FILE COPY

NORTHROP GRUMMAN
Integrated Systems

Northrop Grumman Corporation
Airborne Early Warning and
Electronic Warfare Systems
South Oyster Bay Road
Bethpage, NY 11714-3581

ETC02L-013
May 30, 2002

Mr. Roger Murphy, P. E.
Bureau of Solid Waste & Corrective Action, 8th Floor
Division of Solid Waste and Hazardous Materials
New York State Department of Environmental Conservation
625 Broadway Street
Albany, NY 12233-7252

Re: Northrop Grumman Corporation
Plant 1 Remedial Program
Interim Report

Dear Mr. Murphy:

The purpose of this correspondence is to present your office with the findings of the activities completed to date in support of the above referenced program. Attachment 1 to this correspondence presents a table summarizing the remedial activities conducted in accordance with the Remediation Plan previously submitted to the New York State Department of Environmental Conservation in July 2001. By its letter dated May 20, 2002, the Department has given its approval of our Remediation Plan. Attachment 2 presents sample location maps associated with additional delineation and endpoint sampling activities conducted at select areas of concern. Analytical summary tables documenting the results of the delineation and endpoint sampling activities are presented as Attachment 3.

If you have any questions or comments, please do not hesitate to contact me at (516) 575-2385.

Very truly yours,

Larry L. Leskovjan
Manager
Environmental, Safety, Health &
Medical Services
M/S: Z18-025

cc: Henry Wilkie, NYSDEC
Larry Rosenmann, NYSDEC
William Gilday, NYSDOH

Attachments

ATTACHMENT 1

SUMMARY OF

REMEDIAL ACTIVITES

ATTACHMENT 1
NORTHROP GRUMMAN CORPORATION
PLANT 1 FACILITY
Summary of Remedial Activities

Areas of Concern (AOCs)	Boring Location(s)	Feature Type	Constituents of Concern	Remedial Activity Proposed in July 2001 Remediation Plan	Status	Endpoint Sampling	Backfilling	Restoration
Ejector Pit/Paint Tunnel (DF-70 and DF-71) within Former Paint Spray Room	I07B01	Pit	Cr and Pb	A 13 5' x 16' x 6-inch thick volume of concrete floor, the concrete ejector pit structure and the concrete trench within the Former Paint Spray Room shall be sawcut, jack hammered, removed, containerized and transported off-site for proper disposal Excavate an 8' by 10 25' area of soil to a depth of 5' bgs and excavate a 13 5' x 16' area of soil (less the 8' x 10 25' area) to a depth of 3' bgs Backfill and compact the excavation in 12" lifts with certified clean fill and restore the area in kind	Remediation of this area of concern has been completed as outlined in the Remediation Plan	Not Required	Complete	Complete
Former Storage Building	I30B03	--	PAHs and CaPAHs	A 20' x 20' x 6-inch thick volume of concrete floor surrounding I30B03 in the Former Storage Building shall be sawcut, jack hammered, removed, containerized and transported off-site for proper disposal Excavate a 16' by 16' area of soil to a depth of 3' bgs The excavation shall be backfilled and compacted in 12" lifts with certified clean fill to within 6-inches of final grade and re-surfaced with concrete to match existing grade	Remediation of this area of concern has been completed as outlined in the Remediation Plan However, the excavation in this area was extended by 4' on two sides of the area of concern depicted in the Remediation Plan to ensure that the excavation extended to the soil borings which positively delineated the extent of impacted soil As a result, the total area of excavation was 20' by 20' by 3' deep	Not Required	Completed	Complete
Dry Well in Former Carpentry Shop	I43B01	Dry Well	Cr and Pb	This is a 10' deep dry well which is currently backfilled to grade Assume it has an 8' diameter Excavate 8' of overburden material (to be segregated and stockpiled for re-use as backfill material) Excavate impacted soils from 8' to 10' bgs within the dry well ring structure for proper off-site transportation and disposal The dry well shall then be backfilled and compacted with the stockpiled overburden material and supplemented with certified clean fill material to within 6-inches of final grade and resurfaced with concrete to match existing surrounding grade	Remediation of this dry well has been completed as outlined in the Remediation Plan	Not Required	Not Completed	Not Completed
Dry Well in Former Carpentry Shop	I43B02	Dry Well	CaPAHs	This is a 10' deep dry well which is currently backfilled to grade Assume it has an 8' diameter Excavate 13' of overburden material (to be segregated and stockpiled for re-use as backfill material) Excavate impacted soil from 13' to 15' bgs within the dry well ring structure for proper off-site transportation and disposal The dry well shall then be backfilled and compacted with the stockpiled overburden material and supplemented with certified clean fill material to within 6-inches of final grade and resurfaced with concrete to match existing surrounding grade	Upon initiating excavation in this area, it was determined that this dry well was not previously backfilled As a result, this dry well is now being addressed under the Underground Injection Control (UIC) Closure Program This dry well will be remediated and returned to service for stormwater drainage in consultation with the USEPA and NCDH	Not Completed	Not Required (to be left in service for stormwater drainage)	Not Required (to be left in service for stormwater drainage)

ATTACHMENT 1
NORTHROP GRUMMAN CORPORATION
PLANT 1 FACILITY
Summary of Remedial Activities

Areas of Concern (AOCs)	Boring Location(s)	Feature Type	Constituents of Concern	Remedial Activity Proposed in July 2001 Remediation Plan	Status	Endpoint Sampling	Backfilling	Restoration
Former Coal Storage Bin	E09B01	--	Pb	Excavate a 22' by 7' area to a depth of 4' bgs at E09B01 The excavation shall be backfilled and compacted in 12" lifts with certified clean fill to within 6-inches of final grade and re-surfaced with topsoil and sod to match existing grade	For the purposes of the Remediation Plan, as well as to support the development of a remedial cost estimate, the limits of soil excavation at this AOC were estimated Additional delineation sampling was conducted in this area subsequent to the release of the Remediation Plan Based on the findings of this sampling effort, exceedances of the reference criteria were found to be limited to a 5' by 10' by 2' deep area A sample location map and analytical results associated with this sampling effort are presented in Attachment 2 As a result, soil within this 5' by 10' by 2' deep area was excavated for proper off-site transportation and disposal	Not Required	Completed	Not Completed
Former Drum Storage Area	E13B02	--	CaPAHs	A 10' x 16' x 6-inch thick volume of concrete at E13B02 in the Former Drum Storage Area shall be sawcut, jack hammered, removed, containerized and transported off-site for proper disposal Excavate a 10' by 16' area of soil to a depth of 2' bgs The excavation shall be backfilled and compacted in 12" lifts with certified clean fill to within 6-inches of final grade and re-surfaced with concrete to match existing grade	Remediation of this area of concern has been completed as outlined in the Remediation Plan	Not Required	Completed	Not Completed
Former Drainage Swale (North of Maintenance Area)	E36B02	--	PCBs and Arsenic	A 20' x 15' x 6-inch thick volume of concrete surrounding E36B02 in the Former Drainage Swale Area shall be sawcut, jack hammered, removed, containerized and transported off-site for proper disposal Excavate a 20' by 15' area of soil to a depth of 7' bgs The excavation shall be backfilled and compacted in 12" lifts with certified clean fill to within 6-inches of final grade and re-surfaced with concrete to match existing grade	Based on additional delineation as well as end point sampling, a total area of 137' by 12' was excavated to a maximum depth of 7' bgs The remediated area in this location was expanded due to the discovery of stained soil adjacent to a buried railroad siding that exhibited elevated concentrations of arsenic It should be noted that additional impacted soil within an approximate 15' by 20' by 5' deep area also exists to the west of the excavation, however, a 4,160 volt electric transformer precluded the ability to conduct soil excavation in this area As a result, deed restrictions will be utilized in this area Attachment 2 presents a sample location map, and Attachment 3 presents the analytical data packages associated with the sampling conducted in this area Based on the results of the endpoint samples (see adjacent column), it appears that this AOC has been remediated to the highest degree practical (without removing a transformer and taking out power to the building) As a result, it is recommended that deed restrictions be utilized in this area	On April 2, five grab samples were collected from the floor of the excavation (at 5' bgs) and four grab samples were collected from one sidewall of this excavation (total of nine samples) within that portion of the excavation that was extended (to the east) Sidewall samples could not be collected at other sidewalls of the excavation since they were composed of concrete (former railroad platform) Of the nine samples collected, one floor sample exceeded the site-specific guidance value for arsenic As a result, additional soil within a 40' by 12' area was remediated an additional 2' bgs (7' bgs) Subsequently, another endpoint sample was collected in the same location as the one which contained the exceedance for arsenic This sample result did not exceed the reference criteria A sample location map is presented in Attachment 2 and endpoint sampling results are provided in Attachment 3	Not Completed	Not Completed

