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December 28, 2001

Ms. Jennifer L. Shoemaker
Remedial Project Manager
United States Environmental Protection Agency - Region III
1650 Arch Street
Mail Delivery - 3WC23
Philadelphia, Pennsylvania 19103-2029

Re: Report on Phase IA Activities
Solutia, Inc. Facility; 1 Monsanto Road, Nitro, West Virginia
EPA ID. No. WVD033990965

Dear Ms. Shoemaker:

On behalf of Solutia Inc. (Solutia), Roux Associates, Inc. is pleased to present this report regarding the Phase IA activities completed at the Solutia facility located in Nitro, West Virginia (site).

In your letter to Solutia dated August 17, 2001 (included as Appendix A), the United States Environmental Protection Agency (USEPA) identified the activities that were to be completed as part of the Corrective Measures Study (CMS) process and agreed that those activities could be completed in a phased approach (Phases I and II). The primary goal of the Phase I CMS activities was to complete the *Environmental Indicator* (EI) *for Migration of Contaminated Ground-Water Under Control.* This task was completed and the ground water EI report dated December 21, 2001 was submitted to the USEPA as a separate deliverable. During a conference call between the USEPA and Solutia on December 13, 2001, it was further agreed that the Phase I activities outlined in the USEPA's August 17, 2001 letter could be completed in two phases (Phases IA and IB), as summarized below.

Task	Phase
Complete surface-water and sediment sampling in the Kanawha River	IA
Prepare a database of existing ground-water data / Identify data gaps	IA / IB
Locate, evaluate, and survey all monitoring wells	IA
Determine the extent of constituents of concern (COCs) in ground water south of the facility	IA
Obtain discrete ground-water data, which demonstrates the absence of dioxin from within the benzene plume at MW-7	IA
Compile past dioxin soil sampling data to evaluate surface exposure (combined with the last activity on this list)	IA
Re-evaluate the existing TCE extraction system to optimize performance	IB
Sample wells MW-10, MW-12, and MW-13 to further define the extent of volatile organic compounds (VOCs) in ground water	IB
Provide a summary of dioxin surface and subsurface soil concentrations for the site, identify no-dig areas, and describe institutional controls to prevent exposure	IA

This report addresses the Phase IA activities.

Discussion of Phase IA Activities

Surface-Water and Sediment Sampling in the Kanawha River
Roux Associates, Inc. and Potesta & Associates, Inc. (Potesta) conducted surface-water and sediment sampling in the Kanawha River, adjacent to the Nitro facility, in September and October 2001. A site map showing the surface-water, and sediment sampling locations is included as Figure 1. All surface-water and sediment sampling activities were conducted as directed by the USEPA in the August 17, 2001 letter to Solutia and in accordance with the USEPA-approved work plan prepared by Roux Associates, Inc. dated September 13, 2001.

A total of 23 sediment samples and 13 surface-water samples were collected from the Kanawha River on September 20, 21, and 25, 2001 from locations biased to detect any possible ground-water discharge impacts to the river. As directed by the USEPA, the surface water and sediment sampling locations targeted three segments along the Kanawha River, designated as Segments A, B, and C. Ten sediment and five surface-water samples were collected along Segment A, located adjacent to the Process Study Area (PSA). Four sediment and three surface-water samples were collected along Segment B, located adjacent to the LNAPL Area (MW-7). Nine sediment and five surface-water samples were collected along Segment C, located adjacent to the Waste Treatment Study Area (WTSA). Two background samples were also collected (BG-1 and BG-2). During a second surface-water sampling event on October 16, 2001, all 13 surface-water sampling locations described above were resampled.

None of the analyzed COCs (as identified in the USEPA's August 17, 2001 letter to Solutia) were detected in any of the surface-water samples during either the September or October 2001 sampling events. Surface-water sample analytical data are included in Appendix B. The surface-water sampling results demonstrate that COCs in site ground water discharging to the Kanawha River do not present an unacceptable risk with respect to impacts to surface water.

COCs detected in sediment samples and their respective concentrations are summarized below. A comprehensive sediment sample result summary table, including a list of all sampling locations and dry weight and total organic carbon (TOC) results, is included in Appendix B. Sediment sample laboratory analytical data reports are also included in Appendix B.

Constituent	Location	Detected Concentration (mg/kg)	Sediment Quality Benchmark*
Benzene	ASD-6 ASD-10	0.005 0.011	0.057
Chlorobenzene	ASD-10	0.003	0.820
Ethylbenzene	ASD-10	0.003	3.600
Vinyl Chloride	ASD-2 ASD-6	0.003 0.004	None Listed
Total Xylenes	ASD-10	0.002	0.025

* - Sediment Quality Benchmark from *Toxicological Benchmarks for Screening Contaminants of Potential Concern for Effects on Sediment-Associated Biota: 1997 Revision*, Oak Ridge National Laboratory, D.S. Jones, G.W. Suter II and R.N. Hull, 1997 Revision.

The sediment sampling results demonstrate that COCs in site ground water discharging to the Kanawha River do not present an unacceptable risk with respect to impacts to sediments (i.e., all results were below applicable sediment criteria).

The surface water and sediment data are currently undergoing 100% third-part data validation as requested by the USEPA. The findings of this data validation, along with the complete laboratory quality assurance/quality control (QA/QC) data package will be submitted to the USEPA as a separate deliverable at a later date.

Ground-Water Database

To facilitate evaluation of the ground-water data at the site, the historical and quarterly ground-water results were entered into an EQuIS® database program. EQuIS® allows for the storage and retrieval of data as well as the generation of summary tables and concentration trend graphs, among other types of outputs. Data entered into the database includes results for wells sampled in September 1981 and continues through the results for the September 2001 quarterly ground-water monitoring event.

As requested by Mr. Joel Hennesey of the USEPA, the ground-water database was saved to a 3.5" floppy disk in Microsoft® Access© reader format (included in Appendix C). Roux Associates is available (by conference calls and/or meetings) to provide assistance to the USEPA, if needed, in using and/or providing information regarding the ground-water database.

The ground-water data gap analysis is currently being conducted and will be included in the Phase IB report to be submitted to the USEPA at a later date.

Monitoring Well Evaluation and Survey

Since several of the site monitoring wells have not been sampled for a number of years, their locations needed to be confirmed and their current condition needed to be evaluated. Potesta was contracted by Solutia to confirm the locations and conditions of all site wells. The evaluation of the wells' condition included items such as:

- condition of the concrete pad and protective casing; and
- total well depth compared to reported installation depth (to determine if significant silting had occurred).

In addition to the above evaluation of well conditions, well survey information was compiled, including horizontal location (based on West Virginia State Plane coordinates) and vertical elevation of the well casing and adjacent land surface (surveyed relative to mean sea level).

A summary of the well condition evaluation and survey information is presented on Table 1.

Evaluation of the Extent of COCs in Ground-Water South of the Facility
Historically, several COCs were detected in wells along the southern property boundary between the Solutia site and the Great Lakes Chemical Corporation (GLC), formerly FMC Corporation (FMC), property located immediately to the south (see Figure 1). The USEPA requested that the extent of COCs in ground water to the south of the site (south of MW-23A) be evaluated.

Work completed as part of this task included:

- conducting a file review requesting information regarding ground-water quality monitoring conducted at the adjacent GLC property;
- evaluating site ground-water flow patterns; and
- evaluating ground-water concentration trends in well MW-23A (the well nearest the southern property boundary sampled as part of the ongoing quarterly ground-water monitoring program).

A summary of the work completed and findings is presented below.

File Review
Potesta conducted a file review at the West Virginia Department of Environmental Protection (DEP) offices. The file review was made under the Freedom of Information Act (FOIA) and requested that information regarding any ground water quality monitoring conducted on the GLC property be made available for review. Upon completion of the file review, it was found that no ground-water monitoring data in the area of the GLC property adjacent to the Solutia site have been submitted to the DEP. Therefore, it is presumed that no such monitoring has been conducted at the GLC property.

Site Ground-Water Flow
Site geology, hydrogeology, and ground-water flow patterns were extensively evaluated as part of the historical site characterization and corrective-measure studies. The findings of these historical geologic and hydrogeologic evaluations were presented in several reports submitted to the USEPA, including the following:

- *Draft RFI Work Plan*, Roux Associates, Inc., 1993;
- *RFI Report and Stabilization/Corrective Measures Plan*, Roux Associates, Inc., May 5, 1995;
- *Stabilization/Corrective Measures Study Report*, Roux Associates, Inc., February 29, 1996;
- *Stabilization/Corrective Measures Effectiveness Report*, Roux Associates, Inc., January 25, 1999; and

- *Response to USEPA Comments of Corrective Measures Effectiveness Report*, Roux Associates, Inc., May 12, 2000.

Historical ground-water flow patterns show that ground water beneath the southern portion of the site flows to the west-northwest, toward the Kanawha River, which is consistent with the anticipated flow direction based on the site setting. Ground-water elevation contour maps for September 20, 1994 and February 19, 2001 are included as Figures 2 and 3, respectively. A more detailed review of these maps also indicated that the flow direction along the southern site boundary has a northerly component, showing ground-water flow from the GLC property towards the Solutia site.

Based on the observed ground-water flow direction at the site described above, ground-water flow from beneath the site does not flow towards the property located to the south, and may be more likely to flow from the GLC property toward the Solutia site. Therefore, the only transport pathway for COCs in site ground water to migrate from the Solutia site to the south would be by lateral dispersion. Side gradient lateral dispersion is believed to result in minimal, if any, migration of COCs from the Solutia site to the south.

Ground-Water Concentration Trends in MW-23A

Historical ground-water results were used to evaluate ground-water concentration trends for trichloroethene (TCE) in MW-23A. This trend evaluation was conducted for TCE in MW-23A since sampling of MW-23A for TCE is conducted routinely as part of the ongoing quarterly ground-water monitoring program. The concentration-versus-time trend graph for TCE in MW-23A is presented as Figure 4. As illustrated by this trend graph, overall, TCE concentrations have been decreasing over time.

Summary and Conclusions

Based on the information presented above, further evaluation of the extent of COCs in ground water to the south of the site is not warranted and would not provide any decision-relevant data with regard to the stabilization or corrective measures necessary at the site. This conclusion is based on the following:

- Ground-water flow direction has been shown to be toward the west-northwest toward the Kanawha River. In addition, a minor component of the ground-water flow direction at the southern site boundary appears to be from the GLC site to the Solutia site.

- Surface water and sediment sampling results demonstrated that COCs in site ground water that discharges to the Kanawha River do not present an unacceptable risk with respect to impacts to surface water or sediments (i.e., all results were either non-detect or below applicable standards). The river segments targeted for sampling (as directed by the USEPA) were immediately downgradient of the areas of the site where the highest concentrations of COCs were detected in ground water. Specifically, Segment A was located immediately downgradient of wells with the highest detected TCE concentrations, ranging up to 9,180 micrograms per liter (µg/l) (MW-20A on November 21, 1997). The highest TCE concentration measured in MW-23A was 2,630 µg/l on June 25, 1998. Since surface-water and

sediment samples collected in the area, expected to show the greatest potential impact (Segment A), showed no significant impact, it would be expected that surface-water and sediment quality downgradient of MW-23A would be as good as or better than that shown in Segment A.

- Ground-water concentration trends in MW-23A are decreasing over time. Therefore, future ground water, surface-water, and sediment quality near MW-23A and to the south of the site is expected to improve over time with regard to COCs in ground water beneath the Solutia site.

Discrete Ground-Water Sampling for Dioxin from in the Benzene Plume at MW-7
To demonstrate the absence of dioxin in ground water, the USEPA requested the collection of discrete ground-water samples from the area of MW-7. However, composite ground-water samples, which demonstrated the absence of dioxin in ground water, were collected previously from extraction wells in this area (EW-1 through EW-4). These sampling results were documented in the report submitted to the USEPA entitled *Results of Dioxin Sampling in Ground Water and Kerosene* dated November 30, 1998, prepared by Roux Associates, Inc. The sampling activities documented in the aforementioned report were performed in response to the USEPA's written request dated July 24, 1998 and were conducted in accordance with the USEPA-approved work plan dated September 8, 1998 and the September 18, 1998 work plan addendum.

The composite ground-water sample collected from the extraction wells EW-1 through EW-4 (Composite #2), located in close proximity to MW-7, demonstrated the absence of all dioxin congeners (i.e., all validated results were below method detection limits or were attributable to blank contamination). Therefore, discrete ground-water sampling for dioxin analyses would not provide decision-relevant data. That is, since dioxins were demonstrated to be absent from the composite sample, the potential presence of extremely low concentrations in discrete ground-water samples would not affect future remedial actions or ground-water treatment/disposal in this area. Therefore, collection of discrete ground-water samples for dioxin analyses is not warranted.

Summary of Soil Concentrations, No-Dig Areas, and Institutional Controls
The USEPA requested that Solutia provide a summary of past surface and subsurface dioxin soil results, identify no-dig areas on the site, and describe institutional controls to prevent dioxin exposure. The requested information is presented in the Appendices to this report referenced below.

<u>Dioxin Soil Results</u>
Historical dioxin soil sampling was conducted by NUS Corporation (NUS) on three different occasions and documented in the following reports.

- *A Field Trip Report for Monsanto Nitro Plant* dated November 9, 1983, prepared by NUS documenting the dioxin soil sampling activities and results conducted between June 30 and July 1, 1983 (prepared under TDD No. F3-8306-26, EPA No. WV-W-04, Contract No. 68-01-6699).

- *Field Trip Report for Monsanto Company* dated January 3, 1985, prepared by NUS documenting the dioxin soil sampling activities and results conducted between August 29 and September 28, 1983 (prepared under TDD No. F3-8308-31, EPA No. WV-029, Contract No. 68-01-6699).

- *A Field Trip Report for Nitro Dump* dated February 25, 1985, prepared by NUS documenting the dioxin soil sampling activities and results conducted on September 16, 1984 (prepared under TDD No. F3-8407-39, Contract No. 68-01-6699). This report was submitted to Mr. Harold Byer of the USEPA.

All above-listed reports were submitted to Mr. Harold Byer of the USEPA. Copies of the dioxin soil result tables and sampling location maps from these reports are included as Appendix D.

Excavation Guidelines/No-Dig Areas

The Nitro Plant prepared an ESH (Environment, Health, and Safety) Manual dated December 1, 2001 regarding guidelines and a permit system for conducting excavations at the site. This manual describes the procedures for conducting excavations and the site and identifies no-dig areas (institutional controls). A copy of this manual is included as Appendix E.

We trust that the information presented herein satisfactorily addresses the Phase IA issues for the site. Solutia plans to proceed with addressing the Phase IB activities outlined herein and will submit a report regarding those activities at a future date to be mutually agreed to by Solutia and the USEPA.

Please feel free to contact us at (856) 423-8800 should you have any questions regarding this submission.

Respectfully Submitted,

Michael Gonshor

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Camille Costa, P.E.
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cc: Ruth Prince - USEPA
Jim Duranti - WVDEP
Mark Priddy - WVDEP
D. Michael Light - Solutia
John Loper - Roux Associates, Inc.
Chris Grose - Potesta & Associates, Inc.

TABLES

Table 1. Site Monitoring and Extraction Well Summary Table. Solutia, Inc., Nitro, West Virginia.

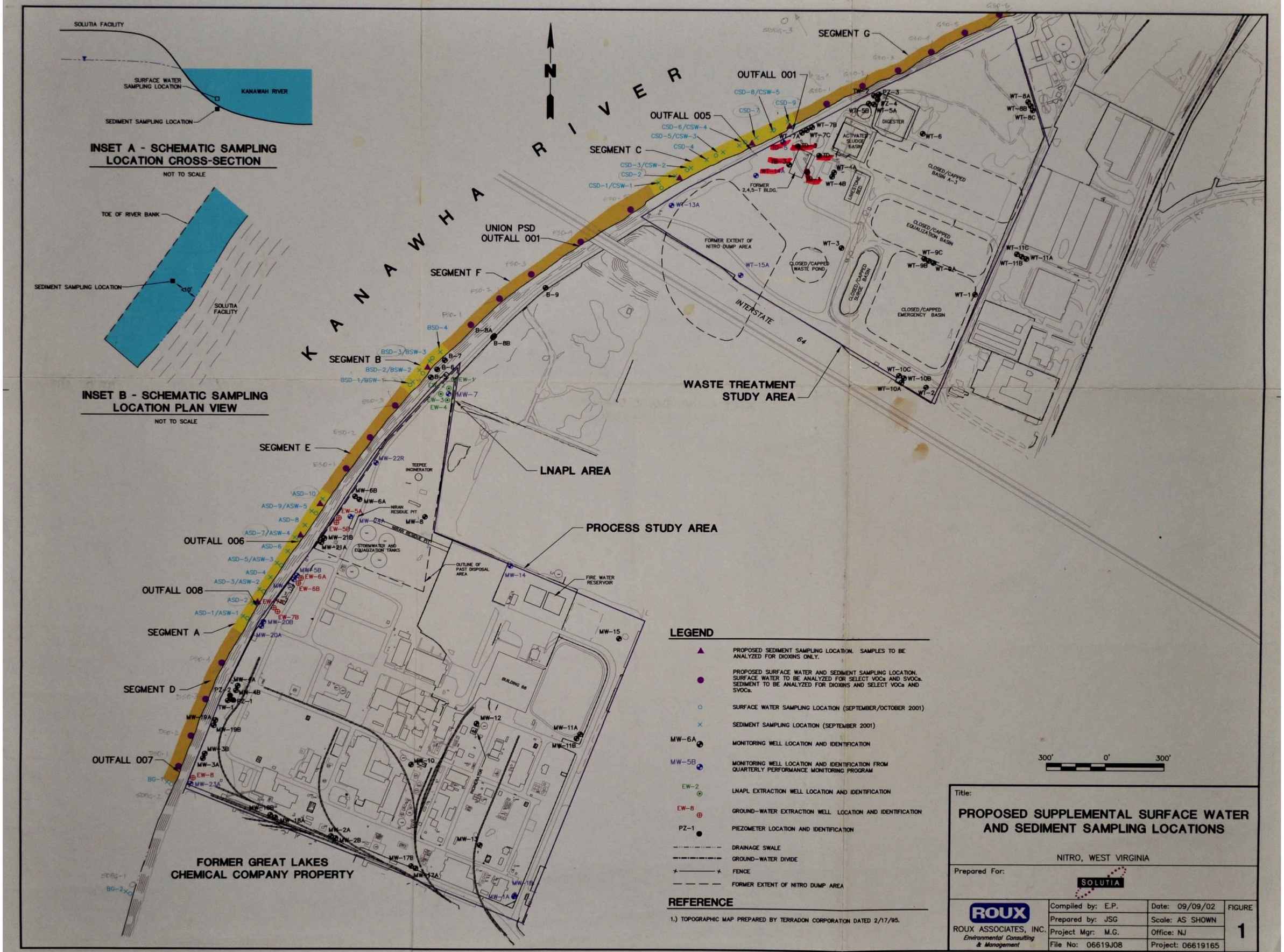
Well Designation	Installation Date	Location	Drilled Total Depth (feet)	Screen Setting (feet)	Total Depth on 02/19/01 (feet)	Casing Diameter (inches)	State Plane Coordinates (feet) Northing	Easting	Top-of-Casing Elevation (feet)	Ground Surface Elevation (feet)	Comments
Waste Treatment Area											
TB-1	09/14/81	2,4,5-T Building	34	27-32	34	2"	527,385.7	1,760,123.6	593.07	591.4	surrounded by asphalt, hinge broken
TB-3	09/16/81	2,4,5-T Building	33.7	27-32	33.7	2"	527,424.5	1,760,030.9	592.90	591.8	no sign of cement, general rust, hinge almost rusted through
TD-1	NA	2,4,5-T Building	32	27-32	34	2"	527,471.3	1,760,182.1	592.20	590.4	cement in good condition, minor rust
TD-3	NA	2,4,5-T Building	30	27-30	31.6	2"	527,518.2	1,760,073.8	590.92	589.5	no sign of cement, general rust, hinge almost rusted through
TD-5	NA	2,4,5-T Building	30	25-30	30.4	2"	527,538.4	1,759,999.7	589.49	588.4	no sign of cement, hinge broken, general rust
WT-1(1)	02/04/92	Emergency Basin	33.5	13.5-33.5	33	2"	526,771.4	1,760,979.9	590.33	588.6	no cement visible, rusted
WT-2	09/01/81	Emergency Basin	53.5	16.5-53.3	50	4"	526,294.6	1,760,733.0	590.13	588.4	cement broken, general rust
WT-3	09/14/81	Surge Basin	55	15-55	50	4"	527,002.8	1,760,299.4	590.67	589.6	bailer present, cement broken
WT-4A	09/14/81	Limestone Bed	40	25-40	35	4"	527,385.7	1,760,258.7	591.82	590.4	bailer present, cement broken, general rust
WT-4B	09/04/81	Limestone Bed	58	41-58	54	4"	527,377.7	1,760,255.2	592.06	590.5	bailer present, cement broken, general rust
WT-5A	09/12/81	Digester	43	28-43	42	4"	572,732.6	1,760,459.3	589.99	588.8	bailer present, cement broken, rusted
WT-5B	09/12/81	Digester	58	43-58	60	4"	527,725.0	1,760,450.9	589.93	588.7	cement broken, general rust
WT-6	09/03/81	Digester	53	18-53	53	4"	527,586.8	1,760,709.7	589.09	587.5	ABANDONED 9/97
WT-7A	11/28/85	Activated Sludge Basin	41.5	21.5-41.5	33.8	2"	527,588.9	1,760,101.5	589.25	587.5	bailer present, no sign of cement, general rust
WT-7B	11/28/85	Activated Sludge Basin	56.6	41.5-56.5	33.5	2"	527,602.1	1,760,121.6	589.16	587.4	bailer present, no sign of cement, general rust
WT-7C	11/28/85	Activated Sludge Basin	73	62-72	75	2"	527,599.9	1,760,119.6	589.12	587.3	no visible cement, general rust
WT-8A	12/04/85	Polishing Basin	39	19-39	40	2"	527,736.8	1,761,254.4	589.42	587.6	bailer present, no visible cement, rusted
WT-8B	12/04/85	Polishing Basin	52	37-52	52	2"	527,732.6	1,761,255.9	589.31	587.4	no visible cement, rusted, no cap on PVC casing (water to lip of PVC)
WT-8C	12/04/85	Polishing Basin	70	60-70	70	2"	527,728.4	1,761,258.2	587.13	586.6	no visible cement, rusted, no cap on PVC casing (water to lip of PVC)
WT-9A(1)	02/05/92	Emergency Basin	50	30-50	51	2"	526,938.1	1,760,750.5	599.71	598.0	bailer present, no sign of cement, rusted
WT-9B(1)	02/05/92	Emergency Basin	68.5	48.5-68.5	54	2"	526,941.6	1,760,744.0	598.61	596.6	bailer present, no sign of cement, rusted
WT-9C(1)	02/06/92	Emergency Basin	80	72-80	81	2"	526,944.9	1,760,736.6	599.53	598.0	no sign of cement, rusted
WT-10A	01/15/85	Upgradient	39	19-39	40	2"	526,337.5	1,760,619.8	590.13	588.4	bailer present, cement in good condition, general rust
WT-10B	01/15/85	Upgradient	54	39-54	55	2"	526,339.5	1,760,616.0	590.09	588.4	bailer present, cement in good condition, general rust
WT-10C	01/15/85	Upgradient	70	60-70	74	2"	526,341.6	1,760,611.9	590.30	588.6	cement in good condition, general rust
WT-11A	01/23/85	Off-Site	42	22-42	-	2"	526,964.4	1,761,221.3	588.60	588.9	OFF SITE, ABANDONED ?
WT-11B	01/23/85	Off-Site	54	39-54	-	2"	526,966.5	1,761,215.9	588.47	588.8	OFF SITE, ABANDONED ?
WT-11C	01/23/85	Off-Site	74	64-74	-	2"	526,969.0	1,761,211.5	588.27	588.6	OFF SITE, ABANDONED ?
WT-13A	08/28/94	City of Nitro Dump	34	14-34	35	4"	527,212.7	1,759,435.5	590.82	589.1	bailer present, cement in good condition, general rust
WT-14A	08/27/94	City of Nitro Dump	40	15-35	29.6	4"	527,368.9	1,759,863.1	593.57	591.9	cement in good condition, general rust
WT-15A	08/27/94	City of Nitro Dump	24	9-24	25	4"	526,862.4	1,759,788.6	589.08	587.4	bailer present, cement in good condition, general rust
LNAPL Area											
MW-7	10/01/83	LNAPL Area	30	20-30	32	2"	526,267.6	1,758,312.2	594.03	592.5	no visible cement
EW-1	12/07/95	LNAPL Area	58.1	16.8-56.8	-	6"	526,322.2	1,758,336.4	593.79	592.7	cement pad in good condition
EW-2	12/04/95	LNAPL Area	58.4	12-57.3	-	6"	526,275.0	1,758,310.6	593.60	592.4	cement pad in good condition
EW-3	11/27/95	LNAPL Area	58	16.9-56.6	-	6"	526,246.2	1,758,270.0	593.70	592.9	cement pad in good condition
EW-4	12/04/95	LNAPL Area	57.6	17-56.5	-	6"	526,214.6	1,758,303.9	592.90	592.3	cement pad in good condition
W-1(M-1)	NA	LNAPL Area	42.67	NA	42.65	8"	526,291.5	1,758,300.3	594.96	NA	cement broken
R-1	NA	LNAPL Area	49.93	NA	50.02	4"	526,252.9	1,758,306.4	592.94	NA	cement broken, general rust, rusted at ground surface
R-2	NA	LNAPL Area	NA	NA	38.62	4"	526,250.0	1,758,305.3	592.92	NA	cement broken, rusted
B-1	NA	LNAPL Area	35.38	NA	35.51	2"	526,335.9	1,758,341.2	594.98	NA	cement broken, general rust
B-2	NA	LNAPL Area	32.15	NA	31.95	2"	526,210.2	1,758,317.1	592.87	NA	unable to remove red clay to expose concrete, general rust
B-3	NA	LNAPL Area	33.19	NA	33.28	2"	526,241.9	1,758,257.2	595.14	NA	cement broken, general rust
B-4	NA	LNAPL Area	32	NA	31.89	2"	526,275.1	1,758,327.3	593.82	NA	unable to remove red clay to expose concrete, general rust
B-5	NA	LNAPL Area	14.45	NA	14.45	2"	526,334.5	1,758,214.7	578.92	NA	no visible cement
B-6	NA	LNAPL Area	11.89	NA	11.92	2"	526,374.5	1,758,247.0	575.66	NA	no visible cement
B-7	NA	LNAPL Area	14.42	NA	14.5	2"	526,422.0	1,758,285.5	577.37	NA	no visible cement
B-8A	11/28/95	LNAPL Area	42.67	26.3-41.3	41.32	4"	526,546.1	1,758,537.8	595.64	NA	cement pad in good condition, general good condition
B-8B	12/13/95	LNAPL Area	59.5	40.0-60.0	52.17	4"	526,538.1	1,758,530.9	595.69	NA	cement pad in good condition, general good condition
B-9	11/28/95	LNAPL Area	33.07	36.2-42.1	33.07	4"	526,791.7	1,758,797.5	594.23	NA	cement pad in good condition, general good condition

Table 1. Site Monitoring and Extraction Well Summary Table. Solutia, Inc., Nitro, West Virginia.

Well Designation	Installation Date	Location	Drilled Total Depth (feet)	Screen Setting (feet)	Total Depth on 02/19/01 (feet)	Casing Diameter (inches)	State Plane Coordinates (feet) Northing	Easting	Top-of-Casing Elevation (feet)	Ground Surface Elevation (feet)	Comments
Process Area											
MW-1A	09/08/83	Upgradient	32	20-30	31	2"	523,682.8	1,758,656.8	594.37	592.5	eroded concrete, hinge broken
MW-1B	01/02/85	Upgradient	55	40-55	56	2"	523,677.7	1,758,654.7	594.38	592.5	broken cement
MW-2A	09/09/83	FMC Boundary	32	20-30	31.65	2"	523,985.3	1,757,719.9	592.60	591.2	no visible cement, hinge broken , general rust
MW-2B	01/14/85	FMC Boundary	55	40-55	56	2"	523,983.9	1,757,724.1	592.84	591.1	broken cement, lock rusted, general rust
MW-3A	09/09/83	Riverfront	35	25-35	36	2"	524,399.8	1,757,078.4	598.85	597.2	bailer present, cement broken, hinge broken, lock hasp rusted
MW-3B	12/20/84	Riverfront	61	46-61	62	2"	524,405.9	1,757,080.1	599.24	597.2	broken cement, general rust, PVC casing loose and rotates
MW-4A	09/12/83	Riverfront	38	27.5-37.5	37.5	2"	524,730.4	1,757,237.6	598.56	596.4	cement in good condition, hinge broken, general rust
MW-4B	NA	Riverfront	61.5	41.5-61.5	60.5	2"	524,725.9	1,757,235.4	598.05	596.3	cement broken, general rust
MW-5A	08/31/83	Riverfront	33	23-33	33	2"	525,290.9	1,757,548.4	594.65	593.3	bailer present, cement broken, hinge broken
MW-5B	NA	Riverfront	56	41-56	54	2"	525,293.9	1,757,544.4	594.91	593.0	no visible cement, general rust
MW-6A	09/01/83	Past Disposal Area	30	20-30	31	2"	525,706.3	1,757,859.0	591.39	590.0	cement broken, hinge broken, general rust
MW-6B	12/17/84	Past Disposal Area	58	43-58	59	2"	525,709.0	1,757,853.2	592.76	591.0	no sign of cement, general rust
MW-8	09/01/83	Past Disposal Area	30	20-30	32	2"	525,618.7	1,758,192.6	588.30	586.7	cement broken, hinge broken, general rust
MW-10	09/07/83	Process Area	29.5	17-27	28.6	2"	524,351.1	1,758,124.9	590.20	588.3	cement broken, hinge broken, general rust
MW-11A	09/06/83	Upgradient	31	19-29	30	2"	524,491.4	1,758,970.4	591.13	589.4	no visible cement, hinge broken
MW-11B	09/06/83	Upgradient	NA	38-48	50	2"	524,488.7	1,758,969.0	591.01	589.6	no sign of cement, hinge rusted
MW-12	09/07/83	Process Area	29.5	18-28	28	2"	524,562.9	1,758,459.9	589.80	588.4	DAMAGED/ABANDONED 11/98
MW-13	09/13/83	Process Area	29	18-28	20.16	2"	523,940.9	1,758,479.2	590.84	589.2	inundated (unable to see cement), lid rusted shut, poor condition
MW-14	09/02/83	Process Area	29	18-28	29.6	2"	525,369.7	1,758,627.8	589.53	588.0	no visible cement, hinge broken
MW-15	09/02/83	Process Area	NA	10-20	21	2"	525,001.4	1,759,181.4	587.96	586.3	no sign of cement, hinge broken, general rust
MW-17A	01/31/85	FMC Boundary	40	30-40	41	2"	523,820.3	1,758,153.0	591.53	589.9	cement broken, rusted
MW-17B	02/04/85	FMC Boundary	56	36-56	57	4"	523,822.8	1,758,146.5	591.85	590.4	cement broken, rusted
MW-18A	02/05/85	FMC Boundary	40	30-40	41	2"	524,080.3	1,757,438.3	593.20	591.3	cement broken, rusted
MW-18B	02/05/85	FMC Boundary	55	40-55	56	2"	524,083.0	1,757,433.5	592.59	590.7	surrounded by asphalt, protective casing broken/bent by vehicle
MW-19A	01/02/85	Process Area	40	30-40	37	2"	524,570.1	1,757,130.9	597.58	595.7	cement broken, general rust
MW-19B	01/02/85	Process Area	62	47-62	60	2"	524,575.1	1,757,132.7	598.17	597.0	cement broken, general rust
MW-20A	01/29/85	Riverfront	40	30-40	40	2"	525,073.9	1,757,371.4	596.71	594.9	bailer present, cement in good condition, general rust
MW-20B	01/29/85	Riverfront	57	42-57	60	2"	525,087.7	1,757,347.5	596.76	594.8	cement in good condition, general rust
MW-21A	01/10/85	Riverfront	40	30-40	59	2"	525,486.8	1,757,666.5	592.65	591.7	cement broken, general rust
MW-21B	01/11/85	Riverfront	58	43-58	36	2"	525,490.7	1,757,669.5	594.07	592.4	bailer present, cement broken, general rust
MW-22R	08/26/94	Past Disposal Area	40	18-38	41	4"	525,893.6	1,757,941.1	596.53	594.0	bailer present, cement cracked, general rust, lock hasp missing
MW-23A	08/24/94	FMC Boundary	35	19.8-34.8	36	4"	524,252.9	1,757,009.2	598.82	597.3	cement eroded, general rust
MW-24A	08/25/94	Niran Residue Pit	35	15-35	36	4"	525,619.0	1,757,812.2	594.58	592.1	bailer present, cement in good condition
EW-5A	09/23/96	TCE Hot Spot	43.2	21.2-41.2	42.49	6"	525,611.4	1,757,754.0	594.09	592.8	cement pad in good condition
EW-5B	09/19/96	TCE Hot Spot	56.2	35.75-55.75	57.82	6"	525,602.2	1,757,751.7	594.87	592.8	cement pad in good condition
EW-6A	09/11/96	TCE Hot Spot	41.65	25.76-40.76	42.19	6"	525,286.9	1,757,556.3	594.23	592.8	cement pad in good condition
EW-6B	09/09/96	TCE Hot Spot	59.1	43.40-58.40	59.78	6"	525,276.8	1,757,551.6	594.18	592.8	cement pad in good condition
EW-7A	09/04/96	TCE Hot Spot	42.1	21.5-41.5	43.36	6"	525,150.4	1,757,427.0	595.16	593.3	cement pad in good condition
EW-7B	09/03/96	TCE Hot Spot	58.1	37.38-57.38	59.78	6"	525,145.9	1,757,431.4	595.20	593.3	cement pad in good condition
EW-8	08/29/96	TCE Hot Spot	40.8	20.4-40.4	41.52	6"	524,260.1	1,757,012.1	597.02	595.9	cement pad in good condition

Notes:
Elevations in feet relative to mean sea level.
Total depth, screen setting, and gauged total depth on February 19, 2001 from ground surface.

FIGURES



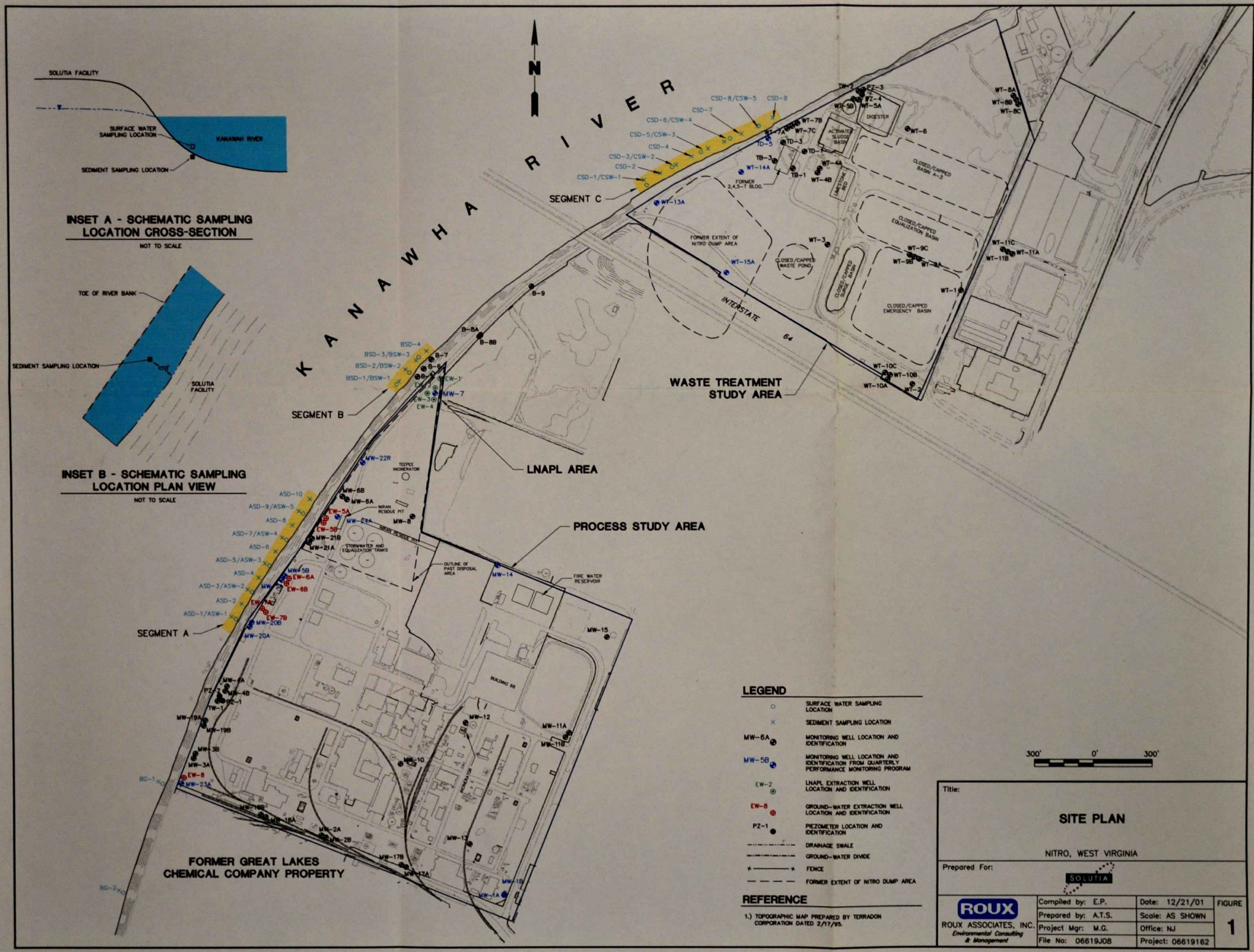
Title:

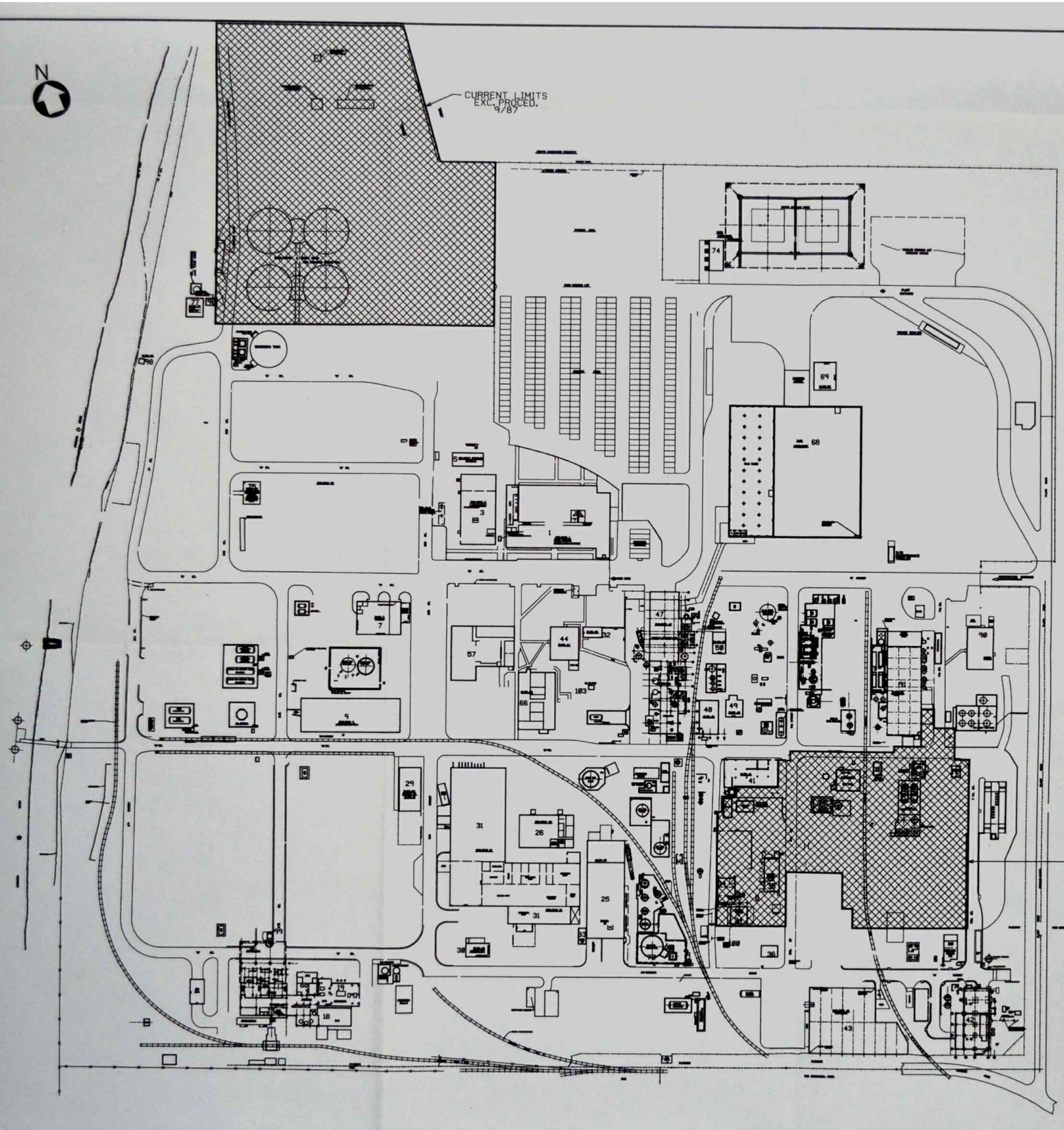
PROPOSED SUPPLEMENTAL SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS

NITRO, WEST VIRGINIA

Prepared For: SOLUTIA

ROUX ASSOCIATES, INC. Environmental Consulting & Management	Compiled by: E.P.	Date: 09/09/02	FIGURE
	Prepared by: JSG	Scale: AS SHOWN	1
	Project Mgr: M.G.	Office: NJ	
	File No: 06619J08	Project: 06619165	


