

HAFB 06



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH FIGHTER WING (ACC)
HOLLOMAN AIR FORCE BASE, NEW MEXICO

JUL 19 2006

MEMORANDUM FOR NEW MEXICO ENVIRONMENT DEPARTMENT

Attn: Mr. John Kieling
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Santa Fe, NM 87505-6303

FROM: 49 CES/CEV
550 Tabosa Ave
Holloman AFB NM 88330-8458



SUBJECT: Response to the Notice of Deficiency (NOD) Regarding the Base Hospital UST
Voluntary Corrective Measures Completion Report dated July 2005

1. As required by NMED NOD comment #1, "Permitte is required to provide the depth to ground-water in the excavation and a discussion on whether there was any indication of groundwater contamination (e.g., odor, sheen or free product)." Holloman AFB has collected data regarding the groundwater at the referenced site.
2. Please find enclosed a revised Figure 3 (Atch 1) from the completion report indicating the location of the new groundwater monitoring well HUST-DP-01.
3. Please also find enclosed a copy of the laboratory analytical report (Atch 2) for the analysis of the groundwater sample collected from well HUST-DP-01 on 7 June 2006. No volatile organic constituents exceed New Mexico Groundwater Quality Control Commission standards.
4. The depth to water in the temporary monitoring well on 7 June 2006 was 10.22 feet below the ground surface (bgs). The total depth of the well is 16 feet bgs.
5. If you have any questions or require additional information, please contact Mr. Dave Griffin at (505) 572-5395.


A. DAVID BUDAK
Deputy Base Civil Engineer

Attachments:

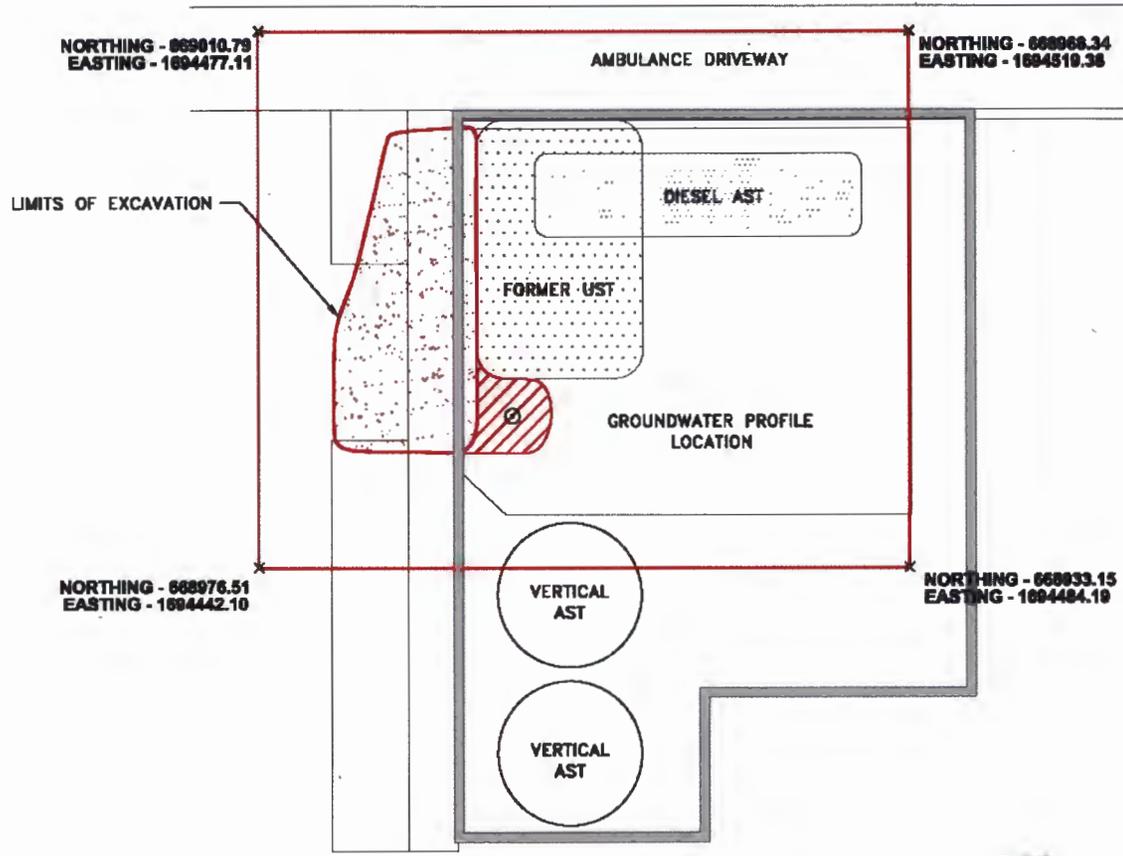
1. Figure 3
2. Laboratory Analytical Report HUST-DP-01

