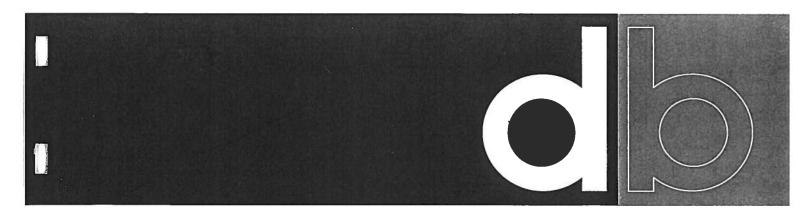


PLANT 2 - SUPPLEMENTAL PHASE II SITE ASSESSMENT

GRUMMAN AEROSPACE CORPORATION BETHPAGE, NEW YORK



Dvirka and Bartilucci

Consulting Engineers

PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT GRUMMAN AEROSPACE CORPORATION BETHPAGE, NEW YORK

PREPARED BY

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS WOODBURY, NEW YORK

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PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT GRUMMAN AEROSPACE CORPORATION BETHPAGE, NEW YORK

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1.0 INTRODUCTION

contaminated portions of the existing concrete slabs and soil at the site which would be classified as been removed, the property can be delisted. indicated to GAC that once any concrete and soil which would be classified as hazardous waste has necessary to delist the Plant 2 parcel from the New York State Registry of Inactive Hazardous hazardous waste and, therefore, provide recommendations regarding the remedial activities 1-1 and 1-2). The primary purpose of the Supplemental Phase II Site Assessment is to identify any Waste Disposal Sites. In correspondence dated June 11, 1996 (see Appendix A), NYSDEC has Aerospace Corporation (GAC) at the Plant 2 property located in Bethpage, New York (see Figures recommendations of the Supplemental Phase II Site Assessment undertaken for Grumman This report documents the investigatory activities, findings, conclusions and

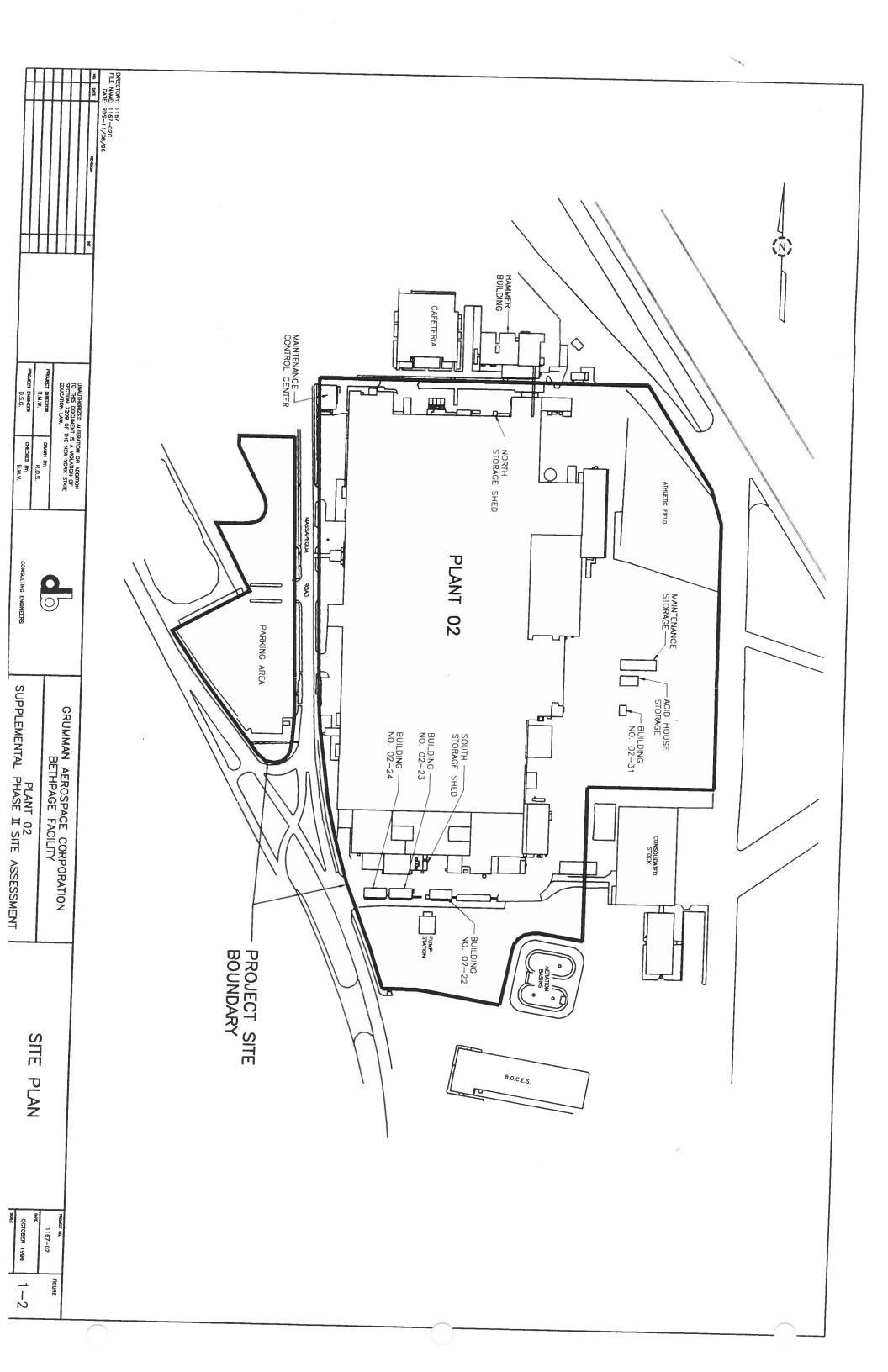
to GAC from NYSDEC dated August 6, 1996, the Work Plan was approved by NYSDEC (see accordance with NYSDEC's communications, the proposed Work Plan was outlined conjunction with the NYSDEC and the New York State Department of Health (NYSDOH). The correspondence from GAC to NYSDEC dated July 22, 1996 (see Appendix A). In correspondence sample locations, depth intervals and analytical parameters were selected by NYSDEC. Appendix A). The Work Plan for the Supplemental Phase II Site Assessment was developed in

floor slabs. The samples were analyzed for selected TCLP metals and PCBs in order to identify material which would be classified as characteristic or listed hazardous waste at the Plant 2 site. below the top of floor slabs and soil samples were collected from 0 to 2 feet beneath the bottom of In accordance with the Work Plan, concrete core samples were collected from 1 to 3 inches

the levels of contamination in surface concrete at the Plant 2 site at select locations. Samples of referenced above, a secondary purpose of the Supplemental Phase II Site Assessment is to assess Additionally, in accordance with the June 11, 1996 correspondence from NYSDEC

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1-4

the top 1 inch of concrete, from seven locations, selected by NYSDEC and identified in the July 22, 1996 Work Plan, were collected and analyzed for certain total metals, semivolatile organic compounds or PCBs in accordance with the Work Plan. The results of these analyses are compared to the USEPA Generic Soil Screening Levels (SSLs), since these levels are health risk based and there are no NYSDEC or USEPA screening standards available for contamination in concrete.

The information presented in this report is based upon the results of the field activities conducted on August 26 through September 6, 1996 and laboratory analyses of the environmental samples. Section 2 documents the procedures followed in conducting the Supplemental Phase II Site Assessment. Presented in Section 3 are the findings of the assessment and interpretation of the findings with respect to appropriate standards, guidance values and criteria. Conclusions and recommendations are presented in Section 4.

Presented in Appendix B are the Daily Field Activity Reports which document the activities undertaken during each day of the Supplemental Phase II field program. Appendix C contains Air Monitoring Forms. Equipment Calibration Logs are presented in Appendix D. Sample Information Records and Soil Boring Logs are provided in Appendices E and F, respectively; and, the Supplemental Phase II Site Assessment analytical laboratory data are presented in Appendix G.

2.0 FIELD PROGRAM

This section of the report presents a description of the Supplemental Phase II Site Assessment field activities undertaken at Plant 2. Daily Field Activity Reports, provided in Appendix B, document the daily field program activities which were conducted. Inside the Plant 2 building, the field activities consisted of advancing concrete core/soil probes at 18 locations. Twelve concrete core samples and nine soil samples were collected from interior locations for chemical analysis. One concrete core sample and three soil samples from the Acid House Storage Facility were submitted for chemical analysis. Figure 2-1 illustrates the location of each Plant 2 interior sample. The location of the exterior samples, collected in the Acid House Storage Facility, are shown on Figure 2-2.

2.1 Air Monitoring and Sample Screening

During the advancing of concrete corings, monitoring for organic vapors in the breathing zone and at the probe holes was conducted utilizing either a photoionization detector (PID) or a flame ionization detector (FID). Monitoring results were recorded on Air Monitoring Forms, provided in Appendix C. Prior to use, the PID was calibrated using a 100 ppm concentration isobutylene gas and the FID was calibrated using a 95 ppm concentration methane gas. Completed Equipment Calibration Logs are presented in Appendix D. The instruments were also utilized to screen the soil samples collected. The sample screening results are presented on Sample Information Records and Soil Boring Logs in Appendices E and F, respectively.

2.2 Concrete and Soil Sampling Program

2.2.1 Concrete Core Sampling

A total of 22 cores were advanced through building interior and exterior floor slabs. Twelve interior concrete cores and one exterior concrete core were submitted for chemical analysis, Both 0" to 1" deep and 1" to 3" deep concrete cores were collected for analysis. Figures 2-1 and 2-2 present the concrete core sampling locations in the Plant 2 building interior and the Acid House Storage Facility, respectively.

Concrete coring was performed utilizing a Drillco Coring Machine or a Hilti Coring Machine equipped with a 3-inch diameter by 16-inch long concrete coring bit and cooling water hose connection. Potable water was utilized to cool the coring bit during coring operations and was collected and contained within 55-gallon drums for proper disposal.

The depths of interior and exterior concrete floor slabs varied from location to location. Concrete coring was performed to a maximum depth of 13 1/2 inches to obtain probe samples of soils beneath the floor slabs.

Seven 0" to 1" deep concrete core samples were collected for chemical analysis. Table 2-1 presents the location and sample identification number as well as the analytical parameters completed for each 0" to 1" concrete core sample. Six 1" to 3" concrete core samples were collected for chemical analysis. Table 2-2 presents the location and sample identification number as well as the analytical parameters completed for each 1" to 3" concrete core sample.

The concrete cores submitted for laboratory analysis were first broken apart on clean plastic sheeting utilizing a hammer and chisel, and subsequently placed in laboratory prelabeled sample jars. Concrete core sample information records are presented in Appendix E.

During the interior concrete coring activities, one backfilled pit was investigated. The backfilled pit, formerly an Anodize/Magnaform pit (located in Area 27) which extended to a depth of approximately 4' below the existing floor slab, had been backfilled with soil and covered with a concrete floor slab to grade. Concrete core sampling was conducted at the location of the former backfilled pit. The procedure consisted of coring through the existing floor slab and subsequently hand augering through the soil in the backfilled pit. To maintain a void through the backfill material, a PVC pipe was installed into the hand-augered borehole.

Summary of 0" - 1" Concrete Core Locations and Sample Analyses Plant 2 -Supplemental Phase II Site Assessment Grumman Aerospace Corporation Table 2-1

Area	Sample Identification No.	PCBs (Method 8080)	Total Chromium (Method 6010)	Total Cadmium (Method 6010)	Semivolatile Organic Compounds (Method 8270)
3	3C-C (0"-1")				
	3SA-C (0"-1")				
12	12SA-C (0"-1")				
13	13SA-C (0"-1")				
25	25SA-C (0"-1")				
27	27A-C (0"-1")				
XIID	X11D-C (0"-1")				

Summary of 1" - 3" Concrete Core Locations and Sample Analyses Plant 2 -Supplemental Phase II Site Assessment Grumman Aerospace Corporation Table 2-2

		Chromium TCLP	Chromium TCLP Cadmium TCLP 1,2 TCE TCLP	1,2 TCE TCLP
	Sample	(Methods 1311 and	(Methods 1311 and (Methods 1311 and (Methods 1311 and	(Methods 1311 and
Area	Identification No.	(0110)	(0109	8240)
3	3C-C (1"-3")			
12	12C-C (1"-3")			
	12G-C (1"-3")			
14	14A-C (1"-3")			
16	16E-C (1"-3")			
27	27A-C (1"-3")		8	

Once the borehole was advanced to the top elevation of the subslab, the Drillco Coring Machine and 3" diameter concrete core bit, along with a core bit extension were utilized to core through the concrete "subslab." The subslab concrete core was broken apart on clean plastic sheeting utilizing a hammer and chisel, and subsequently placed in prelabeled jars for laboratory analysis.

The concrete core bit was decontaminated between each sample location. Decontamination procedures consisted of an alconox wash followed by a distilled/deionized water rinse. The decontamination water was secured in a 55-gallon drum on-site provided by GAC.

2.2.2 Soil Sampling

A total of 12 soil samples were collected at the Plant 2 site for chemical analysis. Nine soil samples were collected from Plant 2 interior locations and three soil samples were collected from within the Acid House Storage Facility. All soil samples were collected at 0 to 2 feet below the concrete floor slabs. The location and sample identification number as well as the analytical parameters which each soil sample was tested for are presented on Table 2-3.

Soil samples were secured by manually driving the split spoon sampler to the bottom of the desired sample depth interval. Upon retrieving the soil sample, the sample was screened for volatile organic vapors using either a photoionization detector (PID) or a flame ionization detector (FID). All soil samples were physically and visually characterized and inspected for the presence of staining or discoloration. Soil samples collected for chemical analysis were transferred directly into prelabeled laboratory sample containers and placed on ice in a cooler for shipment to the laboratory.

The split spoon, drill rod and other ancillary sampling equipment were thoroughly decontaminated prior to use at each sample location. Decontamination procedures consisted of an external alconox wash followed by a distilled/deionized water rinse. The decontamination water was secured in a 55-gallon drum on-site provided by GAC.

Table 2-3
Grumman Aerospace Corporation
Plant 2 -Supplemental Phase II Site Assessment
Summary of Soil Sample Locations and Sample Analyses

		Chromium TCLP Cadmium TCLP 1,2 DCA TCLP	Cadmium TCLP	1,2 DCA TCLP	
	Sample	(Methods 1311 and (Methods 1311 (Methods 1311and	(Methods 1311	(Methods 1311and	PCBs
Area	Identification No.	(010)	and 6010)	8240)	(Method 8080)
3	3A-S (0'-2')				
	3B-S (0'-2')				
4	4F-S (0'-2')				
12	12G-S (0'-2')			6.2	
13	13A-S (0'-2')				
	13B-S (0'-2')				
	13C-S (0'-2')				
22	22A-S (0'-2')		8		
25	25E-S (0'-2')				
	X11D-S1 (0'-2')				
	X11D-S2 (0'-2')				
	X11D-S3 (0'-2')				

3.0 FINDINGS

This section presents the analytical results for the environmental samples collected at the Plant 2 site. Zero to 1-inch deep concrete core sample results are compared to the USEPA Generic Soil Screening Levels (SSLs) and 1" to 3" deep concrete core sample results are compared to toxicity characteristic leaching procedure (TCLP) regulatory limits. The TCLP soil sample results are compared to the regulatory limits and the results of analyses of soil samples for PCBs are compared to the recommended soil cleanup objectives identified in the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) HWR-94-4046 dated January 24, 1994 and the 50 ppm regulatory limit.

3.1 Concrete Core Samples

3.1.1 <u>0" to 1" Concrete Core Samples</u>

The analytical test results for the 0" to 1" concrete core samples are presented in Tables 3-1, 3-2 and 3-3. As the tables indicate, the 0" to 1" concrete core samples collected inside the Plant 2 building were analyzed for semivolatile organic compounds and total cadmium and total chromium. The 0" to 1" concrete core sample collected in the Acid House Storage Facility was analyzed for polychlorinated biphenyls (PCBs).

As shown in Table 3-1, concrete core samples 3SA-C (0"-1"), 12SA-C (0"-1"), 13SA-C (0"-1") and 25SA-C (0"-1") were analyzed for semivolatile compounds. There are no recommended cleanup objectives for semivolatile organic compounds in concrete. However, if a comparison of the semivolatile organic compounds detected in 0" to 1" concrete core samples is made to the USEPA Generic SSLs, none of the semivolatile organic compounds were detected at levels above the SSLs. It should be noted that comparison of Plant 2 concrete contaminant concentrations to the Generic SSLs represents a "conservative comparison" since, in general, the potential exposure routes/contaminant pathways associated with soils are more significant

GRUMMAN AEROSPACE CORPORATION - PLANT 2
SUPPLEMENTAL PHASE II SITE ASSESSMENT
ZERO TO ONE INCH CONCRETE CORE SAMPLING RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS

SAMPLE IDENTIFICATION	3SA-C (0"-1")	12SA-C(0"-1")		13SA-C (0"-1") 25SA-C(0"-1")	FBCS04	CONTRACT	Generi	Generic SSLs
SAMPLE DEPTH	0"-1"	0"-1"		0"-1"	FIELD BLANK	REQUIRED		
DATE OF COLLECTION	96/90/60	08/26/96	08/26/96	08/29/96	08/29/96	DETECTION	Ingestion	Inhalation
DILUTION FACTOR		-	-		-	LIMIT		
SEMIVOLATILE ORGANIC COMPOUNDS	(ug/kg)	(ng/kg)	(ng/kg)	(ng/kg)	(l/gn)	(ng/kg)	(ng/kg)	(ng/kg)
Phenol	n	0	0	¬		330	47,000,000	
bis(2-Chloroethyl)ether	D	J	⊃	D	>	330	009	. 200
2-Chlorophenol	>	n	⊃	>	>	330	390,000	53,000,000
1.3-Dichlorobenzene	ם	⊃	D	⊃	>	330	1	1
1,4-Dichlorobenzene	D	⊃	D	ח	>	330	27,000	•
1,2-Dichlorobenzene	<u></u>	⊃	J	D	⊃	330	7,000,000	260,000
2-Methylphenol	D	⊃	D	D	>	330	3,900,000	
2.2'-oxybis(1-chloropropane)	>	>	D	⊃	D	330	1	1
4-Methylphenol	⊃	⊃	¬	D	Þ	330	-	1
N-Nitroso-di-n-propylamine	כ	-	_	D	⊃	330	90	!
Hexachloroethane	⊃	-	D	<u>ס</u>	>	330	46,000	55,000
Nitrobenzene	>	_	כ	D	-	330	39,000	92,000
Isophorone	ס	ם	D	D	ם	330	670,000	4,600,000
2-Nitrophenol	D	D	⊃	>	_	330	1	1
2.4-Dimethylphenol	ס	_	>	D	>	330	1,600,000	1
2.4-Dichlorophenol	_	⊃	D	D	ם ב	330	230,000	I
1,2,4-Trichlorobenzene	⊃	D	D	D	<u></u>	330	780,000	3,200,000
Naphthalene	D	D		2,800 D	-	330	3,100,000	
4-Chloroaniline	>	D	D)	>	330	310,000	!
Hexachlorobutadiene	¬	>	>	D	>	330		1
bis(2-Chloroethoxy)methane	D	D	J	D	-	330	1	1
4-Chloro-3-methylphenol	D	D	>	>	>	330	I	1
2-Methylnaphthalene	⊃	>	>	200 J	_ _	330	5	•
Hexachlorocyclopentadiene	D	D)	D	>	330	550,000	10,000
2,4,6-Trichlorophenol	>	D	J	>	>	330	28,000	200,000
2.4.5-Trichlorophenol	>	D	D	D	>	800	7,800,000	1
2-Chloronaphthalene	_	>	D	¬	-	330	1	1
2-Nitroaniline		_	D	D	ם	800	l	-
Dimethylphthalate	D	⊃	_	ח	ם	330	-	i
Acenaphthylene	כ	⊃	D	n	>	330		
2.6-Dinitrotoluene	כ	D	>	⊃	¬	330	006	i
3-Nitroaniline	כ	>	D)	ם	800	!	-
Acenaphthene	58 J	48 J	n	ס	ם	330	4,700,000	1

GRUMMAN AEROSPACE CORPORATION - PLANT 2
SUPPLEMENTAL PHASE II SITE ASSESSMENT
ZERO TO ONE INCH CONCRETE CORE SAMPLING RESULTS
SEMIVOLATILE ORGANIC COMPOUNDS

SAMPLE IDENTIFICATION	3SA-C (0"-1")	12SA-C(0"-1")	13SA-C (0"-1")	25SA-C(0"-1")	FBCS04	CONTRACT	Gener	Generic SSLs
DAMITTE COLLECTION	96/90/60	08/26/96	08/26/96	08/29/96	08/29/96	DETECTION	Ingestion	Inhalation
SEMIVOLATILE ORGANIC COMPOUNDS	(ug/kg)	(ug/kg)	(ng/kg)	(ug/kg)	(l/gn)	(ng/kg)	(ng/kg)	(ng/kg)
2,4-Dinitrophenol		J :))	D :	800	160,000	_
4-Nitrophenol	0 - 62	- C	=)	o =	8 8		
Olberizoldiari 2.4-Dinitrotolijapa	2	, ⊃) ⊃))) ⊃	330	006	1
Diethylotthalate) ⊃) ⊃)	0	כ	330	63,000,000	2,000,000
4-Chlorophenyl-ohenylether)	>	n	ם	330	ı	-
Fluorene	100 J	53 J	D	ס	ם	53	3,100,000	1
4-Nitroaniline	⊃	ס	⊃	כ	<u></u>	1,700	*	•
4,6-Dinitro-2-methylphenol	>	5	D	⊃	>	1,700	-	-
N-Nitrosodiphenylamine	D	>	D	>	>	330	130,000	1
4-Bromophenyl-phenylether	J	>	⊃	⊃)	330	-	1
Hexachlorobenzene	D	¬	⊃	⊃)	330	400	1,000
Pentachlorophenol	⊃	>	>	<u></u>	>	1,700	3,000	1
Phenanthrene	530	420	83 J	⊃	>	83	1	-
Anthracene	120 J	D	D	>)	330	23,000,000	1 00
Di-n-butyl phthalate	>	>	59 J))	59	7,800,000	2,300,000
Fluoranthene	250 J	100	43 J	> :	> :	43	3,100,000	
Pyrene	190])	> :	O -	o :	330	2,300,000	000
Butylbenzylphthalate	400	> :	> :	230 J)	930	16,000,000	930,000
3,3'-Dichlorobenzidine) - 2	> =	> =) =) =	330	000	1
Benzo(a)antinacene	28.2	- c	=) =	o =	44	88.000	i
his/2-Ethylboxyllohthalate	150 .1	170.1	550	180 J) ⊃	330	46,000	31,000,000
Di-n-octylohthalate		D	ס	>	D	330	1,600,000	10,000,000
Benzo(b)fluoranthene	J	D	_	D	>	330	006	4949
Benzo(k)fluoranthene	D	_	ם	D	D	330	000'6	i
Benzo(a)pyrene	D	>	D	D	>	330	8	1
Indeno(1,2,3-cd)pyrene	D	ם -	D	כ	ם	330	006	•
Dibenz(a,h)anthracene	D)	D	D	D.	330	06	1
Benzo(g,h,i)penylene	D	D	D)	⊃	330	1	-
Benzyl Alcohol	D	_	D	>	>	330	1	1
Benzoic Acid	D	D	ם	>	D	1,700	310,000,000	-
TOTAL PAHS	1,334	999	126	2,800	0			8
TOTAL CARCINOGEN PAHS	98	44	0	0	0		+++++	
TOTAL SVOCs	1,963	919	735	3,410	0			

QUALIFIERS
J. Compound found at a concentration below the CRDL, value estimated.
U. Compound analyzed for but not detected.
B. Compound found in the method blank as well as the sample.
D. Result taken from the diluted run, at 1:2.