ATTACHMENT 1
NORTHROP GRUMMAN CORPORATION
PLANT 1 FACILITY
Summary of Remedial Activities

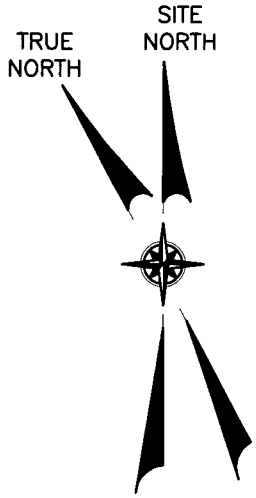
Areas of Concern (AOCs)	Boring Location(s)	Feature Type	Constituents of Concern	Remedial Activity Proposed in July 2001 Remediation Plan	Status	Endpoint Sampling	Backfilling	Restoration
Square Ejector Pit North of Recharge Basin	D15B01	Pit	Cr	A 20' x 20' x 20' deep concrete ejector pit structure with 1' thick concrete walls and a 2' thick concrete floor slab shall be demolished, removed, containerized and transported off-site for proper disposal Excavate a 40' by 40' area of soil (10' beyond the footprint of the existing ejector pit structure) to a depth of 10' below the bottom of the ejector pit structure (32' bgs) The excavation shall be backfilled and compacted in 12" lifts with certified clean fill, the concrete ejector pit structure shall be replaced (refer to next column for details), and the salvaged pumps, piping and appurtenances shall be reinstalled	It should be noted that additional delineation sampling was conducted after the July 2001 Remediation Plan was released Results of this sampling indicated that impacted soil existed from a depth of 8' to 27' bgs, over an area that is 28' wide by 35' long With the exception of these revised limits of excavation, the remediation of this AOC has been completed as outlined in the Remediation Plan Attachment 2 presents a sample location map, and Attachment 3 presents the analytical data packages associated with the sampling conducted in this area	Not Required	Completed	Not Completed
Underground Railroad Tracks in Northeastern Parking Lot	E46	Buried Railroad Tracks	As, Cr	Not included in July 2001 Remediation Plan (Previously unidentified AOC)	This area of concern was identified during the remediation of a dry well being addressed under the UIC program A buried railraod siding was discovered in this area that exhibited stained soil and elevated concentrations of constituents of concern Additional investigation and remediation of this area is ongoing A representative of the NYSDEC has been verbally briefed on the findings obtained to date Remedial activities conducted in this area and confirmatory end point sampling results will be provided to the NYSDEC in the future	Confirmatory endpoint samples to be collected subsequent to remediation	Not Completed	Not Completed
Alodine Storage Chambers	E14	Leaching Chambers	Cr	Not included in July 2001 Remediation Plan (Initially addressed under UIC Program)	A Remediation Plan for this AOC has been submitted to the NYSDEC via correspondence dated April 2, 2002 Analytical data and a sampling location map associated with this area were included as attachments to this correspondence The proposed Remedial Plan for this area included the excavation of soil to a maximum depth of 12' bgs A meeting was held with representatives of the NYSDEC on April 17, 2002 to discuss and finalize the remedial plan Conceptual agreement and conditional approval of the Remedial Plan was obtained from the NYSDEC, provided groundwater monitoring and end point sampling for hexavalent and total chrome was incorporated Correspondence was submitted to the NYSDEC on May 6, 2002 incorporating these additional elements into the Plan, as requested by the NYSDEC By its letter dated May 20, 2002, the NYSDEC provided confirmation of the acceptability of our work plan As a result, remediation of this area is proceeding Remedial activities conducted in this area, confirmatory end point sampling results and groundwater monitoring results will be provided to the NYSDEC in the future	Not Completed (confirmatory endpoint samples to be collected after remediation)	Not Completed	Not Completed

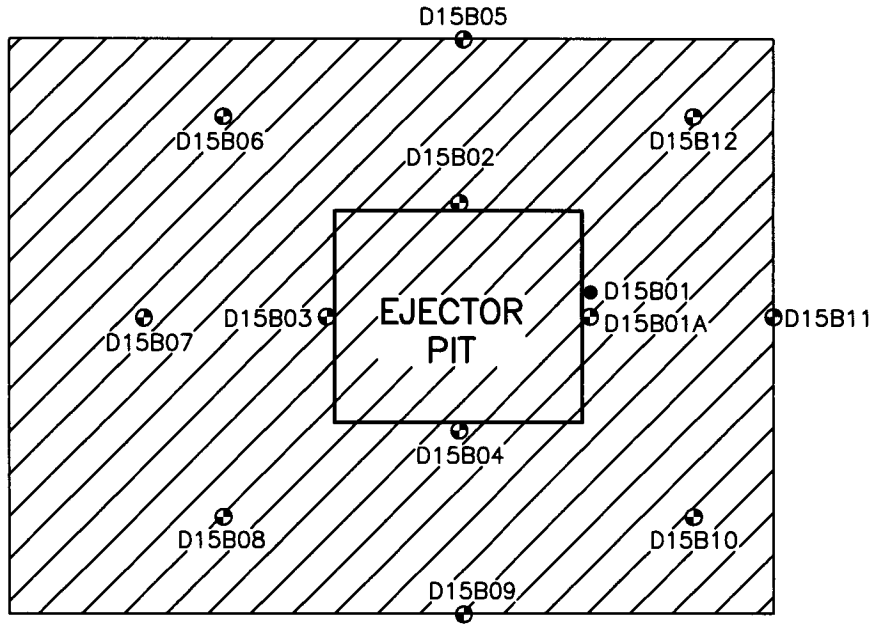
Notes:
bgs below ground surface
-- Not applicable

ATTACHMENT 2

SAMPLE LOCATION MAPS

(AOCs D15, E09 AND E36)





LEGEND

AREA REMEDIATED FROM 7' TO 27' BGS.