cc (w/Atchs): See next page

Mr. Cornelius Amindyas
Hazardous Waste Bureau
5500 San Antonio Drive NE
Albuquerque, NM 87109

Mr. Will Motes
Hazardous Waste Bureau
5500 San Antonio Drive NE
Albuquerque, NM 87109

James Harris
USEPA, Region 6 PD-N,
1445 Ross Ave., Ste 12
Dallas, TX 75202-2733



NOTES:

This information is depicted to provide visual aid within the context of this report and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

All coordinates are in NAD 1983 New Mexico Central State Plane

LEGEND:

-  AREA OF EXCAVATION
-  AREA OVER-EXCAVATED DUE TO HIGH FIELD READINGS
- AST ABOVEGROUND STORAGE TANK
- UST UNDERGROUND STORAGE TANK



**SITE MAP
HOSPITAL UST**

PROJECT NO. 9030072	SCALE 1"=20'	DATE 02/02/06	DRAWN BY: SSD/MRM
			DRAWING NO: 9030072.03-ATT3

BASE HOSPITAL UST
VOLUNTARY CORRECTIVE MEASURES
COMPLETION REPORT
HOLLOMAN AFB, NM

Figure 3

A/Ech 1



IT'S ALL IN THE CHEMISTRY

06/26/06



Technical Report for

Bhate Environmental Associates, Inc.

HOLMN

PROJECT # 9050043.01.06

Accutest Job Number: F41328

Sampling Date: 06/07/06

Report to:

Bhate Environmental Associates, Inc.

fgardner@bhate.com

ATTN: Frank Gardner

Total number of pages in report: **22**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi
Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Bhate Environmental Associates, Inc.

Job No: F41328

HOLMN

Project No: PROJECT # 9050043.01.06

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F41328-1	06/07/06	10:18	KG	06/08/06	AQ Ground Water	HUST-DP-01
F41328-2	06/07/06	00:00	KG	06/08/06	AQ Trip Blank Water	TRIP BLANK

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental Associates, Inc.

Job No: F41328

Site: HOLMN

Report Date 6/21/2006 9:38:45 AM

1 Sample, 1 Trip Blank were collected on 06/07/2006 and received at Accutest on 06/08/2006 properly preserved, at 2.2 Deg. C and intact. These Samples received an Accutest job number of F41328. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix: AQ

Batch ID: VJ954

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F41295-1MS, F41295-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, 1,2-Dibromo-3-chloropropane, 2-Chloroethyl vinyl ether, 2-Hexanone, 4-Methyl-2-pentanone, Methyl methacrylate, Styrene, Trans-1,4-Dichloro-2-Butene, Vinyl Acetate are outside control limits. Probable cause due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, 2-Chloroethyl vinyl ether, 2-Hexanone, 4-Methyl-2-pentanone, Methyl chloride, Methyl methacrylate, Styrene, Trans-1,4-Dichloro-2-Butene, Vinyl Acetate are outside control limits. Probable cause due to matrix interference. See Blank Spike.