MDL: Method detection limit.
USEPA Soil Screening Limits presented for comparison purposes. NOTES

TABLE 3-2
GRUMMAN AEROSPACE CORPORATION - PLANT 2
SUPPLEMENTAL PHASE II SITE ASSESSMENT
ZERO TO ONE INCH CONCRETE CORE SAMPLING RESULTS
TOTAL CADMIUM AND CHROMIUM

				0.6	Gener	Generic SSLs
SAMPLE IDENTIFICATION	3C-C(0"-1")		FB1	INSTRUMENT		
SAMPLE DEPTH	0"- 1"	2	뿐	DETECTION	Ingestion	Inhalation
DATE OF COLLECTION	96/20/60	1	96/50/60	LIMIT	1	
ANALYTICAL RESULTS	(mg/kg)	(mg/kg)		(l/gn)	(mg/kg)	(mg/kg)
Cadmium	70.1	N V	0.0099	8.3	78	1,800
Chromium	24.3	4,480	D	4.7	390	270
			<u> </u>			

QUALIFIERS

U. Compound analyzed for but not detected NA: Not Analyzed

NOTES
NA: Not Analyzed for.
USEPA Soil Screening Limits presented for comparison purposes.

SUPPLEMENTAL PHASE II SITE ASSESSMENT ZERO TO ONE INCH CONCRETE CORE SAMPLING RESULTS **GRUMMAN AEROSPACE CORPORATION - PLANT 2 TABLE 3-3**

		2000 -			
SAMPLE DEPTH	0"-1"	FIELD BLANK	CONTRACT	Generi	Generic SSLs
DATE OF COLLECTION	08/28/96	08/29/96	REQUIRED		
DILUTION FACTOR		The state of the s	DETECTION	Ingestion	Inhalation
PERCENT SOLIDS	NA	NA	LIMIT)	
ANALYTICAL RESULTS	ug/kg	ng/l	ug/kg	(ng/kg)	(ng/kg)
Aroclor 1016		•	08		
)	200		
Aroclor 1221	¬	⊃	80	-	
Aroclor 1232		⊃	80	1	1
Aroclor 1242		\supset	80	1	1
Aroclor 1248		<u> </u>	80		1
Aroclor 1254	>)	80		
Aroclor 1260	>)	80	1	1
PCB TOTAL	0	0		1,000*	
OLIALIEIERS			SHON		
J: Compound found at a concentration below the CRDL,	entration below the		: Not established	ð.	
hotomiton order			Lotude of miles I was a constant of the Consta	Court officer I series	700

value estimated.

U: Compound analyzed for but not detected.
B: Compound found in the method blank as well as the sample.

USEPA Soil Screening Limits presented for comparison purposes.

* : Criteria is for total PCBs

than those for concrete; and, the SSLs were developed based on potential exposure pathways in a residential setting.

Table 3-2 presents the results of the analyses of the 0"-1" concrete core samples for total cadmium and chromium. By reviewing the analytical results presented on Table 3-2, it can be seen that the chromium concentration of 24.3 mg/kg detected in sample 3C-C (0"-1") is below the Generic SSLs, and the cadmium concentration of 70.1 mg/kg in concrete core sample 3C-C (0"-1") is below the Generic SSLs as well, however, the chromium concentration of 4,480 mg/kg in concrete core sample 27A-C (0"-1") is above the corresponding Generic SSLs for ingestion and inhalation.

The results of the analysis of the concrete core sample X11D-C (0"-1") for polychlorinated biphenyls (PCBs) is presented in Table 3-3. As indicated in the table, PCBs were not detected in the sample.

3.1.2 <u>1" to 3" Concrete Core Samples</u>

A total of six 1" to 3" concrete corings were collected from Plant 2 building interior floor slabs for chemical analysis. As shown in Table 3-4, one 1" to 3" concrete core sample was analyzed for TCLP cadmium and chromium, four samples were analyzed for TCLP chromium alone and one sample was analyzed for TCLP trichloroethene.

As shown in the table, the TCLP chromium result for sample 27A-C (1"-3") of 43.8 mg/l exceeds the TCLP limit of 5.0 mg/l. As discussed earlier, this sample was collected from a pit "subslab". None of the other 1"-3" samples exceeded the corresponding TCLP limits.

3.2 Soil Samples

As discussed in Section 2.2.2, 12 soil samples were collected for analysis and tested for the parameters listed on Table 2-3.

SUPPLEMENTAL PHASE II SITE ASSESSMENT 1 TO 3 INCH CONCRETE CORE SAMPLING RESULTS TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) **GRUMMAN AEROSPACE CORPORATION - PLANT 2** TABLE 3-4

SAMPI E IDENTIFICATION	3C-C(1"-3")	12C-C (1"-3")	12G-C (1"-3")	14A-C (1"-3")	16E-C (1"-3")	27A-C(1"-3")	FB1	CONTRACT	Ш
SAMPLE DEPTH	1"-3"	1"-3"	1"-3"	1"-3"	1"-3"	1"-3"	FIELD BLANK REQUIRED	REQUIRED	LEVEL
DATE OF COLLECTION	96/90/60	08/26/96	08/26/96	08/27/96	08/53/96	08/28/96	96/50/60	DETECTION	
ANALYTICAL RESULTS	(Mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	LIMIT (mg/l)	(mg/l)
Cadmium	כ	NA	A A	¥	ΑΝ	¥	ב	0.0044	
Chromium	0.023	0.12	D	NA A	0.25	43.8	ב	0.0047	5.0 mg/l
Trichloroethene NA NA 0.29 NA NA	AN	NA A	AA	0.29	Ā	NA A	¥	0.05	0.5 mg/l
OUALIFIERS					NOTES	ES			

J: Compound found at a concentration below the CRDL, value estimated U: Compound analyzed for but not detected B: Compound found in the method blank as well as the sample QUALIFIERS

: Exceeds Regulatory Limit

NA: Not analyzed for

TABLE 3-6
GRUMMAN AEROSPACE CORPORATION - PLANT 2
SUPPLEMENTAL PHASE II SITE ASSESSMENT
SOIL SAMPLING RESULTS
PCBS

NYSDEC TAGM 4046 APPENDIX A	CRITERIA ug/kg			10000 *
CONTRACT REQUIRED DETECTION	LIMIT ug/kg 80	8 8 8	80	
FBSS-03 FIELD BLANK 08/29/96	- V I/gn	> > >	כככ	O 0
X11D-S2 (0'-2') X11D-S3 (0'-2') 0'-2' 08/28/96 08/28/96	89 ug/kg))	540 U	190 730
X11D-S2 (0'-2') 0'-2' 08/28/96	88 ug/kg)	09 <i>L</i>	160 920
X11D-S1 (0'-2') 0'-2' 08/28/96	1 86 ug/kg)	1400	300
SAMPLE IDENTIFICATION X11D-S1 (0'-2') SAMPLE DEPTH 0'-2' DATE OF COLLECTION 08/28/96	DILUTION FACTOR PERCENT SOLIDS ANALYTICAL RESULTS	Aroclor 1016 Aroclor 1221 Aroclor 1232	Aroclor 1242 Aroclor 1248	Arociol 1234 Aroclor 1260 TOTAL PCBs

QUALIFIERS

J: Compound found at a concentration below the CRDL, value estimated

U. Compound analyzed for but not detected

B. Compound found in the method blank as well as the sample

NOTES ---- : Not Established

* : Criteria is for total PCBs in subsurface soil

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the Supplemental Phase II Site Assessment field program discussed in Section 3.0, area-by-area conclusions are presented in this section, and recommendations are provided for further investigation and remediation.

In support of providing conclusions and making technical recommendations with respect to the primary objective of this phase of the site assessment program, which is to provide a determination of the remedial activities necessary to delist the Plant 2 parcel from the New York State Registry of Inactive Hazardous Waste Disposal Sites, the sample analytical results are compared to regulatory limits, as appropriate. As stated in the introduction to this report, NYSDEC has indicated that after GAC has remediated any media identified during this investigation which exceeds regulatory TCLP and PCB limits, the property can be delisted.

In support of the secondary purpose of the Supplemental Phase II Site Assessment, which is to assess the levels of contamination in surface concrete at select locations at the site, comparisons of the results of the 0" to 1" concrete core samples are made to USEPA Generic Soil Screening Levels (SSLs).

Specific recommendations are presented below for additional investigation and remedial activities to delist the property.

4.1 Area 3 - Former North Plating Room

Conclusions

Five samples were collected for chemical analysis from the former North Plating Room. Sample 3SA-C (0"-1") was collected in a stained area and tested for semivolatile organic compounds. As stated in Section 3.1.1, when compared to the USEPA Generic SSLs, none of the SVOCs detected in sample 3SA-C (0"-1") were above the corresponding limits.

Samples 3C-C (0"-1") and 3C-C (1"-3") were collected in the area of a trench drain where elevated concentrations of cadmium and chromium had previously been detected in a 1"-3" deep concrete core sample collected under the initial Phase II Site Assessment program. Sample 3C-C (0"-1") was analyzed for total cadmium and chromium, and sample 3C-C (1"-3") was analyzed for TCLP chromium and cadmium. The total chromium result for sample 3C-C (0"-1") of 24.3 mg/kg is below the USEPA Generic SSLs for chromium. The total cadmium concentration of 70.1 mg/kg detected in 3C-C (0"-1") is also below the Generic SSLs for ingestion and inhalation for cadmium of 78 mg/kg and 1,800 mg/kg, respectively. The TCLP chromium result for sample 3C-C (1"-3") of 0.023 mg/l is below the regulatory limit of 5 mg/l and cadmium was not detected in the sample extract.

Soil samples 3A-S (0'-2') and 3B-S (0'-2') were each collected from beneath one of the two sumps in the pit of the former North Plating Room. Sample 3A-S (0'-2') was analyzed for TCLP chromium and sample 3B-S (0'-2') was analyzed for TCLP cadmium based upon the results of total metal analyses at locations 3A and 3B under the initial Phase II Site Assessment program. The chromium concentration of 0.028 mg/l detected in the 3A-S (0'-2') sample extract is below the regulatory limit of 5 mg/l. The cadmium concentration of 2.2 mg/l detected in the 3B-S (0'-2') sample extract is above the regulatory limit of 1 mg/l.

Recommendations

In summary, in the former North Plating Room, the results for surface concrete samples 3SA-C (0"-1") and 3C-C (0"-1") are below the Generic SSLs. Moreover, the concentrations detected in the extracts for samples 3C-C (1"-3") and 3A-S (0'-2') are below regulatory limits. However, exceedance of the regulatory limit was detected in the extract of soil sample 3B-S (0'-2').

Therefore, removal of the sump at location 3B in the former North Plating Room, as well as underlying soil, is recommended in support of delisting. The soil sampling conducted 0' to 2'

and 2' to 4' beneath the sump under the initial Phase II Site Assessment indicated total cadmium concentrations of 103 mg/kg and 23.8 mg/kg, respectively, at location 3B. Therefore, removal of 5' of underlying soil is recommended. Endpoint sampling and analysis for TCLP cadmium should be conducted after excavation of the concrete sump and soil.

4.2 Area 4 - Former North Painting Room

Conclusions and Recommendations

One sample, 4F-S (0'-2'), was collected in the former North Painting Room at a location where elevated concentrations of total chromium were previously detected. Sample 4F-S (0'-2') was analyzed for TCLP chromium. The chromium concentration of 0.56 mg/l detected in sample 4F-S (0'-2') is below the TCLP regulatory limit. Therefore, no further action is expected to be required in the former North Painting Room in support of delisting.

4.3 Area 12 - Former Central Paint Room

Conclusions and Recommendations

Three samples were collected for chemical analysis in the former Central Paint Room. Sample 12SA-C (0"-1") was collected in a location where staining was observed and analyzed for SVOCs. As stated in Section 3.1.1, when compared to the Generic SSLs, none of the SVOCs detected in 12SA-C (0"-1") were above the corresponding limits.

Samples 12C-C (1"-3"), 12G-C (1"-3") and 12G-S (0'-2') were collected in the location of former paint spray booths and tested for TCLP chromium. Elevated concentrations of chromium were detected in concrete at location 12C and in soil (0' to 2' deep) at location 12G under the initial Phase II Site Assessment. The chromium concentration of 0.12 mg/l detected in the extract from sample 12C-C (1"-3") is below the regulatory limit; chromium was not detected

in the extract from sample 12G-C (1"-3"); and, the chromium concentration of 0.23 mg/l detected in the extract from sample 12G-S (0'-2') is below the regulatory limit.

As a result, no further action is expected to be required in the former Central Paint Room in support of delisting.

4.4 Area 13 - Former Alodine/Anodize Room

Conclusions

Four samples were collected for analysis in the former Alodine/Anodize Room. Sample 13SA-C (0"-1") was collected at a location where concrete staining was observed and analyzed for SVOCs. As stated in Section 3.1.1, when compared to the USEPA Generic SSLs, none of the SVOCs detected in 13SA-C (0"-1") were above the corresponding limits.

Samples 13A-S (0'-2'), 13B-S (0'-2') and 13C-S (0'-2'), which were each analyzed for TCLP chromium, were collected in the location of a former tank line where elevated concentrations of chromium were detected in soil samples (0'-2' and 2'-4' deep) under the initial Phase II Site Assessment. The chromium concentration of 8.1 mg/l detected in sample 13A-S (0'-2') extract exceeds the regulatory limit of 5 mg/l. The concentrations of chromium detected in the extracts from samples 13B-S (0'-2') and 13C-S (0'-2') were both below the regulatory limit.

Recommendations

Based on the TCLP chromium results for sample 13A-S (0'-2'), excavation and removal of concrete and soil is recommended in this area. Under the initial Phase II Site Assessment total chromium concentrations of 596 mg/kg and 575 mg/kg were detected in 0' to 2' and 2' to 4' deep soil samples collected at location 13A, respectively. Therefore, removal of soil to a minimum of 5' in this area is recommended. In addition, endpoint sampling and analysis for

TCLP chromium should be conducted to verify removal of the characteristically hazardous soil in support of delisting.

4.5 Area 14 - Former Degreaser Pit

Conclusions and Recommendations

One sample was collected in the sump of the former Degreaser Pit identified as Area 14. Elevated concentrations of trichloroethene were formerly detected in the concrete at this location. Sample 14A-C (1"-3") was collected in the sump of the degreaser pit and analyzed for TCLP trichloroethene. The concentration of TCE detected in the TCLP extract is below the regulatory limit. Therefore, no further action is expected to be required in the former Degreaser Pit in support of delisting.

4.6 Area 16 - Former Final Paint Rooms

Conclusions and Recommendations

During the initial Phase II Site Assessment, elevated concentrations of chromium were detected at location 16E which is located in a trench drain in the Final Paint Rooms. Accordingly, sample 16E-C (1"-3") was collected and analyzed for TCLP chromium. The result of the analysis for chromium of the TCLP extract for sample 16E-C (1"-3") is below the regulatory limit. Therefore, no further action is expected to be required in the former Final Paint Rooms in support of delisting.

4.7 Area 22 - Former Descale Pit

Conclusions and Recommendations

Sample 22A-S (0'-2') was collected in the former Descale Pit at a location where elevated concentrations of chromium had been detected in the 0' to 2' deep and 2' to 4' deep samples collected under the initial Phase II Site Assessment. The chromium concentration detected in the TCLP extract for sample 22A-S (0'-2') is below the regulatory limit. Therefore, no further action is expected to be required in the former Descale Pit in support of delisting.

4.8 Area 25 - Former Paint Storage, Mixing and Stripping Room

Conclusions and Recommendations

Two samples were collected in the former Paint Storage, Mixing and Stripping Rooms. Sample 25SA-C (0"-1") was collected at a location where concrete staining was observed and analyzed for SVOCs. As stated in Section 3.1.1, when compared to the USEPA Generic SSLs, none of the SVOCs detected in 25SA-C (0"-1") were above the corresponding limits.

Sample 25E-S (0'-2') was collected at a location where elevated concentrations of volatile organic compounds, including 1,2-dichloroethane, had been detected in 0' to 2' deep soil samples collected under the initial Phase II Site Assessment program. Accordingly, sample 25E-S (0'-2') was analyzed for TCLP 1,2-dichloroethane. As stated in Section 3.2, 1,2-dichloroethane was not detected in the sample extract. Therefore, no further action is expected to be required in the former Paint Storage, Mixing and Stripping Room in support of delisting.

4.9 Area 27 - Former Anodizing/Magnaform Pit

Conclusions

Under the initial Phase II Site Assessment program, elevated concentrations of chromium were detected in a sample of the concrete "subslab" (at 5,670 mg/kg) and 0' to 2' deep (at 714 mg/kg) and 2' to 4' deep (at 371 mg/kg) soil samples collected from below the "subslab" in the backfilled pit identified as Area 27. Under the Supplemental Phase II Site Assessment, two samples were collected for analysis at this location. Sample 27A-C (0"-1") was analyzed for total chromium and sample 27A-C (1"-3") was analyzed for TCLP chromium.

The total chromium result of 4,480 mg/kg for sample 27A-C (0"-1") exceeds the USEPA Generic SSLs for ingestion and inhalation. Additionally, the result for sample 27A-C (1"-3") of 43.8 mg/l exceeds the TCLP regulatory limit for chromium.

Recommendations

Based on the elevated concentrations of chromium detected at location 27A, additional investigation and remediation is required in this area in support of delisting. Presently, there is no information available regarding the dimensions of the backfilled pit or the extent of contamination in this area. Based on review of historical drawings, however, the former Anodize/Magnaform process area was approximately 40' by 75'.

A 20' by 20' sampling grid resulting in 12 sample locations would identify the extent of contamination in the area. Based on the results of previous sampling results, collection of one concrete core sample and a 0'-2', 2'-4' and 4'-6' deep soil sample below the "subslab" at each sampling grid location is recommended. Each concrete and soil sample should be analyzed for TCLP chromium. It should be noted that if a "subslab" is not detected at a grid sampling location, sample collection would not be required. After the extent of the "subslab" chromium

contamination is determined, remediation would be required in support of delisting to address soil and concrete which exceeds the TCLP regulatory limits.

4.10 Area X11 - Former Acid House Storage Facility

Conclusions and Recommendations

Four samples were collected for chemical analysis in the former Acid House Storage Facility at a location where PCBs were detected in a 1" to 3" deep concrete core sample collected during the initial Phase II Site Assessment. Concrete sample X11D-C (0"-1") was analyzed for PCBs, and none were detected.

Soil samples X11D-S1 (0'-2'), X11D-S2 (0'-2') and X11D-S3 (0'-2') were collected at a 5' radius around X11D. As stated in Section 3.2, the concentrations of PCBs detected in the soil samples are below the New York State limit of 50 ppm for listed hazardous waste as well as the NYSDEC recommended soil cleanup objective for PCBs of 10 mg/kg.

Therefore, no further action is expected to be required in the former Acid House Storage Facility in support of delisting.

A sunimary of the conclusions and recommendations is presented in tabular form on Table 4-1.

4.11 Additional Recommendations for Investigation

In addition to the conclusions and recommendations presented above, review of the initial Phase II Site Assessment results was undertaken in order to identify locations, in addition to the locations targeted under this Supplemental Phase II Site Assessment, in which TCLP regulated constituents were detected in soils or concrete at greater than 20 times the TCLP regulatory limit. The purpose of this review was to identify any additional areas for which investigation may be

Table 4-1

GRUMMAN AEROSPACE CORPORATION - PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT SUMMARY OF FINDINGS AND RECOMMENDATIONS

Area	Sample ID	Location	Analytical Results	Findings	Recommendations
3-Former North Plating Room	3SA-C (0"-1") 3C-C (0"-1")	Stained Area Trench Drain	SVOCs Cadmium	<ssls <ssls< td=""><td>No action. No action.</td></ssls<></ssls 	No action. No action.
ij	3C-C (1"-3")	Trench Drain	Chromium TCLP Cd	<ssls< p=""> <regulatory limit<="" p=""></regulatory></ssls<>	No action.
	3A-S (0'-2') 3B-S (0'-2')	Sump Sump	TCLP Cr TCLP Cd	Regulatory LimitRegulatory Limit	No action. No action. Remove sump & 5' of soil.
4-Former North Painting Room	4F-S (0'-2')	Former Paint Booth Drain	TCLP Cr	<regulatory limit<="" td=""><td>No action.</td></regulatory>	No action.
12-Former Central Paint Room	12SA-C (0"-1") 12C-C (1"-3") 12G-C (1"-3") 12G-S (0'-2")	Stained Area Former Paint Booth Former Paint Booth Former Paint Booth	SVOCs TCLP Cr TCLP Cr TCLP Cr	<ssls <regulatory limit<br=""><regulatory limit<br=""><regulatory limit<="" td=""><td>No action. No action. No action. No action.</td></regulatory></regulatory></regulatory></ssls 	No action. No action. No action. No action.
13-Former Alodine/Anodize Room	13SA-C (0"-1") 13A-S (0'-2") 13B-S (0'-2") 13C-S (0'-2")	Stained Area Former Tank Line Former Tank Line Former Tank Line	SVOCs TCLP Cr TCLP Cr TCLP Cr	<pre><ssls>Regulatory Limit <regulatory <regulatory="" limit="" limit<="" pre=""></regulatory></ssls></pre>	No action. Remove concrete & 5' of soil. No action. No action.
14-Former Degreaser Pit	14A-C (1"-3")	Sump	TCLP TCE	<regulatory limit<="" td=""><td>No action.</td></regulatory>	No action.
16-Former Final Paint Rooms	16E-C (1"-3")	Trench Drain	TCLP Cr	<regulatory limit<="" td=""><td>No action.</td></regulatory>	No action.

4-9

Table 4-1 (continued)

SUMMARY OF FINDINGS AND RECOMMENDATIONS GRUMMAN AEROSPACE CORPORATION - PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT

			Analytical	:	
Area	Sample ID	Location	Kesuits	Findings	Kecommendations
22-Former Descale Pit	22A-S (0'-2')	Former Descale Pit	TCLP Cr	<regulatory limit<="" td=""><td>No action.</td></regulatory>	No action.
25-Former Paint Storage, Mixing and Stripping Room	25SA-C (0"-1") 25E-S (0'-2")	Stained Area Former Storage Area	SVOCs 1,2-DCA	<ssls <regulatory limit<="" td=""><td>No action. No action.</td></regulatory></ssls 	No action. No action.
27-Former Anodizing/Magnaform Pit	27A-C (0"-1") 27A-C (1"-3")	"Subslab" "Subslab"	Chromium TCLP Cr	>SSLs >Regulatory Limit	Investigate extent and remediate. Investigate extent and remediate.
XII-Former Acid House Storage Facility	XIID-C (0"-1") XIID-SI (0"-2") XIID-S2 (0"-2") XIID-S3 (0"-2")	Floor Slab 5' from X11D-C 5' from X11D-C 5' from X11D-C	PCBs PCBs PCBs PCBs	<pre><ssls <="" <ssls="" pre=""></ssls></pre>	No action. No action. No action. No action.

Notes:

SVOCs - Semivolatile organic compounds

1,2-DCA - Dichloroethane TCE - Trichloroethene

SSLs - USEPA Generic Soil Screening Limits

warranted in order to delist the Plant 2 site based on the results of the Supplemental Phase II Site Assessment. A summary of the results of this review is presented in Table 4-2.

The initial approach was to compare the initial Phase II Site Assessment total concentration results with the Supplemental Phase II Site Assessment TCLP results as indicated in Table 4-3. The purpose of this comparison was to develop a semi-empirical relationship between total concentration and TCLP results to determine the total concentration above which exceedance of TCLP regulatory limits is expected. As can be seen in Table 4-3, however, there is no correlation.