● D15B01 PHASE II SOIL PROBE LOCATION

D15B01A SUPPLEMENTAL PHASE II DELINEATION PROGRAM SOIL PROBE/BORING LOCATION

0 10
SCALE IN FEET

Dvirka and Bartilucci Consulting Engineers

NORTHROP GRUMMAN CORPORATION
PLANT 1 – REMEDIAL PROGRAM

REMEDIATION AT SQUARE EJECTOR PIT NORTH OF RECHARGE BASIN

D&B JOB NO.
801–98

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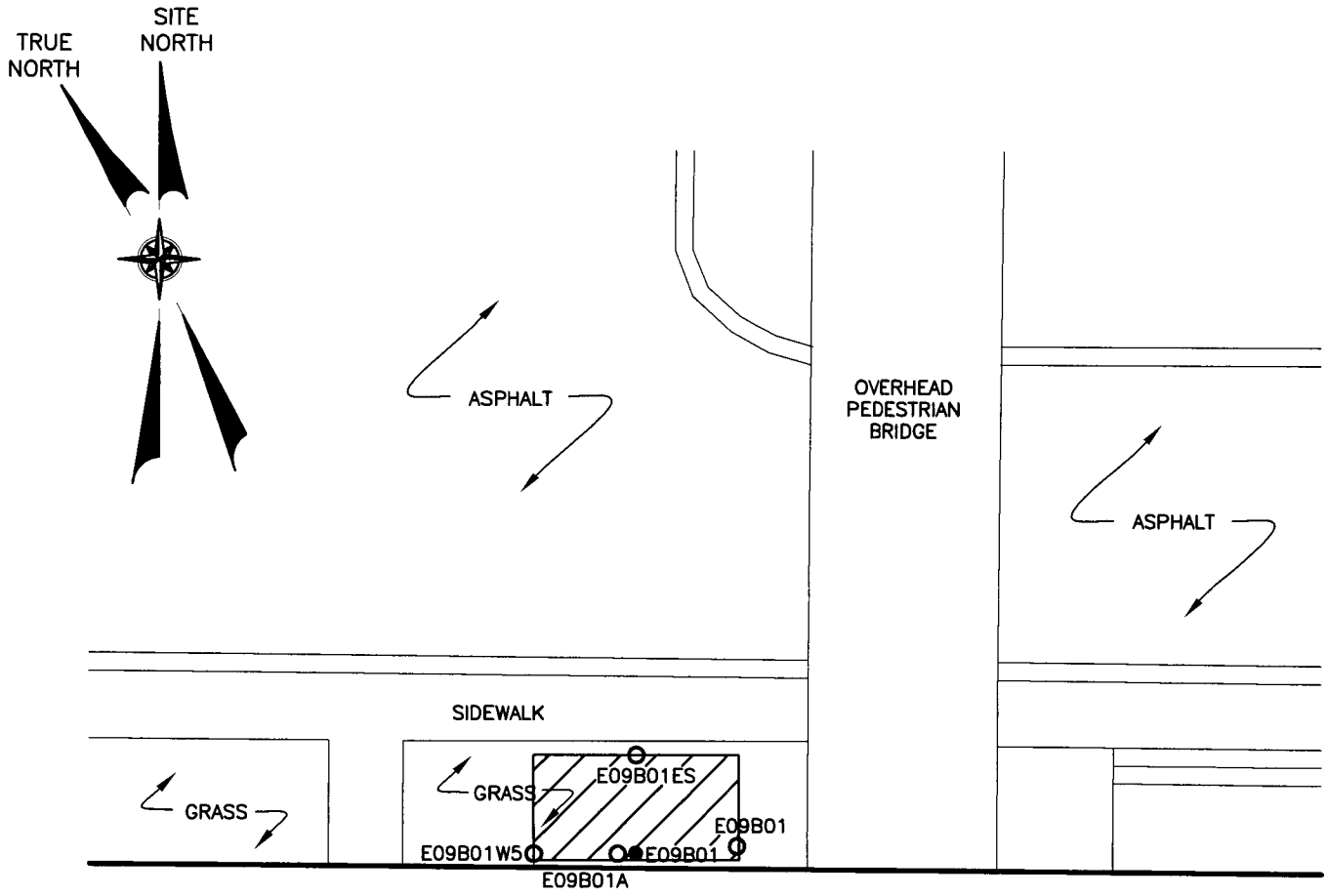

LEGEND

● E09B01 PHASE II SOIL PROBE LOCATION

O E09B01A SUPPLEMENTAL PHASE II DELINEATION PROGRAM SOIL PROBE LOCATION

AREA REMEDIATED TO DEPTH OF 2' BELOW GROUND SURFACE

0 10
SCALE IN FEET

Dvirka and Bartilucci
Consulting Engineers

NORTHROP GRUMMAN CORPORATION
PLANT 1 – REMEDIAL PROGRAM

REMEDIATION AT FORMER COAL STORAGE BIN

D&B JOB NO.
801–98

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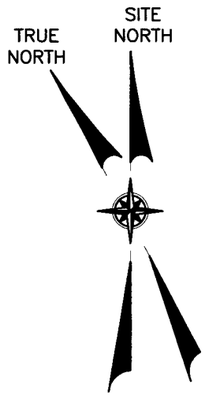
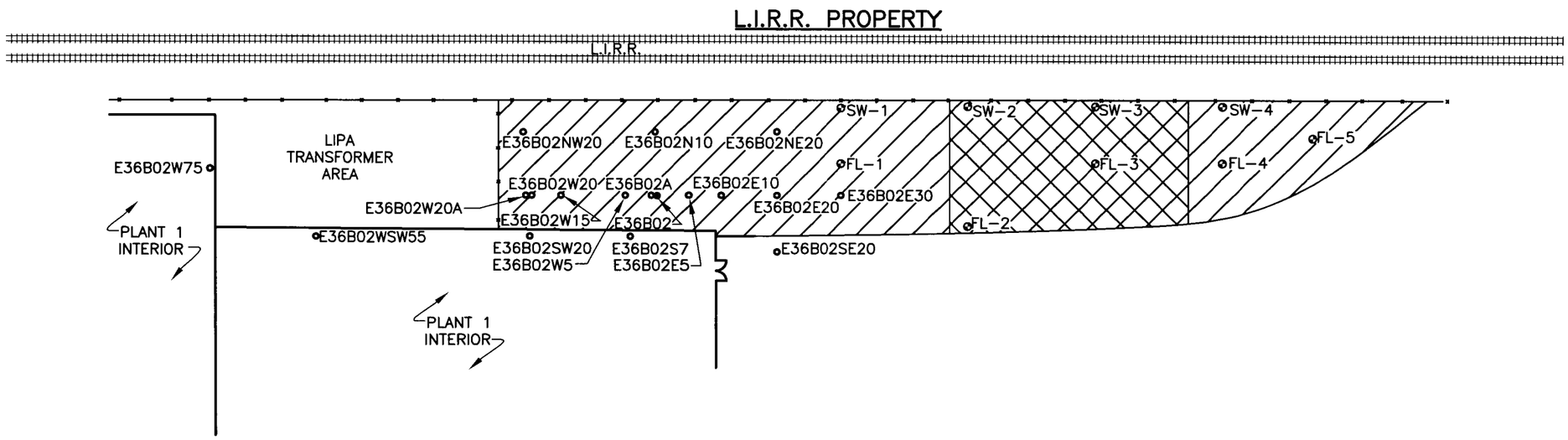


LEGEND

- ● E36B02 — PHASE II SOIL BORING LOCATION
- ○ E36B02A — SUPPLEMENTAL PHASE II DELINEATION PROGRAM SOIL PROBE/BORING LOCATION
- SW-1 — SIDE-WALL ENDPOINT SAMPLE LOCATION
- FL-1 — FLOOR ENDPOINT SAMPLE LOCATION
- FENCE
- AREA REMEDIATED TO A DEPTH OF 5' BGS.
- AREA REMEDIATED TO A DEPTH OF 7' BGS.



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SCALE IN FEET

NORTHROP GRUMMAN CORPORATION
PLANT 1 – REMEDIAL PROGRAM

REMEDIATION AT FORMER DRAINAGE SWALE

Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

DRAWING 3

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ATTACHMENT 3

DELINEATION AND ENDPOINT SAMPLING

LABORATORY RESULTS

(AOCs D15, E09 AND E36)