Extractables by GCMS By Method SW846 8270C

Matrix: AQ

Batch ID: OP16856

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F41336-1MS, F41336-1MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Volatiles by GC By Method SW846 8015

Matrix: AQ

Batch ID: GCD2866

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F41358-1MS, F41358-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8015 M

Matrix: AQ

Batch ID: OP16861

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) F41336-2MS, F41336-2MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Metals By Method EPA 200.7

Matrix: AQ

Batch ID: MP9742

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F41290-1DUP, F41290-1MS, F41290-1MSD, F41290-1SDL were used as the QC samples for metals.

RPD(s) for Duplicate for Arsenic, Barium, Beryllium, Potassium, Selenium are outside control limits for sample MP9742-D1. RPD acceptable due to low duplicate and sample concentrations.

RPD(s) for Serial Dilution for Aluminum, Arsenic, Barium, Beryllium, Cadmium, Iron, Manganese, Nickel, Potassium,

Selenium are outside control limits for sample MP9742-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Metals By Method EPA 245.1

Matrix: AQ

Batch ID: MP9746

All samples were digested within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F41371-1DUP, F41371-1MS were used as the QC samples for metals.

Wet Chemistry By Method EPA 160.1

Matrix: AQ

Batch ID: GN20962

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) F41295-1DUP were used as the QC samples for Solids, Total Dissolved.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

Date: June 21, 2006

Svetlana Izosimova, QAO (signature on file)



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: HUST-DP-01		Date Sampled: 06/07/06
Lab Sample ID: F41328-1		Date Received: 06/08/06
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260B		
Project: HOLMN		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J023226.D	1	06/15/06	MM	n/a	n/a	VJ954
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	5.0	ug/l	
75-05-8	Acetonitrile	ND	20	10	ug/l	
107-02-8	Acrolein	ND	20	10	ug/l	
107-13-1	Acrylonitrile	ND	10	5.0	ug/l	
107-05-1	Allyl chloride	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
100-44-7	Benzyl Chloride	ND	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	1.0	ug/l	
67-66-3	Chloroform	2.1	1.0	0.50	ug/l	
544-10-5	1-Chlorohexane	ND	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: HUST-DP-01	
Lab Sample ID: F41328-1	Date Sampled: 06/07/06
Matrix: AQ - Ground Water	Date Received: 06/08/06
Method: SW846 8260B	Percent Solids: n/a
Project: HOLMN	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
1476-11-5	cis-1,4-Dichloro-2-Butene	ND	10		ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	2.0	ug/l	
76-13-1	Freon 113	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	1.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
126-98-7	Methacrylonitrile	ND	20	10	ug/l	
74-83-9	Methyl bromide	ND	2.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
74-88-4	Methyl iodide	ND	5.0	2.5	ug/l	
80-62-6	Methyl methacrylate	ND	5.0	2.5	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
76-01-7	Pentachloroethane	ND	10	5.0	ug/l	
107-12-0	Propionitrile	ND	20	10	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HUST-DP-01	Date Sampled: 06/07/06
Lab Sample ID: F41328-1	Date Received: 06/08/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: HOLMN	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	0.55	1.0	0.50	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		86-115%
17060-07-0	1,2-Dichloroethane-D4	115%		73-126%
2037-26-5	Toluene-D8	97%		86-112%
460-00-4	4-Bromofluorobenzene	111%		83-119%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: HUST-DP-01	
Lab Sample ID: F41328-1	Date Sampled: 06/07/06
Matrix: AQ - Ground Water	Date Received: 06/08/06
Method: SW846 8270C SW846 3510C	Percent Solids: n/a
Project: HOLMN	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L032116.D	1	06/10/06	NJ	06/09/06	OP16856	SL1662
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic Acid	ND	25	10	ug/l	
95-57-8	2-Chlorophenol	ND	5.0	2.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	2.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	5.0	2.0	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	25	10	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	5.0	ug/l	
95-48-7	2-Methylphenol	ND	5.0	2.0	ug/l	
	3&4-Methylphenol	ND	5.0	2.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	2.0	ug/l	
100-02-7	4-Nitrophenol	ND	25	10	ug/l	
87-86-5	Pentachlorophenol	ND	25	10	ug/l	
108-95-2	Phenol	ND	5.0	2.0	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	2.0	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	2.0	ug/l	
83-32-9	Acenaphthene	ND	5.0	1.0	ug/l	
208-96-8	Acenaphthylene	ND	5.0	1.0	ug/l	
120-12-7	Anthracene	ND	5.0	1.0	ug/l	
92-87-5	Benzidine	ND	25	15	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.0	1.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.0	1.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.0	1.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.0	1.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.0	1.0	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.0	2.0	ug/l	
100-51-6	Benzyl Alcohol	ND	5.0	1.0	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.0	1.0	ug/l	
106-47-8	4-Chloroaniline	ND	10	4.0	ug/l	
218-01-9	Chrysene	ND	5.0	1.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.0	1.0	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.0	2.0	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	HUST-DP-01	Date Sampled:	06/07/06
Lab Sample ID:	F41328-1	Date Received:	06/08/06
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 3510C		
Project:	HOLMN		