Therefore, in order to address the necessity for potential additional sampling, a conservative approach was followed. First, the minimum total to TCLP results ratios in Table 4-3 were identified for both soil and concrete matrices. Among the samples which exceeded TCLP regulatory limits, the lowest total to TCLP ratio is 129 for concrete and 47 for soil, as can be seen in Table 4-3.

Next, using these ratios and the TCLP regulatory limits, upper total concentration limits for concrete and soil were calculated. Values of 129 for cadmium and 645 for chromium and lead (i.e., the regulatory limit of 1 of 5, respectively, multiplied by the minimum ratio of 129) were obtained for concrete. The upper total concentration limits calculated for soil are 47 for cadmium and 235 for lead and chromium.

The totals concentrations in Table 4-2 were then screened utilizing the upper limit values. The foregoing approach resulted in selecting the following locations for additional TCLP testing:

- Sample 23BS-1(0'-2') located in the former Clean Line Tank Pit. Chromium was detected at a concentration of 316 mg/kg in this soil sample.
- Sample 32CS-1(0'-2') located in the former Plating Room Pit. Cadmium was detected at a concentration of 70.1 mg/kg in this soil sample.
- Sample 37AS-1(0'-2') located in the area of a former plating operation. Lead was detected at a concentration of 555 mg/kg in this soil sample.

TABLE 4-2 GRUMMAN AEROSPACE CORPORATION PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT INITIAL PHASE II SITE ASSESSMENT CONCRETE CORE AND SOIL SAMPLING RESULTS WHICH EXCEED TCLP REGULATORY LEVELS BY 20 FOLD OR GREATER

	Sample		Concentration	TCLP Regulatory	Analyzed During
	Identification	Contaminant	(mg/kg)	Levels (mg/L)	Supplemental Phase II
					Supplemental Filase II
	1B (1"-3")	Chromium	123	5.0	
	3C (1"-3")	Cadmium	474	1.0	√
l ete	3C (1"-3")	Chromium	280	5.0	
	12C (1"-3")	Chromium	115	5.0	✓
Concrete	16E (1"-3")	Chromium	264	5.0	✓
	27ASS (1"-3")	Chromium	5670	5.0	✓
	43A (1"-3")	Chromium	335	5.0	
	43A (1"-3")	Lead	108	5.0	
	1AS-1 (0'-2')	Lead	204	5.0	
	3AS-2 (2'-4')	Chromium	102	5.0	
	3BS-1 (0'-2')	Cadmium	103	1.0	✓
	3BS-2 (2'-4')	Cadmium	23.8	1.0	1
	3CS-1 (0'-2')	Cadmium	30.3	1.0	,
	4DS-1 (0'-2')	Chromium	190	5.0	The S. S. Commonwell of States of Common and
	4FS-1 (0'-2')	Chromium	4580	5.0	✓
	4FS-2 (2'-4')	Chromium	213	5.0	
	12FS-1 (0'-2')	Chromium	145	5.0	
	12GS-1 (0'-2')	Chromium	141	5.0	✓
	13AS-1 (0'-2')	Chromium	596	5.0	✓ · · · · · · · · · · · · · · · · · · ·
Soil	13AS-2 (2'-4')	Chromium	575	5.0	
ဟ	13CS-1 (0'-2')	Chromium	109	5.0	✓
	22AS-1 (0'-2')	Chromium	608	5.0	4
	22AS-2 (2'-4')	Chromium	114	5.0	
	23BS-1 (0'-2')	Chromium	316	5.0	
	27ASSS-1 (0'-2')	Chromium	714	5.0	
	27ASSS-2 (2'-4')	Chromium	371	5.0	
	32CS-1 (0'-2')	Cadmium	70.1	1.0	
	37AS-1 (0'-2')	Lead	555	5.0	
	43AS-1 (0'-2')	Chromium	127	5.0	
	43BS-1 (0'-2')	Chromium	233	5.0	
	43BS-2 (2'-4')	Chromium	188	5.0	

CONCRETE CORE AND SOIL SAMPLING RESULTS
COMPARISON OF INITIAL PHASE II TOTAL AND SUPPLEMENTAL PHASE II TCLP RESULTS PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT **GRUMMAN AEROSPACE CORPORATION Taue 4-3**

	Sample Identificati	lentification		Phase II	Supplemental Phase II Ratio of Total	Ratio of Total
	Initial	Supplemental		Total Result	TCLP Result	Result to
	Phase II	Phase II	Parameter	(mg/kg)	(mg/L)	TCLP Result
	3C	3C-C (1"-3")	Cadmium	474	ח	
	၁င	3C-C (1"-3")	Chromium	280	0.023	12,174
əje	12C	12C-C (1"-3")	Chromium	115	0.12	958
JOI	₹ Y	12G-C (1"-3")	Chromium	Ą Z	D	1
uo:	14A	14A-C (1"-3")	Trichloroethene	9.5	0.29	33
0	16E	16E-C (1"-3")	Chromium	264	0.25	1,056
	27ASS	27A-C (1"-3")	Chromium	5670	46.8	129
	3AS-1	3A-S (0'-2')	Chromium	42.5	0.028	1,518
	3BS-1	3B-S (0'-2')	Cadmium	103	2.2	47
	4FS-1	4F-S (0'-2')	Chromium	4580	0.56	8,179
ı	12GS-1	12G-S (0'-2')	Chromium	141	0.23	613
ios	13AS-1	13A-S (0'-2')	Chromium	596		74
3	13BS-1	13B-S (0'-2')	Chromium	88.9	0.016	5,556
	13CS-1	13C-S (0'-2')	Chromium	109	0.024	4,542
	22AS-1	22A-S (0'-2')	Chromium	809	0.12	2,067
	25ES-1	25E-S (0'-2')	1,2-Dichloroethane	1.1	n	

QUALIFIERS

U: Compound analyzed for but not detected.

J: Compound found at a concentration below the CRDL.

NOTES

---- : Not applicable.

NA : Not analyzed.

Value exceeds TCLP Regulatory

Level.

Collection of 0 to 2 foot deep soil samples and testing for the corresponding TCLP metal is recommended in the three areas identified above. It should be noted that TCLP testing is not warranted for soils recommended for remediation in Sections 4.1 through 4.10. Additionally, based on the approach described above, additional TCLP testing of concrete does not appear to be warranted.

APPENDIX A

CORRESPONDENCE DOCUMENTING NYSDEC APPROVAL OF WORK PLAN

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



June 11, 1996

Michael D. Zagata missioner

Mr. John Ohlmann, P.E. Northrop-Grumman Corporation Bethpage, NY 11714-3582

Dear Mr. Ohlmann:

RE: C

Grimmen Corporation
Site Number: 130003A

This is in response to the April 1996 Phase II Assessment Report for Plant 2 which was prepared by Dvirks and Bartilucci, and John Cofman's letter of May 2, 1996 in which your proposed clean-up goals for Plant 2 were presented.

The clean-up goals presented in Mr. Cofman's letter are not acceptable to the State of New York for the following reasons:

- Materials containing Cd, Cr, Hg, and Se at concentrations at or approaching the proposed clean-up goals would probably be classified as characteriatic hazardous wastes. As long as hazardous wastes remain at the facility, the facility would not be delisted from the Registry of Inactive Hazardous Waste Disposal Sites. If the wastes are adequately contained, we would likely only downgrade the site classification.
- The bases for the clean-up levels provided for the states of Connecticut,
 Massachusetts, and New Jersey were not provided, nor were the bases by which these
 clean-up levels are used by the respective states. For example, what are the
 definitions for industrial, commercial, or residential properties as used by the
 respective states? Without this information, we cannot accept this data. It should be
 noted that the clean-up levels presented for the NJDEP are guidance values, not
 standards.
- 3. The process used to select the proposed clean-up goals (last column of Table 1) appears to be arbitrary in nature.

NOTE: The NYSDEC's clean-up goals for soils contaminated with cadmium is 10 ppm and for chromium 50 ppm. The values presented in Table 1 are incorrect.

The clean-up goals for the Plant 2 facility must be based upon the foreseeable future risks considering the potential exposure scenarios. In order to assess these risks, additional data is required. Specifically, samples of the surface and the top 1" of the concrete floor in impacted areas must be collected and analyzed. Wipe samples would be appropriate for the surface sampling exercises. Once this data is collected, then the risks can be determined, followed by the selection of

clean-up goals and remedial actions (if required). Chemical analyses for metals, VOCs, and total petroleum hydrocarbons (TPH) must be conducted using the previous data as a guide for determining which analyses would be required in each area investigated.

Additionally, areas where cadmium concentrations are in excess of 20 ppm and/or chromium concentrations are in excess of 100 ppm must be resampled and analyzed pursuant to the Toxicity Characteristic Leaching Parameter (TCLP) test. Due to the number of samples involved, we would recommend that a statistical approach be used to limit the cost of this program. For example, a simple empirical equation could be developed to equate sample concentration (total basis) to the TCLP value. Using this type of an approach, you might be able to get by with a sample set consisting of 10 or fewer samples.

In order to minimize any future confusion in this matter, we urge you to submit a work plan in which the sampling and analytical protocols are presented. This work plan can be in letter form. We would be willing to meet with you at your convenience to discuss these matters. We suggest that such a meeting be held at your offices and be combined with a walk through at Plant 2. I will contact you in the near future to arrange such a meeting. If you have any questions regarding this matter, please feel free to contact me at (518) 457-3395.

Very truly yours,

John D. Barnes, P.E.

Environmental Engineer 2

Bureau of Bastern Remedial Action

Division of Hazardous Waste Remediation

cc:

- S. Ervolina
- S. McCormick
- J. Harrington
- T. Vickerson (NYSDOH)

NORTHROP GRUMMAN

July 22, 1996 ETC96-236

John D. Barnes, P.E.
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233

Subject:

Plant 2, Bethpage, NY

Supplemental Phase II Site Assessment

Dear Mr. Barnes:

The purpose of this letter is to provide a work plan for completing the above referenced site assessment for your review and comment. This work plan is based on the site inspection conducted on June 19, 1996, and our subsequent telephone conversation on June 27, 1996.

The locations, matrices and analyses of the samples to be collected as part of this supplemental assessment are provided on the attached table. The sample collection and analytical methods, except for TCLP (which was not performed under the original Phase II program), will be the same as contained in the Phase II Site Assessment Report dated April 1996. TCLP extraction will be performed using USEPA SW846 Method 1311, with analysis on the extract being performed using USEPA SW846 Methods 6010 and 8240.

We do not plan to conduct this supplemental site assessment until we receive your approval.

Also enclosed, as requested in your letter dated June 11, 1996, is the basis for the cleanup levels for the states of Connecticut, Massachusetts and New Jersey, together with USEPA Soil Screening Guidance.

Grumman Aerospace Corporation
Electronics & Systems Integration Division
A Subsidiary of Northrop Grumman
South Oyster Bay Road
Bethpage, New York 11714



July 22, 1996 ETC96-236 Page 2

If you have any questions with regard to this work plan or require additional information, please do not hesitate to contact me at (516) 575-4680 or our consultant, John Ohlmann at (516) 575-2385.

Very truly yours,

GRUMMAN AEROSPACE CORPORATION

John Cofman, Manager

Environmental Technology & Compliance

M/S: D08-001

TFM/tam(cc)

Enclosures

cc.

T. Maher (D&B)

R. Walka (D&B)

00801/T0701601.LTR

GRUMMAN AEROSPACE CORPORATION PLANT 2 SUPPLEMENTAL PHASE II SITE ASSESSMENT WORK PLAN

Sample Location	Sample Matrix	Sample Analysis
3A	Soil (0-2')	Cr TCLP
3B	Soil (0-2')	Cd TCLP
3C	Concrete Core (1"-3")	Cr & Cd TCLP
4F	Soil (0-2')	Cr TCLP
12C	Concrete Core (1"-3")	Cr TCLP
12F or G	Concrete Core (1"-3") & Soil (0-2')	Cr TCLP
13A, B & C	Soil (0-2')	Cr TCLP
16E	Concrete Core (1"-3")	Cr TCLP
22A	Soil (0-2')	Cr TCLP
27A	Concrete Core (1"-3")	Cr TCLP
14A	Concrete Core (1"-3")	TCE TCLP
25ES-1	Soil (0-2')	1,2-DCA TCLP
X11D	3 Soil (0-2') ¹	PCB (Total)
3C **	Concrete (0-1")	Cr & Cd (Total)
X11D	Concrete (0-1")	PCB (Total)
27A	Concrete (0-1")	Cr (Total)
	,	(10,000)
3 (Stained Area)	Concrete (0-1")	SVOC (Total)
12 (Stained Area)	Concrete (0-1")	SVOC (Total)
13 (Stained Area)	Concrete (0-1")	SVOC (Total)
25 (Stained Area)	Concrete (0-1")	SVOC (Total)

Notes:

- 1. Three samples located at a 5' radius around X11D.
- 2. Quality Control samples will be collected as follows:

Number/Type	Sample Matrix	Sample Analysis
1 Matrix Spike1 Matrix Spike Duplicate1 Matrix Spike	Concrete Concrete Soil	SVOC Total, Cd, Cr, PCB SVOC Total, Cd, Cr, PCB Cd TCLP, Cr TLCP, DCE
1 Matrix Spike Duplicate	Soil	TCLP, TCE TCLP Cd TCLP, Cr TCLP, DCE
1 Field Blank	Soil Sampling Equipment Rinsate	TCLP, TCE TCLP Cd TCLP, Cr TCLP, PCB,
1 Field Blank	Concrete Sampling Equipment Rinsate	TCE TCLP, DCE TCLP Cd, Cr, PCB, SVOC

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233



August 6, 1996

Mr. John Ohlmann, P.E. Northrop-Grumman Corporation Bethpage, NY 11714-3582

Dear Mr. Ohlmann:

RE:

Ortmon Corporation

Site Number: 130003A

The New York State Departments of Environmental Conservation and Health have reviewed the letter work plan for the additional investigation at Plant 2 which was developed by Dvirka and Bartiluuci, Inc. Please be advised that this work plan is hereby approved.

The clean-up goals for Plant 2 will be based upon the risks posed at the plant. The State of New York is not bound to accept the clean-up goals which are used by the states of New Jersey, Connecticut, or Massuchussetts.

If you have any questions regarding this matter, please feel free to contact me at (518) 457-

Very truly yours,

John D. Barnes, P.E.

Environmental Engineer 2

Bureau of Bastern Remedial Action

Division of Hazardous Waste Remediation

100000 MATERIAL OF THE

CC:

S. Ervolina

S. McCormick

J. Harrington

T. Vickerson (NYSDOH)

APPENDIX B



Report Number:	\ Proje	ect Number: 1167-02	Date: <u> </u>	8-26-96
Field Log Book P	age Number: 93-9	7	í.	
Project: Grumme	in Bothpage Plant	2 Supp. Phase II		
Address: Plan	m 2			
	Warm + Humid		(AM) UA (PM) VA	InchesInches
Temperature: (AM	$\begin{array}{ccc} \text{M} & \frac{\$\$}{\$} & \text{Wind Spee} \\ \text{M} & \frac{\$\$}{\$} & \text{Y} & \text{Wind Spee} \end{array}$	d: (AM) NA MPH	Wind Direction:	(AM) ————————————————————————————————————
Site Condition:				
Personnel On Site:	Name	Affiliation	Arrival Time	Departure Time
	Keith Klaus	DoB	1700	0015
	Joe Susco	GA C	1705	1830
	Kevin Mc Gourry	LAWES	1700	0015
	Carl Pedersen	LAVES	1700	0015
	John Mayx	Pinkerton Security	1700	0015
2	<u>'</u>			6.
				8
				
*				
•	9			
***	5 5		.8	
			9	
Subcontractor World	c Commencement: (A	.M)	(PM) 182	5
abcontractor World	c Completion: (A	M) 0015	(PM)	



DATE:	4	8-	2	6-	9	6
<i></i> ,						

General work pe	rformed today by D&B:	Inspect concrete coring and soil sampling
<u>at</u>	locations 12.6	Inspect concrete coring and soil sampling 12-C area 12 13-A, 13-B.
	1- Samples york	2 - concrete samples 0-2 : 1265, 134, 13B 2 - concrete samples 1-3" : 1266, 1266 2 - concrete samples 0-1" : 126-56, 1350
		2 - concrete samples 1-3" (1266, 1266
		3 - CONCRE SAMPLE 0-1" 6 17 <-55 1350
- Calibrat	e PID (microtip))
	1	
		results (include problems and corrective actions):
- insp	ection of site ac	ccessibility
Inspec	TION OF SITE 1957OF	intion
List type and loca	tion of tom marketing de	
		and results (include equipment used and monitoring results):
-Obtain p	A) (MICROTIA) readir	ngs From soil samples and boreholds.
3		3
		- W
9		
3		
Verbal comments	received from subsequen	actor (include construction and testing problems, and
recommendations/	regulting action).	A
	resulting action): V	' A
	30	
	V T	
congred her		.
rebaten ph:		Reviewed by:



DB-DFAR

	8-76-96	
DATE:	0 28 1	

	ed today by subcontractor(s) (includes equipment and labor breakdown):
on s	11e 1700
1855-	Be
1	Begin Coring Concrete @ 126.
	Core complère sample 1-3"
2000-	Obrain Split Spoon 0-2'
	COULTE COR 1-)
2125	Concrete core 12 (Stained area) 0-1"
2135.	Area 13 stgined area concrete core 0.1" @ location 13
2147	- 3/M 3/08/
2360	2011 11/11/12
	Sample 13 C O.Z
2330	- LALICE II as spir spoon.
2335	- LAWES WILL attempt sample tomorrow
6615	- Secure area , Seal all boreloss with concrete Security escont off site
- 1 3	secontry rocont or site
* No.1	re- Decon performed at each sample location.
	FOT CONCRED CONTROL TO I SOLT OF
	FOR CONCRETE CORING BIT and IDIT Spoon.
At	1/8



Report Number:	Proje	ect Number: 1167-02	Date:	1-27-96
	Page Number: 98-10			
Project: GAC	Plant 2 Suppliment	a) Ohase II		
\wedge	hpage			N.
Weather: (AM (PM)	: Warm and Humi		(AM) NA (PM)	Inches Inches
Temperature: (AM	n F Wind Spee	ed: (AM) 10A MPH 11PH MPH	Wind Direction:	(AM) WA
Site Condition:				
Personnel On Site:	Name	<u>Affiliation</u>	Arrival <u>Time</u>	Departure Time
	Korth Klaus	D+B	1700	0030
	Jac Suxo	GAL	1700	1735
	Koun Mc Garry	LANES	1700	0030
3.5	Chris O'Shea	1(1700	0036
	John Mayes	Security	1700	0030
	<u> </u>			
	123	2	•	
21			[101]	
			-	
,				
Subcontractor World	k Commencement: (A	AM)	(PM) 170	<u>ن</u>
bcontractor Worl	k Completion: (A	um 6030	(PM)	



DATE:	8-27-96	

General work performed today by D&B	: - Calibrate Microrip PID
el el	- Inspect Deconformination activities
V	- Observe sample collection
	- Observe sample collection - Secure and deliver samples
	Secore SIMO Servery
ist specific inspection(s) performed and	d results (include problems and corrective actions):
- INSPECT SITE MESTORGILEN	
	8
	=
	<u> </u>
Obtain PID megsurements F	rom samples and boreholds
	·
erbal comments received from subcontr commendations/resulting action):	ractor (include construction and testing problems, and
	o core through subfloor concrete slab.
. 1	rult is to backfill borehole and obtain addition
,	1 1
extension rod to ach	ive proper longth, 4'9" minimum
1 /// NI	
pared by:	Reviewed hv



DB-DFAR

	X-)> a/	
DATE:	0-21-96	

On Sire 1700
1740 : prepare to take soil sample (0.2')@ 13-C
- experience some difficulty with reinforcement bor in concrete
1900- Soil sample obtained
1910 - Mobilize to location 27-A
2015 - Drill 12" diameter hole Through concrete Floor to Set
4" ID casing to obtain subslab core begin to excounte
2100 - 1 A) (6 mm) Sorbide.
2100 - LAWES measures bit and extensions on size, complete lengths
Insufficient to obtain sub slab core - backfill borehole and secure Forevening
2115-Begin to come at location 4-F
2225 - Complete coring 4-F (concrete 6" Mack and very hand).
- Obtain Soil Sample (1-)
2250 - Mobilize to location 14-4 to obtain 1-3" concord care
Sample Core obtained
begin to demobilize for shift
0030 - ESCORT (SECURITY) OFF SIX
* 1) 1
* Note: Deconsamination performed on apparatus before
work at now locations



Report Number:		ject Number: 167-62	Date: &	-28-96
Field Log Book Pa	age Number: 102	05	"	
Project: Grumm	nan Supp. Phase]		11	
Address: Pant	- 2			
•	Warm + Humid	Rainfall:	(AM)(PM)	Inches Inches
Temperature: (AM (PM)	F Wind Spo	eed: (AM) — MPH (PM) — MPH	Wind Direction:	(AM) UA
Site Condition:		(9)		
Personnel On Site:	Name	Affiliation	Arrival <u>Time</u>	Departure <u>Time</u>
	Keith Klaux	DOB		
) -	KANIM McGOLATY	LAWES	1650 1745	2400
-	Chris G'Sha	LAWES	1743	2400
-	John Hayes	Security Security	1745	2400
r s	Gotte Hay 25	J. CORTEY	- 17-17	2 -100
-			-	
F1			•	
(2)				
_				
_				
-		7		
-				
Subcontractor Work	Commencement:	(AM)	(PM) 174	5
ocontractor Work	: Completion:	(AM)	(PM) 2400)



DATE:	8-28-96	
DAIL:	0 20 .	