SOLUTIA FACILITY
SURFACE WATER SAMPLING LOCATION
KANAWAH RIVER
SEDIMENT SAMPLING LOCATION
INSET A - SCHEMATIC SAMPLING LOCATION CROSS-SECTION
NOT TO SCALE
TOE OF RIVER BANK
SEDIMENT SAMPLING LOCATION
SOLUTIA FACILITY
INSET B - SCHEMATIC SAMPLING LOCATION PLAN VIEW
NOT TO SCALE
N
KANAWHA RIVER
SEGMENT C
SEGMENT B
SEGMENT A
LNAPL AREA
PROCESS STUDY AREA
WASTE TREATMENT STUDY AREA
INTERSTATE 64
FORMER GREAT LAKES CHEMICAL COMPANY PROPERTY
DIGESTER
ACTIVATED SLUDGE BASIN
CLOSED/CAPPED BASIN A-3
CLOSED/CAPPED EQUALIZATION BASIN
CLOSED/CAPPED EMERGENCY BASIN
CLOSED/CAPPED WASTE POND
CLOSED/CAPPED SURGE BASIN
LIMESTONE BED
FORMER EXTENT OF NITRO DUMP AREA
FORMER 2,4,5-T BLDG.
TEEPEE INCINERATOR
NIRAN RESIDUE PIT
STORMWATER AND EQUALIZATION TANKS
OUTLINE OF PAST DISPOSAL AREA
FIRE WATER RESERVOIR
BUILDING 68
INCINERATOR
CSD-1/CSW-1
CSD-2
CSD-3/CSW-2
CSD-4
CSD-5/CSW-3
CSD-6/CSW-4
CSD-7
CSD-8/CSW-5
CSD-9
BSD-1/BSW-1
BSD-2/BSW-2
BSD-3/BSW-3
BSD-4
ASD-1/ASW-1
ASD-2
ASD-3/ASW-2
ASD-4
ASD-5/ASW-3
ASD-6
ASD-7/ASW-4
ASD-8
ASD-9/ASW-5
ASD-10
BG-1
BG-2
LEGEND
SURFACE WATER SAMPLING LOCATION
SEDIMENT SAMPLING LOCATION
MW-6A MONITORING WELL LOCATION AND IDENTIFICATION
MW-5B MONITORING WELL LOCATION AND IDENTIFICATION FROM QUARTERLY PERFORMANCE MONITORING PROGRAM
EW-2 LNAPL EXTRACTION WELL LOCATION AND IDENTIFICATION
EW-8 GROUND-WATER EXTRACTION WELL LOCATION AND IDENTIFICATION
PZ-1 PIEZOMETER LOCATION AND IDENTIFICATION
DRAINAGE SWALE
GROUND-WATER DIVIDE
FENCE
FORMER EXTENT OF NITRO DUMP AREA
REFERENCE
1.) TOPOGRAPHIC MAP PREPARED BY TERRADON CORPORATION DATED 2/17/95.
300' 0' 300'
Title:
SITE PLAN
NITRO, WEST VIRGINIA
Prepared For:
SOLUTIA
ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management
Compiled by: E.P.
Prepared by: A.T.S.
Project Mgr: M.G.
File No: 06619J08
Date: 12/21/01
Scale: AS SHOWN
Office: NJ
Project: 06619162
FIGURE
1



DIOXIN RESTRICTION AREAS - CURRENT LIMITS

REV	BY	DESCRIPTION	CHKD
	DATE		APPD

FLEXSYS

FLEXSYS AMERICA LP
PLANT ENGINEERING DEPT.
NITRO, WV

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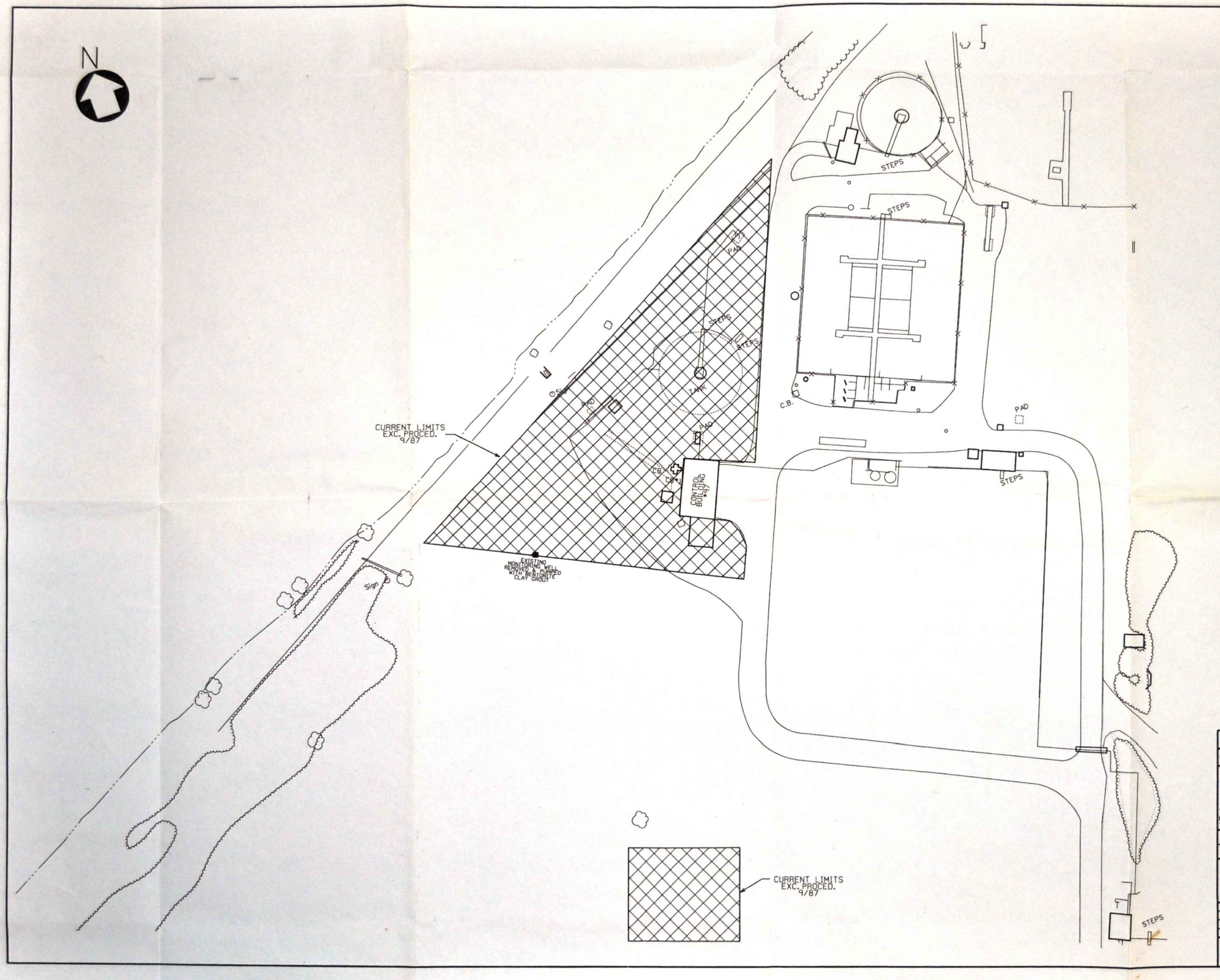
LOCATION	BLDG.	
DEPT.	TSD NO.	W.O. NO.

PLANT PLOT PLAN DIOXIN RESTRICTION AREAS

	BY	DATE	APPROVED	DATE	APPROVED	DATE
DRAWN						
CHECKED						
ENGINEER						

SCALE	DRAWING NO.
1"=100'	5848-C01



REV	BY / DATE	DESCRIPTION	CHKD / APPD
1	JER 12/12/01		DS

FLEXSYS

FLEXSYS AMERICA LP
PLANT ENGINEERING DEPT.
NITRO, WV

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LOCATION | BLDG. PLANT

DEPT. | TSD NO. | W.O. NO.

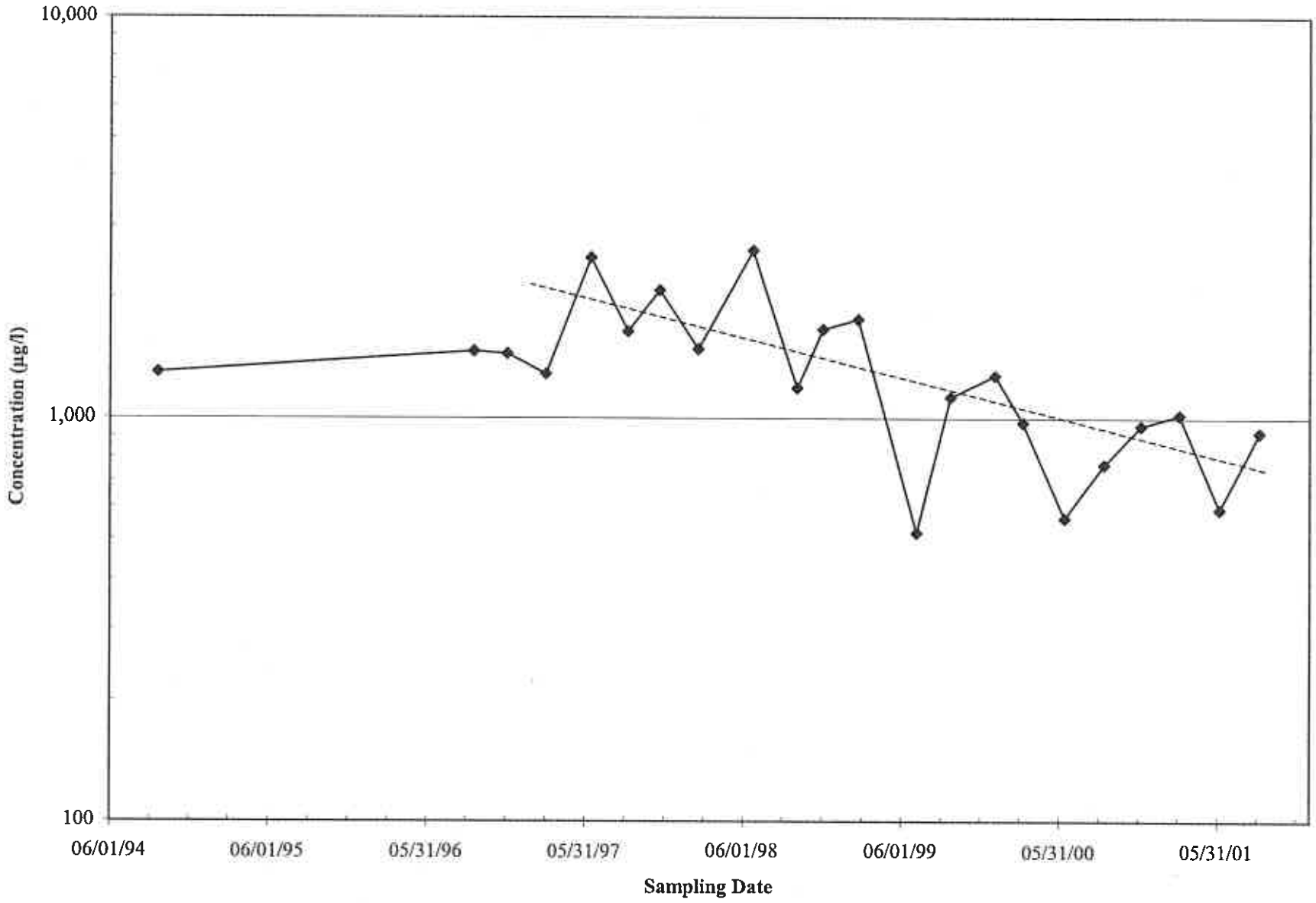
WWTP AREA DIOXIN RESTRICTION AREAS

	BY	DATE	APPROVED	DATE	APPROVED	DATE
DRAWN	RGB	12/00				
CHECKED						
ENGINEER						

SCALE 1"=40'

DRAWING NO. 5848-C02

Figure 4. MW-23A Ground-Water Concentration Trends for Trichloroethene



ROUX ASSOCIATES INC

MO066191.86

APPENDIX A

LETTER FROM THE USEPA TO SOLUTIA DATED AUGUST 17, 2001

MG

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 17, 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Anthony C. Tuk
Nitro Coordinator
Solutia, Inc.
#1 Monsanto Road
Nitro, WV 25143

RECEIVED
AUG 27 01
BY

Re: Follow-up to the July 25, 2001 Meeting
Solutia, Inc., Nitro, WV
EPA ID No. WVD039 990 965

Dear Mr. Tuk:

The United States Environmental Protection Agency (EPA) and West Virginia Department of Environmental Protection (WVDEP) appreciate Solutia's continued efforts to move the corrective action process forward at the Nitro, West Virginia facility. Our recent meeting on July 25, 2001 to discuss the draft comments for the Corrective Measures Study Work Plan (CMS Work Plan) dated March 26, 2001 was productive to discuss ways to prioritize future work at the site. Based on the discussions from the meeting, it appears that approaching the Corrective Measures process in a phased approach would be beneficial to focus the next steps.

The goal for the Phase I CMS will be to meet the Environmental Indicators for this site, namely Current Human Exposures Under Control and Migration of Contaminated Groundwater Under Control. Solutia had identified specific activities in the CMS Work Plan that should be implemented now to achieve this goal, such as preparing the groundwater database, identifying data gaps, locating and surveying monitoring wells, and sampling existing wells. The Phase II CMS goal will address the long-term remediation goals for the facility. The Agencies' requirements for the CMS Work Plan are discussed in detail in previous letters dated August 16, 2000 and January 18, 2001, and also in a fax dated May 25, 2001. For clarification, the issues identified in those correspondences are summarized below and categorized into phases.

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Area	Issue	Phase I	Phase II
Groundwater	Complete surface water and sediment sampling in Kanawha River.	X	
	Prepare database with existing groundwater data and identify data gaps.	X	
	Locate, evaluate, and survey all monitoring wells.	X	
	Determine extent of groundwater contamination to south of the facility.	X	
	Obtain discrete groundwater data which demonstrates absence of dioxin from benzene plume (MW-7).	X	
	After process inputs are removed from the underground sewer, evaluate whether the system is collecting contaminated groundwater and potential impacts.		X
LNAPL Recovery Area	Reconfigure existing extraction wells to separate upper and lower aquifers.		X
	Evaluate corrective measures for residual LNAPL		X
	Evaluate corrective measures for VOC groundwater plume.		X
	Compile past dioxin soil sampling data to evaluate surface exposure.	X	
TCE Hot Spot Area	Reevaluate existing TCE extraction system to optimize performance. Evaluations should include increasing pumping rates at extraction wells, modeling to predict capture zones, conducting pumping tests, relocating wells inland, determining whether EW-8 could capture groundwater in area.	X	
	Evaluate source control remedies for sources contributing to contamination in wells MW-24A and EW-5A. (i.e. Niran Residue Pits)		X
	Assess corrective measures for VOC groundwater plume.		X
	Sample wells MW-10, MW-12, and MW-13 to further define VOC groundwater plume.	X	
	Evaluate corrective measures for hydraulic containment and remediation of VOC contaminated groundwater		X
Nitro Dump Area	Assess effectiveness of biosparging system to determine if technology can be used at other areas of contamination.		X
	Evaluate corrective measures for hydraulic containment and remediation of contaminated groundwater.		X
	Evaluate source control corrective measures.		X
N. Waste Treatment Area	Evaluate corrective measures for hydraulic containment and remediation of contaminated groundwater.		X
	Evaluate source control corrective measures.		X

Soil	Provide a summary of dioxin surface and subsurface soil concentrations for the site, identify no-dig areas, and describe institutional controls to prevent exposure.	X	
	Obtain/provide bottom soil data from previous water-filled depression in PDA.		X
	Obtain/provide surface soil data for the former Tepee Incinerator.		X
	Fully characterize vertical and horizontal extent of waste remaining in Niran Residue Pits for evaluation of source control remedy.		X
	Evaluate previous stabilization activities to determine if they are sufficient as a final remedy		X
	Compile all existing soil data into a database.		X

During the July 25 meeting, we discussed implementing a sediment and surface water sampling plan in an effort to characterize any potential impact that the discharge of contaminated groundwater may have on the adjacent Kanawha River and to verify Solutia's previously submitted modeling results. EPA has reviewed the previously submitted groundwater sampling data from monitoring wells bordering the river (see Attachment A). Based on this review, EPA has developed requirements for the sediment and surface water sampling event, which are attached to this letter (see Attachment B). Solutia must submit a work plan to implement this field work. EPA also agreed during the meeting to provide sediment sampling results from a previous investigation that supported the request to require Solutia to sample Kanawha River sediments for volatile organic compounds. These results are attached, as well (see Attachment C).

Solutia requested during the meeting that they be allowed to cease pumping of the extraction well network in the Process Study Area for the following reasons: (1) tying the effluent into the replacement sewer system will be difficult because of the distance to the new lift station and; (2) the pumping system has served its original purpose and may not be part of a final groundwater remedy for the site. EPA reviewed the request, the Corrective Measures Effectiveness Report, the Stabilization/Corrective Measures Study Report, and Solutia's response to EPA's comments on the Effectiveness Report. Also, EPA and Mr. Tuk from Solutia further discussed this issue during a conference call on July 30, 2001.

Previously, Solutia had proposed to continue pumping for an additional year at increased pumping rates, collect additional quarterly water quality and groundwater elevation data (including a river staff gage), and re-evaluate pumping effectiveness. Solutia has not provided this additional data or evaluation, which will be an important component of the CMS. As a practical matter, EPA would be willing to allow pumping as an interim measure at well EW-8 to cease if it cannot be conveniently connected in the short term to the new sewer system. Well EW-8 has significantly lower yields than any other extraction well and is at the greatest distance from the other wells. However, EPA remains concerned with the level of groundwater contamination in the EW-8 area, and has provided comments regarding the need for additional

monitoring data (shallow and deep) as well as an evaluation of possible improvements to groundwater extraction at that location. At this time, EPA does not agree that pumping should discontinue until these comments are addressed. During the July 30 conference call, Solutia agreed to submit additional information to EPA and WVDEP and continue the discussions on this issue.

For the next steps, Solutia should begin implementing the Phase I CMS activities as described above and submit the Phase I CMS Report by December 28, 2001. Concurrently, the Agencies and Solutia will continue working on reevaluating the TCE extraction system and developing the sediment/surface water sampling plan. Also, EPA will research the available historical files to attempt to locate any dioxin sampling results that may exist. The submittal schedule for the Phase II CMS Report will be discussed with Solutia at a later date. If you would like to discuss these issues, please feel free to contact me at the above address or at (215)814-2772 if you have any questions regarding these issues.

Sincerely,

Jennifer L. Shoemaker

Jennifer L. Shoemaker
Remedial Project Manager

Attachments

cc: Bob Greaves, EPA
Joel Hennessy, EPA
Ruth Prince, EPA
Jim Duranti, WVDEP
Mark Priddy, WVDEP

...ste T...ent A...perim...alls, g...dwate...pling ...ts

all results are ug/l

date sampled	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/98	9/98	9/96	12/96	12/96	3/97	6/97	6/97	9/97	9/97	11/97	11/97	2/98
	WT-5A	WT-5B	WT-7A	WT-7B	WT-7C	WT-13A	WT-14A	TB-3	TD-1	TD-3	TD-5	WT-14A	WT-13A	WT-14A	WT-13A	WT-14A	WT-14A	TD-5	WT-14A	WT-14A	WT-13A	WT-14A	WT-13A	WT-14A
1,1-Dichloroethene																								
trans-1,2-Dichloroethene																								
Tetrachloroethene																								
Trichloroethene				12		610			15	7	7													
cis-1,2-Dichloroethene				11		17					6													
Vinyl Chloride				12																				
1,1-Dichloroethane																								
1,2-Dichloroethane																								
1,1,2-Trichloroethane																								
Benzene				74			2600	60	6	41														
Ethylbenzene																								
Toluene							420																	
Xylenes (total)							110		10															
Methylene Chloride							170																	
Chloromethane							600																	
Chloroform				23				31	14															
Carbon Tetrachloride																								
Chlorobenzene			190	14		11	31	50	16	990	9													
Acetone							890																	
2-Butanone																								
4-Methyl-2-Pentanone																								
Carbon Disulfide				11	18					10														
1,2-Dichloropropane																								
trans-1,3-dichloropropylene																								
Dichlorobromomethane																								
Bis(2-ethylhexyl)phthalate																								
Di-n-octylphthalate																								
2,4-Dichlorophenol							130					67				36				32		24		
Pentachlorophenol																								
2,4,5-Trichlorophenol						55			17												175	74	157	
2,4,6-Trichlorophenol							470					187	122		193	74		186	134	108				20
4-Chloro-3-methylphenol							1200									167			206					
2,4-Dimethylphenol							3800					307					32		58	97				
2-Methylphenol							2500																	
3-and 4-Methylphenol							50000																	
Phenol							5800					341				89			509					
2-Nitrophenol							35																	24
4,6-Dinitro-2-methylphenol							17																	
2-Chlorophenol												20												
Napthalene																								
2-Methylnaphthalene																								
Phenanthrene																								
Pyrene																								
Fluorene																								
Bis(2-chloroethyl)ether																								
Isophorone																								
m,p-cresol														7200		2870								
o-cresol														336		31	62		393					
4-Nitrophenol			41																10400					
N-Nitrosodi-n-propylamine							10																	
N-nitrosodiphenylamine																								

ımen				
all results are ug/				
date sampled	2/98	6/98	10/98	10/98
	WT-13A	WT-14A	WT-13A	WT-14A
1,1-Dichloroethene				
trans-1,2-Dichloroethene				
Tetrachloroethene				
Trichloroethene				
cis-1,2-Dichloroethene				
Vinyl Chloride				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1,2-Trichloroethane				
Benzene				8
Ethylbenzene				
Toluene				
Xylenes (total)				
Methylene Chloride				
Chloromethane				
Chloroform				
Carbon Tetrachloride				
Chlorobenzene				
Acetone				
2-Butanone				
4-Methyl-2-Pentanone				
Carbon Disulfide				
1,2-Dichloropropane				
trans-1,3-dichloropropylene				
Dichlorobromomethane				
Bis(2-ethylhexyl)phthalate				
Di-n-octylphthalate				
2,4-Dichlorophenol		24		33
Pentachlorophenol				
2,4,5-Trichlorophenol		102	113	30
2,4,6-Trichlorophenol	56			
4-Chloro-3-methylphenol		181		
2,4-Dimethylphenol		182		
2-Methylphenol				
3-and 4-Methylphenol				
Phenol		108		
2-Nitrophenol				
4,6-Dinitro-2-methylphenol				
2-Chlorophenol				
Napthalene				
2-Methylnaphthalene				
Phenanthrene				
Pyrene				
Fluorene				
Bis(2-chloroethyl)ether				
Isophorone				
m,p-cresol		1720		
o-cresol		113		
4-Nitrophenol				
N-Nitrosodi-n-propylamine				
N-nitrosodiphenylamine				

Solutia - Pro[illegible] Study Area perimeter wells, groundwater results

all results are [illegible]

									LNAPL								
date sampled	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94	9/94
	MW-3A	MW-3B	MW-4A	MW-4B	MW-5A	MW-5B	MW-6A	MW-6B	MW-7	MW-19A	MW-19B	MW-20A	MW-20B	MW-21A	MW-21B	MW-22R	MW-23A
1,1-Dichloroethene	10	8	6														
trans-1,2-Dichloroethene			21									170		51	6	6	13
Tetrachloroethene				31													
Trichloroethene	990	77	220		880	1050	68	170		160	21	3200	2300	470	460	21	1300
cis-1,2-Dichloroethene	480	54	790	51	170	200	320	37	6800	170	11	830	260	1800	320	84	170
Vinyl Chloride			170	69		77	550			37		300	45	130	14	110	
1,1-Dichloroethane	31	23								5							
1,2-Dichloroethane						8		13							6		
1,1,2-Trichloroethane						7											
Benzene	8		11			16	18	27	3000			6				20	7
Ethylbenzene	7						67									44	
Toluene	6						130							5			
Xylenes (total)	22						250		1700							26	
Methylene Chloride																	
Chloroform	32	7		7		23		37			6				19		81
Carbon Tetrachloride	18					37		10									250
Chlorobenzene	240	8	37			84		17		17				15		5	
Acetone																	
2-Butanone																	
4-Methyl-2-Pentanone							54										
Carbon Disulfide																6	
1,2-Dichloropropane								11									
trans-1,3-dichloropropylene																	
Dichlorobromomethane																	
Bis(2-ethylhexyl)phthalate	12								23					21	16		
Di-n-octylphthalate									32								
2,4-Dichlorophenol																	
Pentachlorophenol																	
2,4,5-Trichlorophenol	200						200									36	
2,4,6-Trichlorophenol													53				
Napthalene									220								
2-Methylnaphthalene									250								
Phenanthrene									15								
Pyrene									15								
Fluorene									10								
Biz(2-chloroethyl)ether															17		
Isophorone							88										
m,p-cresol																	
N-nitrosodiphenylamine																	

[illegible]tia - [illegible] dy A[illegible]																		
all results are																		
date sampled	9/94	2/97	2/97	2/97	2/97	2/97	2/97	2/97	8/97	11/97	5/97	7/97	7/97	8/97	9/97	4/97	7/97	3/97
	MW-24A	EW-5A	EW-5B	EW-6A	EW-6B	EW-7A	EW-7B	EW-8	EW-5A	EW-5B	EW-6A	EW-6A	EW-6B	EW-6B	EW-6B	EW-7A	EW-7B	EW-8
1,1-Dichloroethene									6			7		6				
trans-1,2-Dichloroethene									434	146	142	344	111	454	343	3470		60
Tetrachloroethene	5																	
Trichloroethene	450	2120	1050	1300	3420	4840	4000	1300	7360	871	980	1130	752	1960	1320	3400	942	602
cis-1,2-Dichloroethene	120										11							
Vinyl Chloride	25								50	25		1130	30	1190	1560	63		
1,1-Dichloroethane																		
1,2-Dichloroethane									30	24		10		10	6			
1,1,2-Trichloroethane												25		27	25			
Benzene	590	36	30	10	41	32	22	28	217	43	5	46	5	51	61	27	59	14
Ethylbenzene									12				15			203		
Toluene	270								44				6			102		25
Xylenes (total)																		
Methylene Chloride																		8
Chloroform									58	105	16	23	17	22	21			401
Carbon Tetrachloride											21	60	23	48	65			880
Chlorobenzene		18	162	14	279	357	29		89	137	15	47	21	46	51	453		
Acetone																		
2-Butanone																		
4-Methyl-2-Pentanone																		
Carbon Disulfide																		
1,2-Dichloropropane										14		9		8	8			
trans-1,3-dichloropropylene									489									
Dichlorobromomethane																		6
Bis(2-ethylhexyl)phthalate																		
Di-n-octylphthalate																		
2,4-Dichlorophenol	410															62		
Pentachlorophenol																		
2,4,5-Trichlorophenol	950											60						
2,4,6-Trichlorophenol																		
Napthalene																79		
2-Methylnaphthalene																		
Phenanthrene																		
Pyrene																		
Fluorene																		
Biz(2-chloroethyl)ether														34	28			
Isophorone																63		
m,p-cresol						58												
N-nitrosodiphenylamine																		12

Attachment B: Solutia, Inc., Nitro, WV
Kanawha River Sediment and Surface Water Sampling Procedure

Overview

In order to determine the analytes and sampling locations for the Solutia Kanawha River Groundwater Environmental Indicator evaluation, EPA compiled all of the available groundwater data from the monitoring and extraction wells nearby the river (see attached spreadsheet). The groundwater data for the Process Area and Past Disposal Area revealed numerous elevated chlorinated volatile organics, including several which are not associated with the breakdown of TCE, such as chlorobenzene. This groundwater data also revealed elevated BTEX, and some elevated SVOC data, including 2,4,5-trichlorophenol. The groundwater data for the Waste Treatment Area revealed more consistently elevated chlorinated and methylated phenols. However, this data included wells which were sampled from 1994 through 1998. The Process Area monitoring wells were only sampled in 1994, while a separate set of extraction wells for this area were sampled in 1997. The existing groundwater data for the Process Area is actually quite limited, but EPA can only work with what is available.

Table A below indicates the factor by which maximum groundwater concentrations exceeded surface water ecological effects-based benchmarks. The benchmarks were obtained from *Toxicological Benchmarks for Screening of Potential Contaminants of Concern for Effects on Aquatic Biota on Oak Ridge Reservation: 1996 Revision* (Suter, G.W. II and C.L. Tsao, Oak Ridge National Laboratory,1996) and *NOAA Screening Quick Reference Tables* (NOAA HAZMAT Report 99-1, M.F. Buchman, 1999). The URLs for these references are www.esd.ornl.gov/programs/ecorisk/ecorisk.html and http://response.restoration.noaa.gov/cpr/sediment/sediment.html.

A similar comparison cannot be directly made for potential sediment impacts. Chemical partitioning evaluations are also not always sufficiently predictive for sediment accumulation.

TABLE A

Groundwater Chemical	Maximum GW Concentration (ug/L)	Exceedance Factor for Surface Water Benchmark	Surface Water Benchmark (ug/L)
Benzene	3,000	23	130
Chlorobenzene	990	15	64
Chloroform	401	14	28
4-Chloro-3-methylphenol	1,200 (181)#	---	---

Groundwater Chemical	Maximum GW Concentration (ug/L)	Exceedance Factor for Surface Water Benchmark	Surface Water Benchmark (ug/L)
Carbon Tetrachloride	880	90	9.8
cis-1,2-Dichloroethene	6,800	11	590
trans-1,2-Dichloroethene	3,470	6	590
2,4-Dichlorophenol	410	11*	36*
trans-1,3-Dichloropropylene	489	8891	0.055
2,4-Dimethylphenol	3,800 (182)#	45* (2)#*	85*
Ethylbenzene	203	27	7.3
2-Methylnaphthalene	250	119*	2.1*
2-Methylphenol	2,500 (113)#	192 (7)#	13
3- and 4-Methylphenol	50,000 (1720)#	3846* (132)#*	13*
Naphthalene	220	18	12
4-Nitrophenol	10,400	35	300
Phenol	5,800 (108)#	53 (0.93)	110
Toluene	270	27	9.8
Trichloroethene	7,360	157	47
2,4,5-Trichlorophenol	950	15	63
2,4,6-Trichlorophenol	470 (56)#	5* (0.58)#*	97*
Vinyl chloride	1,560	---	---
Xylenes (total)	1,700	131	13

* Indicates that either a chemical surrogate benchmark was used, or an adjustment was made from an acute effects value or chronic LOAEL value.
# Values in parentheses are 1998 groundwater concentrations, and associated exceedance factors. Maximums are drawn from entire data set.

Based on the constituents listed in Table A, the analyte list for the sediment and surface water sampling is outlined below. Please note that the workplan submittal for this sampling

event must include the laboratory Reporting Limits per analyte for both water and sediment samples, in order to determine whether these detection limits will be adequate for comparison to the ecologically-based benchmark values. Also, EPA recommends 100% third party data validation for this sampling event at the M2 Level, *Innovative Approaches to Data Validation*, USEPA Region III, June 1995. All deviations from the previously approved Quality Assurance Project Plan should be documented.

Methods and Analytes
SW 846 Method 8260 - Report all volatile organics listed in Table A.
(Please note that there are new preparative methods for VOCs, e.g., SW846 Method 5035. Please indicate what preparative method will be used in the workplan.)

SW 846 Method 8270 - Report all semi-volatile organics listed in Table A.

Lloyd-Kahn Method - TOC analysis, sediments.

ASTM D422 - Grain size distribution analysis, sediments.

Equipment

Refer to *Compendium of ERT Surface Water and Sediment Sampling Procedures*, EPA/540/P-91/005 (see Attachment D). Any of the acceptable water sampling devices in this compendium may be used. Water samples should be obtained at the bottom of the water column, directly above the riverbed. The best equipment for the sediment sampling is most likely the petite Ponar dredge.

Sample Locations

Locations will be gridded at equal intervals parallel to the riverbank, per the segments specified below. EPA will need riverbed depth information, from the shoreline to approximately 10 feet perpendicular from the shoreline, to determine the locations in relation to the shoreline. The sediment sampling locations may vary somewhat depending on the availability of sediment. Please note that EPA is always interested in better methods of identifying groundwater discharge zones in the riverbed, instead of relying on grids. Two methods that have been useful in some locations include gridded temperature probing into the riverbed in search of a temperature differential to identify groundwater discharge locations, as well as gridded conductivity probing into the riverbed to again identify a differential. Solutia may propose these activities as a sampling reconnaissance component of this sampling effort.

1. <u>Segment A (MW20A - MW24A)</u>

Sediment Locations: Ten (10) locations at 80 foot intervals; use the MW20A coordinates for the first sediment location of Segment A.

Surface Water Locations: Five (5) locations at 160 foot intervals; use the MW20A coordinates for the first surface water location of Segment A. Obtain two sets of surface water samples during the low flow period, with at least one week's duration between the sets of surface water sampling. Avoid sampling during or directly after precipitation. The lowest flow month for the Kanawha River at Charleston, WV, appears to be September.

2. Segment B (MW7)

Sediment Locations: Four (4) locations at 70 foot intervals; use the MW7 coordinates for the second sediment location of Segment B.
Surface Water Locations: Three (3) locations at 90 foot intervals; use the MW7 coordinates for the second surface water location of Segment B. Obtain two sets of surface water samples during the low flow period, with at least one week's duration between the sets of surface water sampling. Avoid sampling during or directly after precipitation. The lowest flow month for the Kanawha River at Charleston, WV, appears to be September.

3. Segment C (WT13A - TD3)

Sediment Locations: Nine (9) locations at 90 foot intervals; use the WT13A coordinates for the first sediment location of Segment C.
Surface Water Locations: Five (5) locations at 160 foot intervals; use the WT13A coordinates for the first surface water location of Segment C. Obtain two sets of surface water samples during the low flow period, with at least one week's duration between the sets of surface water sampling. Avoid sampling during or after precipitation. The lowest flow month for the Kanawha River at Charleston, WV, appears to be September.

Attachment C

Analytical Results for Vinyl Chloride in Sediment Samples (ug/kg)				
Groundwater Area A - BWXT Site				
Sampling Location	Dec. 1997 (ppb)	Screening Benchmark (ppb)	Oct. 1998 (ppb)	Screening Benchmark (ppb)
	ROUND 1	ROUND 1	ROUND 2	ROUND 2
JRA1-UP			5 U	31
JRA-1	28	31	NS	31
JRA-2	120	31	2 J	31
JRA-2-50			5 U	31
JRA-2-100			5 U	31
JRA-2-225			5 U	31
JRA-3	690	31	150 J	31
JRA-3-50			5 U	31
JRA-3-100			5 U	31
JRA-3-225			5 U	31
JRA-4	2 J	31	4 J	31
JRA-4-100			5 U	31
JRA-4-225			5 U	31
JRA-4-DOWN			5 U	31
JRA-5	5 U	31	NS	31
JRA-6	5 U	31	NS	31
JRA-7	5 U	31	NS	31
JRA-7-DOWN			5 U	31
MWA -16 GW (ug/l)	134		140	

Analytical Results for cis-1,2-Dichloroethylene in Sediment Samples (ug/k				
Groundwater Area A - BWXT Site				
Sampling Location	Dec. 1997 (ppb)	Screening Benchmark (ppb)	Oct. 1998 (ppb)	Screening Benchmark (ppb)
	ROUND 1	ROUND 1	ROUND 2	ROUND 2
JRA1-UP			5 U	400
JRA-1	4 J	400	NS	400
JRA-2	650	400	1 J	400
JRA-2-50			5 U	400
JRA-2-100			5 U	400
JRA-2-225			730 J	400
JRA-3	830	400	2 J	400
JRA-3-50			4 J	400
JRA-3-100			5 U	400
JRA-3-225			180 J	400
JRA-4	135 J	400	5 U	400
JRA-4-100			5 U	400
JRA-4-225			5 U	400
JRA-4-DOWN			5 U	400
JRA-5	22	400	NS	400
JRA-6	10	400	NS	400
JRA-7	5 J	400	NS	400
JRA-7-DOWN			5 U	400
MWA-16 GW (ug/L)	520		490	

Analytical Results for TCE in Sediment Samples (ug/kg)				
Groundwater Area A - BWXT Site				
Sampling Location	Dec. 1997 (ppb)	Screening Benchmark (ppb)	Oct. 1998 (ppb)	Screening Benchmark (ppb)
	ROUND 1	ROUND 1	ROUND 2	ROUND 2
JRA1-UP			5 U	220
JRA-1	5 U	220	NS	220
JRA-2	76	220	5 U	220
JRA-2-50			5 U	220
JRA-2-100			5 U	220
JRA-2-225			5 U	220
JRA-3	6 J	220	23	220
JRA-3-50			1 J	220
JRA-3-100			2 J	220
JRA-3-225			5 U	220
JRA-4	380	220	480 J	220
JRA-4-100			19.5	220
JRA-4-225			1 J	220
JRA-4-DOWN			5 U	220
JRA-5	70	220	NS	220
JRA-6	3 J	220	NS	220
JRA-7	110	220	NS	220
JRA-7-DOWN			8	220
MWA-16 GW (ug/L)	3900		4200	

APPENDIX B

SUMMARY OF SEDIMENT SAMPLE RESULTS AND SURFACE WATER AND SEDIMENT SAMPLE LABORATORY REPORTS

Appendix B. Summary of September 24, 2001 Sediment Sample Results. Solutia, Inc. Facility; Nitro, West Virginia.

Sample Identification	Percent Moisture	Total Organic Carbon (mg/kg)	Volatile Organic Compound COCs (mg/kg)						SVOCs (mg/kg)
			Benzene	Chlorobenzene	Ethylbenzene	Toluene	Vinyl Chloride	Total Xylenes	All COCs
Upriver Background									
BG-1	36	48,100	ND	ND	ND	ND	ND	ND	ND
BG-2	46	71,200	ND	ND	ND	ND	ND	ND	ND
River Segment A									
ASD-1	30	7,800	ND	ND	ND	ND	ND	ND	ND
ASD-2	38	32,100	ND	ND	ND	ND	**0.003**	ND	ND
ASD-3	41	43,200	ND	ND	ND	ND	ND	ND	ND
ASD-4	43	48,000	ND	ND	ND	ND	ND	ND	ND
ASD-5	44	58,000	ND	ND	ND	ND	ND	ND	ND
ASD-6	44	36,000	**0.005**	ND	ND	ND	**0.004**	ND	ND
ASD-6 (Dup)	54	33,000	**0.006**	ND	ND	ND	**0.005**	ND	ND
ASD-7	45	38,000	ND	ND	ND	ND	ND	ND	ND
ASD-8	33	34,100	ND	ND	ND	ND	ND	ND	ND
ASD-9	40	35,100	ND	ND	ND	ND	ND	ND	ND
ASD-10	47	39,000	**0.011**	**0.003**	**0.003**	ND	ND	**0.002**	ND
River Segment B									
BSD-1	43	32,100	ND	ND	ND	ND	ND	ND	ND
BSD-2	36	22,100	ND	ND	ND	ND	ND	ND	ND
BSD-3	36	37,300	ND	ND	ND	ND	ND	ND	ND
BSD-4	36	34,100	ND	ND	ND	ND	ND	ND	ND
River Segment C									
CSD-1	42	28,300	ND	ND	ND	ND	ND	ND	ND
CSD-2	53	56,200	ND	ND	ND	ND	ND	ND	ND
CSD-3	47	49,100	ND	ND	ND	ND	ND	ND	ND
CSD-4	50	31,400	ND	ND	ND	ND	ND	ND	ND
CSD-5	51	143,000	ND	ND	ND	ND	ND	ND	ND
CSD-6	58	34,000	ND	ND	ND	ND	ND	ND	ND
CSD-7	49	51,000	ND	ND	ND	ND	ND	ND	ND
CSD-8	40	39,400	ND	ND	ND	ND	ND	ND	ND
CSD-9	44	97,200	ND	ND	ND	ND	ND	ND	ND
Local POTW Outfall									
Union PSD	34	23,000	ND	ND	ND	ND	ND	ND	ND
Union PSD Liquid	NA	NA	ND	ND	ND	ND	ND	ND	ND
QA/QC Blank Samples									
Field Blank (FBSED)	21	ND	ND	ND	ND	ND	ND	ND	ND
Equipment Blank (EB-1)	NA	NA	ND	ND	ND	**0.001**	ND	ND	ND
Trip Blank	NA	NA	ND	ND	ND	ND	ND	ND	NT

Notes:

NA - Not applicable.
ND = Not detected above the laboratory reporting limit.
NT - Not tested.
COC - Constituents of Concern.
SVOCs - Semi-volatile organic compounds.