Table 1-A

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B01 6-8**	**D15B01 10-12**	**D15B01 14-16**	**D15B01 17-19**	**D15B01 19-21**	**D15B01A 21-23**	**D15B01A 25-27**	**D15B01A 29-31**	Comparison Value for Areas of Concern
Sample Depth (ft)	6-8	10-12	14-16	17-19	19-21	21-23	25-27	29-31	
Sampling Date	04/10/01	04/10/01	04/10/01	04/10/01	04/10/01	10/31/01	10/31/01	10/31/01	
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg?kg	mg?kg	mg/kg	mg/kg
Arsenic	1.9	U	0.88 B	U	1.4	NR	NR	NR	20
Barium	21.7	2.9 B	3.6 B	3.9 B	16.2 B	NR	NR	NR	5500
Cadmium	U	U	0.24 B	0.09 B	0.59	NR	NR	NR	78
Chromium	25.4	8.7	39.2	39.5	**584**	186 N	128 N	13.7 N	390
Lead	4.6	0.98	1.3	1.9	10.9	NR	NR	NR	400
Mercury	U	U	U	U	0.09	NR	NR	NR	23
Selenium	U	U	U	U	U	NR	NR	NR	390
Silver	0.26 B	U	0.15 B	U	0.4 B	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B02 11-13**	**D15B02 15-17**	**D15B02 19-21**	**D15B02 23-25**	**D15B02 27-29**	**D15B02 31-33**	**D15B03 11-13**	**D15B03 15-17**	Comparison Value
Sample Depth (ft)	11-13	15-17	19-21	23-25	27-29	31-33	11-13	15-17	for Areas
Sampling Date	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	of Concern
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	346 N	198 N	**488 N**	**584 N**	29.3	18.8 N	**509 N**	99.7 N	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B03 19-21**	**D15B03 23-25**	**D15B03 27-29**	**D15B03 31-33**	**D15B04 11-13**	**D15B04 15-17**	**D15B04 19-21**	**D15B04 23-25**	Comparison Value
Sample Depth (ft)	19-21	23-25	27-29	31-33	11-13	15-17	19-21	23-25	for Areas
Sampling Date	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	10/31/01	of Concern
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	167 N	401 N	261 N	8.5 N	62 N	35.8 N	38.2 N	373 N	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B04 27-29**	**D15B04 31-33**	**D15B0520-22**	**D15B05 24-26**	**D15B05 28-30**	**D15B05 32-34**	**D15B05 36-38**	**D15B05 40-42**	Comparison Value for Areas of Concern
Sample Depth (ft)	27-29	31-33	20-22	24-26	28-30	32-34	36-38	40-42	
Sampling Date	10/31/01	10/31/01	11/06/01	11/06/01	11/06/01	11/06/01	11/06/01	11/06/01	
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	177 N	17.5 N	374	87.1	35.5	71.9	15.4	23.9	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B06 20-22**	**D15B06 28-30**	**D15B06 32-34**	**D15B06 36-38**	**D15B06 40-42**	**D15B07 20-22**	**D15B07 24-26**	**D15B07 28-30**	Comparison Value for Areas of Concern
Sample Depth (ft)	20-22	28-30	32-34	36-38	40-42	20-22	24-26	28-30	
Sampling Date	11/05/01	11/05/01	11/05/01	11/05/01	11/05/01	11/06/01	11/05/01	11/05/01	
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	171	13.3	21	28.7	19	161	21.9	10	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B07 32-34**	**D15B07 36-38**	**D15B07 40-42**	**D15B08 20-22**	**D15B08 24-26**	**D15B08 28-30**	**D15B08 32-34**	**D15B08 36-38**	Comparison Value
Sample Depth (ft)	32-34	36-38	40-42	20-22	24-26	28-30	32-34	36-38	for Areas
Sampling Date	11/05/01	11/05/01	11/05/01	11/05/01	11/05/01	11/05/01	11/05/01	11/05/01	of Concern
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	11.2	20	17.9	57.5	73	22.1	26.6	42.7	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B08 40-42**	**D15B09 20-22**	**D15B09 24-26**	**D15B09 28-30**	**D15B09 32-34**	**D15B09 36-38**	**D15B09 40-42**	**D15B10 20-22**	Comparison Value for Areas of Concern
Sample Depth (ft)	40-42	20-22	24-26	28-30	32-34	36-38	40-42	20-22	
Sampling Date	11/05/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg?kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	9.1	109 E	48.2 E	110 E	46.5 E	29.9 E	27.4 E	147 *	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B10 24-26**	**D15B10 28-30**	**D15B10 32-34**	**D15B10 36-38**	**D15B10 40-42**	**D15B11 24-26**	**D15B11 28-30**	**D15B11 32-34**	Comparison Value for Areas of Concern
Sample Depth (ft)	24-26	28-30	32-34	36-38	40-42	24-26	28-30	32-34	
Sampling Date	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/06/01	11/06/01	11/06/01	
Matrix	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR	NR	20
Barium	NR	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	NR	78
Chromium	8.1 *	7.0 *	18.3 *	7.4 *	9.2 *	14.9	15.7	17.2	390
Lead	NR	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	NR	390

Table 1-A -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

RCRA Metals

Sample Location	Square Ejector Pit North of Recharge Basin								
Sample ID	**D15B11 36-38**	**D15B11 40-42**	**D15B12 20-22**	**D15B12 24-26**	**D15B12 32-34**	**D15B12 36-38**	**D15B1240-42**		Comparison Value for Areas of Concern
Sample Depth (ft)	36-38	40-42	20-22	24-26	32-34	36-38	40-42		
Sampling Date	11/06/01	11/06/01	11/06/01	11/06/01	11/06/01	11/06/01	11/06/01		
Matrix	S	S	S	S	S	S	S		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg
Arsenic	NR	NR	NR	NR	NR	NR	NR		20
Barium	NR	NR	NR	NR	NR	NR	NR		5500
Cadmium	NR	NR	NR	NR	NR	NR	NR		78
Chromium	17.8	10.7	318	11.3	8.3	24.4	13.4		390
Lead	NR	NR	NR	NR	NR	NR	NR		400
Mercury	NR	NR	NR	NR	NR	NR	NR		23
Selenium	NR	NR	NR	NR	NR	NR	NR		390
Silver	NR	NR	NR	NR	NR	NR	NR		390

Qualifiers

U Constituent was not detected at the indicated concentration

B Constituent detected below the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit

E Reported value is estimated due to interference

N Spiked sample recovery not within control limits

* For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

Notes

Result exceeds Comparison Value for Areas of Concern

NR Not analyzed

Table 1-B

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Square Ejector Pit North of Recharge Basin					
Sample ID	**D15B01 6-8**	**D15B01 10-12**	**D15B01 14-16**	**D15B01 17-19**	**D15B01 19-21**	Comparison Value
Sample Depth (ft)	6-8	10-12	14-16	17-19	19-21	for Non-UIC Areas
Sampling Date	04/10/01	04/10/01	04/10/01	04/10/01	04/10/01	of Concern
Matrix	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	U	U	U	U	U	47000000
2-Chlorophenol	U	U	U	U	U	390000
2-Nitrophenol	U	U	U	U	U	---
2,4-Dimethylphenol	U	U	U	U	U	1600000
2,4-Dichlorophenol	U	U	U	U	U	230000
4-Chloro-3-methylphenol	U	U	U	U	U	---
2,4,6-Trichlorophenol	U	U	U	U	U	58000
2,4-Dinitrophenol	U	U	U	U	U	160000
4-Nitrophenol	U	U	U	U	U	---
4,6-Dinitro-2-methylphenol	U	U	U	U	U	---
Pentachlorophenol	U	U	U	U	U	3000
bis(2-Chloroethyl)ether	U	U	U	U	U	600
1,3-Dichlorobenzene	U	U	U	U	U	---
1,4-Dichlorobenzene	U	U	U	U	U	27000
1,2-Dichlorobenzene	U	U	U	U	U	7000000
N-Nitroso-di-n-propylamine	U	U	U	U	U	90
Hexachloroethane	U	U	U	U	U	46000
Nitrobenzene	U	U	U	U	U	39000
Isophorone	U	U	U	U	U	670000
bis(2-Chloroethoxy)methane	U	U	U	U	U	---
1,2,4-Trichlorobenzene	U	U	U	U	U	780000
Naphthalene	U	U	U	U	U	3100000
Hexachlorobutadiene	U	U	U	U	U	8000
Hexachlorocyclopentadiene	U	U	U	U	U	550000
2-Chloronaphthalene	U	U	U	U	U	---
Dimethylphthalate	U	U	U	U	U	---
Acenaphthylene	U	U	U	U	U	---
2,6-Dinitrotoluene	U	U	U	U	U	900
Acenaphthene	U	U	U	U	U	4700000
2,4-Dinitrotoluene	U	U	U	U	U	900
Diethylphthalate	U	U	U	U	U	63000000
4-Chlorophenyl-phenylether	U	U	U	U	U	---
Fluorene	U	U	U	U	U	3100000
N-Nitrosodiphenylamine	U	U	U	U	U	130000
4-Bromophenyl-phenylether	U	U	U	U	U	---
Hexachlorobenzene	U	U	U	U	U	400
Phenanthrene	U	U	U	U	U	---
Anthracene	U	U	U	U	U	23000000
Di-n-butylphthalate	U	U	U	U	120 J	7800000
Fluoranthene	U	U	U	U	U	3100000
Pyrene	U	U	U	U	U	2300000
Butylbenzylphthalate	U	U	U	U	U	16000000
3,3'-Dichlorobenzidine	U	U	U	U	U	1000
Benzo(a)anthracene	U	U	U	U	U	900
Chrysene	U	U	U	U	U	88000
bis(2-Ethylhexyl)phthalate	U	U	U	U	U	46000
Di-n-octyl phthalate	U	U	U	U	U	16000000
Benzo(b)fluoranthene	U	U	U	U	U	900
Benzo(k)fluoranthene	U	U	U	U	U	9000
Benzo(a)pyrene	U	U	U	U	U	90
Indeno(1,2,3-cd)pyrene	U	U	U	U	U	900
Dibenzo(a,h)anthracene	U	U	U	U	U	90
Benzo(g,h,i)perylene	U	U	U	U	U	---
2,4,5-Trichlorophenol	U	U	U	U	U	7800000
2-Methylphenol	U	U	U	U	U	3900000