General work performed today by De	&B: - Calibrate Microrio
= -	- Collect various soil and concrete sample
	- Observe sample rechniques
	- Observe Decontamination procedures
	- Secure and deliver somples
List specific inspection(s) performed	and results (include problems and corrective actions):
Inspect site access	
Inspect site restoration	
Co.	
Obtain PID Readings Fro	m samples and horeholds
2	121
Verbal comments received from subco ecommendations/resulting action):	ontractor (include construction and testing problems, and
9 %	
	6
. 2	•
pared by: Keith Klans	Davison d box
	Reviewed by:



DATE:	<u></u>	-2	8.	96	

Work performed today by subcontractor(s) (includes equipment and labor breakdown):

1745-LAVES on SIZE
1800 LANES mobilizes to location 27-A to obtain sub slab concrete
(Are as a location 2 1-A to obtain 305 Slab Concrete
1915 - Bre a to concert excavate boreholo, set 4" 1D casing (PUC)
1945 - 113 CONE SUN Slab
1915 - Brain to come sub slab 1945 - 6"1 Come recovered (concrete). * Note: entire concrete come is green in
2030 - Ann 27 A since Concrete spaled (both sub slab and surface
THE DECUM
2100 - Prepare to sample at largtion 1) (Acid house).
2145- Splitspoon Sample @ XIID-53
2150- core @ X-11052
2155- Surface concrete sample taken X-110-C (0-1")
2230 Sal Samolo X-1105> Obtained
2240 · core location 7-11051
2310 XIIDSI Soil sample obtained
Secure six demobilize for nich.
2400 - SPOURTY PSOUT OFFSIRE
* Note: Decontamination performed before all sample events
TO THE POST OF THE
B-DFAR



Report Number: _	Pr	oject Number: 1167-62	Date: _	5-29-96
Field Log Book Pa	age Number: 106)	67		
Project: Grumm	on Plant 2, Sug	pp. Phose II		
Address: Plant	-2, Bothpage			
Weather: (AM) (PM):	Marm	Rainfall:	(AM)(PM)	
Temperature: (AM (PM)	78 °F Wind Sp	peed: (AM)	Wind Direction:	(AM) ————————————————————————————————————
Site Condition:				
Personnel On Site:	Name	A CETIONICA	Arrival	Departure
	Korth Khus	Affiliation N. 12	Time	Time
-		15+19	1650	2100
-	Keuin Mc Gourry	LAWES	1700	5100
-	Chris Osley	LAWES	1700	5100
-	John Hayre	Security	1700	2100
-		- E		•
-	₩.		-	
<u>-</u>			•	
_			·	· ————
_	8			
*				
Subcontractor Work	Commencement:	(AM)	(PM) 176	
sbcontractor Work	Completion:	(AM)	(PM) ZIC	0



DATE:	8-29.96

General work performed today by D&B:	Calibrate Microtip PID
_	Secure samples
	Observe sample collection
	Observe sample decor
	obtain Field blank Samples
_	Secure and deliver simple
	ults (include problems and corrective actions):
	2 22
Obtain PID Measurements of	results (include equipment used and monitoring results):
	~
Verbal comments received from subcontractor recommendations/resulting action):	(include construction and testing problems, and
	9
repared by: Keith Klac	Reviewed by:



DB-DFAR

DATE: 8.29-96

Work performed today by subcontractor(s) (includes equipment and labor breakdown):
1700 - on site
1730 - Prepare to core @ 16-E
1805- Concrete core obtained
1815- Impare to obtain soil sound @ 25 (3)
1000 JOI Samur Secure
- 1720 - Concrete Surface: Stop Only
1940 Obrain split spoon Field blanks
2000- Obtain Core barrel Field blank samples
2100. Essort OFC SITE

APPENDIX C

AIR MONITORING FORMS



AMP

	CAC		ORING FORM	817/106
PROJECT!	AME: GAC	- Supp Phase I		DATE: 8/26/96
PROJECT N	NMBER: 1167-	-02		NSTRUMENT: MICIOTIA
RECORDE	BY: Keith	Klaux		CALIBRATION DATE: 8/26/96
WEATHER	CONDITIONS:	Jarm and Humid		
TIME	LOCATION	WIND SPEED AND DIRECTION	Borehole/ READING ppm	OBSERVATIONS
2000	12-6	NA	6.7	in borehole.
2055	12-Concre	NA	0.0	
2145	13-A	NA	9.0	bosehole
2146	13-A	NA	0.1	Floorlevel
2726	13-8	NA	9,5	Borehole
2 2 2 6	13-B	NA	0.7	Floorlevel
	(a)			
	;•			
CORDING	PROCEDURES/RE	MARKS:		
<u> </u>				
	-			



AMP

PROJECT NUMBER: 1167-02

ALR MONITORING FORM
Plant 2

DATE: 5-27-96 INSTRUMENT: MICTOTIP RECORDED BY: KOTH KING CALBRATION DATE: WEATHER CONDITIONS: WINN HUMIN WIND SPEED TIME LOCATION READING PPM AND DIRECTION OBSERVATIONS 2.7 1910 136 Borehole NA 2035 6,8 RECORDING PROCEDURES/REMARKS: .



	GAL	Supp Phas TT	ORING FORM	DATE: 8-28-96
PROJECT	TUMBER: 167	SOPP THATE IS	IAN'I <	DATE: O 28 18
PROJECT	DBY: // Th	2)		INSTRUMENT: MICROTIP PID
				_ CALIBRATION DATE:
WEATHER	CONDITIONS: —	1074		
TIME	LOCATION	WIND SPEED AND DIRECTION	READING	OBSERVATIONS
1945	27-A	NA	0.0	
7151	X1110-53 X1110 52		19.5	Borehale
2236			= 141,5	Borehole
2314	X111) SI		141,9	Borehdo
10	a			
}				
		e.		
			2	
			0	
				2
				7
CORDING	PROCEDURES/RE	MARKS:		
MF				



AIR MONITORING FORM

WEATHER CONDITIONS: WITH / Clear			CALIBRATION DATE:	
TIME	LOCATION	WIND SPEED AND DIRECTION	READING	OBSERVATIONS
	25ES1	NA	14,7	Breathing zone
1701	25ES)	NA	Ø. ø.	Breathing 2000
		[9]		
		,		
				p%.
ORDING	PROCEDURES/RE	MARKS:		



AMP

			ORING FORM	/
PROJECT	IAME: GN	mman flat 2	D	ATE: 9/5/41
PROJECT N	UMBER: 18	20-02		ISTRUMENT: 0VM-128
RECORDED) BY:	Keith Robins	с.	ALIBRATION DATE: 9/5/46
WEATHER	CONDITIONS:	SURAY/COOL		' (
ТІМЕ	LOCATION	WIND SPEED AND DIRECTION	READING HE	OBSERVATIONS
800 pa.	3 A	culm	٥.٥ مرم و	Insoil (0-2)
930 pm	3 B	cula		In soil (0-2)
650 pm	3 C 3 staned arth	calm	0.0 ppm	Cuncrete (1"-3")
700pm	3 staned arch	(alm	0.0pm	In when of strined concrete
		25		
		120		
		<u> </u>		
		a a		
		<u> </u>		
CORDING	PROCEDURES/REA	MARKS: DUF	1/120 ubilaed a No votati	to conducto Le organic compounds / sampling activities.
			0 0	

.



		AIR MONITO	KING FORM		- 1 1
DIECT!	AME:	6 ruman Planta		DATE:	19/96
PROJECT	UMBER:	11.67-02		INSTRUMENT: _	OVA/128
RECORDE) BY:	Grumman Plant2 11.67-02 Keith Robins		CALIBRATION D	ATE: 9/9/9
	CONDITIONS: _				, ,
TIME	LOCATION	WIND SPEED AND DIRECTION	OVA ppm	OBSERVA	TIONS
430 pa	22A	Calm	0.0 ppm	1	(6-2)
32 14					
0					
	ti.				li .
			# 6		"
		/			
				*	
CORDING	PROCEDURES/RI	MARKS: No	vocs defe	ctad duri	ny drilling
(g					

APPENDIX D

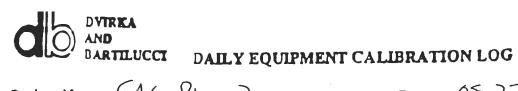
EQUIPMENT CALIBRATION LOGS



DECL

DAILY EQUIPMENT CALIBRATION LOG

roject Name: Grumma oject Number: 1167-02	n Plant 2	Date: Calibrated	8-26 By: M-Rauber K. Klavs
		I	100
Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Century 128 OVA	95 ppm CH4 Ges	NA	
Photovac Microtip	100 ppm Isobutiyae	11845	160 pm
V			
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	70		
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ři –	9		3
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	i is		



roject Name: _	GAC	Plant	5	В.	Date: _	08-	27 - 96		_
oject Number	1167	50.			Calibrat	ed By:	M-Ranber	K. Klacy	_

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations		
Century 128 OVA	95 opm CHa Ges	4735	NA		
Photovac Microtip	95 ppm CH4 Gres 100 ppm Isobutlyme	1 1735	100		
	4				
		<u> </u>			
	"				
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	2 2				
			9		



AND BARTILUCCI DAILY EQUIPMENT CALIBRATION LOG

Jject Name: Grunman Plant Z	Date: 8-28-96
oject Number: 1167-02	Calibrated By: M. Rauber K. Th Khy

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Century 128 OVA	95 ppm CH4 Ges	NP	
photovac Microtip	100 ppm Isobutlyine	1800	100
	- 1		
		<u> </u>	
	<u> </u>		
6		•	
30	T.		
			P
3			
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DAILY EQUIPMENT CALIBRATION LOG

roject Name: Grund ject Number:	nen Plant 2	Date: Calibrated i	7/5/96, 9/9/96 By Keith Robins -	-
Instrument Name	Calibration			7
and Model Number	Method	Time	Readings and Observations	
OVA/128 (40085)	95 Methone	430pm	Calibrated to 90 ppm	9/5/
OVN/128 (44085	95 //a Meltine	330 Pm	Calibrated to 88 ppm	9/9/
				1
	(S)			
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				ŧ.
1		72		
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APPENDIX E

SAMPLE INFORMATION RECORDS

SAMPLE INFORMATION	N RECOR	D
SITE Grumman Plant 2 SAM	D1 17 CD E311	LANK <
SAMPLE LOCATION/WELLNO. 12 G	PLE CREW	
FIELD SAMPLE I.D. NUMBER 126	DATE	8-26-96
TIME 1945 WEATHER INDOORS	_	TEMPERATURE 85
SAMPLE TYPE:		
GROUNDWATER SEDIMENT		
SURFACE WATER/STREAM		
SOIL	OTHER (De	
WELL INFORMATION (fill out for groundwater samples):		
DEPTH TO WATER MEASUREMENT	METHOD	
DEPTH OF WELL MEASUREMENT		
VOLUME REMOVED REMOVAL METH		
FIELD TEST RESULTS:		
COLOR Gray pH NA	OD	OR NA
TEMPERATURE (°F) 1/A SPECIFIC CONDUCTANCE (umb		
OTHER (OVA, Methane meter, etc.)		8)
	8	
CONSTITUENTS SAMPLED:		
	ii)	
REMARKS: Core 6" Thick, Sample Interval	1-3"	

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10

WELL CASING VOLUMES

2" = 0.16 2-1/2" = 0.24

3" = 0.37 3-1/2" = 0.50 4" = 0.65 6" = 1.46

AND SAMPLI BARTILUCCI	E INFORMATION RECORD
SITE GNAMAN Plant 2	SAMPLE CREW LAWES
SAMPLE LOCATION/WELLNO. 12-C	
FIELD SAMPLE I.D. NUMBER 12 (DATE 8-26-96
TIME 2030 WEATHER	indoors TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER	SEDIMENT
	AIR
	OTHER (Describe, i.e., septage, leachate) Concrete Core
WELL INFORMATION (fill out for groundwater	
	MEASUREMENT METHOD
	MEASUREMENT METHOD
VOLUME REMOVED	REMOVAL METHOD
FIELD TEST RESULTS:	
COLOR Gray PH	ODOR
TEMPERATURE (°F) SPECIFIC C	ONDUCTANCE (umbos/cm)
OTHER (OVA, Methane meter, etc.)	
CONSTITUENTS SAMPLED:	

REMARKS: Core 6" Hick, Sample Interval 1-3"

GAL/FT 1-1/4" = 0.077 2" - 0.16 3" - 0.27

3" = 0.37 3-1/2" = 0.50 4" = 0.65 6" = 1.46

	AND BARTILUCCI
(

SAMPLE INFORMATION RECORD

SITE G	rumman	Plant	2		SAM	PLE CREW	LAh	JES	
	OCATION/								
FIELD SAN	MPLE I.D. N	UMBER _	120	S ((500	Fare Concre	DATE	8-2	6-96	
TIME	055	WE	ATHER _	indoors			TEMPE	RATURE	
SAMPLE T								_	3)
GROUNDW	ATER		· .	SEI	DIMENT				
									<u></u>
						OTHER (De	scribe, i.e.,		2.
WELL INFO	RMATION	(fill out for	groundwa	ter samples):	NA -				
DEPTH TO	WATER		¥	MEASU	REMENT	METHOD _			
DEPTH OF V	WELL			MEASUI	REMENT	METHOD			
									# 9
FIELD TEST									
COLOR	Gray		_ pH _			OD	OR		
TEMPERATI	ure (°f) _		SPECIFIC	CONDUCTA	NCE (uml	nos/cm)			
OTHER (OV	A, Methane	meter, etc.)			,				
		(6)							
CONSTITUE	NTS SAMP	LED:							
		· · · · · · · · · · · · · · · · · · ·			×				8
			0						•
REMARKS:	Samp	e int	erual	0-1"				-	
¥	9	ei ei					(9		
G		l-1/4" = 0.6 l-1/2" = 0.1(77	VELL CASING 2" = 0.16 2-1/2" = 0.24		ES 3" = 0.37 3-1/2" = 0.5		4" = 0.65 6" = 1.46	•

AND BARTILUCCI	SAMPLE INFORMAT	TION RECORI	
SITE Grumman Plant	2	SAMPLE CREW	LAWES
SAMPLE LOCATION/WELLNO.	13		
FIELD SAMPLE I.D. NUMBER			8-26-96
TIME 2125 WEAT	THER indoor		TEMPERATURE
SAMPLE TYPE:			
GROUNDWATER	SEDIME	INT	
SURFACE WATER/STREAM			
SOIL		OTHER (Desi	
WELL INFORMATION (fill out for	groundwater samples): 🔘 /		
DEPTH TO WATER			R 0
DEPTH OF WELL	MEASUREM	ENT METHOD _	
VOLUME REMOVED			
FIELD TEST RESULTS:			
COLOR Gray	рН	ODO	PR
TEMPERATURE (°F)	PECIFIC CONDUCTANCE	(umhos/cm)	
OTHER (OVA, Methane meter, etc.)		9 12	
2			п
CONSTITUENTS SAMPLED:		8	
REMARKS: Sample int	erual O-)"	,	
			2

WELL CASING VOLUMES

2" = 0.16 3

2-1/2" = 0.24 3

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10

3" = 0.37 3-1/2" = 0.50 $4^{m} = 0.65$

SAMPLE INFORMATIO	
SITE Grumman Plant 2 SAI	MPLE CREW LAWES
SAMPLE LOCATION/WELLNO. 3-A	
FIELD SAMPLE I.D. NUMBER \\ \frac{13 \text{ A}}{2000}	DATE 8-26-96
TIME 2146 WEATHER	TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER SEDIMENT	
SURFACE WATER/STREAM	
SOIL X	OTHER (Describe, i.e., septage, leachate)
WELL INFORMATION (fill out for groundwater samples):	
DEPTH TO WATER MEASUREMENT	METHOD
DEPTH OF WELL MEASUREMENT	г метнор
VOLUME REMOVED REMOVAL MET	HOD
FIELD TEST RESULTS:	
COLOR Brown pH	ODOR
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (un	abos/cm)
OTHER (OVA, Methane meter, etc.)	
CONSTITUENTS SAMPLED:	
EMARKS: 26 Blows, 24" Penetration, 12" rec	overy Brown silty medium
GAL/FT 1-1/4" = 0.077 2" = 0.16	ARS 3" = 0.37

BARTILUCCI	LE INFORMATION RECORD
SITE Grumman Plant 2	SAMPLE CREW LAWES
SAMPLE LOCATION/WELLNO. 13 B	
FIELD SAMPLE I.D. NUMBER 13	B DATE 8-26-96
TIME 22) WEATHER	TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER	SEDIMENT
SURFACE WATER/STREAM	AIR
COT	OTHER (Describe, i.e., septage, leachate)
WELL INFORMATION (fill out for groundwate	
DEPTH TO WATER	MEASUREMENT METHOD
	MEASUREMENT METHOD
	REMOVAL METHOD
FIELD TEST RESULTS:	
COLOR An pH	ODOR
	CONDUCTANCE (umbos/cm)
OTHER (OVA, Methane meter, etc.)	
CONSTITUENTS SAMPLED:	
- 2	
71 R1 71 "	1 0.11

REMARKS: 21 Blows, 24" penetration, 24" recovery top 17" Poorly sorted

Fine-medium sand with trace medium gravel, Lower 7"

Tan/Gray sandy clay

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10 WELL CASING VOLUMES
2" = 0.16 3

2" = 0.16 2-1/2" = 0.24 3" = 0.37 3-1/2" = 0.50

4" = 0.65 6" = 1.46

BARTILUCCI	SAMPLE INFORMA	ATION RECORD	
SITE Grumman Plant	2	SAMPLE CREW	Ah)f<
SAMPLE LOCATION/WELLNO	. 13-6		
FIELD SAMPLE I.D. NUMBER	13-6-5	DATE S	27-96
TIME 1900 WE	ATHERIndour	TEM	PERATURE
SAMPLE TYPE:			-
GROUNDWATER	SEDIA	ŒVT	
SURFACE WATER/STREAM			
SOIL		AIR	1
		UTHER (Describe, leachate)	i.e., septage,
WELL INFORMATION (III out fo	r groundwater samples):		
DEPTH TO WATER	MEASURE	MENT METHOD	
DEPTH OF WELL			
VOLUME REMOVED			
FIELD TEST RESULTS:		METHOD	
COLOR	pH	ODOR	
TEMPERATURE (°F)			
OTHER (OVA, Methane meter, etc.)		
3,			ω .
		ē	
CONSTITUENTS SAMPLED:			
20			
REMARKS: 50 blows, 18	3" peneration, 18"	recovery lower	6" gray Fine sand
410 1111 ,70	ace grave), upper	11 tanking to	Madium Tand
Tracesilt a	and grown	· · · · · · · · · · · · · · · · · · ·	
GAL/FT 1-1/4" = 0.6	WELL CASING VO 2" = 0.16	OLUMES 3" = 0.37	4" = 0.65

BARTILUCCI	SAMPLE INFORMA		
SITE Grumman Plans	72	SAMPLE CREW LAWES	
SAMPLE LOCATION/WELLNO.	145		
FIELD SAMPLE I.D. NUMBER _	14F-5	DATE 8-27-96	
TIME WEA	THER	TEMPERATURE	
SAMPLE TYPE:		a tay	
GROUNDWATER	SEDIM	ŒNT	
SURFACE WATER/STREAM		AIR	
SOIL X		OTHER (Describe, i.e., septage, leachate)	
WELL INFORMATION (fill out for	groundwater samples):	JA.	
DEPTH TO WATER	MEASUREM	MENT METHOD	
DEPTH OF WELL	MEASUREM	MENT METHOD	
		METHOD	
FIELD TEST RESULTS:			
COLOR	pH	ODOR	
		E (umhos/cm)	
OTHER (OVA, Methane meter, etc.)			
×			
CONSTITUENTS SAMPLED:			·
REMARKS: 6 blows, 24" sand and asa	Penetration 10"	recount. Tan poorly somed	
3-110 1110 919	we l		

GAL/FT

1-1/4" = 0.077 $1-1/2^{-}=0.10$

WELL CASING VOLUMES

2" = 0.16 3'

2-1/2" = 0.24 3.

3" = 0.37 3-1/2" = 0.50

6" = 1.46

AND BARTILUCCI	SAMPLE INFORMATION RECORD	
SITE Grumman Plant?	SAMPLE CREW	LAUFS
SAMPLE LOCATION/WELLNO	IL, A	
FIELD SAMPLE I.D. NUMBER	14A-C DATE 8	-27-96
TIME $\frac{\phi\phi_{1}}{}$ WEAT	HERT	EMPERATURE
SAMPLE TYPE:		
GROUNDWATER	SEDIMENT	
SURFACE WATER/STREAM	AIR	
	OTHER (Descri	
WELL INFORMATION (fill out for g	roundwater samples):	
DEPTH TO WATER	MEASUREMENT METHOD	
	MEASUREMENT METHOD	
<u>.</u>	REMOVAL METHOD	
FIELD TEST RESULTS:		
COLOR	pHODOR	
	PECIFIC CONDUCTANCE (umbos/cm)	
OTHER (OVA, Methane meter, etc.)		
·	·	
CONSTITUENTS SAMPLED:	N TI	

REMARKS: Sample Interval 1-3", Gray Concrete

GAL/FT 1-1/4" = 0.077 WELL CASING VOLUMES 2" = 0.16 3

 $1-1/4^n = 0.077$ $2^n = 0.16$ $1-1/2^n = 0.10$ $2-1/2^n = 0.24$

3" = 0.37 3-1/2" = 0.50

4" = 0.65 6" = 1.46

AND SAMPLE INFORM	
SITE Grumman Plant 2	_ SAMPLE CREW LAVES
SAMPLE LOCATION/WELLNO.	
FIELD SAMPLE I.D. NUMBER 27A C 4-1	DATE 5-28
TIME 1945 WEATHER	TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER SEDI	MENT
SURFACE WATER/STREAM	
SOIL	
WELL INFORMATION (fill out for groundwater samples):	
DEPTH TO WATER MEASURI	
DEPTH OF WELL MEASURI	
VOLUME REMOVED REMOVAL	
COLOR GREEN PH	ODOR
TEMPERATURE (°F) SPECIFIC CONDUCTAN	
OTHER (OVA, Methane meter, etc.)	
CONSTITUENTS SAMPLED:	
100 U.S. 150	
Substate case (" II de E	10.71

REMARKS: Substat core 6" Thick Entire length green in Color Darker at the top surface lighter green at bottom of sample Top surface rustly colored layer. Sample interval 0-1"

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10 WELL CASING VOLUMES
2" = 0.16 3'

2-1/2" = 0.24

3" = 0.37 3-1/2" = 0.50

 $4^{\circ} = 0.65$ $6^{\circ} = 1.46$

SAMPLE INFORMATION RECORD BARTILUCCI SITE Grumman Plant 2 SAMPLE CREW LAWES SAMPLE LOCATION/WELLING 27-A FIELD SAMPLE I.D. NUMBER 27-A-(1-3 DATE 8/28/94 TIME 19415 WEATHER ______ TEMPERATURE _____ SAMPLE TYPE: GROUNDWATER _____ SEDIMENT ____ SURFACE WATER/STREAM _____ AIR _____ SOIL OTHER (Describe, i.e., septage, leachate) Concrete core WELL INFORMATION (fill out for groundwater samples): DEPTH TO WATER _____ MEASUREMENT METHOD _____ DEPTH OF WELL _____ MEASUREMENT METHOD _____ VOLUME REMOVED _____ REMOVAL METHOD _____ FIELD TEST RESULTS: COLOR GREEN PH ODOR TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umbos/cm) _____ OTHER (OVA, Methane meter, etc.) CONSTITUENTS SAMPLED:

REMARKS: Concrete core 15 green in color Dark shade on top gradually turning lighter green on borrow, sample interval 15 1-3"

GAL/FT

1-1/4" = 0.077 1-1/2" = 0.10 WELL CASING VOLUMES

2-1/2" = 0.24

3" = 0.37 3-1/2" = 0.50

4" = 0.65 6" - 1.46

SAMPLE INFORMATION RECOR	D
SITE Grumman Plant 2 SAMPLE CREW	LAWES
SAMPLE LOCATION/WELLNO. X-11-1)	
FIELD SAMPLE I.D. NUMBER X-11) 5-3 DATE	8/28/96
TIME 2316 WEATHER	TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER SEDIMENT SEDIMENT	
SURFACE WATER/STREAM AIR OTHER (De lead	scribe, i.e., septage,
WELL INFORMATION (fill out for groundwater samples):	
DEPTH TO WATER MEASUREMENT METHOD	
DEPTH OF WELL MEASUREMENT METHOD	
VOLUME REMOVED REMOVAL METHOD	
FIELD TEST RESULTS:	
COLOR pH OD	OR
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (umbos/cm)	
OTHER (OVA, Methane meter, etc.)	
	5
CONSTITUENTS SAMPLED:	
REMARKS: Sample Interval 0-2' 50 blows, 24" p Black/ Dark Brown Sitry (Lound Sand) Trace and	Penetralian. 13" rocapny