ABN Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.0	1.0	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.0	1.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	1.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	1.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	1.0	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	5.0	2.0	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	5.0	2.0	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	10	5.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.0	2.0	ug/l	
132-64-9	Dibenzofuran	ND	5.0	1.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.0	2.0	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.0	2.5	ug/l	
84-66-2	Diethyl phthalate	ND	5.0	2.0	ug/l	
131-11-3	Dimethyl phthalate	ND	5.0	2.0	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5.0	2.5	ug/l	
206-44-0	Fluoranthene	ND	5.0	1.0	ug/l	
86-73-7	Fluorene	ND	5.0	1.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.0	1.0	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	2.0	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	5.0	2.0	ug/l	
67-72-1	Hexachloroethane	ND	5.0	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.0	2.0	ug/l	
78-59-1	Isophorone	ND	5.0	1.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.0	1.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	4.0	ug/l	
99-09-2	3-Nitroaniline	ND	10	4.0	ug/l	
100-01-6	4-Nitroaniline	ND	10	4.0	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
98-95-3	Nitrobenzene	ND	5.0	1.0	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.0	2.0	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.0	1.0	ug/l	
129-00-0	Pyrene	ND	5.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	49%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	102%		36-137%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: HUST-DP-01	Date Sampled: 06/07/06
Lab Sample ID: F41328-1	Date Received: 06/08/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8270C SW846 3510C	
Project: HOLMN	

ABN Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	91%		45-118%
1718-51-0	Terphenyl-d14	95%		46-135%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: HUST-DP-01	Date Sampled: 06/07/06
Lab Sample ID: F41328-1	Date Received: 06/08/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: HOLMN	

Metals Analysis

Analyte	Result	RL	MDL	Units	DF	Prep	Analyzed By	Method	Prep Method	
Aluminum	2040	200	18	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Antimony	3.4 U	6.0	3.4	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Arsenic	5.1 J	10	2.8	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Barium	26.8 J	200	0.40	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Beryllium	2.0 J	8.0	0.80	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Cadmium	0.30 U	5.0	0.30	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Calcium	646000	5000	210	ug/l	5	06/09/06	06/13/06	RS	SW846 6010B ³	EPA 200.7 ⁴
Chromium	1.4 J	10	0.60	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Cobalt	1.3 J	50	0.60	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Copper	1.0 U	25	1.0	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Iron	1470	300	15	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Lead	1.7 U	5.0	1.7	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Magnesium	141000	5000	4.3	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Manganese	45.9	15	1.5	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Mercury	0.10 U	1.0	0.10	ug/l	1	06/12/06	06/12/06	MS	EPA 245.1 ¹	EPA 245.1 ⁵
Nickel	2.9 J	40	0.80	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Potassium	10400	10000	100	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Selenium	7.1 J	10	2.8	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Silver	0.90 U	10	0.90	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Sodium	80400	50000	2500	ug/l	5	06/09/06	06/13/06	RS	SW846 6010B ³	EPA 200.7 ⁴
Thallium	2.9 U	10	2.9	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Vanadium	39.5 J	50	1.1	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴
Zinc	9.6 J	20	1.6	ug/l	1	06/09/06	06/12/06	RS	EPA 200.7 ²	EPA 200.7 ⁴