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-7
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-01A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	51,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	49	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	1		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	1		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	1		09/28/01	TC
Chloroform	ND	µg/Kg	NA	1		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	1		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	1		09/28/01	TC
Toluene	ND	µg/Kg	NA	1		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	1		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	1		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	105	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	119	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	104	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	112	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-7
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-01A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.979		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.979		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.979		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.96		10/07/01	WP
Surr: 2,4,6-Tribromophenol	63	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	54	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	41	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	66	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	49	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	57	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-6
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-02A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	34,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	58	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/28/01	TC
Chloroform	ND	µg/Kg	NA	2		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/28/01	TC
Toluene	ND	µg/Kg	NA	2		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	110	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	121	%REC	NA	74-121	S	09/28/01	TC
Surr: Dibromofluoromethane	107	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	111	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
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* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-6
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-02A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.979		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.979		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.979		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.979		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.96		10/07/01	WP
Surr: 2,4,6-Tribromophenol	82	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	65	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	49	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	83	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	57	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	74	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-5
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-03A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	143,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	51	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	1		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	1		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	1		09/28/01	TC
Chloroform	ND	µg/Kg	NA	1		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	1		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	1		09/28/01	TC
Toluene	ND	µg/Kg	NA	1		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	1		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	1		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	110	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	116	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	115	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-5
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-03A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.986		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.986		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.986		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.97		10/07/01	WP
Surr: 2,4,6-Tribromophenol	70	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	59	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	44	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	72	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	56	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	63	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-4
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-04A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	31,400	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	50	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	1		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	1		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	1		09/28/01	TC
Chloroform	ND	µg/Kg	NA	1		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	1		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	1		09/28/01	TC
Toluene	ND	µg/Kg	NA	1		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	1		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	1		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	103	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	128	%REC	NA	74-121	S	09/28/01	TC
Surr: Dibromofluoromethane	104	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	117	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-4
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-04A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.328		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.328		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.328		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.328		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.328		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.328		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.328		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.328		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.328		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.328		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.655		10/07/01	WP
Surr: 2,4,6-Tribromophenol	68	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	52	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	35	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	66	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	45	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	54	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-05A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	49,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	47	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	109	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	115	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	109	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-05A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.800		10/07/01	WP
Surr: 2,4,6-Tribromophenol	67	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	53	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	39	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	65	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	47	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	57	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-06A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	56,200	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	53	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/28/01	TC
Chloroform	ND	µg/Kg	NA	2		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/28/01	TC
Toluene	ND	µg/Kg	NA	2		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	118	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	110	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	118	%REC	NA	81-117	S	09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
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NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-06A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.795		10/07/01	WP
Surr: 2,4,6-Tribromophenol	63	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	50	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	34	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	63	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	43	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	51	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-1
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-07A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	28,300	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	42	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	118	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	120	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	115	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	120	%REC	NA	81-117	S	09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
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REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-1
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-07A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.324		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.324		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.324		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.324		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.324		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.324		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.324		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.324		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.324		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.324		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.649		10/07/01	WP
Surr: 2,4,6-Tribromophenol	65	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	44	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	35	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	63	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	39	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	52	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: UNION PSD SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-08A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	23,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	34	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	111	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	107	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	112	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	107	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: UNION PSD SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-08A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.662		10/07/01	WP
Surr: 2,4,6-Tribromophenol	66	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	51	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	39	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	66	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	49	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	55	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: UNION PSD LIQUID
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-09A
Collection Date: 9/24/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/08/01	TC
Carbon tetrachloride	ND	µg/L	NA	1.0		10/08/01	TC
Chlorobenzene	ND	µg/L	NA	1.0		10/08/01	TC
Chloroform	ND	µg/L	NA	1.0		10/08/01	TC
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/08/01	TC
Ethylbenzene	ND	µg/L	NA	1.0		10/08/01	TC
Toluene	ND	µg/L	NA	1.0		10/08/01	TC
Trichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
Vinyl chloride	ND	µg/L	NA	1.0		10/08/01	TC
o-Xylene	ND	µg/L	NA	1.0		10/08/01	TC
m,p-Xylene	ND	µg/L	NA	2.0		10/08/01	TC
Surr: 1,2-Dichloroethane-d4	100	%REC	NA	80-120		10/08/01	TC
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		10/08/01	TC
Surr: Dibromofluoromethane	102	%REC	NA	80-120		10/08/01	TC
Surr: Toluene-d8	108	%REC	NA	88-110		10/08/01	TC
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.018		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/03/01	WP
Phenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
Surr: 2,4,6-Tribromophenol	81	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	76	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	46	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	90	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	78	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	40	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-4
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-10A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	34,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	36	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	106	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	105	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-4
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-10A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.329		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.329		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.329		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.657		10/07/01	WP
Surr: 2,4,6-Tribromophenol	67	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	50	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	38	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	63	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	44	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	55	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-11A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	37,300	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	36	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	111	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	105	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	110	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	107	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-11A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.662		10/07/01	WP
Surr: 2,4,6-Tribromophenol	62	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	48	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	35	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	62	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	40	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	52	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-12A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	22,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	36	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/28/01	TC
Chloroform	ND	µg/Kg	NA	2		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/28/01	TC
Toluene	ND	µg/Kg	NA	2		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	108	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	108	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-12A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.329		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.329		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.329		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.329		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.657		10/07/01	WP
Surr: 2,4,6-Tribromophenol	50	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	38	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	29	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	47	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	36	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	43	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-1
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-13A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	32,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	43	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/28/01	TC
Chloroform	ND	µg/Kg	NA	2		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/28/01	TC
Toluene	ND	µg/Kg	NA	2		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	115	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	111	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	110	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSD-1
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-13A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.662		10/07/01	WP
Surr: 2,4,6-Tribromophenol	57	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	42	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	30	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	57	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	37	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	46	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-10
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-14A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	39,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	47	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	11	µg/Kg	NA	2		09/30/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/30/01	TC
Chlorobenzene	3	µg/Kg	NA	2		09/30/01	TC
Chloroform	ND	µg/Kg	NA	2		09/30/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/30/01	TC
Ethylbenzene	3	µg/Kg	NA	2		09/30/01	TC
Toluene	ND	µg/Kg	NA	2		09/30/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/30/01	TC
o-Xylene	2	µg/Kg	NA	2		09/30/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/30/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/30/01	TC
Surr: 4-Bromofluorobenzene	107	%REC	NA	74-121		09/30/01	TC
Surr: Dibromofluoromethane	110	%REC	NA	75-120		09/30/01	TC
Surr: Toluene-d8	103	%REC	NA	81-117		09/30/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-10
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-14A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.666		10/07/01	WP
Surr: 2,4,6-Tribromophenol	44	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	34	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	28	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	39	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	33	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	40	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-9
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-15A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	35,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	40	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	108	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	112	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	107	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-9
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-15A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.662		10/07/01	WP
Surr: 2,4,6-Tribromophenol	51	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	37	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	20	%REC	NA	25-121	S	10/07/01	WP
Surr: 4-Terphenyl-d14	46	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	27	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	36	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-8
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-16A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	34,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	33	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	110	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	110	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	106	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-8
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-16A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.333		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.333		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.666		10/07/01	WP
Surr: 2,4,6-Tribromophenol	54	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	42	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	29	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	52	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	36	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	45	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-7
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-17A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	38,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	45	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	117	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	113	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-7
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-17A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.332		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.332		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.332		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.332		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.332		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.332		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.332		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.332		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.332		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.332		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.664		10/07/01	WP
Surr: 2,4,6-Tribromophenol	80	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	62	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	57	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	73	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	65	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	73	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-6
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-18A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	36,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	44	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	5	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	4	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	110	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	110	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	106	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-6
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-18A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.99		10/07/01	WP
Surr: 2,4,6-Tribromophenol	81	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	66	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	53	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	76	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	60	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	71	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: SD-DUPLICATE
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-19A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	33,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	54	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	6	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	5	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	110	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	125	%REC	NA	74-121	S	09/29/01	TC
Surr: Dibromofluoromethane	110	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	111	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: SD-DUPLICATE
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-19A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.99		10/07/01	WP
Surr: 2,4,6-Tribromophenol	78	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	63	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	51	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	72	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	62	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	67	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-5
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-20A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	58,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	44	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	116	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	114	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	114	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	106	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-5
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-20A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.992		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.992		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.992		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.98		10/07/01	WP
Surr: 2,4,6-Tribromophenol	57	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	48	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	39	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	54	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	45	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	54	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-4 / MS / MSD
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-21A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	48,000	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	43	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	115	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	112	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	113	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-4 / MS / MSD
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-21A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.326		10/05/01	WP
o-Cresol	ND	mg/Kg	NA	0.326		10/05/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.326		10/05/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.326		10/05/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.326		10/05/01	WP
Naphthalene	ND	mg/Kg	NA	0.326		10/05/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.326		10/05/01	WP
Phenol	ND	mg/Kg	NA	0.326		10/05/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.326		10/05/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.326		10/05/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.784		10/05/01	WP
Surr: 2,4,6-Tribromophenol	53	%REC	NA	19-122		10/05/01	WP
Surr: 2-Fluorobiphenyl	41	%REC	NA	30-115		10/05/01	WP
Surr: 2-Fluorophenol	30	%REC	NA	25-121		10/05/01	WP
Surr: 4-Terphenyl-d14	50	%REC	NA	18-137		10/05/01	WP
Surr: Nitrobenzene-d5	32	%REC	NA	23-120		10/05/01	WP
Surr: Phenol-d5	47	%REC	NA	24-113		10/05/01	WP

Abbreviations:
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PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-22A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	43,200	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	41	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	109	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	107	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	107	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-3
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-22A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.996		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.996		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.99		10/07/01	WP
Surr: 2,4,6-Tribromophenol	76	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	64	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	53	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	74	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	56	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	67	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-23A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	32,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	38	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	3	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	111	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	112	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	108	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-23A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.989		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.989		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.989		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.98		10/07/01	WP
Surr: 2,4,6-Tribromophenol	76	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	62	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	44	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	70	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	56	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	64	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-1 / MS / MSD
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-24A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	7,800	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	30	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	1		09/28/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	1		09/28/01	TC
Chlorobenzene	ND	µg/Kg	NA	1		09/28/01	TC
Chloroform	ND	µg/Kg	NA	1		09/28/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	1		09/28/01	TC
Ethylbenzene	ND	µg/Kg	NA	1		09/28/01	TC
Toluene	ND	µg/Kg	NA	1		09/28/01	TC
Trichloroethene	ND	µg/Kg	NA	1		09/28/01	TC
Vinyl chloride	ND	µg/Kg	NA	1		09/28/01	TC
o-Xylene	ND	µg/Kg	NA	1		09/28/01	TC
m,p-Xylene	ND	µg/Kg	NA	3		09/28/01	TC
Surr: 1,2-Dichloroethane-d4	115	%REC	NA	72-120		09/28/01	TC
Surr: 4-Bromofluorobenzene	96	%REC	NA	74-121		09/28/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/28/01	TC
Surr: Toluene-d8	100	%REC	NA	81-117		09/28/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASD-1 / MS / MSD
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-24A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.328		10/05/01	WP
o-Cresol	ND	mg/Kg	NA	0.328		10/05/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.328		10/05/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.328		10/05/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.328		10/05/01	WP
Naphthalene	ND	mg/Kg	NA	0.328		10/05/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.328		10/05/01	WP
Phenol	ND	mg/Kg	NA	0.328		10/05/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.328		10/05/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.328		10/05/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.787		10/05/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	19-122		10/05/01	WP
Surr: 2-Fluorobiphenyl	36	%REC	NA	30-115		10/05/01	WP
Surr: 2-Fluorophenol	25	%REC	NA	25-121		10/05/01	WP
Surr: 4-Terphenyl-d14	56	%REC	NA	18-137		10/05/01	WP
Surr: Nitrobenzene-d5	28	%REC	NA	23-120		10/05/01	WP
Surr: Phenol-d5	45	%REC	NA	24-113		10/05/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: EB-2
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-25A
Collection Date: 9/24/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/08/01	TC
Carbon tetrachloride	ND	µg/L	NA	1.0		10/08/01	TC
Chlorobenzene	ND	µg/L	NA	1.0		10/08/01	TC
Chloroform	ND	µg/L	NA	1.0		10/08/01	TC
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/08/01	TC
Ethylbenzene	ND	µg/L	NA	1.0		10/08/01	TC
Toluene	1.0	µg/L	NA	1.0		10/08/01	TC
Trichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
Vinyl chloride	ND	µg/L	NA	1.0		10/08/01	TC
o-Xylene	ND	µg/L	NA	1.0		10/08/01	TC
m,p-Xylene	ND	µg/L	NA	2.0		10/08/01	TC
Surr: 1,2-Dichloroethane-d4	100	%REC	NA	80-120		10/08/01	TC
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		10/08/01	TC
Surr: Dibromofluoromethane	102	%REC	NA	80-120		10/08/01	TC
Surr: Toluene-d8	107	%REC	NA	88-110		10/08/01	TC
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.019		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	85	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	75	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	40	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	92	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	76	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	37	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-1 SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-26A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	48,100	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	36	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/29/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/29/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/29/01	TC
Chloroform	ND	µg/Kg	NA	2		09/29/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/29/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/29/01	TC
Toluene	ND	µg/Kg	NA	2		09/29/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/29/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/29/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/29/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/29/01	TC
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	72-120		09/29/01	TC
Surr: 4-Bromofluorobenzene	112	%REC	NA	74-121		09/29/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/29/01	TC
Surr: Toluene-d8	108	%REC	NA	81-117		09/29/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-1 SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-26A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.973		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.973		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.973		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.973		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.973		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.973		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.973		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.973		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.973		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.973		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.95		10/07/01	WP
Surr: 2,4,6-Tribromophenol	69	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	52	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	31	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	68	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	42	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	51	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-1 LIQUID
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-27A
Collection Date: 9/24/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/08/01	TC
Carbon tetrachloride	ND	µg/L	NA	1.0		10/08/01	TC
Chlorobenzene	ND	µg/L	NA	1.0		10/08/01	TC
Chloroform	ND	µg/L	NA	1.0		10/08/01	TC
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/08/01	TC
Ethylbenzene	ND	µg/L	NA	1.0		10/08/01	TC
Toluene	ND	µg/L	NA	1.0		10/08/01	TC
Trichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
Vinyl chloride	ND	µg/L	NA	1.0		10/08/01	TC
o-Xylene	ND	µg/L	NA	1.0		10/08/01	TC
m,p-Xylene	ND	µg/L	NA	2.0		10/08/01	TC
Surr: 1,2-Dichloroethane-d4	96	%REC	NA	80-120		10/08/01	TC
Surr: 4-Bromofluorobenzene	105	%REC	NA	86-115		10/08/01	TC
Surr: Dibromofluoromethane	101	%REC	NA	80-120		10/08/01	TC
Surr: Toluene-d8	107	%REC	NA	88-110		10/08/01	TC
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.020		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	98	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	77	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	50	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	93	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	83	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	43	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FBSED
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-28A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	ND	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	21	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/30/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/30/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/30/01	TC
Chloroform	ND	µg/Kg	NA	2		09/30/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/30/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/30/01	TC
Toluene	ND	µg/Kg	NA	2		09/30/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/30/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/30/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/30/01	TC
Surr: 1,2-Dichloroethane-d4	117	%REC	NA	72-120		09/30/01	TC
Surr: 4-Bromofluorobenzene	101	%REC	NA	74-121		09/30/01	TC
Surr: Dibromofluoromethane	112	%REC	NA	75-120		09/30/01	TC
Surr: Toluene-d8	97	%REC	NA	81-117		09/30/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FBSED
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-28A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.331		10/05/01	WP
o-Cresol	ND	mg/Kg	NA	0.331		10/05/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.331		10/05/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.331		10/05/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.331		10/05/01	WP
Naphthalene	ND	mg/Kg	NA	0.331		10/05/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.331		10/05/01	WP
Phenol	ND	mg/Kg	NA	0.331		10/05/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.331		10/05/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.331		10/05/01	WP
m,p-Cresol	ND	mg/Kg	NA	0.795		10/05/01	WP
Surr: 2,4,6-Tribromophenol	75	%REC	NA	19-122		10/05/01	WP
Surr: 2-Fluorobiphenyl	46	%REC	NA	30-115		10/05/01	WP
Surr: 2-Fluorophenol	34	%REC	NA	25-121		10/05/01	WP
Surr: 4-Terphenyl-d14	72	%REC	NA	18-137		10/05/01	WP
Surr: Nitrobenzene-d5	30	%REC	NA	23-120		10/05/01	WP
Surr: Phenol-d5	56	%REC	NA	24-113		10/05/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-Z SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-29A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	71,200	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	46	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/30/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/30/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/30/01	TC
Chloroform	ND	µg/Kg	NA	2		09/30/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/30/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/30/01	TC
Toluene	ND	µg/Kg	NA	2		09/30/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/30/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/30/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/30/01	TC
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	72-120		09/30/01	TC
Surr: 4-Bromofluorobenzene	117	%REC	NA	74-121		09/30/01	TC
Surr: Dibromofluoromethane	111	%REC	NA	75-120		09/30/01	TC
Surr: Toluene-d8	108	%REC	NA	81-117		09/30/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-Z SOIL
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-29A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.992		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.992		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.992		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.992		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.98		10/07/01	WP
Surr: 2,4,6-Tribromophenol	71	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	61	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	40	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	74	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	44	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	63	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-Z LIQUID
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-30A
Collection Date: 9/24/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/08/01	TC
Carbon tetrachloride	ND	µg/L	NA	1.0		10/08/01	TC
Chlorobenzene	ND	µg/L	NA	1.0		10/08/01	TC
Chloroform	ND	µg/L	NA	1.0		10/08/01	TC
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/08/01	TC
Ethylbenzene	ND	µg/L	NA	1.0		10/08/01	TC
Toluene	1.0	µg/L	NA	1.0		10/08/01	TC
Trichloroethene	ND	µg/L	NA	1.0		10/08/01	TC
Vinyl chloride	ND	µg/L	NA	1.0		10/08/01	TC
o-Xylene	ND	µg/L	NA	1.0		10/08/01	TC
m,p-Xylene	ND	µg/L	NA	2.0		10/08/01	TC
Surr: 1,2-Dichloroethane-d4	103	%REC	NA	80-120		10/08/01	TC
Surr: 4-Bromofluorobenzene	102	%REC	NA	86-115		10/08/01	TC
Surr: Dibromofluoromethane	104	%REC	NA	80-120		10/08/01	TC
Surr: Toluene-d8	107	%REC	NA	88-110		10/08/01	TC
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.020		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	89	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	73	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	46	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	91	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	79	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	42	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-8
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-31A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	39,400	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	40	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/30/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/30/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/30/01	TC
Chloroform	ND	µg/Kg	NA	2		09/30/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/30/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/30/01	TC
Toluene	ND	µg/Kg	NA	2		09/30/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/30/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/30/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/30/01	TC
Surr: 1,2-Dichloroethane-d4	102	%REC	NA	72-120		09/30/01	TC
Surr: 4-Bromofluorobenzene	108	%REC	NA	74-121		09/30/01	TC
Surr: Dibromofluoromethane	109	%REC	NA	75-120		09/30/01	TC
Surr: Toluene-d8	111	%REC	NA	81-117		09/30/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-8
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-31A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.989		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.989		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.989		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.989		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.98		10/07/01	WP
Surr: 2,4,6-Tribromophenol	63	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	52	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	28	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	67	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	36	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	48	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-9
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-32A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
ORGANIC CARBON, Total		**LLOYD KAHN**					
Total Organic Carbon	97,200	mg/Kg	NA	100		09/27/01	JC
PERCENT MOISTURE		**SM2540 B**					
Percent Moisture	44	wt%	NA	0.5		10/04/01	TM
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/Kg	NA	2		09/30/01	TC
Carbon tetrachloride	ND	µg/Kg	NA	2		09/30/01	TC
Chlorobenzene	ND	µg/Kg	NA	2		09/30/01	TC
Chloroform	ND	µg/Kg	NA	2		09/30/01	TC
cis-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,2-Dichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
trans-1,3-Dichloropropene	ND	µg/Kg	NA	2		09/30/01	TC
Ethylbenzene	ND	µg/Kg	NA	2		09/30/01	TC
Toluene	ND	µg/Kg	NA	2		09/30/01	TC
Trichloroethene	ND	µg/Kg	NA	2		09/30/01	TC
Vinyl chloride	ND	µg/Kg	NA	2		09/30/01	TC
o-Xylene	ND	µg/Kg	NA	2		09/30/01	TC
m,p-Xylene	ND	µg/Kg	NA	4		09/30/01	TC
Surr: 1,2-Dichloroethane-d4	112	%REC	NA	72-120		09/30/01	TC
Surr: 4-Bromofluorobenzene	113	%REC	NA	74-121		09/30/01	TC
Surr: Dibromofluoromethane	108	%REC	NA	75-120		09/30/01	TC
Surr: Toluene-d8	107	%REC	NA	81-117		09/30/01	TC

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSD-9
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-32A
Collection Date: 9/24/01
Matrix: SOIL

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/Kg	NA	0.986		10/07/01	WP
o-Cresol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4-Dichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4-Dimethylphenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2-Methylnaphthalene	ND	mg/Kg	NA	0.986		10/07/01	WP
Naphthalene	ND	mg/Kg	NA	0.986		10/07/01	WP
4-Nitrophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
Phenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4,5-Trichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
2,4,6-Trichlorophenol	ND	mg/Kg	NA	0.986		10/07/01	WP
m,p-Cresol	ND	mg/Kg	NA	1.97		10/07/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	19-122		10/07/01	WP
Surr: 2-Fluorobiphenyl	48	%REC	NA	30-115		10/07/01	WP
Surr: 2-Fluorophenol	26	%REC	NA	25-121		10/07/01	WP
Surr: 4-Terphenyl-d14	62	%REC	NA	18-137		10/07/01	WP
Surr: Nitrobenzene-d5	33	%REC	NA	23-120		10/07/01	WP
Surr: Phenol-d5	45	%REC	NA	24-113		10/07/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: TRIP BLANKS
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737
Lab ID: 0109737-33A
Collection Date: 9/24/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/01/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/01/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/01/01	WM
Chloroform	ND	µg/L	NA	1.0		10/01/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/01/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/01/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/01/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/01/01	WM
Toluene	ND	µg/L	NA	1.0		10/01/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/01/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/01/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/01/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/01/01	WM
Surr: 1,2-Dichloroethane-d4	98	%REC	NA	80-120		10/01/01	WM
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		10/01/01	WM
Surr: Dibromofluoromethane	77	%REC	NA	80-120	S	10/01/01	WM
Surr: Toluene-d8	100	%REC	NA	88-110		10/01/01	WM

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

CLIENT: SOLUTIA INC
Project: PROJECT # 01-0081-00
Site ID: SOLUTIA INC. / KANAWHA RIVER

Lab Order: 0109737

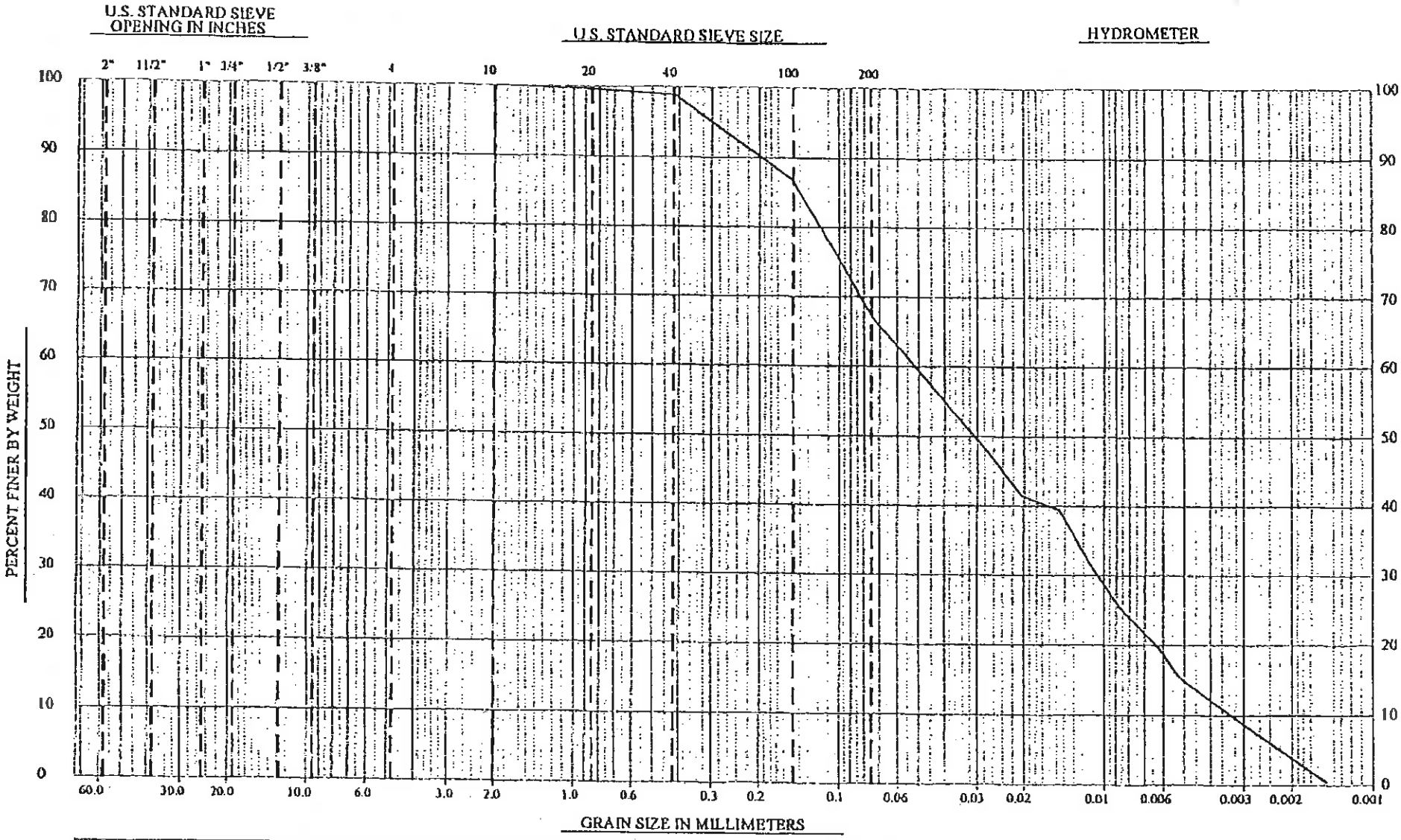
Data Review

Approved: _____
Inorganic Department Manager Date

Approved: _____
Organic Department Manager Date

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: _____

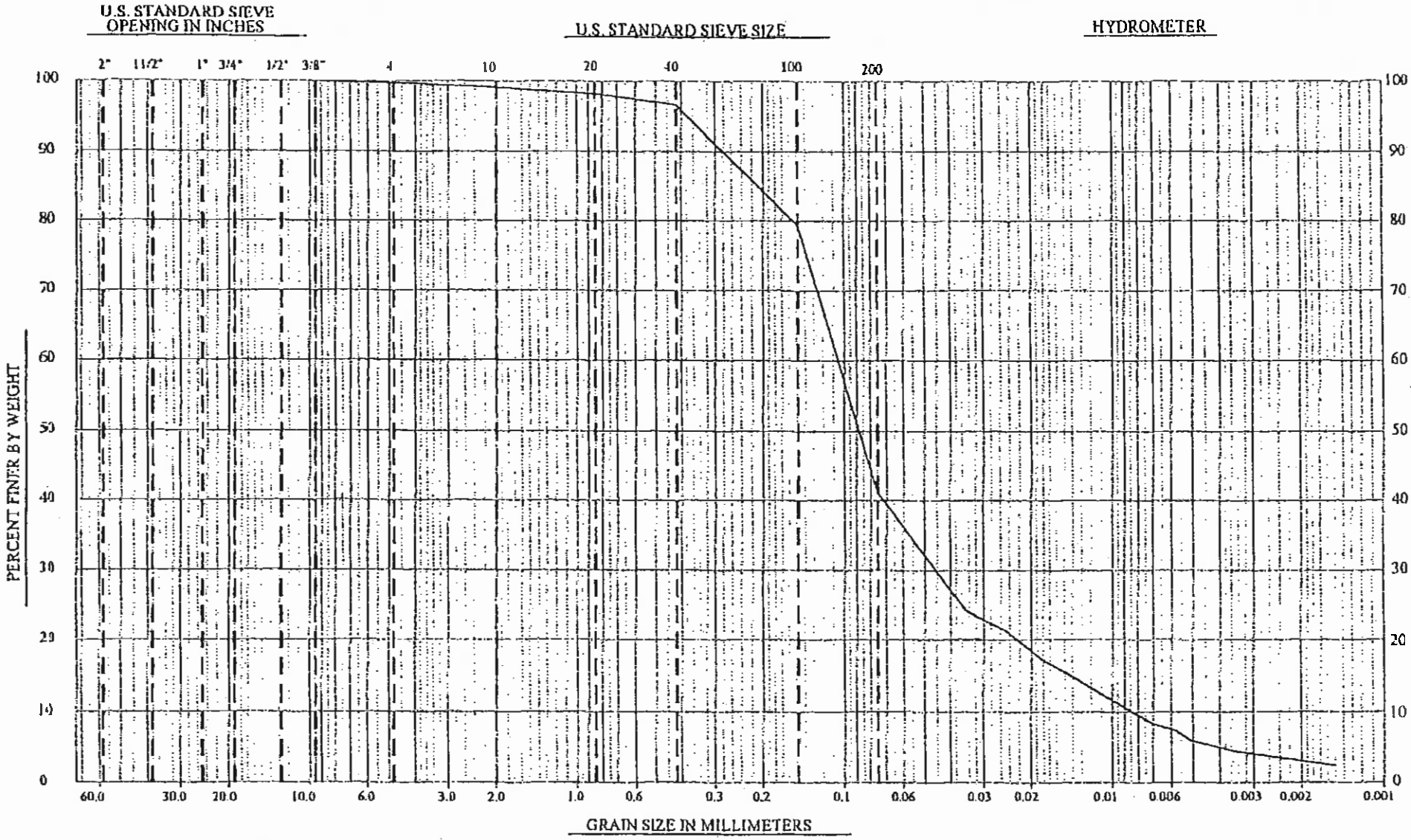
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-6						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 747

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

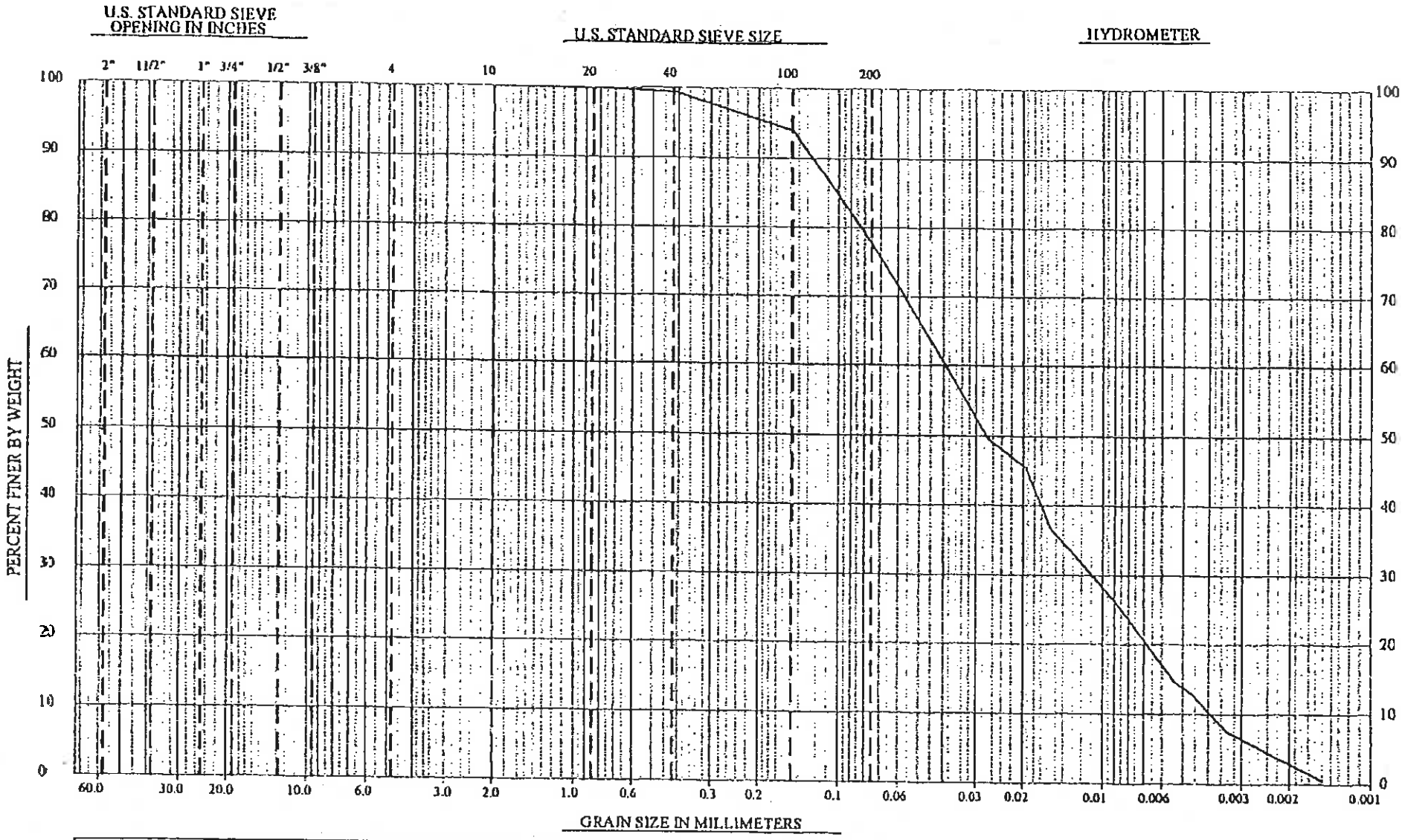
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-9						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 746

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

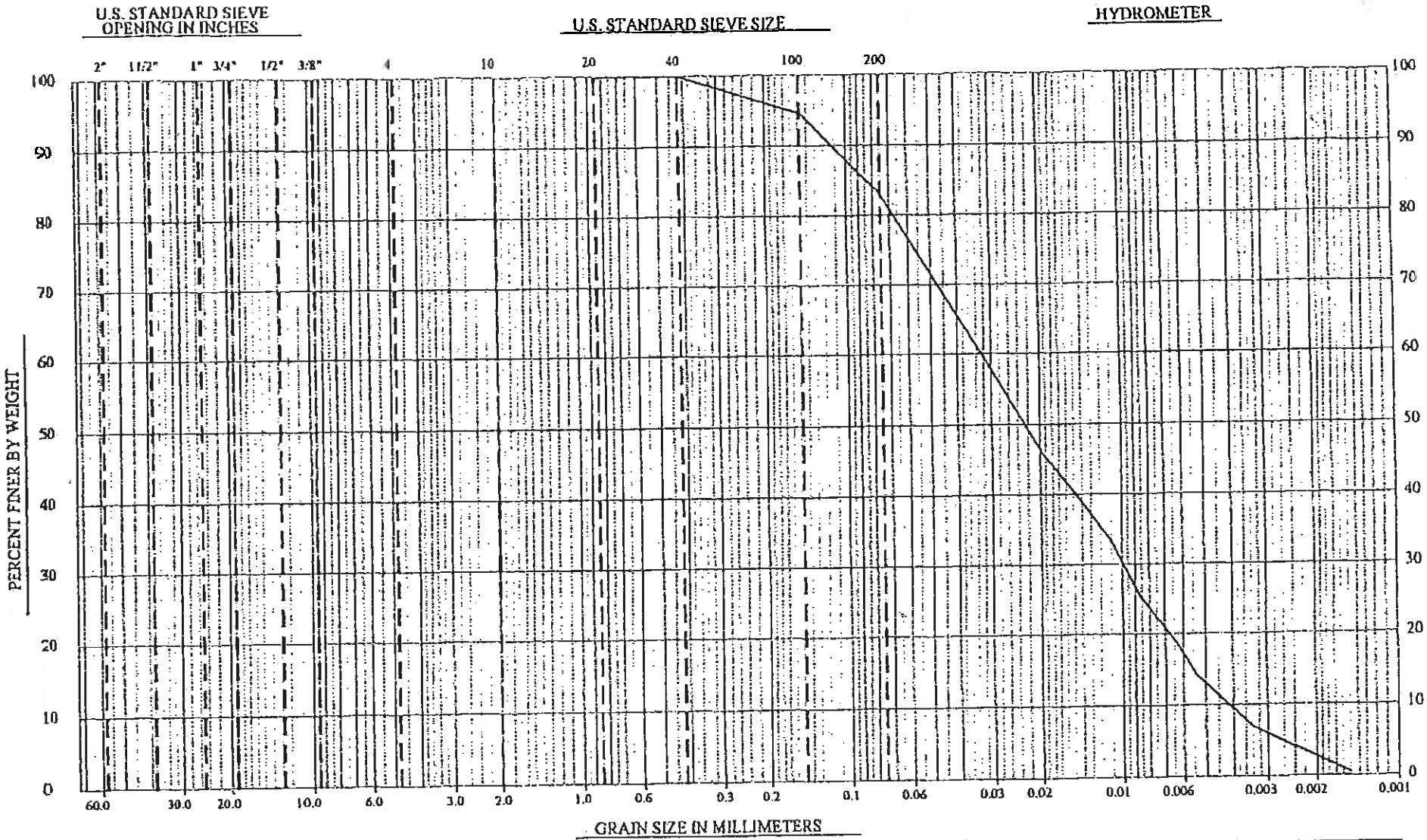
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-1						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 745

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

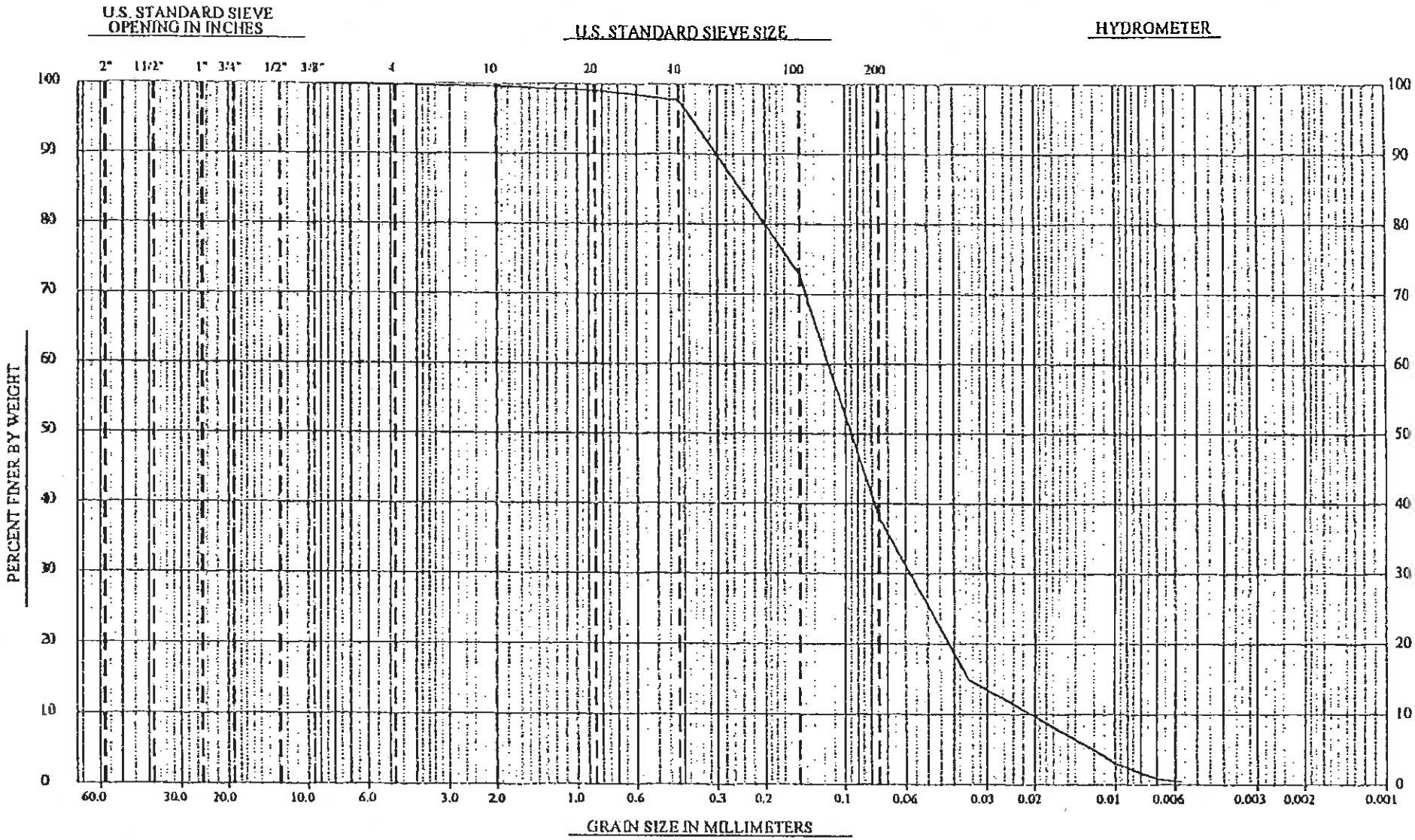
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-7						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 744

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

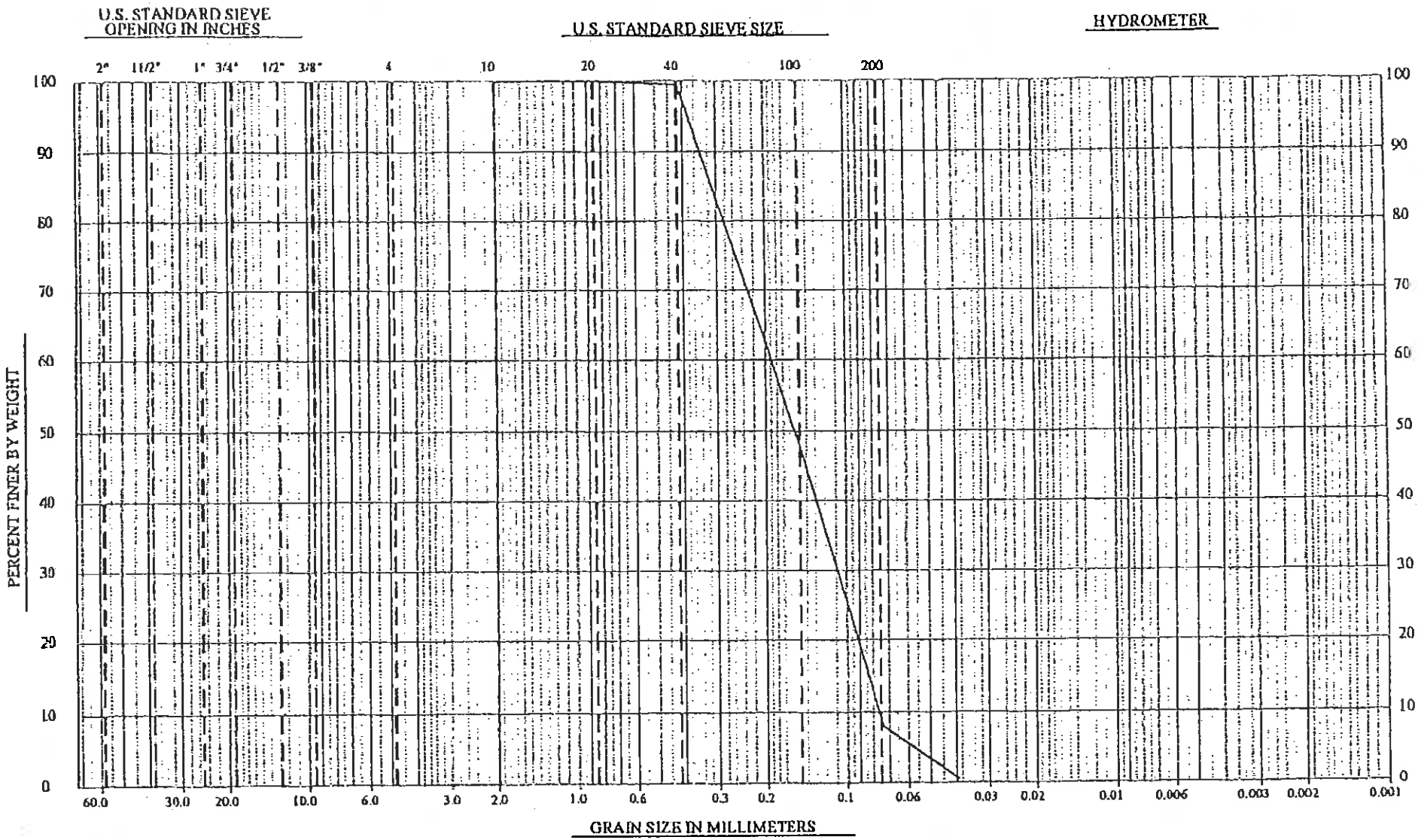
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-2						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 743

