/2000
382	6/2/2000	131/174	sidewall	0.058 B	0.0088 J	0.006 U	0.006 U	0.006 U	0.006 U		6/3/2000	6/7/2000
384	6/2/2000	131/130	sidewall	0.028 B	0.006 J	0.0058 U	0.0058 U	0.0058 U	0.0058 U		6/3/2000	6/7/2000
386	6/2/2000	122/129	sidewall	0.11 B	0.02	0.006 U	0.006 U	0.006 U	0.006 U		6/3/2000	6/7/2000
388	7/18/2000	217	6	0.19 B	0.011 J	0.0058 U	0.0058 U	0.0058 U	0.0058 U		7/19/2000	7/21/2000
390	7/18/2000	217/233	sidewall	0.063 B	0.0063 J	0.0058 U	0.0058 U	0.0014 J	0.0058 U		7/19/2000	7/21/2000
392	7/18/2000	217/133	sidewall	0.083 B	0.014	0.006 U	0.006 U	0.006 U	0.006 U		7/19/2000	7/21/2000
394	7/18/2000	185	6	0.017 JB	0.011 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U		7/19/2000	7/21/2000
396	7/18/2000	185/184	sidewall	0.042 B	0.0063 J	0.0058 U	0.0058 U	0.0058 U	0.0058 U		7/19/2000	7/21/2000
398	7/18/2000	134	6	0.029 B	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U		7/19/2000	7/23/2000
400	7/18/2000	134/184	sidewall	0.06 B	0.007 J	0.0068 U	0.0068 U	0.0068 U	0.0068 U		7/19/2000	7/23/2000
402	7/18/2000	134/135	sidewall	0.087 B	0.012 J	0.0063 U	0.0063 U	0.0063 U	0.0063 U		7/19/2000	7/23/2000
404	7/18/2000	134/133	sidewall	0.037 B	0.015 U	0.0076 U	0.0076 U	0.0076 U	0.0076 U		7/19/2000	7/23/2000
406	7/18/2000	126	6	0.064 B	0.008 J	0.0063 U	0.0063 U	0.0063 U	0.0063 U		7/19/2000	7/23/2000
408	7/18/2000	136	6	0.048 B	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U		7/19/2000	7/23/2000
410	7/18/2000	136/135	sidewall	0.096 B	0.014 J	0.0082 U	0.0082 U	0.0082 U	0.0082 U		7/19/2000	7/24/2000
412	7/18/2000	178	6	0.12 B	0.016 U	0.0079 U	0.0079 U	0.0079 U	0.0079 U		7/19/2000	7/24/2000
414	8/28/2000	89	6	0.018 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
416	8/28/2000	144	6	0.009 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
418	8/28/2000	68	6	0.011 JB	0.012 U	0.006 U	0.006 U	0.006 U	0.006 U			
420	8/28/2000	88	6	0.014 JB	0.012 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U			
422	8/28/2000	69	6	0.012 JB	0.012 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U			
424	8/28/2000	69	sidewall	0.32 B	0.059 U	0.029 U	0.029 U	0.029 U	0.029 U		8/29/2000	8/31/2000
426	8/28/2000	71	6	0.019 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
428	8/28/2000	70	6	0.014 JB	0.012 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U			
430	8/28/2000	70	sidewall	0.26 B	0.058 U	0.029 U	0.029 U	0.029 U	0.029 U		8/29/2000	8/31/2000
432	8/29/2001	74	6	0.01 JB	0.012 U	0.012 U	0.012 U	0.0062 U	0.0062 U			
434	8/29/2001	73	6	0.012 B	0.012 U	0.012 U	0.012 U	0.006 U	0.006 U			
436	8/29/2001	72	6	0.012 U	0.012 U	0.012 U	0.012 U	0.0059 U	0.0059 U			
438	8/29/2001	159	6	0.0059 JB	0.011 U	0.011 U	0.011 U	0.0057 U	0.0057 U			
440	8/29/2001	160	6	0.0065 JB	0.011 U	0.011 U	0.011 U	0.0057 U	0.0057 U			
442	9/17/2001	90	6	0.037	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U			
444	9/17/2001	148	6	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
446	9/17/2001	152	6	0.02	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
448	9/17/2001	158	6	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
450	9/17/2001	157	6	0.016	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U			
452	9/17/2001	156	6	0.069	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
454	9/26/2001	85	6	0.006	0.005 U	0.013 B	0.005 U	0.005 U	0.005 U			
456	9/26/2001	86	6	0.043	0.005 U	0.012 B	0.005 U	0.005 U	0.005 U			
458	9/26/2001	87	6	0.005 U	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U			
460	9/26/2001	92	6	0.005 U	0.005 U	0.008 B	0.005 U	0.005 U	0.005 U			
462	9/26/2001	91	6	0.006 U	0.006 U	0.012 B	0.006 U	0.006 U	0.006 U			
464	9/26/2001	150	6	0.6DL U	0.005 U	0.011 B	0.005 U	0.005 U	0.005 U			
466	9/26/2001	149	6	0.006	0.005 U	0.012 B	0.005 U	0.005 U	0.005 U			
468	9/26/2001	151	6	0.005	0.005 U	0.011 B	0.005 U	0.005 U	0.005 U			
470	9/26/2001	155	6	0.007	0.005 U	0.01 B	0.005 U	0.005 U	0.005 U			
472	9/26/2001	162	6	0.005	0.005 U	0.009 B	0.005 U	0.005 U	0.81DL U			