Table 1-B -- continued

Northrop Grumman Corporation - Plant 1
Ejector Pit
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Square Ejector Pit North of Recharge Basin					
Sample ID	**D15B01 6-8**	**D15B01 10-12**	**D15B01 14-16**	**D15B01 17-19**	**D15B01 19-21**	Comparison Value
Sample Depth (ft)	6-8	10-12	14-16	17-19	19-21	for Non-UIC Areas
Sampling Date	04/10/01	04/10/01	04/10/01	04/10/01	04/10/01	of Concern
Matrix	S	S	S	S	S	
Dilution Factor	1.0	1.0	1 0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
3+4-Methylphenols	U	U	U	U	U	---
Benzyl Alcohol	U	U	U	U	U	---
2,2'-oxybis(1-Chloropropane)	U	U	U	U	U	---
4-Chloroaniline	U	U	U	U	U	310000
2-Methylnaphthalene	U	U	U	U	U	---
4-Nitroaniline	U	U	U	U	U	---
2-Nitroaniline	U	U	U	U	U	---
3-Nitroaniline	U	U	U	U	U	---
Dibenzofuran	U	U	U	U	U	---
Azobenzene	U	U	U	U	U	---
Benzoic acid	U	U	U	U	U	310000000
Total Carcinogenic PAHs	ND	ND	ND	ND	ND	10000
Total PAH	ND	ND	ND	ND	ND	100000
Total Confident Conc. SVOC (s)	ND	ND	ND	ND	120	500000

Qualifiers

U The compound was not detected at the indicated concentration

J Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero

Notes

--- Not established

ND Not detected

Table 2-A

Northrop Grumman Corporation - Plant 1
Former Coal Storage Bin
Analytical Summary Tables

RCRA Metals

Sample Location	Former Coal Storage Bin						Comparison Value for Areas of Concern
Sample ID	**E09 B01 0-2**	**E09 B01 6-8**	**E09B01A 2-4**	**E09B01A 4-6**	**E09B01 N5 0-2**	**E09B01 N5 2-4**	
Sample Depth (ft)	0-2	6-8	2-4	4-6	0-2	2-4	
Sampling Date	10/02/00	10/02/00	11/01/01	11/01/01	11/01/01	11/01/01	
Matrix	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	7.4	14.2	NR	NR	NR	NR	20
Barium	18.5 B	19.7 B	NR	NR	NR	NR	5500
Cadmium	0.12 B	0.3 B	NR	NR	NR	NR	78
Chromium	10.9	12.1	NR	NR	NR	NR	390
Lead	**834**	32.8	15.5	119	311	69.5	400
Mercury	0.2	0.13	NR	NR	NR	NR	23
Selenium	U	0.65	NR	NR	NR	NR	390
Silver	0.21 BN	0.15 BN	NR	NR	NR	NR	390

Table 2-A -- continued

Northrop Grumman Corporation - Plant 1
Former Coal Storage Bin
Analytical Summary Tables

RCRA Metals

Sample Location	Former Coal Storage Bin						
Sample ID	**E09B01 E5 2-4**	**E09B01 E5 4-6**	**E09B01 W5 0-2**	**E09B01 W5 2-4**	**E09 B01W5 4-6**		Comparison Value for Areas of Concern
Sample Depth (ft)	2-4	4-6	0-2	2-4	4-6		
Sampling Date	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01		
Matrix	S	S	S	S	S		
Dilution Factor	1.0	1.0	1.0	1.0	1.0		
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg
Arsenic	NR	NR	NR	NR	NR		20
Barium	NR	NR	NR	NR	NR		5500
Cadmium	NR	NR	NR	NR	NR		78
Chromium	NR	NR	NR	NR	NR		390
Lead	71.8	8.6	115	22.6	14.8		400
Mercury	NR	NR	NR	NR	NR		23
Selenium	NR	NR	NR	NR	NR		390
Silver	NR	NR	NR	NR	NR		390

Qualifiers

U: Constituent was not detected at the indicated concentration.

B: Constituent detected below the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit

N: Spiked sample recovery not within control limits

Notes

: Result exceeds Comparison Value for Areas of Concern

NR : Not analyzed

Table 2-B

Northrop Grumman Corporation - Plant 1
Former Coal Storage Bin
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Former Coal Storage Bin		
Sample ID	**E09 B01 0-2**	**E09 B01 6-8**	Comparison Value
Sample Depth (ft)	0-2	6-8	for Areas
Sampling Date	10/02/00	10/02/00	of Concern
Matrix	S	S	
Dilution Factor	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg
Phenol	U	U	47000000
2-Chlorophenol	U	U	390000
2-Nitrophenol	U	U	---
2,4-Dimethylphenol	U	U	1600000
2,4-Dichlorophenol	U	U	230000
4-Chloro-3-methylphenol	U	U	---
2,4,6-Trichlorophenol	U	U	58000
2,4-Dinitrophenol	U	U	160000
4-Nitrophenol	U	U	---
4,6-Dinitro-2-methylphenol	U	U	---
Pentachlorophenol	U	U	3000
bis(2-Chloroethyl)ether	U	U	600
1,3-Dichlorobenzene	U	U	---
1,4-Dichlorobenzene	U	U	27000
1,2-Dichlorobenzene	U	U	7000000
N-Nitroso-di-n-propylamine	U	U	90
Hexachloroethane	U	U	46000
Nitrobenzene	U	U	39000
Isophorone	U	U	670000
bis(2-Chloroethoxy)methane	U	U	---
1,2,4-Trichlorobenzene	U	U	780000
Naphthalene	U	U	3100000
Hexachlorobutadiene	U	U	8000
Hexachlorocyclopentadiene	U	U	550000
2-Chloronaphthalene	U	U	---
Dimethylphthalate	U	U	---
Acenaphthylene	U	U	---
2,6-Dinitrotoluene	U	U	900
Acenaphthene	U	U	4700000
2,4-Dinitrotoluene	U	U	900
Diethylphthalate	U	U	63000000
4-Chlorophenyl-phenylether	U	U	---
Fluorene	U	U	3100000
N-Nitrosodiphenylamine	U	U	130000
4-Bromophenyl-phenylether	U	U	---
Hexachlorobenzene	U	U	400
Phenanthrene	230 J	160 J	---
Anthracene	47 J	42 J	23000000

Table 2-B -- continued

Northrop Grumman Corporation - Plant 1
Former Coal Storage Bin
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Former Coal Storage Bin		
Sample ID	**E09 B01 0-2**	**E09 B01 6-8**	Comparison Value
Sample Depth (ft)	0-2	6-8	for Areas
Sampling Date	10/02/00	10/02/00	of Concern
Matrix	S	S	
Dilution Factor	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg
Di-n-butylphthalate	47 J	79 J	7800000
Fluoranthene	360 J	230 J	3100000
Pyrene	210 J	140 J	2300000
Butylbenzylphthalate	U	U	16000000
3,3'-Dichlorobenzidine	U	U	1000
Benzo(a)anthracene	130 J	93 J	900
Chrysene	160 J	110 J	88000
bis(2-Ethylhexyl)phthalate	U	U	46000
Di-n-octyl phthalate	U	U	16000000
Benzo(b)fluoranthene	110 J	83 J	900
Benzo(k)fluoranthene	140 J	110 J	9000
Benzo(a)pyrene	**130 J**	**96 J**	90
Indeno(1,2,3-cd)pyrene	55 J	45 J	900
Dibenzo(a,h)anthracene	U	U	90
Benzo(g,h,i)perylene	72 J	62 J	---
2,4,5-Trichlorophenol	U	U	7800000
2-Methylphenol	U	U	3900000
3+4-Methylphenols	U	U	---
Benzyl Alcohol	U	U	---
2,2'-oxybis(1-Chloropropane)	U	U	---
4-Chloroaniline	U	U	310000
2-Methylnaphthalene	U	U	---
4-Nitroaniline	U	U	---
2-Nitroaniline	U	U	---
3-Nitroaniline	U	U	---
Dibenzofuran	U	U	---
Azobenzene	U	U	---
Benzoic acid	U	U	310000000
Total Carcinogenic PAHs	725	537	10000
Total PAHs	1414	1171	100000
Total Conc. SVOC (s)	1691	1250	500000

Qualifiers

U: The compound was not detected at the indicated concentration.

J: Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than zero

Notes

--- : Not established.