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

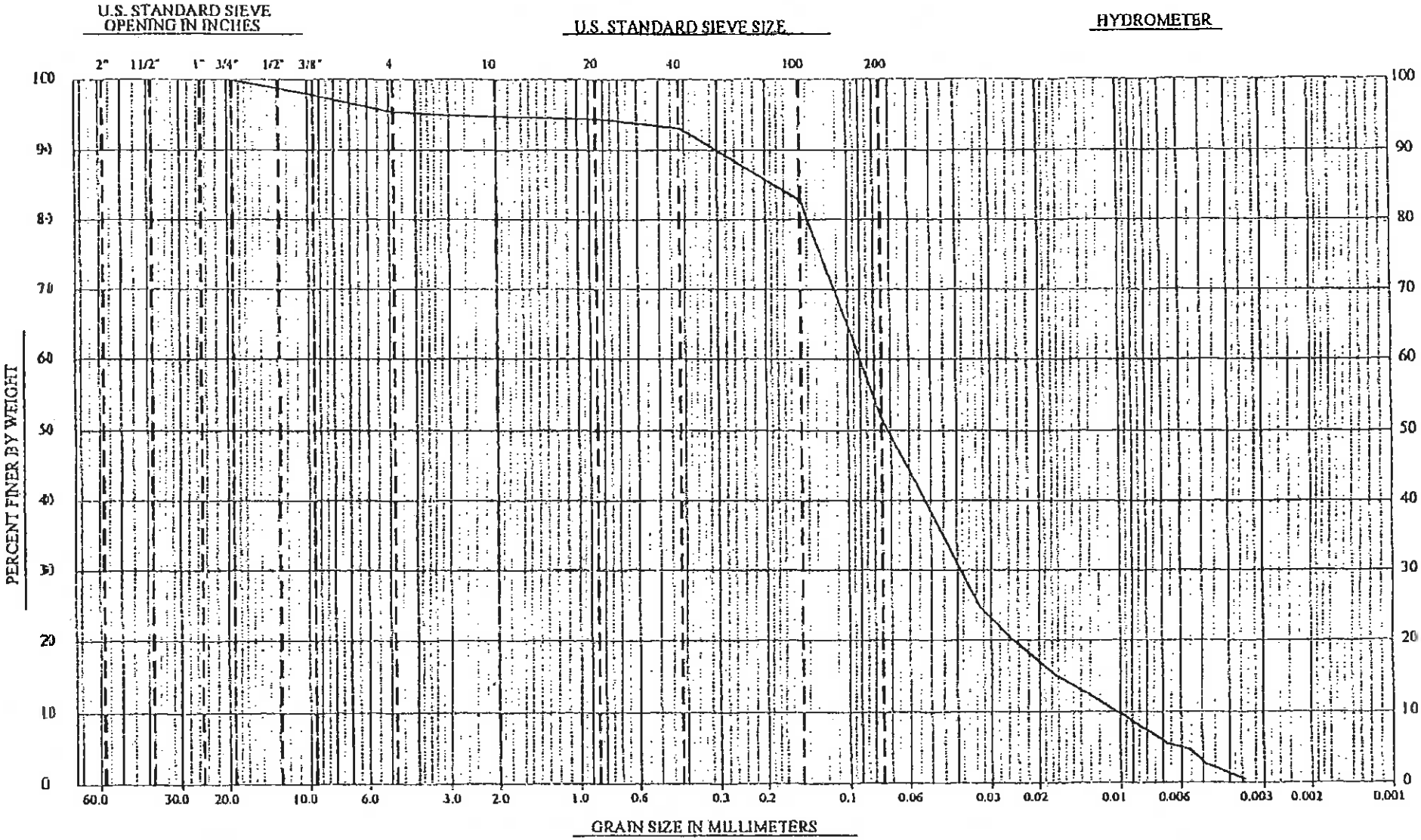
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-1						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 742

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

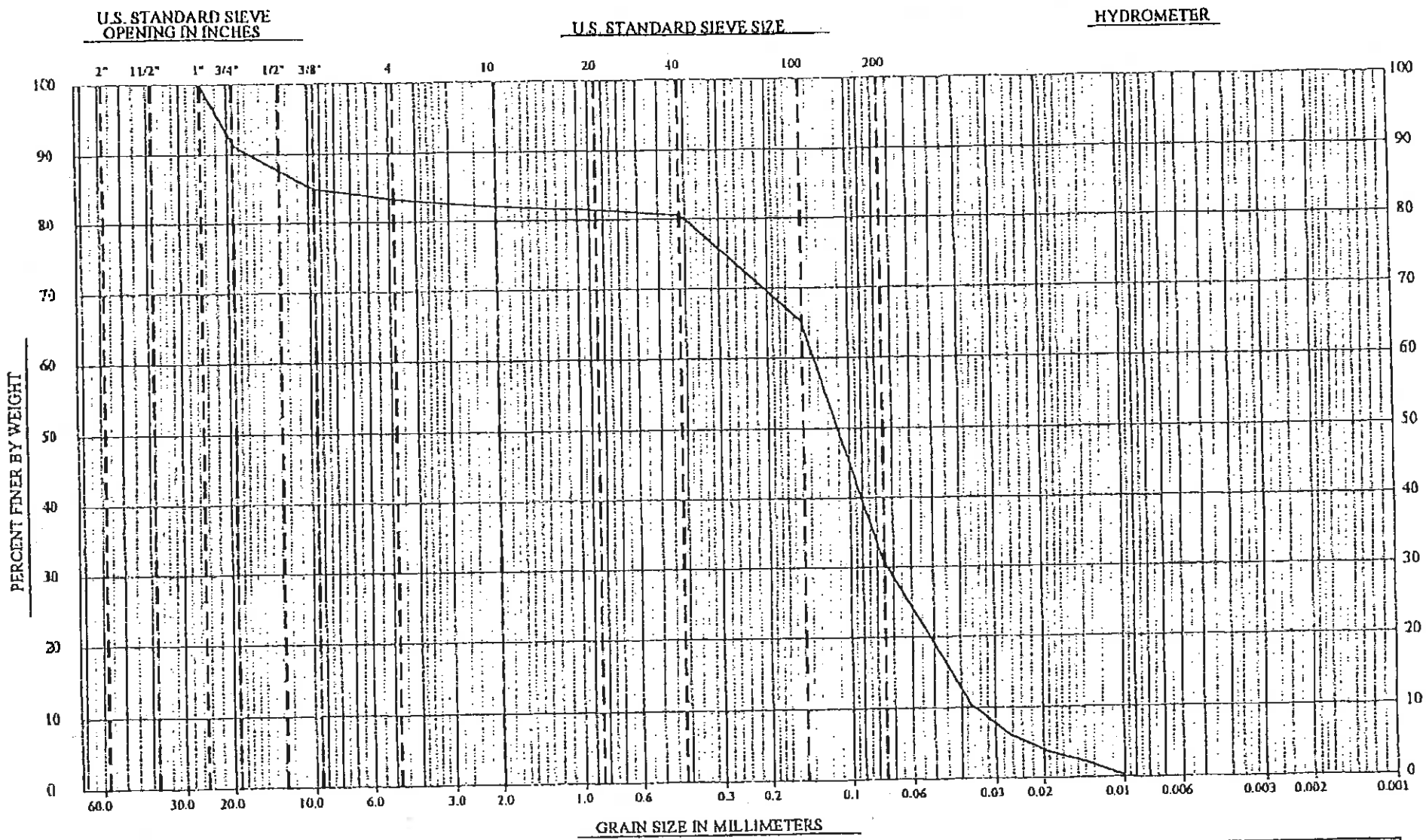
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-10						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 741

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

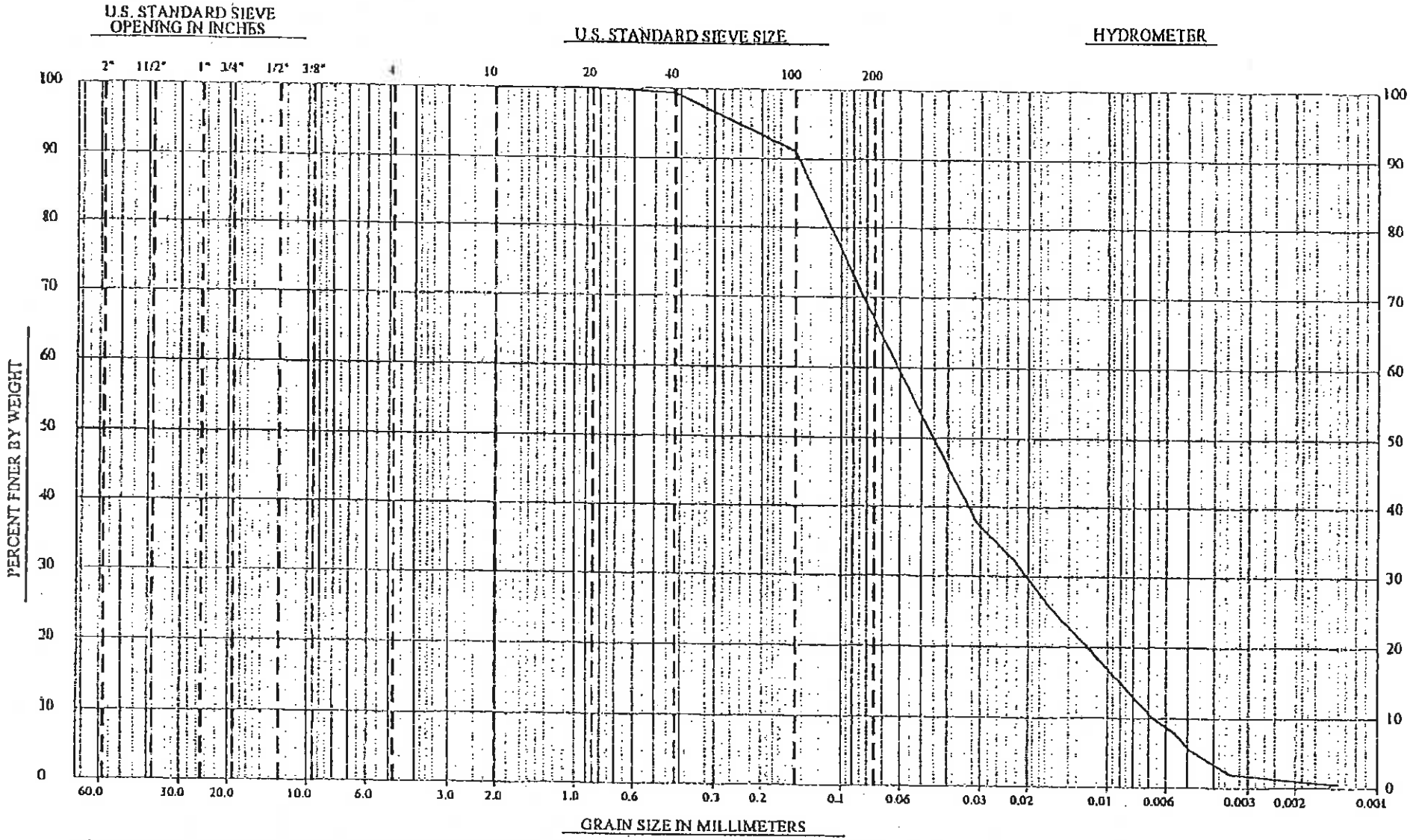
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-5						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 740

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY:

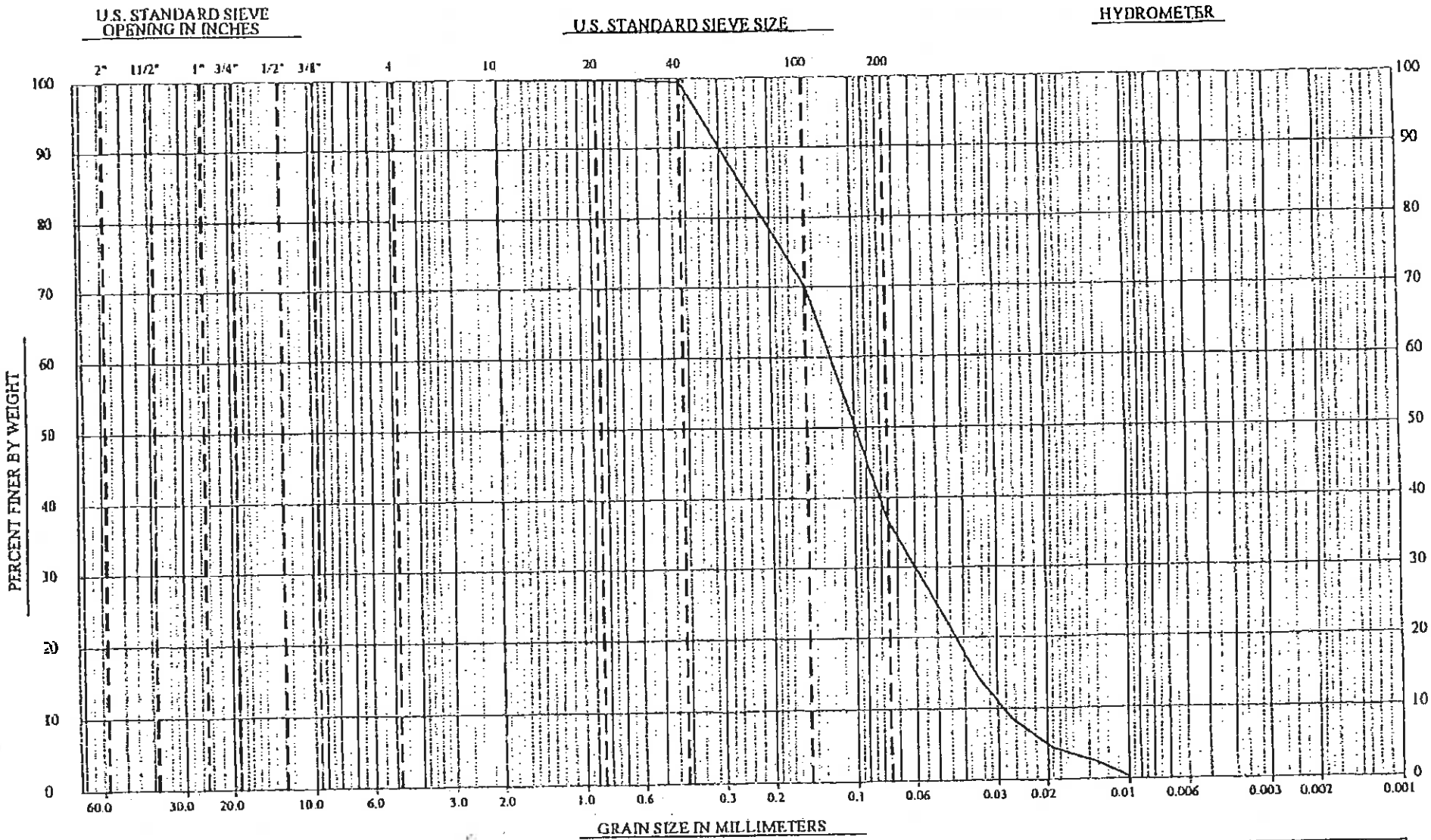
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-4						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 739

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

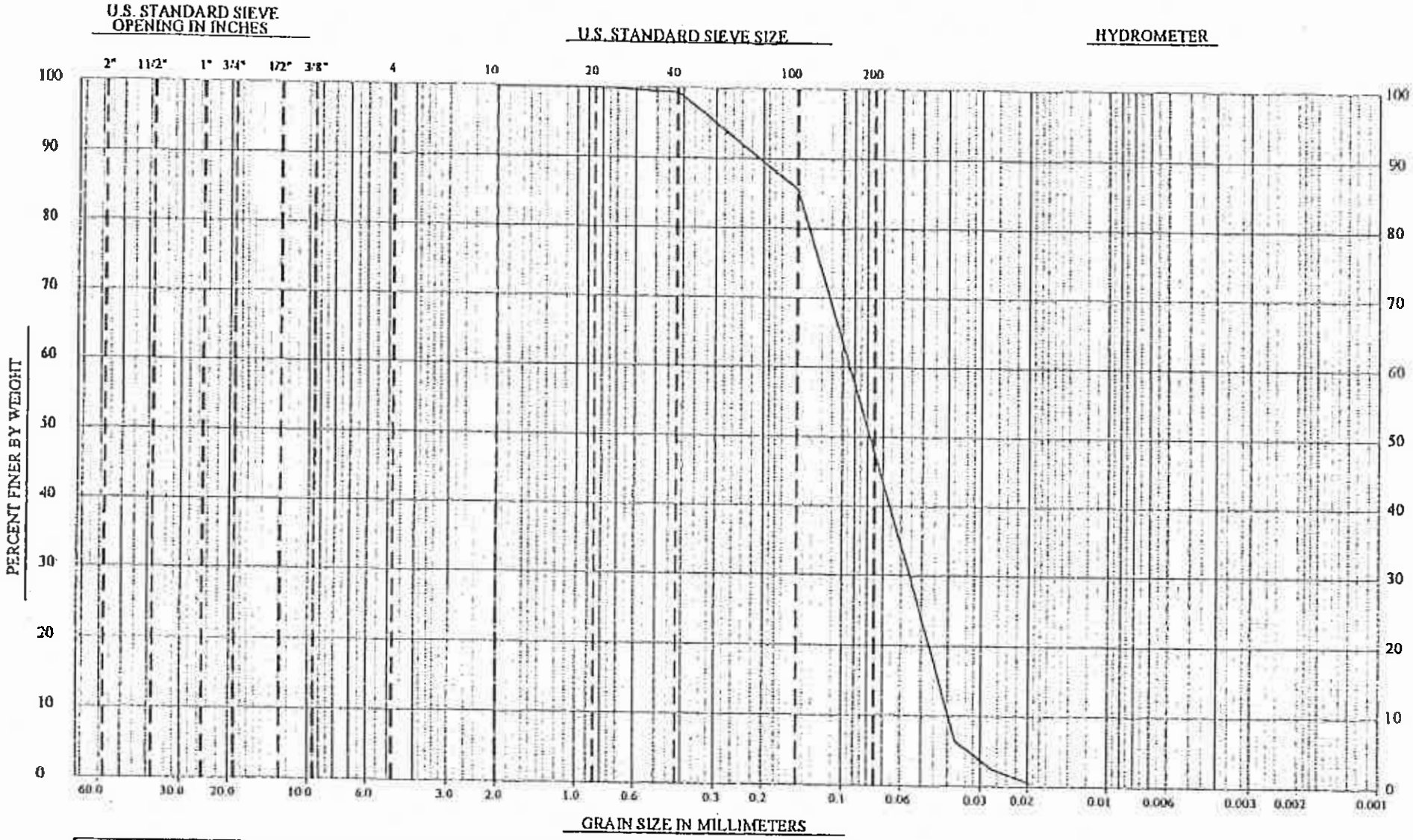
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
ASD-3						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 738

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

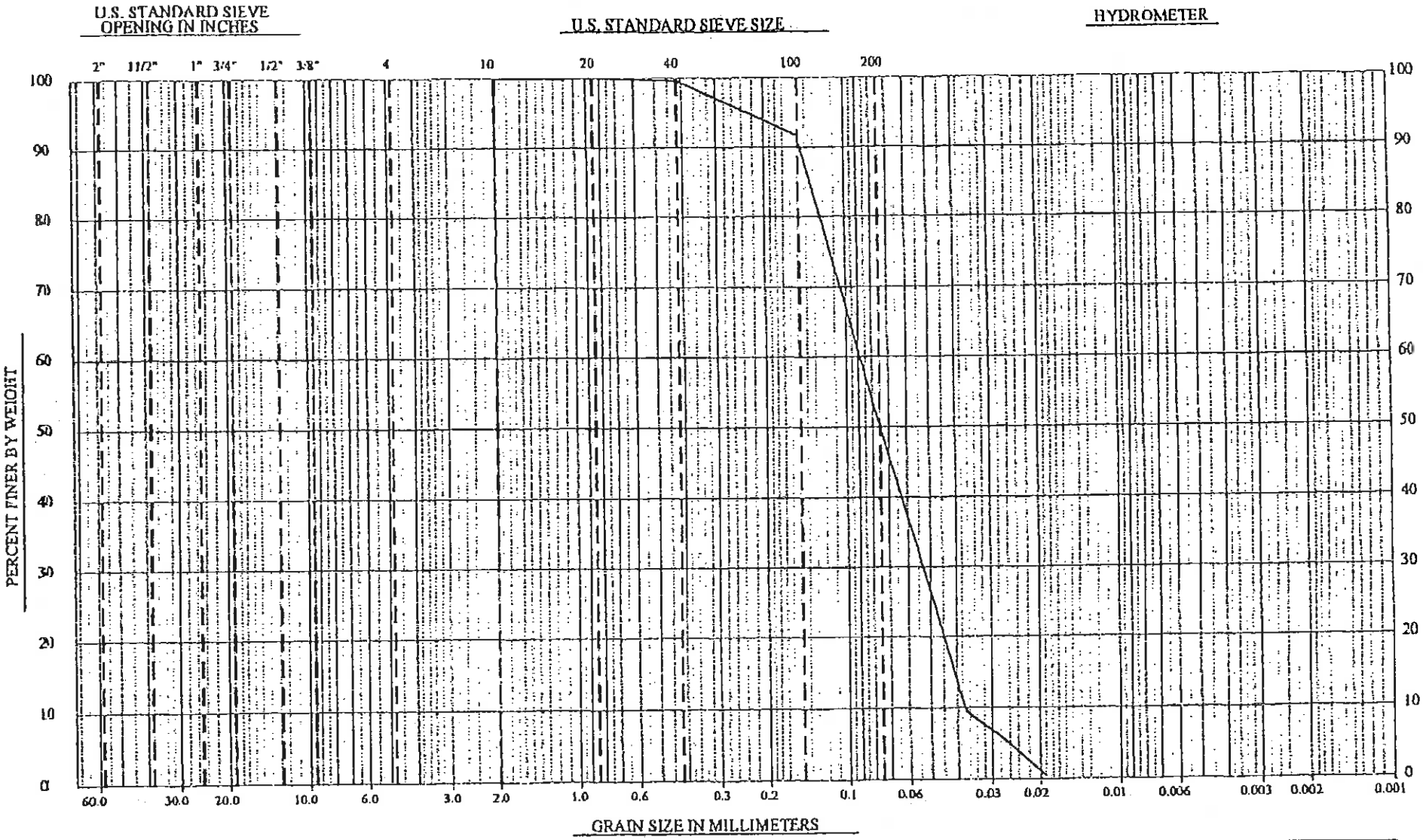
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BSD-4						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 737

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

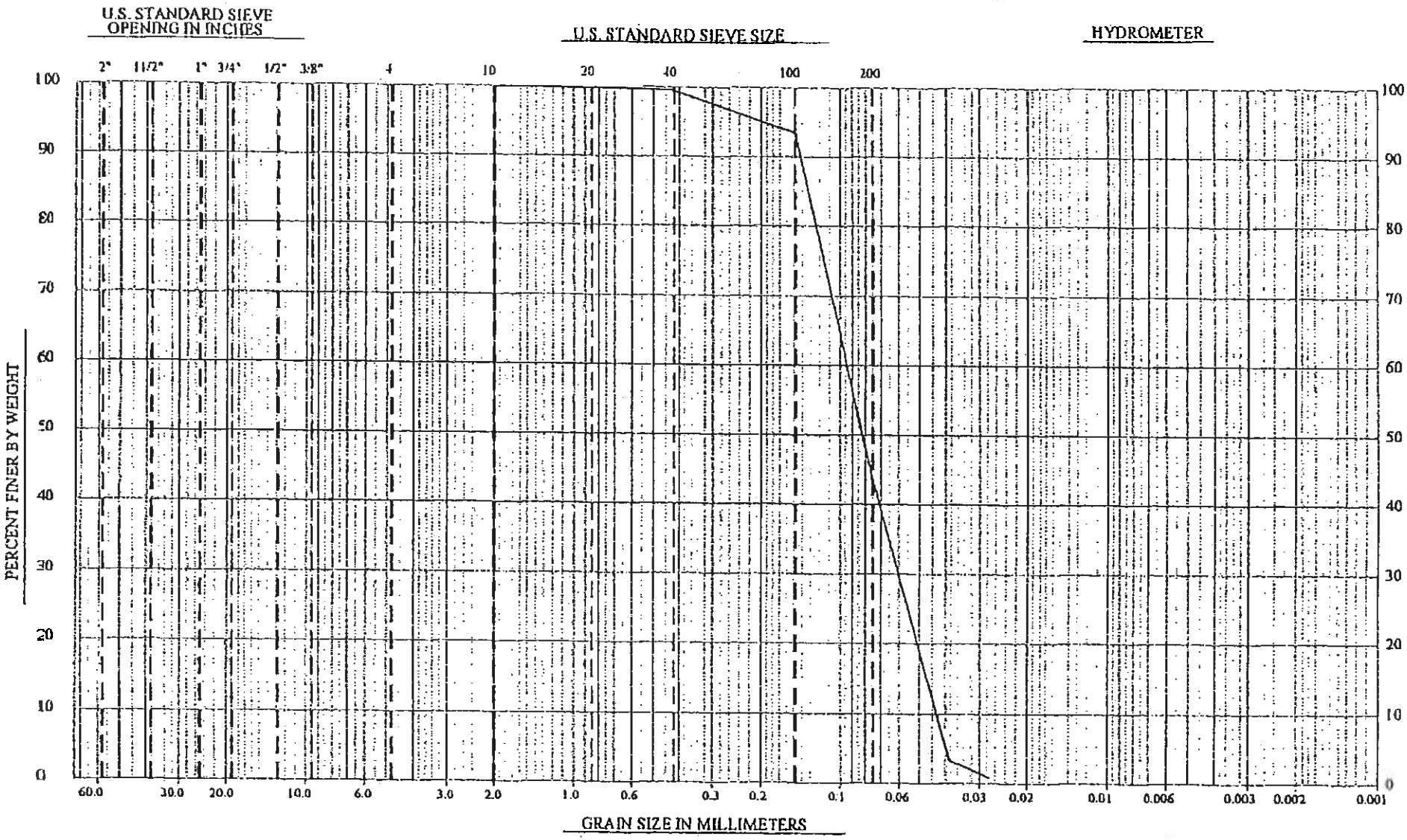
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BSD-3						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 736

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

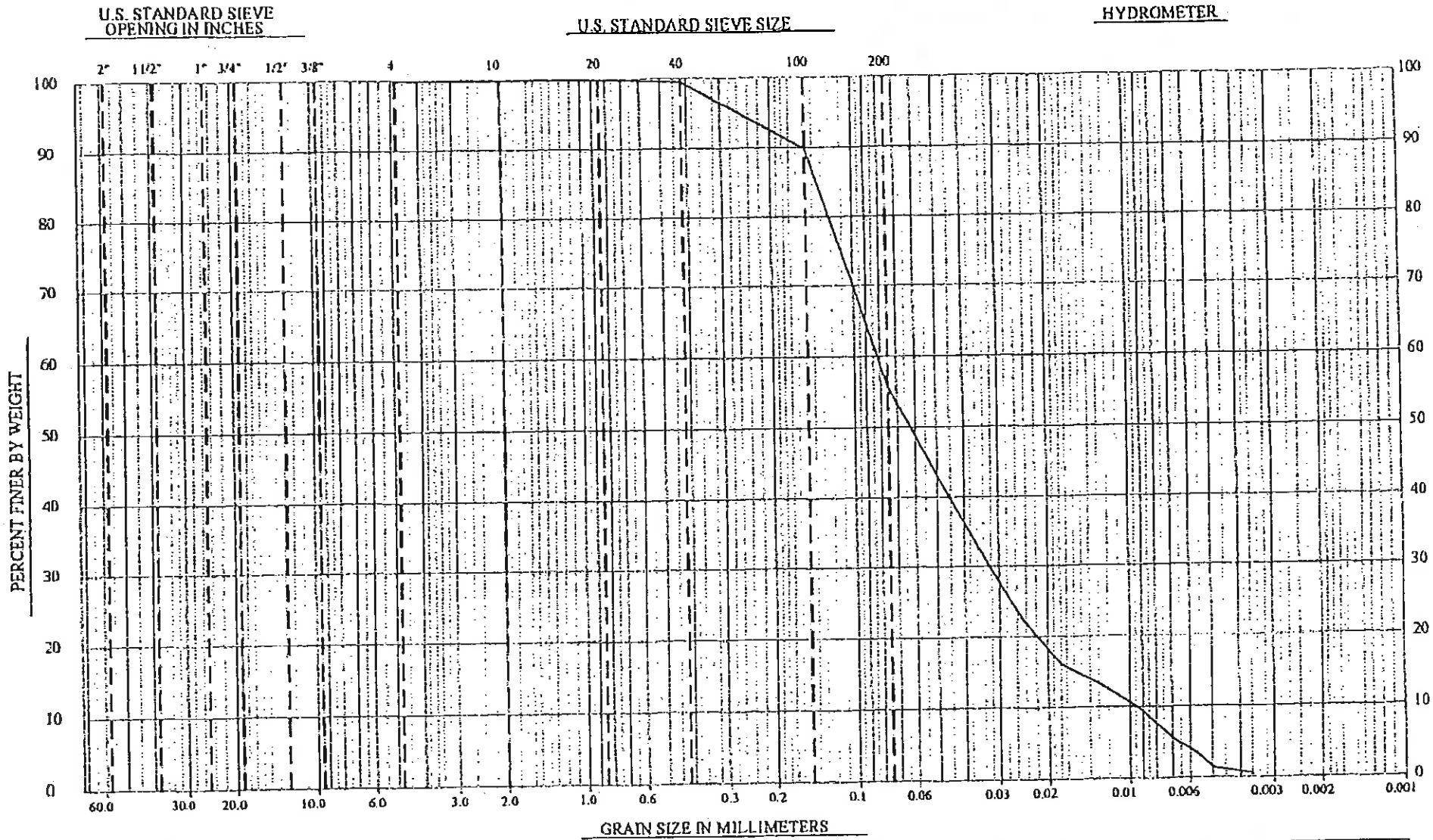
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BSD-2						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 735

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY:

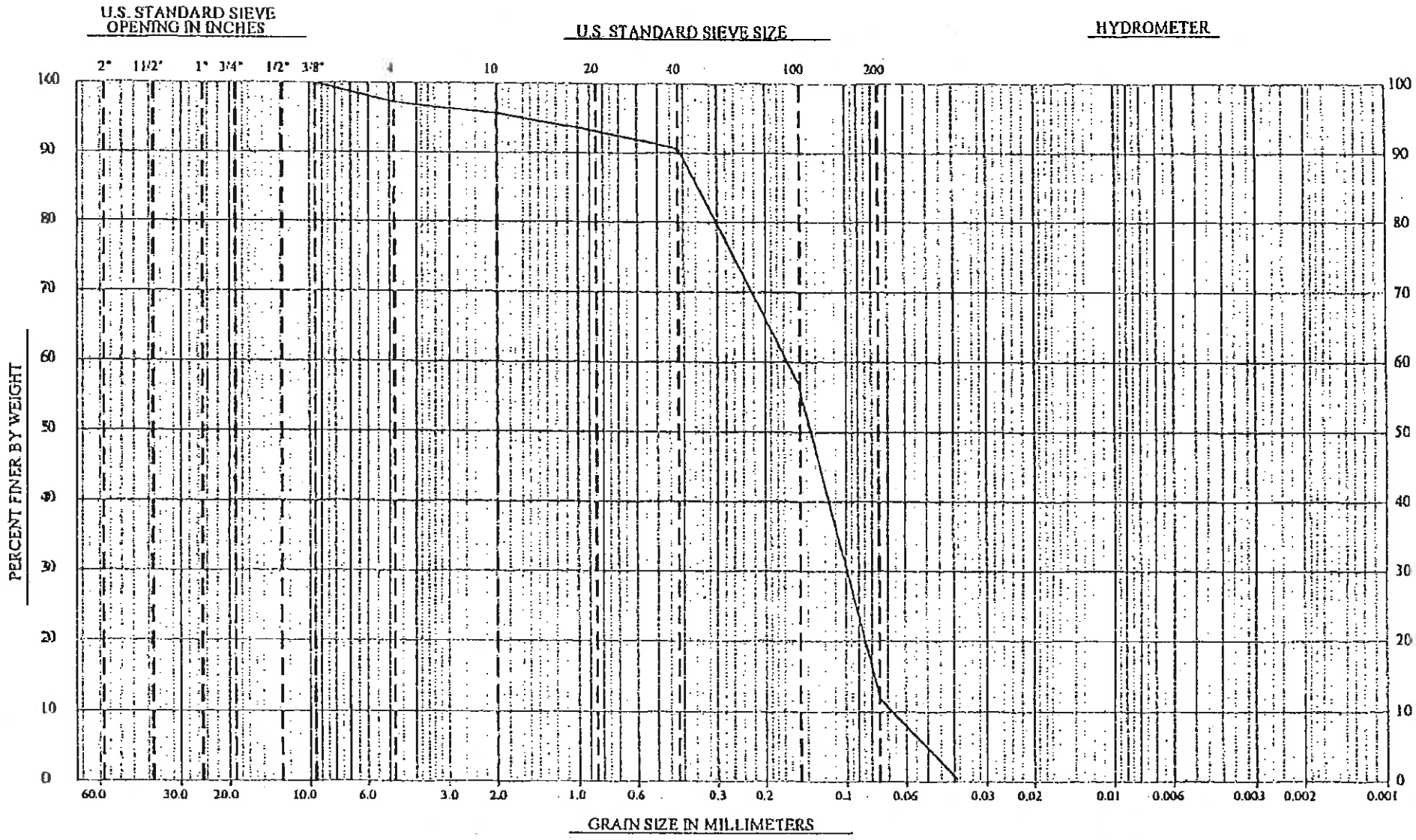
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BSD-1						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 734

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SMC

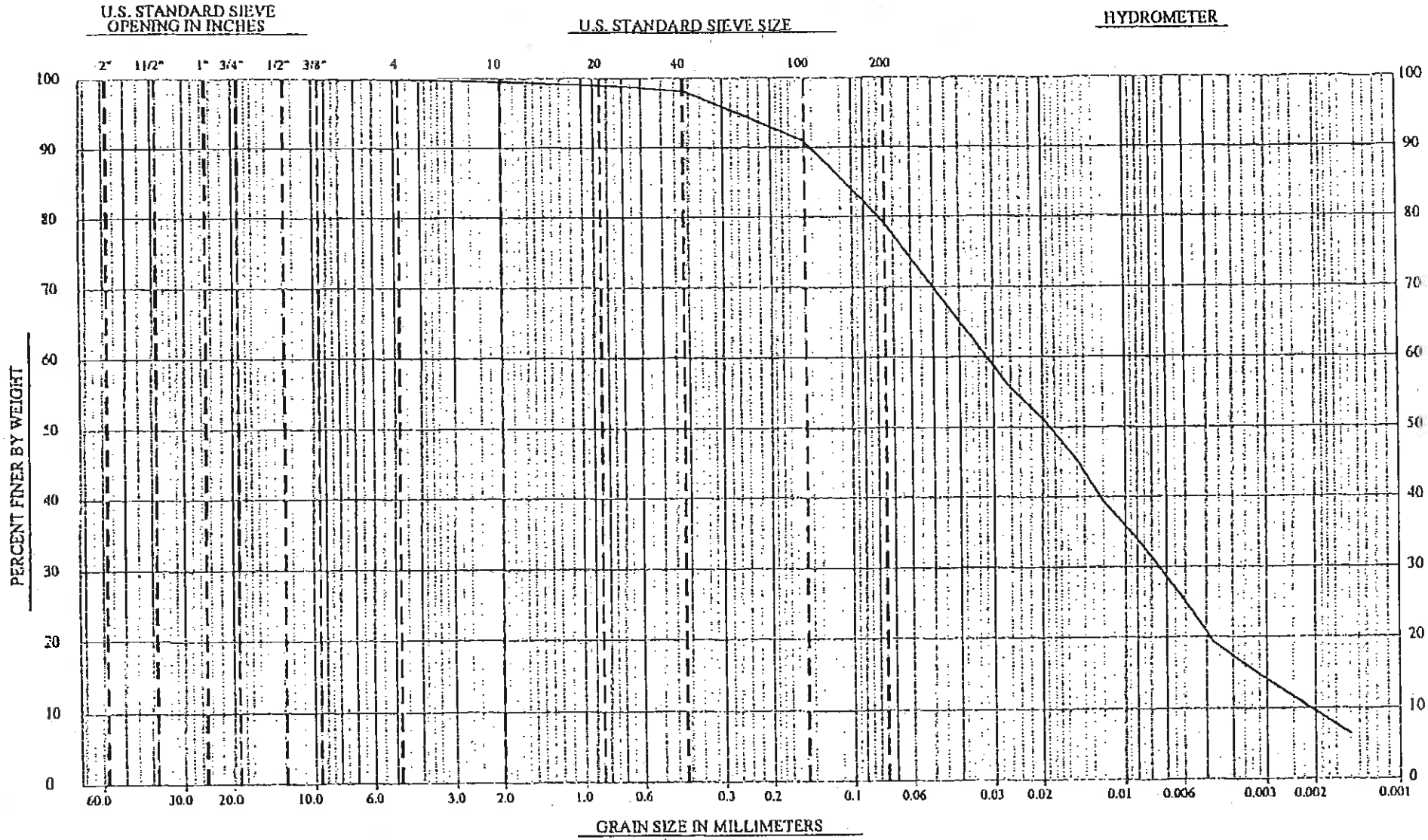
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
UNION PSD						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 733

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

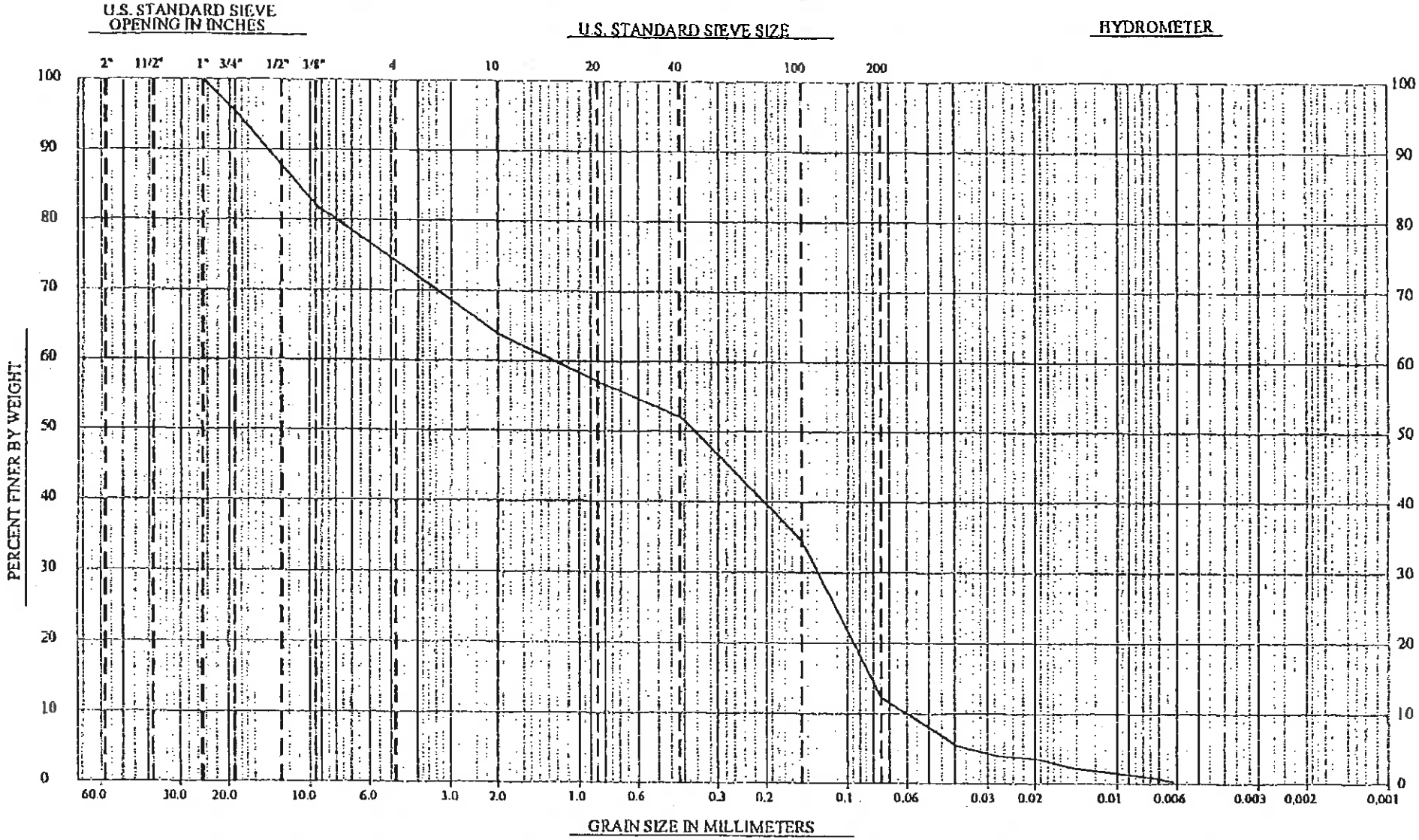
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BG-2						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 732