TABLE H-3 REVISED
MINE FILL B POST-EXCAVATION SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS (mg/kg)

ANALYTE				Acetone	MEK	Meth.Chl.	MIBK	Toluene	Xylenes	Qualifiers		
IM Industrial Cleanup Goal				8800	27000	18	2800	880	320			
IM Residential Cleanup Goal				2000	7100	7.8	770	790	320			
MFB PES#	Sample Date	Grid #	Depth (in.)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		Sample Prep Date	Sample Analysis Date
474	9/26/2001	161	6	0.006 U	0.006 U	0.011 B	0.006 U	0.006 U	0.012			
475	9/26/2001	162	sidewall	0.005	0.005 U	0.01 B	0.005 U	0.005 U	0.001 J			
476	9/26/2001	155	sidewall	0.004 U	0.004 U	0.013 B	0.004 U	0.001 J	0.004 U			
477	9/26/2001	151	sidewall	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			
478	9/26/2001	150	sidewall	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U			
479	9/26/2001	92	sidewall	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U	0.006 U			
480	9/26/2001	74	sidewall	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U	0.007 U			

NOTE: samples flagged with a "J*" were analyzed outside the EPA extended 54-hour hold time and are considered to be reported with a "low bias". Actual sample prep dates and sample analysis dates are provided for referencee.

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BION10214053	BION10214053FD				
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	2.89	1.84	44			
RDX	11.9	18.2	42			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0.114	200			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS10315091	BIOS10315091FD				
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	1.63	0.749	74			
RDX	3.34	0.712	130			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM10419052	BIOM10419052FD		BIOM10419113	BIOM10419113FD	
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	0.308	0.448	37	8.89	4.6	64
RDX	0.428	0	200	31.7	4	155
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0.302	0.152	66	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BION105 NO DUPLICATES COLLECTED					
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX						
RDX						
TNB						
DNB						
TETRYL						
NB						
TNT						
4-ADNT						
2-ADNT						
2,6-DNT						
2,4-DNT						
2-NT						
4-NT						
3-NT						
PETN						

