37188

Fred C. Hart Associates, Inc.

ASB 001 1540 F

REMEDIAL INVESTIGATION REPORT
MILLINGTON SITE
MORRIS COUNTY, NEW JERSEY

APPENDIX VOLUME: I

Prepared For:
National Gypsum Company
Dallas, Texas

Prepared By:

Fred C. Hart Associates, Inc.
140 Allen Road
Liberty Corner, N.J. 07938

FEBRUARY 29, 1988

ASB 001 1541

APPENDIX A

TEST BORING LOGS

ASB 001 1542

HART

FRED C. HART ASSOCIATES, INC.

TEST BORING LOG

BORING NO. 101

BORING WELL LOCATION SKETCH MAP

N

PROJECT NO. NAME: [illegible]

LOCATION: [illegible]

DRILLING CONTRACTOR. DRILLER: [illegible] / [illegible]

HART GEOLOGIST. OFFICE: [illegible] / [illegible]

DRILLING EQUIPMENT. METHOD: [illegible]

SIZE. TYPE OF BIT:

SAMPLING METHOD: [illegible]

START. FINISH DATE: [illegible]

WELL INSTALLED? YES ☐ NO ☒

CASING MAT.. DIA.:

SCREEN: TYPE | MAT. | LENGTH | DIA. | SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE | TOP OF WELL CASING | TOP & BOTTOM SCREEN | GW SURFACE | DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
		1.4	3-3 3-2	0-0.3' = yellow fine sand (well-sort) Rest = Brunswick-colored silt-clay	Pebbles w/ clay		
		1.0	4-6 6-7	Brunswick-colored silty/clayey soil			
5				Brunswick Formation Siltstone bedrock encountered at 4 1/2 feet below grade RQD = 45/60 = 75 %			
10							
15							

Proportions Used. Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

ASB 001 1543

FRED C. HART ASSOCIATES, INC.

HART

TEST BORING LOG

BORING NO. [illegible]

PROJECT NO. NAME [illegible]

LOCATION [illegible]

DRILLING CONTRACTOR DRILLER [illegible]

HART GEOLOGIST OFFICE [illegible]

DRILLING EQUIPMENT METHOD | SIZE TYPE OF BIT | SAMPLING METHOD [illegible] | START FINISH DATE

WELL INSTALLED? YES ☐ NO ☐ | CASING MAT. DIA. | SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	28	0.5	2-2 2-2	silty/clayey fill w/ pebbles + rock-frag dark-brown colored			
5	29	2.0	1-1 1-1	white-colored asbestos fiber			
				Shelby tube collected			
10	30	2.0	1-1 1-1	asbestos fiber			
				Shelby tube collected			
15	31	2.0	1-1 1-1	asbestos fiber			
				Shelby tube collected			
	32	2.0	1-1 1-1	asbestos fiber			

Proportions Used. Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

ASB 001 1544

FRED C. HART ASSOCIATES, INC.

HART

LOG OF TEST BORING

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
				Shelby tube collected			
	3-1	2.0	1-2 2-12	asbestos fiber			
25'				shelby tube collected			
	35	1.15	2-3 4-7	0-0.3' = clayey, gray/green silt (soft) feet = silty, brittle residue of weathered siltstone bedrock			
30'				siltstone bedrock at 29'			

ASB 001 1545

HART

FRED C. HART ASSOCIATES, INC.

TEST BORING LOG

BORING NO. [illegible]

PROJECT NO. NAME [illegible]

LOCATION [illegible]

DRILLING CONTRACTOR DRILLER [illegible]

HART GEOLOGIST OFFICE [illegible]

DRILLING EQUIPMENT METHOD | SIZE, TYPE OF BIT | SAMPLING METHOD [illegible] | START FINISH DATE

WELL INSTALLED? YES ☒ NO ☐ | CASING MAT., DIA. | SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	1	2.0	5-8 3-1	red fill with bits of gravel			
	2	1.25	1-1 1-1	2 & 3 = fill Rest = white + green asbestos fiber			
5	3	1.05	1-1 1-1	white asbestos fiber			
	4	1.6	1-1 1-1	asbestos fiber			
	5	1.4	1-1 1-1	asbestos fiber			
10	6	2.0	1-1 1-1	asbestos fiber			
	7	2.0	1-1 1-1	asbestos fiber			
15	8	2.0	1-1 1-1	asbestos fiber			
	9	2.0	1-1 1-1	asbestos fiber			
	10	2.0	1-1 1-1	asbestos fiber			

ASB 001 1546

Proportions Used: Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

FRED C. HART ASSOCIATES, INC.

BORING NO. [illegible]

LOG OF TEST BORING

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	[illegible]	2.0	2-3 2-2	asbestos fiber			
	12	2.0	2-3 3-2	asbestos fiber			
25	13	1.45	2-2 3-3	asbestos fiber			
	14	2.0	3-1 0 2	asbestos fiber			
	15	2.0	1-1 1-1	asbestos fiber			
30	16	2.0	1-1 1-1	0-0.5' = asbestos fiber Rest = brown, soft, silty-clay			
	17	2.0	6-10 12-24	hard silty brown clay			
35	18	1.1	17 17 100/6	0-0.5' = brown silt Rest = siltstone bedrock			

End of boring - 35'

ASB 001 1547

HART

FRED C. HART ASSOCIATES, INC.

TEST BORING LOG

BORING NO. [illegible]

PROJECT NO. NAME [illegible] | LOCATION [illegible]

DRILLING CONTRACTOR, DRILLER [illegible]

HART GEOLOGIST OFFICE [illegible]

DRILLING EQUIPMENT METHOD | SIZE, TYPE OF BIT | SAMPLING METHOD | START FINISH DATE

WELL INSTALLED? YES ☐ NO ☐ | CASING MAT., DIA. | SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
		1.6	2-1 1-2	0-0.2 = Fill (Silty) Rest = asbestos fiber			
	T-1			Shelby tube sample			
5		1.4	1-1 2-2	asbestos fiber			
	T-2			shelby tube sample			
10		1.2	1-1 1-1	asbestos fiber			
	T-3			shelby tube sample			
15		2.0	1-1 1-1	asbestos fiber			
	T-4			Shelby tube sample			
		2.0	1-1 1-1	asbestos fiber			

ASB 001 1548

Proportions Used. Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

FRED C. HART ASSOCIATES, INC.

BORING NO. [illegible]

LOG OF TEST BORING

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	T-5			Shelby tube sample			
		20	3-4 5-5	asbestos fiber			
25	T-6			No Recovery on shelby tube			
		20	1-1 2-4	0-1.8' = asbestos fiber Rest = soft, wet, brown clayey-silt			
30	T-7			Shelby tube sample			
		09	3-2 2-3	0-0.4' = gray silty-clay 0.4-0.7' = red clayey-silt Rest = shale bedrock chips			
35				Shelby tube sample			

ASB 001 1549

FRED C. HART ASSOCIATES, INC.

HART

TEST BORING LOG

BORING NO. 9-S

PROJECT NO. NAME

LOCATION

DRILLING CONTRACTOR DRILLER

HART GEOLOGIST OFFICE

DRILLING EQUIPMENT METHOD | SIZE TYPE OF BIT | SAMPLING METHOD | START FINISH DATE

WELL INSTALLED? YES ☐ NO ☐ | CASING MAT., DIA. | SCREEN: TYPE MAT LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	48	0.4	2-1 1-1	dark-brown, silt ~~to~~ soil grading into a clayey silt			
	49	0.3	3-5 5-11	dk-brown clayey, coarse-silt, ~~green~~			
5	50	1.3	11-11 16-5	brown silt (0-0.25') Rest = extremely weathered shale			
				Bedrock at 5' below grade			
10							
15							

ASB 001 1550

Proportions Used. Trace = 0-10%. Little = 10-20%. Some = 20-35%. And = 35-50%

Sampling Abbreviations: SS = Split Spoon. ST = Shelby Tube. CSC = Continuous Soil Core

HART

FRED C. HART ASSOCIATES, INC.

TEST BORING LOG

BORING NO. [illegible]	
PROJECT NO. NAME [illegible]	LOCATION [illegible]
DRILLING CONTRACTOR. DRILLER [illegible]	
HART GEOLOGIST OFFICE [illegible]	
DRILLING EQUIPMENT. METHOD	SIZE. TYPE OF BIT / SAMPLING METHOD / START FINISH DATE
WELL INSTALLED? YES ☒ NO ☐	CASING MAT.. DIA. / SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE / TOP OF WELL CASING / TOP & BOTTOM SCREEN / GW SURFACE / DATE
REMARKS.	

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	36	.8	7-8 / 14-5	red-brown silty soil/fill pebbles + rock-frag present			
	37	1.2	5-8 / 8-6	brown-red silty/clayey fill rock frag present			
5	38	.55	3-2 / 1-1	Same as above			
	39	.7	1-1 / 1-1	0-.1 = fill rest = asbestos fiber			
10	40	1.7	1-1 / 1-3	asbestos fiber			
	41	1.75	1-1 / 14-12	asbestos fiber w/ upper 1/2-wet			
	42	1.0	1-1 / 1-1	Same as above			
15	43	1.1	1-1 / 1-20	0-.95 = asbestos Rest = dark-brown clayey silt			
	44	0.5	100/3	dark-brown silt + shale-frag			
				Bedrock at 17			

Proportions Used. Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

ASB 001 1551

HART

FRED C. HART ASSOCIATES, INC.

TEST BORING LOG

BORING NO. [illegible]

BORING WELL LOCATION SKETCH MAP

PROJECT NO., NAME [illegible]

LOCATION [illegible]

DRILLING CONTRACTOR, DRILLER [illegible]

HART GEOLOGIST, OFFICE [illegible]

DRILLING EQUIPMENT, METHOD

SIZE, TYPE OF BIT

SAMPLING METHOD [illegible]

START FINISH DATE

WELL INSTALLED? YES ☒ NO ☐

CASING MAT., DIA.

SCREEN: TYPE MAT. LENGTH DIA. SLOT SIZE

ELEVATION OF: (FT. ABOVE M.S.L.) GROUND SURFACE TOP OF WELL CASING TOP & BOTTOM SCREEN GW SURFACE DATE

REMARKS:

DEPTH (FT)	SAMPLE NO. AND TYPE	RECOVERY (FT)	PENETRATION RESISTANCE BLOWS/FT	LOG OF TEST BORING: DESCRIPTION	REMARKS	WELL CONST.	GRAPHIC LITHO LOG
	46	CS	1-3 3-9	0-0.2' = brown soft silt Rest = red-brown silt w/ rock-frag			
	[illegible]			Shelby tube sample not obtained			
5	45	1.7	1-2 2-5	0-0.5 = asbestos fill Rest = moist brown silt			
	46	2.0	1-2 [illegible]-3	wet brown silt			
10	47	CS		coarse silt - grading into black residue overlying blue-green-colored weathered material.			
15				Bedrock encountered at 9' very weathered shale/siltstone			

ASB 001 1552

Proportions Used. Trace = 0-10%, Little = 10-20%, Some = 20-35%, And = 35-50%

Sampling Abbreviations: SS = Split Spoon, ST = Shelby Tube, CSC = Continuous Soil Core

APPENDIX B

INITIAL ANALYTICAL DATA

ASB 001 1553

SOIL DATA

ORGANIC ANALYSES

ASB 001 1554

QA/QC Review For Organics On
YWC Jobs 30860-1586, -1598, -1605, -1666, and 1679

Sample Holding Times: Holding times were adhered to as per 40 CFR 136 except BNA and Pesticide extraction for Job 30860-1666. The extraction was done in 11 days not the 7 days as required. All BNA and pesticide data should be considered estimates.

GC/MS Tuning and Performance: All tuning and performance criteria were met.

Calibration: All calibration criteria were met.

Surrogate Recoveries: The results for VOA samples marked Lab ID #1586-001, 1586-007, 1666-001, and 1666-003 should be considered estimates because one VOA surrogate was outside QC limits. The results for the base neutral fraction for Lab ID #'s 1586-001, 1586-003, and 1586-008 should be considered estimates because two surrogates were outside QC limits but were above 10 percent. The results for the acid fraction Lab ID #'s 1586-001 and 1586-009 should be considered estimates because two surrogates were outside QC limits but above 10% recovery. Many pesticide surrogates were outside the advisory QC limits, because they are advisory limits no action is required.

Matrix Spike (MS)/Matrix Spike Duplicate (MSD): Several MS and MSD's for VOA's, BNA's and Pesticides were outside QC limits. These results are used for long term method evaluation and no action is required on MS/MSD data alone.

Compound Identification: All identification criteria were met.

System Performance: There were not any indications of poor instrument performance.

Pesticide Retention Time Shift of DBC: All retention times of DBC were within 2%.

Pesticide Check for Linearity: DDT was ouside +10% RSD, proper procedures for correction were followed.

Check for 4,4' -DDT/Endrin Breakdown: All met CLP criteria.

Pesticide/PCB Standards: Percent differences for several compounds fell outside CLP limits, these didn't effect any sample.

YORK LABORATORIES DIVISION

CASE NARRATIVE

Organics data for Fred C. Hart/National Gypsum

The case narrative covers the following YWC jobs and Hart samples.

YWC Job: 30860-1586
Received 08/14/86

Lab Identification	Hart Identification
1586-001	29
1586-002	31
1586-003	35
1586-004	36
1586-005	37
1586-006	38
1586-007	39
1586-008	42
1586-009	43
1586-010	Trip Blank

YWC Job: 30860-1598
Received 08/15/86

Lab Identification	Hart Identification
1598-001	44
1598-002	46
1598-003	Trip Blank

YWC Job: 30860-1605
Received 08/18/86

Lab Identification	Hart Identification
1605-001	50

YWC Job: 30860-1666
Received 08/28/86

Lab Identification	Hart Identification
1666-001	3
1666-002	7
1666-003	9
1666-004	Field Blank
1666-005	Trip Blank

YWC Job: 30860-1679
Received 09/02/86

Lab Identification	Hart Identification
1679-001	14
1679-002	18
1679-003	22

All samples (except trip blanks) were analyzed for full HSL organics according to USEPA Contract Laboratory Program Protocols. Trip blanks were analyzed for volatile organics only. The following items were noted in the course of analysis:

Volatile Organics

Several samples had instances where one surrogate was not in criteria. Inspection of the data indicated a matrix problem where the surrogate (Toluene d-8) was eluting with another compound causing artificially high recoveries. These items were noted on the surrogate recovery summary.

Base-Neutral/Acid Organics

YWC job 30860-1586 had severe problems with both surrogate recoveries and some problems with the matrix spike samples. Initially not enough sample was submitted in sample 1586-006 (38) to analyze for extractable organics. Initial screening of the samples indicated a medium level extraction was required for most of the samples. The surrogate recoveries were very erratic and this is attributed to the high moisture content and sample matrix. It is noted that sample 1586-007 (#39) actually polymerized during pesticide extraction and could not be analyzed.

Pesticide/PCB's

As stated previously samples 1586-006 (38) and 1586-007 (39) could not be analyzed. The first case was due to lack of sample while the latter instance was a result of polymerization of the sample during extraction. Erratic surrogate recoveries were attributed to the high moisture content of certain samples.

Miscellaneous

Regarding Tentatively Identified Compounds (TIC's), the contract requires the three (3) best match spectra. Our data system software (Hewlett-Packard Aquarius package) utilizes the McLafferty U + a algorithm to qualify spectra during library search. York Labs sets the prefiltration of spectral match criteria to the minimum the software allows, which for the most part, gives three (3) matches to the TIC spectra. However occasionally there are not three (3) matches which meet the algorithm criteria. In these cases, none, one, or two closest matches are retrieved which indicates that no other matches are within the criteria (algorithm U + a) and the data system will not be able to report three (3) matches.

Should there be any questions concerning this case please contact me at (203) 261-4458.

Jeffrey C. Curran
Laboratory Manager

Covers Test Boring Samples
9, 12, 13, 16

QA/QC Review For Organics On
YWC Jobs 30860-1551, -1776, -1790 and -1819

Sample Holding Times: All sample holding times as per 40 CFR 136 were adhered to except the extraction on the pesticide fractions for samples in Job #30860-1551. The extraction was one day late, positive results should be considered estimates.

GC/MS Tuning and Performance: All tuning and performance criteria were met.

Calibration: Continuing calibration compound vinyl chloride was over 25% difference by 0.65%. All positive results for vinyl chloride in samples ID#1790001 thru 1790007 should be considered estimates. All other calibration criteria were met.

Blanks: Both VOA method blanks for soil on Job 30860-1551 were contaminated with 9 ug/kg methylene chloride (MeCl). Results for methylene chloride below 90 ug/kg in those samples should not be reported. The VOA method blank for soil on Job 30860-1776 was contaminated with 7 ug/kg MeCl. Results for MeCl below 70 ug/kg in those samples should not be reported. The VOA method blank for water on Job 30860-1819 was contaminated with 6 ug/L of MeCl. Results for MeCl below 60 ug/L in those samples should not be reported. The VOA method blanks for soil on Job 30860-1819 was contaminated with 15 ug/kg MeCl. Results for MeCl below 150 ug/kg in those samples should not be reported. All other method blanks were within CRDL.

Surrogate: The base neutral fraction of samples ID #s 1551-001 and 1551-004 had two surrogates outside QC limits but were above 10% recovery. Positive results for base neutral compounds for those samples should be considered estimates. The acid fraction of sample ID #1551-004 had two surrogates outside QC limits but were above 10% recovery. Positive results for acid compounds should be considered estimates. The base neutral and acid fractions of sample ID #1790-005 each had three surrogates outside QC limits and one surrogate below 10% recovery. Positive BNA results should be considered estimates and negative results unusable. The BNA fraction for sample ID #1819-004 had no surrogates added, consider all positive results as estimates. Several pesticide surrogates were outside QC limits, no action is taken because these are advisory limits only. All other surrogates were within QC limits.

Matrix Spike (MS)/Matrix Spike Duplicate (MSD): MS/MSD results for Job 30860-1551 had 22 of 44 recoveries and 5 of 22 RPD's outside QC limits. MS/MSD results for Job 30860-1776 had 5 of 76 and 1 of 38 RPD's outside QC limits. MS/MSD results for Job #30860-1790 had 10 of 56 recoveries and 0 of 28 RPD's outside QC limits. MS/MSD results for Job #30860-1819 had 8 of 76 recoveries and 1 of 38 RPD's outside QC limits. No action is taken solely on MS/MSD data. MS/MSD results are used in a long term evaluation of a method.

Compound Identification: All identification criteria were met.

Covers Test Borings
9, 12, 13, 66

QA/QC Review For Inorganics
On YWC Jobs 30860-1551, -1776,
-1790, -1796, and -1819

Sample Holding Times: Holding times were exceed for mercury on all the jobs in this review. The number of days ranged from 1 to 38 days overdue. The cyanide holding time for job #30860-1551 were exceeded by one day. All other holding times were adhered to. Results for mercury and cyanide in the previously mentioned jobs must be considered estimates.

Initial and Continuing Calibration Verification Data: Initial calibration of silver was a little high, this didn't effect any samples. All other calibration data met CLP criteria.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP interference check results were within CLP limits.

Spike Sample Recoveries: Antimony recovery was below 75% but above 30% for Jobs 30860-1776, -1790, -1796 and -1819. Antimony results for these jobs should be considered estimates. Lead recovery was below 30% for Jobs 30860-1776, -1790, -1796, and -1819. Lead data for these jobs are unusable. Selenium recoveries were below 30% for Jobs 30860-1551, -1776, -1790, -1796 and -1819. Selenium data for all jobs in this review is unusable. Lead recovery was above 125% for Job 30860-1551. Lead positive results for this job should be considered estimates. Thallium recovery was below 75% and above 30% for Job 30860-1551. Thallium results should be considered estimates. All other recoveries were within QC limits.

Duplicates: Relative percent difference (RPD) for - copper for Jobs 30860-1776, -1790, -1796 and -1819 was greater than 35% but less than 100%. Copper results for these jobs should be considered estimates. RPD for zinc and lead for Job 30860-1551 were greater than 35% but less than 100%. Zinc and lead results for this job should be considered estimates. All other RPD's were within QC limits.

Instrument Detection Limit: All IDL's were at or below CRDL as required.

Standard Addition Results: None were run.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 9

Laboratory Name: YORK LABS Client: HART

Lab Sample I.D. #: 1551-001 Job #: 30860-1551

Sample Matrix: SOIL Date Sample Received: 8-8-86

Data Release Authorized By: S. B. Bartlett

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 8/21/86

Conc./Dil. Factor: 5.18 pH:

Percent Moisture: 80.7
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	↓	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	↓	1,2-Dichloropropane	5 U
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	8 JB	Trichloroethene	↓
Trichlorofluoromethane	4 JB	Benzene	3 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	↓
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	11 B	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5 U	Toluene	25 B
1,1,1-Trichloroethane	↓	Chlorobenzene	5 U
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 9 (-001)

SEMI-VOLATILE COMPOUNDS

Concentration: Low (Medium)

Date Extracted/Prepared: 08/15/86

Separatory Funnel: Yes

Date Analyzed: 08/27/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 80.7 (decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	20000u	Anthracene	20000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 9

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/14/86 Separatory Funnel:

Date Analyzed: 9/9/86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 8129
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~u~~ MEC
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

Laboratory Name: York Laboratories

Case No: Hart 1551

Sample Number
Sample 9
(-001)

Organics Analysis Data Sheet
(Page 4)

000076

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (mins)	Estimated Concentration (ug/l or ug/kg)
1. 76131	1,1,2-Trichloro-1,2,2-Trifluoroethane	VOA	16.03	59
2.	Unknown	VOA	18.04	55
3.	Unknown	VOA	21.21	36
4.	Unknown	VOA	22.96	38
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.312	590000
12. N/A	Unknown, hydrocarbon	BNA	6.906	74000
13. 594821	Butane, 2,2,3,3-tetramethyl-	BNA	7.553	92000
14. 3648213	1,2-Benzenedicarboxylic acid, diheptyl ester	BNA	32.458	130000
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1564

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 12

Laboratory Name: YORK LABS Client: HART

Lab Sample I.D. #: 1551-002 Job #: 20860-1551

Sample Matrix: SOIL Date Sample Received: 8-8-86

Data Release Authorized By: John C. Eckl

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 8/15/86

Conc./Dil. Factor: 5.09 pH:

Percent Moisture: 80.2
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	↓	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	↓	1,2-Dichloropropane	5 U
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	20 B	Trichloroethene	↓
Trichlorofluoromethane	4 JB	Benzene	6 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	↓
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	16 B	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5 U	Toluene	22 J
1,1,1-Trichloroethane	↓	Chlorobenzene	5 U
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000139

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 12 (-002)

SEMI-VOLATILE COMPOUNDS

Concentration: Low (Medium)

Date Extracted/Prepared: 08/15/86

Separatory Funnel: Yes

Date Analyzed: 08/27/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 80.2
(decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	200000u	Anthracene	200000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1566

PRIORITY POLLUTANT ORGANICS

000140

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 12

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/16/86 Separatory Funnel: _____

Date Analyzed: 9/11/86 Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: 6181
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA ~~u~~ mtc.
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80. u
PCB-1232	80. u
PCB-1242	80. u
PCB-1248	80. u
PCB-1254	160. u
PCB-1260	160. u

*See Appendix for footnotes.