- (1) Instrument QC Batch: MA5026
- (2) Instrument QC Batch: MA5029
- (3) Instrument QC Batch: MA5031
- (4) Prep QC Batch: MP9742
- (5) Prep QC Batch: MP9746

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

3:1
3

Client Sample ID: HUST-DP-01	Date Sampled: 06/07/06
Lab Sample ID: F41328-1	Date Received: 06/08/06
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: HOLMN	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Solids, Total Dissolved	3460	100	10	mg/l	1	06/12/06 09:40	LE	EPA 160.1

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
J = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: TRIP BLANK	Date Sampled: 06/07/06
Lab Sample ID: F41328-2	Date Received: 06/08/06
Matrix: AQ - Trip Blank Water	Percent Solids: n/a
Method: SW846 8260B	
Project: HOLMN	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	J023225.D	1	06/15/06	MM	n/a	n/a	VJ954
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	5.0	ug/l	
75-05-8	Acetonitrile	ND	20	10	ug/l	
107-02-8	Acrolein	ND	20	10	ug/l	
107-13-1	Acrylonitrile	ND	10	5.0	ug/l	
107-05-1	Allyl chloride	ND	10	5.0	ug/l	
71-43-2	Benzene	ND	1.0	0.50	ug/l	
100-44-7	Benzyl Chloride	ND	1.0	0.50	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.50	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.50	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
75-00-3	Chloroethane	ND	2.0	1.0	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
544-10-5	1-Chlorohexane	ND	2.0	1.0	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.50	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	2.5	ug/l	
75-15-0	Carbon disulfide	ND	2.0	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.50	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.50	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.50	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.50	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.50	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.50	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK	
Lab Sample ID: F41328-2	Date Sampled: 06/07/06
Matrix: AQ - Trip Blank Water	Date Received: 06/08/06
Method: SW846 8260B	Percent Solids: n/a
Project: HOLMN	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
124-48-1	Dibromochloromethane	ND	1.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.50	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
1476-11-5	cis-1,4-Dichloro-2-Butene	ND	10		ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.50	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.30	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
97-63-2	Ethyl methacrylate	ND	5.0	2.0	ug/l	
76-13-1	Freon 113	ND	1.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.5	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.50	ug/l	
110-54-3	Hexane	ND	2.0	1.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.50	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	5.0	2.5	ug/l	
126-98-7	Methacrylonitrile	ND	20	10	ug/l	
74-83-9	Methyl bromide	ND	2.0	1.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	1.0	ug/l	
74-88-4	Methyl iodide	ND	5.0	2.5	ug/l	
80-62-6	Methyl methacrylate	ND	5.0	2.5	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.50	ug/l	
75-09-2	Methylene chloride	ND	5.0	1.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	2.0	1.0	ug/l	
76-01-7	Pentachloroethane	ND	10	5.0	ug/l	
107-12-0	Propionitrile	ND	20	10	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.50	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TRIP BLANK	
Lab Sample ID: F41328-2	Date Sampled: 06/07/06
Matrix: AQ - Trip Blank Water	Date Received: 06/08/06
Method: SW846 8260B	Percent Solids: n/a
Project: HOLMN	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.50	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
110-57-6	Trans-1,4-Dichloro-2-Butene	ND	10	5.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.50	ug/l	
108-05-4	Vinyl Acetate	ND	10	5.0	ug/l	
	m,p-Xylene	ND	2.0	0.50	ug/l	
95-47-6	o-Xylene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		86-115%
17060-07-0	1,2-Dichloroethane-D4	114%		73-126%
2037-26-5	Toluene-D8	98%		86-112%
460-00-4	4-Bromofluorobenzene	111%		83-119%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
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 N = Indicates presumptive evidence of a compound