	BIOM10609052	BIOM10609052FD		BIOM10609113	BIOM10609113FD	
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	0	1.14	200	2.06	4.68	77
RDX	0.593	0.437	30	3.1	25.6	157
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS10707091	BIOS10707091FD				
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	1	0.763	27			
RDX	1	0.856	16			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS10807091	BIOS10807091FD		BIOS10807113	BIOS10807113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1920	723	91	0	0	—
RDX	0	0	—	0	0	—
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM10911052	BIOM10911052FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS11010031	BIOS11010031FD		BIOS11010092	BIOS11010092FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	0	0	—
RDX	1110	0	200	0	0	—
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM11109053	BIOM11109053FD		BIOM11109113	BIOM11109113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	0	0	—
RDX	0	0	—	0	0	—
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS11215091	BIOS11215091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	3390	3320	2			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM11309052	BIOM11309052FD		BIOM11309113	BIOM09113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	6920	6120	12	0	0	—
RDX	7250	4830	44	1220	4070	108
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	264	200	19000	3160	143
4-ADNT	629	499	23	452	297	41
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS11410052	BIOS11410052FD		BIOS11410113	BIOS11410113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	0	0	—
RDX	0	0	—	2890	3030	5
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM11508091	BIOM11508091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	1150	2310	67			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	451	679	40			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM11606091	BIOM11606091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	1150	0	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS11707052	BIOS11707052FD		BIOS11707113	BIOS11707113FD	
	Results mg/kg	Results mg/kg	%RPD	Results mg/kg	Results mg/kg	%RPD
HMX	1.1	1.4	24	1.4	1.5	7
RDX	3.2	5.3	49	6.2	1	144
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS11810052	BIOS11810052FD		BIOS11810113	BIOS11810113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	2910	3460	17
RDX	0	0	—	7670	11300	38
TNB	0	383	200	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	621	0	200
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM11909091	BIOM11909091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM12007091	BIOM12007091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1790	1970	10			
RDX	2520	6430	87			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	524	200			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS12114091	BIO12114091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS12207052	BIOS12207052FD		BIOS12207113	BIOS12207113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	2200	0	200
RDX	0	1900	200	7200	2860	86
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	385	9750	185	0	0	—
4-ADNT	447	0	200	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM12309052	BIOM12309052FD		BIOM12309113	BIOM12309113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	5400	0	200	6390	0	200
RDX	24100	1290	180	37500	9450	119
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	164	0	200	3470	0	200
4-ADNT	594	0	200	1180	0	200
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM12411091	BIOM12411091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS12509052	BIOS12509052FD		BIOS12509113	BIOS12509113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	4940	200	6090	1230	133
RDX	0	12800	200	9800	4330	76
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	406	4060	164	127	862	149
4-ADNT	0	632	200	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOM12607091	BIOM12607091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	1460	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS12707052	BIOS127052FD		BIOS12707113	BIOS12707113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	2440	9970	121	0	0	—
RDX	10000	62400	145	1020	1310	25
TNB	0	2060	200	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	1180	11800	164	0	268	200
4-ADNT	674	1890	95	0	0	—
2-ADNT	0	989	200	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM12809091	BIOM12809091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1610	2020	23			
RDX	6600	2530	89			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	296	128	79			
4-ADNT	211	302	35			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS12911052	BIOS12911052FD		BIOS12911113	BIOS12911113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1550	1130	31	0	0	—
RDX	2450	8140	107	706	0	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	1620	11300	150	497	0	200
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM13010091	BIOM13010091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1820	2100	14			
RDX	2340	2950	23			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	671	200			
4-ADNT	741	494	40			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS13109052	BIOS13109052FD		BIOS13109113	BIOS13109113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	4580	200	0	5980	200
RDX	1270	9730	154	0	16000	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	1380	200	0	25000	200
4-ADNT	0	633	200	0	1280	200
2-ADNT	0	272	200	0	426	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM13210052	BIOM13210052FD		BIOM13210113	BIOM13210113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	1980	0	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS13308091	BIOS13308091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	1110	200			
RDX	1480	2590	55			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	2020	198	164			
4-ADNT	350	0	200			
2-ADNT	182	0	200			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOM13412091	BIOM13412091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS13509052	BIOS13509052FD		BIOS13509113	BIOS13509113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	5750	4270	30	5020	4460	12
RDX	2630	1610	48	19500	13000	40
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	463	0	200	1020	7420	152
4-ADNT	931	580	46	682	406	51
2-ADNT	0	0	—	0	0	—
2,6-DNT	406	0	200	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS13619052	BIOS13619052FD		BIOS13619113	BIOS13619113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	2240	0	200	0	0	—
RDX	9880	3330	99	2750	1610	52
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	24800	0	200	0	0	—
4-ADNT	399	113	112	316	558	55
2-ADNT	328	170	63	0	232	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM13711052	BIOM13711052FD		BIOM13711113	BIOM13711113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	1590	200	2040	1410	37
RDX	0	2820	200	6050	5800	4
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	2720	200	669	486	32
4-ADNT	0	0	—	421	480	13
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM13811091	BIOM13811091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	1320	200			
RDX	793	8940	167			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	263	200			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS13911091	BIOS13911091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	1350	1520	12			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	1850	200			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM14017052	BIOM14017052FD		BIOM14017113	BIOM14017113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	373	0	200
RDX	0	0	—	2100	0	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM14111091	BIOM14111091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS14214091	BIOS14214091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	163	0	200			
RDX	0	210	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS14313052	BIOS14313052FD		BIOS14313113	BIOS14313113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	3390	4040	17	6170	6530	6
RDX	8220	7510	9	9430	10000	6
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	242	864	112	523	3700	150
4-ADNT	0	0	—	0	480	200
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM14410091	BIOM14410091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	407	675	50			
RDX	1200	1940	47			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM14511052	BIOM14511052FD		BIOM14511113	BIOM14511113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	501	686	31	0	46	200
RDX	2430	1190	69	396	309	25
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	1250	200	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS14618091	BIOS14618091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	15700	0	200			
RDX	76700	285	199			
TNB	528	0	200			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	720	127	140			
4-ADNT	659	0	200			
2-ADNT	288	0	200			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS14710052	BIOS14710052FD		BIOS14710113	BIOS14710113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1240	529	80	3080	420	152
RDX	652	269	77	10900	1780	144
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM14814052	BIOM14814052FD		BIOM14814113	BIOM14814113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	408	436	7	0	745	200
RDX	312	2120	149	0	1400	200
TNB	118	0	200	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	248	0	200	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM14914091	BIOM14914091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	116	200			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	149	200			
2-ADNT	0	102	200			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS15010052	BIOS15010052FD		BIOS15010113	BIOS15010113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1570	1160	30	2580	1190	74
RDX	4020	1410	96	4480	779	141
TNB	0	0	—	168	0	200
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	598	46.1	171	7600	0	200
4-ADNT	234	0	200	1540	0	200
2-ADNT	149	0	200	1000	0	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS1511253	BIOS1511253FD		BIOS15112113	BIOS15112113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	494	619	22	2510	0	200
RDX	551	781	35	4870	385	171
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	90.2	27100	199	246	0	200
4-ADNT	0	0	—	1840	0	200
2-ADNT	0	0	—	2010	0	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM15212052	BIOM15212052FD		BIOM15212113	BIOM15212113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	466	1260	92	1150	1800	44
RDX	736	697	5	326	1540	130
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	58.3	194	108	0	0	—
TETRYL	0	0	—	0	0	—
2,4 DNT	0	0	—	0	0	—
2,6 DNT	0	0	—	0	0	—
2ADNT	0	0	—	0	0	—
4ADNT	0	0	—	0	0	—
2NT	0	0	—	0	0	—
4NT	0	0	—	0	0	—
3NT	0	0	—	0	0	—
PETN						