ASB 001 1567

Laboratory Name: York Laboratories

Case No: Hart 1551

Sample Number
Sample 12
(-002)

Organics Analysis Data Sheet
(Page 4)

000141

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (mins.)	Estimated Concentration (ug/l or ug/kg)
1.	Unknown	VOA	16.11	68
2. 1066-40-6	Trimethyl Silanol	VOA	18.25	170
3.	Unknown	VOA	23.04	35
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.302	360000
12. N/A	Unknown, hydrocarbon	BNA	6.909	45000
13. N/A	Unknown, hydrocarbon	BNA	7.557	51000
14. 128370	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	18.479	121000
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1568

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** 13

Laboratory Name: YORK LABS Client: HART

Lab Sample I.D. #: 1551-003 Job #: 30860-1551

Sample Matrix: SOIL Date Sample Received: 8-8-86

Data Release Authorized By: E S Gilmoth

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 8/21/86

Conc./Dil. Factor: 4.08 pH:

Percent Moisture: 75.5
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane		2-Chloroethylvinyl ether	10 U
Vinyl Chloride		1,2-Dichloropropane	5 U
Chloroethane		trans-1,3-Dichloropropane	5 U
Methylene Chloride	110 B	Trichloroethene	9 J
Trichlorofluoromethane	3 JB	Benzene	3 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform	8 JB	1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane	5 U	Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000202

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 13 (-003)

SEMI-VOLATILE COMPOUNDS

Concentration: Low (Medium)

Date Extracted/Prepared: 08/15/86

Separatory Funnel: Yes

Date Analyzed: 08/27/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 75.5 (decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	20000u	Anthracene	20000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1570

PRIORITY POLLUTANT ORGANICS

000203

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 13

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 8/16/86

Separatory Funnel:

Date Analyzed: 9/11/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 83.02
(decanted)

	ug/L or ug/Kg
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80. u
PCB-1232	80. u
PCB-1242	80. u
PCB-1248	80. u
PCB-1254	160. u
PCB-1260	160. u

*See Appendix for footnotes.

ASB 001 1571

Laboratory Name: York Laboratories

Case No: Hart 1551

Sample Number
Sample 13
(-003)

Organics Analysis Data Sheet
(Page 4)

000204

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (mins)	Estimated Concentration (ug/l or ug/kg)
1. 76131	1,1,2-Trichloro-1,2,2-Trifluoroethane	VOA	16.05	1200
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.316	530000
12. N/A	Unknown hydrocarbon	BNA	6.901	65000
13. 2216333	Octane, 3-methyl-	BNA	7.558	107000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1572

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 16

Laboratory Name: YORK LABS Client: HART

Lab Sample I.D. #: 1551-004 Job #: 20860-1551

Sample Matrix: SOIL Date Sample Received: 8-8-86

Data Release Authorized By: [illegible]

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 8/21/86

Conc./Dil. Factor: 1.32 pH:

Percent Moisture: 24.5
(not decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	↓	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	↓	1,2-Dichloropropane	5 U
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	33 B	Trichloroethene	↓
Trichlorofluoromethane	4 JB	Benzene	2 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	↓
1,1-Dichloroethene	↓	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	3 JB	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5 U	Toluene	5 JB
1,1,1-Trichloroethane	↓	Chlorobenzene	5 U
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000263

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 16 (-004)

SEMI-VOLATILE COMPOUNDS

Concentration: Low (Medium)

Date Extracted/Prepared: 08/15/86

Separatory Funnel: Yes

Date Analyzed: 08/23/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 24.5 (decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	20000*	Anthracene	20000*
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000*
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1574

PRIORITY POLLUTANT ORGANICS

000270

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 16

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 8/16/86

Separatory Funnel:

Date Analyzed: 9/4/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 24.25
(decanted)

	ug/L or ug/Kg
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~u~~
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1575

Laboratory Name: York Laboratories

Case No: Hart 1551

Sample Number
Sample 16
(-004)

Organics Analysis Data Sheet
(Page 4)

000271

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (mins)	Estimated Concentration (ug/l or ug/kg)
1.	Unknown	VOA	9.80	34
2.	Unknown	VOA	15.95	96
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.312	146000
12. N/A	Unknown hydrocarbon	BNA	6.917	14000
13. 2216333	Octane, 3-methyl-	BNA	7.554	21000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1576

YWC Job... 30860-1586
Received 8/14/86
001

Boring #202

000052

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 29

Laboratory Name: YORK LABS Client: HART/NAT. GYP.

Lab Sample I.D. #: 1586001 Job #: 30860-1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By:

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86

Date Analyzed: 8/22/86

Conc./Dil. Factor: 6.93 pH:

Percent Moisture: 85 %
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	70U	Bromodichloromethane	35U
Bromomethane	70U	2-Chloroethylvinyl ether	70U
Vinyl Chloride	70U	1,2-Dichloropropane	35U
Chloroethane	70U	trans-1,3-Dichloropropane	35U
Methylene Chloride	35U	Trichloroethene	80.
Trichlorofluoromethane	10. JB	Benzene	20
Acrolein	700U	cis-1,3-Dichloropropene	35U
Acrylonitrile	9. J	Dibromochloromethane	35U
1,1-Dichloroethene	35U	1,1,2-Trichloroethane	35U
1,1-Dichloroethane	35U	Bromoform	35U
trans-1,2-Dichloroethene	35U	Tetrachloroethene	35U
Chloroform	33. J	1,1,2,2-Tetrachloroethane	35U
1,2-Dichloroethane	35U	Toluene	41 B
1,1,1-Trichloroethane	35U	Chlorobenzene	35U
Carbon Tetrachloride	35U	Ethyl benzene	35U

*See Appendix for footnotes.

ASB 001 1577

PRIORITY POLLUTANT ORGANICS

000053

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 29 (-001)

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 08/15/86

Separatory Funnel: Yes

Date Analyzed: 08/27/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 85.6 (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	20000u	Anthracene	20000u
bis(2-chloroethyl)ether		Di-n-butyl pnthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1578

PRIORITY POLLUTANT ORGANICS

000054

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 29

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 8/23/86 Separatory Funnel:

Date Analyzed: ≈8/23/86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: ~~68.10~~ 84.35 MKC
(decanted)

	ug/L or ug/Kg
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA MKC
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1579

Laboratory Name: York

Case No: Hart 1586

Sample Number: Sample 29 (-001)

Organics Analysis Data Sheet
(Page 4)

000055

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (min)	Estimated Concentration (ug/l or ug/kg)
1.	C-6 Alkane	VOA	22.98	120
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.30	800000
12. N/A	Unknown hydrocarbon	BNA	6.91	74000
13. 2216333	Octane, 3-methyl-	BNA	7.56	140000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1580

Boeing 90C

-1586-002

000128

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # 31

Laboratory Name: YORK LABS

Client: HART/NAT. G/P

Lab Sample I.D. #: 1586002

Job #: 30860-1586

Sample Matrix: SOIL

Date Sample Received: 8-14-86

Data Release Authorized By: J. Chuer

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86

Date Analyzed: 8/22/86

Conc./Dil. Factor: 4.81

pH:

Percent Moisture: 79%
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	50 U	Bromodichloromethane	25 U
Bromomethane	50 U	2-Chloroethylvinyl ether	50 U
Vinyl Chloride	50 U	1,2-Dichloropropane	25 U
Chloroethane	50 U	trans-1,3-Dichloropropane	25 U
Methylene Chloride	84 B	Trichloroethene	8 J
Trichlorofluoromethane	1.1 B	Benzene	3 J
Acrolein	500 U	cis-1,3-Dichloropropene	25 U
Acrylonitrile	175 U	Dibromochloromethane	25 U
1,1-Dichloroethene	25 U	1,1,2-Trichloroethane	25 U
1,1-Dichloroethane	25 U	Bromoform	25 U
trans-1,2-Dichloroethene	25 U	Tetrachloroethene	25 U
Chloroform	11 J	1,1,2,2-Tetrachloroethane	25 U
1,2-Dichloroethane	25 U	Toluene	88 B
1,1,1-Trichloroethane	25 U	Chlorobenzene	25 U
Carbon Tetrachloride	25 U	Ethyl benzene	25 U

*See Appendix for footnotes.

ASB 001 1581

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** 31 (-002)

SEMI-VOLATILE COMPOUNDS

Concentration: Low **Medium**

Date Extracted/Prepared: 08/15/86 Separatory Funnel: Yes

Date Analyzed: 08/27/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 79.2
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	200000u	Anthracene	200000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	960000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000130

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 31

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86 Separatory Funnel: _____

Date Analyzed: 9/22/86 Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: 68.10
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	(SaJ) ~~16 u~~ (KBC)
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~u~~ (MCC)
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1583

Laboratory Name: [illegible]

Case No: HART 1586

Sample Number: Sample 31 (-002)

000131

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.30	32000C
12. N/A	Unknown hydrocarbon	BNA	6.91	34000C
13. 3216333	Octane, 3-methyl-	BNA	7.56	49000C
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Boring 902 1586-.003

000202

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 35

Laboratory Name: YORK LABS Client: HART/NAT. GYP.

Lab Sample I.D. #: 1586003 Job #: 30860-1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Chen

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86

Date Analyzed: 8/22/86

Conc./Dil. Factor: 1.18 pH:

Percent Moisture: 15 %
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	35 B	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	~~1 J~~ 5U KAB 12-6
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	3 J	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	14 B
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

ASB 001 1585

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** 35 (-003)

SEMI-VOLATILE COMPOUNDS

Concentration: Low **Medium**

Date Extracted/Prepared: 08/15/86 Separatory Funnel: Yes

Date Analyzed: 08/23/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 15.6 (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	20000u	Anthracene	20000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000204

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 35

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86

Separatory Funnel:

Date Analyzed: 9/22/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 17.27
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~u~~ mcc
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1587

Laboratory Name: York Laboratories

Case No: Hart 1586

Sample Number
Sample 35 (-003)

Organics Analysis Data Sheet
(Page 4)

000205

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid butyl ester	BNA	6.31	140000
12. N/A	Unknown hydrocarbon	BNA	6.92	12000
13. 2216300	Heptane, 2,5-dimethyl-	BNA	7.57	20000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1588

Boring 906
1586-004

000273

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 36

Laboratory Name: York Labs Client: Hart Nat. Gypsum

Lab Sample I.D. #: 1586004 Job #: 30160-1586

Sample Matrix: Soil Date Sample Received: 8-14-86

Data Release Authorized By: J. Cuum

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 8-22-86

Date Analyzed: 8-22-86

Conc./Dil. Factor: 1.2 pH:

Percent Moisture: 16%
(not decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	17B	Trichloroethene	2J
Trichlorofluoromethane	.5J	Benzene	.7J
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	4J	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	13B
1,1,1-Trichloroethane	.9J	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	1J

*See Appendix for footnotes.

ASB 001 1589

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # 56 (-004)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 08/6/86 Separatory Funnel: Yes

Date Analyzed: 08/22/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 12.0
(decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	330U	Anthracene	260J
bis(2-chloroethyl)ether		Di-n-butyl phthalate	63J
1,3-Dichlorobenzene		Fluoranthene	1800
1,4-Dichlorobenzene		Benzidine	330U
1,2-Dichlorobenzene		Pyrene	1200
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	330U
Hexachloroethane		3,3'-Dichlorobenzidine	330U
N-nitroso-di-n-propylamine		Chrysene	930
Nitrobenzene		Benzo(a)anthracene	820
Isophorone		bis-2-ethylhexyl phthalate	330U
bis(2-chloroethoxy)methane		di-n-octyl phthalate	330U
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	780
Naphthalene	40JB	Benzo(k)fluoranthene	150
Hexachlorobutadiene	330U	Benzo(a)pyrene	730
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	520
2-Chloronaphthalene		Dibenzo(a,h)anthracene	42J
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	480
Acenaphthylene	7J	Phenol	330U
2,6-Dinitrotoluene	330U	2-Chlorophenol	
Acenaphthene	140J	2-Nitrophenol	
2,4-Dinitrotoluene	330U	2,4-Dimethylphenol	
Diethyl phthalate	8JB	2,4-Dichlorophenol	
Fluorene	120J	4-Chloro-3-methyl phenol	20J
4-Chlorophenyl-phenyl ether	330U	2,4,6-Trichlorophenol	330U
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	1600U
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene	1200	Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000275

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # .36

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/16

Separatory Funnel:

Date Analyzed: 9/22/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 15.75
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA * (mfc)
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1591

Laboratory Name: York Laboratories

Case No: Hart 1556

Sample Number: Sample 36 (-ccv)

Organics Analysis Data Sheet
(Page 4)

000276

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT/or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 96140	3-Methyl-Pentane	VOA	22.92	17
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown	BNA	6.44	1600
12. N/A	Unknown	BNA	7.13	21000
13. 3074313	Heptane 2,3-dimethyl-	BNA	7.25	1500
14. 921431	Hexane, 2,3,4-trimethyl-	BNA	7.43	1800
15. 2216333	Octane 3-methyl-	BNA	7.57	2000
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Boring 90E
1586-005

000375

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 37

Laboratory Name: YORK LABS Client: AART/NAT GYP

Lab Sample I.D. #: 1586005 Job #: 30860-1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Cuna

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86

Date Analyzed: 8/22/86

Conc./Dil. Factor: 2.25 pH:

Percent Moisture: 55%
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	20U	Bromodichloromethane	10U
Bromomethane	20U	2-Chloroethylvinyl ether	20U
Vinyl Chloride	20U	1,2-Dichloropropane	10U
Chloroethane	20U	trans-1,3-Dichloropropane	10U
Methylene Chloride	20.B	Trichloroethene	10U
Trichlorofluoromethane	20U	Benzene	5.J
Acrolein	200U	cis-1,3-Dichloropropene	10U
Acrylonitrile	70U	Dibromochloromethane	10U
1,1-Dichloroethene	10U	1,1,2-Trichloroethane	10U
1,1-Dichloroethane	10U	Bromoform	10U
trans-1,2-Dichloroethene	10U	Tetrachloroethene	10U
Chloroform	5.B	1,1,2,2-Tetrachloroethane	10U
1,2-Dichloroethane	10U	Toluene	9.JB
1,1,1-Trichloroethane	10U	Chlorobenzene	10U
Carbon Tetrachloride	10U	Ethyl benzene	10U

*See Appendix for footnotes.

ASB 001 1593

PRIORITY POLLUTANT ORGANICS 000379

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # 37 (-005)

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 08/15/86 Separatory Funnel: Yes

Date Analyzed: 08/28/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 55.5 (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	20000u	Anthracene	20000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1594

PRIORITY POLLUTANT ORGANICS

000380

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 37

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86

Separatory Funnel:

Date Analyzed: 9/22/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 6.9%
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~u~~ mcc
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1595

Laboratory Name: York Laboratories

Case No: Hart 1586

Sample Number: Sample 37 (-005)

Organics Analysis Data Sheet
(Page 4)

000351

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.28	310000
12. N/A	Unknown	BNA	6.88	58000
13. N/A	Unknown hydrocarbon	BNA	7.50	55000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1596

Bearing 906

[redacted]

000455

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # #38

Laboratory Name: YORK LABS Client: HART/NAT. GYP.

Lab Sample I.D. #: 1586006 Job #: 30860-1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Cuman

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86

Date Analyzed: 8/22/86

Conc./Dil. Factor: 1.11 pH:

Percent Moisture: 10 %
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	5U	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	5U
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	5U	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	5U
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

ASB 001 1597

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # 38

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Continuous-Liq-Liq:_____

Conc./Dil. Factor:_____

No- enough sample

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine		Anthracene	
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 38

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

Not enough sample

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

Laboratory Name: YORK LABS

Case No 30810 - 1586

Sample Number: HART #38

Organics Analysis Data Sheet
(Page 4)

000455

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 541059	HEXAMETHYLCYCLOTRISILOXANE	VOA	34.65	1600
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30				

ASB 001 1600

[redacted] Boring 906 000496

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** 39

Laboratory Name: YORK LABS Client: HART/NAT. GYP.

Lab Sample I.D. #: 1586 007 Job #: 30860 1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Cum

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/16/86

Date Analyzed: 8/16/86

Conc./Dil. Factor: 1.40 pH:

Percent Moisture: 28 %
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	150 B	Trichloroethene	8 J
Trichlorofluoromethane	9 J	Benzene	3 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	21 B	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	33
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

ASB 001 1601

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** 39 (C-007)

SEMI-VOLATILE COMPOUNDS

Concentration: Low **Medium**

Date Extracted/Prepared: 08/15/86 Separatory Funnel: Yes

Date Analyzed: 08/28/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 28.6 (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	200000u	Anthracene	200000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

1/85

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 39

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____ Sample polymerized during extraction

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

Laboratory Name: York Laboratories

Case No: Hart 1556

Sample Number: Sample 39 (-007)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

000499

CAS Number	Compound Name	Fraction	RT or Scan Number (min)	Estimated Concentration (ug/l or ug/kg)
1. 96140	3-Methylpentane	VOA	23.09	30
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9. 123864	Acetic acid, butyl ester	BNA	6.28	110000
10. N/A	Unknown, hydrocarbon	BNA	6.58	13000
11. 2216302	Heptane, 2,5-dimethyl-	BNA	7.53	21000
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1604

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000556

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** 42

Laboratory Name: YORK LABS Client: HART/NAT GYP

Lab Sample I.D. #: 1586008 Job #: 308601586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Quinn

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 8/16/86

Date Analyzed: 8/16/86

Conc./Dil. Factor: 2.46 pH:

Percent Moisture: 59%
(not decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
Chloromethane	20U	Bromodichloromethane	10U
Bromomethane	20U	2-Chloroethylvinyl ether	20U
Vinyl Chloride	20U	1,2-Dichloropropane	10U
Chloroethane	20U	trans-1,3-Dichloropropane	10U
Methylene Chloride	51. B	Trichloroethene	6 J.
Trichlorofluoromethane	2. J	Benzene	5 JB
Acrolein	200U	cis-1,3-Dichloropropene	10U
Acrylonitrile	73U	Dibromochloromethane	10U
1,1-Dichloroethene	10U	1,1,2-Trichloroethane	10U
1,1-Dichloroethane	10U	Bromoform	10U
trans-1,2-Dichloroethene	10U	Tetrachloroethene	10U
Chloroform	11. B	1,1,2,2-Tetrachloroethane	10U
1,2-Dichloroethane	10U	Toluene	30.
1,1,1-Trichloroethane	3. J.	Chlorobenzene	10U
Carbon Tetrachloride	10U	Ethyl benzene	10U

*See Appendix for footnotes.

ASB 001 1605

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** 42 (-008)

SEMI-VOLATILE COMPOUNDS

Concentration: Low **Medium**

Date Extracted/Prepared: 08/15/86 Separatory Funnel: yes

Date Analyzed: 08/28/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 59.3
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	200000u	Anthracene	200000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	960000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 42

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 8/22/86 Separatory Funnel:

Date Analyzed: 9/22/86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: 65.41
(decanted)

	ug/L or ug/Kg
Alpha-BHC	8.0 u
Beta-BHC	3.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	N/A ~~u~~ mec.
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80. u
PCB-1232	80. u
PCB-1242	80. u
PCB-1248	80. u
PCB-1254	160. u
PCB-1260	160. u

*See Appendix for footnotes.

Laboratory Name: York Laboratories

Case No: HART 1586

Sample Number: Sample #2 (FCC8)

Organics Analysis Data Sheet
(Page 4)

000559

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	(RT) or Scan Number min	Estimated Concentration (ug/l or (ug/kg))
1. 1066406	Trimethylsilanol	VOA	15.40	48
2. 96140	2-methyl Pentane	VOA	22.06	81
3. 108101	4-methyl-2-Pentanone	VOA	24.57	44
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.37	310000
12. N/A	Unknown hydrocarbon	BNA	6.87	61000
13. 2216333	Octane, 3-methyl-	BNA	7.53	64000
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1608

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PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 43

Laboratory Name: YORK LABS Client: HART/NAT GYP

Lab Sample I.D. #: 1586009 Job #: 30860-1586

Sample Matrix: SOIL Date Sample Received: 8-14-86

Data Release Authorized By: J. Cuum

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/16/86

Date Analyzed: 8/16/86

Conc./Dil. Factor: 1.48 pH:

Percent Moisture: 32 % (not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	355 B	Trichloroethene	5 J
Trichlorofluoromethane	10 U	Benzene	2 JB
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	11 B	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	54
1,1,1-Trichloroethane	2 J	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	4 J

*See Appendix for footnotes.