WELL CASING VOLUMES
2" = 0.16 3 **GAL/FT** 1-1/4" = 0.0771-1/2" = 0.10

3" = **0.37** 2-1/2" = 0.24 3-1/2" = 0.50 4" = 0.65 6" = 1.46

AND BARTILUCCI	SAMPLE INFORMATION	NRECORD
SITE Grumman Plant	SAM	PLE CREW LAVES
SAMPLE LOCATION/WELLNO.	X-11-D	
FIELD SAMPLE I.D. NUMBER	X-110 52	DATE 8/28/16
TIME 2235 WEA	THER	TEMPERATURE
SAMPLE TYPE:		
GROUNDWATER	SEDIMENT	
SURFACE WATER/STREAM		AIR
soil ×		OTHER (Describe, i.e., septage, leachate)
WELL INFORMATION (fill out for	groundwater samples):	
		METHOD
DEPTH OF WELL	MEASUREMENT	METHOD
VOLUME REMOVED	REMOVAL METH	IOD
FIELD TEST RESULTS:		9)
COLOR	_ pH	ODOR
TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (umb	nos/cm)
OTHER (OVA, Methane meter, etc.)		
*		
CONSTITUENTS SAMPLED:		·
	1 2 2 1 2 1 1 1	
Black/Dark Boxin	sity Loany Fand Trace	grave)
GAL/FT 1-1/4" = 0.07		RS = 0.37 4" = 0.65

SAMPLE INFORMATIO	
SITE Grumman Plant 2 SA	MPLE CREW LAWFS
SAMPLE LOCATION/WELLNO. X-111)	
FIELD SAMPLE I.D. NUMBER X-11 D SI	DATE 8/28/196
TIME 21415 WEATHER	TEMPERATURE
SAMPLE TYPE:	
GROUNDWATER SEDIMENT	•
SURFACE WATER/STREAM	AIR
SOIL	OTHER (Describe, i.e., septage, leachate)
WELL INFORMATION (fill out for groundwater samples):	
DEPTH TO WATER MEASUREMEN	Т МЕТНОО
DEPTH OF WELL MEASUREMEN	т метнор
VOLUME REMOVED REMOVAL MET	
FIELD TEST RESULTS:	
COLORpH	ODOR
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (ur	
OTHER (OVA, Methane meter, etc.)	
CONSTITUENTS SAMPLED:	
	· ·
EMARKS: Sample Interval 0-2' 22 block Black larmy sand trace grave)	US, 24" penantion, 12" recovery
GAL/FT 1-1/4" = 0.077 2" = 0.16	MES 3" = 0.37

AND SAMPLE BARTILUCCI	INFORMATION RECOR	D
SITE Grumman Plant 2	SAMPLE CREW	LAVES
SAMPLE LOCATION/WELLNO. X-11 D		
FIELD SAMPLE I.D. NUMBER X-11	C (CONCIPIE DATE	8-28-96
TIME 2) S WEATHER		TEMPERATURE
SAMPLE TYPE:	**	
GROUNDWATER	SEDIMENT	
SURFACE WATER/STREAM	AIR	
SOIL	OTHER (De	
WELL INFORMATION (fill out for groundwater sa	amples):	
DEPTH TO WATER	MEASUREMENT METHOD	
DEPTH OF WELL		
VOLUME REMOVED		
FIELD TEST RESULTS:		ă.
COLOR Gray PH	OD	OR
TEMPERATURE (°F) SPECIFIC CO	NDUCTANCE (umhos/cm)	
OTHER (OVA, Methane meter, etc.)		
	1	
CONSTITUENTS SAMPLED:		
100 V		
0-11 60-0		
REMARKS: 50mple intro	9	

WELL CASING VOLUMES **GAL/FT** 1-1/4" = 0.077 1-1/2" = 0.10

2" = 0.16 2-1/2" = 0.24

3" = 0.37 3-1/2" = 0.50

4" = 0.65 6" = 1.46

AND SAMPLE INFORMATION RECORD
SITE Grumman Plant 2 SAMPLE CREW LAWES
SAMPLE LOCATION/WELLNO. 16E
FIELD SAMPLE I.D. NUMBER 16EC 1-3 DATE 8-29-96
TIME 805 WEATHER TEMPERATURE
SAMPLE TYPE:
GROUNDWATER SEDIMENT
SURFACE WATER/STREAM AIR
SOILOTHER (Describe, i.e., septage,
WELL INFORMATION (fill out for groundwater samples):
DEPTH TO WATER MEASUREMENT METHOD
DEPTH OF WELL MEASUREMENT METHOD
VOLUME REMOVED REMOVAL METHOD
FIELD TEST RESULTS:
COLOR Gray pH ODOR
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (umbos/cm)
OTHER (OVA, Methane meter, etc.)
CONSTITUENTS SAMPLED:

		-
R EMARKS :	Sumple interval 1-3"	
·		

GAL/FT 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65 1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46

REMARKS: 26 blood; 24" Ponptration, 14" recours, top 9" Black
logmy sand trace grave, lower 5" (Rrown poorly sorted
sand with trace grave)

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10 WELL CASING VOLUMES

2" = 0.16 2-1/2" = 0.24 3" = 0.37 3-1/2" = 0.50 4" = 0.65 6" = 1.46

AND BARTILUCCI	SAMPLE INFORMA		
SITE Grumman Plant	2	_ SAMPLE CREW	LAWES
SAMPLE LOCATION/WELLNO.	25		
FIELD SAMPLE I.D. NUMBER	2566-1	DATE _	8-29-96
TIME 1920 WEA	THER	1	TEMPERATURE
SAMPLE TYPE:			£
GROUNDWATER	SEDI	MENT	
SURFACE WATER/STREAM			
SOIL			
WELL INFORMATION (fill out for			ale) Concrete conq
		•	•
DEPTH TO WATER	MEASURE	MENT METHOD _	
VOLUME REMOVED	REMOVAL	METHOD	
COLOR Gray	_ pH	ODC	OR
TEMPERATURE (°F)		CE (umbos/cm)	
OTHER (OVA, Methane meter, etc.)			
CONSTITUENTS SAMPLED:	:		
)		
REMARKS: Sample into	mal 0-1"	in Stainec) arra,
approximately 8	in From back de	201 SHE 977	actod drawing

GAL/FT 1-1/4" = 0.077 1-1/2" = 0.10 WELL CASING VOLUMES

2" = 0.16 2-1/2" = 0.24

3" = 0.37

3-1/2" = 0.50

 $4^{m} = 0.65$ $6^{m} = 1.46$

	DVIRKA
\Box	AND
u	BARTTLUCCI

SITE GOVERN	sample Crew	KeilhRot	1:22
SAMPLE LOCATION/WELLNO.	3 (0-1")		
FIELD SAMPLE I.D. NUMBER	S(Stoned) DATE	915/96	
TIME 100 p.pa WEATH	B(Stand) DATE ER COOL	TEMPERATURE _	GSOF
SAMPLE TYPE:			
GROUNDWATER	SEDIMENT		
SURFACE WATER	AIR		*
SOIL	OTHER De	scribe, e.g., septage le	achate)
WELL INFORMATION (fill out for gro	oundwater samples):		
	MEASUREMENT METHOD		
	MEASUREMENT METHOD		
VOLUME REMOVED	REMOVAL METHOD		100.1
FIELD TEST RESULTS:	9 V		
color gray/6	Jack pH OD	OR MA	٤
	SPECIFIC CONDUCTANCE (umb		
TURBIDITY			
PIDIFID READING U. U. P.	VISUAL DESCRIPTION	encrete	
CONSTITUENTS TO BE ANALYZED	(SVOCS TOTAL)		
		161	· · ·
REMARKS:	Sungle collected with	concrete	CORPLI
			3
			-
GAL/FT 1-1/4" = 0.077 1-1/2" = 0.19	WELL CASING VOLUMES 7 2" = 0.16 3" = 0. 2-1/2" = 0.24 3-1/2" = 0.	T	•

4	5	DVIRKA AND
U		BARTILUCCI

SITE Gramman flant 2 SAMPLE CREW	KeithRobers	
SAMPLE LOCATION/WELLNO. 30		
FIELD SAMPLE I.D. NUMBER 3 C (1"-3") DATE	9/5/36	
TIME 650 PM WEATHER COO!	TEMPERATURE	650F
SAMPLE TYPE:		
GROUNDWATER SEDIMENT		
SURFACE WATER AIR		
SOILOTHER (Des	scribe, e.g., septage.leach	nates
WELL INFORMATION (fill out for groundwater samples):		
DEPTH TO WATER MEASUREMENT METHOD _	8	
DEPTH OF WELL MEASUREMENT METHOD		
VOLUME REMOVED REMOVAL METHOD		
FIELD TEST RESULTS:		
COLOR Gay pHOD	or None	
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (umbo	os/cm)	
TURBIDITY		
PIDIFID READING 0.0 CF VISUAL DESCRIPTION	Concrete	
CONSTITUENTS TO BE ANALYZED: Cr, cd total		
· · · · · · · · · · · · · · · · · · ·		
REMARKS: (o/lected mith con	crete core	b ₄ rre(
		N
WELL CASING VOLUMES GAL/FT 1-1/4" = 0.077 2" = 0.16 3" = 0.2 1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0	• •	

		DYIRKA
		AND
U	\square	BARTILUCCI

SITE Grunnun Plunta	_ SAMPLE CREW	to. The Robin	·)
SAMPLE LOCATION/WELLNO. 3 &			
FIELD SAMPLE I.D. NUMBER 3 B (0-2')	DATE	7/5/96	
TIME 930 fr WEATHER Cool		TEMPERATURE _	65°F
SAMPLE TYPE:			
GROUNDWATER	SEDIMENT	 	
SURFACE WATER	AIR		
SOIL X	OTHER (Des	cribe, e.g., septage.lea	chate)
WELL INFORMATION (fill out for groundwater samples):			
DEPTH TO WATER MEASURE	EMENT METHOD		
DEPTH OF WELL MEASURE			
VOLUME REMOVED REMOVA	L METHOD		
FIELD TEST RESULTS:			
COLORpH	OD	or None	
TEMPERATURE (°F) SPECIFIC CON			
TURBIDITY	<u></u>		
PIDIFID READING 010 CON VISUAL DESC	CRIPTION TH	a course 5	und
CONSTITUENTS TO BE ANALYZED: Cd TCLP	J		
	15		
REMARKS: Sample collect	ed (0-21)	
		ú	
			32
GAL/FT 1-1/4" = 0.077 2" = 0.16 1-1/2" = 0.10 2-1/2" = 0.24	3" = 0.3		_

6	DVIRKA AND
U	BARTILUCCI

SAMPLE LOCATION/WELLNO. SAMPLE CREW SAMP	
FIELD SAMPLE I.D. NUMBER 3A (0-2') DATE 7/5/96 TIME 800 000 WEATHER COOL TEMPERATURE 65000 SAMPLE TYPE: GROUNDWATER SEDIMENT SURFACE WATER AIR	
SAMPLE TYPE: GROUNDWATER SEDIMENT AIR AIR	
GROUNDWATER SEDIMENT SURFACE WATER AIR	
SURFACE WATER AIR	12:
WELL INFORMATION (fill out for groundwater samples):	
DEPTH TO WATER MEASUREMENT METHOD	8
DEPTH OF WELL MEASUREMENT METHOD	
VOLUME REMOVED REMOVAL METHOD	
FIELD TEST RESULTS:	
COLOR BOWN PH ODOR NONE	
TEMPERATURE (°F) SPECIFIC CONDUCTANCE (umhos/cm)	
TURBIDITY	
PIDIFIDREADING DO PPA VISUAL DESCRIPTION SUAL COURSE I Grave	1 da
CONSTITUENTS TO BE ANALYZED: Cr. TCLP	
REMARKS: Sample collected (0-21)	i)
WELL CASING VOLUMES GAL/FT 1-1/4" = 0.077 2" = 0.16 3" = 0.37 4" = 0.65 1-1/2" = 0.10 2-1/2" = 0.24 3-1/2" = 0.50 6" = 1.46	

	DVIRKA
	AND
U	BARTILUCCI

SITE Gramun P	lant 2 SAMPLE CR	ew KeithRibers
SAMPLE LOCATION/WELLNO.	2-2A	
FIELD SAMPLE I.D. NUMBER	20 A (0-2) DAT	E 9/7/96
TIME 430 6 ~ WEATHER	Svany	TEMPERATURE 70°F
SAMPLE TYPE:	U	
GROUNDWATER	SEDIME	NTTN
SURFACE WATER	AIR	3
SOIL	OTHER	(Describe, e.g., septage.leachate)
WELL INFORMATION (fill out for ground		
DEPTH TO WATER	MEASUREMENT METH	do
DEPTH OF WELL	MEASUREMENT METH	OD
VOLUME REMOVED		
FIELD TEST RESULTS:		
COLOR DULL BROWN	pH	ODOR Ware
TEMPERATURE (°F)		
TURBIDITY		
PID/FID READING DIO COM	VISUAL DESCRIPTION	Duk Bown sund and
CONSTITUENTS TO BE ANALYZED:		
	. ^	
REMARKS:	ple collected at	(0-2') below concret
		*
		164
GAL/FT 1-1/4" = 0.077 1-1/2" = 0.19	WELL CASING VOLUMES 2" = 0.16 3" 2-1/2" = 0.24 3-1/2	= 9.37 4" = 0.65 " = 0.50 6" = 1.46

SIR-0794.PM



Project Name: 1167-02 Grumman Supplimental Phase I Plant 2	Well/Boring No.: 12-G Sheet 1 of By: K.Klaus Date: 8/24/42 Chk'd: Date:
Geologist: Keith Klaus Drilling Method: hand	Borehole Completion Depth: 2' Borehole Diameter: 2"

Drille Drill Samp	Driller: Sound McGourny Drill Rig: NA Sample Spoon i.D.: 142" Date Started: 8-26.96			GeologiDrillingDrive H	St: Keith Method: _ (ammer Wt.: mpleted: _	hand 90 165	Borehole Completion Depth: 2			Дериь: <u>Э'</u>
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)		SAMPLE DESCRIPTION			
-1-	1265	0,2'	12"	3,3,3,3	6.7	Brown	silry m	led, Jin S	and with	coarse grown
-2 -3-			,	16	*				<u> </u>	·
- 4- -5-			×							٠
-6-										×
-8-				e)						
-9-			В	æ	8 9				,	
Remar	:3:				2	Water	Level Mes	surement	D	ateate

BL



Project No.: 167-02

Project Name: Grumman Supplimmal Phase II
Plant 2

Sheet 1 of

By: K.Klaus Date: 8-26-96

Chk'd: Date:

Driller Drill F Sampi	r: <u> </u>	NA Don (.D.: 1) 5-26	12-	Geologi Drilling Drive H	St: Keith Method: _ lammer Wt.:	hand 90 lbs	Borehole Completion Depth: 2' Borehole Diameter: 2' Ground Surface El.:	
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	1	SAMPLE DESCRIPTION	
-()-	13A	ō-2'	17,,	16	0	Brown silty me	diam sound and grown	
-1-						- -		
-2-					et.			
-3-					¥.			
-4-								
-5-							· ·	
-6-		8	2	=		्छ इ. इ.		
-7-	æ						6	
-8-					s	ē	· y	
-9-						E4		
-10							5	
7								
Remari	S :	,				Water Level Meas	Date Date Date	



)) A	VIRKA ND ARTILU	cci	Project No Project Na		Well/Boring No.: 333 Man Supplimental Yhose II Sheet 1 of By: K.Klaus Date: 8-26 Chk'd: Date:
Drille: Drill I Sampi	r: <u>√</u> ≥ Vig: le Spo	un Tile	יבימיץ	Geolog Drilling Drive H	Fruiton ist: Keith Method: _ Iammer Wt.: completed: _	Hand Borehole Completion Depth:
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
-()-	138	0-2'	24"	21	9.5	7-24" Tan Poorly sorred sand with gray clay Ting Pourly somed Fine-medium sand with reast medium gravel
-2- i		•				
-4-						
-5- -6-			8		s.	· · · · · · · · · · · · · · · · · · ·
-7-						
-8-		•	,			
-10						

Remarks: Date Water Level Measurement Date Date Date .



Project Name: Gramman

1167-02 Grunnian Supplimenal Phose II Plant 2

Drille: Drill F Sampi	r: <u>√₂</u> tig: _ e Spod	un Mc	2~	_ Geologi _ Drilling Drive H	St: Keith Method: _ lammer Wt.:	Klaus hand 90	1b5	(65	Borehol	le Completi le Diameter Surface El.		2′
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)				DESCR	1PLE IPTION		
-()-	13-C- 5	0-2	18"	50	2.7	ن- -	12- T	an Fin	e id me	dium san 19) andsitu	nd trac	esir
-1-						۱۵''-	18"-	geny E	inp Sanc) ands it w	ith Trac	e gravel
-2-			ä					•				
-3-							<i>-</i>					lia.
						III						s
-4-											•	
-5-		٠	**	20								
-6-												
-7-		Ti.		:								
, -										98		
-8 -	`											· .
-9-												a
-10												
Remar	ES :	·				ž.	Water Le	vei Mes	nrement		Date	
											Date	



Project Name: 4167-02

Grumman Suppliminal Phase II
Plantiz

Well/Boring No.: 4F

Sheet 1 of

By: K.Klaus Date: 8-27-46

Chk'd: Date:

Drille Drill I	r: <u>√</u> ≥ Rig: _ le Spod	NA De i.D.: \	1.D.: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		Method:	h Klaus hand Borehole Completion Depth: 2 Borehole Diameter: 2 Ground Surface El.:
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
	455	6.2	10"	6	6.8	Tan Poonly sorted sand and gravel
-1-				÷.		*
-2						
-3-						,
-4-						
-5-			er.	vo.		
-6-						
-7-		-				
-8-						v g
-9-		·				
-10	W.					
			73207		=	
Remark	<u>«</u> :				2	Water Level Measurement Date Date Date Date



d	\bigcirc) A	OVIRKA ND ARTILU	ccī	Project No Project Na		Well/Boring No.: XII) 5-1 Man Supplimental Phase II of By: K.Klaus Date: 5-28-4k Chk'd: Date:
Drille Drill Samp	er: <u> </u>	on Ma	2~	Geolog Drilling Drive i	ENUMON ist: Kenth g Method: _ Hammer Wt.:	Hand Borehole Completion Depth: 2 Borehole Diameter: 2 Ground Surface El.:
DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
-()- -{-	×110 51	0-2	12	22	1419	Black silty (Lagray) sand with trace grave)
-2- -3-				2	7)	
- 4- -5-					K	
-6 -			a .			
-8-						
-9-			31	ž)	th gr	*

Remarks: Water Level Measurement Date Date Date Date



Project No.: 167-02 Well/Boring No.: ×111) 5-2
Project Name: Goundan Supplimental Phase II of By: K.Klaus Date: 8-28-96
Chk'd: Date:

Drille Drill I Samp	r: <u> </u>	un Mic	2-	Geolog Drilling Drive H	ist: <u>Kerth</u> Method: _	Hand Borehole Diameter: 2° Ground Surface El.:	
DEPTH (FT.)	SAMPLE NO.	SAMPLING INTERVAL	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION	
-()-	X111) 52	62	13"	21	14,5	Black / dark brown sitry (Loamy) sand with trace grave)	
-2-					5/ II		
-3-							
-4-				0.			
-5-			*	a.			
-6-		18					
-7-	æ				*		190
-8 -						-	
-10		5					
				×			
Remar						Water Level Measurement Date Date Date Date Date Date	



Project Name: 1167-02

Project Name: Grunman Supplimmed Phase II
Plant 2

Well/Boring No.: X111) 5-3

Sheet 1 of

By: K.Klaus Date: 8-28-96

Chk'd: _____ Date:

Drille: Drill I Sampi	r: <u>√₂</u> Cig: e Spod	un Mic	2"	Geolog Drilling Drive H	Enuwon ist: Keith Method: Jammer Wi.:	Borehole Completion Depth: 2' hand Borehole Diameter: 2' Ground Surface El.:
DEPTH (FT.)	SAMPLE NO.	SAMPLING	RECOVERY/ RQD	BLOWS/6"	HEADSPACE (PPM)	SAMPLE DESCRIPTION
-() - :	X11D 53	0.2	13"	50	19.5	Black/Dark brown Silty (Loany) SAND with
-1-					5)	Black/Dark brown silty(Loamy) sand with trace grave)
-2			·			
-3-						
-4-						-
-5-						
-6-					Ę	Ti de la companya de
-7-						
-8-				S#		
-9-		*				×
-10						
Remark	5 :					Water Level Measurement Date Date Date Date

APPENDIX G

ANALYTICAL LABORATORY DATA

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC

Contract: 9622729

14A-C

Lab Code: NYTEST Case No.: 28798 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) WATER

Lab Sample ID: 2879803

Sample wt/vol: 1.0 (g/mL) ML

Lab File ID:

P2325.D

Level: (low/med) LOW

Date Received: 08/28/96

% Moisture: not dec.

Date Analyzed: 09/09/96

Column: (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(mg/L or mg/Kg) MG/L

79-01-6-----Trichloroethene

0.29

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

25ES1

Lab Name: NYTEST ENV INC

Contract: 9622729

Lab Code: NYTEST

Case No.: 28798 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) WATER

Lab Sample ID: 2887902

Sample wt/vol: 1.0 (g/mL) ML

Lab File ID:

P2330.D

Level: (low/med)

LOW

Date Received: 08/30/96

% Moisture: not dec.

Date Analyzed: 09/09/96

Column: (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(mg/L or mg/Kg) MG/L

Q

U

107-06-2----1, 2-Dichloroethane

0.05

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBSS04

Lab Name: NYTEST ENV INC

Contract: 9622729

Lab Code: NYTEST Case No.: 28798 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) WATER

Lab Sample ID: 2887909

Sample wt/vol: 1.0 (g/mL) ML

Lab File ID:

P2329.D

Level: (low/med)

Date Received: 08/30/96

% Moisture: not dec.

LOW

Date Analyzed: 09/09/96

Column: (pack/cap) CAP

Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(mg/L or mg/Kg) MG/L

107-06-2----1,2-Dichloroethane

0.05

U

301

Q.

Lab Name: NYTEST ENV INC Contract: 9622729

COMPOUND

CAS NO.