	BIOM15315052	BIOM15315052FD		BIOM15315113	BIOM15315113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	2691.9	2736.6	2	1913	2045	7
RDX	3124.7	6454.1	70	1754	1745	1
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
2,4 DNT	0	0	—	0	0	—
2,6 DNT	0	0	—	0	0	—
2ADNT	0	164.3	200	0	0	—
4ADNT	0	221.5	200	0	0	—
2NT	0	0	—	0	0	—
4NT	0	0	—	0	0	—
3NT	0	0	—	0	0	—
PETN						

	BIOS15415091	BIOS15415091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
NB	0	0	—			
TNT	0	0	—			
TETRYL	0	0	—			
2,4 DNT	0	0	—			
2,6 DNT	0	0	—			
2ADNT	0	0	—			
4ADNT	0	0	—			
2NT	0	0	—			
4NT	0	0	—			
3NT	0	0	—			
PETN						

	BIOS15512052	BIOS15512052FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
NB	0	0	—			
TNT	0	12600	200			
TETRYL	0	0	—			
2,4 DNT	0	0	—			
2,6 DNT	0	0	—			
2ADNT	0	0	—			
4ADNT	0	0	—			
2NT	0	0	—			
4NT	0	0	—			
3NT	0	0	—			
PETN						

	BIOM15609031	BIOM15609031FD		BIOM15609092	BIOM15609092FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	596.2	467.5	20	1464	846	54
RDX	410.8	1344.2	106	510	830	48
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	206	0	200
TETRYL	0	0	—	0	0	—
2,4 DNT	0	0	—	0	0	—
2,6 DNT	0	0	—	0	0	—
2ADNT	0	0	—	0	0	—
4ADNT	0	0	—	116	0	200
2NT	0	0	—	0	0	—
4NT	0	0	—	0	0	—
3NT	0	0	—	0	0	—
PETN						

	BIOM15709053	BIOM15709053FD		BIOM15709113	BIOM15711309113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	381.4	1083.1	96	4299	1940	76
RDX	485.9	381.3	24	1835	6710	114
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	216	200
4-ADNT	0	0	—	0	108	200
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS15811091	BIOS15811091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS15909052	BIOS15909052FD		BIOS15909113	BIOS15909113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	51.7	200	2340	2470	5
RDX	701	0	200	7590	5130	39
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	231	200	159	1580	163
4-ADNT	0	0	—	245	275	12
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM16011052	BIOM16011052FD		BIOM16011091	BIOM16011091FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	0	0	—
RDX	0	0	—	0	346	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM16110032	BIOM16110032FD		BIOM16110072	BIOM16110072FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1210	2520	70	0	0	—
RDX	4100	1870	75	0	0	—
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	365	273	29	0	349	200
2-ADNT	0	0	—	0	273	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS16210072	BIOS16210072FD		BIOS16210112	BIOS16210112FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	2060	1270	47	872	0	200
RDX	4880	3880	23	0	533	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	280	195	36	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS16308031	BIOS16308031FD		BIOS16308091	BIOS16308091FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	385	124	103	0	259	200
RDX	2340	1880	22	1020	3900	117
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM16410053	BIOM16410053FD		BIOM16410093	BIOM16410093FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	4040	3340	19	1790	633	96
RDX	6980	3520	66	8170	2700	101
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM16509031	BIOM16509031FD		BIOM16509053	BIOM16509053FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	0	0	—
RDX	0	0	—	0	1340	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS16608031	BIOS16608031FD		BIOS16608092	BIOS16608092FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	164	200	0	526	200
RDX	1020	801	24	0	357	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS16710052	BIOS16710052FD		BIOS16710113	BIOS16710113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	90.3	53.7	51	940	176	137
RDX	0	0	—	333	0	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM16808091	BIOM16809091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	93.6	0	200			
RDX	266	0	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM16907052	BIOM16907052FD		BIOM16907113	BIOM16907113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	863	257	108	500	288	54
RDX	8430	2060	121	2330	844	94
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS17012091	BIOS17012091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	757	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS17110052	BIOS17110052FD		BIOS17110113	BIOS17110113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	209	741	112
RDX	0	1720	200	0	6720	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	566	200
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM17212091	BIOM17212091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM17310052	BIOM173052FD		BIOM17310113	BIOM17310113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	695	248	95	578	399	37
RDX	200	227	13	478	77.6	144
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS17410091	BIOS17410091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1250	565	75			
RDX	350	128	93			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS17512212052	BIOS17512052FD		BIOS17512113	BIOS17512113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	261	196	28	2040	2960	37
RDX	408	75.2	138	559	2090	116
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM17612091	BIOM17612091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM17715052	BIOM17715052FD		BIOM17715113	BIOM17715113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	2690	1980	30
RDX	0	1940	200	591	817	32
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS17810091	BIOS17810091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	216	497	79			