IT'S ALL IN THE CHEMISTRY

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F41328



Chain of Custody and Analytical Request

Page 1 of 1
Project Number: 9050043.01.06
P.O. NA
Chain of Custody Number 01060720061
LIMS Number: NA

Project Name / Site Name: WPA8 RAO										Sample Analysis Requested ¹⁾										Quality Assurance Samples ²⁾		
Client Name: USACE										Collection by: K. Germain										Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number
Field Sample ID (to Characterize)	SPH&S LOCID (to Characterize)	Date Collected (Month-Year-Day)	Time Collected (Military)	Sample Depth (Feet)	BA Code ³⁾	Sample Number ⁴⁾	Sample Matrix ⁵⁾	Number of Containers	VOC B240	SVOC B278	DRUGS B415	PCB B416	TOTAL PCBs B417	TRIS B418								
HUST-DP-01	HUST-DP-01	06/07/06	10:18	0	0	N	1	WG	9	II	II	II	II	II					1			
Trip Blank	Field QC					TP			1	II									1			

COMMENTS: **ATTN: Sample Receiving**
Accutest Laboratories
4445 Vineland Road Suite C15
Orlando, FL 32811

1. Collected by (Signed) _____ Date _____ Time _____ 2. <i>AKG 6/7/2006 1600 FX</i> 3. _____	Received by (Signed) _____ Date _____ Time _____ 1. _____ 2. <i>FX</i> 3. <i>AKG ALSG 9:00 AM/06</i>	Sample Delivery Receipt / Laboratory Receipt Delivered Directly to Lab: _____ Method of Shipment: <u>PEDEX</u> Shipment No.: _____ Analytical Lab: <u>Accutest Lab</u> Lab Number: _____ Lab Receipt #: _____ Delivery Location: _____ Delivery Date/Time: _____
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1) Chain of Custody Number = Also referred to as sample number (e.g. 02-02-1999-01)
 2) Sample Type (BA) Codes: N = Normal Sample, TP = Trip Blank (-) Sample, PD = Field Duplicate (-) Sample, PR = Field Duplicate (+) Sample, SB = Equipment Blank (-) Sample, MB = Mobile Blank, ED = Mobile Blank Duplicate, AB = Ambient Blank (-)
 3) Sample Matrix: Unique sample number collected from a particular location per day (e.g. Groundwater sample collected from MW-1 on 10/15/99 = 01, if sampled again on 10/15/99 = 02, etc.)
 4) Matrix Codes: OB = Soil Core, WG = Groundwater, WS = Surface Water, RI = Soil, SE = Sediment, SL = Sludge, SB = Surface Soil Sample, WQ = Aquatic Blank Sample (trip, equipment, ambient, etc.), BQ = Soil Blank
 5) Sample Analysis Requested: Analytical method requested and number of containers provided for each.
 6) Quality assurance samples are analyzed by site laboratory and the sample number associated with the sample (01, 02, etc.) (e.g. Equipment blank collected in association with MW-1 on 10/15/99 will be designated (010999) in the Equipment Blank Lot Control

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ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F41328 CLIENT: Bhate PROJECT: WP49 RAO
 DATE/TIME RECEIVED: 6/8/06 9:00 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2.2
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER GREYHOUND DELIVERY OTHER
 AIRBILL NUMBERS: 8545 9102 5302

COOLER INFORMATION

- CUSTODY SEAL NOT PRESENT OR NOT INTACT
- CHAIN OF CUSTODY NOT RECEIVED (COC)
- ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- TRIP BLANK NOT PROVIDED
- TRIP BLANK NOT ON COC
- TRIP BLANK INTACT
- TRIP BLANK NOT INTACT
- RECEIVED WATER TRIP BLANK
- RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

- NUMBER OF ENCORES ? X
- NUMBER OF 5035 FIELD KITS ? X
- NUMBER OR LAB FILTERED METALS ? X

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE [Signature] 6/8/06 TECHNICIAN SIGNATURE/DATE [Signature] 6-8-06

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