Lab Code: NYTEST Case No.: 28966 SAS No.: SDG No.: AERO2

Matrix: (soil/water) SOIL Lab Sample ID: 2896606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3640.D

Level: (low/med) LOW Date Received: 09/06/96

% Moisture: not dec. 0 dec. Date Extracted:09/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

108-95-2----Phenol 330 U 111-44-4-----bis(2-Chloroethyl)Ether 330 U 95-57-8----2-Chlorophenol U 330 541-73-1----1,3-Dichlorobenzene 330 Ū 106-46-7----1,4-Dichlorobenzene 330 U 95-50-1-----1,2-Dichlorobenzene U 330 95-48-7----2-Methylphenol 330 U 108-60-1----2,2'-oxybis(1-Chloropropane) 330 U 106-44-5-----4-Methylphenol U 330 621-64-7----N-Nitroso-di-n-propylamine U 330 67-72-1-----Hexachloroethane U 330 98-95-3-----Nitrobenzene 330 U 78-59-1-----Isophorone 330 U 88-75-5----2-Nitrophenol 330 U 105-67-9-----2,4-Dimethylphenol 330 U 330 U 120-83-2----2,4-Dichlorophenol U 120-82-1----1,2,4-Trichlorobenzene 330 U 91-20-3-----Naphthalene 330 U 106-47-8-----4-Chloroaniline 330 U 87-68-3-----Hexachlorobutadiene 330 U 111-91-1-----bis(2-Chloroethoxy)methane 330 U 59-50-7----4-Chloro-3-Methylphenol 330 91-57-6----2-Methylnaphthalene U 330 77-47-4------Hexachlorocyclopentadiene 330 U 88-06-2----2,4,6-Trichlorophenol 330 U 95-95-4-----2,4,5-Trichlorophenol U 1700 U 91-58-7----2-Chloronaphthalene 330 88-74-4----2-Nitroaniline 1700 U 131-11-3-----Dimethylphthalate 330 U U 208-96-8-----Acenaphthylene 330 U 606-20-2----2,6-Dinitrotoluene 330 U 99-09-2----3-Nitroaniline 1700 83-32-9------Acenaphthene J

-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

301

Lab Name: NYTEST ENV INC Contract: 9622729

Matrix: (soil/water) SOIL Lab Sample ID: 2896606

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3640.D

Level: (low/med) LOW Date Received: 09/06/96

% Moisture: not dec. 0 dec. Date Extracted:09/07/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alconol 330 U	•		,	~
100-02-74-Nitrophenol 1700 U 132-64-9Dibenzofuran 79 J 121-14-22,4-Dinitrotoluene 330 U 84-66-2Diethylphthalate 330 U 7005-72-34-Chlorophenyl-phenylether 330 U 86-73-7Fluorene 100 J 100-01-64-Nitrosoniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 330 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1	51-28-5	2.4-Dinitrophenol	1700	ŢŢ
132-64-9			· I	
121-14-22,4-Dinitrotoluene 330 U 84-66-2Diethylphthalate 330 U 7005-72-34-Chlorophenyl-phenylether 330 U 86-73-7Fluorene 100 J 100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorophenol 1700 U 87-86-5			1	
84-66-2	121-14-2	2 4-Dinitrotoluene	. 1	
7005-72-34-Chlorophenyl-phenylether 330 U 86-73-7Fluorene 100 J 100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2	84-66-2	Diethylphthalate	. 1	- 1
86-73-7	7005-72-3	4-Chlorophenyl-phenylether	. 1	- 1
100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2Phenanthrene 120 J 129-00-0Phenanthrene 250 J 129-00-0	86-73-7	Fluorene		- 1
534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2			. [- 1
86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7			. 1	1
101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2Phenanthrene 250 J 206-44-0Fluoranthene 250 J 129-00-0	06-30-6	N. Nitrogodinhonylamino (1)	. 1	- 1
118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2Di-n-butylphthalate 330 U 206-44-0Fluoranthene 250 J 129-00-0	101 55.3	A Promorbonyl phonylethor	. 1	
87-86-5Pentachlorophenol 1700 U 85-01-8	110 74 1	Toward orchangen	· I	-
85-01-8Phenanthrene 530 120-12-7Anthracene 120 J 84-74-2Di-n-butylphthalate 330 U 206-44-0Fluoranthene 250 J 129-00-0Pyrene 190 J 85-68-7Butylbenzylphthalate 400 91-94-13,3'-Dichlorobenzidine 670 U 56-55-3Benzo(a) anthracene 39 J 218-01-9Chrysene 47 J 117-81-7bis(2-Ethylnexyl) phthalate 150 J 117-84-0Benzo(b) fluoranthene 330 U 205-99-2Benzo(b) fluoranthene 330 U 207-08-9Benzo(a) pyrene 330 U 193-39-5	110-74-1	Pontagh aronhand	- 1	- 1
120-12-7Anthracene 120 J 84-74-2Di-n-butylphthalate 330 U 206-44-0Fluoranthene 250 J 129-00-0Pyrene 190 J 85-68-7			· I	U
84-74-2				
206-44-0Fluoranthene 250 J 129-00-0Pyrene 190 J 85-68-7Butylbenzylphthalate 400 91-94-13,3'-Dichlorobenzidine 670 U 56-55-3Benzo(a) anthracene 39 J 218-01-9			1 1	
129-00-0	306 44 0	Di-n-butyiphthalate	1	- 1
85-68-7	206-44-0	Fluoranthene	1	-
91-94-13,3'-Dichlorobenzidine 56-55-3Benzo(a) anthracene 218-01-9Chrysene 117-81-7bis(2-Ethylnexyl) phthalate 117-84-0Benzo(b) fluoranthene 205-99-2Benzo(b) fluoranthene 330 U 207-08-9Benzo(k) fluoranthene 330 U 307-08-9Benzo(a) pyrene 330 U 307-08-9Benzo(a) pyrene 330 U 308-39-5Indeno(1,2,3-cd) pyrene 330 U 309-24-2Benzo(g,h,i) perylene 330 U 300-51-6Benzyl Alconol 330 U			· i	J
56-55-3Benzo(a) anthracene 39 J 218-01-9Chrysene 47 J 117-81-7bis(2-Ethylnexyl) phthalate 150 J 117-84-0Di-n-octylphthalate 330 U 205-99-2Benzo(b) fluoranthene 330 U 207-08-9Benzo(k) fluoranthene 330 U 50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6	85-68-/	Butylbenzylphthalate	-1	
218-01-9Chrysene 47 J 117-81-7bis(2-Ethylnexyl)phthalate 150 J 117-84-0Di-n-octylphthalate 330 U 205-99-2Benzo(b)fluoranthene 330 U 207-08-9Benzo(k)fluoranthene 330 U 50-32-8Benzo(a)pyrene 330 U 193-39-5Indeno(1,2,3-cd)pyrene 330 U 53-70-3Dibenz(a,h)anthracene 330 U 191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alconol 330 U	91-94-1	3,3'-Dichloropenzidine	. 1	
117-81-7bis (2-Ethylnexyl) phthalate 150 J 117-84-0Di-n-octylphthalate 330 U 205-99-2Benzo (b) fluoranthene 330 U 207-08-9Benzo (k) fluoranthene 330 U 50-32-8Benzo (a) pyrene 330 U 193-39-5Indeno (1, 2, 3-cd) pyrene 330 U 53-70-3Dibenz (a, h) anthracene 330 U 191-24-2Benzo (g, h, i) perylene 330 U 100-51-6Benzyl Alconol 330 U	56-55-3	Benzo(a) anthracene	1	
117-84-0Di-n-octylphthalate 330 U 205-99-2Benzo(b) fluoranthene 330 U 207-08-9Benzo(k) fluoranthene 330 U 50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alconol 330 U			· I	
205-99-2Benzo (b) fluoranthene 330 U 207-08-9Benzo (k) fluoranthene 330 U 50-32-8Benzo (a) pyrene 330 U 193-39-5Indeno (1,2,3-cd) pyrene 330 U 53-70-3Dibenz (a,h) anthracene 330 U 191-24-2Benzo (g,h,i) perylene 330 U 100-51-6Benzyl Alconol 330 U	117-81-7	bis(2-Ethylnexyl)phthalate		
207-08-9Benzo(k) fluoranthene 330 U 50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alconol 330 U	117-84-0	Di-n-octylphthalate	. 1	
50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Benzo(g,h,i) perylene 330 U 191-24-2Benzyl Alconol 330 U	205-99-2	Benzo(b) fluoranthene	. i	
193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alconol 330 U	207-08-9	Benzo(k)fluoranthene	330	IJ
53-70-3Dibenz (a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alconol 330 U	50-32-8	Benzo(a)pyrene	·I i	
191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alcohol 330 U	193-39-5	Indeno(1,2,3-cd)pyrene	330	_
191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alcohol 330 U	53-70-3	Dibenz(a,h)anthracene	330	Ū
100-51-6Benzyl Alcohol 330 U	191-24-2	Benzo(g,h,i)perylene	330	U
65-85-0Benzoic Acid 1700 U	100-51-6	Benzyl Alconol	330	U
	65-85-0	Benzoic Acid	170.0	U

(1) - Cannot b separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

301

Lab Name: NYTEST ENV INC

Contract: 9622729

Lab Code: NYTEST Case No.: 28966 SAS No.:

SDG No.: AERO2

Matrix: (soil/water) SOIL

Lab Sample ID: 2896606

Sample wt/vol:

30.0 (g/mL) G

Lab File ID:

03640.D

Level: (low/med)

LOW

Date Received: 09/06/96

% Moisture: not dec. 0 dec.

Date Extracted:09/07/96

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N

pH: 6.8

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 21

1		T		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
==========	=======================================	=======	=========	=====
1.	UNKNOWN HYDROCARBON	3.050	6000	J
2.	UNKNOWN	3.207	100	J
3.	UNKNOWN ALDOL	3.538	96000	AJ
4.	UNKNOWN	3.782	100	J
5.	UNKNOWN	3.922	3100	J
6.	UNKNOWN	4.427	510	J
7.	UNKNOWN	5.717	1000	J J
8.	UNKNOWN	5.996	100	J
9. (UNKNOWN	6.170	2800	J
10.	UI::NOWN AROMATIC	13.613	74	J
11.	UNKNOWN AROMATIC	13.962	83	J
12.	UNKNOWN	14.520	160	J
13.	UNKNOWN AROMATIC	15.008	97.	J
14.	UNKNOWN	16.141	80	J
15.	UNKNOWN	16.995	120	J
16.	UNKNOWN HYDROCARBON	17.239	85	J
17.	UNKNOWN	17.553	80	J
18.	UNKNOWN HYDROCARBON	18.128	110	J
19.	UNKNOWN AROMATIC	24.020	130	J
20.	UNKNOWN AROMATIC	25.449	98	J
21.	UNKNOWN AROMATIC	27.558	81	J
22				
43.				
24.		II.		
25.				
26				
27.				
28.				
29.				
30.				

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC Contract: 9622729

FB-1

Lab Code: NYTEST Case No.: 28966 SAS No.: SDG No.: AERO2

Matrix: (soil/water) WATER Lab Sample ID: 2896601

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q3645.D

Level: (low/med) LOW Date Received: 09/06/96

% Moisture: not dec. 0 dec. Date Extracted:09/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L (

		/kg/ 0G/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	·2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	וט
106-46-7	1,4-Dichlorobenzene	10	Ü
95-50-1	1.2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	Ü
108-60-1	2,2'-oxybis(1-Chloropropane)	10	Ü
106-44-5	4-Methylphenol	10	Ü
621-64-7	N-Nitroso-di-n-propylamine	10	Ū
67-72-1	Hexachloroethane	10	ال
98-95-3	Nitrobenzene	10	Ü
78-59-1	Isophorone	10	Ü
88-75-5	2-Nitrophenol	10	Ū
105-67-9	2,4-Dimethylphenol	10	Ū
120-83-2	2,4-Dichlorophenol	10	Ū
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	ן די
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
111-91-1	bis(2-Chloroethoxy) methane	10	u U
59-50-7	4-Chloro-3-Methylphenol	10	ן ט
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2.4.6-Trichlorophenol	10	ן ט
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4:	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	ן ט
208-96-8	Acenaphthylene	10	ן ט
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	50	ע
83-32-9	Acenaphthene	10	ן ט

1-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

EPA SAMPLE NO.

FB-1

Lab Name: NYTEST ENV INC Contract: 9622729

Matrix: (soil/water) WATER Lab Sample ID: 2896601

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q3645.D

Level: (low/med) LOW Date Received: 09/06/96

% Moisture: not dec. 0 dec. Date Extracted:09/09/96

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

		,,	~
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	Ü
132-64-9	Dibenzofuran	10	Ü
	2,4-Dinitrotoluene	10	Ü
	Diethylphthalate	10	Ü
7005-72-3	4-Chlorophenyl-phenylether	10	T U
86-73-7	Fluorene	10	Ü
	4-Nitroaniline	50	Ü
	4,6-Dinitro-2-methylphenol	50	บ
86-30-6	N-Nitrosodiphenylamine (1)	10	ט
101-55-3	4-Bromophenyl-phenylether	10	Ü
118-74-1	Hexachlorobenzene	10	Ü
87-86-5	Pentachlorophenol	50	Ü
85-01-8	Phenanthrene	10	Ü
	Anthracene	10	וט
	Di-n-butylphthalate	10	ָ ע
206-44-0	Fluoranthene	10	וט
129-00-0		10	ָ ט
	Butylbenzylphthalate	10	Ü
91-94-1	3,3'-Dichlorobenzidine	20	Ü
56-55-3	Benzo(a) anthracene	10	Ü
218-01-9	Chrysene	10	. 0
	bis(2-Ethylhexyl)phthalate	10	บ
117-84-0	Di-n-octylphthalate	10	וט
205-99-2	Benzo(b) fluoranthene	10	U
207-08-9	Benzo(k) fluoranthene	10	ט
50-32-8	Benzo(a) pyrene	10	וט
193-39-5	Indeno(1,2,3-cd)pyrene	• †	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	• 1	ט
100-51-6	Benzyl Alcohol	10	Ü
65-85-0	Benzoic Acid	50	
	Delizote Actu	. 50	U
		.	i

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

Lab Name: NYTEST ENV INC

Contract: 9622729

FB-1

Lab Code: NYTEST Case No.: 28966 SAS No.:

SDG No.: AERO2

Matrix: (soil/water) WATER

Lab Sample ID: 2896601

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: Q3645.D

Level: (low/med) LOW

Date Received: 09/06/96

% Moisture: not dec. 0 dec.

Date Extracted: 09/09/96

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N

pH: 7.0

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

Number TICs found: 0

		1		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1			=======================================	
2.				
3		- -		
5 _		-		
6.				
7.				
J.				
10				
11.		_ -		
13.		_ -		
14.		_ -		
10.		- -		
1/.				
18.				ļ
20.		-		
41.		_		
22.		- -	19	
24.				
25				
26.		- -		
40.				
79		_		
·		- -		

EPA SAMPLE NO.

12C-SC

Contract: 9622729 Lab Name: NYTEST ENV INC

SDG No.: AERO1 Lab Code: NYTEST Case No.: 28778 SAS No.:

Lab Sample ID: 2877806 Matrix: (soil/water) SOIL

Lab File ID: Q3500.D Sample wt/vol: 30.0 (g/mL) G

Date Received: 08/27/96 Level: (low/med) LOW

Date Extracted:08/30/96 % Moisture: not dec. 0 dec.

Date Analyzed: 09/03/96 Extraction: (SepF/Cont/Sonc) SONC

Dilution Factor: 1.0 GPC Cleanup: (Y/N) N pH: 7.7

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG CAS NO. COMPOUND

CAS NO. COMPOUND (49/11 01 49/1		
51-28-52,4-Dinitrophenol	1700	U
100-02-74-Nitrophenol	1700	וט
132-64-9Dibenzofuran	84	J
121-14-22,4-Dinitrotoluene	330	וט
84-66-2Diethylphthalate	330	ט
7005-72-34-Chlorophenyl-phenylether_	330	U
86-73-7Fluorene	53	J
100-01-64-Nitroaniline	1700	IJ
534-52-14,6-Dinitro-2-methylphenol	1700	U
86-30-6Nitrosodiphenylamine (1)	330	U
101-55-34-Bromophenyl-phenylether	330	U
118-74-1Hexachlorobenzene	330	U
87-86-5Pentachlorophenoi	1700	U
85-01-8Phenanthrene	420	
120-12-7Anthracene	330	Ü
84-74-2Di-n-butylphthalate	330	U
206-44-0Fluoranthene	100	J
129-00-0Pyrene	330	U
85-68-7Butylbenzylphthalate	330	U
91-94-13,3'-Dichlorobenzidine	670	U
56-55-3Benzo(a) anthracene	330	U
218-01-9Chrysene	44	· J
117-81-7bis(2-Ethylhexyl)phthalate	170	J
117-84-0Di-n-octylphthalate	330	Ŭ
205-99-2Benzo(b) fluoranthene	330	U
207-08-9Benzo(k) fluoranthene	330	Ŭ
50-32-8Benzo(a)pyrene	330	Ū
193-39-5Indeno(1,2,3-cd)pyrene	330	Ŭ
53-70-3Dibenz(a,h)anthracene	330	U
191-24-2Benzo(g,h,i)perylene	330	Ū
100-51-6Benzyl Alcohol	330	U
65-85-0Benzoic Acid	1700	U
		l

(1) - Cannot be separated from Diphenylamine

13-SC

Lab Name: NYTEST ENV INC Contract: 9622729

Matrix: (soil/water) SOIL Lab Sample ID: 2877807

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3501.D

Level: (low/med) LOW Date Received: 08/27/96

% Moisture: not dec. 0 dec. Date Extracted:08/30/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/03/96

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND (ug/L or ug	/Kg) UG/KG	Q
108-95-2	Phenol	330	U
	bis(2-Chloroethyl)Ether	330	U
	2-Chlorophenol	330	וֹט
	1,3-Dichlorobenzene	330	U
	1,4-Dichlorobenzene	330	U
	1,2-Dichlorobenzene	330	U
	2-Methylphenol	330	U
109-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	וט
621-64-7	N-Nitroso-di-n-propylamine_	330	U
67-72-1	Hexachloroethane	330	<u>.</u>
	Nitrobenzene	330	Ū
	Isophorone	330	U
70-39-1	2-Nitrophenol	330	Ū
105 (7.0	2,4-Dimethylphenol	330	Ü
100-07-9	2,4-Dichlorophenol	330	Ü
120-03-2	1,2,4-Trichlorobenzene	330	Ü
120-82-1	Naphthalene	330	U
91-20-3	4-Chloroaniline	330	Ü
	Hexachlorobutadiene	330	Ü
		330	Ü
111-31-1	bis (2-Chloroethoxy) methane	330	. 0
	4-Chloro-3-Methylphenol	330	וט
91-57-6	2-Methylnaphthalene	330	Ü
77-47-4	Hexachlorocyclopentadiene	330	Ü
	2,4,6-Trichlorophenol	1700	Ü
95-95-4	2,4,5-Trichlorophenol	330	ט
91-58-7	2-Chloronaphthalene	1700	Ü
	2-Nitroaniline	1	U
	Dimethylphthalate	330	Ū
208-96-8	Acenaphthylene	330	ָ [U
606-20-2	2,6-Dinitrotoluene	330	ש
	3-Nitroaniline	1700	-
83-32-9	Acenaphthene	330	IJ
		.	

4-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

EPA SAMPLE NO.

13-SC

Lab Name: NYTEST ENV INC Contract: 9622729

Lab Code: NYTEST Case No.: 28778 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) SOIL Lab Sample ID: 2877807

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3501.D

Level: (low/med) LOW Date Received: 08/27/96

% Moisture: not dec. 0 dec. Date Extracted:08/30/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/03/96

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG Q-

53-70-3Benzo(g,h,i)perylene 330 U 191-24-2Benzyl Alcohol 330 U			
100-02-74-Nitrophenol 1700 U 132-64-9Dibenzofuran 330 U 121-14-22,4-Dinitrotoluene 330 U 84-66-2Diethylphthalate 330 U 7005-72-34-Chlorophenyl-phenylether 330 U 86-73-7Fluorene 330 U 100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-3	32	1700	- 17
132-64-9			_
121-14-22,4-Dinitrotoluene 330 U 84-66-2Diethylphthalate 330 U 7005-72-34-Chlorophenyl-phenylether 330 U 86-73-7Fluorene 1700 U 100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5			- 1
84-66-2		1	
State			
86-73-7		1	<u> </u>
100-01-64-Nitroaniline 1700 U 534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8	7005-72-34-Chlorophenyl-phenylether		-
534-52-14,6-Dinitro-2-methylphenol 1700 U 86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8			- 1
86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8	100-01-64-Nitroaniline		
86-30-6N-Nitrosodiphenylamine (1) 330 U 101-55-34-Bromophenyl-phenylether 330 U 118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-68-5	534-52-14,6-Dinitro-2-methylphenol		- 1
118-74-1		1	U
118-74-1Hexachlorobenzene 330 U 87-86-5Pentachlorophenol 1700 U 85-01-8Phenanthrene 83 J 120-12-7Anthracene 330 U 84-74-2Di-n-butylphthalate 59 J 206-44-0Fluoranthene 43 J 129-00-0Pyrene 330 U 85-68-7	101-55-34-Bromophenyl-phenylether	330	U
85-01-8Phenanthrene 83 J 120-12-7Anthracene 330 U 84-74-2Di-n-butylphthalate 59 J 206-44-0Fluoranthene 43 J 129-00-0Pyrene 330 U 85-68-7Butylbenzylphthalate 330 U 91-94-13,3'-Dichlorobenzidine 670 U 56-55-3Benzo(a) anthracene 330 U 218-01-9		330	U.
85-01-8Phenanthrene 83 J 120-12-7Anthracene 330 U 84-74-2Di-n-butylphthalate 59 J 206-44-0Fluoranthene 43 J 129-00-0Pyrene 330 U 85-68-7Butylbenzylphthalate 330 U 91-94-13,3'-Dichlorobenzidine 670 U 56-55-3Benzo(a) anthracene 330 U 218-01-9Chrysene 330 U 117-81-7bis(2-Ethylhexyl)phthalate 550 117-84-0	87-86-5Pentachlorophenol	1700	U
84-74-2		83	J
84-74-2Di-n-butylphthalate 59 J 206-44-0Fluoranthene 43 J 129-00-0Pyrene 330 U 85-68-7Butylbenzylphthalate 330 U 91-94-13,3'-Dichlorobenzidine 670 U 56-55-3Benzo (a) anthracene 330 U 218-01-9Chrysene 330 U 117-81-7bis (2-Ethylhexyl) phthalate 550 117-84-0Benzo (b) fluoranthene 330 U 205-99-2Benzo (b) fluoranthene 330 U 207-08-9Benzo (k) fluoranthene 330 U 50-32-8Benzo (a) pyrene 330 U 193-39-5Indeno (1, 2, 3-cd) pyrene 330 U 53-70-3	120-12-7Anthracene	330	U
206-44-0		59	J
129-00-0		43	J
85-68-7		330	U
91-94-13,3'-Dichlorobenzidine 670 56-55-3Benzo(a) anthracene 330 U 218-01-9Chrysene 330 U 117-81-7bis(2-Ethylhexyl)phthalate 550 U 205-99-2Benzo(b)fluoranthene 330 U 207-08-9Benzo(k)fluoranthene 330 U 50-32-8Benzo(a)pyrene 330 U 193-39-5Indeno(1,2,3-cd)pyrene 330 U 53-70-3Dibenz(a,h)anthracene 330 U 191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alcohol 330 U		330	U
56-55-3	91-94-13.3'-Dichlorobenzidine	670	U
218-01-9Chrysene 330 U 117-81-7bis(2-Ethylhexyl)phthalate 550 117-84-0		330	U
117-81-7bis (2-Ethylhexyl) phthalate 550 117-84-0Di-n-octylphthalate 330 U 205-99-2Benzo (b) fluoranthene 330 U 207-08-9Benzo (k) fluoranthene 330 U 50-32-8Benzo (a) pyrene 330 U 193-39-5Indeno (1, 2, 3-cd) pyrene 330 U 53-70-3Dibenz (a, h) anthracene 330 U 191-24-2Benzo (g, h, i) perylene 330 U 100-51-6Benzyl Alcohol 330 U		330	U
117-84-0Di-n-octylphthalate 330 205-99-2Benzo (b) fluoranthene 330 207-08-9Benzo (k) fluoranthene 330 50-32-8Benzo (a) pyrene 330 193-39-5Indeno (1, 2, 3-cd) pyrene 330 53-70-3Dibenz (a, h) anthracene 330 191-24-2Benzo (g, h, i) perylene 330 100-51-6Benzyl Alcohol 330	117-81-7bis(2-Ethylhexyl)phthalate	550	
205-99-2Benzo (b) fluoranthene 330 U 207-08-9Benzo (k) fluoranthene 330 U 50-32-8Benzo (a) pyrene 330 U 193-39-5Indeno (1,2,3-cd) pyrene 330 U 53-70-3Dibenz (a,h) anthracene 330 U 191-24-2Benzo (g,h,i) perylene 330 U 100-51-6Benzyl Alcohol 330 U	117-84-0Di-n-octvlphthalate	330	U
207-08-9Benzo(k) fluoranthene 330 U 50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alcohol 330 U		330	U
50-32-8Benzo(a) pyrene 330 U 193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alcohol 330 U		. 330	U
193-39-5Indeno(1,2,3-cd) pyrene 330 U 53-70-3Dibenz(a,h) anthracene 330 U 191-24-2Benzo(g,h,i) perylene 330 U 100-51-6Benzyl Alcohol 330 U		330	U
53-70-3Benzo(g,h,i)perylene 330 U 191-24-2Benzyl Alcohol 330 U		330	U
191-24-2Benzo(g,h,i)perylene 330 U 100-51-6Benzyl Alcohol 330 U			U
100-51-6Benzyl Alcohol 330 U			ប
100-51 0 Benzyl meenet			U
Delizote field			U
			1

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NC.