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: _____

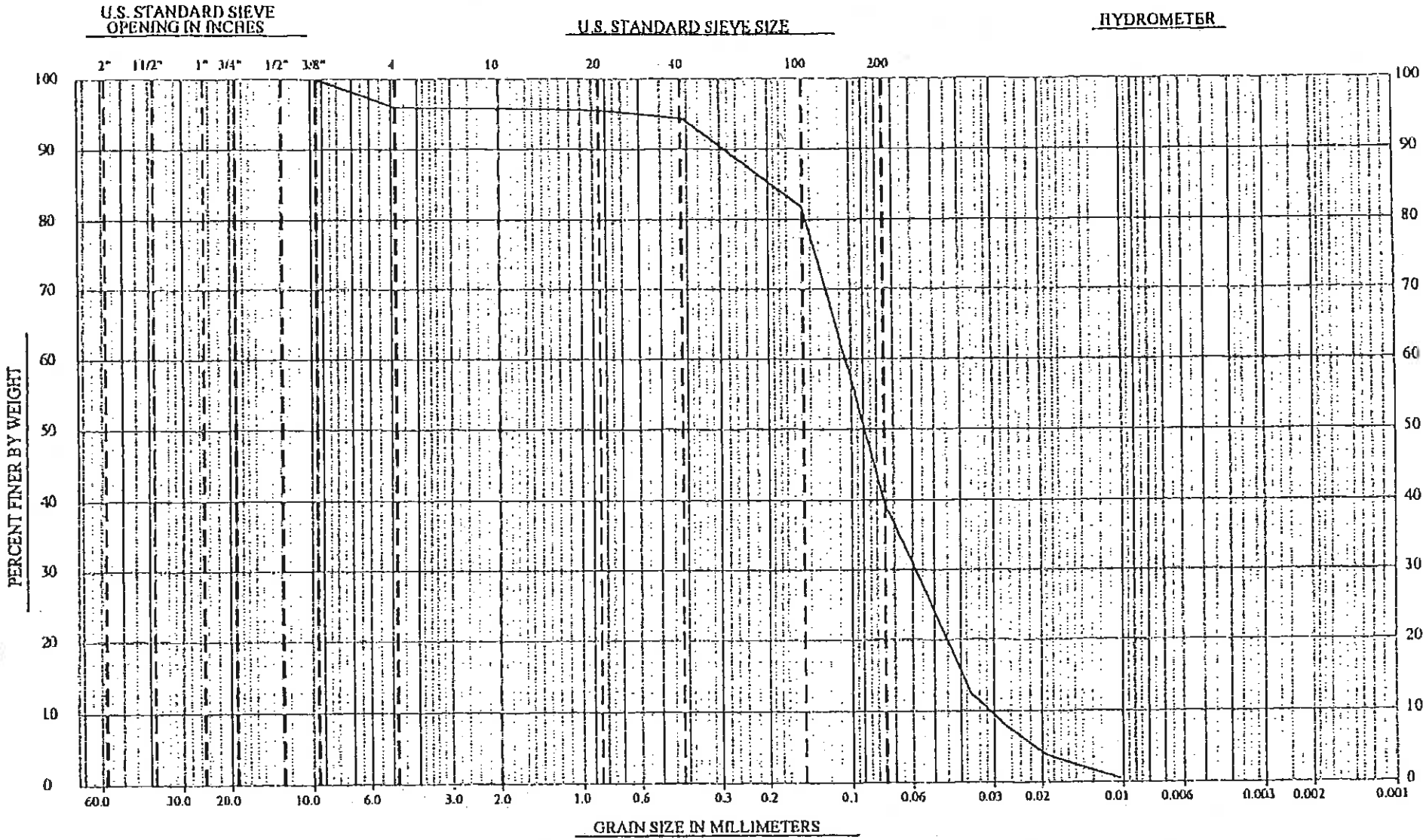
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
BG-1						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 731

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

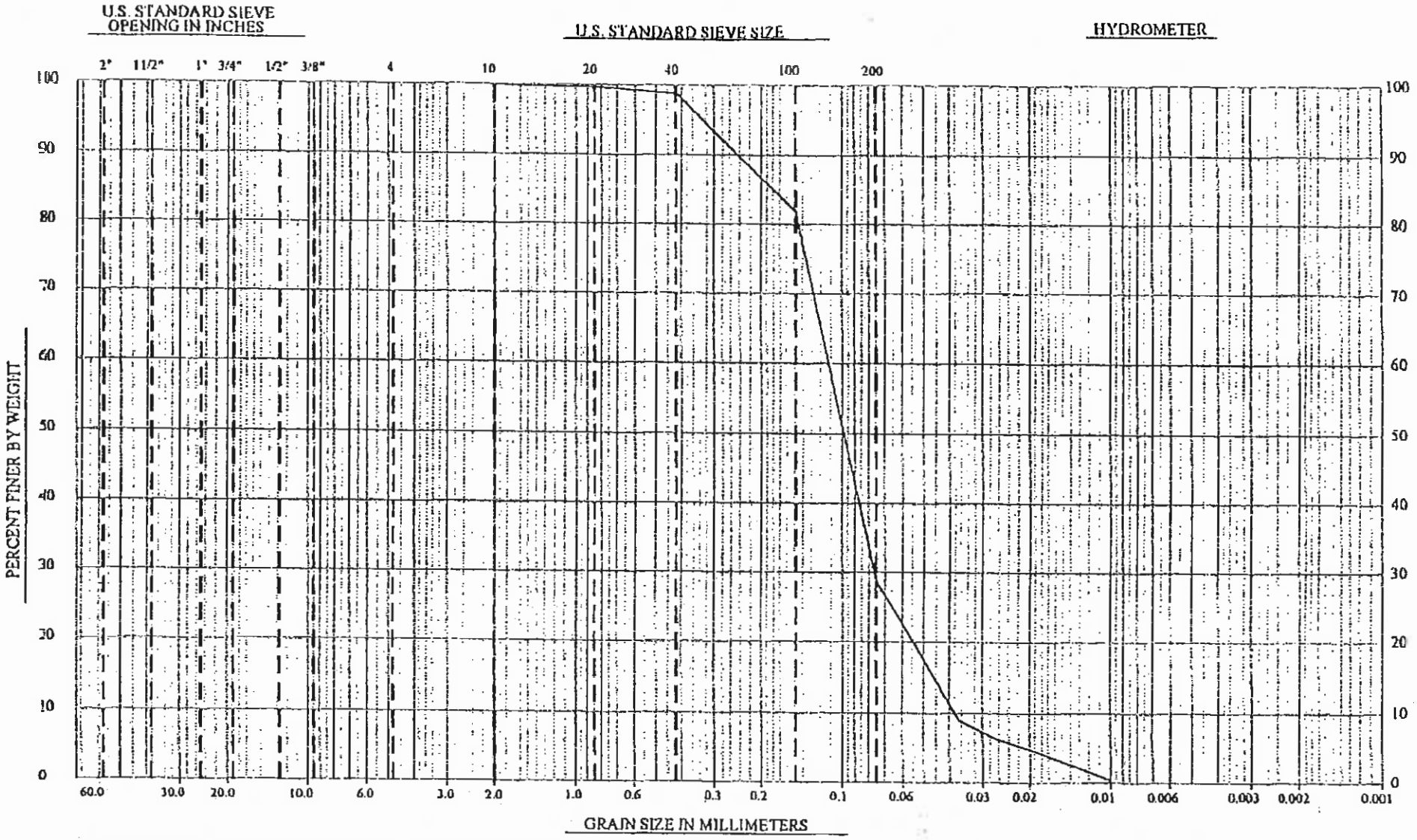
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-9						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 730

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

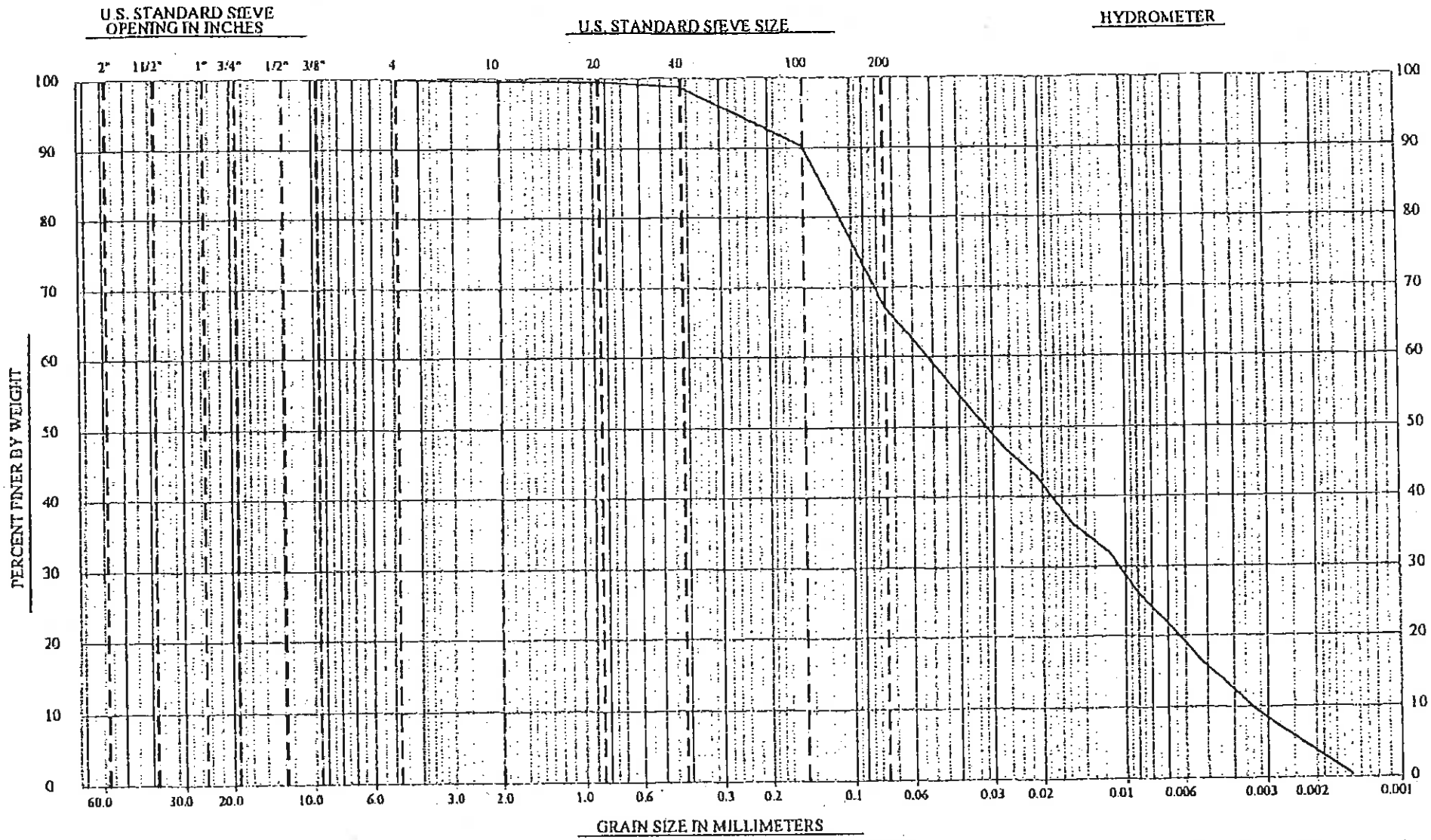
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-4						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 729

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAC

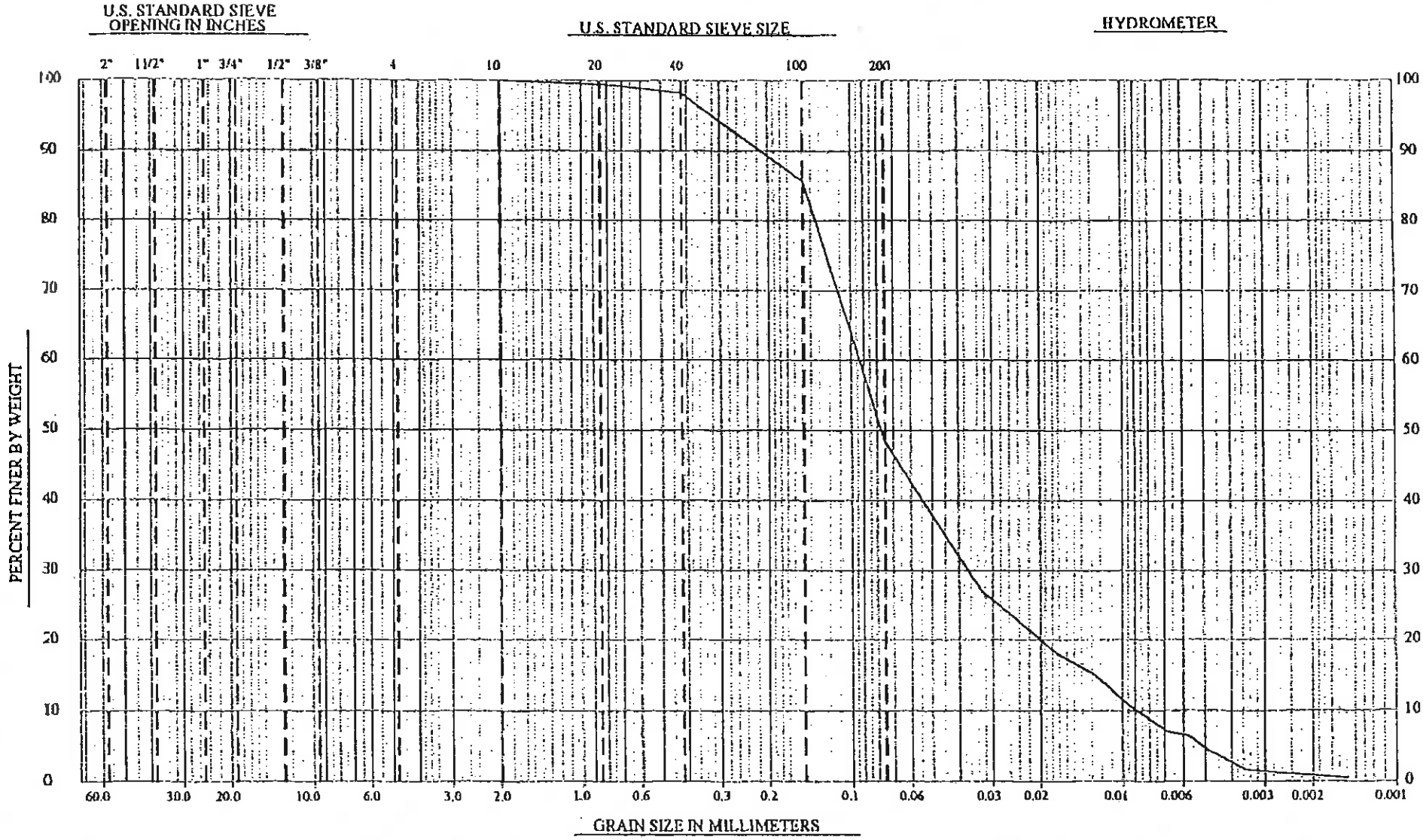
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-7						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 728

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: SAP

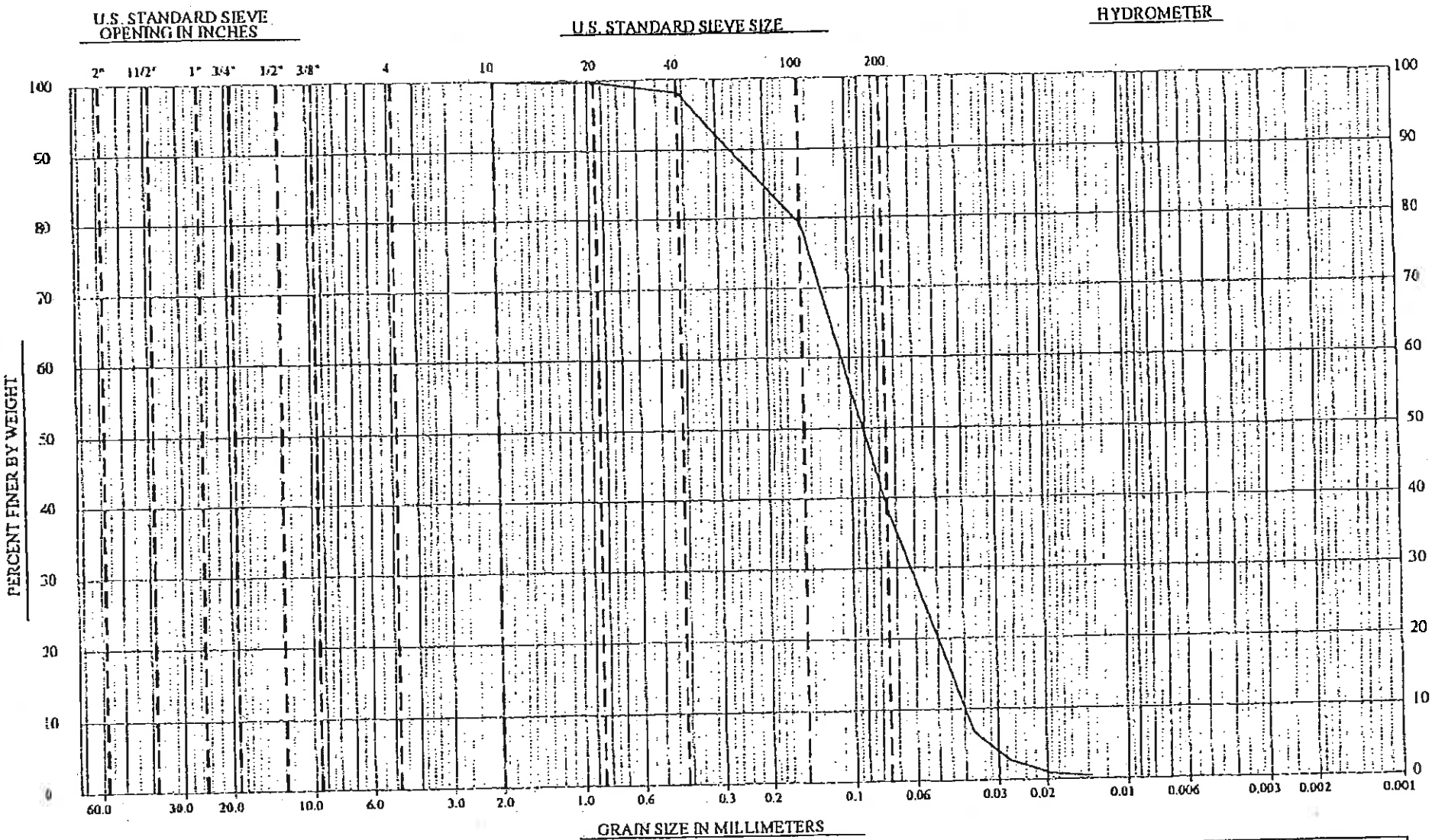
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-6						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES SOLUTIA, INC.

LAB NO. 727

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-5						

DESCRIPTION:

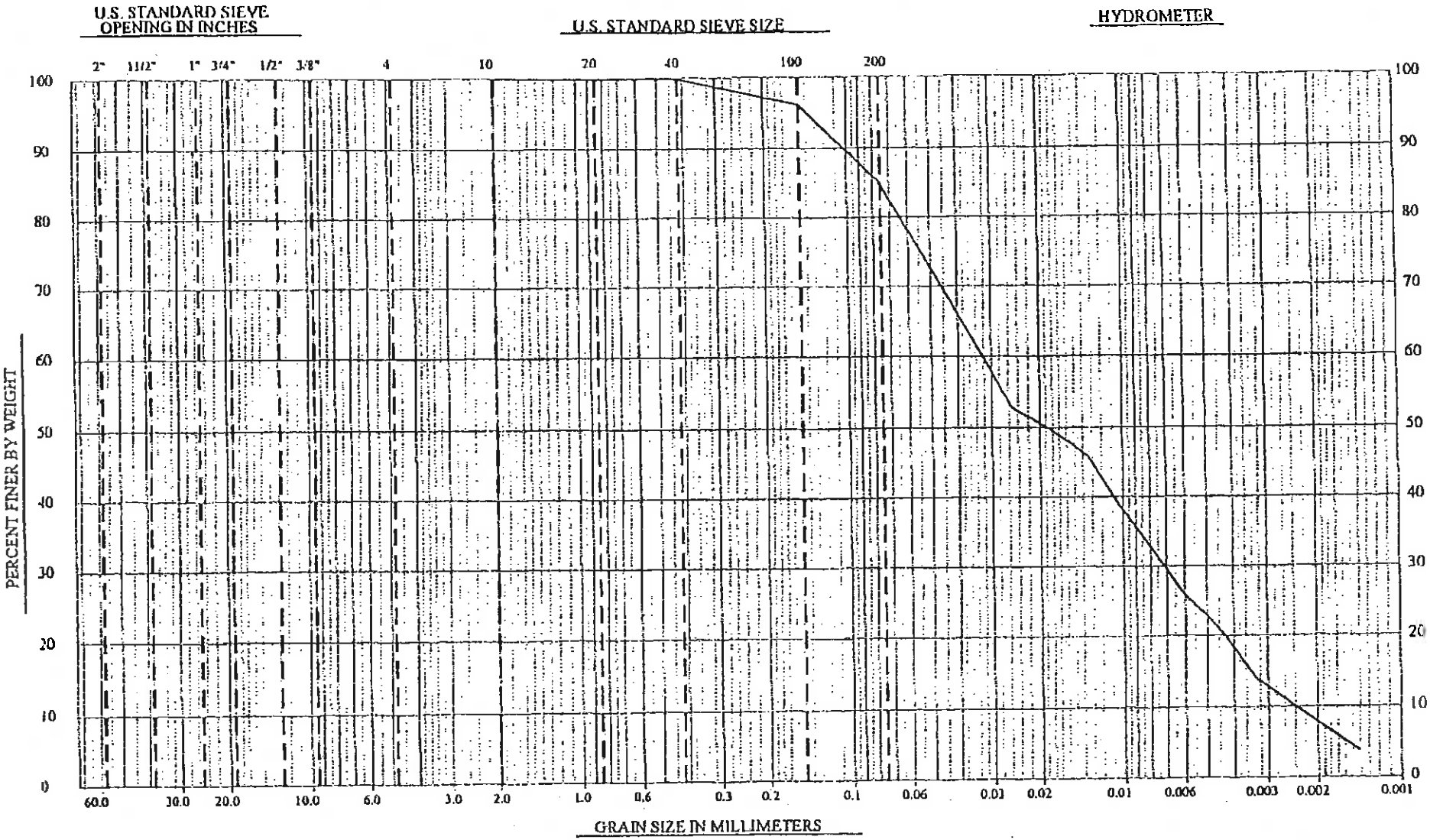
DRAWN BY: GAW CHECKED BY:

LAB NO. 726

PROJECT:

POTESTA & ASSOCIATES
SOLUTIA, INC.

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY:

HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-4						

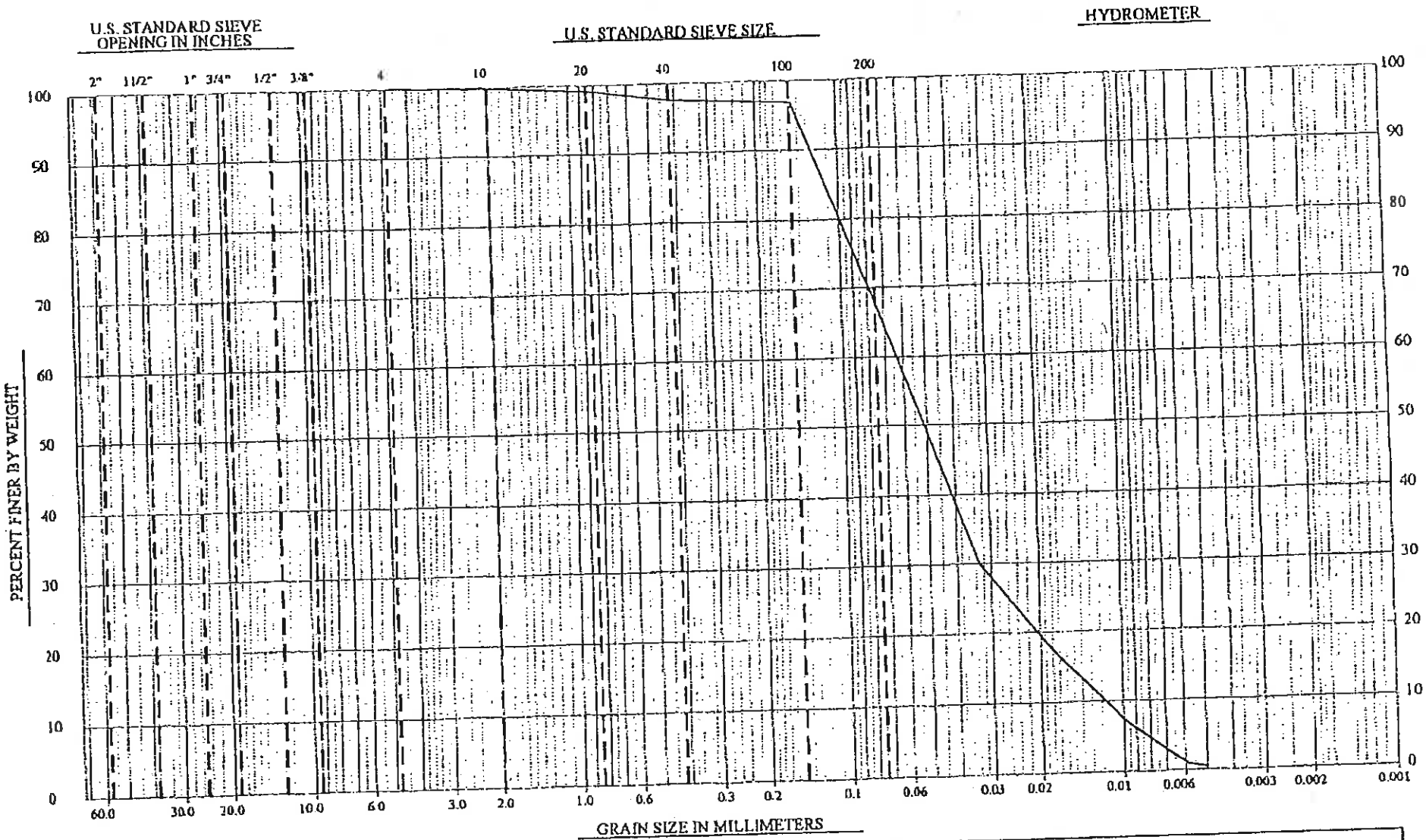
DESCRIPTION:

PROJECT:

POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 725

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY:

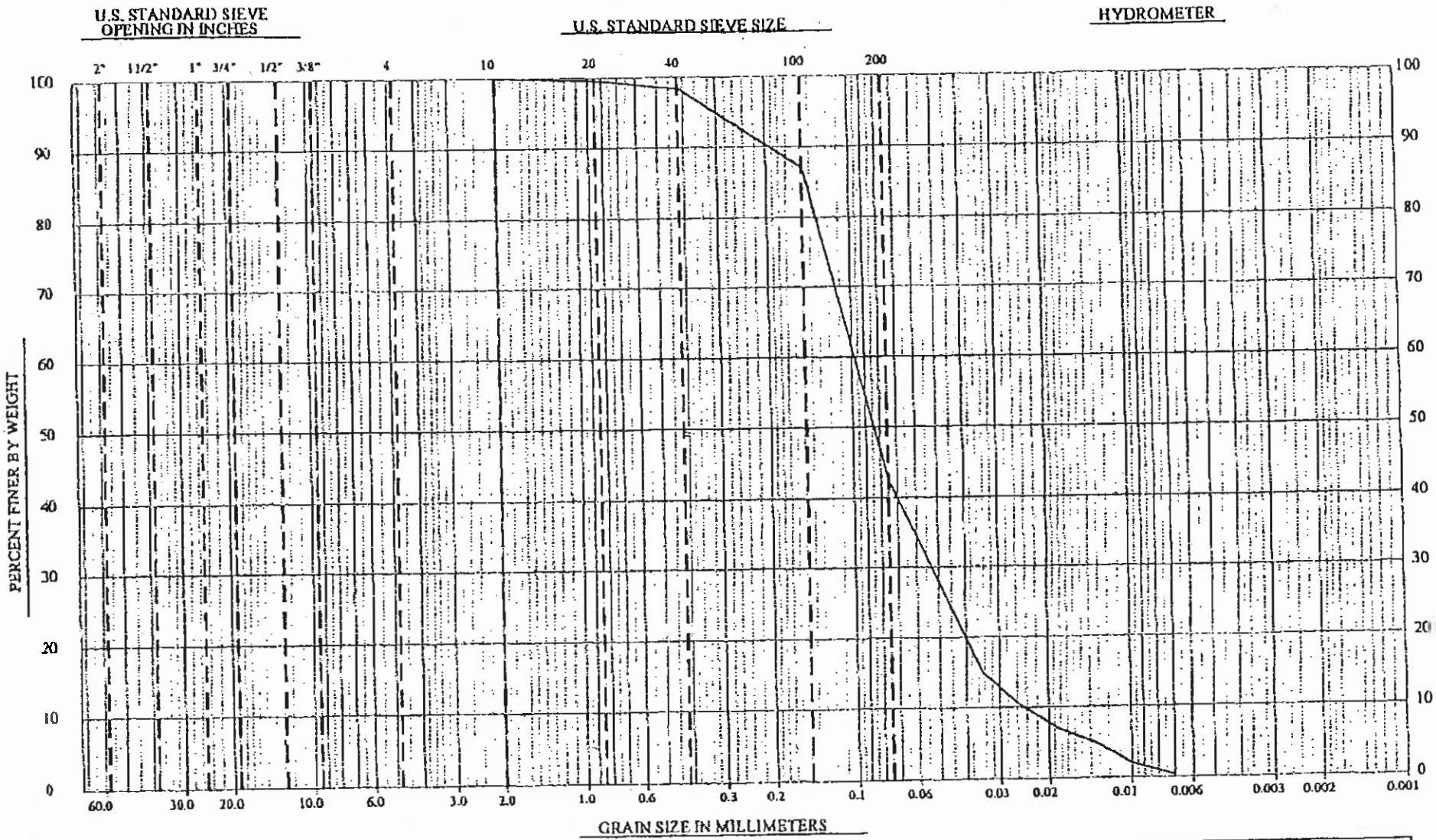
HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-3						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 724

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-2						

DESCRIPTION:

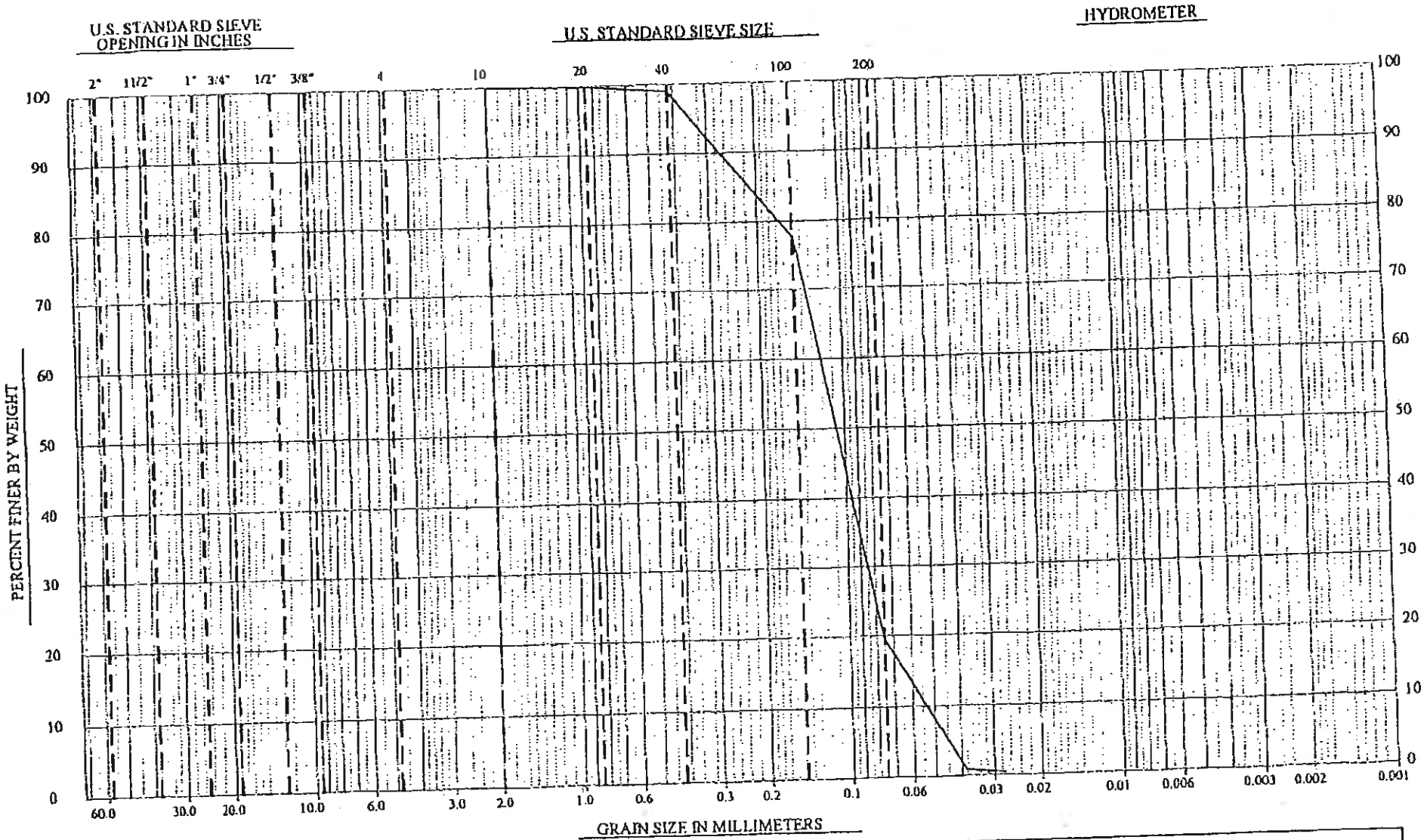
DRAWN BY: GAW CHECKED BY:

PROJECT:

POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 723

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.



GRAVEL		SAND			SILT AND CLAY
COARSE	FINE	COARSE	MEDIUM	FINE	

DRAWN BY: GAW CHECKED BY: [illegible]

HOLE NO.	SAMPLE NO.	DEPTH	NAT. WC	LL	PI	CLASSIFICATION
CSD-1						

DESCRIPTION:

PROJECT: POTESTA & ASSOCIATES
SOLUTIA, INC.

LAB NO. 722

ACKENHEIL ENGINEERS & GEOLOGISTS, INC.

ACKENHEIL
ENGINEERS
GEOLOGISTS

Ackenheil Engineers and Geologists, Inc.
P.O. Box 416
Hub Industrial Park
Nitro, West Virginia 25143
Phone (304) 755-8228
Fax (304) 755-8229
Email Ackenheil7@aol.com

OCT 10

01-0081

LETTER OF TRANSMITTAL

TO: Potesta + Assoc.

DATE: 10-8-01	JOB NO.: 01103
ATTENTION: Chris Grese	
RE: Lab tests	
Solutia, Inc.	

WE ARE SENDING YOU ☐ ATTACHED ☐ UNDER SEPARATE COVER VIA _____ THE FOLLOWING

☐ DRAWINGS ☐ PLANS ☐ SAMPLES ☐ SPECIFICATIONS

☐ LETTER ☐ REPORT ☑ LAB RESULTS ☐ _____

COPIES	DATE	DESCRIPTION
2 6	10-8-01	Seive + Hyd. Test Results

☐ FOR APPROVAL ☐ FOR YOUR USE ☐ AS REQUESTED ☐ FOR REVIEW AND COMMENTS

REMARKS

Gary Workman

Engineering, Geological & Testing Services

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-01A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	92	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	89	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	97	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	100	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	53	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	55	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	21	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	77	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	49	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	21	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-02A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	95	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	96	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	97	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	54	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	49	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	22	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	73	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	42	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	22	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-03A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	98	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	93	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	98	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	102	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	70	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	66	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	29	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	86	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	61	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	25	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-4
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-04A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	105	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	102	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.040		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	57	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	26	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	79	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	52	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	25	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-5
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-05A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	98	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	101	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	100	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	63	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	61	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	26	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	85	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	55	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	25	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-06A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	102	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	93	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	105	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.035		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	70	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	65	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	27	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	85	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	61	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	25	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-07A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	104	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	94	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	102	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	98	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	56	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	54	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	23	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	72	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	48	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	22	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-08A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/26/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/26/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/26/01	WM
Chloroform	ND	µg/L	NA	1.0		10/26/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/26/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/26/01	WM
Toluene	ND	µg/L	NA	1.0		10/26/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/26/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/26/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/26/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/26/01	WM
Surr: 1,2-Dichloroethane-d4	108	%REC	NA	80-120		10/26/01	WM
Surr: 4-Bromofluorobenzene	96	%REC	NA	86-115		10/26/01	WM
Surr: Dibromofluoromethane	104	%REC	NA	80-120		10/26/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/26/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	60	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	57	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	25	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	78	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	51	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	24	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-09A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	93	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	95	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	97	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	54	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	24	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	80	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	48	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	24	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-10A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	95	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	92	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	98	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	97	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	60	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	27	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	81	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	56	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	27	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-11A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	92	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	96	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	97	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	97	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	58	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	60	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	83	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	82	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	51	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	199	%REC	NA	10-94	S	10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-4
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-12A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	98	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	96	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	103	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	102	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.035		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	64	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	66	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	31	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	84	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	62	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	28	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-5
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-13A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	96	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	94	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	97	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	102	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	89	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	93	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	49	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	116	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	91	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	47	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: EB
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-14A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	1.3	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	106	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	104	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	59	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	62	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	30	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	80	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	59	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	28	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FB
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-15A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	1.0	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	105	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	91	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	106	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	97	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	52	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	57	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	21	%REC	NA	21-100	S	10/29/01	WP
Surr: 4-Terphenyl-d14	75	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	52	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	20	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FD
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-16A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	104	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	95	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	106	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	99	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	53	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	60	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	27	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	79	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	56	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	26	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: UNION PSD
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-17A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	108	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	94	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	102	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	94	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	66	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	59	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	25	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	83	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	54	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	26	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-18A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	112	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	92	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	106	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	98	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	64	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	56	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	24	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	74	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	53	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	23	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BG-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-19A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	107	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	96	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	106	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	102	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/29/01	WP
Phenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/29/01	WP
Surr: 2,4,6-Tribromophenol	71	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	64	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	30	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	90	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	59	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	29	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: TRIP BLANK
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521
Lab ID: 0110521-20A
Collection Date: 10/16/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/27/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/27/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/27/01	WM
Chloroform	ND	µg/L	NA	1.0		10/27/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/27/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/27/01	WM
Toluene	ND	µg/L	NA	1.0		10/27/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/27/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/27/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/27/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/27/01	WM
Surr: 1,2-Dichloroethane-d4	108	%REC	NA	80-120		10/27/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/27/01	WM
Surr: Dibromofluoromethane	106	%REC	NA	80-120		10/27/01	WM
Surr: Toluene-d8	98	%REC	NA	88-110		10/27/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/29/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/29/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/29/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/29/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/29/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/29/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/29/01	WP
Phenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/29/01	WP
Surr: 2,4,6-Tribromophenol	59	%REC	NA	10-123		10/29/01	WP
Surr: 2-Fluorobiphenyl	48	%REC	NA	43-116		10/29/01	WP
Surr: 2-Fluorophenol	21	%REC	NA	21-100		10/29/01	WP
Surr: 4-Terphenyl-d14	68	%REC	NA	33-141		10/29/01	WP
Surr: Nitrobenzene-d5	45	%REC	NA	35-114		10/29/01	WP
Surr: Phenol-d5	22	%REC	NA	10-94		10/29/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