ASB 001 1609

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** 43 (-009)

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 08/15/86 Separatory Funnel: Yes

Date Analyzed: 08/28/86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 32.6 (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	2000u	Anthracene	2000u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	96000u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000333

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 43

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86

Separatory Funnel: _____

Date Analyzed: 9/13/86

Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: 26.0
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16 u
Dieldrin	16 u
4,4'-DDD	16 u
Endrin Aldehyde	NA ~~*~~ (mg)
4,4'-DDT	16 u
Chlordane	80 u
Endosulfan I	8.0 u
Endosulfan II	16 u
Endosulfan Sulfate	16 u
Endrin	16 u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1611

Laboratory Name: York Laboratories

Case No: Hart 1586

Sample Number: Sample 43 (-009)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

000040

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	Unknown	WA	14.65	11
2. 1066406	Trimethylsilanol	WA	19.12	57
3. 96332	Methyl cyclopentane	WA	19.11	12
4.	Unknown ketone	WA	24.87	13
5.	Unknown	WA	38.66	11
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.75	9600
12. N/A	Unknown hydrocarbon	BNA	6.86	7100
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1612

YWC JOB: 30860-1586
Received 8/14/86

-010

000717

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # TRIP BLANK

Laboratory Name: YORK LABS

Client: HARTFORD CITY

Lab Sample I.D. #: 1586-010

Job #: 30860-1586

Sample Matrix: WATER

Date Sample Received:

Data Release Authorized By: J. [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/15/86

Date Analyzed: 8/15/86

Conc./Dil. Factor: 1.0

pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ~~ug/Kg~~		ug/L or ~~ug/Kg~~
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	2.7J	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	5U
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	5U	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	2J
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

ASB 001 1613

YWC JOB: 30860-1580
Recieved 8/14/86

- 010

000717

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # TRIP BLANK

Laboratory Name: YORK LABS

Client: HARTINE CAP

Lab Sample I.D. #: 1586-010

Job #: 30860-1586

Sample Matrix: WATER

Date Sample Received:

Data Release Authorized By: J. [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 8/15/86

Date Analyzed: 8/15/86

Conc./Dil. Factor: 1.0

pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ~~ug/Kg~~		ug/L or ~~ug/Kg~~
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	2.7J	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	5U
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	5U	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	2.7J
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

ASB 001 1614

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # Trip Blank

SEMI-VOLATILE COMPOUNDS

No Sample

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Continuous-Liq-Liq:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine		Anthracene	
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # Trip Blank

PESTICIDES/PCB'S

No Sample

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

Laboratory Name YORK LABS

Case No 30560- 1586

Sample Number TRIP BLANK

Organics Analysis Data Sheet
(Page 4)

000720

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30				

ASB 001 1617

Boring 907

000740

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** 44

Laboratory Name: York Labs Client: Hart/National Gypsum

Lab Sample I.D. #: >BY025 Job #: 30860-1598

Sample Matrix: Soil Date Sample Received: 8-15-86

Data Release Authorized By: J. Chum

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 8-16-86

Conc./Dil. Factor: 1.26 pH:

Percent Moisture: 20.7
(not decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
Chloromethane	10u	Bromodichloromethane	5u
Bromomethane	↓	2-Chloroethylvinyl ether	10u
Vinyl Chloride	↓	1,2-Dichloropropane	5u
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	11B	Trichloroethene	↓
Trichlorofluoromethane	.4J	Benzene	↓
Acrolein	100u	cis-1,3-Dichloropropene	↓
Acrylonitrile	35u	Dibromochloromethane	↓
1,1-Dichloroethene	5u	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	16B	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5u	Toluene	↓
1,1,1-Trichloroethane	↓	Chlorobenzene	↓
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

ASB 001 1618

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, TWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # #44

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 08-22-86 Separatory Funnel: Yes

Date Analyzed: 09-01-86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 20.7
(decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	330u	Anthracene	20J
bis(2-chloroethyl)ether		Di-n-butyl phthalate	44JB
1,3-Dichlorobenzene		Fluoranthene	180J
1,4-Dichlorobenzene		Benzidine	330u
1,2-Dichlorobenzene		Pyrene	93
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	330u
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	92J
Isophorone		bis-2-ethylhexyl phthalate	620B
bis(2-chloroethoxy)methane		di-n-octyl phthalate	330u
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene	16JB	Benzo(k)fluoranthene	
Hexachlorobutadiene	330u	Benzo(a)pyrene	87J
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	330u
2-Chloronaphthalene		Dibenzo(a,h)anthracene	330u
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	52J
Acenaphthylene		Phenol	330u
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate	10J	2,4-Dichlorophenol	
Fluorene	330u	4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	1600u
N-nitrosodiphenyl amine		4-Nitrophenol	34J
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	1600u
Phenanthrene	81J	Pentachlorophenol	1600u

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS 006742

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 44

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86 Separatory Funnel: _____

Date Analyzed: 9/2/86 Liquid-Liquid: _____

Conc./Dil. Factor: 1.0

Percent Moisture: 25.26 ~~15.6~~ (DEC)
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80. u
PCB-1232	80. u
PCB-1242	80. u
PCB-1248	80. u
PCB-1254	160. u
PCB-1260	160. u

*See Appendix for footnotes.

ASB 001 1620

oratory Name York Laboratories

No Hart 1598

Sample Number
44
(-001)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

000743

CAS Number	Compound Name	Fraction	RT or Scan Number (mins)	Estimated Concentration (ug/l or ug/kg)
	NONE DETECTED	VOA		
N/A	Unknown	BNA	6.353	4800
N/A	Unknown	BNA	6.427	5000
N/A	Unknown hydrocarbon	BNA	7.054	80000
3074713	Heptane, 2,3-dimethyl-	BNA	7.211	4800
110123	2-Hexanone, 5-methyl-	BNA	7.274	7000
921471	Hexane, 2,3,4-trimethyl-	BNA	7.379	6800
2216333	Octane, 3-methyl-	BNA	7.536	8700
N/A	Unknown	BNA	9.993	4600
N/A	Unknown	BNA	11.133	5200

ASB 001 1621

Boring · 907 A 000829

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET – Page 1 **SAMPLE #** 46

Laboratory Name: York Labs Client: Hartwell National Gypsum

Lab Sample I.D. #: 7B X026 Job #: 30860-1598

Sample Matrix: Soil Date Sample Received: 8-15-86

Data Release Authorized By: J. Chum

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: –

Date Analyzed: 8-16-86

Conc./Dil. Factor: 1.32 pH:

Percent Moisture: 24.4
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10u	Bromodichloromethane	5u
Bromomethane	↓	2-Chloroethylvinyl ether	10u
Vinyl Chloride	↓	1,2-Dichloropropane	5u
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	9JB	Trichloroethene	↓
Trichlorofluoromethane	.3J	Benzene	↓
Acrolein	100u	cis-1,3-Dichloropropene	↓
Acrylonitrile	35u	Dibromochloromethane	↓
1,1-Dichloroethene	5u	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	4JB	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5u	Toluene	↓
1,1,1-Trichloroethane	↓	Chlorobenzene	↓
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

ASB 001 1622

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # #46

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 08-22-86 Separatory Funnel: Yes

Date Analyzed: 09-03-86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: 24.4
(decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	330u	Anthracene	330u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	41JB
1,3-Dichlorobenzene		Fluoranthene	330u
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	230JB
bis(2-chloroethoxy)methane		di-n-octyl phthalate	330u
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene	45JB	Benzo(k)fluoranthene	
Hexachlorobutadiene	330u	Benzo(a)pyrene	70J
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	330u
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	1600u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS 000831

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 46

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 5/22/86 Separatory Funnel: _____

Date Analyzed: 9/13/86 Liquid-Liquid: _____

Conc./Dil. Factor: 1.0

Percent Moisture: 15.62
(decanted)

	ug/L or ug/Kg
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160 u
PCB-1016	80 u
PCB-1221	80 u
PCB-1232	80 u
PCB-1242	80 u
PCB-1248	80 u
PCB-1254	160 u
PCB-1260	160 u

*See Appendix for footnotes.

ASB 001 1624

Laboratory Name York Laboratories

Case No Hart 1598

Sample Number #46

(-002)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

00532

CAS Number	Compound Name	Fraction	RT or Scan Number (mins)	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown			
12. N/A	Unknown	BNA	6.359	13000
13. N/A	Unknown	BNA	7.029	117000
14. 3074713	Heptane, 2,3-dimethyl-	BNA	7.239	11300
15. 2216333	Octane, 3-methyl-	BNA	7.344	7900
16.		BNA	7.511	11000
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1625

Form - Part H

1593-003 Trip Blank

000395

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** Trip Blank

Laboratory Name: York Labs Client: Hart/National Gypsum

Lab Sample I.D. #: AX021 Job #: 30860-1598

Sample Matrix: Water Date Sample Received: 8-15-86

Data Release Authorized By: J. Cum

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 8-16-86

Conc./Dil. Factor: 1.00 pH: — N/A

Percent Moisture: N/A
(not decanted)

	(ug/L) or ug/Kg		(ug/L) or ug/Kg
Chloromethane	10 u	Bromodichloromethane	5 u
Bromomethane	↓	2-Chloroethylvinyl ether	10 u
Vinyl Chloride	↓	1,2-Dichloropropane	5 u
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	4JB	Trichloroethene	↓
Trichlorofluoromethane	10 u	Benzene	↓
Acrolein	100 u	cis-1,3-Dichloropropene	↓
Acrylonitrile	35 u	Dibromochloromethane	↓
1,1-Dichloroethene	5 u	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	2JB	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5 u	Toluene	↓
1,1,1-Trichloroethane	↓	Chlorobenzene	↓
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

ASB 001 1626

PRIORITY POLLUTANT ORGANICS

000896

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # Trip Blank

SEMI-VOLATILE COMPOUNDS

No sample

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Continuous-Liq-Liq:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine		Anthracene	
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenapnthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1627

PRIORITY POLLUTANT ORGANICS

000597

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # Trip Blank

No Sample

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

ASB 001 1628

Laboratory Name: YORK LABS

Case No: 30860 - 1598

Sample Number
TRIP BLANK

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

000098

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30				

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # P907 S #50

Laboratory Name: YORK LABS Client: HART/NAT. GYP.

Lab Sample I.D. #: 1605001 Job #: 30860-1605

Sample Matrix: SOIL Date Sample Received: 8-18-86

Data Release Authorized By: [signature]

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 8/20/86

Date Analyzed: 8/20/86

Conc./Dil. Factor: 1.18 pH:

Percent Moisture: 15 %
(not decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	4 JB	Trichloroethene	1 J
Trichlorofluoromethane	10U	Benzene	1 JB
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	1 J	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	4 JB	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	5U
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000916

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # #050 (-001)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 08/22/86

Separatory Funnel: Yes

Date Analyzed: 09/03/86

Continuous-Liq-Liq: NO

Conc./Dil. Factor: 1.0

Percent Moisture: 15.2 (decanted)

	ug/L or (ug/Kg)		ug/L or (ug/Kg)
N-nitrosodimethyl amine	330u	Anthracene	330u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	29JB
1,3-Dichlorobenzene		Fluoranthene	330u
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	162JB
bis(2-chloroethoxy)methane		di-n-octyl phthalate	330u
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene	4JB	Benzo(k)fluoranthene	
Hexachlorobutadiene	330u	Benzo(a)pyrene	26J
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	330u
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate	12J	2,4-Dichlorophenol	
Fluorene	330u	4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	1600u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1631

PRIORITY POLLUTANT ORGANICS

000917

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # #5C

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 8/22/86

Separatory Funnel:

Date Analyzed: 9/13/86

Liquid-Liquid:

Conc./Dil. Factor: 1.0

Percent Moisture: 19.51
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16. u
Dieldrin	16. u
4,4'-DDD	16. u
Endrin Aldehyde	NA u
4,4'-DDT	16. u
Chlordane	80. u
Endosulfan I	8.0 u
Endosulfan II	16. u
Endosulfan Sulfate	16. u
Endrin	16. u
Heptachlor Epoxide	8.0 u
Toxaphene	160. u
PCB-1016	80. u
PCB-1221	80. u
PCB-1232	80. u
PCB-1242	80. u
PCB-1248	80. u
PCB-1254	160. u
PCB-1260	160. u

*See Appendix for footnotes.

ASB 001 1632

Laboratory Name: [illegible]

Case No: H-[illegible] Gypsum ~~[illegible]~~ 1605 [illegible]

Sample Number

#[illegible]

Organics Analysis Data Sheet
(Page 4)

00[illegible]013

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown	BNA	6.39	11000
12. N/A	Unknown	BNA	7.06	93000
13. 3074713	Heptane, 2,3-dimethyl-	BNA	7.22	4700
14. 110123	2-Hexanone, 5-methyl-	BNA	7.27	10000
15. 2213232	Heptane, 2,4-dimethyl-	BNA	7.39	7100
16. 2216333	Octane, 3-methyl-	BNA	7.54	10000
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1633

E

Case Narrative

FOR

HART / NATIONAL GYPSUM

CONSISTING OF YWC JOBS

30860 - 1551
30860 - 1776
30860 - 1796
30860 - 1819
30860 - 1790

ASB 001 1634

QA/QC Review For Inorganics
On YWC Jobs 30860-1551, -1776,
-1790, -1796, and -1819

Sample Holding Times: Holding times were exceed for mercury on all the jobs in this review. The number of days ranged from 1 to 38 days overdue. The cyanide holding time for job #30860-1551 were exceeded by one day. All other holding times were adhered to. Results for mercury and cyanide in the previously mentioned jobs must be considered estimates.

Initial and Continuing Calibration Verification Data: Initial calibration of silver was a little high, this didn't effect any samples. All other calibration data met CLP criteria.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP interference check results were within CLP limits.

Spike Sample Recoveries: Antimony recovery was below 75% but above 30% for Jobs 30860-1776, -1790, -1796 and -1819. Antimony results for these jobs should be considered estimates. Lead recovery was below 30% for Jobs 30860-1776, -1790, -1796, and -1819. Lead data for these jobs are unusable. Selenium recoveries were below 30% for Jobs 30860-1551, -1776, -1790, -1796 and -1819. Selenium data for all jobs in this review is unusable. Lead recovery was above 125% for Job 30860-1551. Lead positive results for this job should be considered estimates. Thallium recovery was below 75% and above 30% for Job 30860-1551. Thallium results should be considered estimates. All other recoveries were within QC limits.

Duplicates: Relative percent difference (RPD) for - copper for Jobs 30860-1776, -1790, -1796 and -1819 was greater than 35% but less than 100%. Copper results for these jobs should be considered estimates. RPD for zinc and lead for Job 30860-1551 were greater than 35% but less than 100%. Zinc and lead results for this job should be considered estimates. All other RPD's were within QC limits.

Instrument Detection Limit: All IDL's were at or below CRDL as required.

Standard Addition Results: None were run.

YORK LABORATORIES DIVISION

YWC

E

Case Narrative

This report covers the inorganics data for the following YWC jobs pertaining to Fred C. Hart/National Gypsum:

YWC Job 30860-1551
Includes Hart Samples:

9	13
12	16

YWC job 30860-1776
Includes Hart Samples:

2510 SED-1	2514 SED-5
2511 SED-2	2515 SED-6
2513 SED-4	2516 SED-7

YWC Job 30860-1796
Includes Hart Samples:

2524 SED-15	2557 SED-16

YWC Job 30860-1819
Includes Hart Samples:

#7 NVR-2	#12 NVR-3
#8 NVR-2	#13 NVR-3

YWC Job 30860-1790
Includes Hart Samples:

2517 SED-8	2521 SED-12
2518 SED-9	2522 SED-13
2519 SED-10	2555 SED-14
2520 SED-11	

The samples reported here were all soils and/or sediments. Samples were analyzed for priority pollutant metals.

ASB 001 1636

The following items were noted:

Recoveries for selenium were very poor. This was due to a contamination of sample matrix and the digestion procedure. High chloride content can lead to volatilization of selenium resulting in poor recoveries.

Jeffrey C. Curran
Laboratory Manager

Date 12/23/86

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name YORK Laboratories Case No. Hart/National Gypsum
SOW No. 785 Q.C. Report No. _____

Sample Numbers

Client ID	Lab ID No.	Client ID	Lab ID No.
2510 SED-1	1776001	#7 NVR-2	1819001
2511 SED-2	1776002	#8 NVR-2	1819002
2513 SED-4	1776003	#12 NVR-3	1819003
2514 SED-5	1776004	#13 NVR-3	1819004
2515 SED-6	1776005	2517 SED-8	1790001
2516 SED-7	1776006	2518 SED-9	1790002
2524 SED-15	1796004	2519 SED-10	1790003
2557 SED-16	1796005	2520 SED-11	1790004

Comments:

ICP interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after _____ generation of raw data.

Footnotes:

R - Not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).
U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
S - Indicates value determined by Method of Standard Addition.
N - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is less than 0.995
W - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

ASB 001 1638

Date 12/23/86

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name York Laboratories Case No. Hart/National Gypsum
SOW No. 785 Q.C. Report No. _____

Sample Numbers

Client ID	Lab ID No.	Client ID	Lab ID No.
2521 SED-12	1790005	16	1551004
2522 SED-13	1790006	SWP 10 #60 Spike	1748005 Spike
2555 SED-14	1790007	SWP 10 #60 Dup.	1748005 Dup.
2516 SED-7 Spike	1776006 Spike		Reagent Blank
2516 SED-7 Dup.	1776006 Dup.		Reagent Blank
9	1551001		Soil Blank
12	1551002		
13	1551003		

Comments:

ICP interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after ___ generation of raw data.

Footnotes:

NR - Not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).
U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
* - Indicates value determined by Method of Standard Addition.
R - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is less than 0.995
M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

SOIL DATA

INORGANIC ANALYSES

ASB 001 1640

QA/QC Review For Inorganics
on YWC Jobs 30860-1586, -1598, -1605
-1666, -1679, -1707, -1737, and -1748

Sample Holding Times: All mercury holding times were exceeded except for YWC Job #30860-1748. The range was 7 to 32 days over. Mercury results for all samples with exceeded holding times should be considered estimates. Cyanide holding times for YWC Job #'s 30860-1666, -1679, -1707, -1737 and -1748 were exceeded. The range was from 1 to 16 days. Sample results with exceeded holding times should be considered estimates. All other holding times were adhered to.

Initial and Continuing Calibration Verification: All calibration criteria were within CLP limits.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP interference check results were within CLP limits.

Spike Sample Recovery: Spike recoveries for YWC Job #30860-1748 for lead, and Thallium were outside CLP limits. Results for those metals should be considered estimates. Spike recoveries for YWC Job #30860-1737 for Chromium and Nickel were outside CLP limits. Results for these metals should be considered estimates. All selenium data is considered unusable due to severe recovery problems. The required number of spikes were run.

Duplicates: The required number of duplicates were run. Copper and Lead RPD's were outside CLP limits for YWC Job #30860-1598. Results for those metals should be considered estimates. Lead and Zinc RPD's were outside CLP limits for YWC Job #30860-1748. Results for these metals should be considered estimates.

Instrument Detection Limit (IDL): All IDL were at or below CRDL as required.

Standard Additions Results: None were run.

NOTE: Due to problems in both duplicates and one spike all lead data for all YWC jobs listed in this review should be considered estimates.

YORK LABORATORIES DIVISION

YWC

CASE NARRATIVE

This report covers the inorganics data for the following YWC jobs pertaining to Fred C. Hart/National Gypsum Project:

YWC Job: 30860-1586

Includes Hart Samples:

29	36	39
31	37	42
35	38	43

YWC Job: 30860-1598

Includes Hart Samples:

44	46

YWC Job: 30860-1737

Includes Hart Samples:

30-GS	37-GS
33-GS	38-GS
34-GS	41-GS
36-GS	42-GS

YWC Job: 30860-1605

Hart Sample: 50

YWC Job: 30860-1679

Includes Hart Samples:

14	18	22

YWC Job: 30860-1707

Includes Hart Samples:

SWP #25 4-6'
SWP #26 6-8'

YWC Job: 30860-1748

Includes Hart Samples:

SWP 7 #44	SWP 9 #53
SWP 8 #48	SWP 10 #60
SWP 8 #49	

YWC Job: 30860-1666

Includes Hart Samples:

3 7 9

The samples reported here were all soils/sediments. The following items are noted:

(1) Recoveries for selenium spikes were very poor. This is due to a combination of the digestion procedure and sample matrix. High chloride content can lead to volatilization of selenium and result in poor recoveries.

(2) Recoveries for nickel and chromium in the spike of sample 36-GS were just below the lower limit of 75 percent. A possible matrix problem causing poor recoveries in general is suggested as most of the ICP results were at the low end of the recovery range.

Jeffrey C. Curran
Laboratory Manager

Date 12/01/86

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name York Laboratories Division of YWG, INC Case No. Hart/National Gypsum

SOW No. _____ Q.C. Report No. _____

Sample Numbers

Client ID	Lab ID No.	Client ID	Lab ID No.
29	1586 001	43	1586 009
31	1586 002	44	1598 001
35	1586 003	46	1598 002
36	1586 004	30-GS	1737 001
37	1586 005	33-GS	1737002
38*	1586 006	34-GS	1737003
39	1586 007	36-GS	1737004
42	1586008	37-GS	1737005

Comments:

*Not enough sample submitted for metals on 1586-006.

ICP interelement and background corrections applied? Yes X No ____.

If yes, corrections applied before X or after _____ generation of raw data.

Footnotes:

NR - Not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).

U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

S - Indicates value determined by Method of Standard Addition.

N - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP, A for Flame AA and F for Furnace.

ISB Amend. One

ASB 001 1644

000002

Date 12/01/86

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name York Laboratories Div. of YWC, Inc. Case No. Hart/National/Gypsum.

SOW No. _____ Q.C. Report No. _____

Sample Numbers

Client ID	Lab ID No.	Client ID	Lab ID No.
38-GS	1737006	22	1679003
41-GS	1737007	SWP#2 25 4-6 Ft.	1707001
42-GS	1737008	SWP#2 26 6-8 Ft.	1707002
44 DUP.	1598001 DUP.	SWP7 44	1748001
36-GS Spike	1737004 Spike	SWP8 48	1748002
50	1605001	SWP8 49	1748003
14	1679001	SWP9 53	1748004
18	1679002	SWP 9 60	1748005

Comments: _____

ICP interelement and background corrections applied? Yes X No ___.

If yes, corrections applied before X or after _____ generation of raw data.

Footnotes:

NR - Not required by contract at this time

Form I:

Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).

U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).

E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.

S - Indicates value determined by Method of Standard Addition.

R - Indicates spike sample recovery is not within control limits.

* - Indicates duplicate analysis is not within control limits.

+ - Indicates the correlation coefficient for method of standard addition is less than 0.995

M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

ASB 001 1645

Date 12/01/86

COVER PAGE
INORGANIC ANALYSES DATA PACKAGE

Lab Name York Laboratories Div. of YWC, INC Case No. Hart/National Gypsum
SOW No. _____ Q.C. Report No. _____

Sample Numbers

Client ID	Lab ID No.	Client ID	Lab ID No.
3	1668001		
7	1666002		
9	1666003		
SWP 9 60. DUP	1748005 DUP		
SWP 9 60 Spike	1748005 Spike		
—	Reagent BLK		
—	Reagent BLK		
—	Soil BLK		

Comments:

ICP interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after ___ generation of raw data.