13-SC

Lab Name: NYTEST ENV INC

Contract: 9622729

SDG No.: AERO1

Matrix: (soil/water) SOIL

Lab Sample ID: 2877807

Sample wt/vol:

Lab Code: NYTEST

30.0 (g/mL) G

Lab File ID: Q3501.D

Level: (low/med) LOW Date Received: 08/27/96

% Moisture: not dec. 0 dec.

Date Extracted: 08/30/96

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 09/03/96

GPC Cleanup: (Y/N) N

pH: 7.8

Case No.: 28778 SAS No.:

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 14

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
======================================	UNKNOWN ALDOL UNKNOWN	3.739 3.782 4.094 4.191 4.298 4.717 4.878 6.049 6.500 7.209 7.456	15000 350 2000 77 240 180 270 1800 72 190	AJ JB JB JB JB JB J JB J
18. 19. 20.		8.251 12.311 13.127	82 70 160	J J
22. 23. 24. 25. 26. 27. 28. 29.				

25C0-1

Lab Name: NYTEST ENV INC Contract: 9622729

Lab Code: NYTEST Case No.: 28778 SAS No.: SDG No.: AERO1

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S4699.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF,'Cont/Sonc) SONC Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS:

Q CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 108-95-2----Phenol 330 U 111-44-4-----bis(2-Chloroethyl)Ether 330 U 95-57-8----2-Chlorophenol 330 U 541-73-1-----1,3-Dichlorobenzene 330 U 106-46-7-----1,4-Dichlorobenzene U 330 95-50-1----1,2-Dichlorobenzene_ 330 U U 330 95-48-7----2-Methylphenol U 108-60-1----2,2'-oxybis(1-Chloropropane) 330 106-44-5-----4-Methylphenol 330 U 621-64-7----N-Nitroso-di-n-propylamine 330 U 67-72-1-----Hexachloroethane____ U 330 330 U 98-95-3-----Nitrobenzene 330 U 78-59-1-----Isophorone 330 U 88-75-5----2-Nitrophenol 105-67-9-----2,4-Dimethylphenol 330 U 330 U 120-83-2----2,4-Dichlorophenol 330 U 120-82-1----1,2,4-Trichlorobenzene 2700 E 91-20-3-----Naphthalene U 330 106-47-8-----4-Chloroaniline 87-68-3-----Hexachlorobutadiene 330 U 111-91-1-----bis(2-Chloroethoxy)methane 330 U 330 U 59-50-7-----4-Chloro-3-Methylphenol_ 200 J 91-57-6----2-Methylnaphthalene 330 U 77-47-4-----Hexachlorocyclopentadiene 330 U 88-06-2----2,4,6-Trichlorophenol_ U 1700 95-95-4-----2,4,5-Trichlorophenol_ U 330 91-58-7----2-Chloronaphthalene U 1700 88-74-4----2-Nitroaniline U 330 131-11-3-----Dimethylphthalate U 330 208-96-8-----Acenaphthylene U 330 606-20-2----2,6-Dinitrotoluene_ U 1700 99-09-2-----3-Nitroaniline 330 83-32-9-----Acenaphthene

-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

EPA SAMPLE NO. INORGANIC ANALYSES DATA SHEET FB-1 b Name: NYTEST_ENV_INC_____ Contract: 9622729____ Lab Code: NYTEST Case No.: 28966 SAS No.: ____ SDG No.: AERO2_ Matrix (soil/water): WATER Lab Sample ID: 896601 vel (low/med): LOW Date Received: 09/06/96 Solids: __0.0 Concentration Units (ug/L or mg/kg dry weight): UG/L_ CAS No. Analyte | Concentration | C | M 7440-43-9 Cadmium 9.9 P _8.3|0 7440-47-3 Chromium Texture: Color Before: Clarity Before: ____ Artifacts: ____ Clarity After: _____ Color After: omments: FB-1____

000022

U.S. EPA - CLP

1		INORGANIC	ANALYSES DATA	SHEET	EPA SAMPLE NO.
Lab Name: NY	TEST_ENV_INC		_ Contract: 9	9622729	FB-1
Lab Code: NY	TEST C	ase No.: 28	3966_ SAS No.		SDG No.: AERO2_
<pre>[atrix (soil,</pre>	/water): WATE	ER			
Level (low/me	ed): LOW				⊇ ID: T896601
% Solids:	0.	_		Date Rece:	ived: 09/06/96
· C			/L or mg/kg dr	y weight):	MG/L_
		l .	Concentration	C Q M	
	7440-43-9 7440-47-3	Cadmium_ Chromium_	0.0044		- - -
0					
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		((6))			9
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e - 					2.
lor Before:		Clarity	Before:		*
or After:			After:		xture:
s:		oraricy	Arter:	Ar	tifacts:
	CLP				000024

25C0-1

Lab Name: NYTEST ENV INC Contract: 9622729

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S4699.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND (ug/11 of ug	/ 11g/ 00/ 110	×
51-28-5	2,4-Dinitrophenol	1700	U
	4-Nitrophenol	1700	Ū
	Dibenzofuran	330	Ü
	2,4-Dinitrotoluene	330	ָ ט
	Diethylphthalate	330	U
	4-Chlorophenyl-phenylether	330	U
86-73-7		330	U
	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
	4-Bromophenyl-phenylether	330	U
	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-butylphthalate	330	U
	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	230	J
	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a) anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	180	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
	Indeno (1, 2, 3-cd) pyrene	330	U
	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	. 330	U
100-51-6	Benzyl Alcohol	330	U
65-85-0	Benzoic Acid	1700	U

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

25C0-1

Lab Name: NYTEST ENV INC

Contract: 9622729

SDG No.: AERO1 Lab Code: NYTEST Case No.: 28778 SAS No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 2887905

Sample wt/vol:

30.0 (g/mL) G

Lab File ID: S4699.D

Level: (low/med) LOW

Date Received: 08/30/96

% Moisture: not dec. 0 dec.

Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N

pH: 7.1

Dilution Factor: 1.0

CONCENTRATION UNITS: Number TICs found: 11 (ug/L or ug/Kg) UG/KG

Lab Name: NYTEST ENV INC Contract: 9622729

25C0-1DL

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S4719.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/09/96

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 2.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

208-96-8			
111-44-4		670	
95-57-82-Chlorophenol 670 U 541-73-11, 3-Dichlorobenzene 670 U 106-46-71, 4-Dichlorobenzene 670 U 95-50-11, 2-Dichlorobenzene 670 U 95-48-72-Methylphenol 670 U 108-60-12, 2' - oxybis (1-Chloropropane) 670 U 106-44-5			_
541-73-11, 3-Dichlorobenzene 670 U 106-46-71, 4-Dichlorobenzene 670 U 95-50-11, 2-Dichlorobenzene 670 U 95-48-72-Methylphenol 670 U 108-60-12, 2'-oxybis (1-Chloropropane) 670 U 106-44-54-Methylphenol 670 U 621-64-7N-Nitroso-di-n-propylamine 670 U 67-72-1			
106-46-71,4-Dichlorobenzene 670 U 95-50-11,2-Dichlorobenzene 670 U 95-48-72-Methylphenol 670 U 108-60-12,2'-oxybis (1-Chloropropane) 670 U 106-44-54-Methylphenol 670 U 621-64-7N-Nitroso-di-n-propylamine 670 U 98-95-3Nitrobenzene 670 U 98-95-3Isophorone 670 U 98-75-52-Nitrophenol 670 U 105-67-92,4-Dimethylphenol 670 U 105-67-92,4-Dimethylphenol 670 U 120-82-11,2,4-Trichlorobenzene 670 U 120-82-1Naphthalene 670 U 120-82-1bis (2-Chloroethoxy) methane 670 U 97-50-74-Chloro-3-Methylphenol 670 U 91-57-62-Methylnaphthalene 670 U 91-57-62-Methylnaphthalene 670 U 91-57-62-Methylnaphthalene 670 U 95-95-42,4,5-Trichlorophenol 670 U 95-95-42,4,5-Trichlorophenol 670 U 91-58-72-Chloronaphthalene 670 U			
95-50-1			
95-48-7			
108-60-1 2,2'-oxybis(1-Chloropropane) 670 U 106-44-5 -4-Methylphenol 670 U 621-64-7 -N-Nitroso-di-n-propylamine 670 U 67-72-1 -Hexachloroethane 670 U 98-95-3 -Nitrobenzene 670 U 78-59-1 -Isophorone 670 U 88-75-5 -2-Nitrophenol 670 U 105-67-9 -2,4-Dimethylphenol 670 U 120-83-2 -2,4-Dichlorophenol 670 U 120-82-1 1,2,4-Trichlorobenzene 670 U 91-20-3 -Naphthalene 2800 D 106-47-8 -4-Chloroaniline 670 U 87-68-3 -Hexachlorobutadiene 670 U 87-68-3 -Hexachlorobutadiene 670 U 111-91-1 -bis(2-Chloroethoxy) methane 670 U 99-50-7 -4-Chloro-3-Methylphenol 670 U 98-66-2 -2,4,5-Trichlorophenol 670 U 98-95-4 -2,4,5-Trichlorophenol 3300		14	_
106-44-54-Methylphenol 670 U 621-64-7N-Nitroso-di-n-propylamine 670 U 67-72-1Hexachloroethane 670 U 98-95-3	95-48-72-Methylphenol	. 1	
621-64-7N-Nitroso-di-n-propylamine 670 U 67-72-1Hexachloroethane 670 U 98-95-3Nitrobenzene 670 U 78-59-1	108-60-12,2'-oxybis(1-Chloropropane)	- 1	-
67-72-1		L L	_
98-95-3			_
78-59-1			_
88-75-52-Nitrophenol 670 U 105-67-92,4-Dimethylphenol 670 U 120-83-22,4-Dichlorophenol 670 U 120-82-11,2,4-Trichlorobenzene 670 U 91-20-3Naphthalene 2800 D 106-47-8Naphthalene 670 U 87-68-3			_
88-75-52-Nitrophenol 670 U 105-67-92,4-Dimethylphenol 670 U 120-83-22,4-Dichlorophenol 670 U 120-82-11,2,4-Trichlorobenzene 670 U 91-20-3Naphthalene 2800 D 106-47-8Naphthalene 670 U 87-68-3Nethoroaniline 670 U 87-68-3	78-59-1Isophorone		_
105-67-92,4-Dimethylphenol 670 U 120-83-22,4-Dichlorophenol 670 U 120-82-11,2,4-Trichlorobenzene 670 U 91-20-3Naphthalene 2800 D 106-47-8	88-75-52-Nitrophenol	• • • •	_
120-83-22,4-Dichlorophenol 670 120-82-11,2,4-Trichlorobenzene 670 91-20-3Naphthalene 2800 106-47-84-Chloroaniline 670 87-68-3Hexachlorobutadiene 670 111-91-1bis (2-Chloroethoxy) methane 670 59-50-74-Chloro-3-Methylphenol 670 91-57-62-Methylnaphthalene 200 77-47-4Hexachlorocyclopentadiene 670 88-06-22,4,6-Trichlorophenol 670 95-95-42,4,5-Trichlorophenol 3300 91-58-72-Chloronaphthalene 670 88-74-42-Nitroaniline 3300 131-11-3Dimethylphthalate 670 208-96-8Acenaphthylene 670 606-20-23-Nitroaniline 3300 99-09-23-Nitroaniline 3300	105-67-92,4-Dimethylphenol	- 1	_
91-20-3Naphthalene 2800 D 106-47-84-Chloroaniline 670 U 87-68-3	120-83-22,4-Dichlorophenol		_
106-47-84-Chloroaniline 670 U 87-68-3Hexachlorobutadiene 670 U 111-91-1bis (2-Chloroethoxy) methane 670 U 59-50-74-Chloro-3-Methylphenol 670 U 91-57-62-Methylnaphthalene 200 JD 77-47-4Hexachlorocyclopentadiene 670 U 88-06-22,4,6-Trichlorophenol 670 U 95-95-42,4,5-Trichlorophenol 3300 U 91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-23-Nitroaniline 3300 U	120-82-11,2,4-Trichlorobenzene	670	U
87-68-3	91-20-3Naphthalene	2800	D
111-91-1	106-47-84-Chloroaniline	670	U
111-91-1	87-68-3Hexachlorobutadiene	670	
59-50-74-Chloro-3-Methylphenol 670 U 91-57-62-Methylnaphthalene 200 JD 77-47-4Hexachlorocyclopentadiene 670 U 88-06-22,4,6-Trichlorophenol 670 U 95-95-42,4,5-Trichlorophenol 3300 U 91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-23-Nitroaniline 3300 U		670	
91-57-62-Methylnaphthalene 200 JD 77-47-4Hexachlorocyclopentadiene 670 U 88-06-22,4,6-Trichlorophenol 670 U 95-95-42,4,5-Trichlorophenol 3300 U 91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-23-Nitroaniline 3300 U		670	_
77-47-4		200	JD
88-06-22,4,6-Trichlorophenol 670 U 95-95-42,4,5-Trichlorophenol 3300 U 91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		*	U
95-95-42,4,5-Trichlorophenol 3300 U 91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		670	U
91-58-72-Chloronaphthalene 670 U 88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		3300	_
88-74-42-Nitroaniline 3300 U 131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		670	U
131-11-3Dimethylphthalate 670 U 208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		3300	1
208-96-8Acenaphthylene 670 U 606-20-22,6-Dinitrotoluene 670 U 99-09-23-Nitroaniline 3300 U		670	U
606-20-22,6-Dinitrotoluene		670	U
99-09-23-Nitroaniline3300	606-20-22.6-Dinitrotoluene	670	U
	99-09-23-Nitroaniline	3300	U
		670	U
		£	

-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

Lab Name: NYTEST ENV INC Contract: 9622729

25C0-1DL

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: S4719.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/09/96

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 2.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

132-64-9			
100-02-7	51-28-52 4-Dinitrophenol	3300	U
132-64-9		3300	Ü
121-14-22,4-Dinitrotoluene			U
84-66-2			_
7005-72-34-Chlorophenyl-phenylether 670 U 86-73-7Fluorene 670 U 100-01-64-Nitroaniline 3300 U 534-52-14,6-Dinitro-2-methylphenol 3300 U 86-30-6N-Nitrosodiphenylamine (1) 670 U 101-55-34-Bromophenyl-phenylether 670 U 118-74-1Hexachlorobenzene 670 U 87-86-5Pentachlorophenol 3300 U 85-01-8		1	JD
86-73-7		. – 1	
100-01-64-Nitroaniline 3300 U 534-52-14,6-Dinitro-2-methylphenol 3300 U 86-30-6N-Nitrosodiphenylamine (1) 670 U 101-55-34-Bromophenyl-phenylether 670 U 118-74-1Hexachlorobenzene 670 U 87-86-5Pentachlorophenol 3300 U 85-01-8Phenanthrene 670 U 120-12-7Anthracene 670 U 84-74-2			U
534-52-14,6-Dinitro-2-methylphenol 3300 U 86-30-6N-Nitrosodiphenylamine (1) 670 U 101-55-34-Bromophenyl-phenylether 670 U 118-74-1Hexachlorobenzene 670 U 87-86-5Pentachlorophenol 3300 U 85-01-8Phenanthrene 670 U 120-12-7Anthracene 670 U 84-74-2Phenanthrene 670 U 129-00-0		1	Ü
86-30-6N-Nitrosodiphenylamine (1) 670 U 101-55-34-Bromophenyl-phenylether 670 U 118-74-1Hexachlorobenzene 670 U 87-86-5		1	ij
101-55-34-Bromophenyl-phenylether 118-74-1Hexachlorobenzene 87-86-5Pentachlorophenol 85-01-8Phenanthrene 120-12-7Anthracene 84-74-2Di-n-butylphthalate 129-00-0Pyrene 85-68-7Butylbenzylphthalate 91-94-13,3'-Dichlorobenzidine 91-94-1			•
118-74-1			_
87-86-5			_
85-01-8Phenanthrene 670 U 120-12-7Anthracene 670 U 84-74-2Di-n-butylphthalate 670 U 206-44-0Fluoranthene 670 U 129-00-0Pyrene 670 U 85-68-7Butylbenzylphthalate 200 JD 91-94-1		*	_
120-12-7Anthracene		I	
84-74-2		* . *	_
206-44-0Fluoranthene 670 129-00-0			•
129-00-0		*	•
85-68-7		1	•
91-94-13,3'-Dichlorobenzidine 1300 U 56-55-3Benzo(a) anthracene 670 218-01-9Chrysene 670 117-81-7bis(2-Ethylhexyl)phthalate 160 117-84-0Benzo(b) fluoranthene 670 205-99-2Benzo(b) fluoranthene 670 207-08-9Benzo(a) pyrene 670 193-39-5Indeno(1,2,3-cd)pyrene 670 191-24-2Benzo(g,h,i)perylene 670 191-24-2Benzyl Alcohol 670		1	•
56-55-3Benzo (a) anthracene 670 U 218-01-9Chrysene 670 U 117-81-7bis (2-Ethylhexyl) phthalate 160 JD 117-84-0Di-n-octylphthalate 670 U 205-99-2Benzo (b) fluoranthene 670 U 207-08-9Benzo (k) fluoranthene 670 U 50-32-8Benzo (a) pyrene 670 U 193-39-5Indeno (1, 2, 3-cd) pyrene 670 U 53-70-3	85-68-7Butylbenzylphthalate		
218-01-9Chrysene 670 U 117-81-7bis (2-Ethylhexyl)phthalate 160 JD 117-84-0Di-n-octylphthalate 670 U 205-99-2			_
117-81-7			
117-84-0	218-01-9Chrysene	* · · ·	_
117-84-0Di-n-octylphthalate 670 205-99-2Benzo (b) fluoranthene 670 207-08-9Benzo (k) fluoranthene 670 50-32-8Benzo (a) pyrene 670 193-39-5Indeno (1,2,3-cd) pyrene 670 53-70-3Dibenz (a, h) anthracene 670 191-24-2Benzo (g, h, i) perylene 670 100-51-6Benzyl Alcohol 670	117-81-7bis(2-Ethylhexyl)phthalate	771	
205-99-2Benzo (b) fluoranthene 670 207-08-9Benzo (k) fluoranthene 670 50-32-8Benzo (a) pyrene 670 193-39-5Indeno (1,2,3-cd) pyrene 670 53-70-3Dibenz (a, h) anthracene 670 191-24-2Benzo (g, h, i) perylene 670 100-51-6Benzyl Alcohol 670	117-84-0Di-n-octylphthalate	670	Ū
207-08-9Benzo (k) fluoranthene 670 U 50-32-8Benzo (a) pyrene 670 U 193-39-5Indeno (1,2,3-cd) pyrene 670 U 53-70-3Benzo (g,h,i) anthracene 670 U 191-24-2Benzo (g,h,i) perylene 670 U 100-51-6Benzyl Alcohol 670 U		670	U
50-32-8Benzo (a) pyrene 670 0 193-39-5Indeno (1,2,3-cd) pyrene 670 0 53-70-3Dibenz (a, h) anthracene 670 0 191-24-2Benzo (g, h, i) perylene 670 0 100-51-6Benzyl Alcohol 670 0		670	U
193-39-5 Indeno (1,2,3-cd) pyrene 670 U 53-70-3 Dibenz (a,h) anthracene 670 U 191-24-2 Benzo (g,h,i) perylene 670 U 100-51-6 Benzyl Alcohol 670 U		670	U
53-70-3		670	U
191-24-2Benzo(g,h,i)perylene 670 U 100-51-6Benzyl Alcohol 670 U		670	U
100-51-6Benzyl Alcohol 670		670	U
		670	U
DCII2010 IIII		3300	U
	05-05 0 Delizate fiera		

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

25C0-1DL

Lab Name: NYTEST ENV INC Contract: 9622729

Lab Code: NYTEST Case No.: 28778 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) SOIL

Lab Sample ID: 2887905

Sample wt/vol:

30.0 (g/mL) G

S4719.D Lab File ID:

Level: (low/med) LOW

Date Received: 08/30/96

% Moisture: not dec. 0 dec.

Date Extracted: 09/03/96

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 09/09/96

GPC Cleanup: (Y/N) N

pH: 7.1

Dilution Factor: 2.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 7

1		1		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	3.055	910	
2.	UNKNOWN ALDOL	3.669	30000	AJD
3.	UNKNOWN HYDROCARBON	4.336	1100	JD
4.	UNKNOWN HYDROCARBON	5.073	3200	JD
5.	UNKNOWN	5.512	2400	JD
6.	UNKNOWN HYDROCARBON	5.880	1700	JD
7. =	UNKNOWN	5.951	1300	JD
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1 14.				
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23.				
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41.				
20.				
43.				
30.				
				l

25C0-1RE

Contract: 9622729 Lab Name: NYTEST ENV INC

Lab Code: NYTEST Case No.: 28778 SAS No.: SDG No.: AERO1

Lab Sample ID: 2887905 Matrix: (soil/water) SOIL

Lab File ID: Q3657.D Sample wt/vol: 30.0 (g/mL) G

Date Received: 08/30/96 Level: (low/med) LOW

Date Extracted:09/11/96 % Moisture: not dec. 0 dec.

Date Analyzed: 09/12/96 Extraction: (SepF/Cont/Sonc) SONC

Dilution Factor: 1.0 pH: 7.0 GPC Cleanup: (Y/N) N

> CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG COMPOUND CAS NO.