CLIENT: SOLUTIA INC
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0110521

Data Review

Approved: _____
Organic Department Manager Date

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-5
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-01A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/04/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/04/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/04/01	WM
Chloroform	ND	µg/L	NA	1.0		10/04/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/04/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/04/01	WM
Toluene	ND	µg/L	NA	1.0		10/04/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/04/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/04/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/04/01	WM
Surr: 1,2-Dichloroethane-d4	118	%REC	NA	80-120		10/04/01	WM
Surr: 4-Bromofluorobenzene	100	%REC	NA	86-115		10/04/01	WM
Surr: Dibromofluoromethane	141	%REC	NA	80-120	S	10/04/01	WM
Surr: Toluene-d8	98	%REC	NA	88-110		10/04/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/02/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/02/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/02/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/02/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/02/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/02/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/02/01	WP
Phenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
Surr: 2,4,6-Tribromophenol	83	%REC	NA	10-123		10/02/01	WP
Surr: 2-Fluorobiphenyl	77	%REC	NA	43-116		10/02/01	WP
Surr: 2-Fluorophenol	42	%REC	NA	21-100		10/02/01	WP
Surr: 4-Terphenyl-d14	94	%REC	NA	33-141		10/02/01	WP
Surr: Nitrobenzene-d5	76	%REC	NA	35-114		10/02/01	WP
Surr: Phenol-d5	36	%REC	NA	10-94		10/02/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-4
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-02A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/04/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/04/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/04/01	WM
Chloroform	ND	µg/L	NA	1.0		10/04/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/04/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/04/01	WM
Toluene	ND	µg/L	NA	1.0		10/04/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/04/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/04/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/04/01	WM
Surr: 1,2-Dichloroethane-d4	117	%REC	NA	80-120		10/04/01	WM
Surr: 4-Bromofluorobenzene	101	%REC	NA	86-115		10/04/01	WM
Surr: Dibromofluoromethane	117	%REC	NA	80-120		10/04/01	WM
Surr: Toluene-d8	93	%REC	NA	88-110		10/04/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/02/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/02/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/02/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/02/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/02/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/02/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/02/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/02/01	WP
Phenol	ND	mg/L	NA	0.01		10/02/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/02/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/02/01	WP
Surr: 2,4,6-Tribromophenol	84	%REC	NA	10-123		10/02/01	WP
Surr: 2-Fluorobiphenyl	79	%REC	NA	43-116		10/02/01	WP
Surr: 2-Fluorophenol	48	%REC	NA	21-100		10/02/01	WP
Surr: 4-Terphenyl-d14	89	%REC	NA	33-141		10/02/01	WP
Surr: Nitrobenzene-d5	80	%REC	NA	35-114		10/02/01	WP
Surr: Phenol-d5	42	%REC	NA	10-94		10/02/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-03A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/04/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/04/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/04/01	WM
Chloroform	ND	µg/L	NA	1.0		10/04/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/04/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/04/01	WM
Toluene	ND	µg/L	NA	1.0		10/04/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/04/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/04/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/04/01	WM
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	80-120		10/04/01	WM
Surr: 4-Bromofluorobenzene	99	%REC	NA	86-115		10/04/01	WM
Surr: Dibromofluoromethane	117	%REC	NA	80-120		10/04/01	WM
Surr: Toluene-d8	94	%REC	NA	88-110		10/04/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/02/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/02/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/02/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/02/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/02/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/02/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/02/01	WP
Phenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
Surr: 2,4,6-Tribromophenol	90	%REC	NA	10-123		10/02/01	WP
Surr: 2-Fluorobiphenyl	77	%REC	NA	43-116		10/02/01	WP
Surr: 2-Fluorophenol	40	%REC	NA	21-100		10/02/01	WP
Surr: 4-Terphenyl-d14	95	%REC	NA	33-141		10/02/01	WP
Surr: Nitrobenzene-d5	77	%REC	NA	35-114		10/02/01	WP
Surr: Phenol-d5	35	%REC	NA	10-94		10/02/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-04A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/04/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/04/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/04/01	WM
Chloroform	ND	µg/L	NA	1.0		10/04/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/04/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/04/01	WM
Toluene	ND	µg/L	NA	1.0		10/04/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/04/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/04/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/04/01	WM
Surr: 1,2-Dichloroethane-d4	119	%REC	NA	80-120		10/04/01	WM
Surr: 4-Bromofluorobenzene	98	%REC	NA	86-115		10/04/01	WM
Surr: Dibromofluoromethane	132	%REC	NA	80-120	S	10/04/01	WM
Surr: Toluene-d8	96	%REC	NA	88-110		10/04/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/02/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/02/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/02/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/02/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/02/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/02/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/02/01	WP
Phenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
Surr: 2,4,6-Tribromophenol	88	%REC	NA	10-123		10/02/01	WP
Surr: 2-Fluorobiphenyl	77	%REC	NA	43-116		10/02/01	WP
Surr: 2-Fluorophenol	45	%REC	NA	21-100		10/02/01	WP
Surr: 4-Terphenyl-d14	90	%REC	NA	33-141		10/02/01	WP
Surr: Nitrobenzene-d5	78	%REC	NA	35-114		10/02/01	WP
Surr: Phenol-d5	39	%REC	NA	10-94		10/02/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: CSW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-05A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/04/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/04/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/04/01	WM
Chloroform	ND	µg/L	NA	1.0		10/04/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/04/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/04/01	WM
Toluene	ND	µg/L	NA	1.0		10/04/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/04/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/04/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/04/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/04/01	WM
Surr: 1,2-Dichloroethane-d4	106	%REC	NA	80-120		10/04/01	WM
Surr: 4-Bromofluorobenzene	98	%REC	NA	86-115		10/04/01	WM
Surr: Dibromofluoromethane	118	%REC	NA	80-120		10/04/01	WM
Surr: Toluene-d8	94	%REC	NA	88-110		10/04/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/02/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/02/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/02/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/02/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/02/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/02/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/02/01	WP
Phenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/02/01	WP
Surr: 2,4,6-Tribromophenol	87	%REC	NA	10-123		10/02/01	WP
Surr: 2-Fluorobiphenyl	72	%REC	NA	43-116		10/02/01	WP
Surr: 2-Fluorophenol	47	%REC	NA	21-100		10/02/01	WP
Surr: 4-Terphenyl-d14	91	%REC	NA	33-141		10/02/01	WP
Surr: Nitrobenzene-d5	79	%REC	NA	35-114		10/02/01	WP
Surr: Phenol-d5	42	%REC	NA	10-94		10/02/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: EB
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-06A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	105	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	87	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	100	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/03/01	WP
Phenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
Surr: 2,4,6-Tribromophenol	72	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	72	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	29	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	87	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	73	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	28	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-07A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	112	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	88	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	95	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/03/01	WP
Phenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
Surr: 2,4,6-Tribromophenol	91	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	83	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	46	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	106	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	87	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	40	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-08A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	105	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	99	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	92	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	97	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.065		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.065		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.261		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.065		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.065		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.065		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.065		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.065		10/03/01	WP
Phenol	ND	mg/L	NA	0.065		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.065		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.065		10/03/01	WP
Surr: 2,4,6-Tribromophenol	40	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	79	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	30	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	95	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	80	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	57	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: BSW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-09A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	122	%REC	NA	80-120	S	10/05/01	WM
Surr: 4-Bromofluorobenzene	97	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	89	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	96	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.036		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/03/01	WP
Phenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
Surr: 2,4,6-Tribromophenol	86	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	71	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	43	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	92	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	73	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	37	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-5
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-10A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	131	%REC	NA	80-120	S	10/05/01	WM
Surr: 4-Bromofluorobenzene	100	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	93	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	95	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.040		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	91	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	73	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	46	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	93	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	75	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	40	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FD
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-11A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	100	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	115	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	96	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.009		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.009		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.037		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.009		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.009		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.009		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.009		10/03/01	WP
Phenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.009		10/03/01	WP
Surr: 2,4,6-Tribromophenol	90	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	76	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	46	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	90	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	77	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	39	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-4
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-12A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	101	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	143	%REC	NA	80-120	S	10/05/01	WM
Surr: Toluene-d8	96	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.038		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	91	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	78	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	48	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	94	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	78	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	43	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: FB
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-13A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	116	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	152	%REC	NA	80-120	S	10/05/01	WM
Surr: Toluene-d8	93	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.010		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.010		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.040		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.010		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.010		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.010		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.010		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.010		10/03/01	WP
Phenol	ND	mg/L	NA	0.010		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.010		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.010		10/03/01	WP
Surr: 2,4,6-Tribromophenol	82	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	76	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	39	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	93	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	79	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	36	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-3
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-14A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	119	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	98	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	120	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	93	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.040		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	102	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	78	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	53	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	97	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	82	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	45	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: TRIP BLANK
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-15A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	119	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	99	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	137	%REC	NA	80-120	S	10/05/01	WM
Surr: Toluene-d8	95	%REC	NA	88-110		10/05/01	WM

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-2
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-16A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	111	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	99	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	118	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	96	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.040		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	91	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	73	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	43	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	98	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	74	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	39	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

Client: SOLUTIA INC
Client Sample ID: ASW-1
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684
Lab ID: 0109684-17A
Collection Date: 9/21/01
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		**SW8260B**					
Benzene	ND	µg/L	NA	1.0		10/05/01	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		10/05/01	WM
Chlorobenzene	ND	µg/L	NA	1.0		10/05/01	WM
Chloroform	ND	µg/L	NA	1.0		10/05/01	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		10/05/01	WM
Ethylbenzene	ND	µg/L	NA	1.0		10/05/01	WM
Toluene	ND	µg/L	NA	1.0		10/05/01	WM
Trichloroethene	ND	µg/L	NA	1.0		10/05/01	WM
Vinyl chloride	ND	µg/L	NA	1.0		10/05/01	WM
o-Xylene	ND	µg/L	NA	1.0		10/05/01	WM
m,p-Xylene	ND	µg/L	NA	2.0		10/05/01	WM
Surr: 1,2-Dichloroethane-d4	117	%REC	NA	80-120		10/05/01	WM
Surr: 4-Bromofluorobenzene	100	%REC	NA	86-115		10/05/01	WM
Surr: Dibromofluoromethane	90	%REC	NA	80-120		10/05/01	WM
Surr: Toluene-d8	95	%REC	NA	88-110		10/05/01	WM
SEMIVOLATILE ORGANIC COMPOUNDS		**SW8270C**					
4-Chloro-3-methylphenol	ND	mg/L	NA	0.01		10/03/01	WP
o-Cresol	ND	mg/L	NA	0.01		10/03/01	WP
m,p-Cresol	ND	mg/L	NA	0.039		10/03/01	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.01		10/03/01	WP
2-Methylnaphthalene	ND	mg/L	NA	0.01		10/03/01	WP
Naphthalene	ND	mg/L	NA	0.01		10/03/01	WP
4-Nitrophenol	ND	mg/L	NA	0.01		10/03/01	WP
Phenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.01		10/03/01	WP
Surr: 2,4,6-Tribromophenol	96	%REC	NA	10-123		10/03/01	WP
Surr: 2-Fluorobiphenyl	76	%REC	NA	43-116		10/03/01	WP
Surr: 2-Fluorophenol	49	%REC	NA	21-100		10/03/01	WP
Surr: 4-Terphenyl-d14	95	%REC	NA	33-141		10/03/01	WP
Surr: Nitrobenzene-d5	81	%REC	NA	35-114		10/03/01	WP
Surr: Phenol-d5	45	%REC	NA	10-94		10/03/01	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 05-Nov-01

CLIENT: SOLUTIA INC
Project: 01-0081-000
Site ID: SOLUTIA INC/KRS

Lab Order: 0109684

Data Review

Approved: _____
Organic Department Manager Date

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Potesta & Associates, Inc.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
University of Charleston, Cox Hall • 2300 MacCorkle Avenue, SE • Charleston, WV 25304
Tel: (304) 342-1400 • FAX: (304) 343-9031

CHAIN OF CUSTODY RECORD

3065

PAGE 1 OF 5

CLIENT/SAMPLING SITE: Solutia, Inc./KRS
ADDRESS: #1 Monsanto Rd.
CITY/STATE/ZIP: Nitro, WV 25143
PROJECT NO.: 61-0081-000 DATE: 10-16-01

LAB USED: REIC
CONTACT PERSON: C. Grose
TELEPHONE/FAX: See Header
SAMPLER: R. Kendall, D. Bowe
HOW SHIPPED: Courier

SAMPLE LOG AND ANALYSIS REQUESTED

TURNAROUND TIME: X REGULAR ___ RUSH

PRESERVATIVES
0 NO PRESERVATIVE
1 HYDROCHLORIC ACID
2 NITRIC ACID
3 SULFURIC ACID
4 SODIUM THIOSULFATE
5 SODIUM HYDROXIDE
6 ZINC ACETATE
7 EDTA

PRESERVATIVE CODES

SAMPLE ID	NO. & TYPE OF CONTAINERS	DATE/TIME	MATRIX	SAMPLE COMP/GRAB	ANALYSIS REQUESTED & METHOD	From List							REMARKS
ASW-1	1-1250ml	10-16-01 1315	H_2O	Grab	X								Please send results to C. Grose at Potesta
ASW-2	1-1250ml	10-16-01 1305	H_2O	Grab	X								
ASW-3	1-1250ml	10-16-01 1300	H_2O	Grab	X								
ASW-4	1-1250ml	10-16-01 1250	H_2O	Grab	X								
ASW-5	1-1250ml	10-16-01 1220	H_2O	Grab	X								
BSW-1	1-1250ml	10-16-01 1155	H_2O	Grab	X								
BSW-2	1-1250ml	10-16-01 1145	H_2O	Grab	X								
BSW-3	1-1250ml	10-16-01 1130	H_2O	Grab	X								
CSW-1	1-1250ml	10-16-01 1105	H_2O	Grab	X								
CSW-2	1-1250ml	10-16-01 1055	H_2O	Grab	X								

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Douglas W. Bowe	01/01/17 823	[signature]	[signature]	10/17/01 1430	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CONDITION ON ARRIVAL:
		[signature]	10/17/01 1430	1.0

COMMENTS

NOV-05-2001 10:09 304 343 9031 P.24

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CHAIN OF CUSTODY RECORD

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PAGE 3 OF 5

CLIENT/SAMPLING SITE: Solutia, Inc. / KRS
ADDRESS: #1 Monsanto Rd.
CITY/STATE/ZIP: Nitro, WV 25143
PROJECT NO.: 01-0081-000 DATE: 10-16-01

LAB USED: REIC
CONTACT PERSON: C. Grose
TELEPHONE/FAX: See Header
SAMPLER: D. Bowe, R. Kendall
HOW SHIPPED: Courier

SAMPLE LOG AND ANALYSIS REQUESTED

TURNAROUND TIME: X REGULAR ___ RUSH

PRESERVATIVES
0 NO PRESERVATIVE
1 HYDROCHLORIC ACID
2 NITRIC ACID
3 SULFURIC ACID
4 SODIUM THIOSULFATE
5 SODIUM HYDROXIDE
6 ZINC ACETATE
7 EDTA

PRESERVATIVE CODES

ANALYSIS REQUESTED & METHOD: List X

SAMPLE ID	NO. & TYPE OF CONTAINERS	DATE/TIME	MATRIX	SAMPLE COMP/GRAB	List X						REMARKS
ASW-1	4-40 ml	10-16-01 1315	H_2O	Grab	X						Please Send Results to C. Grose at Potesta
ASW-2	4-40 ml	10-16-01 1305	H_2O	Grab	X						
ASW-3	4-40 ml	10-16-01 1300	H_2O	Grab	X						
ASW-4	4-40 ml	10-16-01 1250	H_2O	Grab	X						
ASW-5	4-40 ml	10-16-01 1220	H_2O	Grab	X						
BSW-1	4-40 ml	10-16-01 1155	H_2O	Grab	X						
BSW-2	4-40 ml	10-16-01 1145	H_2O	Grab	X						
BSW-3	4-40 ml	10-16-01 1130	H_2O	Grab	X						
CSW-1	4-40 ml	10-16-01 1105	H_2O	Grab	X						
CSW-2	4-40 ml	10-16-01 1055	H_2O	Grab	X						

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Douglas W. Bowe	011017 823			10/17/01 1450	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CONDITION ON ARRIVAL:
			10/17/01 1450	1.6°

COMMENTS

Potesta & Associates, Inc.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
University of Charleston, Cox Hall • 2300 MacCorkle Avenue, SE • Charleston, WV 25304
Tel: (304) 342-1400 • FAX: (304) 343-9031

CHAIN OF CUSTODY RECORD

3066

PAGE 2 OF 5

CLIENT/SAMPLING SITE: Solutia, Inc. / KRS
ADDRESS: #1 Monsanto Rd.
CITY/STATE/ZIP: Nitro, WV 25143
PROJECT NO.: 01-0081-000 DATE: 10-16-01

LAB USED: REIC
CONTACT PERSON: C. Grose
TELEPHONE/FAX: See Header
SAMPLER: R. Kendall, D. Bowe
HOW SHIPPED: Courier

SAMPLE LOG AND ANALYSIS REQUESTED

TURNAROUND TIME: X REGULAR ___ RUSH

PRESERVATIVES
0 NO PRESERVATIVE
1 HYDROCHLORIC ACID
2 NITRIC ACID
3 SULFURIC ACID
4 SODIUM THIOSULFATE
5 SODIUM HYDROXIDE
6 ZINC ACETATE
7 EDTA

PRESERVATIVE CODES

ANALYSIS REQUESTED & METHOD: Gram List

SAMPLE ID	NO. & TYPE OF CONTAINERS	DATE/TIME	MATRIX	SAMPLE COMP/GRAB	Gram List	REMARKS
CSW-3	1-1250ml	10-16-01 1045	H_2O	Grab	X	Please send results to G. Grose at Potesta
CSW-4	1-1250ml	10-16-01 1030	H_2O	Grab	X	
CSW-5	1-1250ml	10-16-01 1015	H_2O	Grab	X	
EB	1-1250ml	10-16-01 1235	H_2O	Grab	X	
FB	1-1250ml	10-16-01 1230	H_2O	Grab	X	
FD	1-1250ml	10-16-01 1220	H_2O	Grab	X	
ASW-5 MS	1-1250ml	10-16-01 1220	H_2O	Grab	X	
ASW-5 MSD	1-1250ml	10-16-01 1220	H_2O	Grab	X	
Union PSD	1-1250ml	10-16-01 1120	H_2O	Grab	X	
BG-1	1-1250ml	10-16-01 1325	H_2O	Grab	X	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Douglas W. Bowe	011017 8:23	[signature]	[signature]	10/17/01 1430	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CONDITION ON ARRIVAL:
		[signature]	10/17/01 1430	1.0

COMMENTS

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Tel: (304) 342-1400 • FAX: (304) 343-9031

CHAIN OF CUSTODY RECORD

3068

PAGE 4 OF 5

CLIENT/SAMPLING SITE: Solutia, Inc. / KRS
ADDRESS: #1 Monsanto Rd.
CITY/STATE/ZIP: Nitro, WV 25143
PROJECT NO.: 01-0081-000 DATE: 10-16-01

LAB USED: REIC
CONTACT PERSON: C. Grose
TELEPHONE/FAX: See Header
SAMPLER: R. Kendall, D. Bowe
HOW SHIPPED: Courier

SAMPLE LOG AND ANALYSIS REQUESTED

TURNAROUND TIME: X REGULAR ___ RUSH

PRESERVATIVES
0 NO PRESERVATIVE
1 HYDROCHLORIC ACID
2 NITRIC ACID
3 SULFURIC ACID
4 SODIUM THIOSULFATE
5 SODIUM HYDROXIDE
6 ZINC ACETATE
7 EDTA

PRESERVATIVE CODES

SAMPLE ID	NO. & TYPE OF CONTAINERS	DATE/TIME	MATRIX	SAMPLE COMP/GRAB	ANALYSIS REQUESTED & METHOD						REMARKS
CSW-3	4-40ml	10-16-01 1045	H_2O	Grab	X						Please Send Results to C. Grose at Potesta.
CSW-4	4-40ml	10-16-01 1030	H_2O	Grab	X						
CSW-5	4-40ml	10-16-01 1015	H_2O	Grab	X						
EB	4-40ml	10-16-01 1235	H_2O	Grab	X						
FB	4-40ml	10-16-01 1230	H_2O	Grab	X						
FD	4-40ml	10-16-01 1220	H_2O	Grab	X						
ASW-5 MS	4-40ml	10-16-01 1220	H_2O	Grab	X						
ASW-5 MSD	4-40ml	10-16-01 1220	H_2O	Grab	X						
Union PSD	4-40ml	10-16-01 1120	H_2O	Grab	X						
BG-1	4-40ml	10-16-01 1325	H_2O	Grab	X						

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Douglas W. Bowe	011017 823	[signature]	[signature]	1430 10/17/01	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CONDITION ON ARRIVAL:
		[signature]	10/17/01 1430	1.3

COMMENTS

Potesta & Associates, Inc.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
University of Charleston, Cox Hall • 2300 MacCorkle Avenue, SE • Charleston, WV 25304
Tel: (304) 342-1400 • FAX: (304) 343-9031

CHAIN OF CUSTODY RECORD

2827

PAGE 5 OF 5

CLIENT/SAMPLING SITE: Solutia, Inc. / KRS
ADDRESS: #1 Monsanto Rd.
CITY/STATE/ZIP: Nitro, WV 25143
PROJECT NO.: 01-0081-001 DATE: 10-16-01

LAB USED: REIC
CONTACT PERSON: C. Grose
TELEPHONE/FAX: See header
SAMPLER: R. Kendall, D. Bowe
HOW SHIPPED: Courier

SAMPLE LOG AND ANALYSIS REQUESTED

TURNAROUND TIME
X REGULAR
____ RUSH

PRESERVATIVES
0 NO PRESERVATIVE
1 HYDROCHLORIC ACID
2 NITRIC ACID
3 SULFURIC ACID
4 SODIUM THIOSULFATE
5 SODIUM HYDROXIDE
6 ZINC ACETATE
7 EDTA

PRESERVATIVE CODES

ANALYSIS REQUESTED & METHOD: Volatile Compound

SAMPLE ID	NO. & TYPE OF CONTAINERS	DATE/TIME	MATRIX	SAMPLE COMP/GRAB	Volatile Compound	REMARKS
BG-2	1-1250ml	10-16-01 1340	H_2O	Grab	X	
BG-2	4-40ml	10-16-01 1340	H_2O	Grab	X	Please Send
Trip Blank	4-40ml	10-16-01	H_2O	Grab	X	Results to
Trip Blank	4-1l	10-16-01	H_2O	Grab	X	C. Grose
						at Potesta

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED BY: (SIGNATURE)
Douglas W. Bowe	011017 823	[signature]	[signature]	10/17/01 1430	

RELINQUISHED BY: (SIGNATURE)	DATE/TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE/TIME	CONDITION ON ARRIVAL:
		[signature]	10/17/01 1430	1

COMMENTS

Appendix C. Instructions for Database 3.5" Floppy Disk. Solutia, Inc., Nitro, West Virginia

This dataset contains ground water analytical data collected from the Solutia, Inc. facility located at 1 Monsanto Road, Nitro, West Virginia. The dataset includes results for wells sampled in September 1981 and continues through the results for the September 2001 quarterly ground-water monitoring event. Data is presented in two formats for conversion by end users, a Microsoft® Access© database file with mdb extension and text files for import/export to compatible database programs.

There are six data tables included in the data base. Five of these tables contain data for use in queries and other data manipulation (dt_sample, dt_field_sample, dt_result, dt_test, and rt_analyte). The dt_sample table provides a record for all samples collected at the Solutia site. The dt_field_sample table builds on the dt_sample table and provides sampling date and additional field data, if necessary. The dt_result table contains result values for all analytical parameters entered into the database. The dt_test table is a record of all analysis performed for the samples included in the database, and the rt_analyte table is a reference for the chemical abstracts services registry numbers (CASRN) (note: not all CASRN included in this list were analyzed, this is a comprehensive reference list for in-house use by Roux Associates, Inc.). Several records are default values, ie. sample_time, analysis_time, and analysis location, the default values do not impact the end users ability to query or manipulate data. The final table, SOLUTIA DATABASE was generated by linking the tables with a simple make table query in Access©. This query is included in this dataset.

The sys_sample_code field, located in the dt_sample and dt_field sample tables allows all samples collected during the period of record to have a unique identification value. This unique identification value is a necessary component of Roux Associates, Inc. database management system, EQuIS®. This code commonly includes: the well location sampled, the sample date and any additional information to allow a unique identifier. This field does not have to match the location code (sys_location_code) for the well. Additional fields, such as the test_surrogate_key in the dt_test and dt_result tables allow the user to link tables during query for specific dates, analytical parameter, locations, etc. This field also represents a link to the original database. Therefore, contact between primary and secondary users of the dataset can have a common reference. This allows easier communication, in the event the secondary users are experiencing difficulty with the dataset.

Roux Associates, Inc., has provided this data at the request of the USEPA and is intended for use by the USEPA Region III and authorized agents for internal purpose in the conduct of daily affairs. The data is provided without warranty of any kind and secondary users are responsible for understanding the accuracy limits of all electronic data provided herein. Any reproduction or manipulation of the data must ensure that the data integrity remains intact. The database files were examined for completeness and accuracy; however, Roux Associates, Inc. makes no warranty expressed or implied, regarding the condition of the product or its fitness for any particular purpose. The burden for determining fitness for use lies entirely with the end user. This dataset will continually be updated by Roux Associates, Inc. as more data becomes available.

APPENDIX D

SURFACE AND SUBSURFACE DIOXIN SOIL RESULT TABLES AND SAMPLE LOCATION MAPS

NUS CORPORATION
992 OLD EAGLE SCHOOL ROAD
SUITE 916
WAYNE, PENNSYLVANIA 19087
(215) 687-9510

November 9, 1983
R-585-7-3-30
68-01-6699

Mr. Harold Byer
U.S. Environmental Protection Agency
Sixth and Walnut Streets
Philadelphia, PA 19106

Subject: Final Report
TDD No. F3-8306-26
Monsanto Corporation
Nitro, West Virginia

Dear Mr. Byer:

Submitted herewith is the final Field Trip report for the subject project.

Based on our review of available data, we have concluded that EPA should consider the following:

- The presence of 2,3,7,8-TCDD in sample numbers W-04-01B, W-04-02B, W-04-03B, W-04-04B, W-04-06B, W-04-08B, W-04-09B, W-04-10B, W-04-11B, W-04-12B, W-04-13B, W-04-14B, W-04-16B, W-04-08A, and W-04-12A has been confirmed by QA/QC review.

- Based on Monsanto's data, the presence of 2,3,7,8-TCDD in sample numbers W-04-05A, W-04-06A, W-04-07A, W-04-09A, W-04-10A, W-04-11A, W-04-12A, W-04-13A, W-04-14A, W-04-15A, and W-04-16A are strongly suspected.

- An extent of contamination study is recommended. (This was performed under TDD No. F3-8308-31.)

If you have any questions, please contact me.

Respectfully submitted,

Terrence Shannon
Env. Engineer

Richard Cromer
Env. Engineer

Reviewed by,

Garth Glenn
Asst. Manager

Approved by,

Donald Senovich
Manager, FIT III

TS/RC/kim

Attachment

ORIGINAL
(Red)

R-585-7-3-30

A FIELD TRIP REPORT FOR MONSANTO, NITRO PLANT PREPARED UNDER

TDD NO. F3-8306-26
EPA NO. WV-W-04
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

NOVEMBER 9, 1983

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
Richard Cromer		Donald Senovich
TERRENCE SHANNON	GARTH GLENN	DONALD SENOVICH
ENVIRON. ENGINEER	ASST. MANAGER	MANAGER, FIT III

RICHARD CROMER
ENVIRON. ENGINEER

Disclaimer: This report has been prepared for the U.S. Environmental Protection Agency (EPA) under Contract No. 68-01-6699. The content does not necessarily reflect the views and policies of EPA nor does the mention of trade names or common products constitute endorsement by EPA.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic
☒ Dioxin

TDD Number F3-8306-26
EPA Number

Site Name W-04
Date of Sample 6/30/83 - 7/1/83

Compounds Detected

	Sample Number	Sample Description and Location	Phase	Units	Detec. Limit	2,3,7,8-TCDD												Remarks
✓	W-04-01B	Treatment plant area	solid	ppb	0.07	ND												
✓	W-04-01B	Treatment plant area	solid	ppb	—	2.8												
✓	W-04-02B	Treatment plant area	solid	ppb	—	0.82												
✓	W-04-02B	Treatment plant area	solid	ppb	—	13												
✓	W-04-03B	Treatment plant area	solid	ppb	—	0.41												
✓	W-04-03B	Treatment plant area	solid	ppb	0.04	ND												
✓	W-04-04B	Treatment plant area	solid	ppb	—	0.65												
✓	W-04-04B	Treatment plant area	solid	ppb	0.28	ND												
✓	W-04-04B	Treatment plant area	solid	ppb	0.09	ND												
	W-04-05B	Decon. Rinseate	aqueous	ppb	—	0.23												
✓	W-04-06B	Treatment plant area	solid	ppb	—	0.61												
✓	W-04-06B	Treatment plant area	solid	ppb	—	1.0												
✓	W-04-06B	Treatment plant area	solid	ppb	0.10	ND												
✓	W-04-07B	Treatment plant area	solid	ppb	0.15	ND												

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

[illegible] based upon quality assurance review of data.

TDD Number F3-8306-26

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☐ Inorganic

☒ Dioxin

Site Name W-04

Date of Sample 6/30/83 - 7/1/83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Detec. Limit	2,3,7,8-TCDD												Remarks
W-04-08B	Incinerator area/NE	solid	ppb	—	0.14												
W-04-09B	Incinerator area/E	solid	ppb	—	0.36												
W-04-10B	Incinerator area/SE	solid	ppb	1.00	ND ◊												
W-04-11B	Incinerator area/N	solid	ppb	—	0.88												
W-04-12B	Incinerator area/C	solid	ppb	—	0.83												
W-04-13B	Incinerator area/S	solid	ppb	—	1.2												
W-04-14B	Incinerator area/NW	solid	ppb	—	2.0												
W-04-15B	Incinerator area/W	solid	ppb	0.75	ND ◊												
W-04-16B	Incinerator area/SW	solid	ppb	—	2.7												
W-04-17B	Field blank, surface	solid	ppb	0.21	ND ◊												
W-04-17B	Field blank, auger	solid	ppb	0.55	ND ◊												
✓ W-04-01A	Treatment plant	aqueous	ppb	2.0	ND												
W-04-02A	Treatment plant	aqueous	ppb	1.6	ND												
W-04-03A	Treatment plant	aqueous	ppb	0.71	ND												

NOTE: For a review of this data and non-target, tentatively [illegible] ...ds, pl[illegible] ...ce the Analytical Quality Assurance section of this report,

◊ [illegible] results of questionable qualitative signif[illegible] [illegible] review of data.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number F3-8306-26
EPA Number

☐ Organic ☐ Inorganic
☑ Dioxin

Site Name W-04
Date of Sample 6/30/83 - 7/1/83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Detec. Limit	2,3,7,8-TCDD											Remarks
W-04-04A	Treatment plant	solid		See Quality Assurance Review												
W-04-05A	Treatment plant	solid		See Quality Assurance Review												
W-04-06A	Treatment plant	solid		See Quality Assurance Review												
W-04-07A	Transfer area	solid		See Quality Assurance Review												
W-04-08A	East of butylald. tank	solid	ppb		23											
W-04-09A	East of butylald. tank	solid		See Quality Assurance Review												
W-04-10A	East of butylald. tank	solid		See Quality Assurance Review												
W-04-11A	East of butylald. tank	solid		See Quality Assurance Review												
W-04-12A	East of butylald. tank	solid	ppb		10 *											* Per conversation with lab representative 4/7/83.
W-04-13A	East of butylald. tank	solid		See Quality Assurance Review												
W-04-14A	Bldg. 41 + Area 34	solid		See Quality Assurance Review												
W-04-15A	Bldg. 41 + Area 34	solid		See Quality Assurance Review												
W-04-16A	Bldg. 41 + Area 34	solid		See Quality Assurance Review												
W-04-20B	Blank	aqueous	ppb	0.63	ND											

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

Qualitative significance based upon quality assurance review of data.

ORIGINAL (Red)

TDD Number: F3-8306-26
Site Name: W-04
Sample Dates: 6/30/83 - 7/1/83

ORIGINAL (Red)

SAMPLE DATA SUMMARY
COMPARISON OF EPA AND MONSANTO RESULTS
FOR DIOXIN (2,3,7,8-TCDD)

Sample Number	Sample Location	Phase	2,3,7,8-TCDD (ppb*) NUS/EPA	2,3,7,8-TCDD (ppb*) Monsanto
W-04-01A	Treatment plant, monitoring well	Aqueous	ND	2.0/1.6 ppt
W-04-02A	Treatment plant, intake	Aqueous	ND	ND
W-04-03A	Treatment plant, effluent	Aqueous	ND	0.1 ppt
W-04-01B	Treatment plant, surface	Solid	ND	2.0/3.8
W-04-01B	Treatment plant, 36-42"	Solid	2.8	9.6
W-04-02B	Treatment plant, surface	Solid	0.82	1.9
W-04-02B	Treatment plant, 6-8"	Solid	13	58
W-04-02B	Treatment plant, core			
	0-1"	Solid	-	4.8/3.7
	1-2"	Solid	-	2.7
	2-3"	Solid	-	2.2
	3-4"	Solid	-	20
	4-5"	Solid	-	140
	5-6"	Solid	-	89
	6-7"	Solid	-	94
	7-8"	Solid	-	75
	8-9"	Solid	-	95
	9-10"	Solid	-	88
	10-11"	Solid	-	68
W-04-03B	Treatment plant, surface	Solid	0.41	1.3
W-04-03B	Treatment plant, 27-33"	Solid	ND	ND
W-04-04B	Treatment plant, surface	Solid	0.65	2.2
W-04-04B	Treatment plant, 32-38"	Solid	ND	ND
W-04-04B	Treatment plant, 38-44"	Solid	ND	0.2/ND/ND
W-04-05B	Decon rinseate	Aqueous	0.23	-
W-04-06B	Treatment plant, surface	Solid	0.61	3.7/3.5
W-04-06B	Treatment plant, 18-24"	Solid	1.0	5.1
W-04-06B	Treatment plant, 36-42"	Solid	ND	0.6
W-04-07B	Treatment plant, surface	Solid	ND	0.4
W-04-07B	Treatment plant, core			
	0-1"	Solid	-	0.2/0.2
	1-2"	Solid	-	0.2
	2-3"	Solid	-	ND
	3-4"	Solid	-	ND
	4-5"	Solid	-	ND
	5-6"	Solid	-	ND
	6-7"	Solid	-	ND

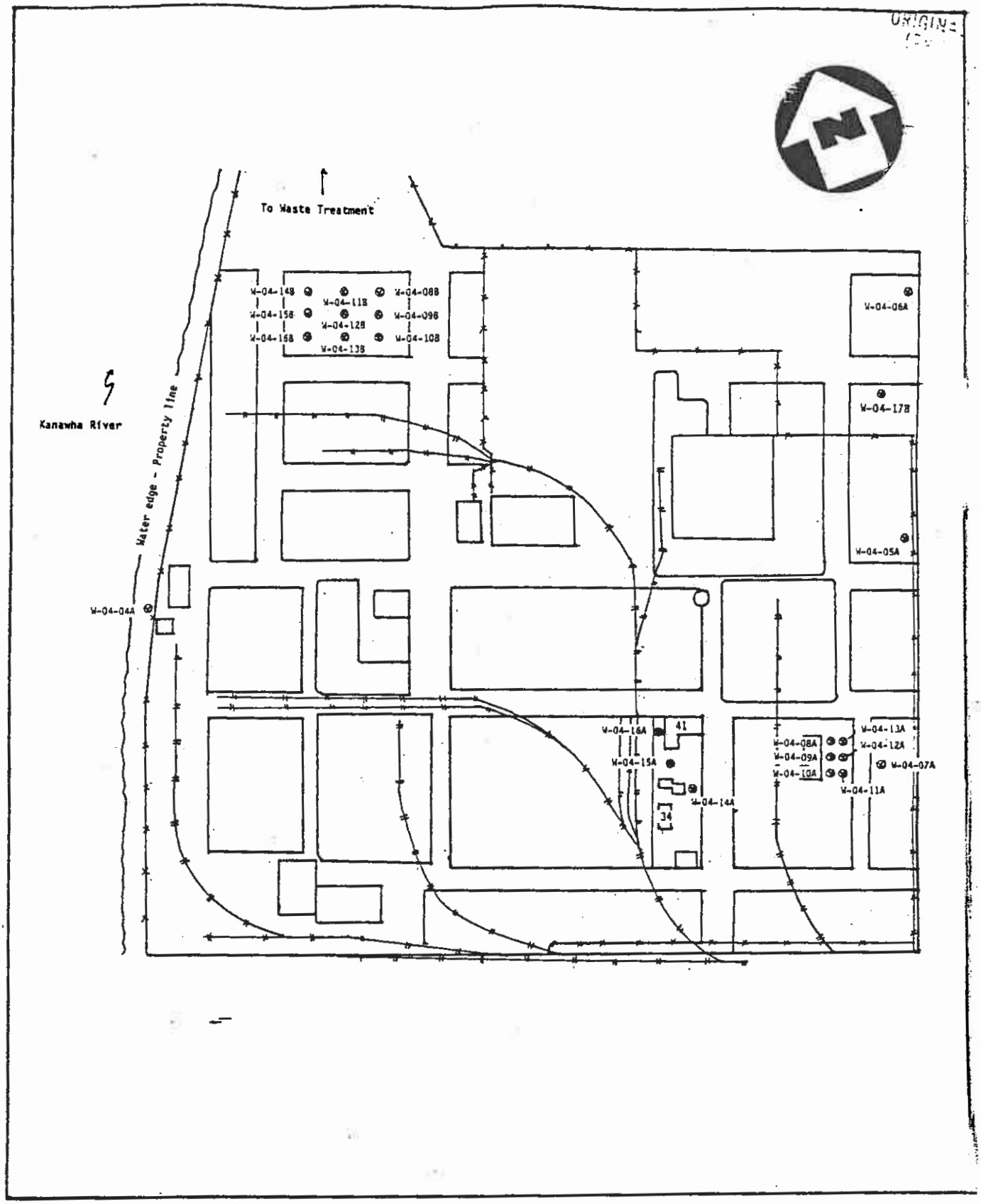
Sample Number	Sample Location	Phase	2,3,7,8-TCDD (ppb*) NUS/EPA	Monsanto
W-04-04A	Treatment plant, surface	Solid	See Q.A.	ND
W-04-05A	Treatment plant, surface	Solid	See Q.A.	1.6
W-04-06A	Treatment plant, top 1"	Solid	-	1.6
W-04-06A	Treatment plant, 1-2" and 0-3" combined	Solid	See Q.A.	6.2
W-04-08B	Incinerator area NE, surface	Solid	0.14	0.5
W-04-09B	Incinerator area E, top 1"	Solid	-	1.6
W-04-09B	Incinerator area E, 1-4"	Solid	0.36	2.6/2.4
W-04-10B	Incinerator area SE, 8-12" below chat	Solid	ND◊	1.3
W-04-11B	Incinerator area N, top 1"	Solid	-	0.3/0.6
W-04-11B	Incinerator area N, 1-3"	Solid	0.88	0.8
W-04-12B	Incinerator area C, top 1"	Solid	-	1.2
W-04-12B	Incinerator area C, 1-3"	Solid	0.83	-
W-04-13B	Incinerator area S, 0-5"	Solid	-	1.2
W-04-13B	Incinerator area S, 3-11"	Solid	1.2	-
W-04-14B	Incinerator area NW, top 1"	Solid	-	1.9
W-04-14B	Incinerator area NW, 1-3"	Solid	2.0	2.7
W-04-15B	Incinerator area W, 1-2"	Solid	ND◊	0.7
W-04-16B	Incinerator area SW, top 1"	Solid	-	0.1
W-04-16B	Incinerator area SW, 1-3"	Solid	2.7	3.9/3.6
W-04-17B	Field blank, 1-4"	Solid	ND◊	0.4
W-04-17B	Field blank, 11-17"	Solid	ND◊	2.0
W-04-07A	Transfer area, chat	Solid	-	0.8
W-04-07A	Transfer area, 0-6" below chat	Solid	See Q.A.	15
W-04-08A	E. of butylaldehyde tank, chat	Solid	-	0.1
W-04-08A	E. of butylaldehyde tank, 6-8" below chat	Solid	23	40
W-04-09A	E. of butylaldehyde tank, chat	Solid	-	ND
W-04-09A	E. of butyladehyde tank, 0-12" below chat	Solid	See Q.A.	74
W-04-10A	E. of butylaldehyde tank, chat	Solid	-	0.1
W-04-10A	E. of butylaldehyde tank, 6-8" below chat	Solid	See Q.A.	22
W-04-11A	E. of butylaldehyde tank, chat	Solid	-	0.6
W-04-11A	E. of butylaldehyde tank, 6-8" below chat	Solid	See Q.A.	97

ORIGINAL (Red)

Sample Number	Sample Location	Phase	2,3,7,8-TCDD (ppb*) NUS/EPA	Monsanto
W-04-12A	E. of butylaldehyde tank, chat	Solid	-	ND
W-04-12A	E. of butylaldehyde tank, 2-8" below chat	Solid	10	8.0
W-04-13A	E. of butylaldehyde tank, chat	Solid	-	8.5
W-04-13A	E. of butylaldehyde tank, chat	Solid	-	0.7
W-04-13A	E. of butylaldehyde tank, 6-7" below chat	Solid	See Q.A.	2.2
W-04-13A	E. of butylaldehyde tank, core			
	0-1"	Solid	-	43/61/43
	1-2"	Solid	-	11
	2-3"	Solid	-	15
	3-4"	Solid	-	10
	4-5"	Solid	-	6.5
	5-6"	Solid	-	0.9
	6-7"	Solid	-	0.4
	7-8"	Solid	-	ND
	8-9"	Solid	-	2.0
W-04-14A	Bldg. 41 & Area 34, chat	Solid	-	0.9
W-04-14A	Bldg. 41 & Area 34, 2-6" below chat	Solid	See Q.A.	137
W-04-14A	Bldg. 41 & Area 34, core			
	0-1"	Solid	-	1.2/1.1
	1-2"	Solid	-	20
	2-3"	Solid	-	47
	3-4"	Solid	-	76
	4-5"	Solid	-	139
	5-6"	Solid	-	70
W-04-15A	Bldg. 41 & Area 34, chat	Solid	-	0.03
W-04-15A	Bldg. 41 & Area 34, 0-6" below chat	Solid	See Q.A.	7.5
W-04-16A	Bldg. 41 & Area 34, chat	Solid	-	0.02
W-04-16A	Bldg. 41 & Area 34 0-4" below chat	Solid	See Q.A.	0.7
W-04-20B	Blank	Aqueous	N.D.	-

◊ Denotes results of questionable qualitative significance based upon quality assurance review of data