Footnotes:

NR - Not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).
U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
S - Indicates value determined by Method of Standard Addition.
R - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is less than 0.995
M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

ASB 001 1646

Form I

Sample No. 9

000026

Date 12/23/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. 785 Lab Receipt Date 8-8-86

LAB SAMPLE ID. NO. 155100 1 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	65.5	UP	14.	Manganese	NR	
3.	Arsenic	5.56	UF	15.	Mercury	1.79	CVAA
4.	Barium	NR		16.	Nickel	147	*P
5.	Beryllium	5.46	UP	17.	Potassium	~~NR~~	
6.	Cadmium	5.46	UP	18.	Selenium	5.56	UFR
7.	Calcium	NR		19.	Silver	10.9	UP
8.	Chromium	59.3	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	5.56	URF
10.	Copper	49.4	P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	57.9	*P
12.	Lead	39.4	R*F		Percent Solids (%)	17.97	

Cyanide 0.70

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 0.5 U

Lab Manager J. Curran

ASB 001 1647

Form I

Sample No.
12

000027

Date 12/23/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. 785 Lab Receipt Date 8-8-86

LAB SAMPLE ID. NO. 155/002 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	35.2	UP	14.	Manganese	NR	
3.	Arsenic	3.02	UF	15.	Mercury	0.28 U	CVAA
4.	Barium	NR		16.	Nickel	109	P
5.	Beryllium	2.93	UP	17.	Potassium	NR	
6.	Cadmium	2.93	UP	18.	Selenium	3.02	URF
7.	Calcium	NR		19.	Silver	5.87	UP
8.	Chromium	43.1	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	3.02	URF
10.	Copper	14.7	UP	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	270	*P
12.	Lead	11.2	R*F		Percent Solids (%)	32.79	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 5.3

Lab Manager J. Cuman

ASB 001 1648

Form I

Sample No.
13

000028

Date 12-23-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. 785 Lab Receipt Date 8-8-86

LAB SAMPLE ID. NO. 155/003 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	45.8	UP	14.	Manganese	NR	
3.	Arsenic	3.74	UF	15.	Mercury	~~6.6~~ R	CVAA
4.	Barium	NR		16.	Nickel	160	P
5.	Beryllium	3.81	UP	17.	Potassium	NR	
6.	Cadmium	3.81	UP	18.	Selenium	3.74	UFR
7.	Calcium	NR		19.	Silver	7.63	UP
8.	Chromium	64.3	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	3.74	UFR
10.	Copper	22.6	P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	380	*P ? *P
12.	Lead	18.8	R*F		Percent Solids (%)	26.22	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 0.5U

Lab Manager D. Curran

ASB 001 1649

Form I

Sample No.
16

000029

Date 12-23-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. 785 Lab Receipt Date 8-8-86

LAB SAMPLE ID. NO. 1551004 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	15.4	UP	14.	Manganese	NR	
3.	Arsenic	6.48	UF	15.	Mercury	0.14	CVAA
4.	Barium	NR		16.	Nickel	13.4	P
5.	Beryllium	1.28	UP	17.	Potassium	NR	
6.	Cadmium	1.28	UP	18.	Selenium	1.30	UFR
7.	Calcium	NR		19.	Silver	2.57	UP
8.	Chromium	24.8	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.30	UFR
10.	Copper	12.5	P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	38.5	*P
12.	Lead	19.1	R*F		Percent Solids (%)	75.70	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 0.5 U

Lab Manager J. Cuna

ASB 001 1650

Form I

000004

Sample No. 29

SWP 3 -

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 158600 QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	76.7 U P	14.	Manganese	NR
3.	Arsenic	6.14 U F	15.	Mercury	0.83 CVAA
4.	Barium	NR	16.	Nickel	301 R P
5.	Beryllium	6.39 U P	17.	Potassium	NR
6.	Cadmium	6.39 U P	18.	Selenium	6.14 UR F
7.	Calcium	NR	19.	Silver	12.8 U P
8.	Chromium	58.8 R P	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	6.14 U F
10.	Copper	31.9 * P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	79.5 P
12.	Lead	7.62 *F		Percent Solids (%)	15.65

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 5U

Lab Manager

ASB 001 1651

Form I

000005

SWP #4

Sample No. 31

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586002

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	36.9 U P	14.	Manganese	NR
3.	Arsenic	3.04 U F	15.	Mercury	0.39 CVAA
4.	Barium	NR	16.	Nickel	179 RP
5.	Beryllium	3.07 U P	17.	Potassium	NR
6.	Cadmium	3.07 U P	18.	Selenium	3.04 URF
7.	Calcium	NR	19.	Silver	6.15 U P
8.	Chromium	46.1 RP	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	3.04 U F
10.	Copper	15.4 * P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	17.5 P
12.	Lead	9.07 *F		Percent Solids (%)	31.90

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 3.14 U

Lab Manager

ASB 001 1652

Form I

000006

SWP #5

Sample No. 35

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. _____ Lab Receipt Date _____

LAB SAMPLE ID. NO. 1586003 QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	14.4 UP	14.	Manganese	NR
3.	Arsenic	6.04 F	15.	Mercury	0.12U CVAA
4.	Barium	NR	16.	Nickel	40.3 RP
5.	Beryllium	1.20 UP	17.	Potassium	NR
6.	Cadmium	1.20 UP	18.	Selenium	1.16 UFR
7.	Calcium	NR	19.	Silver	2.39 UP
8.	Chromium	26.5 RP	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	1.16 UF
10.	Copper	41.9 *P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	751 P
12.	Lead	16.6 *F		Percent Solids (%)	82.73

Cyanide 0.18

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.21 U

Lab Manager [signature]

ASB 001 1653

Form I

SWP # 5

Sample No. 36

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586004

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	13.8	U P	14.	Manganese	NR	
3.	Arsenic	7.37	F	15.	Mercury	0.16	CVAA
4.	Barium	NR		16.	Nickel	51.5	RP
5.	Beryllium	1.15	U P	17.	Potassium	NR	
6.	Cadmium	1.15	U P	18.	Selenium	1.15	URF
7.	Calcium	NR		19.	Silver	2.30	U P
8.	Chromium	30.6	RP	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.15	U F
10.	Copper	37.3	* P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	82.7	P
12.	Lead	79.7	*F		Percent Solids (%)	84.25	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.19 U

Lab Manager

ASB 001 1654

Form I

000005

Sup #5

Sample No. 37

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586005

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	39.4 U P	14.	Manganese	NR
3.	Arsenic	3.25 U F	15.	Mercury	1.18 CVAA
4.	Barium	NR	16.	Nickel	113 RP
5.	Beryllium	3.28 U P	17.	Potassium	NR
6.	Cadmium	3.28 U P	18.	Selenium	3.25 UFR
7.	Calcium	NR	19.	Silver	6.56 U F
8.	Chromium	47.9 RP	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	3.25 U F
10.	Copper	25.7 * P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	29.3 P
12.	Lead	8.12 * F		Percent Solids (%)	30.19

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = ~~3.8~~ 3.31U

JCC 10/14/86

Lab Manager

ASB 001 1655

Form

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

SUP # 5

EPA Sample No. 38

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories

CASE NO. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586-006

QC REPORT NO.

Elements Identified and Measured

Concentration: Low ✓ Medium

Matrix: Water Soil ✓ Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	13.	Magnesium
2.	Antimony	14.	Manganese
3.	Arsenic	15.	Mercury
4.	Barium	16.	Nickel
5.	Beryllium	17.	Potassium
6.	Cadmium	18.	Selenium
7.	Calcium	19.	Silver
8.	Chromium	20.	Sodium
9.	Cobalt	21.	Thallium
10.	Copper	22.	Vanadium
11.	Iron	23.	Zinc
12.	Lead		Precent Solids (%)

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Not enough sample for metals or phenols

Lab Manager

Form I

000010

SWP #6

Sample No. 39

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586 007 QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	14.7	U P	14.	Manganese	NR	
3.	Arsenic	1.22	U F	15.	Mercury	7.8	CVAA
4.	Barium	NR		16.	Nickel	55.2	R P
5.	Beryllium	1.22	U P	17.	Potassium	NR	
6.	Cadmium	1.22	U P	18.	Selenium	1.22	U F R
7.	Calcium	NR		19.	Silver	2.44	U F
8.	Chromium	83.3	R P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	~~309~~ JCC 10/01/86	P 1.22 U F
10.	Copper	68.2	* P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	309	P
12.	Lead	27.2	* F		Percent Solids (%)	79.48	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.26 U

Lab Manager

ASB 001 1657

Form I

SWP #6

Sample No. 42

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of TWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586008

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	34.3	U P	14.	Manganese	NR	
3.	Arsenic	2.89	U F	15.	Mercury	0.42	CVAA
4.	Barium	NR		16.	Nickel	104	RP
5.	Beryllium	2.86	U P	17.	Potassium	NR	
6.	Cadmium	2.86	U P	18.	Selenium	2.89	U F R
7.	Calcium	NR		19.	Silver	5.72	U P
8.	Chromium	34.7	RP	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	2.89	U F
10.	Copper	16.6	* P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	21.7	P
12.	Lead	6.24	* F		Percent Solids (%)	34.59	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 2.89 U

Lab Manager

ASB 001 1658

Form I

000012

SWP 7

Sample No. 43

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc. CASE NO. F. C. Hart/National Gypsum

SOW NO. Lab Receipt Date 8/14/86

LAB SAMPLE ID. NO. 1586009 QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	15.6 UP	14.	Manganese	NR
3.	Arsenic	1.32 UF	15.	Mercury	2.4 CVAA
4.	Barium	NR	16.	Nickel	57.6 RP
5.	Beryllium	1.30 UP	17.	Potassium	NR
6.	Cadmium	1.30 UP	18.	Selenium	1.32 UFR
7.	Calcium	NR	19.	Silver	2.60 UP
8.	Chromium	26.3 RP	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	1.32 UF
10.	Copper	17.0 *P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	50.1 P
12.	Lead	14.1 *F		Percent Solids (%)	74.00

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.35 U

Lab Manager

ASB 001 1659

1593

Millington Soil — Metals

000013

Sample No. 44

Date 10/14/86

TA SHEET

LAB NAME Yc

SOW NO. ___

LAB SAMPLE I

CASE NO. F. C. Hart/National Gypsum

Lab Receipt Date 8/15/86

QC REPORT NO. ___

ntified and Measured

Concentration: Low X Medium ___

Matrix: Water ___ Soil X Sludge ___ Other ___

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR	13.	Magnesium	NR
2.	Antimony	13.7 UP	14.	Manganese	NR
3.	Arsenic	2.26 UF	15.	Mercury	1.66 CVAA
4.	Barium	NR	16.	Nickel	35.6 RP
5.	Beryllium	1.14 UP	17.	Potassium	NR
6.	Cadmium	1.14 UP	18.	Selenium	1.13 UFR
7.	Calcium	NR	19.	Silver	2.29 UP
8.	Chromium	25.4 RP	20.	Sodium	NR
9.	Cobalt	NR	21.	Thallium	1.13 UF
10.	Copper	59.0 *P	22.	Vanadium	NR
11.	Iron	NR	23.	Zinc	82.1 P
12.	Lead	88.1 *F		Percent Solids (%)	85.76

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.17 U

Lab Manager [signature]

ASB 001 1660

Form I

Sample No. 46

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/14-8/15/86

LAB SAMPLE ID. NO. 1598002

QC REPORT NO. JTC 12/01/86

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	15.4	UP	14.	Manganese	NR	
3.	Arsenic	2.30	F	15.	Mercury	0.24	CVAA
4.	Barium	NR		16.	Nickel	18.5	R P
5.	Beryllium	1.28	UP	17.	Potassium	NR	
6.	Cadmium	1.28	UP	18.	Selenium	1.32	UFR
7.	Calcium	NR		19.	Silver	2.56	UP
8.	Chromium	26.6	PR	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.32	UF
10.	Copper	16.7	P*	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	55.4	P
12.	Lead	16.0	*F		Percent Solids (%)	75.86	

Cyanide 0.17

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 5.74

Lab Manager

Form I

Sample No. 50

Date 10/14/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.

CASE NO. F. C. Hart/National Gypsum

SOW NO.

Lab Receipt Date 8/18/86

LAB SAMPLE ID. NO. 1605001

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	14.9	UP	14.	Manganese	NR	
3.	Arsenic	1.21	UF	15.	Mercury	0.42	CVAA
4.	Barium	NR		16.	Nickel	23.7	P
5.	Beryllium	1.24	UP	17.	Potassium	NR	
6.	Cadmium	1.24	UP	18.	Selenium	1.21	UFR
7.	Calcium	NR		19.	Silver	2.48	UP
8.	Chromium	29.2	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.21	UFR
10.	Copper	18.9	P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	64.6	*P
12.	Lead	21.3	R*F		Precent Solids (%)	80.72	
	Cyanide	0.13					

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols = 1.2 U

Lab Manager

ASB 001 1662

YORK LABORATORIES DIVISION

CHAIN OF CUSTODY RECORD

CLIENT FRED C. HART ASSOC.

JOB No. 01005-00 & 5001-11

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
29	1 8oz jar + 2 VOA soil samples		
31	"		
35	"		
36	"		
37	"		
38	"		
39	"		
42	"		
43	"		

1 TRIP BLANK

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: Steve Hambos DATE: 8-13-86

SIGNATURE Steve Hambos SEALS PLACED ON CONTAINERS? ☐ YES ☒ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY:

4 NAME: Keith Hagan DATE: 8/14/86 TIME: 9:00AM

SIGNATURE: Keith Hagan ARE SEALS INTACT? ☒ YES ☒ NO ☐

WERE ANY SAMPLES SPLIT WITH ANOTHER PARTY? ☒ YES ☐ NO Coolers Sealed Intact

IF YES, IDENTIFY: 29 + 43

ASB 001 1663

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT FRED C HART ASSOC INC

JOB No. C1CS-CC RSC01-C 11

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
44	1 8oz Jar 2 VOA		I-Chem Preserv
46	"		"
Trip Blank			

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: Steve Hamlin DATE: 8-15-86

SIGNATURE: Steve Hamlin SEALS PLACED ON CONTAINERS? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY:

4 NAME: Keith Hagan DATE: 8/15/86 TIME: 9:00 AM

SIGNATURE: Keith Hagan ARE SEALS INTACT? ☑ YES ☑ NO ☐ N/A

WERE ANY SAMPLES SPLIT WITH ANOTHER PARTY? ☐ YES ☑ NO Cooler Seals Intact

IF YES, IDENTIFY _____

ASB 001 1664

9-5-86

The samples listed below are taken from the GREAT SWAMP NATIONAL WILDLIFE REFUGE in New Jersey. Each sample consists of 1 8-oz jar + 2 VOA's.

Sample #

~~33~~	30	36	41
~~39~~	33	37	42
	34	38	

Relinquished by
STEVE HAMBOS
Steve Hambos
9-5-86

Received by K. Hagan 9/5/86
Cooler Seals Intact

ASB 001 1665

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT FRED C HART ASSOC

JOB No. [illegible] 8SC001-[illegible]11

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
50	15-C2 [illegible]		

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

NAME: Steve Humbes DATE: 8-15-86

SIGNATURE: Steve Humbes SEALS PLACED ON CONTAINERS? ☐ YES ☒ NO

CUSTODY TRANSFERRED TO:

NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY:

NAME: Keith Hagan DATE: 8/18/86 TIME: 9:30 AM

SIGNATURE: Keith Hagan ARE SEALS INTACT? ☑ YES ☒ NO ☐ N/A

ARE ANY SAMPLES SPLIT WITH ANOTHER PARTY? — YES [illegible]

ASB 001 1666

SEDIMENT DATA

ORGANIC ANALYSES

ASB 001 1667

SGD 1, 2 + SW 22

QA/QC Review For Organics On
YWC Jobs 30860-1551, -1776, -1790 and -1819

Sample Holding Times: All sample holding times as per 40 CFR 136 were adhered to except the extraction on the pesticide fractions for samples in Job #30860-1551. The extraction was one day late, positive results should be considered estimates.

GC/MS Tuning and Performance: All tuning and performance criteria were met.

Calibration: Continuing calibration compound vinyl chloride was over 25% difference by 0.65%. All positive results for vinyl chloride in samples ID#1790001 thru 1790007 should be considered estimates. All other calibration criteria were met.

Blanks: Both VOA method blanks for soil on Job 30860-1551 were contaminated with 9 ug/kg methylene chloride (MeCl). Results for methylene chloride below 90 ug/kg in those samples should not be reported. The VOA method blank for soil on Job 30860-1776 was contaminated with 7 ug/kg MeCl. Results for MeCl below 70 ug/kg in those samples should not be reported. The VOA method blank for water on Job 30860-1819 was contaminated with 6 ug/L of MeCl. Results for MeCl below 60 ug/L in those samples should not be reported. The VOA method blanks for soil on Job 30860-1819 was contaminated with 15 ug/kg MeCl. Results for MeCl below 150 ug/kg in those samples should not be reported. All other method blanks were within CRDL.

Surrogate: The base neutral fraction of samples ID #s 1551-001 and 1551-004 had two surrogates outside QC limits but were above 10% recovery. Positive results for base neutral compounds for those samples should be considered estimates. The acid fraction of sample ID #1551-004 had two surrogates outside QC limits but were above 10% recovery. Positive results for acid compounds should be considered estimates. The base neutral and acid fractions of sample ID #1790-005 each had three surrogates outside QC limits and one surrogate below 10% recovery. Positive BNA results should be considered estimates and negative results unusable. The BNA fraction for sample ID #1819-004 had no surrogates added, consider all positive results as estimates. Several pesticide surrogates were outside QC limits, no action is taken because these are advisory limits only. All other surrogates were within QC limits.

Matrix Spike (MS)/Matrix Spike Duplicate (MSD): MS/MSD results for Job 30860-1551 had 22 of 44 recoveries and 5 of 22 RPD's outside QC limits. MS/MSD results for Job 30860-1776 had 5 of 76 and 1 of 38 RPD's outside QC limits. MS/MSD results for Job #30860-1790 had 10 of 56 recoveries and 0 of 28 RPD's outside QC limits. MS/MSD results for Job #30860-1819 had 8 of 76 recoveries and 1 of 38 RPD's outside QC limits. No action is taken solely on MS/MSD data. MS/MSD results are used in a long term evaluation of a method.

Compound Identification: All identification criteria were met.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 2510 SED-1

Laboratory Name: York Client: Hart

Lab Sample I.D. #: 1776-001 Job #: 30860-1776

Sample Matrix: Soil Date Sample Received: 9-12-86

Data Release Authorized By: [signature]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared:

Date Analyzed: 9 / 13 / 86

Conc./Dil. Factor: 1.37 pH:

Percent Moisture:
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 u	Bromodichloromethane	5 u
Bromomethane	↓	2-Chloroethylvinyl ether	10 u
Vinyl Chloride	↓	1,2-Dichloropropane	5 u
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	13 B	Trichloroethene	↓
Trichlorofluoromethane	10 u	Benzene	↓
Acrolein	100 u	cis-1,3-Dichloropropene	↓
Acrylonitrile	35 u	Dibromochloromethane	↓
1,1-Dichloroethene	5 u	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	2 JB	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5 u	Toluene	12 B
1,1,1-Trichloroethane	↓	Chlorobenzene	5 u
Carbon Tetrachloride	↓	Ethyl benzene	5 u

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000335

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # (1776-001) 2510 SED 1

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 9/17/86

Separatory Funnel: ✓

Date Analyzed: 9/27/86

Continuous-Liq-Liq:

Conc./Dil. Factor: 10

Percent Moisture: 35.64
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	330u	Anthracene	55J ✓
bis(2-chloroethyl)ether	330u	Di-n-butyl phthalate	~~55B~~
1,3-Dichlorobenzene	330u	Fluoranthene	400 ✓
1,4-Dichlorobenzene	330u	Benzidine	330u
1,2-Dichlorobenzene	330u	Pyrene	320J ✓
bis(2-chloroisopropyl)ether	330u	Butyl benzyl phthalate	330u
Hexachloroethane	330u	3,3'-Dichlorobenzidine	330u
N-nitroso-di-n-propylamine	330u	Chrysene	210J ✓
Nitrobenzene	330u	Benzo(a)anthracene	330u
Isophorone	330u	bis-2-ethylhexyl phthalate	140JB
bis(2-chloroethoxy)methane	330u	di-n-octyl phthalate	330u
1,2,4-Trichlorobenzene	330u	Benzo(b)fluoranthene	330u
Naphthalene	330u	Benzo(k)fluoranthene	330u
Hexachlorobutadiene	330u	Benzo(a)pyrene	150J ✓
Hexachlorocyclopentadiene	330u	Benzo(g,h,i)perylene	330u
2-Chloronaphthalene	330u	Dibenzo(a,h)anthracene	330u
Dimethyl phthalate	330u	Indeno(1,2,3,c,d)pyrene	330u
Acenaphthylene	330u	Phenol	330u
2,6-Dinitrotoluene	330u	2-Chlorophenol	330u
Acenaphthene ✓	16J	2-Nitrophenol	330u
2,4-Dinitrotoluene	330u	2,4-Dimethylphenol	330u
Diethyl phthalate	51J	2,4-Dichlorophenol	330u
Fluorene ✓	20J	4-Chloro-3-methyl phenol	330u
4-Chlorophenyl-phenyl ether	330u	2,4,6-Trichlorophenol	330u
4-Bromophenyl phenyl ether	330u	2,4-Dinitrophenol	1600u
N-nitrosodiphenyl amine	330u	4-Nitrophenol	1600u
Hexachlorobenzene	330u	2-methyl-4,6-dinitrophenol	1600u
Phenanthrene ✓	210J	Pentachlorophenol	1600u

*See Appendix for footnotes.

ASB 001 1670

PRIORITY POLLUTANT ORGANICS

000336

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 3510 - Sed 1

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 9/17/86 Separatory Funnel: _____

Date Analyzed: 10/8/86 Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: 35.64% (decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	5.7 J
Aldrin	8.0 u
4,4'-DDE	16.0 u
Dieldrin	16.0 u
4,4'-DDD	16.0 u
Endrin Aldehyde	16.0 u
4,4'-DDT	16.0 u
Chlordane	80.0 u
Endosulfan I	8.0 u
Endosulfan II	16.0 u
Endosulfan Sulfate	16.0 u
Endrin	8.0 u
Heptachlor Epoxide	8.0 u
Toxaphene	160.0 u
PCB-1016	80.0 u
PCB-1221	80.0 u
PCB-1232	80.0 u
PCB-1242	80.0 u
PCB-1248	80.0 u
PCB-1254	160.0 u
PCB-1260	160.0 u

*See Appendix for footnotes.