Table 3-A

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Volatile Organic Compounds

Sample Location	Former Drainage Swale (North of Maintenance Area)				
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02 E30 3-5**	**E36B02W20A 3-5**	Comparison Value
Sample Depth (ft)	1-3	3-5	3-5	5-Mar	for Areas
Sampling Date	09/25/00	09/25/00	11/09/01	12/06/01	of Concern
Matrix	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Chloromethane	U	U	U	U	---
Bromomethane	U	U	U	U	---
Vinyl Chloride	U	U	U	U	300
Chloroethane	U	U	U	U	---
Methylene Chloride	U	2.5 J	5.7	2.3 JB	85000
Trichlorofluoromethane	U	U	U	U	---
1,1-Dichloroethene	U	U	U	U	1000
1,1-Dichloroethane	U	U	U	U	7800000
trans-1,2-Dichloroethene	U	U	U	U	1600000
cis-1,2-Dichloroethene	U	U	U	U	780000
Chloroform	U	U	U	U	100000
1,2-Dichloroethane	U	U	U	U	7000
1,1,1-Trichloroethane	U	U	U	U	---
Carbon Tetrachloride	U	U	U	U	5000
Bromodichloromethane	U	U	U	U	10000
1,2-Dichloropropane	U	U	U	U	9000
cis-1,3-Dichloropropene	U	U	U	U	4000
Trichloroethene	U	U	U	U	58000
Dibromochloromethane	U	U	U	U	---
1,1,2-Trichloroethane	U	U	U	U	11000
Benzene	U	U	U	U	22000
t-1,3-Dichloropropene	U	U	U	U	4000
2-Chloroethyl Vinyl Ether	U	U	U	U	---
Bromoform	U	U	U	U	81000
Tetrachloroethene	U	U	U	U	12000
1,1,2,2-Tetrachloroethane	U	U	U	U	3000
Toluene	U	U	U	U	16000000
Chlorobenzene	U	U	U	U	1600000
2-Butanone	U	U	U	U	---
Ethyl Benzene	U	U	U	U	7800000
m/p-Xylenes	U	U	U	U	160000000
o-Xylene	U	U	U	U	160000000
Acetone	U	U	U	U	7800000
Carbon Disulfide	U	U	U	U	7800000
4-Methyl-2-Pentanone	U	U	U	U	---
2-Hexanone	U	U	U	U	---

Table 3-A -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Volatile Organic Compounds

Sample Location	Former Drainage Swale (North of Maintenance Area)				
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02 E30 3-5**	**E36B02W20A 3-5**	Comparison Value
Sample Depth (ft)	1-3	3-5	3-5	5-Mar	for Areas
Sampling Date	09/25/00	09/25/00	11/09/01	12/06/01	of Concern
Matrix	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Styrene	U	U	U	U	16000000
1,3-Dichlorobenzene	U	U	U	U	---
1,4-Dichlorobenzene	U	U	U	U	27000
1,2-Dichlorobenzene	U	U	U	U	7000000
Dichlorodifluoromethane	U	U	U	U	---
Vinyl Acetate	U	U	U	U	78000000
2,2-Dichloropropane	U	U	U	U	---
Bromochloromethane	U	U	U	U	---
1,1-Dichloropropene	U	U	U	U	---
1,3-Dichloropropane	U	U	U	U	---
1,2-Dibromoethane	U	U	U	U	---
Isopropylbenzene	U	U	U	U	---
1,2,3-Trichloropropane	U	U	U	U	---
1,1,1,2-Tetrachloroethane	U	U	U	U	---
Bromobenzene	U	U	U	U	---
n-propylbenzene	U	U	U	U	---
2-Chlorotoluene	U	U	U	U	---
1,3,5-Trimethylbenzene	U	U	U	U	---
4-Chlorotoluene	U	U	U	U	---
tert-Butylbenzene	U	U	U	U	---
1,2,4-Trimethylbenzene	U	U	U	U	---
sec-Butylbenzene	U	U	U	U	---
p-Isopropyltoluene	U	U	U	U	---
Dibromomethane	U	U	U	U	---
n-Butylbenzene	U	U	U	U	---
1,2-Dibromo-3-Chloropropane	U	U	U	U	---
1,2,4-Trichlorobenzene	U	U	U	U	780000
Hexachlorobutadiene	U	U	U	U	8000
Naphthalene	U	U	U	U	3100000
MTBE	U	U	U	U	---
1,2,3-Trichlorobenzene	U	U	U	U	---
Total Conc. VOAs (s)	ND	3	5.7	2.3	10000
Total Estimated Conc. VOA TICs (s)	6	16	ND	18	---

Qualifiers

U The compound was not detected at the indicated concentration

J Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit but greater than zero The concentration given is an approximate value

B The analyte was found in the laboratory blank as well as the sample This indicates possible laboratory contamination of the environmental sample.

Notes

--- : Not established.
ND : Not detected.

Table 3-B

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Former Drainage Swale (North of Maintenance Area)				
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02 E30 3-5**	**E36B02 W20A 3-5**	
Sample Depth (ft)	1-3	3-5	3-5	5-Mar	Comparison Value
Sampling Date	09/25/00	09/25/00	11/09/01	12/06/01	for Areas
Matrix	S	S	S	S	of Concern
Dilution Factor	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Phenol	U	75 J	U	U	47000000
2-Chlorophenol	U	U	U	U	390000
2-Nitrophenol	U	U	U	U	---
2,4-Dimethylphenol	U	U	U	U	1600000
2,4-Dichlorophenol	U	U	U	U	230000
4-Chloro-3-methylphenol	U	U	U	U	---
2,4,6-Trichlorophenol	U	U	U	U	58000
2,4-Dinitrophenol	U	U	U	U	160000
4-Nitrophenol	U	U	U	U	---
4,6-Dinitro-2-methylphenol	U	U	U	U	---
Pentachlorophenol	U	U	U	U	3000
bis(2-Chloroethyl)ether	U	U	U	U	600
1,3-Dichlorobenzene	U	U	U	U	---
1,4-Dichlorobenzene	U	U	U	U	27000
1,2-Dichlorobenzene	U	U	U	U	7000000
N-Nitroso-di-n-propylamine	U	U	U	U	90
Hexachloroethane	U	U	U	U	46000
Nitrobenzene	U	U	U	U	39000
Isophorone	U	U	U	U	670000
bis(2-Chloroethoxy)methane	U	U	U	U	---
1,2,4-Trichlorobenzene	U	U	U	U	780000
Naphthalene	U	81 J	U	53 J	3100000
Hexachlorobutadiene	U	U	U	U	8000
Hexachlorocyclopentadiene	U	U	U	U	550000
2-Chloronaphthalene	U	U	U	U	---
Dimethylphthalate	U	U	U	U	---
Acenaphthylene	U	U	U	U	---
2,6-Dinitrotoluene	U	U	U	U	900
Acenaphthene	U	98 J	U	190 J	4700000
2,4-Dinitrotoluene	U	U	U	350 J	900
Diethylphthalate	U	U	U	53 B	63000000
4-Chlorophenyl-phenylether	U	U	U	U	---
Fluorene	U	130 J	U	170 J	3100000
N-Nitrosodiphenylamine	U	U	U	U	130000
4-Bromophenyl-phenylether	U	U	U	U	---
Hexachlorobenzene	U	U	U	U	400
Phenanthrene	U	860	170 J	940	---
Anthracene	U	240 J	50 J	230 J	23000000
Di-n-butylphthalate	83 J	140 J	U	120 J	7800000
Fluoranthene	U	860	180 J	860	3100000
Pyrene	U	630	150 J	1400	2300000
Butylbenzylphthalate	U	U	37 J	270 J	16000000
3,3'-Dichlorobenzidine	U	U	U	U	1000
Benzo(a)anthracene	U	450	83 J	530	900
Chrysene	U	440	97 J	710	88000
bis(2-Ethylhexyl)phthalate	87 J	U	U	240 J	46000
Di-n-octyl phthalate	U	U	U	U	16000000

Table 3-B -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Semivolatile Organic Compounds