* Unless otherwise noted

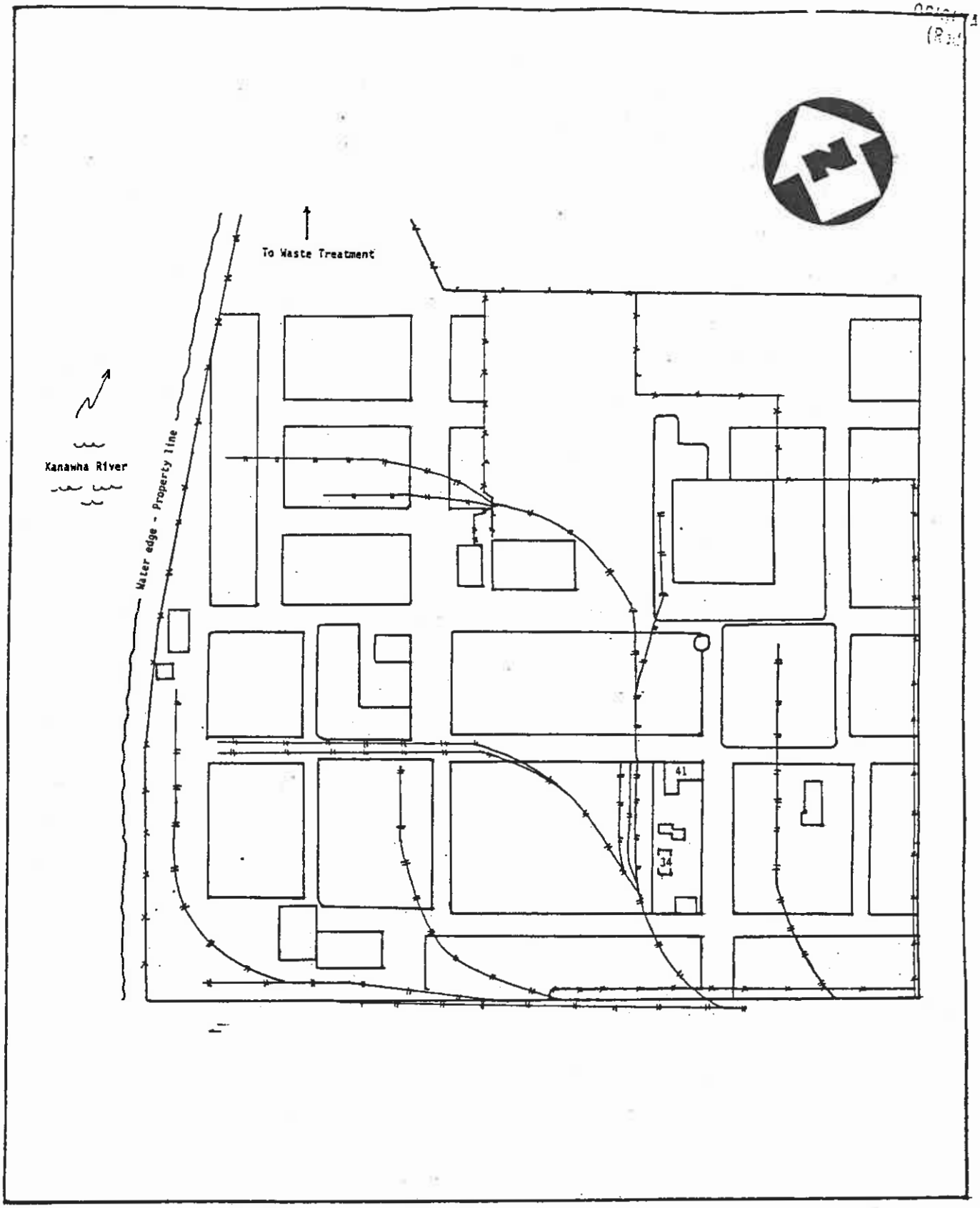


Sample Location Map - Chemical Plant

Monsanto Company, Nitro, WV

NOT TO SCALE

NUS CORPORATION
A Halliburton Company

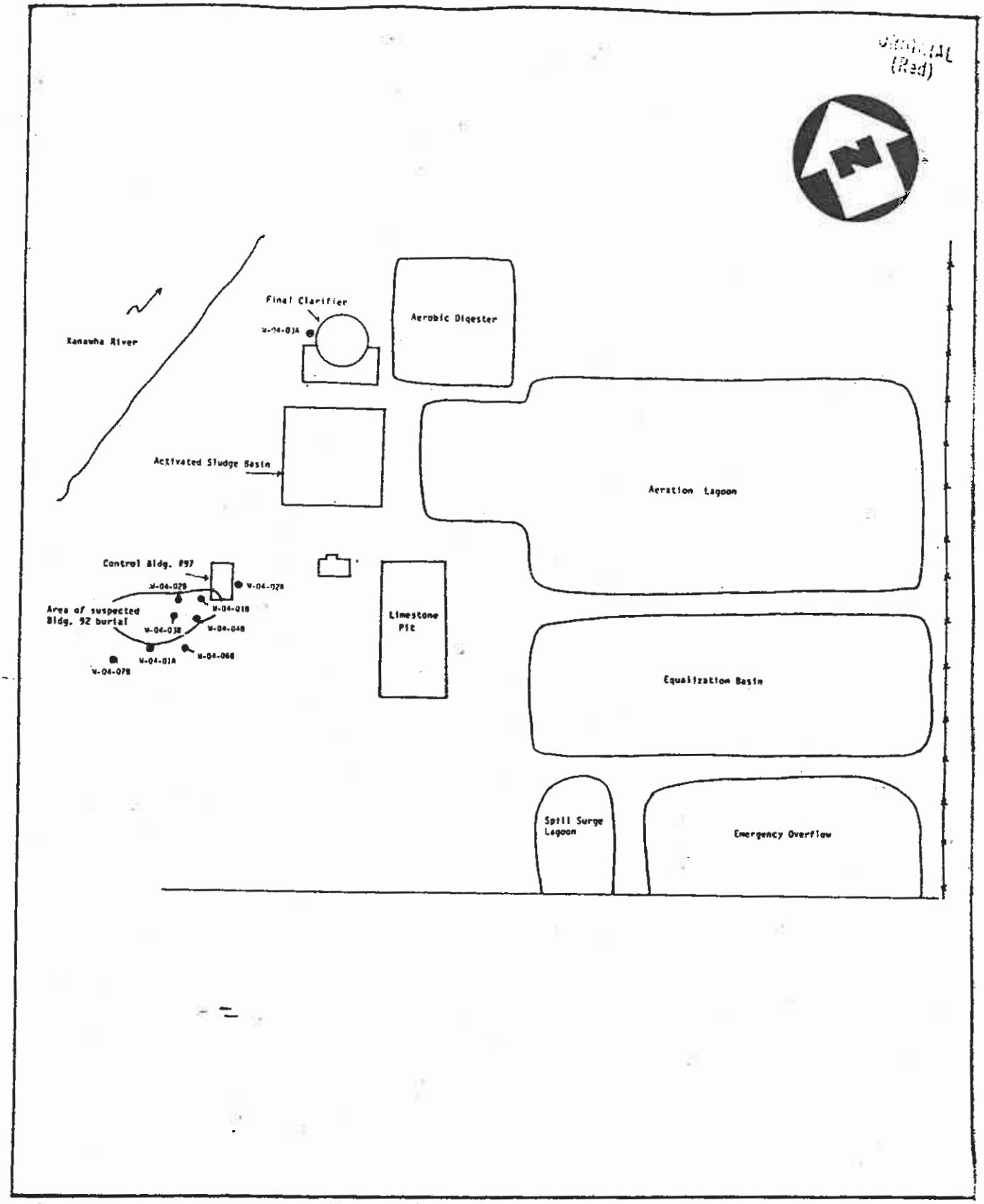


Site Sketch - Chemical Plant

Monsanto Company, Nitro, WV

NOT TO SCALE

NUS CORPORATION
A Halliburton Company

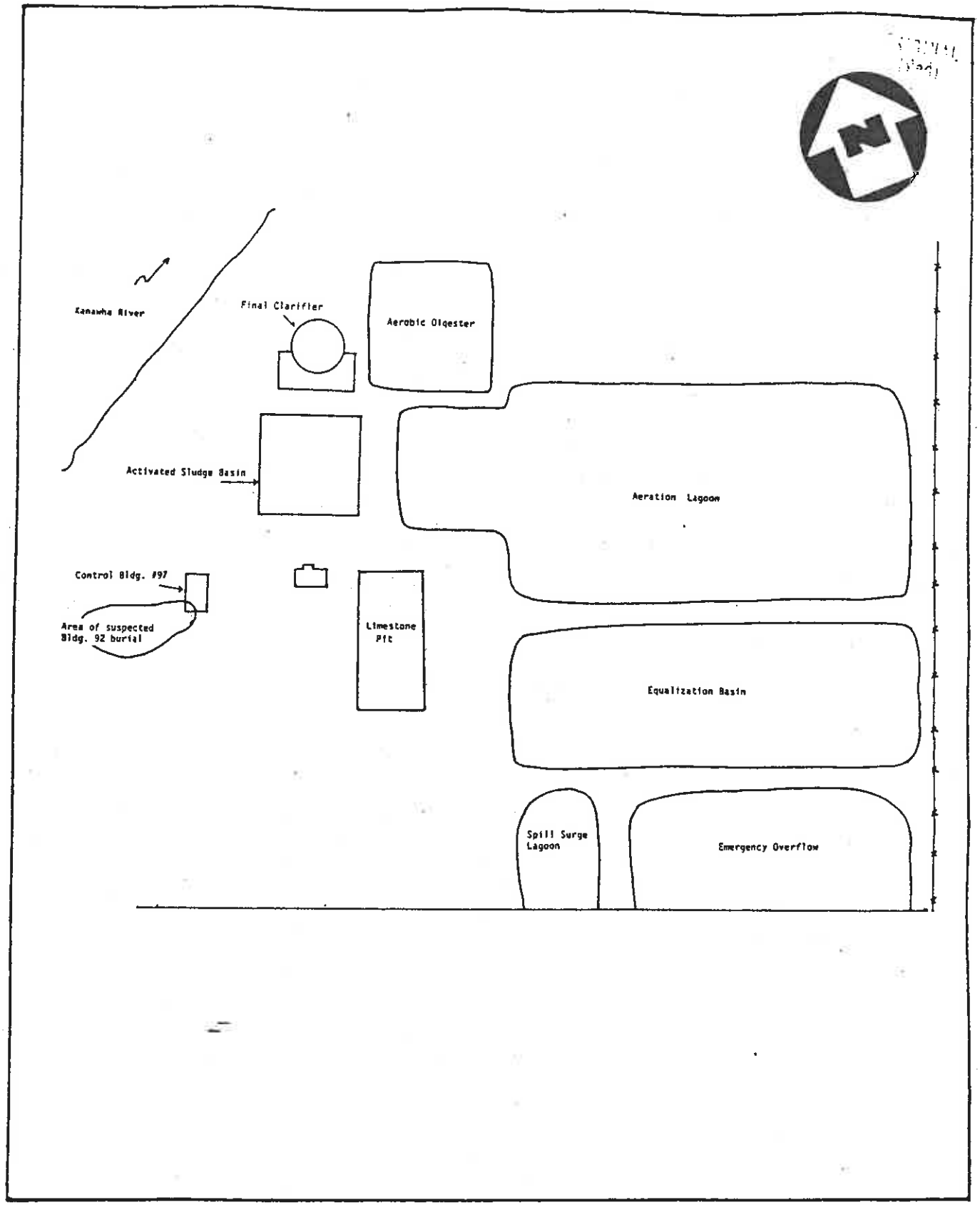


Sample Location Map - Waste Treatment Facility

Monsanto Company, Nitro, WV

NOT TO SCALE

NUS CORPORATION
A Halliburton Company



Site Sketch - Waste Treatment Facility

Monsanto Company, Nitro, WV

NOT TO SCALE

NUS CORPORATION
A Halliburton Company

NUS CORPORATION

992 OLD EAGLE SCHOOL ROAD, SUITE 918
WAYNE, PENNSYLVANIA 19087
215-687-9510

January 3, 1985
R-585-10-3-3
68-01-6699

Mr. Harold Byer
U.S. Environmental Protection Agency
Sixth and Walnut Streets
Philadelphia, PA 19106

Subject: Final Report
TDD No. F3-8308-31
Monsanto Company
Nitro, West Virginia 24153

(Red)

Dear Mr. Byer:

Attached is a final report for the extent of contamination sampling conducted at Monsanto Company, Nitro, West Virginia.

Sampling commenced for the subject project on August 29, 1983 and was completed on September 28, 1983. The sampling consisted of driving a 2-inch diameter, 12-inch core-type sampler at various grid intercepts. The grid intercepts (sampling points) were as follows:

- Off-site 500-foot grid
- On-site 250-foot grid
- On-site grid was reduced into 100- and 50-foot grid systems in areas of concern as defined by the initial dioxin screening conducted on June 30 and July 1, 1983.
- The Waste Water Treatment Plant area was gridded on a 50-foot system and surface samples were obtained at these grid intercepts. Monsanto Company had Earth Tech of Baltimore, Maryland perform a geophysical study in this area during the month of August 1983. Based on the information obtained from this report, it was determined that an indepth study would be required to determine the depth and the perimeter of the underground burial area. Agreements were reached between Monsanto, EPA, and NUS that a study would be performed in this area. Monsanto agreed to subcontract to Geraghty and Miller, Inc. from Annapolis, Maryland to supervise the work and prepare a groundwater monitoring report for the area of the Waste Water Treatment Plant. This work consisted of drilling (with continuous split spoon sampling) and installing 5 monitoring wells. Four unsuccessful attempts were made to drill through the center (as defined by Earth Tech) of the burial area. Approximately 17 exploratory borings were also made to determine the extent of the underground burial area from Building No. 92, the 2,4,5-T manufacturing building. The results and field logs of these borings are attached. Boring EH-3B was drilled within the burial area and on the downgradient side.

All sampling and decontamination procedures were performed according to the Dioxin Protocol as developed by the U.S. Environmental Protection Agency, Region VII Laboratory and dated May 1983.

Monsanto personnel performed all sampling and NUS Region III personnel monitored and documented (including photographs) all sampling and drilling techniques. All samples taken were transported to Monsanto's Dayton, Ohio laboratory for analysis. Sample results are included in the report.

A groundwater monitoring report, prepared for Monsanto by Geraghty and Miller, Inc., has been attached as an appendix.

Included in section 2.4 of the attached report are sample data summaries for all grid samples taken. Attached as appendices are the grid location maps, sampling plan, project specifications, and a map of the Waste Water Treatment Plant area showing the locations of the monitoring wells, exploratory borings, and the extent of the underground burial area. Also attached are our field logs of all the borings and the well construction detail.

If you have any further questions regarding this project, please do not hesitate to contact me.

Respectfully submitted,	Reviewed by,	Approved by,
Jeffrey Case	Richard M. Cromer	Garth Glenn
Chemical Engineer	Asst. Manager	Manager, FIT III

RMC/klm

Attachments

ORIGINAL
(Red)

R-585-10-3-3

FINAL FIELD TRIP REPORT FOR MONSANTO COMPANY PREPARED UNDER

TDD NO. F3-8308-31
EPA NO. WV-029
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

ORIGINAL (Red)

JANUARY 3, 1985

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
JEFFREY CASE	RICHARD CROMER	GARTH GLENN
CHEMICAL ENGINEER	ASST. MANAGER	MANAGER, FIT III

2.4 Sample Locations and Data Summaries

2.4.1 Off-site Samples

ORIGINAL
(Red)

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name MONSANTO

Date of Sample 8-29 THRU 9-28-93

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT			Remarks
—	OFF-SITE	SOIL	µg/kg	RB-0	0.2		AA-15	ND		DD-6	0.1		BB-24	ND			
	SAMPLES			RB-1	1.4		AA-20	ND		DD-11	ND		BB-25	0.3			
				RB-6	1.4		A-20			DD-15	ND		BB-26	ND			
				RB-10	0.6		K-16	ND		K-23	5.2						
				RB-11	ND		Q-20	ND		K-24	0.2						
				RB-12	1.1		K-19	ND		A-23	0.3		DD-6		(DUP)		
				RB-15	18.9		BB-0	0.5		A-25	0.3		W-20		(DUP)		
		ORIGINAL (Red)		CHAT A-10	ND		CC-0	ND		T-22 CHAT	0.01						
				CORE A-10	1.5		CC-6	0.2		T-22 CORE	.11						
				A-11	1.4		CC-11	0.4		U-21	0.8						
				A-12	0.4		CC-15	0.5		W-20	17						
				AA-0	0.7		CC-20	0.6		AA-23	0.1						
				AA-6	0.3		CC-21	0.4		AA-26							
				AA-11	ND		DD-0	ND		BB-23	ND						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCATIONS
OFF-SITE SAMPLES

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
RB-0	N-0	W-RB	Core Only	8/29/83	1735	Joe Wolfsberger	0-12"	0-2"	Yes	J. Case	
RB-1	N-250	W-RB	Core Only	8/29/83	1725	Jim Eckel	0-8"	0-2"	Yes	J. Case	
RB-6	N-500	W-RB	Core Only	8/29/83	1715	Joe Wolfsberger	0-7"	0-2"	Yes	J. Case	
RB-10	N-750	W-RB	Core Only	8/29/83	1745	Jim Eckel	0-7-1/2"	0-2"	Yes	J. Case	
RB-11	N-1000	W-RB	Core Only	8/30/83	1055	Joe Wolfsberger	0-6-1/2"	0-2"	Yes	J. Case	
RB-12	N-1250	W-RB	Core Only	8/30/83	1107	Jim Eckel	0-7"	0-2"	Yes	J. Case	
RB-15	N-1500	W-RB	Core Only	8/30/83	1116	Jim Eckel	0-10"	0-2"	Yes	J. Case	
A-10	N-750	W-0	Chat Core	8/30/83	1032	Jim Eckel	2" 0-9-1/4"	2" 0-9-1/4"	Yes	J. Case	0-9-1/4" Br. Moist, compact soil
A-11	N-1000	W-0	Core Only	8/29/83	1120	Joe Wolfsberger	0-12"	0-12"	Yes	J. Case	0-6" Misc. Full 6"-12" Br. Moist Clay
A-12	N-1250	W-0	Core Only	8/29/83	1105	Joe Wolfsberger	0-10"	0-10"	Yes	J. Case	0-2" topsoil 2"-10" Br. Moist clay
AA-0	N-0	E-500	Core Only	8/29/83	1630	Tom Hoogheem	0-7"	0-2"	Yes	R. Cromer	Sample taken along RR right-of-way
AA-6	N-500	E-565.4	Core Only	8/29/83	1710	Tom Hoogheem	0-7"	0-2"	Yes	R. Cromer	Sample taken by Hwy. Maint. Bldg.
AA-11	N-1000	E-500	Core Only	8/29/83	1740	Mark Johnson	0-10"	0-2"	Yes	R. Cromer	

Original (Red)

SAMPLE LOCATIONS
OFF-SITE SAMPLES

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
AA-15	N-1500	E-500	Core Only	8/29/83	1750	Mark Johnson	0-10"	0-2"	Yes	R. Cromer	Sample taken by Hecks warehouse
AA-20	N-2000	E-500	Core Only	8/29/83	1725	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	
A-20	N-2000	E-0	Core Only	8/30/83	0850	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	
K-16	N-1650	W-500	Core Only	8/30/83	0805	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	
Q-20	N-2000	W-1000	Core Only	8/30/83	0820	Mark Johnson	0-9"	0-2"	Yes	R. Cromer	
K-19	N-2250	W-500	Core Only	8/30/83	0840	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	
BB-0	N-0	E-1000	Core Only	8/29/83	1615	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	Sample taken along entrance road
CC-O	N-0	E-1675	Core Only	8/29/83	1525	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	Sample taken at corner of entrance road and Rt. 25
CC-6	N-500	E-1700	Core Only	8/29/83	1500	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	Sample taken in medial strip of Rt. 25
CC-11	N-1000	E-1675	Core Only	8/29/83	1420	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	Sample taken along RR right-of-way
CC-15	N-1500	E-1675	Core Only	8/29/83	1315	Tom Hoogheem	0-8-1/2"	0-2"	Yes	R. Cromer	Sample taken along RR right-of way
CC-20	N-2000	E-1675	Core Only	8/29/83	1335	Tom Hoogheem	0-11"	0-2"	Yes	R. Cromer	Sample taken along RR right-of-way
CC-21	N-2500	E-1675	Core Only	8/29/83	1345	Tom Hoogheem	0-11"	0-2"	Yes	R. Cromer	Sample taken along RR right-of-way

ORIGINAL (Red)

SAMPLE LOCATIONS
OFF-SITE SAMPLES

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
DD-0	N-0	E-2000	Core Only	8/29/83	1515	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	Sample taken behind DOT's resale shop
DD-6	N-500	E-2000	Core Only	8/29/83	1435	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	Samples taken behind Nation
DD-6(Dup)	N-500	E-2000	Core Only	8/29/83	1435	Tom Hoogheem	0-10"	0-2"	Yes	R. Cromer	Insurance office
DD-11	N-1000	E-2000	Core Only	8/29/83	1405	Tom Hoogheem	0-7"	0-2"	Yes	R. Cromer	Sample taken behind Gino's Pizza Shop
DD-15	N-1500	E-2000	Core Only	8/29/83	1300	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	Sample taken at edge of parking lot by Chevy dealer
K-23	N-3500	W-500	Core Only	8/30/83	1020	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	Sample taken on edge of roac WWTP
K-24	N-4000	W-400	Core Only	8/30/83	1150	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	
A-23	N-3500	E-0	Core Only	8/30/83	1030	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	Sample taken on edge of road to WWTP
A-25	N-4500	E-0	Core Only	8/30/83	1200	Jim Eckel	0-9-1/2"	0-2"	Yes	J. Case	
T-22	N-3000	W-1100	Chat Core	8/30/83	1005 1010	Mark Johnson	3" 0-7"	3" 0-2"	Yes	R. Cromer	Samples taken on edge of road to WWTP
U-21	N-2500	W-1300	Chat Core	8/30/83	0950 0955	Tom Hoogheem	1" 0-8"	1" 0-2"	Yes	R. Cromer	Samples taken on edge of road to WWTP

ORIGINAL (Red)

SAMPLE LOCATIONS
OFF-SITE SAMPLES

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
W-20	N-2000	W-1500	Core Only	8/30/83	0935	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	Samples taken on edge of road to WWTP
W-20(Dup)	N-2000	W-1500	Core Only	8/30/83	0940	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	
AA-23	N-3300	E-500	Core Only	8/30/83	1040	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	
AA-26	N-5000	E-500	Core Only	8/30/83	1151	Joe Wolfsberger	0-10-1/2"	0-2"	Yes	J. Case	
BB-23	N-3500	E-1000	Core Only	8/30/83	1115	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	
BB-24	N-4000	E-1000	Core Only	8/30/83	1120	Tom Hoogheem	0-8"	0-2"	Yes	R. Cromer	
BB-25	N-4500	E-1000	Core Only	8/30/83	1135	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	
BB-26	N-5000	E-750	Core Only	8/30/83	1140	Jim Eckel	0-8-3/4"	0-2"	Yes	J. Case	

ORIGINAL (Red)

2.4.2 250 Foot Grid On Site

ORIGINAL
(Red)

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name MONSANTO

Date of Sample 8/29 THRU 9/28/8

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT				Remarks
	250' GRID	SOL	µg/kg	A-0	1.5		P-11	1.3		W-11	0.3		W-10		(DUP)			
	SAMPLES			A-15 (0-6")	2.3		Q-0 (CHAT)	131		W-12	ND							
	ON-SITE			A-15 (6"-10")	0.4		Q-0 (0-6")	137		Y-0 (0-6")	4.2							
				F-0	1.3		Q-0 (6"-9½")	6.4		Y-0 (6"-11½")	ND							
				F-11 (CHAT)	0.6		Q-12	ND		Y-1 (CHAT)	0.02							
				F-11 (0-6")	0.7		T-0	ND		Y-1 (0-4")	0.8							
				F-12	ND		T-1	ND		Y-6 CHAT								
				F-15 (CHAT)	0.01		T-6 (0-6")	1.2										
				F-15 (0-6")	0.7		T-11	ND										
				F-15 (6"-12")	0.1		W-0	ND										
				K-0	2.0		W-1	ND										
				K-10	ND		W-10 (CHAT)	0.9										
				K-12	0.2		W-10 (0-6")	ND										
				P-0	0.9		W-10 (6"-10")	ND										

ORIGINAL (Red)

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCATIONS
250 FOOT GRID SAMPLES
ON-SITE

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
A-0	N-0	W-0	Chat Core	8/29/83	1305	Jim Eckel	1" 0-8-1/4"	—	No	J. Case	Sample very dry Chat throughout
A-15	N-1500	W-0	Core Only	8/29/83	1045	Tom Hoogheem	0-10"	—	No	J. Case	
F-0	N-0	W-250	Core Only	8/29/83	1325	Jim Eckel	0-10"	—	No	J. Case	
F-11	N-1000	W-250	Core Only	8/30/83	1001	Joe Wolfsberger	0-8-1/2"	—	No	J. Case	
F-12	N-1250	W-250	Core Only	8/29/83	1023	Tom Hoogheem	0-10"	—	No	J. Case	
F-15	N-1500	W-250	Chat 24" core	8/29/83	1010	Joe Wolfsberger	1" 0-17"	1" 0-17"	Yes	J. Case	0-8" dry, compacted fill 8-17" Br. Moist very stiff cla
K-0	N-0	W-500	Chat 24" core	8/29/83	1340	Jim Eckel	2" 0-19"	2" 0-19"	Yes	J. Case	0-19" Dr. Br. moist clay
K-10	N-750	W-500	Chat Core	8/30/83	0947	Jim Eckel	1-1/4" 0-4"	— —	No	J. Case	
K-12	N-1250	W-500	Core Only	8/30/83	0753	Joe Wolfsberger	0-9-1/2"	—	No	J. Case	
P-0	N-0	W-750	Core Only	8/29/83	1420	Joe Wolfsberger	0-10"	—	No	J. Case	
P-11	N-1000	W-750	Core Only	8/30/83	0941	Joe Wolfsberger	0-8-1/2"	—	No	J. Case	Sample taken 2' east of light standard
Q-0	N-0	W-1000	Chat Core	8/29/83	1430	Jim Eckel	1" 0-9-1/2"	— —	No	J. Case	
Q-12	N-1250	W-1000	Chat Core	8/30/83	0935	Jim Eckel	1" 0-9-1/2"	— —	No	J. Case	

ORIGINAL
(Red)

SAMPLE LOCATIONS
250 FOOT GRID SAMPLES
ON-SITE

Sample #	Coordinates		Type of Sample Off-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
T-0	N-0	W-1250	Chat Core	8/29/83	1445	Jim Eckel	2" 0-8-1/2"	— —	No	J. Case	
T-1	N-250	W-1250	Chat Core	8/29/83	1610	Jim Eckel	2" 0-9-1/2"	2" 0-9-1/2"	Yes Yes	J. Case	0-9-1/2" black wet coal-like material
T-6	N-500	W-1250	Core Only	8/29/83	1700	Jim Eckel	0-9-1/2"	—	No	J. Case	
T-11	N-1000	W-1250	Chat Core	8/30/83	0925	Jim Eckel	2" 0-8-1/4"	— —	No	J. Case	
W-0	N-0	W-1500	Core Only	8/29/83	1455	Jim Eckel	0-10"	—	No	J. Case	Black coal-like material
W-1	N-250	W-1500	Core Only	8/29/83	1600	Joe Wolfsberger	0-10-1/4"	—	No	J. Case	
W-10	N-750	W-1500	Chat Core	8/30/83	0840	Jim Eckel	1-1/2" 0-10"	—	No	J. Case	
W-10(Dup)	N-750	W-1500	Chat Core	8/30/83	0840	Jim Eckel	1-1/2" 0-9"	— -	No	J. Case	
W-11	N-1000	W-1500	Chat Core	8/30/83	0903	Jim Eckel	2" 0-8-3/4"	—	No	J. Case	
W-12	N-1250	W-1500	Core Only	8/30/83	0909	Jim Eckel	0-9"	0-9"	Yes	J. Case	0-9" Lt. br. moist soil with some Chat mixed in
Y-0	N-0	W-1750	Core Only	8/29/93	1505	Joe Wolfsberger	0-11-1/2"	—	No	J. Case	
Y-1	N-250	W-1750	Chat Core	8/29/83	1535	Joe Wolfsberger	2" 0-4"	—	No	J. Case	Refusal at 4"
Y-6	N-500	W-1750	Chat 24" Core	8/30/83	0815	Jim Eckel	1" 0-17"	1" 0-17"	Yes	J. Case	0-17" Dk. br. moist soil

ORIGINAL (Red)

2.4.3 100 Foot Grid On Site

ORIGINAL
(Red)

TDD Number F3-8306-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Monsanto

Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Sample #	Result		Sample #	Result		Sample #	Result		Sample #	Result				Remarks
	SAMPLES	SOL	US/Kg	R-14 Chet	ND		X-16 Surf	14.6		X-17 (0-6")	25.4 26.0 17.7		X-14 Chet	ND				
	100' Grid			R-14 Core	ND		X-16 (0-6")	14		X-17 (6-9¾)	2.8		X-14 Core	ND				
	ON-SITE			R-15 (0-12")	ND		X-16 (6-10")	114		S-18 (0-6")	2.0		X-15 Chet					
				R-15 (12-20")	ND		R-17 (0-6")	1.0		S-18 (6-7¾)	10.3		X-15 (0-6")	4.8				
				R-16 Chet	ND		S-17 Chet	ND		U-18 (0-6")	0.9		X-15 (6-9")	2.5				
				R-16 Core			S-17 (0-5")	2.6		V-18 Chet	ND							
				S-16 Core	3.7, 12 (0-5")		S-13 Chet			V-18 Core	0.4 (0-6")							
				S-16 (0-6")	1.5, 1.6, 1.6, 1.2		S-13 (0-16")	0.9		V-18	0.7 (0-6")							
	ORIGINAL (Red)			S-16 (6-11")	0.8		U-17 Chet			V-18		(DUP)						
				U-16 Core	1.0		U-17 (0-6")	5.0		U-13 Chet								
				U-16 Core	1.0		U-17 (6-7¾")	2.5		U-13 (0-6")	4.8							
				V-16 Chet	ND		V-17 Chet	ND		V-13 Chet								
				V-16 24" Core	0.1 (0-6")		V-17 Core	ND ND		V-13 Surf	6.1							
				X-16 Chet	ND		X-17 Chet			V-13 (0-6")	1.1							

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Qualification of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCATION
100 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
R-14	N-1400	W-1120	Chat Core	8/30/83	1728	Jim Eckel	1" 0-6-1/2"	— —	No	J. Case	
R-15	N-1500	W-1120	24" Core Only	8/30/83	1742	Jim Eckel	0-20"	0-20"	Yes	J. Case	0-12" Dark fill 12-20" Br. silty clay. Sample location is located in a pile of railroad ties, probably soak in creosote or pentachlorophe
R-16	N-1600	W-1120	Chat Core	8/30/83	1730	Tom Hoogheem	4" 0-3"	— —	No	R. Cromer	Refusal at 3" Misc. fill material
S-16	N-1600	W-1220	Core Only	8/30/83	1720	Tom Hoogheem	0-11"		No	R. Cromer	0-11" fill
U-16	N-1600	W-1320	Core Only	8/30/83	1700	Tom Hoogheem	0-12"	0-12"	Yes	R. Cromer	0-6" Br. moist silty clay 6-12" Bk. tar-like substance with some resin type material
V-16	N-1600	W-1420	Chat 24" Core	8/30/83	1520	Tom Hoogheem	1/2" 0-17"	1/2" 0-17"	Yes	R. Cromer	0-17" Br. & gray clayey silty some cinders (fill) resin type material at 12". Blue clay-like material with some glass mixed in with sample 12-17"
X-16	N-1600	W-1520	Chat Core	8/30/83	1505	Tom Hoogheem	3" 0-10"	— —	No	R. Cromer	0-10" Misc. cinder fill
R-17	N-1700	W-1120	Core Only	8/30/83	1603	Joe Wolfsberger	0-9-1/2"	0-9-1/2"	Yes	J. Case	0-6" Br. moist compact soil 6-9-1/2" Br. moist soil with s oily matter.
S-17	N-1700	W-1220	Chat Core	8/30/83	1546	Jim Eckel	2" 0-5"	— —	No	J. Case	Refusal at 5"

SAMPLE LOCATIONS
100 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
S-13	N-1350	W-1220	Chat Core	8/30/83	1716	Joe Wolfsberger	1" 0-6"	-- --	No	J. Case	White powder in Chat Refusal at 6"
U-17	N-1700	W-1320	Chat Core	8/30/83	1533	Joe Wolfsberger	2" 0-7-1/4"	-- --	No	J. Case	
V-17	N-1700	W-1420	Chat Core	8/30/83	1520	Jim Eckel	1" 0-6-1/4"	-- --	No	J. Case	
X-17	N-1700	W-1520	Chat Core	8/30/83	1507	Jim Eckel	1/2" 0-9-1/4"	-- --	No	J. Case	
S-18	N-1800	W-1220	Core Only	8/30/83	1438	Jim Eckel	0-7-3/4"	--	No	J. Case	
U-18	N-1800	W-1320	Core Only	8/30/83	1448	Jim Eckel	0-9-3/4"	--	No	J. Case	
V-18	N-1800	W-1420	Chat Core	8/30/83	1452	Joe Wolfsberger	2" 0-6-1/4"	-- --	No	J. Case	
V-18(Dup)	N-1800	W-1420	Chat Core	8/30/83	1524	Joe Wolfsberger	2" 0-6-1/4"	-- --	No	J. Case	
U-13	N1350	W-1320	Chat Core	8/30/83	1705	Jim Eckel	2" 0-3-1/2"	-- --	No	J. Case	Refusal at 3-1/2"
V-13	N-1350	W-1420	Chat Core	8/30/83	1656	Jim Eckel	2" 0-8-1/2"	-- --	No	J. Case	
X-14	N-1400	W-1520	Chat Core	8/30/83	1455	Tom Hoogheem	1" 0-4"	-- --	No	R. Cromer	Refusal at 4" on misc. fill material
X-15	N-1500	W-1520	Chat Core	8/30/83	1445	Tom Hoogheem	2" 0-9"	-- --	No	R. Cromer	Cinder fill material

ORIGINAL (Red)

2.4.4 50 Foot Grid On Site

ORIGINAL
(Red)

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name MONSANTO

Date of Sample 8-29 Thru 9-28-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT			Remarks
	50' Grid	SOL	µg/kg	A-1 Chat	ND		A-6 Chat			B-2 (6-8")	3.3		B-7 (0-6")	0.5			
	Samples			A-1 (0-6")	6.6		A-6 (0-6")	2.2		B-3 Chat			B-7 (6-9")				
	ON-SITE			A-1 (6-12")	1.9		A-6 (6-10")	ND		B-3 Surf	0.14		B-8 Chat	ND			
				A-2 Chat			A-7 Chat	ND		B-3 (0-6")	2.4, 6.1		B-8 (0-6")	2.7			
				A-2 Surf	ND 0.1		A-7 (0-6")	8.0, 7.3		B-3 (6-12")	8.6		B-8 (6-8")	0.9			
				A-2 (0-6")	5.4, 2.8		A-7 (6-9")	10.7		B-4 Chat			C-8 Chat				
				A-2 (6-11")	ND		A-8 Chat			B-4 (0-6")	8.2		C-8 (0-6")	1.2			
				A-3 Chat	ND		A-8 (0-6")	2.7		B-4 (6-9")	2.7		D-1 Chat	ND			
				A-3 (0-6")	2.6, 2.76		A-8 (6-10")	ND		B-5 (0-6")	6.0		D-1 (0-45")	1.4			
				A-3 (6-12")	0.1		B-1 Chat			B-5 (6-8")	0.3		D-2 Chat				
				A-4 Chat			B-1 Surf	ND, 0.03		B-6 Chat	0.08, 0.10		D-2 (0-6")	8.8			
				A-4 (0-6")	1.7		B-1 (0-6")	1.1		B-6 (0-6")	7.9		D-2 (6-7½")	1.1			
				A-5 Chat	0.2		B-2 Chat			B-6 (6-9")	3.7, 3.5		D-3 Chat				
				A-5 (0-6")	1.3		B-2 (0-6")	4.6		B-7 Chat			D-3 Surf	0.08			

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of qu[illegible] qualitative significance based upon quality assurance review of data.

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Monsanto

Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT			Remarks
	50' Grid	SOL	ug/kg	D-3 (0-6")			E-2 (0-6")	17.9 12		E-6 (0-6")			F-6 Chat				
	SAMPLES			D-3 (6-12")			E-2 (6-12)	1.8		E-6 (6-12")			F-6 (0-6")	373, 227			
	ON-SITE			D-4 Chat			E-3 Chat	ND		E-8 Chat			F-6 (6-7½")	13.0			
				D-4 (0-6")	59, 82		E-3 (0-6")	17.9 11 14		E-8 (0-6")	1.0		G-2 Chat				
				D-4 (6-8½)	215		E-4 Chat			F-2 Chat	0.3		G-2 (0-6")	ND, ND, 1.6			
				D-5 Chat			E-4 (0-6")	2.0		F-2 Surf	4.3		G-8 Chat				
				D-5 Surf	0.11		E-5 Chat	ND		F-2 (0-6")	3.6, 2.5		G-8 Surf	0.02			
				D-5 (0-6")	4.7		E-5 (0-6")	75.1 63. 76 73		F-2 (6-6½")	2.7, 1.6		G-8 (0-6")	2.0 2.3			
				D-5 (6-7½")	27.3		E-5 (6-12")	106		F-4 Chat			H-3 Chat				
				D-8 Chat			E-5 (12-17")	174		F-4 (0-6")	28		H-3 Surf	0.03			
				D-8 (0-6")	28 32 44		E-5 (12-17")	17/.69		F-4 (6-9")			H-3 (0-6")	1.2			
				D-8 (6-7½")	19.7 17.4		E-6 Chat	2.2 0.9		F-5 Chat	ND		H-4 Chat				
				E-1 Chat	ND		E-6 (0-5")	62.6, 109, 63, 120, 59, 120		F-5 (0-6")	318, 329 276, 310		H-4 (0-6")	326 111			
				E-2 Chat			E-6 Chat		DUP	F-5 (6-8")	2358		H-4 (6-12")	7.7 7.4			

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name MONSANTO

Date of Sample 8-29 Thru 9-28-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT		SAMPLE #	RESULT			Remarks
	50' Grid	SOL	ug/Kg	I-3 Chat			J-4 (0-6")	4.2		K-2 Chat	ND		M-4 (0-6")	6.9 14			
	SAMPLES			I-3 (0-6")	ND ND		J-4 (6-9")	10.5		K-4 Chat			M-4 (6-9")				
	ON-SITE			I-3 (6-8½")			J-5 Chat			K-4 Surf	0.13		M-4 Chat		Dup		
				I-4 (0-6")	2.0		J-5 (0-6")	4.7		K-4 (0-6")	5.4, 5.4		M-4 Surf		Dup		
				I-4 (6-10")	12.65		J-5 (6-9")			K-5 Chat			M-4 (0-6")		Dup		
				J-1 Chat			J-9 Chat	ND		K-5 (0-3")	2.0		M-4 (6-9")		Dup		
				J-1 (0-6")	ND		J-9 (0-6")	9.2		K-9 Chat	ND, 0.2		M-5 Chat				
				J-1 (6-18")			J-9 (6-8")	7.0		K-9 (0-6")	ND		M-5 (0-6")	2.5 3.8 9.0			
				J-2 Chat	ND		K-3 Chat	0.18 0.29		K-9 (6-12)			M-5 (6-9½")	4.3 2.4			
				J-2 (0-4")	76.0 80.0 76.0		K-3 (0-6")	1040 1040 1080		L-8 Chat			M-9 Chat	ND			
				J-3 Chat			K-3 (6-7¾")	852		L-8 (0-6")	0.30		M-9 (0-6")	ND ND			
				J-3 (0-6")	119, 190, 110, 135 136		K-3 Chat		Dup	L-8 (6-9")			M-9 (6-9")				
				J-3 (6-9½")	35.2		K-3 (0-6")		Dup	M-4 Chat	ND		N-1 Chat				
				J-4 Chat	0.4		K-3 (6-7¾")		Dup	M-4 Surf	0.44 0.34		N-1 (0-6")	1.2			

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-6308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Monsanto

Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	RESULT		SAMPLE #	RESULT										Remarks
	50' Grid	SOL	µg/Kg	N-1 (6-12")			P-4 (0-6")	ND										
	SAMPLES			N-2 Chat	ND 0.22 ND		P-4 (6-10")											
	ON-SITE			N-2 (0-6")	2.5		P-5 Chat	ND										
				N-2 (6"-7')	7.7		P-5 (0-6")	ND										
				N-3 Surf	ND ND		P-5 (6-10")											
				O-3 (0-6")	1.4		P-6 Chat											
				O-5 Chat			P-6 (0-6")	ND										
				O-5 (0-6")	4.2 3.15		P-6 (6-12")											
	ORIGINAL (RED)			O-5 (6-8½")	3.82		P-9 Chat	ND ND										
				O-6 Chat			P-9 (0-6")	ND 0.2 0.3										
				O-6 Surf	0.39		TF-0 Field Blank											
				O-6 (0-6")	2.5 3.37													
				O-6 (0-12")	1.3													
				P-4 Chat														

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
A-1	N-250	W-0	Chat 24" Core	8/31/83	1355	Tom Hoogheem	1/2" 0-21"	1/2" 0-21"	Yes	R. Cromer	0-10" fill 10-21" Br. moist clay
A-2	N-300	W-0	Chat Core	8/31/83	1215	Tom Hoogheem	1" 0-11"	-- --	No	R. Cromer	
A-3	N-350	W-0	Chat 24" Core	8/31/83	1130	Tom Hoogheem	2" 0-23"	2" 0-23"	Yes	R. Cromer	0-7" fill 7-23" Br. moist silty clay
A-4	N-400	W-0	Chat Core	8/31/83	1115	Tom Hoogheem	1/2" 0-11"	- --	No	R. Cromer	
A-5	N-450	W-0	Chat Core	8/31/83	0930	Tom Hoogheem	1/2" 0-12"	1/2" 0-12"	Yes	R. Cromer	0-4" Gry. & Br. fill 4-12" Br. & red clay
A-6	N-500	W-0	Chat Core	8/31/83	0910	Tom Hoogheem	1" 0-10"	-- --	No	R. Cromer	
A-7	N-565	W-0	Chat Core	8/31/83	0835	Tom Hoogheem	1/2" 0-9"	1/2" 0-9"	Yes	R. Cromer	0-9" Br. & Gry. Fill
A-8	N-600	W-0	Chat Core	8/31/83	0805	Mark Johnson	1" 0-10"	-- --	No	R. Cromer	
B-1	N-250	W-50	Chat Core	8/31/83	1415	Tom Hoogheem	1" 0-11"	-- --	No	R. Cromer	
B-2	N-300	W-50	Chat Core	8/31/83	1200	Tom Hoogheem	1" 0-8"	-- --	No	R. Cromer	
B-3	N-350	W-50	Chat Core	8/31/83	1155	Mark Johnson	1" 0-10"	-- --	No	R. Cromer	
B-4	N-400	W-50	Chat Core	8/31/83	1120	Tom Hoogheem	1/2" 0-9"	-- --	No	R. Cromer	

ORIGINAL (Red)

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
B-5	N-450	W-50	Core Only	8/31/83	0950	Mark Johnson	0-8"	--	No	R. Cromer	
B-6	N-500	W-50	Chat Core	8/31/83	0920	Tom Hoogheem	1/2" 0-9"	-- --	No	R. Cromer	
B-7	N-565	W-50	Chat Core	8/31/83	0855	Tom Hoogheem	1/2" 0-9"	1/2" 0-9"	Yes	R. Cromer	0-9" Gray dry fill
B-8	N-600	W-50	Chat Core	8/31/83	0820	Mark Johnson	1" 0-8"	-- --	No	R. Cromer	
C-8	N-600	W-100	Chat Core	8/31/83	1143	Jim Eckel	2" 0-6"	-- --	No	J. Case	
D-1	N-250	W-150	Chat Core	8/31/83	0804	Jim Eckel	2" 0-4-1/2"	-- --	No	J. Case	Refusal at 4-1/2"
D-2	N-300	W-150	Chat Core	8/31/83	0813	Jim Eckel	2" 0-7-1/4"	-- --	No	J. Case	
D-3	N-350	W-150	Chat Core	8/31/83	0930	Jim Eckel	1/2" 0-9-1/2"	-- --	No	J. Case	
D-4	N-400	W-150	Chat Core	8/31/83	0921	Joe Wolfsberger	2" 0-8-1/2"	-- --	No	J. Case	
D-5	N-450	W-150	Chat Core	8/31/83	0914	Jim Eckel	2" 0-7-1/2"	-- --	No	J. Case	
D-8	N-600	W-150	Chat Core	8/31/83	1132	Jim Eckel	2" 0-7-1/2"	-- --	No	J. Case	

ORIGINAL
(Red)