ASB 001 1671

Laboratory Name: York Laboratories

Case No: Hart / N.G. 1776

Sample Number: 2510-SED-1 (-001)

Organics Analysis Data Sheet
(Page 4)

000037

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown	BNA	6.10	12000
12. N/A	Unknown	BNA	6.72	18000
13. 594-82-1	Butane, 2,2,3,3- tetramethyl-	BNA	7.06	9900
14. N/A	Unknown	BNA	9.49	9300
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB OUT 16/2

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 2511-SED2

Laboratory Name: York Client: Hart

Lab Sample I.D. #: 1776-002 Job #: 30860-1776

Sample Matrix: Soil Date Sample Received: 9-12-86

Data Release Authorized By:

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared:

Date Analyzed: 9/13/86

Conc./Dil. Factor: 1.45 pH:

Percent Moisture:
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	↓	2-Chloroethylvinyl ether	10U
Vinyl Chloride	↓	1,2-Dichloropropane	5U
Chloroethane	↓	trans-1,3-Dichloropropane	↓
Methylene Chloride	21B	Trichloroethene	↓
Trichlorofluoromethane	10U	Benzene	1J
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	↓
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	4JB	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	5U	Toluene	15B
1,1,1-Trichloroethane	↓	Chlorobenzene	5U
Carbon Tetrachloride	↓	Ethyl benzene	5U

*See Appendix for footnotes.

ASB 001 1673

PRIORITY POLLUTANT ORGANICS

C 406

YORK LABORATORIES DIVISION, YWC, INC.

(1776-002)

ANALYSIS SHEET - Page 2 SAMPLE # 2511 - SEC-2

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 9/17/96 Separatory Funnel: ✓

Date Analyzed: 9/27/96 Continuous-Liq-Liq:

Conc./Dil. Factor: 1.0

Percent Moisture: 39.38
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	330u	Anthracene	82J
bis(2-chloroethyl)ether	330u	Di-n-butyl phthalate	81JB
1,3-Dichlorobenzene	330u	Fluoranthene	1400
1,4-Dichlorobenzene	330u	Benzidine	330u
1,2-Dichlorobenzene	330u	Pyrene	1200
bis(2-chloroisopropyl)ether	330u	Butyl benzyl phthalate	330u
Hexachloroethane	330u	3,3'-Dichlorobenzidine	330u
N-nitroso-di-n-propylamine	330u	Chrysene	840
Nitrobenzene	330u	Benzo(a)anthracene	660
Isophorone	330u	bis-2-ethylhexyl phthalate	130JB
bis(2-chloroethoxy)methane	330u	di-n-octyl phthalate	330u
1,2,4-Trichlorobenzene	330u	Benzo(b)fluoranthene	1300
Naphthalene	8J	Benzo(k)fluoranthene	170J
Hexachlorobutadiene	330u	Benzo(a)pyrene	590
Hexachlorocyclopentadiene	330u	Benzo(g,h,i)perylene	500
2-Chloronaphthalene	330u	Dibenzo(a,h)anthracene	330u
Dimethyl phthalate	330u	Indeno(1,2,3,c,d)pyrene	460
Acenaphthylene	32J	Phenol	330u
2,6-Dinitrotoluene	330u	2-Chlorophenol	330u
Acenaphthene	14J	2-Nitrophenol	330u
2,4-Dinitrotoluene	330u	2,4-Dimethylphenol	330u
Diethyl phthalate	54J	2,4-Dichlorophenol	330u
Fluorene	85J	4-Chloro-3-methyl phenol	330u
4-Chlorophenyl-phenyl ether	330u	2,4,6-Trichlorophenol	330u
4-Bromophenyl phenyl ether	330u	2,4-Dinitrophenol	1600u
N-nitrosodiphenyl amine	330u	4-Nitrophenol	1600u
Hexachlorobenzene	330u	2-methyl-4,6-dinitrophenol	1600u
Phenanthrene	560	Pentachlorophenol	1600u

*See Appendix for footnotes.

1674

PRIORITY POLLUTANT ORGANICS

000407

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 2511 Soil2

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 9/17/86

Separatory Funnel: _____

Date Analyzed: 10/4/86

Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: 39 38 %
(decanted)

	ug/L or (ug/Kg)
Alpha-BHC	8.0 u
Beta-BHC	8.0 u
Gamma-BHC	8.0 u
Delta-BHC	8.0 u
Heptachlor	8.0 u
Aldrin	8.0 u
4,4'-DDE	16.0 u
Dieldrin	16.0 u
4,4'-DDD	16.0 u
Endrin Aldehyde	N/A
4,4'-DDT	16.0 u
Chlordane	80.0 u
Endosulfan I	8.0 u
Endosulfan II	16.0 u
Endosulfan Sulfate	16.0 u
Endrin	8.0 u
Heptachlor Epoxide	8.0 u
Toxaphene	160.0 u
PCB-1016	80.0 u
PCB-1221	80.0 u
PCB-1232	80.0 u
PCB-1242	80.0 u
PCB-1248	80.0 u
PCB-1254	160.0 u
PCB-1260	160.0 u

*See Appendix for footnotes.

ASB 001 1675

Laboratory Name: York Laboratories

Case No: HART/NG 1776

Sample Number: 2511 SED-2 (-002

U00108

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (min)	Estimated Concentration (ug/l or ug/kg)
1.	C6 - Alkane	VOA	23.14	8
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown	BNA	6.62	110000
12. N/A	Unknown	BNA	9.48	7700
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1676

SEDIMENT DATA

INORGANIC ANALYSES

ASB 001 1677

SED 1+2
SW22

QA/QC Review For Inorganics
On YWC Jobs 30860-1551, -1776,
-1790, -1796, and -1819

Sample Holding Times: Holding times were exceed for mercury on all the jobs in this review. The number of days ranged from 1 to 38 days overdue. The cyanide holding time for job #30860-1551 were exceeded by one day. All other holding times were adhered to. Results for mercury and cyanide in the previously mentioned jobs must be considered estimates.

Initial and Continuing Calibration Verification Data: Initial calibration of silver was a little high, this didn't effect any samples. All other calibration data met CLP criteria.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP interference check results were within CLP limits.

Spike Sample Recoveries: Antimony recovery was below 75% but above 30% for Jobs 30860-1776, -1790, -1796 and -1819. Antimony results for these jobs should be considered estimates. Lead recovery was below 30% for Jobs 30860-1776, -1790, -1796, and -1819. Lead data for these jobs are unusable. Selenium recoveries were below 30% for Jobs 30860-1551, -1776, -1790, -1796 and -1819. Selenium data for all jobs in this review is unusable. Lead recovery was above 125% for Job 30860-1551. Lead positive results for this job should be considered estimates. Thallium recovery was below 75% and above 30% for Job 30860-1551. Thallium results should be considered estimates. All other recoveries were within QC limits.

Duplicates: Relative percent difference (RPD) for - copper for Jobs 30860-1776, -1790, -1796 and -1819 was greater than 35% but less than 100%. Copper results for these jobs should be considered estimates. RPD for zinc and lead for Job 30860-1551 were greater than 35% but less than 100%. Zinc and lead results for this job should be considered estimates. All other RPD's were within QC limits.

Instrument Detection Limit: All IDL's were at or below CRDL as required.

Standard Addition Results: None were run.

Form I

000005

Sample No.
2510 SED-1

Date 12/23/86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.
CASE NO. F. C. Hart/National Gypsum
SOW NO. 785
Lab Receipt Date 9/12/86
LAB SAMPLE ID. NO. 1776001
QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water Soil X Sludge Other

ug/L or mg/kg dry weight (Circle One) ppm

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	18.5	UPR	14.	Manganese	NR	
3.	Arsenic	7.54	UF	15.	Mercury	0.16 U	CVAA
4.	Barium	NR		16.	Nickel	32.1	*P
5.	Beryllium	1.54	UP	17.	Potassium	NR	
6.	Cadmium	1.54	UP	18.	Selenium	1.51	URF
7.	Calcium	NR		19.	Silver	3.08	UP
8.	Chromium	25.6	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.51	UF
10.	Copper	29.0	*P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	108	P
12.	Lead	33.2	RF		Percent Solids (%)	64.36	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 0.5 U

Lab Manager [illegible]

ASB 001 1679

Form I

000006

Sample No.
2511 SED-2

Date 12-23-86

INORGANIC ANALYSIS DATA SHEET

LAB NAME York Laboratories Div. of YWC, Inc.
CASE NO. F. C. Hart/National Gypsum
SOW NO. 785
Lab Receipt Date 9/12/86
LAB SAMPLE ID. NO. 1776002
QC REPORT NO. _____

Elements Identified and Measured

Concentration: Low X Medium _____

Matrix: Water _____ Soil X Sludge _____ Other _____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	NR		13.	Magnesium	NR	
2.	Antimony	19.2	UPR	14.	Manganese	NR	
3.	Arsenic	10.9	F	15.	Mercury	0.36	CVAA
4.	Barium	NR		16.	Nickel	28.8	*P
5.	Beryllium	1.60	UP	17.	Potassium	NR	
6.	Cadmium	1.60	UP	18.	Selenium	1.50	URF
7.	Calcium	NR		19.	Silver	3.20	UP
8.	Chromium	29.2	P	20.	Sodium	NR	
9.	Cobalt	NR		21.	Thallium	1.50	UF
10.	Copper	67.2	*P	22.	Vanadium	NR	
11.	Iron	NR		23.	Zinc	181	P
12.	Lead	62.0	RF		Percent Solids (%)	60.72	

Cyanide 0.10 U

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: NR = Not Requested

Phenols 1.0

Lab Manager J. Cuman

ASB 001 1680

SURFACE WATER DATA
ORGANIC ANALYSES

ASB 001 1681

SW

F

ORGANICS

CASE DATA PACKAGE

FOR

HART/NATIONAL GYPSUM

CONSISTING OF YWC JOBS

30860-1756

30860-1760

30860-1789

ASB 001 1682

QA/QC Review For Organics On
YWC Jobs 30860-1756, -1760, and -1789

Sample Holding Times: All sample holding times were adhered to as per 40 CFR 136.

GC/MS Tuning and Performance: All tuning and performance criteria.

Calibration: All calibration criteria were met.

Blanks: VOA method blank for Job 30860-1756 had 7 ug/L methylene chloride (MeCl) and 7 ug/L acetone. Results for acetone and MeCl below 70 ug/L for samples in this job should not be reported. VOA method blank for Job 30860-1760 had 5 ug/L MeCl, 60 ug/L Acetone and u ug/L 2-Hyxanone. Results for MeCl below 50 ug/L, acetone below 6 ug/L, and 2-Hexanone below 35 ug/L should not be reported for this job. Both VOA method blanks for Job 30860-1789 had levels of MeCl, 5 ug/L and 6 ug/L. Results for MeCl below 60 ug/L should not be reported for this job. All other method blanks were within the CRDL.

Surrogate Recoveries: Surrogate recoveries were within acceptable CLP guidelines.

Matrix Spike (MS)/Matrix Spike Duplicate (MSD): MS/MSD results for Job #;s 30860-1756 and 30860-1760 each had 5 of 44 recoveries and 0 of 22 RPD's outside QC limits. MS/MSD results for Job #30860-1789 had 9 Of 34 recoveries and 2 of 17 RPD's outside QC limits. No action is taken on MS/MSD data alone. The results are used to evaluate long term performance of a method.

Compound Identification: All identification criteria were met.

System Performance: There were not any indications of poor instrument performance.

Pesticide Retention Time Shift of DBC: All retention times of DBC were within 2%.

Pesticide Check for Linearity: DDT outside the 10% RSD, proper procedures for correction were followed.

Check for 4,4'-DDT/Endrin Breakdown: All met CLP breakdown criteria were met.

Pesticide/PCB Standards: Percent difference for several compounds fell outside CLP limits, this didn't effect any sample results.

YORK LABORATORIES DIVISION

CASE NARRATIVE

This report contains the organic data for the following YWC jobs pertaining to Fred C. Hart/National Gypsum:

YWC Job 30860-1756

Lab Identification	Hart Identification
1756-001	SW-1 2501
1756-002	SW-2 2529
1756-003	SW-3 2528
1756-004	SW-4 2530
1756-005	SW-5 2531
1756-006	SW-6 2532
1756-007	TB-1 2811

YWC Job 30860-1760

Lab Identification	Hart Identification
1760-001	Field Blank

YWC Job 30860-1789

Lab Identification	Hart Identification
1789-001	SW-13 2502
1789-002	SW-14 2503
1789-003	SW-15-2504
1789-004	TB-3

Samples TB-1 and TB-3 were analyzed for volatile organics only. All other samples were analyzed for priority pollutant organics (volatiles, base-neutral/acid extractable and pesticides/PCB's) including a library search as per USEPA Contract Laboratory Program Protocols.

The following items were noted:

Volatile Organics

No items noted.

Base-Neutral/Acid Extractable Organics

No items noted.

Pesticide/PCB's

No items noted.

Miscellaneous

Not enough sample was submitted to run a matrix spike and matrix spike duplicate for pesticides/PCB's and base-neutral/acid extractable organics. As such laboratory water was spiked and used for recovery checks in lieu of a client sample.

Regarding Tentatively Identified Compounds (TIC's), our data system software (Hewlett-Packard Aquarius package) utilizes the McLafferty U + a algorithm to qualify spectra during library search. York Labs sets the prefiltration of spectral match criteria to the minimum the software allows, which for the most part, gives three (3) matches to the TIC spectra. However occasionally there are not three (3) matches which meet the algorithm criteria. In these cases, none, one, or two closest matches are retrieved which indicates that no other matches are within the criteria (algorithm U + a) and the data system will not be able to report three (3) matches.

Jeffrey C. Curran
Laboratory Manager

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # [illegible]

Laboratory Name: YORK LABS Client: [illegible]

Lab Sample I.D. #: 1756001 Job #: 30860-1756

Sample Matrix: WATER Date Sample Received: 9-11-86

Data Release Authorized By: [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 9/13/86

Date Analyzed: 9/13/86

Conc./Dil. Factor: 1.0 pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane		2-Chloroethylvinyl ether	5 U
Vinyl Chloride		1,2-Dichloropropane	5 U
Chloroethane		trans-1,3-Dichloropropene	
Methylene Chloride	5 U	Trichloroethene	
Trichlorofluoromethane	10 U	Benzene	
Acrolein	100 U	cis-1,3-Dichloropropene	
Acrylonitrile	35 U	Dibromochloromethane	
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** SW-1-2501 (HOA/NS 1756) DCI

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 09-15-86 Separatory Funnel: Yes

Date Analyzed: 09-22-86 Continuous-Liq-Liq: No

Conc./Dil. Factor: 10

Percent Moisture: N/A
(decanted)

	(ug/L) or ug/Kg		(ug/L) or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether	10u	Di-n-butyl phthalate	10u
1,3-Dichlorobenzene	10u	Fluoranthene	10u
1,4-Dichlorobenzene	10u	Benzidine	10u
1,2-Dichlorobenzene	10u	Pyrene	10u
bis(2-chloroisopropyl)ether	10u	Butyl benzyl phthalate	10u
Hexachloroethane	10u	3,3'-Dichlorobenzidine	10u
N-nitroso-di-n-propylamine	10u	Chrysene	10u
Nitrobenzene	10u	Benzo(a)anthracene	10u
Isophorone	10u	bis-2-ethylhexyl phthalate	10u
bis(2-chloroethoxy)methane	10u	di-n-octyl phthalate	10u
1,2,4-Trichlorobenzene	10u	Benzo(b)fluoranthene	10u
Naphthalene	10u	Benzo(k)fluoranthene	10u
Hexachlorobutadiene	10u	Benzo(a)pyrene	10u
Hexachlorocyclopentadiene	10u	Benzo(g,h,i)perylene	10u
2-Chloronaphthalene	10u	Dibenzo(a,h)anthracene	10u
Dimethyl phthalate	10u	Indeno(1,2,3,c,d)pyrene	10u
Acenaphthylene	10u	Phenol	10u
2,6-Dinitrotoluene	10u	2-Chlorophenol	10u
Acenaphthene	10u	2-Nitrophenol	10u
2,4-Dinitrotoluene	10u	2,4-Dimethylphenol	10u
Diethyl phthalate	10u	2,4-Dichlorophenol	10u
Fluorene	10u	4-Chloro-3-methyl phenol	10u
4-Chlorophenyl-phenyl ether	10u	2,4,6-Trichlorophenol	10u
4-Bromophenyl phenyl ether	10u	2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine	10u	4-Nitrophenol	50u
Hexachlorobenzene	10u	2-methyl-4,6-dinitrophenol	50u
Phenanthrene	10u	Pentachlorophenol	50u

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # SW-1-350'

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 4-15-86 Separatory Funnel: ✓

Date Analyzed: 10-15-86 Liquid-Liquid: ~~✓~~

Conc./Dil. Factor: 1

Percent Moisture: _____
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	.05 U
Beta-BHC	.05 U
Gamma-BHC	.05 U
Delta-BHC	.05 U
Heptachlor	.05 U
Aldrin	.05 U
4,4'-DDE	.10 U
Dieldrin	.10 U
4,4'-DDD	.10 U
Endrin Aldehyde	NA
4,4'-DDT	.10 U
Chlordane	.5 U
Endosulfan I	~~.10~~ .05 U
Endosulfan II	.10 U
Endosulfan Sulfate	.10 U
Endrin	.10 U
Heptachlor Epoxide	.05 U
Toxaphene	1.0 U
PCB-1016	.5 U
PCB-1221	.5 U
PCB-1232	.5 U
PCB-1242	.5 U
PCB-1248	.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

Laboratory Name: York Laboratories

Case No: [illegible]

Sample Number

[illegible]

(-CC1)

000038

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (min)	Estimated Concentration (ug/l or ug/kg)
1.	ACETONE	VOA	[illegible]	7
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 10588-3	Benzene, methyl-	BNA	4.76	8
12. N/A	Unknown	BNA	5.79	7
13. N/A	Unknown	BNA	6.39	19
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1689

000083

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # 2529 SW-2

Laboratory Name: YORK LABS Client: HART | NAT GYP

Lab Sample I.D. #: 1756-002 Job #: 30860-1756

Sample Matrix: WATER Date Sample Received: 9-11-86

Data Release Authorized By: [signature]

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 9/13/86

Date Analyzed: 9/13/86

Conc./Dil. Factor: 1.0 pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane		2-Chloroethylvinyl ether	10 U
Vinyl Chloride		1,2-Dichloropropane	5 U
Chloroethane		trans-1,3-Dichloropropene	
Methylene Chloride	5 U	Trichloroethene	
Trichlorofluoromethane	10 U	Benzene	
Acrolein	100 U	cis-1,3-Dichloropropene	
Acrylonitrile	35 U	Dibromochloromethane	
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

ASB 001 1690

PRIORITY POLLUTANT ORGANICS

000084

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # SW-2-2529
(1756-002)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 9-15-86

Separatory Funnel: Yes

Date Analyzed: 9-27-86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether	10u	Di-n-butyl phthalate	2JB
1,3-Dichlorobenzene	10u	Fluoranthene	10u
1,4-Dichlorobenzene	10u	Benzidine	10u
1,2-Dichlorobenzene	10u	Pyrene	10u
bis(2-chloroisopropyl)ether	10u	Butyl benzyl phthalate	10u
Hexachloroethane	10u	3,3'-Dichlorobenzidine	10u
N-nitroso-di-n-propylamine	10u	Chrysene	10u
Nitrobenzene	10u	Benzo(a)anthracene	10u
Isophorone	10u	bis-2-ethylhexyl phthalate	10u
bis(2-chloroethoxy)methane	10u	di-n-octyl phthalate	10u
1,2,4-Trichlorobenzene	10u	Benzo(b)fluoranthene	10u
Naphthalene	10u	Benzo(k)fluoranthene	10u
Hexachlorobutadiene	10u	Benzo(a)pyrene	10u
Hexachlorocyclopentadiene	10u	Benzo(g,h,i)perylene	10u
2-Chloronaphthalene	10u	Dibenzo(a,h)anthracene	10u
Dimethyl phthalate	10u	Indeno(1,2,3,c,d)pyrene	10u
Acenaphthylene	10u	Phenol	10u
2,6-Dinitrotoluene	10u	2-Chlorophenol	10u
Acenaphthene	10u	2-Nitrophenol	10u
2,4-Dinitrotoluene	10u	2,4-Dimethylphenol	10u
Diethyl phthalate	3JB	2,4-Dichlorophenol	10u
Fluorene	10u	4-Chloro-3-methyl phenol	10u
4-Chlorophenyl-phenyl ether	10u	2,4,6-Trichlorophenol	10u
4-Bromophenyl phenyl ether	10u	2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine	10u	4-Nitrophenol	50u
Hexachlorobenzene	10u	2-methyl-4,6-dinitrophenol	50u
Phenanthrene	10u	Pentachlorophenol	50u

*See Appendix for footnotes.