Sample Location	Former Drainage Swale (North of Maintenance Area)				
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02 E30 3-5**	**E36B02 W20A 3-5**	
Sample Depth (ft)	1-3	3-5	3-5	5-Mar	Comparison Value
Sampling Date	09/25/00	09/25/00	11/09/01	12/06/01	for Areas
Matrix	S	S	S	S	of Concern
Dilution Factor	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzo(b)fluoranthene	U	330 J	71 J	720	900
Benzo(k)fluoranthene	U	450	95 J	310 J	9000
Benzo(a)pyrene	U	**370**	76 J	**560**	90
Indeno(1,2,3-cd)pyrene	U	80 J	U	170 J	900
Dibenzo(a,h)anthracene	U	U	U	90 J	90
Benzo(g,h,i)perylene	U	120 J	47 J	400	---
2,4,5-Trichlorophenol	U	U	U	U	7800000
2-Methylphenol	U	U	U	U	3900000
3+4-Methylphenols	U	U	U	U	---
Benzyl Alcohol	U	U	U	U	---
2,2'-oxybis(1-Chloropropane)	U	U	U	U	---
4-Chloroaniline	U	U	U	U	310000
2-Methylnaphthalene	U	38 J	U	U	---
4-Nitroaniline	U	U	U	U	---
2-Nitroaniline	U	U	U	U	---
3-Nitroaniline	U	U	U	U	---
Dibenzofuran	U	70 J	U	95 J	---
Azobenzene	U	U	U	U	---
Benzoic acid	U	U	U	U	310000000
Total Carcinogenic PAHs	0	2120	469	3090	10000
Total PAHs	0	5247	1019	4338	100000
Total Conc. SVOC (s)	170	5462	1056	8461	500000

Qualifiers

U. The compound was not detected at the indicated concentration

J. Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit but greater than zero

Notes

--- : Not established.

Table 3-C

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02A 5-7**	**E36B02A 7-9**	**E36B02A 9-11**	**E36B02A 11-13**	**E36B02A 13-15**	Comparison Value for Areas of Concern
Sample Depth, ft	1-3	3-5	5-7	7-9	9-11	11-13	13-15	
Sampling Date	09/25/00	09/25/00	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	10.0	10.0	10.0	10.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	270	U	U	U	U	U	U	---
Aroclor 1254	U	**13000**	3300	1600	1200	1600	260	---
Aroclor 1260	U	U	U	U	U	U	U	---
Total	270	13000	3300	1600	1200	1600	260	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02 E5 1-3**	**E36B02 E5 3-5**	**E36B02 E5 5-7**	**E36B02 E5 7-9**	**E36B02 E5 9-11**	**E36B02 E5 11-13**	**E36B02 E5 13-15**	Comparison Value
Sample Depth, ft	1-3	3-5	5-7	7-9	9-11	11-13	13-15	for Areas
Sampling Date	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	10.0	1.0	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	150	U	U	U	U	U	U	---
Aroclor 1254	120 P	1200	U	U	U	100	100	---
Aroclor 1260	U	U	U	U	U	U	U	---
Total	270	1200	0	0	0	100	100	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02 W5 1-3**	**E36B02 W5 3-5**	**E36B02 W5 5-7**	**E36B02 W5 7-9**	**E36B02 W5 9-11**	**E36B02 W5 11-13**	**E36B02 W5 13-15**	Comparison Value
Sample Depth, ft	1-3	3-5	5-7	7-9	9-11	11-13	13-15	for Areas
Sampling Date	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	10.0	10.0	10.0	10.0	10.0	10.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	100	U	U	U	U	U	U	---
Aroclor 1254	71 P	3300	1700 P	650 P	1600	890 P	860 P	---
Aroclor 1260	14 J	U	U	U	U	U	U	---
Total	185	3300	1700	650	1600	890	860	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02 S7 2.5-4.5**	**E36B02 N10 1-3**	**E36B02 N10 3-5**	**E36B02 N10 5-7**	**E36B02 N10 7-9**	**E36B02 N10 9-11**	**E36B02 N10 11-13**	Comparison Value
Sample Depth, ft	2.5-4.5	1-3	3-5	5-7	7-9	9-11	11-13	for Areas
Sampling Date	12/06/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	U	250	30 J	29	U	U	U	---
Aroclor 1254	U	80 P	U	U	U	U	U	---
Aroclor 1260	U	U	U	U	U	U	U	---
Total	0	330	30	29	0	0	0	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02 N10 13-15**	**E36B02 E10 3-5**	**E36B02 E10 6-8**	**E36B02 E10 9-11**	**E36B02W15 1-3**	**E36B02W15 5-7**	**E36B02W15 9-11**	Comparison Value
Sample Depth, ft	13-15	3-5	6-8	9-11	1-3	5-7	9-11	for Areas
Sampling Date	11/01/01	11/01/01	11/01/01	11/01/01	11/09/01	11/09/01	11/09/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	10.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	U	U	U	U	U	U	U	---
Aroclor 1254	U	57 P	U	U	56 P	1900 P	U	---
Aroclor 1260	U	U	U	U	U	U	U	---
Total	0	57	0	0	56	1900	0	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02W15 13-15**	**E36B02W15 13-15**	**E36B02NW20 3-5**	**E36B02NW20 6-8**	**E36B02SE20 3-5**	**E36B02SE20 6-8**	**E36B02SW20 3-5**	Comparison Value
Sample Depth, ft	N6698-14	3-5	3-5	6-8	3-5	6-8	3-5	for Areas
Sampling Date	11/09/01	12/06/01	12/06/01	12/06/01	12/06/01	12/06/01	12/06/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	U	U	U	U	U	U	---
Aroclor 1221	U	U	U	U	U	U	U	---
Aroclor 1232	U	U	U	U	U	U	U	---
Aroclor 1242	U	U	U	U	U	U	U	---
Aroclor 1248	U	U	U	U	U	U	U	---
Aroclor 1254	280 P	U	U	U	U	U	U	---
Aroclor 1260	U	U	U	U	U	U	U	---
Total	280	0	0	0	0	0	0	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02SW20 5-7**	**E36B02NE20 3-5**	**E36B02NE20 6-8**	**E36B02E30 3-5**	**E36B02WE30 5-7**	**E36B02E30 9-11**	**E36B02E30 13-15**	Comparison Value
Sample Depth, ft	5-7	N7000-17	N7000-18	3-5	5-7	9-11	13-15	for Areas
Sampling Date	12/06/01	12/05/2001	12/05/2001	11/09/01	11/09/01	11/09/01	11/09/01	of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Aroclor 1016	U	34 U	34 U	U	U	U	U	---
Aroclor 1221	U	34 U	34 U	U	U	U	U	---
Aroclor 1232	U	34 U	34 U	U	U	U	U	---
Aroclor 1242	U	34 U	34 U	U	U	U	U	---
Aroclor 1248	U	34 U	34 U	55	U	U	U	---
Aroclor 1254	U	34 U	34 U	130	U	U	U	---
Aroclor 1260	U	34 U	34 U	U	U	U	U	---
Total	0	0	0	185	0	0	0	10,000

Table 3-C -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36B02W20 3-5**	**E36B02W20A 3-5**	**E36B02WSW55 3-5**	**36B02WSW55 5.5-7**	**E36B02W75 3-5**	**E36B02W75 5.5-7.5**		Comparison Value for Areas of Concern
Sample Depth, ft	3-5	3-5	3-5	5.5-7.5	3-5	5.5-7.5		
Sampling Date	11/09/01	12-06/01	12/06/01	12/06/01	12/06/01	12/06/01		
Matrix	S	S	S	S	S	S		
Dilution Factor	100.0	1.0	1.0	1.0	1.0	1.0		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		ug/kg
Aroclor 1016	U	U	U	U	U	U		---
Aroclor 1221	U	U	U	U	U	U		---
Aroclor 1232	U	U	U	U	U	U		---
Aroclor 1242	U	U	U	U	U	U		---
Aroclor 1248	U	U	U	U	U	U		---
Aroclor 1254	**19000** P	U	U	U	U	U		---
Aroclor 1260	U	570 P	U	U	U	U		---
Total	19000	570	0	0	0	0		10,000

Qualifiers

U Constituent was not detected at the indicated concentration

P. For dual column analysis, the percent difference between the quantitated concentrations on the 2 columns is greater than 40%

J Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit but greater than zero The concentration given is an approximate value

Notes

Result exceeds Comparison Value for Areas of Concern

NR Not analyzed

--- : Site-specific comparison value not utilized for individual PCBs.