RDX	11200	1530	152			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	152	200			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS17916052	BIOS17916052FD		BIOS17916113	BIOS17916113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	558	226	85	217	476	75
RDX	4290	0	200	1260	119	185
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM18017091	BIOM18017091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	200	0	200			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM18115052	BIOM18115052FD		BIOM18115113	BIOM18115113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	3760	2480	41	1420	1030	32
RDX	29300	5370	138	522	1450	94
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	953	0	200
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS18214091	BIOS18214091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS18312052	BIOS18312052FD		BIOS18312113	BIOS18312113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	11300	7600	37
RDX	1360	2670	65	28400	26000	9
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	270	200	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM18413091	BIOM18413091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM18516052	BIOM18516052FD		BIOM18516113	BIOM18516113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	4960	5230	5	334	0	200
RDX	6710	17800	90	999	0	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS18615091	BIOS18615091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	753	200			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS18719052	BIOS18719052FD		BIOS18719113	BIOS18719113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	1960	2210	12
RDX	0	0	—	1660	3290	66
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM18821091	BIOM18821091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	353	0	200			
RDX	849	0	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	115	200			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM18918052	BIOM18918052FD		BIOM18918113	BIOM18918113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	2700	1810	39	4240	0	200
RDX	1700	2560	40	2840	0	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOS19016091	BIOS19016091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS19117052	BIOS19117052FD		BIOS19117113	BIOS19117113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	160	211	27	1340	3530	90
RDX	0	1120	200	2080	18700	160
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	311	0	200	0	2770	200
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM19331072	BIOM19331072FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1110	1950	55			
RDX	3020	2110	35			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	17.8	200			
TNT	1670	799	71			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM19419073	BIOM19419073FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS19522051	BIOS19522051FD		BIOS19522112	BIOS19522112FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—	484	0	200
RDX	0	0	—	0	121	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS19624033	BIOS19624033FD		BIOS19624111	BIOS19624111FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	3430	6460	61	0	298	200
RDX	14200	24400	53	0	430	200
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	38.7	90.2	80	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BION19720093	BION19720093FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	166	314	62			
RDX	0	132	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM19821072	BIOM19821072FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	145	423	98			
RDX	177	553	103			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BIOM19969031	BIOM19969031FD		BIOM19969092	BIOM19969092FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	996	0	200	538	215	86
RDX	0	0	—	3530	1710	69
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BION20018033	BION20018033FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	68200	23300	98			
RDX	318000	106000	100			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	1680	0	200			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS20147031	BIOS20147031FD		BIOS20147092	BIOS20147092FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	198	240	19	5710	12600	75
RDX	1130	578	65	11200	18400	49
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	164	0	200	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM20921091	BIOM20921091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	234	144	48			
RDX	730	671	8			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	52.9	205	118			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM21020052	BIOM21020052FD		BIOM21020113	BIOM21020113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	4210	3100	30	494	1060	73
RDX	7180	1180	144	286	1040	114
TNB	51.3	0	200	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	2710	196	173	92	81	13
4-ADNT	0	98.8	200	0	0	—
2-ADNT	0	70	200	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOS21118091	BIOS21118091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	95	718	153			
RDX	162	16000	196			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	113	3320	187			
4-ADNT	0	254	200			
2-ADNT	0	266	200			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOS21237091	BIOS21237091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	0	0	—			
RDX	0	1640	200			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BIOM21318052	BIOM21318052FD		BIOM21318113	BIOM21318113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	1110	2130	63	3670	2690	24
RDX	162	1510	161	1320	578	78
TNB	0	0	—	0	0	—
DNB	0	60.9	200	69	73	6
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	196	0	200
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