ASB 001 1691

PRIORITY POLLUTANT ORGANICS

000085

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # SW-2-2529

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 9-15-86 Separatory Funnel: ✓

Date Analyzed: 10-15-86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture:
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	.05 U
Beta-BHC	.05 U
Gamma-BHC	.05 U
Delta-BHC	.05 U
Heptachlor	.05 U
Aldrin	.05 U
4,4'-DDE	.10 U
Dieldrin	.10 U
4,4'-DDD	.10 U
Endrin Aldehyde	NA
4,4'-DDT	.10 U
Chlordane	.5 U
Endosulfan I	~~.10~~ .05 U
Endosulfan II	.10 U
Endosulfan Sulfate	.10 U
Endrin	.10 U
Heptachlor Epoxide	.05 U
Toxaphene	1.0 U
PCB-1016	.5 U
PCB-1221	.5 U
PCB-1232	.5 U
PCB-1242	.5 U
PCB-1248	.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1692

Laboratory Name: York Laboratories

Case No: Hart / NG 1756

Sample Number: SW-3-3589 (-002)

Organics Analysis Data Sheet
(Page 4)

000086

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number (min)	Estimated Concentration (ug/l or ug/kg)
1.	ACETONE	VOA	1079	6
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	5.79	28
12. N/A	Unknown	BNA	6.37	15
13. 128370	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	17.87	15
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1693

000144

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # 2528 SW-

Laboratory Name: YORK LABS

Client: HART/NAT GYP

Lab Sample I.D. #: 1756003

Job #: 30860-156

Sample Matrix: WATER

Date Sample Received: 9-11-86

Data Release Authorized By: [signature]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 9/13/86

Date Analyzed: 9/13/86

Conc./Dil. Factor: 1.0

pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	↓	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	↓	1,2-Dichloropropane	5 U
Chloroethane	↓	trans-1,3-Dichloropropene	↓
Methylene Chloride	5 U	Trichloroethene	↓
Trichlorofluoromethane	10 U	Benzene	↓
Acrolein	100 U	cis-1,3-Dichloropropene	↓
Acrylonitrile	35 U	Dibromochloromethane	↓
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	↓	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	↓	Toluene	↓
1,1,1-Trichloroethane	↓	Chlorobenzene	↓
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

ASB 001 1694

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # SW-3-2528
(1756-003)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 9-15-86

Separatory Funnel: Yes

Date Analyzed: 9-27-86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether	10u	Di-n-butyl phthalate	10u
1,3-Dichlorobenzene	10u	Fluoranthene	10u
1,4-Dichlorobenzene	10u	Benzidine	10u
1,2-Dichlorobenzene	10u	Pyrene	10u
bis(2-chloroisopropyl)ether	10u	Butyl benzyl phthalate	10u
Hexachloroethane	10u	3,3'-Dichlorobenzidine	10u
N-nitroso-di-n-propylamine	10u	Chrysene	10u
Nitrobenzene	10u	Benzo(a)anthracene	10u
Isophorone	10u	bis-2-ethylhexyl phthalate	110
bis(2-chloroethoxy)methane	10u	di-n-octyl phthalate	13
1,2,4-Trichlorobenzene	10u	Benzo(b)fluoranthene	10u
Naphthalene	10u	Benzo(k)fluoranthene	10u
Hexachlorobutadiene	10u	Benzo(a)pyrene	10u
Hexachlorocyclopentadiene	10u	Benzo(g,h,i)perylene	10u
2-Chloronaphthalene	10u	Dibenzo(a,h)anthracene	10u
Dimethyl phthalate	10u	Indeno(1,2,3,c,d)pyrene	10u
Acenaphthylene	10u	Phenol	10u
2,6-Dinitrotoluene	10u	2-Chlorophenol	10u
Acenaphthene	10u	2-Nitrophenol	10u
2,4-Dinitrotoluene	10u	2,4-Dimethylphenol	10u
Diethyl phthalate	2JB	2,4-Dichlorophenol	10u
Fluorene	10u	4-Chloro-3-methyl phenol	10u
4-Chlorophenyl-phenyl ether	10u	2,4,6-Trichlorophenol	10u
4-Bromophenyl phenyl ether	10u	2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine	10u	4-Nitrophenol	50u
Hexachlorobenzene	10u	2-methyl-4,6-dinitrophenol	50u
Phenanthrene	10u	Pentachlorophenol	50u

*See Appendix for footnotes.

ASB 001 1695

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 5W-3-3528

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 9-15-86 Separatory Funnel: ✓

Date Analyzed: 10-15-86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture:
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	.05 U
Beta-BHC	.05 U
Gamma-BHC	.05 U
Delta-BHC	.05 U
Heptachlor	.05 U
Aldrin	.05 U
4,4'-DDE	.10 U
Dieldrin	.10 U
4,4'-DDD	.10 U
Endrin Aldehyde	NA
4,4'-DDT	.10 U
Chlordane	.5 U
Endosulfan I	~~.10~~ .05 U
Endosulfan II	.10 U
Endosulfan Sulfate	.10 U
Endrin	.10 U
Heptachlor Epoxide	.05 U
Toxaphene	1.0 U
PCB-1016	.5 U
PCB-1221	.5 U
PCB-1232	.5 U
PCB-1242	.5 U
PCB-1248	.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

Laboratory Name: York Laboratories

Case No: Hec-1/VG 1756

Sample Number
SW-3-25 25
(-003)

LC0147

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	ACETONE	VOA	10 82	7.
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 52079255	Cyclobutene, 2-propylidene-	BNA	4.76	7
12. 123864-1	Acetic acid, butyl ester	BNA	5.78	33
13. N/A	Unknown	BNA	6.38	14
14. 128330	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	17.88	16
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1697

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # SW-22 2275

Laboratory Name: YORK LABS

Client: HART

Lab Sample I.D. #: 1819-005

Job #: 30860-1819

Sample Matrix: WATER

Date Sample Received: 9-19-86

Data Release Authorized By:

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 09/20/86

Conc./Dil. Factor: 1.00

pH:

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane		2-Chloroethylvinyl ether	10 U
Vinyl Chloride		1,2-Dichloropropane	5 U
Chloroethane		trans-1,3-Dichloropropane	
Methylene Chloride	5 U	Trichloroethene	
Trichlorofluoromethane	10 U	Benzene	
Acrolein	100 U	cis-1,3-Dichloropropene	
Acrylonitrile	35 U	Dibromochloromethane	
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # #2275 1819-005

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 9/23/86

Separatory Funnel: Yes

Date Analyzed: 9/30/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A
(decanted)

	(ug/l) or ug/Kg		(ug/L) or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene	10u	4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # 5775

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 9/23/86 Separatory Funnel: ✓

Date Analyzed: 10/23/86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: —
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	.05 u
Beta-BHC	.05 u
Gamma-BHC	.05 u
Delta-BHC	.05 u
Heptachlor	.05 u
Aldrin	.05 u
4,4'-DDE	.10 u
Dieldrin	.10 u
4,4'-DDD	.10 u
Endrin Aldehyde	NA
4,4'-DDT	.10 u
Chlordane	.50 u
Endosulfan I	.05 u
Endosulfan II	.10 u
Endosulfan Sulfate	.10 u
Endrin	.10 u
Heptachlor Epoxide	.05 u
Toxaphene	1.0 u
PCB-1016	.50 u
PCB-1221	.50 u
PCB-1232	.50 u
PCB-1242	.50 u
PCB-1248	.50 u
PCB-1254	1.0 u
PCB-1260	1.0 u

*See Appendix for footnotes.

Laboratory Name York Labs

Case No HartING 1819

Sample Number 1819-005

2225

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration ug/l or ug/kg
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108883	Benzene, methyl-	BNA	4.71	19
12. N/A	Unknown	BNA	6.33	29
13. 872504	2-Pyrrolidinone, 1-methyl-	BNA	10.42	25
14. 128370	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	17.84	10
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # 2811 TB-1

Laboratory Name: YORK LABS

Client: HART/NYT GVP

Lab Sample I.D. #: 1756007

Job #: 308601756

Sample Matrix: WATER

Date Sample Received: 9-11-86

Data Release Authorized By: [signature]

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 9/13

Date Analyzed: 9/13

Conc./Dil. Factor: 1.0

pH: N/A

Percent Moisture: N/A
(not decanted)

	(ug/L) or ug/Kg		(ug/L) or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	↓	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	↓	1,2-Dichloropropane	5 U
Chloroethane	↓	trans-1,3-Dichloropropene	↓
Methylene Chloride	4 JB	Trichloroethene	↓
Trichlorofluoromethane	10 U	Benzene	↓
Acrolein	100 U	cis-1,3-Dichloropropene	↓
Acrylonitrile	5 U	Dibromochloromethane	↓
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	↓
1,1-Dichloroethane	↓	Bromoform	↓
trans-1,2-Dichloroethene	↓	Tetrachloroethene	↓
Chloroform	↓	1,1,2,2-Tetrachloroethane	↓
1,2-Dichloroethane	↓	Toluene	↓
1,1,1-Trichloroethane	↓	Chlorobenzene	↓
Carbon Tetrachloride	↓	Ethyl benzene	↓

*See Appendix for footnotes.

1

PRIORITY POLLUTANT ORGANICS

000366

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # TB-1-2811

No Sample

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Continuous-Liq-Liq:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine		Anthracene	
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1703

PRIORITY POLLUTANT ORGANICS

000387

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # TB-1 2811

No Sample

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

ASB 001 1704

Laboratory Name: York Laboratories

Case No: 30860-1756

Sample Number: 2811 TB-1

Organics Analysis Data Sheet
(Page 4)

000368

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NONE DETECTED	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT Hart - National Gypsum

JOB No. 01005-00-85001-00

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	YWC #	Condition	Comments
001	SW-1	PP + 40	2501		
002	SW-2	PP + 40	2529		
003	SW-3	PP + 40	2528		
004	SW-4	PP + 40	2530		
005	SW-5	PP + 40	2531		
006	SW-6	PP + 40	2532		
007	TB-1	VOA + 15	2811		

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: FRANCES B. BARKER DATE: 9/10/86

SIGNATURE: Frances B. Barker SEALS PLACED ON ~~CONTAINERS~~ coolers ? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME: _____ DATE: _____ TIME: _____

SIGNATURE: _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY:

4 NAME: Val Strano DATE: 9/11/86 TIME: 9 am

SIGNATURE: Val Strano ARE SEALS INTACT ? ☑ YES ☐ NO ☐ N/A

WERE ANY SAMPLES SPLIT WITH ANOTHER PARTY ? ☐ YES ☑ NO

IF YES, IDENTIFY: _____

ASB 001 1706

SURFACE WATER DATA

INORGANIC ANALYSES

ASB 001 1707

G

Inorganics

1.Case Narrative

FOR

~~EPA SMO CASE NO.~~

Fred C. Hart/National Gypsum

covering YWC Jobs:

30860-1666

30860-1776

30860-1790

30860-1819

(Aqueous samples only)

QA/QC Review For Inorganics
On YWC Jobs 30860-1666, -1776, -1790 and -1819

Sample Holding Times: Mercury holding times were exceeded (3 to 7 days) for Jobs 30860-1666, -1776 and -1790. Mercury results for these jobs should be considered estimates. Cyanide holding time for 166-004 was exceeded by 11 days. Cyanide results for that sample should be considered estimates. All other holding times were adhered to.

Initial and Continuing Calibration Verification: All calibration results were within CLP criteria.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP intereference check results were within CLP limits.

Spike Sample Recovery: Spike recoveries for arsenic and mercury were below 75% recovery but above 30% recovery. Results for all the above jobs for arsenic and mercury should be considered estimates.

Duplicates: Duplicate results were within CLP limits.

Instrument Detection Limits: All IDL were at or below CRDL limits.

Standard Additions Results: Method of standard additions was used to quantitate lead levels in three samples, Lab ID #'s 1790-010, 1790-011, and 1819-005. All correlation coefficient were greater than 0.995 as required by the CLP.

System Performance: There were not any indications of poor instrument performance.

Pesticide Retention Time Shift of DBC: Retention time of DBC for samples ID #1790-001, 1790-002, 1790-003, and 1819-004 is greater than 2%. Therefore, pesticide data for those 4 samples is unusable.

Pesticide Check for Linearity: DDT was outside 10% RSD, proper procedures for correction were followed.

Check for 4,4'-DDT/Endrin Breakdown: All met CLP criteria.

Pesticide/PCB Standards: Percent difference for several compounds fell outside QC limits, this didn't effect any sample results.

Form I

000003

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
SW-1-2501

Date 3/2/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. 785
LAB SAMPLE ID. NO. 1756001

CASE NO. HAO/Nat. GP.
Lab Receipt Date 9/11/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water X Soil Sludge Other

ug/L or mg/kg dry weight (Circle One)

1. Aluminum		13. Magnesium	
2. Antimony	60 UP	14. Manganese	
3. Arsenic	5 U F	15. Mercury	~~0.2~~ 0.2U CVAA
4. Barium		16. Nickel	47 PN
5. Beryllium	3 UPN	17. Potassium	
6. Cadmium	563 P	18. Selenium	5 U F
7. Calcium		19. Silver	10UP
8. Chromium	20 PN	20. Sodium	
9. Cobalt		21. Thallium	5 UNF
10. Copper	20 UP	22. Vanadium	
11. Iron		23. Zinc	20 UPN
12. Lead	5 U F	Percent Solids (%)	NR
Cyanide	10 U		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols = 5U

Lab Manager John P. Clum

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. SW-2-2529

Date 3/2/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC

CASE NO. HAO/Nat. Gvp.

SOW NO. 785

Lab Receipt Date 9/11/86

LAB SAMPLE ID. NO. 1756002

QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water X Soil Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 U F	15.	Mercury	0.2 U CVAA
4.	Barium		16.	Nickel	40 UPN
5.	Beryllium	3 UPN	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 U F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UPN	20.	Sodium	
9.	Cobalt		21.	Thallium	5 UNF
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	20 UPN
12.	Lead	5 U F		Percent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols = 5 U

Lab Manager

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. SW·3·2528

Date 3/2/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
CASE NO. Hoot/Wat Grp.
SOW NO. 785
Lab Receipt Date 9/11/86
LAB SAMPLE ID. NO. 1756003
QC REPORT NO.

Elements Identified and Measured

Concentration: Low X Medium

Matrix: Water X Soil Sludge Other

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 U F	15.	Mercury	0.2U CVAA
4.	Barium		16.	Nickel	40 UPN
5.	Beryllium	3 UPN	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 U F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UPN	20.	Sodium	
9.	Cobalt		21.	Thallium	5 UNF
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	20 UPN
12.	Lead	5 U F		Precent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 5SA 14
JC 03/02/87

Lab Manager

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. SW-22 2275

Date 12.24.86

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC

CASE NO. HART/NAT. GUP.

SOW NO. 785

Lab Receipt Date 9.19.86

LAB SAMPLE ID. NO. 18/8005 5 JCC 12/24/86

QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water ✓ Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60UP	14.	Manganese	
3.	Arsenic	5UNF	15.	Mercury	0.2UN CVAA
4.	Barium		16.	Nickel	84 P
5.	Beryllium	3UP	17.	Potassium	
6.	Cadmium	5UP	18.	Selenium	5UF
7.	Calcium		19.	Silver	10UP
8.	Chromium	10UP	20.	Sodium	
9.	Cobalt		21.	Thallium	5U F
10.	Copper	20UP	22.	Vanadium	
11.	Iron		23.	Zinc	20UP
12.	Lead	18S F		Precent Solids (%)	
	Cyanide	5U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

Phenols 42

Lab Manager

LABORATORIES DIVISION

NC

G

CHAIN OF CUSTODY RECORD

2/2

CLIENT Fred C Hart Assoc.

JOB No. 0100T-00-Final-13

YWC Job 30860-1819

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
2275	SW-22 York-it	Sealed	PP+40
2276	Field Blank-2	Sealed	PP+40
AL ~~FS 3~~	~~Trip Blank 5~~		
2559	TB-50	Sealed	Do not analyze for Acrylo 9/18/86

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: Aaron Levy DATE: 9/18/86

SIGNATURE: Aaron Levy SEALS PLACED ON CONTAINERS? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: DATE: TIME:

SIGNATURE: ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME: DATE: TIME:

SIGNATURE: ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME: K. Hagan DATE: 9/19/86 TIME: 10:00 AM

SIGNATURE: K. Hagan ARE SEALS INTACT? ☑ YES (outer) ☐ NO ☐ N/A

WERE ANY SAMPLES SPLIT WITH ANOTHER PARTY? ☐ YES ☑ NO

IF YES, IDENTIFY

ASB 001 1715

QA/QC Review For Inorganics On
YWC Jobs 30870-0048, 30860-1756, -1760, -1789, and -1796

Sample Holding Times: All sample holding times were adhered to.

Initial and Continuing Calibration Verification: All calibration criteria were met.

Blanks: All method blanks were within CLP limits.

ICP Interference Check: ICP Interference check results were within CLP limits.

Spike Sample Recovery: Spike recoveries for Beryllium, Chromium, Nickel, Selenium, Thallium, and Zinc all had spike recoveries below QC limits. All positive results for these metals should be considered estimates. The required number of spikes were run.

Duplicates: The required number of duplicates were run and were within QC limits.

Instrument Detection Limits (IDL): All IDL's were at or below CRDL as required.

Standard Additions Results: None were run.

YORK LABORATORIES DIVISION

YWC

2-2

CASE NARRATIVE

This case narrative pertains to the inorganic data package for the Fred C. Hart/National Gypsum project. The following samples and YWC jobs are included in this package (aqueous samples only):

YWC Job #30860-1756
Received 09/11/86

Lab Identification	Hart Identification
1756-001	SW-1 2501
1756-002	SW-2 2529
1756-003	SW-3 2528
1756-004	SW-4 2530
1756-005	SW-5 2531
1756-006	SW-6 2532

YWC Job #30860-1760
Received 09/11/86

Lab Identification	Hart Identification
1760-001	Field Blank

YWC Job #30860-1789
Received 09/13/86

Lab Identification	Hart Identification
1789-001	SW-13 2502
1789-002	SW-14 2503
1789-003	SW-15 2504

YWC Job #30860-1796
Received 09/17/86

Lab Identification	Hart Identification
1796-001	SW-20 2506
1796-002	SW-21 2509

YWC Job #30870-0048
Received 10/08/86

Lab Identification	Hart Identification
0048-001	PW-1 3751
0048-002	PW-2 3752
0048-003	PW-3 3760
0048-005	PW-4 3762
0048-006	PW-5 3756

The samples were analyzed for priority pollutant metals, cyanide and phenols using USEPA Contract Laboratory Program Protocols (SOW 7/85). The following items were noted in the course of analysis:

ICP and Furnace Analysis

Spike recoveries for beryllium, chromium, nickel and zinc were below the control limit. As the furnace spikes were also low (selenium and thallium) a matrix effect causing low recoveries appears to be a problem at the site at which these samples were obtained ("PW" site).

Cyanide, Mercury and Phenols

No items were noted.

Robert Q. Bradley
Vice President

Jeffrey C. Curran
Laboratory Manager

WA85-0550 - AMENDMENT THREE (3)
U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

000001

Date 3/2/87

COVER PAGE A
INORGANIC ANALYSES DATA PACKAGE

Lab Name YWC
Case No. HART/NAT'L GYP.
SOW No. 785
Q.C. Report No.

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
SW-1-2501	1756001	SW-14-2503	1789002
SW-2-2529	1756002	SW-15-2504	1789003
SW-3-2528	1756003	SW-20-2506	1796001
SW-4-2530	1756004	SW-21-2509	1796002
SW-5-2531	1756005	PW-1-3751	0048001
SW-6-2532	1756006	PW-2-3752	0048002
Field Blk	1760001	PW-3-3760	0048003
SW-13-2502	1789001	PW-4-3762	0048005

Comments:
- Aqueous Only -

ICP interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after ___ generation of raw data.

Footnotes:

NR - Not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract-required detection limit, report the value in brackets (i.e., [10]). Indicate the analytical method used with P (for ICP), A (for Flame AA) or F (for Furnace AA).
U - Indicates element was analyzed for but not detected. Report with the instrument detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
s - Indicates value determined by Method of Standard Addition.
N - Indicates spike sample recovery is not within control limits.
* - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is less than 0.995
M - Indicates duplicate injection results exceeded control limits.

Indicate method used: P for ICP; A for Flame AA and F for Furnace.

ASB 001 1719

GROUND WATER DATA

ORGANIC ANALYSES

ASB 001 1720

YORK LABORATORIES DIVISION

GW

CASE NARRATIVE

This case narrative pertains to the organics data package for the following YWC jobs for the Fred C. Hart Associates/ National Gypsum project. The following YWC jobs and samples are in this package:

YWC Job #30870-0072
Received 10/13/86

Lab Identification	Hart Identification
0072-001	3501 (Well 902)
0072-002	3503 (Well 907)
0072-003	3505 (Well 906)
0072-004	Field Blank - 1
0072-005	Trip Blank
0072-006	MSD 3508

YWC Job #30870-0090
Received 10/15/86

Lab Identification	Hart Identification
0090-001	2278 Well 905
0090-002	2279 Well 903
0090-003	2281 Well 908
0090-004	2814 Well 904
0090-005	2323 Well 901
0090-006	Trip Blank

YWC Job #30870-0098
Received 10/16/86

Lab Identification	Hart Identification
0098-001	2324 WB-1
0098-002	Trip Blank
0098-003	2325 WB-3
0098-004	2326 WB-2
0098-005	2280 NV-1

The samples were analyzed for priority pollutant organics using USEPA Contract Laboratory Program protocols (IFB WA 85-J176/J177/J178). Trip blanks were analyzed for volatile organics only.

The following items were noted in the course of analysis.

Volatile Organics

The volatile data for sample 3501 (Well 902) was lost due to a system hardware failure. The sample was initially run but due to a leak had to be rerun. During the rerun the computer data system crashed and there was not enough sample left to rerun a third time by the time the system was brought back up.

This data system problem also corrupted the data file for the trip blank (YWC sample #0090-006). As a result no tentatively identified compounds could be reported for this trip blank.

One surrogate was out of criteria (sample 2323 (Well 901)). This was not noted until after the holding times had expired. It is noted that the surrogate recovery is at 87 percent while the lower limit is 88 percent. This means the data is basically good and as no target compounds were detected the low surrogate recovery becomes even less significant.

Base-Neutral/Acid Organics

One sample, 2278 (Well 905), had two acid surrogates outside of criteria. The extractions group reported this sample had a high amount of sediment present and had an emulsion during the acid extraction. This matrix problem caused low surrogate recoveries. Not enough sample was provided to re-extract the sample. Also not enough sample was supplied to perform any matrix spikes. As such no spike recoveries are reported.

Pesticide/PCB's

Seven samples had DBC recoveries outside the contract recommended control limits. In each case there were coeluting peaks present in the samples which interfered with DBC. This matrix interference resulted in high recoveries of DBC in the samples. Not enough sample was supplied to perform any matrix spikes. As such no matrix spike information is reported.

Robert Q. Bradley
Vice President

Jeffrey C. Curran
Laboratory Manager

Pesticide Check for Linearity:
DDT was outside the 10% RSD for job #30870-0090 and -0098. Proper procedures for correction were followed.

Check for 4,4'-DDT/Endrin Breakdown:
All met CLP criteria.

Pesticide/PCB Standards:
Percent difference for several compounds fell outside CLP limits, but this didn't effect any samples.

QA/QC REVIEW FOR ORGANICS ON YWC JOBS 30870-0072, -0092 and -0098

Sample Holding Times:
All sample holding times as per 40 CFR 136 were adhered to.

GC/MS Tuning and Performance:
All tuning and performance criteria were met.

Calibration:
All calibration criteria were met, except for 1,1-Dichloroethene for YWC job #30870-0098. This did not effect any results.