Table 3-E

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)									
Sample ID	**Sidewall-1**	**Sidewall-2**	**Sidewall-3**	**Sidewall-4**	**Floor-1**	**Floor-2**	**Floor-3**	**Floor-4**	**Floor-5**	Comparison Value
Sample Depth (ft)	0-0.5	0-0 5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0 5	0-0.5	for Areas
Sampling Date	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	of Concern
Matrix	S	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1 0	1.0	1.0	1.0	1 0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	U	U	U	U	U	U	U	U	U	
Aroclor-1221	U	U	U	U	U	U	U	U	U	
Aroclor-1232	U	U	U	U	U	U	U	U	U	
Aroclor-1242	U	U	U	U	U	U	U	U	U	
Aroclor-1248	U	U	U	U	U	U	U	U	U	
Aroclor-1254	U	U	U	U	328	280	96 4	U	188	
Aroclor-1260	U	U	U	U	119	159	141	13 1 J	106	
Total	0	0	0	0	447	439	237 4	13.1	294	10000

Qualifiers

U Constituent was not detected at the indicated concentration

J Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit but greater than zero The concentration given is an approximate value

Notes

Result exceeds Comparison Value for Areas of Concern.

NR Not analyzed

--- : No site-specific comparison value utilized for individual PCBs.

Table 3-F

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Arsenic

Sample Location	Former Drainage Swale (North of Maintenance Area)										
Sample ID	**Sidewall-1**	**Sidewall-2**	**Sidewall-3**	**Sidewall-4**	**Floor-1**	**Floor-2**	**Floor-3**	**Floor-4**	**Floor-5**	**Floor-2**	Comparison Value
Sample Depth (ft)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0 5	0-0.5	0-0 5	0-0.5	0-0.5	for Areas
Sampling Date	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	of Concern
Matrix	S	S	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1 0	1.0	1 0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	5.52	2.97	7.50	U	7.84	**25.70**	**56.10**	7 21	8.98	U	20

Qualifiers

U. Constituent was not detected at the indicated concentration

Notes

. Result exceeds Comparison Value for Areas of Concern

Table 3-D

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Metals

Sample Location	Former Drainage Swale (North of Maintenance Area)							Comparison Value for Areas of Concern
Sample ID	**E36 B02 1-3'**	**E36 B02 3-5'**	**E36B02 W5 1-3'**	**E36B02W5 3-5'**	**E36B02W55-7**	**E36B02 E5 3-5**	**E36B02E55-7**	
Sample Depth (ft)	1-3	3-5	1-3	3-5	5-7	3-5	5-7	
Sampling Date	09/25/00	09/25/00	12/11/01	12/11/01	11/01/01	12/11/01	11/01/01	
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	3.2	10.6	6.0 P	**35.7 P**	10.1	**78.0 P**	3.1	20
Barium	4.7 B	7 B	NR	NR	NR	NR	NR	5500
Cadmium	3.2	1.5	NR	NR	NR	NR	NR	78
Chromium	87.3	50.7	NR	NR	NR	NR	NR	390
Lead	25.2	7.5	NR	NR	NR	NR	NR	400
Mercury	0.05	0.08	NR	NR	NR	NR	NR	23
Selenium	U	U	NR	NR	NR	NR	NR	390
Silver	36.9	U	NR	NR	NR	NR	NR	390

Table 3-D -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Metals

Sample Location	Former Drainage Swale (North of Maintenance Area)							
Sample ID	**E36 B02 E10 3-5**	**E36B02E106-8**	**E36B02W753-5**	**E36B02WSW553-5**	**E36B02SW203-5**	**E36B02S72.5-4.5**	**E36B02SE203-5**	Comparison Value
Sample Depth (ft)	**3-5**	**6-8**	**3-5**	**3-5**	**3-5**	**2.5-4.5**	**3-5**	
Sampling Date	12/11/01	11/01/01	12/05/01	12/05/01	12/05/01	12/05/01	12/05/01	for Areas of Concern
Matrix	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	**104 P**	1.8	5.5	4.9	4.4	3.7	5.2	20
Barium	NR	NR	NR	NR	NR	NR	NR	5500
Cadmium	NR	NR	NR	NR	NR	NR	NR	78
Chromium	NR	NR	NR	NR	NR	NR	NR	390
Lead	NR	NR	NR	NR	NR	NR	NR	400
Mercury	NR	NR	NR	NR	NR	NR	NR	23
Selenium	NR	NR	NR	NR	NR	NR	NR	390
Silver	NR	NR	NR	NR	NR	NR	NR	390

Table 3-D -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Metals

Sample Location	Former Drainage Swale (North of Maintenance Area)							Comparison Value for Areas of Concern
Sample ID	**E36B02NE203-5**	**E36B02N105-7**	**E36B02NW203-5**	**E36B02W20A5-7**	**E36B02A5-7**	**E36B02E203-5**		
Sample Depth	**3-5**	**5-7**	**3-5**	**5-7**	**5-7**	**3-5**		
Sampling Date	12/05/01	11/01/01	12/05/01	01/10/02	01/10/02	01/10/02		
Matrix	S	S	S	S	S	S		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0		
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg
Arsenic	2.1	0.7 B	2	16.3	8.2	**213**		20
Barium	NR	NR	NR	NR	NR	NR		5500
Cadmium	NR	NR	NR	NR	NR	NR		78
Chromium	NR	NR	NR	NR	NR	NR		390
Lead	NR	NR	NR	NR	NR	NR		400
Mercury	NR	NR	NR	NR	NR	NR		23
Selenium	NR	NR	NR	NR	NR	NR		390
Silver	NR	NR	NR	NR	NR	NR		390

Table 3-D -- continued

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Metals

Sample Location	Former Drainage Swale (North of Maintenance Area)							Comparison Value Areas of Concern
Sample ID	**E36B02E205-7**							
Sampling Date	01/10/02							
Matrix	S							
Dilution Factor	1.0							
Units	mg/kg							mg/kg
Arsenic	0.9							20
Barium	NR							5500
Cadmium	NR							78
Chromium	NR							390
Lead	NR							400
Mercury	NR							23
Selenium	NR							390
Silver	NR							390

Qualifiers

U Constituent was not detected at the indicated concentration

P: For dual column analysis, the percent difference between the quantitated concentrations on the 2 columns is greater than 40%

*. For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference

Notes

[ ] : Result exceeds Comparison Value for Areas of Concern

NR Not analyzed

Table 3-E

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

PCBs

Sample Location	Former Drainage Swale (North of Maintenance Area)									
Sample ID	**Sidewall-1**	**Sidewall-2**	**Sidewall-3**	**Sidewall-4**	**Floor-1**	**Floor-2**	**Floor-3**	**Floor-4**	**Floor-5**	Comparison Value for Areas of Concern
Sample Depth (ft)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0 5	0-0.5	
Sampling Date	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	
Matrix	S	S	S	S	S	S	S	S	S	
Dilution Factor	1 0	1.0	1.0	1.0	1 0	1.0	1.0	1 0	1 0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	U	U	U	U	U	U	U	U	U	
Aroclor-1221	U	U	U	U	U	U	U	U	U	
Aroclor-1232	U	U	U	U	U	U	U	U	U	
Aroclor-1242	U	U	U	U	U	U	U	U	U	
Aroclor-1248	U	U	U	U	U	U	U	U	U	
Aroclor-1254	U	U	U	U	328	280	96 4	U	188	
Aroclor-1260	U	U	U	U	119	159	141	13.1 J	106	
Total	0	0	0	0	447	439	237.4	13.1	294	10000

Qualifiers

U Constituent was not detected at the indicated concentration

J Data indicates the presence of a compound that meets the identification criteria The result is less than the quantitation limit but greater than zero The concentration given is an approximate value

Notes

Result exceeds Comparison Value for Areas of Concern

NR Not analyzed

--- . No site-specific comparison value utilized for individual PCBs

Table 3-F

Northrop Grumman Corporation - Plant 1
Former Drainage Swale
Analytical Summary Tables

Arsenic

Sample Location	Former Drainage Swale (North of Maintenance Area)										
Sample ID	**Sidewall-1**	**Sidewall-2**	**Sidewall-3**	**Sidewall-4**	**Floor-1**	**Floor-2**	**Floor-3**	**Floor-4**	**Floor-5**	**Floor-2**	Comparison Value
Sample Depth (ft)	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0 5	0-0 5	for Areas
Sampling Date	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	04/02/02	of Concern
Matrix	S	S	S	S	S	S	S	S	S	S	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1 0	1 0	
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	5.52	2.97	7.50	U	7.84	**25.70**	**56.10**	7.21	8.98	U	20

Qualifiers

U. Constituent was not detected at the indicated concentration

Notes

Result exceeds Comparison Value for Areas of Concern