108-95-2Phenol	330	ប
111-44-4bis (2-Chloroethyl) Ether	330	IJ
95-57-82-Chlorophenol	330	Ū
541-73-11,3-Dichlorobenzene	330	Ü
106-46-71,4-Dichlorobenzene	330	Ü
	330	Ū
95-50-11,2-Dichlorobenzene	330	Ü
95-48-72-Methylphenol	330	Ü
108-60-12,2'-oxybis(1-Chloropropane)	330	Ū
106-44-54-Methylphenol	330	ָּט
621-64-7N-Nitroso-di-n-propylamine		U
67-72-1Hexachloroethane	330	-
98-95-3Nitrobenzene	330	U
78-59-1Isophorone	330	Ū
88-75-52-Nitrophenol	330	U
105-67-92,4-Dimethylphenol	330	Ŭ
120-83-22,4-Dichlorophenol	330	U
120-82-11,2,4-Trichlorobenzene	330	U
91-20-3Naphthalene	2300	
106-47-84-Chloroaniline	330	U
87-68-3Hexachlorobutadiene	330	Ū
111-91-1bis (2-Chloroethoxy) methane	330	U
59-50-74-Chloro-3-Methylphenol	330	U
91-57-62-Methylnaphthalene	250	J
77-47-4Hexachlorocyclopentadiene	330	U
88-06-22,4,6-Trichlorophenol	330	U
95-95-42,4,5-Trichlorophenol	1700	U
91-58-72-Chloronaphthalene	330	l U
88-74-42-Nitroaniline	1700	U
131-11-3Dimethylphthalate	330	Ū
	. 330	1
208-96-8Acenaphthylene	330	U
606-20-22,6-Dinitrotoluene	1700	Ī
99-09-23-Nitroaniline	330	1 11
83-32-9Acenaphthene	330	1
		l

4-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

SW846 METHOD 827CA

25C0-1RE

Lab Name: NYTEST ENV INC Contract: 9622729

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3657.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/11/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

	1700	
51-28-52,4-Dinitrophenol	1/001	U
100-02-74-Nitrophenol	1700	U
132-64-9Dibenzofuran	330	U
121-14-22,4-Dinitrotoluene	330	U
84-66-2Diethylphthalate	330	U
7005-72-34-Chlorophenyl-phenylether	330	U
86-73-7Fluorene	330	U
100-01-64-Nitroaniline	1700	U
534-52-14,6-Dinitro-2-methylphenol	1700	U
86-30-6N-Nitrosodiphenylamine_(1)	330	U
101-55-34-Bromophenyl-phenylether	330	U
118-74-1Hexachlorobenzene	330	U
87-86-5Pentachlorophenol	1700	U
85-01-8Phenanthrene	330	U
120-12-7Anthracene	330	U
84-74-2Di-n-butylphthalate	330	. U
206-44-0Fluoranthene	330	U
129-00-0Pyrene	330	U
85-68-7Butylbenzylphthalate	82	J
91-94-13,3'-Dichlorobenzidine	670	U
56-55-3Benzo(a) anthracene	330	U
218-01-9Chrysene	330	· U
117-81-7bis(2-Ethylhexyl)phthalate	86	J
117-84-0Di-n-octylphthalate	330	U
205-99-2Benzo(b) fluoranthene	330	U
207-08-9Benzo(k) fluoranthene	330	U
50-32-8Benzo(a) pyrene	330	Ū
193-39-5Indeno(1,2,3-cd)pyrene	330	U
53-70-3Dibenz (a, h) anthracene	330	U
191-24-2Benzo(g,h,i)perylene	330	U
100-51-6Benzyl Alcohol	330	U
65-85-0Benzoic Acid	1700	U

(1) - Cannot be separated from Diphenylamine

SW846 METHOD 8270A

Lab Name: NYTEST ENV INC Contract: 9622729

25C0-1RE

Matrix: (soil/water) SOIL Lab Sample ID: 2887905

Sample wt/vol: 30.0 (g/mL) G Lab File ID: Q3657.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/11/96

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/12/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: Number TICs found: 20 (ug/L or ug/Kg) UG/KG

(8)	GOLDOND MAG	77.00	DOT CONC	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====================================	UNKNOWN	3.050	1900	J
1.	UNKNOWN	4.026	1	1 1
3.	UNKNOWN HYDROCARBON	4.165	280	J
4.	UNKNOWN HYDROCARBON	4.444	1000	J
* 5.	UNKNOWN	4.671	240	J
6.	UNKNOWN	4.810	800	J
7.	UNKNOWN HYDROCARBON	4.880	420	J
8.	UNKNOWN AROMATIC	5.019	1500	J
9.	UNKNOWN AROMATIC	5.124	500	
10.	UNKNOWN HYDROCARBON	5.229	2700	
11.	UNKNOWN AROMATIC	5.281	680	
12.	UNKNOWN HYDROCARBON	5.473	900	J
13.	UNKNOWN AROMATIC	5.577	400	J
14.	UNKNOWN AROMATIC	5.612	390	J
15.	UNKNOWN HYDROCARBON	5.682	620	J.
16.	UNKNOWN	5.734	1200	.J
17.	UNKNOWN AROMATIC	5.839	300	J
18.	UNKNOWN AROMATIC	5.943	520	J J
19.	UNKNOWN HYDROCARBON	6.100	650	J
20.	UNKNOWN	6.205	1400	ا ا
21	q ²			
22.				
43.				
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FBCS04

Lab Name: NYTEST ENV INC Contract: 9622729

COMPOUND

CAS NO.

Lab Code: NYTEST Case No.: 28778 SAS No.: SDG No.: AERO1

Matrix: (soil/water) WATER Lab Sample ID: 2887913

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4688.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

10 U 108-95-2----Phenol 10 U 111-44-4-----bis(2-Chloroethyl)Ether 10 U 95-57-8----2-Chlorophenol 541-73-1----1,3-Dichlorobenzene 10 Ū 10 U 106-46-7----1,4-Dichlorobenzene U 95-50-1----1,2-Dichlorobenzene_ 10 95-48-7----2-Methylphenol 10 U 108-60-1-----2,2'-oxybis(1-Chloropropane) 10 U 10 U 106-44-5----4-Methylphenol 10 U 621-64-7----N-Nitroso-di-n-propylamine U 67-72-1-----Hexachloroethane 10 U 98-95-3-----Nitrobenzene 10 10 U 78-59-1-----Isophorone U 10 88-75-5----2-Nitrophenol 10 U 105-67-9-----2,4-Dimethylphenol U 120-83-2----2,4-Dichlorophenol 10 U 10 120-82-1-----1,2,4-Trichlorobenzene_ U 10 91-20-3-----Naphthalene U 10 106-47-8-----4-Chloroaniline 10 U 87-68-3------Hexachlorobutadiene U 111-91-1-----bis(2-Chloroethoxy)methane_ 10 U 59-50-7-----4-Chloro-3-Methylphenol_ 10 91-57-6----2-Methylnaphthalene 10 U 77-47-4------Hexachlorocyclopentadiene 10 U 10 U 88-06-2-----2,4,6-Trichlorophenol 50 U 95-95-4----2,4,5-Trichlorophenol 10 U 91-58-7-----2-Chloronaphthalene___ 50 U 88-74-4----2-Nitroaniline U 10 131-11-3-----Dimethylphthalate U 10 208-96-8-----Acenaphthylene

:-Methylphenol is being reported as the combination of 3 + 4 Methylphenol

606-20-2----2,6-Dinitrotoluene

99-09-2----3-Nitroaniline

83-32-9-----Acenaphthene

SW846 METHOD 8270A

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EPA SAMPLE NO.

FBCS04

Lab Name: NYTEST ENV INC Contract: 9622729

Lab Code: NYTEST Case No.: 28778 SAS No.: SDG 1

SDG No.: AERO1

Matrix: (soil/water) WATER Lab Sample ID: 2887913

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S4688.D

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec. Date Extracted:09/03/96

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

CAS NO. COMPOUND CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

(1) - Cannot be separated from Diphenylamine

EPA SAMPLE NO.

FBCS04

Lab Name: NYTEST ENV INC

Contract: 9622729

Lab Code: NYTEST Case No.: 28778 SAS No.:

SDG No.: AERO1

Matrix: (soil/water) WATER

Lab Sample ID: 2887913

Sample wt/vol:

1000 (g/mL) ML

S4688.D Lab File ID:

Level: (low/med) LOW Date Received: 08/30/96

% Moisture: not dec. 0 dec.

Date Extracted: 09/03/96

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 09/06/96

GPC Cleanup: (Y/N) N

pH: 7.0

Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 3	UNKNOWN	3.352	9	J
4. 5. 6.				
8. 9.				
10. 11. 12.	_		30	
14. 15. 16.				
17. 18. 19.				
22. 22. 23.				
24. 25. 26. 27.				
28. 29. 30.				

	:	INORGANIC A	1 ANALYSES DATA S		EPA SAMPLE NO.	- .
ib Name: NYTE	ST ENV INC		Contract: 90	622729	3001	_
	171				- I	— I
Lab Code: NYTE	ST Ca				SDG No.: AERO2	<u>'</u> _
Matrix (soil/w	vater): SOIL			Lab Sam	ple ID: 896603	
evel (low/med	l): LOW_			Date Re	ceived: 09/06/96	
% Solids:	100.	0				
Co	ncentration	Units (ug	/L or mg/kg dr	y weight): MG/KG	
	CAS No.	Analyte	Concentration	C Q	M	
	7440-43-9 7440-47-3	Cadmium_ Chromium_			P_ P_	
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				1,		
						Ç
Color Before:		Clari	ty Before:		Texture:	
lolor After:		Clari	ty After:		Artifacts:	
	CRETE_ SULTS_IN_MG	/KG_AS_REC	EIVED		я	
C -				<u></u>		

EPA SAMPLE N	NO.
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ab .ame: NYTES	ST ENV_INC	9	Contract: 96	522729	27AC01
	_				SDG No.: AERO1_
atrix (soil/wa	ater): SOIL	_		Lab Sampl	e ID: 884901
evel (low/med)): LOW_	_		Date Rece	ived: 08/29/96
Solids:	100.0				
Co	ncentration	Units (ug	/L or mg/kg dry	y weight):	MG/KG
	CAS No.	Analyte	Concentration	C Q	м
	7440-47-3	Chromium	4480		<u>P_</u>
		(%		-	_
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0				-	
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olor Before:		Clari	ty Before:	. !	Texture:
			ty After:		Artifacts:
olor After:		CLALI	cy wreer		
	NCRETE IG/KG_AS_REC	EIVED			
RESULT_IN_M	IG/ KG_AS_KEC	ETAED			

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U.S. EPA - CLP

1 INORGANIC ANALYSES DATA SHEET

EDA	SAMPLE	NIO
r. PA	SAMPLE	NO.

	•		mindle dilling		
Lab Name: NYTE	ST ENV INC		Contract: 96	622729	3A02
					SDG No.: AERO2_
Matrix (soil/w		•			le ID: T896609
Level (low/med				Date Rec	eived: 09/06/96
	0.				
			/L or mg/kg dry	y weight)	: MG/L_
	CAS No.	Analyte	Concentration	C Q	M
	7440-43-9				NR P_
O:					
				7	
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				7.	
±					
Color Before:		Clari	ty Before:		Texture:
Color After:		Clari	ty After:		Artifacts:
omments:	CLP				000025

U.S. EPA - CLP

1 INORGANIC ANALYSES DATA SHEET

FDA	SAMPLE	NO.

Lab Name: NYTE	ST ENV INC		Contract: 9	622729	3B02
					SDG No.: AERO2_
fatrix (soil/w	ater): WATE	R		Lab Samp	le ID: T896612
Level (low/med): LOW_	_		Date Rece	eived: 09/06/96
% Solids:	0.	0			
Co.	ncentration	Units (ug	/L or mg/kg dr	y weight)	: MG/L_
E (10)	CAS No.	Analyte	Concentration	c Q	м
	7440-43-9 7440-47-3	Cadmium_ Chromium_	2.2		P NR
an and					
Color Before:		Clari	ty Before:		Texture:
Color After:		Clari	ty After:		Artifacts:
omments:				ж	000026

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	s *	INORGANIC A	1 NALYSES DATA S	HEET	EPA SAMPLE NO.	
					3C13	
Lab Name: NYTES	ST_ENV_INC_		Contract: 96	522729		_
Lab Code: NYTE	ST Ca	se No.: 289	SAS No.:		SDG No.: AERO	2
Matrix (soil/wa	ater): WATE	R		Lab Sampl	e ID: T896602	
evel (low/med): LOW_	_		Date Rece	eived: 09/06/96	
% Solids:	0.	0				
Co	ncentration	Units (ug	/L or mg/kg dry	y weight):	MG/L_	
		3 = 3 - 4 -	Concentration	c Q	M	
90)	CAS No.	98	Concentration			
	7440-43-9	Cadmium_ Chromium	0.0044	U	P_ P_	
198	7440-47-3	Chromium_	0.023			
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color Before:		Clari	ty Before:		Texture:	
Color After:		Clari	ty After:		Artifacts:	
Comments:	CCLP	re .		_		_
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EPA SAMPLE NO.

ab Name: NYTE	ST_ENV_INC_		Contract: 96	522729	4F-S
					SDG No.: AERO1_
Matrix (soil/w	ater): WATE	R		Lab Samp	le ID: T879802
revel (low/med): LOW_	_		Date Rec	eived: 08/28/96
% Solids:	0.	0			
Co	ncentration	Units (ug	/L or mg/kg dry	y weight)	: MG/L_
	CAS No.	Analyte	Concentration	C Q	м
	7440-47-3	Chromium_	0.56		P_
					<u>-</u>
					<u> </u>
					- F
(lor Before:	1	Clarit	ty Before:	-	Texture:
Color After:			ty After:		Artifacts:
Comments:			<u> </u>		
4F-ST	CLP				

		0.0.				
	24	INORGANIC A	1 ANALYSES DATA S	HEET	EPA SA	MPLE NO.
			P		12	c-c
ab Name: NYTES	ST_ENV_INC_		Contract: 96	522729		
Lab Code: NYTE:	ST Ca	se No.: 28	778_ SAS No.:		SDG No	AERO1_
Matrix (soil/wa	ater): WATE	R		Lab Sam	aple ID: T	877805
evel (low/med): LOW_	0.8		Date Re	eceived: (08/27/96
% Solids:	0.	0				385
Cor	ncentration	Units (ug	/L or mg/kg dry	y weight	:): MG/L_	W.
e	CAS No.	Analyte	Concentration	C Q	м	
	7440-47-3	Chromium	0.12	-	_ _	
		CIIIOMIUM_	0.12			
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					-	
Color Before:		Clarit	ty Before:		Texture	<u>.</u>
Color After:		Clarit	ty After:	=	Artifac	cts:
Comments:	rclp				A.	

U.S. EPA - CLP

EPA SAMPLE NO. INORGANIC ANALYSES DATA SHEET 12GC I b Name: NYTEST_ENV_INC____ Contract: 9622729___ | Lab Code: NYTEST Case No.: 28778_ SAS No.: _____ SDG No.: AERO1_ Lab Sample ID: T877804 Matrix (soil/water): WATER Date Received: 08/27/96 I vel (low/med): LOW___ __0.0 % Solids: Concentration Units (ug/L or mg/kg dry weight): MG/L_ | Analyte | Concentration | C | M CAS No. 7440-47-3 Chromium_ 0.0047 U P Texture: Clarity Before: ____ Culor Before: Artifacts: _____ Clarity After: ____ Color After:

Color Before: _____ Clarity Before: ____ Texture: ____ Artifacts: ____ Color After: ____ Artifacts: ____ Comments: ____ 12GC___ TCLP______

EPA SA	MPLE	NO.	
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ab Name: 1	NYTEST_ENV_INC_		Contract: 96	522729	12GS	
	NYTEST Ca				SDG No.: AER	01_
Matrix (so	il/water): WATE	R		Lab Samp	le ID: T877801	
Level (low,	/med): LOW_	- 11		Date Rec	eived: 08/27/9	6
. Solids:	0.	0				
	Concentration	Units (ug	/L or mg/kg dry	y weight)	: MG/L_	
	CAS No.	Analyte	Concentration	C Q	м .	¥
	7440-47-3	Chromium_	0.23		P_	
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		160	6.7			
	1.20			-	_	1
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olor Befor	re:	Clari	ty Before:		Texture:	
Color Afte	r:	Clari	ty After:		Artifacts:	
Comments: 12GS	TCLP					
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EPA	SAMPLE	NO.
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ab Name: NYTE	ST ENV INC		Contract: 96	522729	13A
					SDG No.: AERO1_
Matrix (soil/w	water): WATE	R		Lab Sampl	le ID: T877802
Level (low/med	l): LOW_	_		Date Rece	eived: 08/27/96
Solids:	0.	0			
Co	ncentration	Units (ug	/L or mg/kg dry	y weight):	: MG/L_
	CAS No.	Analyte	Concentration	C Q	м
	7440-47-3	Chromium_	8.1		P_
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lor Before:		Clari	ty Before:		Texture:
Color After:		Clari	ty After:		Artifacts:
Comments:	CLP		,	Œ	
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EPA	SAMPLE	NO.
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ab Name: NYTE	ST_ENV_INC_		Contract: 96	522729	13B
					SDG No.: AERO1_
Matrix (soil/w	vater): WATE	R		Lab Sampl	e ID: T877803
evel (low/med	l): LOW_	_		Date Rece	ived: 08/27/96
. Solids:	0.	0			20
Co	oncentration	Units (ug	/L or mg/kg dry	y weight):	MG/L_
	CAS No.	Analyte	Concentration	C Q	м
	7440-47-3	Chromium_	0.016		P_
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law Dafama		Clari	ty Before:	_	Texture:
blor Before:					Artifacts:
Color After:		CIALI	ty After:		AICIIdoco.
Comments:	CLP	=			
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FORM I - IN

EPA	SAMPLE	NO.
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					1
b Name: NYTE	ST_ENV_INC_		Contract: 96	522729	13C-S
Lab Code: NYTE	ST Ca	se No.: 287	778_ SAS No.:	·	SDG No.: AERO1_
Matrix (soil/w	rater): WATE	R A		Lab Sampl	e ID: T879801
Tevel (low/med	l): LOW_	_		Date Rece	ived: 08/28/96
. Solids:	0.	0			
Co	ncentration	Units (ug	/L or mg/kg dry	y weight):	MG/L_
	CAS No.	Analyte	Concentration	C Q	м
	7440-47-3				<u>P_</u>
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lor Before:	•	Clari	ty Before:		Texture:
Color After:		Clari	ty After:		Artifacts:
Comments: 13C-S	TCLP				
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	1			EPA	SAMPLE	NO.
INORGANIC	ANALYSES I	ATAC	SHEET			
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	0	15 	2622720		16EC13	
	Contrac	CT: S	3622/29			

I b Name: NYTES	ST ENV INC		Contract: 96	522	729		16EC13			
Lab Code: NYTES							OG No.: AERO1_			
Matrix (soil/water): WATER Lab Sample ID: T887901										
Pivel (low/med): LOW Date Received: 08/30/96										
% Solids:	0.	0								
Con	ncentration	Units (ug,	/L or mg/kg dry	, r	veight):	MO	G/L_			
	CAS NO	Analyte	Concentration	C	Q	M				
					11					
	7440-47-3	Chromium_	0.25	_	- 12	P_				
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27				_			92			
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lor Before:		Clarity	Before:	 Texture:	
Color After:		Clarity	After:	Artifacts:	
Comments: 16EC13	TCLP			2	_
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EPA SAMPLE NO.

	ii 19		95		22A02
ab Name: NYTE	ST_ENV_INC_		Contract: 96	22729	
ab Code: NYTE	ST Cas	se No.: 289	998_ SAS No.:		SDG No.: 28998_
Matrix (soil/w	ater): WATE	R		Lab Sampl	e ID: T899801
evel (low/med): LOW_	_		Date Rece	ived: 09/10/96
Solids:	0.	0			
Co	ncentration	Units (ug	/L or mg/kg dry	y weight):	MG/L_
	CAS No.	Analyte	Concentration	СО	м
				_	
	7440-47-3	Chromium_	0.12	-	P_
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olor Before:		Clari	ty Before:		Texture:
olor After:		Clari	ty After:		Artifacts:
omments:					
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EPA	SAMPLE	NO
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		INORGANIC F	MALISES DATA S	HEET	E	
ab Name: NVTF	ST FNV TNC		Contract: 96	5227:	‴·· ∖ 29	27AC13
						SDG No.: AERO1
atrix (soil/w			_			le ID: T884902
evel (low/med	l): LOW_	_		Dat	e Rec	eived: 08/29/96
Solids:	0.	0				
Co	ncentration	Units (ug	/L or mg/kg dr	y we	ight)	: MG/L_
	CAS No.	Analyte	Concentration	С	Q	M
	7440-47-3	Chromium_	43.8	- -		P_
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0						
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				- -		
				- -		
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				- -		
olor Before:		Clari	ty Before:			Texture:
olor After:		Clari	ty After:			Artifacts:
omments: 27AC13	_TCLP	п				*
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8080PCB - FORM 1 NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

		SAMPLE MA	TRIX:	SOIL	S	AMPLE	ID:	X11DS1		
		CONC. L	EVEL:	LOW	LAB S	AMPLE	ID:	2884903		
		EXTRACTION	DATE:	08/30/96	DI	L FACT	ror:	1.00		
		ANALYSIS	DATE:	09/04/96	*	MOIST	JRE:	14		
							1	UG/KG		
CMPD	#	CAS Number		PCB COMPOUND				(DRY BASIS)		
										_
	1	12674-11-2	- 1	Aroclor-1016			-	92	U	-
	2	11104-28-2	1	Aroclor-1221			1	92	U	1
	3	11141-16-5	1	Aroclor-1232			-1	92	U	1
	4	53469-21-9	1	Aroclor-1242			1	92	U	1
	5	12672-29-6	1	Aroclor-1248			-	1400		1
	6	11097-69-1	1	Aroclor-1254			- 1	92	U	1
	7	11096-82-5	1	Aroclor-1260			1	300		1
	1		- 1				- 1			1

8080PCB - FORM 1 NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

			SAMPLE M	ATRIX:	SOIL	SAM	IPLE	ID:	X1	1DS2		
			CONC.	LEVEL:	LOW	LAB SAM	IPLE	ID:	288	4904		
			EXTRACTION	DATE:	08/30/96	DIL	FACT	OR:		1.00		
			ANALYSIS	DATE:	09/04/96	% MC	ISTU	IRE:		12		
								U	IG/KG			
CMPD	#		CAS Number		PCB COMPOUND			(DRY BA	SIS)		
						·						_
	1	1	12674-11-2	- 1	Aroclor-1016			1		91	U	-1
	2	1	11104-28-2	1	Aroclor-1221			- 1		91	U	-
	3	1	11141-16-5	1	Aroclor-1232			1		91	U	-
	4	1	53469-21-9	1	Aroclor-1242			1		91	U	1
	5	1	12672-29-6	1	Aroclor-1248			1		760		1
٠,	6	1	11097-69-1	1	Aroclor-1254			1		91	U	1
	7	1	11096-82-5		Aroclor-1260			1		160		1

8080PCB - FCRM 1 NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

	SAMPLE MATRI	X: SOIL	SAMPLE I	D:	X11DS3	
	CONC. LEVE	L: LOW	LAB SAMPLE I	D: 2	884905	
	EXTRACTION DATE	E: 08/30/96	DIL FACTO)R:	1.00	
	ANALYSIS DAT	E: 09/04/96	% MOISTUR	E:	11	
				UG/KG	;	
CMPD #	CAS Number	PCB COMPOUND		(DRY	BASIS)	
_						
1	12674-11-2	Aroclor-1016		1	90 U	1
2	11104-28-2	Aroclor-1221		1	90 U	,
3	11141-16-5	Aroclor-1232		1	90 U	7
4	53469-21-9	Aroclor-1242		1	90 U	r]
5	12672-29-6	Aroclor-1248		1	540	- 1
6	11097-69-1	Aroclor-1254		1.	90 U	1
7	11096-82-5	Aroclor-1260		1	190	- 1

8080PCB - FORM 1 NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

INITIAL VOL (ML):

SAMPLE MATRIX: WATER SAMPLE ID: FBSS03

CONC. LEVEL: LOW LAB SAMPLE ID: 2887908

EXTRACTION DATE: 09/04/96 DIL FACTOR: 1.00

UG/L

950

CMPD #	CAS Number	PCB COMPOUND		
1	12674-11-2	Aroclor-1016		1.1 U
2	11104-28-2	Aroclor-1221	1	2.1 U
. 3	11141-16-5	Aroclor-1232	1	1.1 U
4	53469-21-9	Aroclor-1242	1	1.1 U
5	12672-29-6	Aroclor-1248	1	1.1 U
6	11097-69-1	Aroclor-1254	1	1.1 U
7	11096-82-5	Aroclor-1260	1	1.1 U
				11

8080PCB - FORM 1 NYTEST ENVIRONMENTAL INC.

TCL PCB ORGANICS ANALYSIS DATA SHEET

SAMPLE MATRIX:	WATER	SAMPLE ID:	FBCS03
CONC. LEVEL:	LOW	LAB SAMPLE ID:	2887912
EXTRACTION DATE:	09/04/96	DIL FACTOR:	1.00

INITIAL VOL (ML): 825

UG/L

CMPD #	CAS Number	PCB COMPOUND		
1	12674-11-2	Aroclor-1016		1.2 U
2	11104-28-2	Aroclor-1221	1	2.4 U
3	11141-16-5	Aroclor-1232	1	1.2 U
4	53469-21-9	Aroclor-1242	1	1.2 U
5	12672-29-6	Aroclor-1248	1	1.2 U
6	11097-69-1	Aroclor-1254	1	1.2 U
7	11096-82-5	Aroclor-1260	1	1.2 U
1			36	!