Blanks:
Method blanks for YWC Job #30870-0098 were within acceptable limits. VOA and Pesticide method blanks for YWC Job #30870-0090 were within acceptable limits. The VOA method blank contained methylene chloride (12 ug/l) and chloroform (5 ug/l). One BNA compound, however, (di-n-octyl phthalate) was outside CLP limits and the data for that compound is unusable (R). VOA and pesticide method blank data for YWC Job #30870-0072 were also within acceptable limits, but one BNA compound (di-n-octyl phthalate) was outside CLP limits and the data for that compound is unusable (R). The VOA method blank contained methylene chloride (10 ug/l) and chloroform (4 ug/l). For associated samples, results below five times (ten times for common lab contaminants) the amount in the method blank should be reported as not detected.

Surrogate Recovery:
Surrogate recovery for BNAs acid fraction for sample #2278 (well 905) had two outside of QC limits and one below 10% recovery; positives are estimates and negatives should be considered unusable. Surrogate recovery for VOAs for sample #2323 (well 901) had one compound outside QC limits and none below 10% recovery; VOA results should be considered estimates. Several pesticide surrogates were outside QC limits, but these are only advisory limits. The reason for pesticide surrogates outside of QC limits was a coeluting peak.

Matrix Spike (MS)/Matric Spike Duplicate (MSD):
MS and MSD data for VOAs were within QC limits. There wasn't any MS and MSD data for BNAs and pesticides. One in twenty samples is required to be an MS and MSD, although no action is suggested if this requirement is not met.

Compound Identification:
All identification criteria were met.

System Perofrmance:
There were not any indication of poor instrument performance.

Pesticide Retention Time Shift of DBC:
All retention times of DBC were within 2%.

ASB 001 1724

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # 2323

Laboratory Name: YORK LABS Client: FCHA

Lab Sample I.D. #: K6B3208 Job #: 20020-0090

Sample Matrix: WATER Date Sample Received: 10-15-86

Data Release Authorized By: J. Cuma

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/21/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	8 B	Trichloroethene	5 U
Trichlorofluoromethane	10 U	Benzene	5 U
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	5 U	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	5 U
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

00071

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 2323, Well 901 (-005)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 10/15/86

Separatory Funnel: yes

Date Analyzed: 11/13/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	140
bis(2-chloroethoxy)methane		di-n-octyl phthalate	13CB
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1726

PRIORITY POLLUTANT ORGANICS

000712

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 3323 4-11 9-1

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: 11/21/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	KC ~~0.10~~ .036
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1727

Laboratory Name York Labs

Case No Ho-TNE 0090

Sample Number 2323 well 22 (-005)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108883	Benzene methyl-	BNA	5.38.	80
12. 123386	Acetic acid, butyl ester		6.38	25
13. N/A	Unknown (Aldol Condensation Product)		6.79	14
14. N/A	Unknown		8.63	7
15. N/A	Unknown		12.83	6
16. 122370	Propanoic acid, 2-methyl-, 3-methyl-1-methylene-		18.57	8
17. 36468-13	1,2-2-methyl carboxylic acid, 4 heptyl ester		28.69	29
18. N/A	Unknown Isomer of #17		30.21	30
19. N/A	Isomer of #17		30.30	20
20. N/A	Isomer of #17		31.10	30
21. N/A	Isomer of #17		31.21	33
22. N/A	Isomer of #17		31.34	160
23. N/A	Isomer of #17		31.46	130
24. N/A	Isomer of #17		31.57	180
25. N/A	Isomer of #17		31.67	200
N/A	Isomer of #17		31.80	300
N/A	Isomer of #17		31.92	150
N/A	Isomer of #17		32.04	60
N/A	Isomer of #17		32.58	270
N/A	Isomer of #17		34.73	97

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # _____

Laboratory Name: _____ Client: _____

Lab Sample I.D. #: _____ Job #: _____

Sample Matrix: _____ Date Sample Received: _____

Data Release Authorized By: _____

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc./Dil. Factor: _____ pH: _____

Percent Moisture: _____
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane		Bromodichloromethane	
Bromomethane		2-Chloroethylvinyl ether	
Vinyl Chloride		1,2-Dichloropropane	
Chloroethane		trans-1,3-Dichloropropene	
Methylene Chloride		Trichloroethene	
Trichlorofluoromethane		Benzene	
Acrolein		cis-1,3-Dichloropropene	
Acrylonitrile		Dibromochloromethane	
1,1-Dichloroethene		1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

000032

ANALYSIS SHEET - Page 2

SAMPLE # [illegible]

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: [illegible] Separatory Funnel: [illegible]

Date Analyzed: [illegible] Continuous-Liq-Liq: [illegible]

Conc./Dil. Factor: [illegible]

Percent Moisture: N/A
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	✓✓
Isophorone		bis-2-ethylhexyl phthalate	180
bis(2-chloroethoxy)methane		di-n-octyl phthalate	97 B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	✓✓
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene	✓✓	Pentachlorophenol	✓✓

*See Appendix for footnotes.

ASB 001 1730

PRIORITY POLLUTANT ORGANICS

000033

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # _____

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: [illegible]

Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1731

Laboratory Name [illegible]

Case No HARTLAND [illegible]

Sample Number
350, [illegible]
(-001)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11. [illegible]	[illegible]	N/A	5.38	10
12. [illegible]	[illegible]		6.40	11
13. N/A	[illegible] (Aldol Condensation product)		7.00	15
14. N/A	[illegible]		13.20	25
15. [illegible]	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-		18.51	16
16. [illegible]	Phenol, 4-(2,2,3,3-[illegible])		19.83	150
17. [illegible]	2-[illegible]		28.72	25
18. N/A	Isomer of 517		30.23	25
19. N/A	Isomer of 517		31.12	24
20. N/A	Isomer of 517		31.53	10
21. N/A	Isomer of 517	↓	32.62	190
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30				

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # [illegible]

Laboratory Name: [illegible] Client: [illegible]

Lab Sample I.D. #: [illegible]/0072002 Job #: [illegible]

Sample Matrix: WATER Date Sample Received: [illegible]

Data Release Authorized By: [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/10/86

Conc./Dil. Factor: 100 pH: N/A

Percent Moisture: N/A
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	7 B	Trichloroethene	5 U
Trichlorofluoromethane	10 U	Benzene	5 U
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	2 JB	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	5 U
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # WELL # 903

Laboratory Name: YORK LABS Client: FCMA

Lab Sample I.D. #: [illegible] Job #: 30670-0090

Sample Matrix: WATER Date Sample 10-15-86

Data Release Authorized By: J. Curran

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 10/18/86

Conc./Dil. Factor: 100 pH: N/A

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	9B	Trichloroethene	3J
Trichlorofluoromethane	10U	Benzene	2J
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	6	Tetrachloroethene	5U
Chloroform	2JB	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	5U
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000495

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 2279, Well 903 (-002)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 10/5/86

Separatory Funnel: Yes

Date Analyzed: 11/13/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A (decanted)

	(ug/L) or ug/Kg		(ug/L) or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	↓↓↓
bis(2-chloroethoxy)methane		di-n-octyl phthalate	34B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	↓↓↓
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene	↓↓↓	Pentachlorophenol	↓↓↓

*See Appendix for footnotes.

ASB 001 1735

PRIORITY POLLUTANT ORGANICS

000496

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: [illegible]

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1736

Laboratory Name York Labs

Case No 4677NB CC9C

Sample Number
227 well 26.5

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.		None Detected	VOA		
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.	2382-4	Acetic acid, butyl ester	BNA	6.41	15
12.	N/A	Unknown (Aldol Condensation product)	BNA	7.01	20
13.	128370	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	18.60	11
14.	54932784	Phenol, 4-(2,2,3,3-tetramethylbutyl)-	BNA	19.85	16
15.	3648213	1,2-Benzenedicarboxylic acid, diheptyl ester	BNA	31.83	63
16.	N/A	Isomer of #15	BNA	32.62	63
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 **SAMPLE #** 2-14 WELL 9-9

Laboratory Name: YORK LABS Client: FCMA

Lab Sample I.D. #: KAB 3.2.87 ~~734252~~ Job #: 3-0730-0090

Sample Matrix: WATER Date Sample Received: 10-15-86

Data Release Authorized By: J. Cuman

VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: —

Date Analyzed: 10/18/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: —
(not decanted)

	(ug/L or ug/Kg)		(ug/L or ug/Kg)
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	7JB	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	5U
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	2JB	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	5U
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 2814, Well 9C4 (-CC4)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 10/15/86

Separatory Funnel: Yes

Date Analyzed: 11/13/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 10

Percent Moisture: N/A (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	2J
1,3-Dichlorobenzene		Fluoranthene	10u
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	5J
Hexachloroethane		3,3'-Dichlorobenzidine	10u
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	400
bis(2-chloroethoxy)methane		di-n-octyl phthalate	300B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1739

PRIORITY POLLUTANT ORGANICS

000626

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: [illegible]/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1740

Laboratory Name York Labs

Case No [illegible]TING 0090

Sample Number 2814 WELL [illegible]

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	n-Butoxy Ethanol	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108883	Benzene, methyl-	BNA	5.38	72
12. 123864	Acetic acid, butyl ester	BNA	6.38	12
13. N/A	Unknown (Aldol Condensation Product)	BNA	6.98	21
14. 128370	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	18.57	10
15. 3648213	1,2-Benzenedicarboxylic acid, diheptyl ester	BNA	28.58	13
16. N/A	Isomer of #15	BNA	28.69	41
17. N/A	Isomer of #15	BNA	30.21	35
18. N/A	Isomer of #15	BNA	30.39	24
19. N/A	Isomer of #15	BNA	31.10	30
20. N/A	Isomer of #15	BNA	31.22	19
21. N/A	Isomer of #15	BNA	31.34	150
22. N/A	Isomer of #15	BNA	31.48	130
23. N/A	Isomer of #15	BNA	31.57	140
24. N/A	Isomer of #15	BNA	31.68	130
25. N/A	Isomer of #15	BNA	31.81	320
26. N/A	Isomer of #15	BNA	31.97	160
27. N/A	Isomer of #15	BNA	32.56	110
28. N/A	Isomer of #15	BNA	32.59	310
29. N/A	Isomer of #15	BNA	33.73	60
30. N/A	Isomer of #15	BNA	34.74	190

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # 2270

Laboratory Name: YORK LABORATORIES Client: FCMA

Lab Sample I.D. #: 764750 Job #: 30820-0090

Sample Matrix: WATER Date Sample Received: 10-15-86

Data Release Authorized By: J. Cuen

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/17/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	27B	Trichloroethene	6
Trichlorofluoromethane	10U	Benzene	5U
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	2JB	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	2J
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000431

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # 2278, well 905 (-cc.)

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: 10/15/86

Separatory Funnel: Yes

Date Analyzed: 11/3/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 10

Percent Moisture: N/A (decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	50B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1743

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: 11/8/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

Laboratory Name [illegible]

Case No [illegible]

Sample Number
2270, WELL 25

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	BNA	6.42	31
12. N/A	Unknown (Aldol Condensation Product)	BNA	7.01	17
13. N/A	Unknown	BNA	8.66	19
14. 3648213	1,2-Benzenedicarboxylic acid, diheptyl ester	BNA	31.83	100
15. N/A	Isomer of #14	BNA	32.62	130
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # [illegible] 3505

Laboratory Name: YORK LABS

Client: FCHA

Lab Sample I.D. #: [illegible] / 0072003

Job #: 70870-0072

Sample Matrix: WATER

Date Sample [illegible]

Data Release Authorized By: J. [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/21/86

Conc./Dil. Factor: 100

pH: N/A

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	7 B	Trichloroethene	5 U
Trichlorofluoromethane	10 U	Benzene	5 U
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	5 U	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	2 J
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 **SAMPLE #** [illegible]

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: [illegible] Separatory Funnel: -

Date Analyzed: [illegible] Continuous-Liq-Liq: -

Conc./Dil. Factor: 10

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	1J
1,3-Dichlorobenzene		Fluoranthene	10u
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	↓
bis(2-chloroethoxy)methane		di-n-octyl phthalate	21 B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	↓
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene	↓	Pentachlorophenol	↓

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: [illegible]

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 ✓
Beta-BHC	0.05 ✓
Gamma-BHC	0.05 ✓
Delta-BHC	0.05 ✓
Heptachlor	0.05 ✓
Aldrin	0.05 ✓
4,4'-DDE	0.10 ✓
Dieldrin	0.10 ✓
4,4'-DDD	0.10 ✓
Endrin Aldehyde	NA
4,4'-DDT	0.10 ✓
Chlordane	0.5 ✓
Endosulfan I	0.05 ✓
Endosulfan II	0.10 ✓
Endosulfan Sulfate	0.10 ✓
Endrin	0.10 ✓
Heptachlor Epoxide	0.05 ✓
Toxaphene	1.0 ✓
PCB-1016	0.1 ✓
PCB-1221	0.1 ✓
PCB-1232	0.1 ✓
PCB-1242	0.1 ✓
PCB-1248	0.1 ✓
PCB-1254	1.0 ✓
PCB-1260	1.0 ✓

*See Appendix for footnotes.

Laboratory Name York Labs

Case No HATTLE 0072

Sample Number 3505 (well 906)

(-005)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108883	Benzene, methyl-	BNA	5.40	8
12. 123[illegible]	[illegible]	BNA	6.40	11
13. N/A	[illegible] (Aldol Condensation product)	BNA	7.01	13
14. 1332-20	Phenol, 2-[illegible]methyl-[illegible]	BNA	18.59	~~13~~ 11
15. [illegible]	1,2-Benzenedicarboxylic acid, [illegible]	BNA	29.31	23
16. N/A	Tower oil [illegible]	BNA	32.61	43
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2 SAMPLE # [illegible]

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: [illegible] Separatory Funnel: [illegible]

Date Analyzed: [illegible] Continuous-Liq-Liq: [illegible]

Conc./Dil. Factor: [illegible]

Percent Moisture: N/A
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	100	Anthracene	100
bis(2-chloroethyl)ether		Di-n-butyl phthalate	35
1,3-Dichlorobenzene		Fluoranthene	100
1,4-Dichlorobenzene		Benzidine	100
1,2-Dichlorobenzene		Pyrene	100
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	9J
Hexachloroethane		3,3'-Dichlorobenzidine	100
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	6JC B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	100
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # _____

PESTICIDES/PCB'S

Concentration: (Low) Medium

Date Extracted/Prepared: 10/16/86 Separatory Funnel: ✓

Date Analyzed: [illegible] Liquid-Liquid: _____

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	(ug/L) or ug/Kg
Alpha-BHC	0.05 ✓
Beta-BHC	0.05 ✓
Gamma-BHC	0.05 ✓
Delta-BHC	0.05 ✓
Heptachlor	0.05 ✓
Aldrin	0.05 ✓
4,4'-DDE	0.10 ✓
Dieldrin	0.10 ✓
4,4'-DDD	0.10 ✓
Endrin Aldehyde	NA
4,4'-DDT	0.10 ✓
Chlordane	0.5 ✓
Endosulfan I	0.05 ✓
Endosulfan II	0.10 ✓
Endosulfan Sulfate	0.10 ✓
Endrin	0.10 ✓
Heptachlor Epoxide	0.05 ✓
Toxaphene	1.0 ✓
PCB-1016	0.5 ✓
PCB-1221	0.5 ✓
PCB-1232	0.5 ✓
PCB-1242	0.5 ✓
PCB-1248	0.5 ✓
PCB-1254	1.0 ✓
PCB-1260	1.0 ✓

*See Appendix for footnotes.

000055

Laboratory Name: [illegible]

Case No: [illegible]

Sample Number: [illegible]

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 123864	Acetic acid, butyl ester	B/N	6.40	15
12. [illegible]	[illegible]		28.14	67
13. N/A	Isomer of #12		28.62	146
14. N/A	Isomer of #12		28.72	450
15. N/A	Isomer of #12		29.34	800
16. N/A	Isomer of #12		29.70	85
17. N/A	Isomer of #12		29.80	66
18. N/A	Isomer of #12		30.02	96
19. N/A	Isomer of #12		30.24	360
20. N/A	Isomer of #12		30.33	250
21. N/A	Isomer of #12		31.09	77
22. N/A	Isomer of #12		31.37	100
23. N/A	Isomer of #12		31.85	250
24. N/A	Isomer of #12		32.01	130
25. N/A	Isomer of #12		32.63	700
26. N/A	Isomer of #12		32.94	88
27. N/A	Isomer of #12		33.77	85
28. N/A	Isomer of #12		33.85	91
29. N/A	Isomer of #12		34.78	280
30. N/A	Isomer of #12	✓	37.71	67

ASB 001 1752

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # WELL #908 2281

Laboratory Name: YORK LABS Client: FCHA

Lab Sample I.D. #: KB 320-47 ~~378475-1~~ 0090-003 Job #: 30870-0090

Sample Matrix: WATER Date Sample 10-15-86

Data Release Authorized By: J. Cuman

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/19/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: —*
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	10 B	Trichloroethene	6
Trichlorofluoromethane	10 U	Benzene	5 U
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	2 JB	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	5 U
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

000559

ANALYSIS SHEET - Page 2

SAMPLE # 2281, Well 908 (-003)

SEMI-VOLATILE COMPOUNDS

Concentration: (Low) Medium

Date Extracted/Prepared: 10/15/86

Separatory Funnel: Yes

Date Analyzed: 11/13/86

Continuous-Liq-Liq: No

Conc./Dil. Factor: 1.0

Percent Moisture: N/A (decanted)

	(ug/L) or ug/Kg		(ug/L) or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	83
bis(2-chloroethoxy)methane		di-n-octyl phthalate	528
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1754

PRIORITY POLLUTANT ORGANICS

000560

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # 2281 W11 908

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: 11/21/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1755

Laboratory Name York Labs

Case No HarTING 0090

Sample Number 2281, WELL 908 (-003)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.		None Detected	VOA		
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.	123864	Acetic acid, butyl ester	BNA	6.40.	30
12.	N/A	Unknown (Aldol Condensation Product)	BNA	7.00	14
13.	N/A	Unknown	BNA	8.64	15
14.	128370	Phenol 2,6-bis(1,1-dimethylethyl)-4-methyl-	BNA	18.58	7
15.	3648213	1,2-Benzenedicarboxylic acid, diheptyl ester	BNA	30.22	17
16.	N/A	Isomer of #15	BNA	31.34	38
17.	N/A	Isomer of #15	BNA	31.68	38
18.	N/A	Isomer of #15	BNA	31.81	70
19.	N/A	Isomer of #15	BNA	32.58	95
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # [illegible]

Laboratory Name: [illegible] Client: [illegible]

Lab Sample I.D. #: [illegible]/0072004 Job #: [illegible]

Sample Matrix: WATER Date Sample Received: 10-13-86

Data Release Authorized By: [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/21/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10U	Bromodichloromethane	5U
Bromomethane	10U	2-Chloroethylvinyl ether	10U
Vinyl Chloride	10U	1,2-Dichloropropane	5U
Chloroethane	10U	trans-1,3-Dichloropropane	5U
Methylene Chloride	27JB	Trichloroethene	5U
Trichlorofluoromethane	10U	Benzene	1J
Acrolein	100U	cis-1,3-Dichloropropene	5U
Acrylonitrile	35U	Dibromochloromethane	5U
1,1-Dichloroethene	5U	1,1,2-Trichloroethane	5U
1,1-Dichloroethane	5U	Bromoform	5U
trans-1,2-Dichloroethene	5U	Tetrachloroethene	5U
Chloroform	.3JB	1,1,2,2-Tetrachloroethane	5U
1,2-Dichloroethane	5U	Toluene	5U
1,1,1-Trichloroethane	5U	Chlorobenzene	5U
Carbon Tetrachloride	5U	Ethyl benzene	5U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

000236

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # [illegible]

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: [illegible]

Separatory Funnel: [illegible]

Date Analyzed: [illegible]

Continuous-Liq-Liq: [illegible]

Conc./Dil. Factor: [illegible]

Percent Moisture: [illegible]
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10U	Anthracene	10U
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	65
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	49CB
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1758

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3 SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: Low / Medium

Date Extracted/Prepared: 10/16/86 Separatory Funnel: ✓

Date Analyzed: 11/2/86 Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

000235

Laboratory Name: York Labs

Case No: HarT/VG 0072

Sample Number: Field Blank-1

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min.	Estimated Concentration (ug/l or ug/kg)
	None Detected	VOA		
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 108883	Benzene, methyl-	BNA	5.42	13
12. N/A	Unknown (Aldol Condensation product)		7.01	22
13. 120-37-0	Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-		18.59	16
14. 36768-13	12-Benzenedicarboxylic acid, dimethyl ester		28.61	110
15. N/A	Isomer of #14		28.71	360
16. N/A	Isomer of #14		29.69	74
17. N/A	Isomer of #14		29.80	59
18. N/A	Isomer of #14		30.01	74
19. N/A	Isomer of #14		30.24	330
20. N/A	Isomer of #14		30.32	230
21. N/A	Isomer of #14		31.59	66
22. N/A	Isomer of #14		31.83	400
23. N/A	Isomer of #14		31.99	140
24. N/A	Isomer of #14		32.57	260
25. N/A	Isomer of #14		32.63	560
26. N/A	Isomer of #14		33.77	110
27. N/A	Isomer of #14		33.93	110
28. N/A	Isomer of #14		34.78	370
29. N/A	Isomer of #14		36.33	24
30. N/A	Isomer of #14	✓	37.69	110

ASB 001 1760

YWC-SOB 30870- 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT Fred C Hart Assoc

JOB No. 21005-00-85001-24

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
003	3501	well # 902	Good	PP + 4C

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: John Garrison DATE: 10/10/86

SIGNATURE: John J Garrison SEALS PLACED ON CONTAINERS ? ☑ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Daniel Ott DATE 10/11/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT ? ✓ YES ☐ NO ☐ N/A

ASB 001 1761

YWC - 500 00870 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT FCP C [illegible]

JOB No. [illegible]

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
004 BXC3	9 Bottles	Good Seal	[illegible]
	WELL 907		

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: STEVE HAMMOS DATE: [illegible]

SIGNATURE: Steve Hammos SEALS PLACED ON CONTAINERS? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Daniel Ott DATE 10/4/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT? ✓ YES ☐ NO ☐ N/A

ASB 001 1762

YWC 300 30370 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT [illegible]

JOB No. [illegible]

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
[illegible]	W- 906 9bot-1/21	[illegible]	[illegible]

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: [illegible] DATE: [illegible]

SIGNATURE: [illegible] SEALS PLACED ON CONTAINERS ? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO

2 NAME [illegible] DATE [illegible] TIME [illegible]

SIGNATURE [illegible] ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO

3 NAME [illegible] DATE [illegible] TIME [illegible]

SIGNATURE [illegible] ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME DANIEL OTT DATE 14/4/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT ? ✓ YES [illegible] N/A

[illegible]

ASB 001 1763

YWC JOB - 30870 -

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT

JOB No.