MINE FILL B
Windrow Day Last Field Duplicate Relative Percent Diferrence (RPD) Calculations

	BION21423091	BION21423091FD				
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	211	0	200			
RDX	0	0	—			
TNB	0	0	—			
DNB	0	0	—			
TETRYL	0	0	—			
NB	0	0	—			
TNT	0	0	—			
4-ADNT	0	0	—			
2-ADNT	0	0	—			
2,6-DNT	0	0	—			
2,4-DNT	0	0	—			
2-NT	0	0	—			
4-NT	0	0	—			
3-NT	0	0	—			
PETN						

	BION21617052	BION21617052FD		BION21617113	BION21617113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	362	111	106	202	321	46
RDX	453	40.8	167	0	0	—
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						

	BIOM21523052	BIOM21523052FD		BIOM21523113	BIOM21523113FD	
	Results ug/kg	Results ug/kg	%RPD	Results ug/kg	Results ug/kg	%RPD
HMX	388	597	42	2750	1770	43
RDX	2970	597	133	9850	706	173
TNB	0	0	—	0	0	—
DNB	0	0	—	0	0	—
TETRYL	0	0	—	0	0	—
NB	0	0	—	0	0	—
TNT	0	0	—	0	0	—
4-ADNT	0	0	—	0	0	—
2-ADNT	0	0	—	0	0	—
2,6-DNT	0	0	—	0	0	—
2,4-DNT	0	0	—	0	0	—
2-NT	0	0	—	0	0	—
4-NT	0	0	—	0	0	—
3-NT	0	0	—	0	0	—
PETN						