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
005			

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME _____ DATE: _____

SIGNATURE _____ SEALS PLACED ON ~~CONTAINERS~~ coolers? ☐ YES ~~☐ NO~~

CUSTODY TRANSFERRED TO

2 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Daniel Ott DATE 10/4/96 TIME 10:10 AM

SIGNATURE Daniel Ott Seals on coolers ☐ YES ☐ NO ☐ N/A

ASB 001 1764

YWC 503 30370 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT [illegible]

JOB No. [illegible] 24

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
010	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]		
009	TB-1			

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: [illegible] DATE: [illegible]

SIGNATURE: [illegible] SEALS PLACED ON CONTAINERS ? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME DANIEL Ott DATE 10/4/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT ? ✓ YES ☐ NO ☐ N/A

ASB 001 1765

YORK LABORATORIES DIVISION

YWC

YWC JOB 30870-0090

CHAIN OF CUSTODY RECORD

CLIENT Fred C. Hart Assoc.

JOB No. 81005-00-85001.-04

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
001	2278	Well 905 (9 bottles)	Good	1-PP+40
002	2279	Well 903 (9 bottles)	Good	PP+40
003	2281	Well 908 (9 bottles)	Good	PP+40
004	2814	Well 904 (9 bottles)	Good	PP+40
005	2323	Well 901 (9 bottles	Good	PP+40
006	—	Trip Blank	Good	PP+40 was

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: Aaron Levy DATE: 10/14/86

SIGNATURE: Aaron Levy SEALS PLACED ON ~~CONTAINERS~~ coolers? ☑ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME ____ DATE ____ TIME ____

SIGNATURE ____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO

3 NAME ____ DATE ____ TIME ____

SIGNATURE ____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Donald Gonyea DATE 10/15/86 TIME 9:00

SIGNATURE Donald Gonyea Seals on coolers ✓ YES ☐ NO ☒ N/A

ASB 001 1766

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1 SAMPLE # TRIPBLANK

Laboratory Name: YORK LABS Client: FCMA

Lab Sample I.D. #: LAB 3 20-23 ~~[illegible]~~/0072005 Job #: 30823-0072

Sample Matrix: WATER Date Sample Received: 10-13-86

Data Release Authorized By: J. [illegible]

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: —

Date Analyzed: 10/21/86

Conc./Dil. Factor: 1.00 pH: N/A

Percent Moisture: —
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane	10 U	Bromodichloromethane	5 U
Bromomethane	10 U	2-Chloroethylvinyl ether	10 U
Vinyl Chloride	10 U	1,2-Dichloropropane	5 U
Chloroethane	10 U	trans-1,3-Dichloropropane	5 U
Methylene Chloride	12 B	Trichloroethene	5 U
Trichlorofluoromethane	10 U	Benzene	5 U
Acrolein	100 U	cis-1,3-Dichloropropene	5 U
Acrylonitrile	35 U	Dibromochloromethane	5 U
1,1-Dichloroethene	5 U	1,1,2-Trichloroethane	5 U
1,1-Dichloroethane	5 U	Bromoform	5 U
trans-1,2-Dichloroethene	5 U	Tetrachloroethene	5 U
Chloroform	.4 JB	1,1,2,2-Tetrachloroethane	5 U
1,2-Dichloroethane	5 U	Toluene	5 U
1,1,1-Trichloroethane	5 U	Chlorobenzene	5 U
Carbon Tetrachloride	5 U	Ethyl benzene	5 U

*See Appendix for footnotes.

PRIORITY POLLUTANT ORGANICS

060332

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 2

SAMPLE # Trip Blank
No Sample

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Continuous-Liq-Liq:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine		Anthracene	
bis(2-chloroethyl)ether		Di-n-butyl phthalate	
1,3-Dichlorobenzene		Fluoranthene	
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	
Hexachloroethane		3,3'-Dichlorobenzidine	
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,n)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1768

PRIORITY POLLUTANT ORGANICS

000333

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # Trip Blank
No Sample

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared:_____ Separatory Funnel:_____

Date Analyzed:_____ Liquid-Liquid:_____

Conc./Dil. Factor:_____

Percent Moisture:_____
(decanted)

	ug/L or ug/Kg
Alpha-BHC	
Beta-BHC	
Gamma-BHC	
Delta-BHC	
Heptachlor	
Aldrin	
4,4'-DDE	
Dieldrin	
4,4'-DDD	
Endrin Aldehyde	
4,4'-DDT	
Chlordane	
Endosulfan I	
Endosulfan II	
Endosulfan Sulfate	
Endrin	
Heptachlor Epoxide	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

*See Appendix for footnotes.

ASB 001 1769

Laboratory Name: Work Labs

Case No: 03970-0072

Sample Number: Trip 005 Trip Blank

Organics Analysis Data Sheet
(Page 4)

000334

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	None Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ASB 001 1770

PRIORITY POLLUTANT ORGANICS

000351

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS DATA SHEET - Page 1

SAMPLE # MSD's 3,5,5
No Sample

Laboratory Name: _____ Client: _____

Lab Sample I.D. #: _____ Job #: _____

Sample Matrix: _____ Date Sample Received: _____

Data Release Authorized By: _____

VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: _____

Date Analyzed: _____

Conc./Dil. Factor: _____ pH: _____

Percent Moisture: _____
(not decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
Chloromethane		Bromodichloromethane	
Bromomethane		2-Chloroethylvinyl ether	
Vinyl Chloride		1,2-Dichloropropane	
Chloroethane		trans-1,3-Dichloropropene	
Methylene Chloride		Trichloroethene	
Trichlorofluoromethane		Benzene	
Acrolein		cis-1,3-Dichloropropene	
Acrylonitrile		Dibromochloromethane	
1,1-Dichloroethene		1,1,2-Trichloroethane	
1,1-Dichloroethane		Bromoform	
trans-1,2-Dichloroethene		Tetrachloroethene	
Chloroform		1,1,2,2-Tetrachloroethane	
1,2-Dichloroethane		Toluene	
1,1,1-Trichloroethane		Chlorobenzene	
Carbon Tetrachloride		Ethyl benzene	

*See Appendix for footnotes.

ASB 001 1771

PRIORITY POLLUTANT ORGANICS

YORK LABORATORIES DIVISION, YWC, INC.

000352

ANALYSIS SHEET - Page 2

SAMPLE # [illegible]

SEMI-VOLATILE COMPOUNDS

Concentration: Low Medium

Date Extracted/Prepared: [illegible]

Separatory Funnel: [illegible]

Date Analyzed: [illegible]

Continuous-Liq-Liq: [illegible]

Conc./Dil. Factor: [illegible]

Percent Moisture: [illegible]
(decanted)

	ug/L or ug/Kg		ug/L or ug/Kg
N-nitrosodimethyl amine	10u	Anthracene	10u
bis(2-chloroethyl)ether		Di-n-butyl phthalate	2T
1,3-Dichlorobenzene		Fluoranthene	10u
1,4-Dichlorobenzene		Benzidine	
1,2-Dichlorobenzene		Pyrene	
bis(2-chloroisopropyl)ether		Butyl benzyl phthalate	12
Hexachloroethane		3,3'-Dichlorobenzidine	10u
N-nitroso-di-n-propylamine		Chrysene	
Nitrobenzene		Benzo(a)anthracene	
Isophorone		bis-2-ethylhexyl phthalate	
bis(2-chloroethoxy)methane		di-n-octyl phthalate	9B
1,2,4-Trichlorobenzene		Benzo(b)fluoranthene	10u
Naphthalene		Benzo(k)fluoranthene	
Hexachlorobutadiene		Benzo(a)pyrene	
Hexachlorocyclopentadiene		Benzo(g,h,i)perylene	
2-Chloronaphthalene		Dibenzo(a,h)anthracene	
Dimethyl phthalate		Indeno(1,2,3,c,d)pyrene	
Acenaphthylene		Phenol	
2,6-Dinitrotoluene		2-Chlorophenol	
Acenaphthene		2-Nitrophenol	
2,4-Dinitrotoluene		2,4-Dimethylphenol	
Diethyl phthalate		2,4-Dichlorophenol	
Fluorene		4-Chloro-3-methyl phenol	
4-Chlorophenyl-phenyl ether		2,4,6-Trichlorophenol	
4-Bromophenyl phenyl ether		2,4-Dinitrophenol	50u
N-nitrosodiphenyl amine		4-Nitrophenol	
Hexachlorobenzene		2-methyl-4,6-dinitrophenol	
Phenanthrene		Pentachlorophenol	

*See Appendix for footnotes.

ASB 001 1772

PRIORITY POLLUTANT ORGANICS

000353

YORK LABORATORIES DIVISION, YWC, INC.

ANALYSIS SHEET - Page 3

SAMPLE # [illegible]

PESTICIDES/PCB'S

Concentration: Low Medium

Date Extracted/Prepared: 10/16/86

Separatory Funnel: ✓

Date Analyzed: 11/21/86

Liquid-Liquid:

Conc./Dil. Factor: 1

Percent Moisture: NA
(decanted)

	ug/L or ug/Kg
Alpha-BHC	0.05 U
Beta-BHC	0.05 U
Gamma-BHC	0.05 U
Delta-BHC	0.05 U
Heptachlor	0.05 U
Aldrin	0.05 U
4,4'-DDE	0.10 U
Dieldrin	0.10 U
4,4'-DDD	0.10 U
Endrin Aldehyde	NA
4,4'-DDT	0.10 U
Chlordane	0.5 U
Endosulfan I	0.05 U
Endosulfan II	0.10 U
Endosulfan Sulfate	0.10 U
Endrin	0.10 U
Heptachlor Epoxide	0.05 U
Toxaphene	1.0 U
PCB-1016	0.5 U
PCB-1221	0.5 U
PCB-1232	0.5 U
PCB-1242	0.5 U
PCB-1248	0.5 U
PCB-1254	1.0 U
PCB-1260	1.0 U

*See Appendix for footnotes.

ASB 001 1773

Laboratory Name York Labs

Case No Hart/NE 0072

Sample Number NSD3 3508

(OCE)

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number min	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. N/A	Unknown	BNA	13.20.	27
12. 540323-64	Phenol, 4 (2,2,3,3-tetramethylbutyl)		19.84	150
13. 364-89-3	1,2-Benzenedicarboxylic acid, dibenzyl ester		28.61	200
14. N/A	Isomer of #13		28.72	600
15. N/A	Isomer of #13		29.70	120
16. N/A	Isomer of #13		30.01	130
17. N/A	Isomer of #13		30.24	530
18. N/A	Isomer of #13		30.33	360
19. N/A	Isomer of #13		31.16	140
20. N/A	Isomer of #13		31.36	120
21. N/A	Isomer of #13		31.51	120
22. N/A	Isomer of #13		31.59	130
23. N/A	Isomer of #13		31.84	620
24. N/A	Isomer of #13		32.00	270
25. N/A	Isomer of #13		32.58	400
26. N/A	Isomer of #13		32.64	810
27. N/A	Isomer of #13		33.76	160
28. N/A	Isomer of #13		33.84	170
29. N/A	Isomer of #13		34.79	550
30 N/A	Isomer of #13		37.69	170

ASB 001 1774

GROUND WATER DATA

INORGANIC ANALYSES

ASB 001 1775

QA/QC REVIEW FOR INORGANICS ON
YWC JOBS 30870-0072, -0092 and -0098

Sample Holding Times:
All sample holding times as per 40 CFR 136 were adhered to.

GC/MS Tuning and Performance:
All tuning and performance criteria were met.

Calibration:
All calibration criteria were met, except for 1,1-Dichloroethene for YWC job #30870-0098. This did not effect any results.

Blanks:
Method blanks for YWC Job #30870-0098 were within acceptable limits. VOA and Pesticide method blanks for YWC Job #30870-0090 were within acceptable limits. However, one BNA compound (di-n-octyl phthalate) was outside CLP limits and the data for that compound is unusable (R). VOA and pesticide method blank data for YWC Job #30870-0072 were also within acceptable limits, but one BNA compound (di-n-octyl phthalate) was outside CLP limits and the data for that compound is unusable (R).

Surrogate Recovery:
Surrogate recovery for BNAs acid fraction for sample #2278 (well 905) had two outside of QC limits and one below 10% recovery; positives are estimates and negatives should be considered unusable. Surrogate recovery for VOAs for sample #2323 (well 901) had one compound outside QC limits and none below 10% recovery; VOA results should be considered estimates. Several pesticide surrogates were outside QC limits, but these are only advisory limits. The reason for pesticide surrogates outside of QC limits was a coeluting peck.

Matrix Spike (Ms)/Matric Spike Duplicate (MSD):
MS and MSD data for VOAs were within QC limits. There wasn't any MS and MSD data for BNAs and pesticides. One in twenty samples is required to be an MS and MSD, although no action is suggested if this requirement is not met.

Compound Identification:
All identification criteria were met.

System Performance:
There were not any indications of poor instrument performance.

Pesticide Retention Time Shift of DBC:
All retention times of DBC were within 2%.

ASB 001 1776

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. well 901 · 2323

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. 785
LAB SAMPLE ID. NO. 0090005

CASE NO. HAR/NAT. GAP.
Lab Receipt Date 10/15/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 u F	15.	Mercury	0.3 CVAA
4.	Barium		16.	Nickel	40 UP
5.	Beryllium	3 UP	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UP	20.	Sodium	
9.	Cobalt		21.	Thallium	5 u F
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	28 P
12.	Lead	5 u F		Percent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 31

Lab Manager J. Cum

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
Well 902-3501

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
CASE NO. Hart/Natl Gup.
SOW NO. 785
Lab Receipt Date 10/13/86
LAB SAMPLE ID. NO. 0072001
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	[51] F	15.	Mercury	1.2 CVAA
4.	Barium		16.	Nickel	40 UPN
5.	Beryllium	3 UPN	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UPN	20.	Sodium	
9.	Cobalt		21.	Thallium	5 u F
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	57 PN
12.	Lead	5 u F		Percent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 5U

Lab Manager [signature]

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
Well 903 · 2279

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. 785
LAB SAMPLE ID. NO. 0080002

CASE NO. Hoot / Nat. Gap.
Lab Receipt Date 10/15/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60UP	14.	Manganese	
3.	Arsenic	5 u F	15.	Mercury	0.2 CVAA
4.	Barium		16.	Nickel	40UP
5.	Beryllium	3UP	17.	Potassium	
6.	Cadmium	5UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10UP
8.	Chromium	10UP	20.	Sodium	
9.	Cobalt		21.	Thallium	5 u F
10.	Copper	20UP	22.	Vanadium	
11.	Iron		23.	Zinc	28P
12.	Lead	5 u F		Percent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 18

Lab Manager J. Cuva

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. We11904 · 2814

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. 785
LAB SAMPLE ID. NO. 0080004

CASE NO. Haer / Nam. Gip.
Lab Receipt Date 10/15/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60UP	14.	Manganese	
3.	Arsenic	5 U F	15.	Mercury	0.2 U CYAA
4.	Barium		16.	Nickel	40UP
5.	Beryllium	3UP	17.	Potassium	
6.	Cadmium	5UP	18.	Selenium	5 U F
7.	Calcium		19.	Silver	10UP
8.	Chromium	13P	20.	Sodium	
9.	Cobalt		21.	Thallium	5 U F
10.	Copper	20UP	22.	Vanadium	
11.	Iron		23.	Zinc	52P
12.	Lead	5 U F		Precent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 22

Lab Manager J. Cuan

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
Well905 · 2278

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. 785
LAB SAMPLE ID. NO. 0090001

CASE NO. HOO/NATL Bkp.
Lab Receipt Date 10/15/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 u F	15.	Mercury	5.6 CVAA
4.	Barium		16.	Nickel	40 UP
5.	Beryllium	3 UP	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UP	20.	Sodium	
9.	Cobalt —		21.	Thallium	5 u F
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	87 P
12.	Lead	5 u F		Precent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 19

Lab Manager J. Chum

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. well 906-3505

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC

CASE NO. HART/NAT. GYP.

SOW NO. 785

Lab Receipt Date 10/13/86

LAB SAMPLE ID. NO. 0072003

QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 u F	15.	Mercury	2.1 CVAA
4.	Barium		16.	Nickel	40 UPN
5.	Beryllium	3 UPN	17.	Potassium	
6.	Cadmium	5 UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UPN	20.	Sodium	
9.	Cobalt		21.	Thallium	5 u F
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	8 PN
12.	Lead	5 u F		Percent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 48

Lab Manager J. Cuma

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. WE11907-3503

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC

CASE NO. Hoc/Wark. Grp.

SOW NO. 785

Lab Receipt Date 10/13/86

LAB SAMPLE ID. NO. 0072002

QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum		13.	Magnesium	
2.	Antimony	60 UP	14.	Manganese	
3.	Arsenic	5 u F	15.	Mercury	2.5 CVAA
4.	Barium		16.	Nickel	49 PN
5.	Beryllium	3 UPN	17.	Pocassium	
6.	Cadmium	5 UP	18.	Selenium	5 u F
7.	Calcium		19.	Silver	10 UP
8.	Chromium	10 UPN	20.	Sodium	
9.	Cobalt		21.	Thallium	5 u F
10.	Copper	20 UP	22.	Vanadium	
11.	Iron		23.	Zinc	108 PN
12.	Lead	5 u F		Precent Solids (%)	NR
	Cyanide	10 U			

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 23

Lab Manager J. Gum

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
Well 908-2281

Date 3/12/87

INORGANIC ANALYSIS DATA SHEET

LAB NAME YWC
SOW NO. RRS
LAB SAMPLE ID. NO. 0090003

CASE NO. Hoor/Non Gyp
Lab Receipt Date 10/15/86
QC REPORT NO.

Elements Identified and Measured

Concentration: Low ____ Medium ____

Matrix: Water X Soil ____ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1. Aluminum		13. Magnesium	
2. Antimony	60 UP	14. Manganese	
3. Arsenic	5 U F	15. Mercury	6.9 CVAA
4. Barium		16. Nickel	40 UP
5. Beryllium	3 UP	17. Potassium	
6. Cadmium	5 UP	18. Selenium	5 U F
7. Calcium		19. Silver	10 UP
8. Chromium	10 UP	20. Sodium	
9. Cobalt		21. Thallium	5 U F
10. Copper	20 UP	22. Vanadium	
11. Iron		23. Zinc	74 P
12. Lead	5 U F	Percent Solids (%)	NR
Cyanide	10 U		

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: Phenols 11

Lab Manager J. Cuna

YWC-SOB 00870- 0072

K

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT Fred C Hart Assoc

JOB No. 1105-00-85001-24

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
003	3501	Well # 9D2	Good	PP + 40
		" Jones		

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: John Garrison DATE: 10/10/86

SIGNATURE: John J Garrison SEALS PLACED ON CONTAINERS? ☑ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Daniel Ott DATE 10/11/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT? ✓ YES ☐ NO ☐ N/A

ASB 001 1785

YWC - 500 70870 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT FRED C. HART

JOB No. [illegible]

SAMPLE IDENTIFICATION

Sample No.	Sample Description	Condition	Comments
004 B503	9 Bottles	Good, sealed	ff tye
	WELL 907		

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: STEVE HAMMES DATE: [illegible]

SIGNATURE: Steve Hammes SEALS PLACED ON CONTAINERS ? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME DANIEL OT DATE 10/2/86 TIME 10:00 AM

SIGNATURE Daniel OT ARE SEALS INTACT ? ✓ YES ☐ NO ☐ N/A

ASB 001 1786

YWC JOB 20870 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT [illegible]

JOB No. [illegible] 24

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
005	[illegible]	W 906 9bot-12	[illegible]	[illegible]

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: [illegible] DATE: [illegible]

SIGNATURE: [illegible] SEALS PLACED ON CONTAINERS ? ☒ YES ☐ NO

CUSTODY TRANSFERRED TO

2 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME DANIEL OTT DATE 14/4/86 TIME 10:00 AM

SIGNATURE Daniel Ott ARE SEALS INTACT ? ✓ YES ☐ NO ☐ N/A

ASB 001 1787

YWC SDD - 30870 - 0072

YORK LABORATORIES DIVISION

YWC

CHAIN OF CUSTODY RECORD

CLIENT [illegible]

JOB No. [illegible]

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
008	[illegible]	[illegible]	[illegible]	[illegible]

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: [illegible] DATE: [illegible]

SIGNATURE: [illegible] SEALS PLACED ON ~~CONTAINERS~~ coolers? ☐ YES ~~☐ NO~~

CUSTODY TRANSFERRED TO:

2 NAME: _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME _____ DATE _____ TIME _____

SIGNATURE _____ ARE SEALS INTACT ? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME DANIEL ETT DATE 10/4/86 TIME 10:00 AM

SIGNATURE Daniel Ett ARE SEALS INTACT ? Seals on coolers ☐ YES ☐ NO ☐ N/A

ASB 001 1788

YORK LABORATORIES DIVISION

YWC

K

YWC JOB 308.70 - 0090

CHAIN OF CUSTODY RECORD

CLIENT Fred C. Hart Assoc.

JOB No. 01005 -00 -85001.-84

SAMPLE IDENTIFICATION

	Sample No.	Sample Description	Condition	Comments
001	2278	Well 905 (9 bottles)	Good	VOA+40
002	2279	Well 903 (9 bottles)	Good	PP+40
003	2281	Well 908 (9 bottles)	Good	PP+40
004	2314	Well 904 (9 bottles)	Good	PP+40
005	2323	Well 901 (9 bottles	Good	PP+40

CHAIN OF CUSTODY CHRONICLE:

COLLECTED BY:

1 NAME: Aaron Levy DATE: 10/14/86

SIGNATURE: Aaron Levy SEALS PLACED ON ~~CONTAINERS~~ coolers? ☑ YES ☐ NO

CUSTODY TRANSFERRED TO:

2 NAME: DATE TIME

SIGNATURE ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

CUSTODY TRANSFERRED TO:

3 NAME DATE TIME

SIGNATURE ARE SEALS INTACT? ☐ YES ☐ NO ☐ N/A

RECEIVED IN LABORATORY BY

4 NAME Donald Gonyea DATE 10/15/86 TIME 9:00

SIGNATURE Donald Gonyea Seals on coolers ARE SEALS INTACT? ☐ YES ☐ NO ☒ N/A

ASB 001 1789