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
E-1	N-250	W-200	Chat Only	8/31/83	0820	Joe Wolfsberger	1"	—	No	J. Case	Unable to drive core becaus concrete pad
E-2	N-300	W-200	Chat 24" Core	8/31/83	0828	Jim Eckel	2" 0-14"	2" 0-14"	Yes	J. Case	Sampling point offset 10' ea 0-6" fill 6-12" fill & br. silty clay 12-14" br. clay
E-3	N-350	W-200	Chat Core	8/31/83	0939	Joe Wolfsberger	2" 0-8"	— —	No	J. Case	
E-4	N-400	W-200	Chat Core	8/31/83	0944	Jim Eckel	2" 0-6"	2" 0-6"	Yes	J. Case	Refusal at 6"
E-5	N-450	W-200	Chat 24" Core	8/31/83	0956	Jim Eckel	2" 0-17"	2" 0-17"	Yes	J. Case	0-6" fill 6-17" br. silty clay
E-6	N-500	W-200	Chat Core	8/31/83	1111	Joe Wolfsberger	1" 0-5"	—	No	J. Case	
E-6(Dup)	N-500	W-200	Chat Core	8/31/83	1111	Joe Wolfsberger	1" 0-6-1/2"	— —	No	J. Case	
E-8	N-600	W-200	Chat Core	8/31/83	1123	Joe Wolfsberger	2" 0-6"	— —	No	J. Case	
F-2	N-300	W-250	Chat Core	8/31/83	1419	Joe Wolfsberger	2" 0-6-1/2"	— —	No	J. Case	
F-4	N-400	W-250	Chat Core	8/31/83	1412	Jim Eckel	2" 0-9"	— —	No	J. Case	

ORIGINAL (Red)

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
F-5	N-450	W-250	Chat Core	8/31/83	1409	Joe Wolfsberger	2" 0-8"	-- --	No	J. Case	
F-6	N-500	W-250	Chat Core	8/31/83	1356	Jim Eckel	2" 0-7-1/4"	-- --	No	J. Case	
G-2	N-300	W-300	Chat Core	8/31/83	1426	Jim Eckel	1/2" 0-7-1/4"	-- --	No	J. Case	Sample taken between plant railroad tracks
G-8	N-600	W-300	Chat Core	8/31/83	1150	Joe Wolfsberger	2" 0-6"	-- --	No	J. Case	Sample taken between plant railroad tracks
H-3	N-350	W-350	Chat Core	8/31/83	1430	Tom Hoogheem	1/2" 0-8"	-- --	No	R. Cromer	
H-4	N-400	W-350	Chat 24" Core	8/31/83	1440	Tom Hoogheem	1" 0-12"	1" 0-12"	Yes	R. Cromer	Refusal at 12" 0-3" br. fill 3-8" black oily substance with 2" of sand on top 8-12" gray clay
I-3	N-350	W-400	Chat Core	8/31/83	1515	Mark Johnson	2" 0-8-1/2"	2" 0-8-1/2"	Yes	R. Cromer	0-8-1/2" fill
I-4	N-400	W-400	Core Only	8/31/83	1500	Mark Johnson	0-10"	—	No	R. Cromer	Very loose wet fill
J-1	N-250	W-450	Chat 24" Core	8/31/83	1615	Jim Eckel	2" 0-18"	2" 0-18"	Yes	J. Case	0-6" dk. br. sandy soil 6-18" br. silty clay
J-2	N-300	W-450	Chat Core	8/31/83	1625	Tom Hoogheem	2-1/2" 0-4"	-- --	No	R. Cromer	Refusal at 4" on asphalt
J-3	N-350	W-450	Chat Core	8/31/83	1615	Tom Hoogheem	1" 0-9-1/2"	-- --	No	R. Cromer	

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
J-4	N-400	W-450	Chat Core	8/31/83	1555	Tom Hoogheem	1/2" 0-9"	-- --	No	R. Cromer	
J-5	N-450	W-450	Chat Core	8/31/83	1550	Mark Johnson	1" 0-9"	-- --	No	R. Cromer	
J-9	N-650	W-450	Chat Core	8/31/83	1545	Joe Wolfsberger	2" 0-8"	-- --	No	J. Case	
K-3	N-350	W-500	Chat Core	8/31/83	1450	Jim Eckel	1" 0-7-3/4"	-- --	No	J. Case	
K-3(Dup)	N-350	W-500	Chat Core	8/31/83	1450	Jim Eckel	1" 0-6"	-- --	No	J. Case	
K-2	N-300	W-500	Chat Only	8/31/83	1440	Jim Eckel	1"	--	No	J. Case	Asphalt pad under Chat
K-4	N-400	W-500	Chat Core	8/31/83	1515	Joe Wolfsberger	1" 0-2"	-- --	No	J. Case	
K-5	N-450	W-500	Chat Core	8/31/83	1523	Joe Wolfsberger	2" 0-3"	-- --	No	J. Case	
K-9	N-650	W-500	Chat Core	8/31/83	1555	Jim Eckel	1" 0-9"	-- --	No	J. Case	
L-8	N-600	W-550	Chat Core	9/1/83	0805	Tom Hoogheem	1" 0-9"	-- --	No	R. Cromer	
M-4	N-400	W-600	Chat Core	9/1/83	0840	Jim Eckel	1" 0-9"	-- --	No	J. Case	
M-4(Dup)	N-400	W-600	Chat Core	9/1/83	0845	Jim Eckel	1" 0-7-1/2"	-- --	No	J. Case	
M-5	N-450	W-600	Chat Core	9/1/83	0855	Jim Eckel	1" 0-9-1/4"	1" 0-9-1/4"	Yes	J. Case	0-6" fill material 6-9-1/4" fill and br. silty clay

ORIGINAL (Red)

SAMPLE LOCATIONS
50 FOOT GRID
ON-SITE

Sample #	Coordinates		Type of Sample On-site	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
M-9	N-650	W-600	Chat Core	9/1/83	0755	Tom Hoogheem	1" 0-9"	-- --	No	R. Cromer	
N-1	N-250	W-650	Chat Core	9/1/83	0742	Joe Wolfsberger	1-1/2" 0-9-1/2"	-- --	No	J. Case	
N-2	N-300	W-650	Chat Core	9/1/83	0754	Jim Eckel	0-2" 0-7"	-- --	No	J. Case	Sample taken between plant railroad tracks
N-3	N-350	W-650	Core Only	9/1/83	0803	Jim Eckel	0-4-1/2"				
O-3	N-350	W-700	Core Only	9/1/83	0812	Joe Wolfsberger	0-10"		No	J. Case	Sample taken between plant railroad tracks
O-5	N-450	W-700	Chat Core	9/1/83	0905	Mark Johnson	2" 0-8-1/2"	-- --	No	R. Cromer	
O-6	N-500	W-700	Chat 24" Core	9/1/83	0840	Tom Hoogheem	1/2" 0-23"	1/2" 0-23"	Yes	R. Cromer	Sample taken inside substatic 0-8" fill 8-23" br. moist clay
P-4	N-400	W-750	Chat Core	9/1/83	0815	Tom Hoogheem	1" 0-10"	— —	No	R. Cromer	
P-5	N-450	W-750	Chat Core	9/1/83	0825	Tom Hoogheem	2" 0-10"	— —	No	R. Cromer	
P-6	N-500	W-750	Chat Core	9/1/83	0830	Tom Hoogheem	1" 0-8"	— --	No	R. Cromer	
P-9	N-650	W-750	Chat Core	9/1/83	0745	Tom Hoogheem	4" 0-6"	-- —	No	R. Cromer	
TF-0			Field Blank	9/1/83	1200	Tom Hoogheem	--	--	Yes	R. Cromer	Pottery clay - provided by Monsanto's Dayton Lab

2.4.5 50 Foot Grid - Waste Water Treatment Plant Area

ORIGINAL
(Red)

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

TDD Number F3-8308-31
EPA Number

☒ Organic ☐ Inorganic

Site Name MONSANTO
Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	SAMPLE #	Results		SAMPLE #	Results									Remarks
	WASTE WATER	SOL	ug/Kg	TE-1	12.7		(0-5") TA-0										
	TREATMENT			TE-2	11.6		TA-1	11.0, 0.3									
	PLANT			TE-3	10.9		TA-1		Dup								
				TE-4	10.3, 1.1		TA-2	10.8									
				TD-5	11.8		TA-3	10.3									
				TD-3	110		TA-4	ND									
				TD-2	10.8		TB-0 Chat	0.01, 0.03, ND									
				TD-1	16.9, 7.0		TB-0 (0-4½")										
				TC-4	13.4 6.9 4.0		TC-0 Chat	ND									
				TC-3	14.6		TC-0 (0-2")	ND									
				TB-3	ND		TB-1 (0-2")	14.6									
				TC-2 (0-6")	25.6 12												
				TC-2 (6-9")	5.3												
				TA-0 Chat	ND ND												

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCA NS
WASTE WATER TREATMENT PLANT

Sample #	Type of Sample WWTP	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
TE-1	Core Only	9/1/83	1000	Jim Eckel	0-4-3/4"	0-2"	Yes	J. Case	
TE-2	Core Only	9/1/83	1016	Jim Eckel	0-7-1/2"	0-2"	Yes	J. Case	
TE-3	Core Only	9/1/83	1023	Joe Wolfsberger	0-7"	0-2"	Yes	J. Case	
TE-4	Core Only	9/1/83	1027	Jim Eckel	0-8-1/2"	0-2	Yes	J. Case	
TD-5	Core Only	9/1/83	1033	Jim Eckel	0-9"	0-2"	Yes	J. Case	Proposed well
TD-3	Core Only	9/1/83	1040	Jim Eckel Joe Wolfsberger	0-9"	0-2"	Yes	J. Case	Proposed well
TD-2	Core Only	9/1/83	1045	Jim Eckel	0-6-3/4"	0-2"	Yes	J. Case	
TD-1	Core Only	9/1/83	1057	Joe Wolfsberger	0-7-1/4"	0-2"	Yes	J. Case	Proposed well
TC-4	Core Only	9/1/83	1105	Jim Eckel	0-9"	0-2"	Yes	J. Case	
TC-3	Core Only	9/1/83	1117	Jim Eckel	0-7-1/4"	0-2"	Yes	J. Case	
TB-3	Core Only	9/1/83	1125	Joe Wolfsberger	0-9"	0-2"	Yes	J. Case	Proposed well
TC-2	Core Only	9/1/83	1135	Joe Wolfsberger	0-9"	0-2"	Yes	J. Case	Proposed well
TA-O	Chat Core	9/1/83	1010	Tom Hoogheem	1/2" 0-5"	1/2" 0-2"	Yes	R. Cromer	
TA-1	Core Only	9/1/83	1020	Tom Hoogheem	0-12"	0-2"	Yes	R. Cromer	
TA-1 (Dup)	Core Only	9/1/83	1025	Tom Hoogheem	0-12"	0-2"	Yes	R. Cromer	

ORIGINAL
(Red)

SAMPLE LOCA NS
WASTE WATER TREATMENT PLANT

Sample #	Type of Sample WWTP	Date	Time in Hours	Sampler	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
TA-2	Core Only	9/1/83	1035	Tom Hoogheem	0-12"	0-2"	Yes	R. Cromer	
TA-3	Core Only	9/1/83	1045	Mark Johnson	0-7"	0-2"	Yes	R. Cromer	
TA-4	Core Only	9/1/83	1055	Tom Hoogheem	0-9"	0-2"	Yes	R. Cromer	
TB-0	Chat Core	9/1/83	1105	Tom Hoogheem	1/2" 0-4-1/2"	1/2" 0-2"	Yes	R. Cromer	
TC-0	Chat Core	9/1/83	1130	Tom Hoogheem	2" 0-2"	2" 0-2"	Yes	R. Cromer	
TB-1	Core Only	9/1/83	1135	Tom Hoogheem	0-7"	0-2"	Yes	R. Cromer	Proposed well lo

ORIGINAL
(Red)

TDD Number F3-8308-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name MONSANTO

Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Sample #	Result		Sample #	Result									Remarks
	WASTE WATER	SOL	ug/Kg	TB-1-1	0.77		TB3-5	ND									
	TREATMENT			TB-1-2	ND		TD-3-1	4.93									
	PLANT			TB-1-3	0.29		TD-3-2	ND									
	BORINGS			TB-1-4	ND		TD-3-3	ND									
				TB-1-5	ND		TD-3-4	ND ND									
				TD-1-1	1.19		TD-3-5	ND									
				TD-1-2	3.65		TD-5-1	1.77									
				TD-1-3	ND ND		TD-5-2	ND									
				TD-1-4	ND												
				TD-1-5	ND												
				TB-3-1	ND												
				TB-3-2	5.04												
				TB-3-3	ND ND												
				TB-3-4	ND												

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality [illegible] of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLA
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Split	Person Taking Photo	Remarks
TB-1	1	Split Spoon	9/15/83	1310	Rich Cromer/Tom Hoogheem	0-5-2.0'	0.5-2.0'	Yes	J. Case	
TB-1	2	Split Spoon	9/15/83	1320	Rich Cromer/Tom Hoogheem	2.5-4.0'	2.5-4.0'	Yes	J. Case	
TB-1	3	Split Spoon	9/15/83	1328	RC/TH	4.5-6.0'	4.5-6.-'	Y	JC	
TB-1	4	SS	9/15/83	1343	RC/TH	6.5-8.0'	6.5-8.0'	Y	JC	
TB-1	5	SS	9/15	1353	RC/TH	8.5-10.0'	8.5-10.0'	Y	JC	
TB-1	6	SS	9/15	1400	RC/TH	10.5-12.0'	10.5-12.0'	Y	JC	
TB-1	7	SS	9/15	1410	RC/TH	12.5-14.0'	12.5-14.0'	Y	JC	
TB-1	8	SS	9/15	1416	RC/TH	14.5-16.0'	14.5-16.0'	Y	JC	
TB-1	9	SS	9/15	1445	RC/TH	16.5-18.0'	16.5-18.0'	Y	JC	
TB-1	10	SS	9/15	1455	RC/TH	18.5-20.0'	18.5-20.0'	Y	JC	
TB-1	11	SS	9/15	1500	RC/TH	20.5-22.0'	20.5-22.0'	Y	JC	
TB-1	12	SS	9/15	1510	RC/TH	22.5-24.0'	22.5-24.0'	Y	JC	
TB-1	13	SS	9/15	1515	RC/TH	24.5-26.0'	24.5-26.0	Y	JC	Water table at 25.5'
TB-1	14	SS	9/15	1525	RC/TH	26.5-28.0'	26.5-28.0'	Y	JC	
TB-1	15	SS	9/15	1535	RC/TH	28.5-30.0'	28.5-30.0'	Y	JC	
TB-1	16	SS	9/15	1545	RC/TH	30.5-32.0'	30.5-32.0	Y	JC	
TB-1	17	Field Blank	9/15	1600	Tom Hoogheem	—	—	Y	JC	Sample #W-04-04B from TDD F3-8306-26
TB-1	-	Sand Pack	9/15	1630	RC/TH	—	—	Y	No Photo taken	

ORIGINAL (Red)

General Notes:
1. See Field Logs in Appendix _ for sample descriptions
2. Boring was drilled by Mid-Eastern Geotech
3. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
4. This boring was developed into a monitoring well, see Appendix _ for typical construction detail.

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLAN.
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Person Taking Split	Person Taking Photo	Remarks
TD-1	1	SS	9/20	0830	RC/MT	0.5-2.0'	0.0-2.0'	Y	JC	
TD-1	2	SS	9/20	0845	RC/MT	2.5-4.0'	2.5-4.0'	Y	JC	
TD-1	3	SS	9/20	0855	RC/MT	4.5-6.0'	4.5-6.0'	Y	JC	
TD-1	4	SS	9/20	0900	RC/MT	6.5-8.0'	6.5-8.0'	Y	JC	
TD-1	5	SS	9/20	0905	RC/MT	8.5-10.0'	8.5-10.0'	Y	JC	
TD-1	6	SS	9/20	0915	RC/MT	10.5-12.0'	10.5-12.0'	Y	JC	
TD-1	7	SS	9/20	0920	RC/MT	12.5-14.0'	12.5-14.0'	Y	JC	
TD-1	8	SS	9/20	0925	RC/MT	14.5-16.0'	14.5-16.0'	Y	JC	
TD-1	9	SS	9/20	0930	RC/MT	16.5-18.0'	16.5-18.0'	Y	JC	
TD-1	10	SS	9/20	0940	RC/MT	18.5-20.0'	18.5-20.0'	Y	JC	
TD-1	11	SS	9/20	1010	RC/MT	20.5-22.0'	20.5-22.0'	Y	JC	
TD-1	12	SS	9/20	1015	RC/MT	22.5-24.0'	22.5-24.0'	Y	JC	
TD-1	13	SS	9/20	1020	RC/MT	24.5-26.0'	24.5-26.0'	Y	JC	Water table at 25.0'
TD-1	14	SS	9/20	1030	RC/MT	26.5-28.0'	26.5-28.0'	Y	JC	
TD-1	15	SS	9/20	1035	RC/MT	28.5-30.0'	28.5-30.0'	Y	JC	
TD-1	16	SS	9/20	1045	RC/MT	30.5-32.0'	30.5-32.0'	Y	JC	
TD-1	-	Sand Pack	9/20	1100	Mark Townsend	--	--	Y	No Photo Taken	

ORIGINAL (Red)

General Notes:
1. Boring was relocated 18' east of the original location due to overhead electrical wires
2. See Field Logs in Appendix _ for sample descriptions
3. Boring was drilled by Mid-Eastern Geotech
4. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
5. This boring was developed into a monitoring well, see Appendix _ for typical construction detail.

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLA.
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Person Taking Split	Person Taking Photo	Remarks
TB-3	1	SS	9/19	1015	RC/MT	0.5-2.0'	0.5-2.0'	Y	JC	
TB-3	2	SS	9/19	1025	RC/MT	2.5-4.0'	2.5-4.0'	Y	JC	
TB-3	3	SS	9/19	1030	RC/MT	4.5-6.0'	4.5-6.0'	Y	JC	
TB-3	4	SS	9/19	1040	RC/MT	6.5-8.0'	6.5-8.0'	Y	JC	
TB-3	5	SS	9/19	1050	RC/MT	8.5-10.0'	8.5-10.0'	Y	JC	
TB-3	6	SS	9/19	1100	RC/MT	10.5-12.0'	10.5-12.0'	Y	JC	
TB-3	7	SS	9/19	1105	RC/MT	12.5-14.0'	12.5-14.0'	Y	JC	
TB-3	8	SS	9/19	1110	RC/MT	14.5-16.0'	14.5-16.0'	Y	JC	
TB-3	9	SS	9/19	1140	RC/MT	16.5-18.0'	16.5-18.0'	Y	JC	
TB-3	10	SS	9/19	1145	RC/MT	18.5-20.0'	18.5-20.0'	Y	JC	
TB-3	11	SS	9/19	1155	RC/MT	20.5-22.0'	20.5-22.0'	Y	JC	
TB-3	12	SS	9/19	1310	RC/MT	22.5-24.0'	22.5-24.0'	Y	JC	
TB-3	13	SS	9/19	1320	RC/MT	24.5-26.0'	24.5-26.0'	Y	JC	Water Table at 25.0'
TB-3	14	SS	9/19	1330	RC/MT	26.5-28.0'	26.5-28.0'	Y	JC	
TB-3	15	SS	9/19	1335	RC/MT	28.5-30.0'	28.5-30.0'	Y	JC	
TB-3	16	SS	9/19	1345	RC/MT	30.5-32.0'	30.5-32.0'	Y	JC	
TB-3	-	Sand Pack	9/19	1415	RC/MT	—	--	Y	No photo taken	

ORIGINAL (Red)

General Notes:
1. Boring was relocated 3' south of the original location due to overhead electrical wires
2. See Field Logs in Appendix _ for sample descriptions
3. Boring was drilled by Mid-Eastern Geotech
4. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
5. This boring was developed into a monitoring well, see Appendix _ for typical construction detail.

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLA
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Person Taking Split	Person Taking Photo	Remarks
TD-3	1	SS	9/14	1612	RC/TH	0.5-2.0'	0.5-2.0'	Y	JC	
TD-3	2	SS	9/14	1616	RC/TH	2.5-4.0'	2.5-4.0'	Y	JC	
TD-3	3	SS	9/14	1622	RC/TH	4.5-6.0'	4.5-6.0'	Y	JC	
TD-3	4	SS	9/14	1640	RC/TH	6.5-8.0'	6.5-8.5'	Y	JC	
TD-3	5	SS	9/14	1646	RC/TH	8.5-10.0'	8.5-10.0'	Y	JC	
TD-3	6	SS	9/14	1700	RC/TH	10.5-12.0'	10.5-12.0'	Y	JC	
TD-3	7	SS	9/14	1706	RC/TH	12.5-14.0'	12.5-14.0'	Y	JC	
TD-3	8	SS	9/14	1711	RC/TH	14.5-16.0'	14.5-16.0'	Y	JC	
TD-3	9	SS	9/15	0750	RC/TH	16.5-18.0'	16.5-18.0'	Y	JC	
TD-3	10	SS	9/15	0755	RC/TH	18.5-20.0'	18.5-20.0'	Y	JC	
TD-3	11	SS	9/15	0805	RC/TH	20.5-22.0'	20.5-22.0'	Y	JC	
TD-3	12	SS	9/15	0815	RC/TH	22.5-24.0'	22.5-24.0'	Y	JC	Water table at 22.5'
TD-3	13	SS	9/15	0821	RC/TH	24.5-26.0'	24.5-26.0'	Y	JC	
TD-3	14	SS	9/15	0840	RC/TH	26.5-28.0'	26.5-28.0'	Y	JC	
TD-3	15	SS	9/15	0850	RC/TH	28.5-30.0'	28.5-30.0'	Y	JC	
TD-3	-	Sand Pack	9/15	0930	Rich Cromer	—	--	Y	No photos taken	

ORIGINAL (Red)

General Notes:
1. See Field Logs in Appendix _ for sample descriptions
2. Boring was drilled by Mid-Eastern Geotech
3. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
4. This boring was developed into a monitoring well, see Appendix _ for typical construction detail.

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLA.
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Person Taking Split	Person Taking Photo	Remarks
TD-5	1	SS	9/14	0850	RC/TH	0.5-2.0'	0.5-2.0'	Y	JC	
TD-5	2	SS	9/14	0855	RC/TH	2.5-4.0'	2.5-4.0'	Y	JC	
TD-5	3	SS	9/14	0900	RC/TH	4.5-6.0'	4.5-6.0'	Y	JC	
TD-5	4	SS	9/14	0915	RC/TH	6.5-8.0'	6.5-8.0'	Y	JC	
TD-5	5	SS	9/14	0925	RC/TH	8.5-10.0'	8.5-10.0'	Y	JC	
TD-5	6	SS	9/14	0935	RC/TH	10.5-12.0'	10.5-12.0'	Y	JC	
TD-5	7	SS	9/14	0948	RC/TH	12.5-14.0'	12.5-14.0'	Y	JC	
TD-5	8	SS	9/14	1000	RC/TH	14.5-16.0'	14.5-16.0'	Y	JC	
TD-5	9	SS	9/14	1015	RC/TH	16.5-18.0'	16.5-18.0'	Y	JC	
TD-5	10	SS	9/14	1020	RC/TH	18.5-20.0'	18.5-20.0'	Y	JC	
TD-5	11	SS	9/14	1036	RC/TH	20.5-22.0'	20.5-22.0'	Y	JC	
TD-5	12	SS	9/14	1045	RC/TH	22.5-24.0'	22.5-24.0'	Y	JC	Water table at 23.0'
TD-5	13	SS	9/14	1055	RC/TH	24.5-26.0'	24.5-26.0'	Y	JC	
TD-5	14	SS	9/14	1107	RC/TH	26.5-28.0'	26.5-28.0'	Y	JC	
TD-5	15	SS	9/14	1118	RC/TH	28.5-30.0'	28.5-30.0'	Y	JC	
TD-5	-	Sand Pack	9/14	1155	Tom Hoogheem	--	--	Y	No photo taken	

General Notes:
1. See Field Logs in Appendix _ for sample descriptions
2. Boring was drilled by Mid-Eastern Geotech
3. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
4. This boring was developed into a monitoring well, see Appendix _ for typical construction detail.

ORIGINAL
(Red)

SAMPLE LOCATIONS
WASTE WATER TREATMENT PLA
BORINGS

Boring Number	Sample Number	Type of Sample	Date	Time in Hours	Samplers	Depth Monsanto	Depth EPA	Person Taking Split	Person Taking Photo	Remarks
EH-3B	1	SS	9/28	0910	MT	0.5-2.0'	0.5-2.0'	Y	RC	
EH-3B	2	SS	9/28	0915	MT	2.5-4.0'	2.5-4.0'	Y	RC	
EH-3B	3	SS	9/28	092	MT	4.5-6.0'	4.5-6.0'	Y	RC	
EH-3B	4	SS	9/28	0930	MT	6.5-8.0'	6.5-8.0'	Y	RC	
EH-3B	5	SS	9/28	0937	MT	8.5-10.0'	8.5-10.0'	Y	RC	
EH-3B	6	SS	9/28	0946	MT	10.5-12.0'	10.5-12.0'	Y	RC	
EH-3B	7	SS	9/28	0953	MT	12.5-14.0'	12.5-14.0'	Y	RC	
EH-3B	8	SS	9/28	1000	MT	14.5-16.0'	14.5-16.0'	Y	RC	
EH-3B	9	SS	9/28	1010	MT	16.5-18.0'	16.5-18.0'	Y	RC	
EH-3B	10	SS	9/28	1016	MT	18.5-20.0'	18.5-20.0'	Y	RC	
EH-3B	11	SS	9/28	1032	MT	20.5-22.0'	20.5-22.0'	Y	RC	
EH-3B	12	SS	9/28	1040	MT	22.5-24.0'	22.5-24.0'	Y	RC	
EH-3B	13	SS	9/28	1047	MT	24.5-26.0'	24.5-26.0'	Y	RC	Water table at 26.0'
EH-3B	14	SS	9/28	1056	MT	26.5-28.0'	26.5-28.0	Y	RC	
EH-3B	15	SS	9/28	1105	MT	28.5-30.5'	28.5-30.5	Y	RC	
EH-3B	16	SS	9/28	1114	MT	30.5-32.0'	30.5-32.0'	Y	RC	

General Notes:
1. See Field Logs in Appendix _ for sample descriptions
2. Boring was drilled by Mid-Eastern Geotech
3. Drilling and sampling techniques were directed and supervised by Bob Wright from Geraghty & Miller Inc. and Rich Cromer from NUS Corp.
4. This boring was not developed into a monitoring well. Boring was backfilled with bentoite clay grout upon completion

ORIGINAL
(Red)

APPENDIX C

ORIGINAL
(Red)

ADDITIONAL DIOXIN SAMPLING

1.0 A brief explanation of the sampling points is warranted. Samples marked RB were taken on the river bank, outside the fence. For RB-X, where X is a whole number, the sample was taken at the top of the bluff; otherwise, the sample was taken at the waters edge. Samples in the AO.5 series were taken next to the side of the plant access road.

The results complete the designed sampling at the Monsanto site.

ORIGINAL
(Red)

TDD Number F3-8306-31

EPA Number

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Midway

Date of Sample 8-29 Thru 9-26-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Sample #	Results		Sample #	Results		Sample #	Results						Remarks
	Additional	Soil	ug/kg	RB-15.5	0.91		RB-19	1.81 1.92		QO.5-05	0.70 0.94						
	Samplins			RB-24.5	0.56		DD-6.5	ND ND		U-21	1.08						
	Done By			RB-21.5	0.58		K22	ND		CC-23	ND						
	W. Lee			RB-17.5	1.20		Q21	2.74		X-20	4.13 4.54						
				RB-20.5	1.31		AO.5-6	0.66		AO.5-11	4.53						
				RB-1.5	ND		S-19	0.96		QO.5-0	ND ND 0.20						
				DD-6	0.14 ND		R-16	1.91		PO.5-0	ND						
				CC-0	ND		Q-0	21.55									
				RB-17	6.72		X-19	0.36									
				AO.50	0.66		X-18	5.58 4.55 4.21									
				AO.5-15	2.66 2.80		CC-(-2)	0.15									
				CCO.5-0	0.43		K21	ND									
				TG-1	7.95		TF-2	6.50									
				TF-1	16.57		CC-(-1)	ND									

ORIGINAL (Red)

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

LEGEND

- INDICATES SAMPLE LOCATION AND IDENTIFICATION
- 7.0 INDICATES DIOXIN CONCENTRATION (ppb)
- CENTER LINE OF KANAWHA RIVER
- APPROXIMATE PROPERTY LINE
- EDGE OF WATER
- FENCE

NOTES

1.) ALL RESULTS ARE REPORTED IN PARTS PER BILLION (ppb)

REFERENCE

1.) SAMPLE LOCATIONS BASED ON MONSANTO COMPANY DRAWINGS 4907–C01–002 THROUGH 4907–C03–002, LAST REVISED JANUARY 6, 1984 OF "EPA PLANT WIDE GRID SYSTEM LAYOUT, SHEETS 1 THROUGH 3".

2.) BASE MAP USED TO PREPARE THIS FIGURE IS BASED ON PLANT SITE MAP DRAWING 4994–C02–002, PREPARED BY MONSANTO COMPANY, DATED APRIL 29, 1989.

Title:

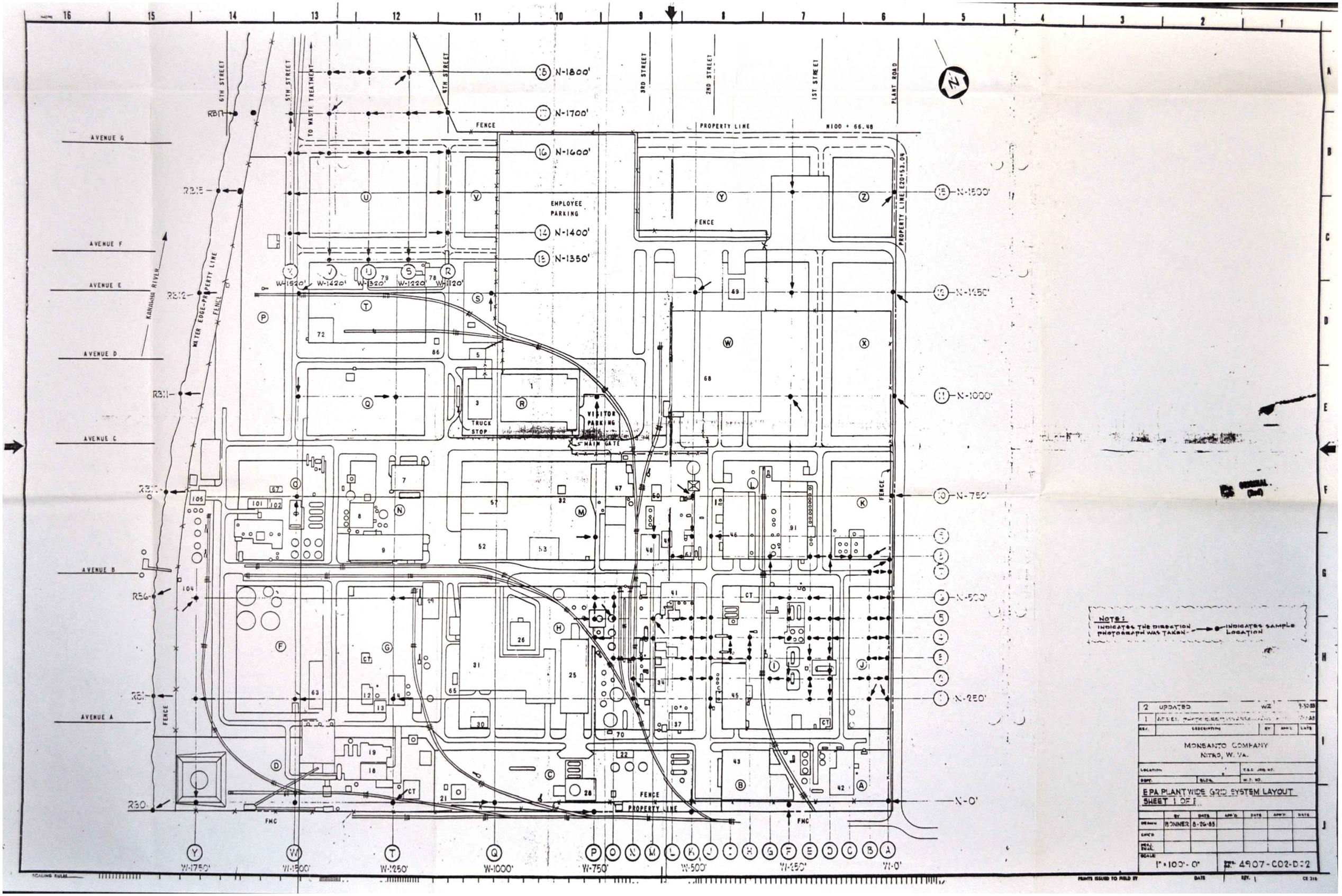
SUMMARY OF EPA DATA COLLECTED IN AND AROUND THE PAST DISPOSAL AREA DURING THE 1980's

NITRO, WEST VIRGINIA

Prepared For: SOLUTIA

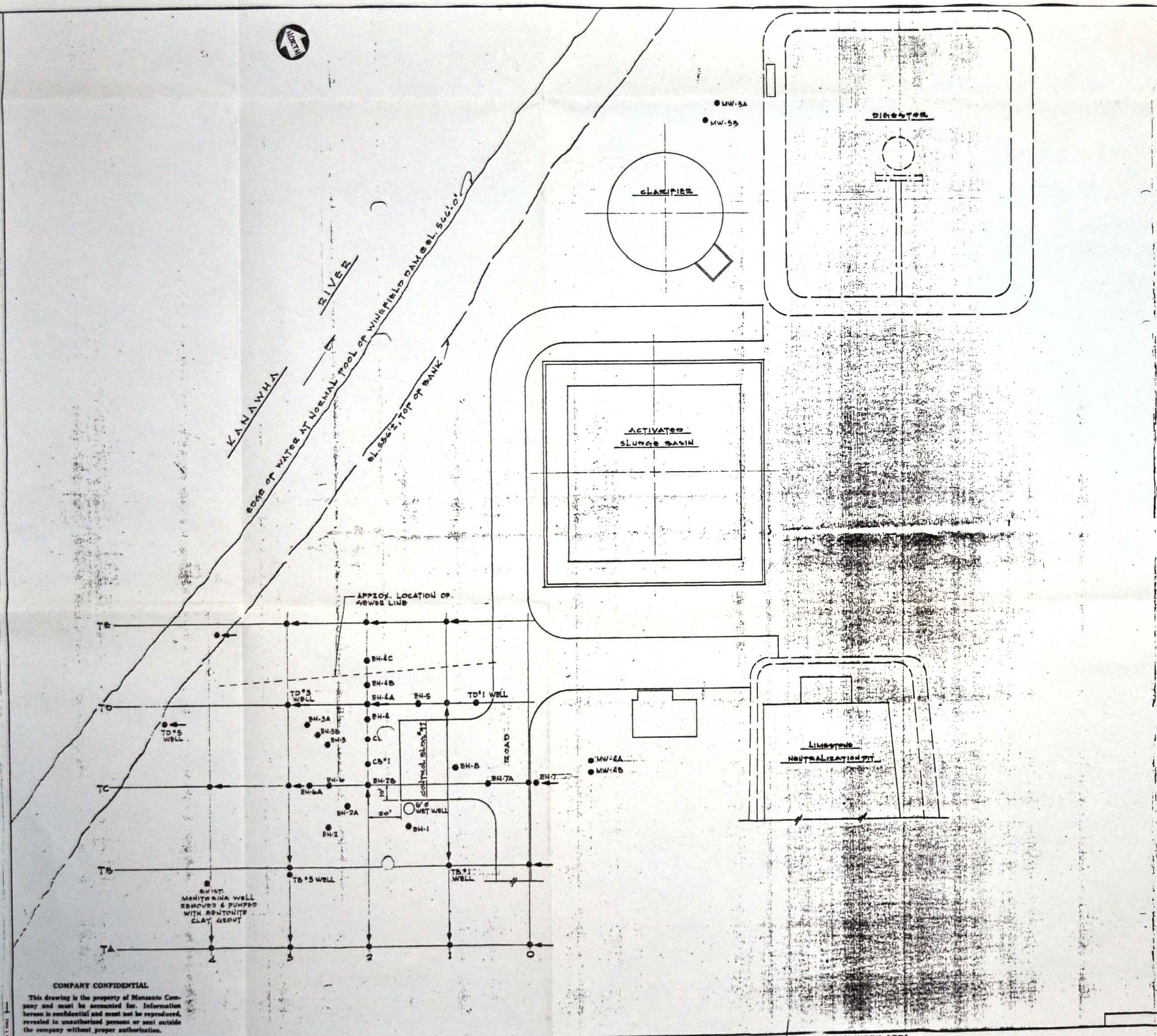
ROUX
ROUX ASSOCIATES INC
Environmental Consulting & Management

Compiled by: P.J.P.	Date: 01/25/99	Figure	
Prepared by: J.S.G.	Scale: SHOWN	1	
Project Mgr: P.J.P.	Revision:		
Proj No: 06619J	File No: 06619150		



6TH STREET
5TH STREET
TO WASTE TREATMENT
4TH STREET
3RD STREET
2ND STREET
1ST STREET
PLANT ROAD
FENCE
PROPERTY LINE
N100 + 66.48
AVENUE G
AVENUE F
AVENUE E
AVENUE D
AVENUE C
AVENUE B
AVENUE A
KANAWHA RIVER
WATER EDGE-PROPERTY LINE
EMPLOYEE PARKING
TRUCK STOP
VISITOR PARKING
MAIN GATE
PROPERTY LINE E20+53.04
N-1800'
N-1700'
N-1600'
N-1500'
N-1400'
N-1350'
N-1250'
N-1000'
N-750'
N-500'
N-250'
N-0'
W-1750'
W-1500'
W-1250'
W-1000'
W-750'
W-500'
W-250'
W-0'
NOTE:
INDICATES THE DIRECTION PHOTOGRAPH WAS TAKEN
INDICATES SAMPLE LOCATION
2 UPDATED
1 ADDED PHOTO DIRECTION
REV. DESCRIPTION BY APP'D DATE
MONSANTO COMPANY
NITRO, W. VA.
LOCATION
DEPT. BLDG.
T.E.C. JOB NO.
W.O. NO.
EPA PLANTWIDE GRID SYSTEM LAYOUT
SHEET 1 OF 1
BY DATE APP'D DATE APP'D DATE
DRAWN BONNER 8-26-85
CHK'D
SCALE 1" = 100'-0"
4907-C02-D02
PRINTS ISSUED TO FIELD BY
DATE
REV. 1

KANAWHA
RIVER
MONSANTO COMPANY
NOTES:
INDICATES THE DIRECTION PHOTOGRAPH WAS TAKEN
INDICATES SAMPLE LOCATION
WORTHY QUARRIER CORP.
PRIVATE ROAD
HUB INDUSTRIAL PARK, INC.
WEST VIRGINIA DEPARTMENT OF HIGHWAYS
INTERSTATE 64
MONSANTO COMPANY
HUB INDUSTRIAL PARK, INC.
UNION BOILER COMPANY
HECKS
15.434 ACRES
40 FOOT RIGHT-OF-WAY
THOMAS, FIELD & CO
CORPORATION
McJUNKIN CORPORATION
FABRICATED METAL PRODUCTS, INC.
UNITED WAREHOUSE, INC.
EMORY R. YOUNG
PENN CENTRAL COMPANY
W.VA. STATE ROUTE No. 25
PENN
UNION BOILER COMPANY
ORIGINAL (Red)
E-0'
E-500'
E-1000'
E-1675'
E-2000'
N-0'
N-500'
N-1000'
N-1500'
N-2000'
N-2500'
N-3000'
N-3500'
N-4000'
N-4500'
N-5000'
MONSANTO COMPANY
NITRO, W. VA.
EPA PLANTWIDE GRID SYSTEM LAYOUT
SHEET 2 OF 3
BONNER
1" = 200'-0"
4907-C01-DC



NOTE:
INDICATES THE DIRECTION PHOTOGRAPH WAS TAKEN → INDICATES SAMPLE LOCATION

● BH__ INDICATES EXPLORATORY BORING

ALL EXPLORATORY BORINGS WERE BACKFILLED WITH BENTONITE CLAY GROUT TO SURFACE ELEVATION UPON COMPLETION.

REV.	DESCRIPTION	BY	APP'D	DATE
1	UPDATED	WZ		9-83

MONSANTO COMPANY
NITRO, W. VA.

LOCATION
DEPT BLDG.
T.E.D. JOB NO.
W.O. NO.

EPA PLANTWIDE GRID SYSTEM LAYOUT
SHEET 3 OF 3

	BY	DATE	APP'D	DATE	APP'D	DATE
DRAWN	SOTHEN	8-26-80				
CHK'D	KHE	9-12-83				
PROJ. ENGR.						

SCALE: 1"=30'-0"
DWG. NO. 4907-C03-D01

AUTHORITY NO.

REFERENCE DRAWINGS

COMPANY CONFIDENTIAL

This drawing is the property of Monsanto Company and must be accounted for. Information hereon is confidential and must not be reproduced, revealed to unauthorized persons or sent outside the company without proper authorization.

ALWAYS WORK SAFELY AND LEAVE CLEAN WORK AREA

NUS CORPORATION

992 OLD EAGLE SCHOOL ROAD, SUITE 918
WAYNE, PENNSYLVANIA 19087
215-687-9510

February 25, 1985
R-585-10-4-24
68-01-6699

Mr. Harold Byer
U.S.Environmental Protection Agency
841 Chestnut Building
Ninth and Chestnut Streets
Philadelphia, PA 19106

Subject: Final Report
TDD No. F3-8407-39
Nitro Dump
Nitro, West Virginia

Dear Mr. Byer:

Submitted herewith is a final Field Trip report for the subject project.

NUS FIT III was tasked to conduct a dioxin extent of contamination study at the old Nitro Dump which is located on the Monsanto plant property in Nitro, West Virginia. The work was completed on September 15, 1984.

If you have any questions, please contact me.

Respectfully submitted,

Jeffrey L. Case
Chemical Engineer

Reviewed by,

for BW
William Wentworth
Asst. Manager, Reports

Approved by,

Garth Glenn
Manager, FIT III

JLC/bs

ORIGINAL
(Red)

R-585-10-4-24

A FIELD TRIP REPORT FOR NITRO DUMP PREPARED UNDER

TDD NO. F3-8407-39
EPA NO.
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

FEBRUARY 25, 1985

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY

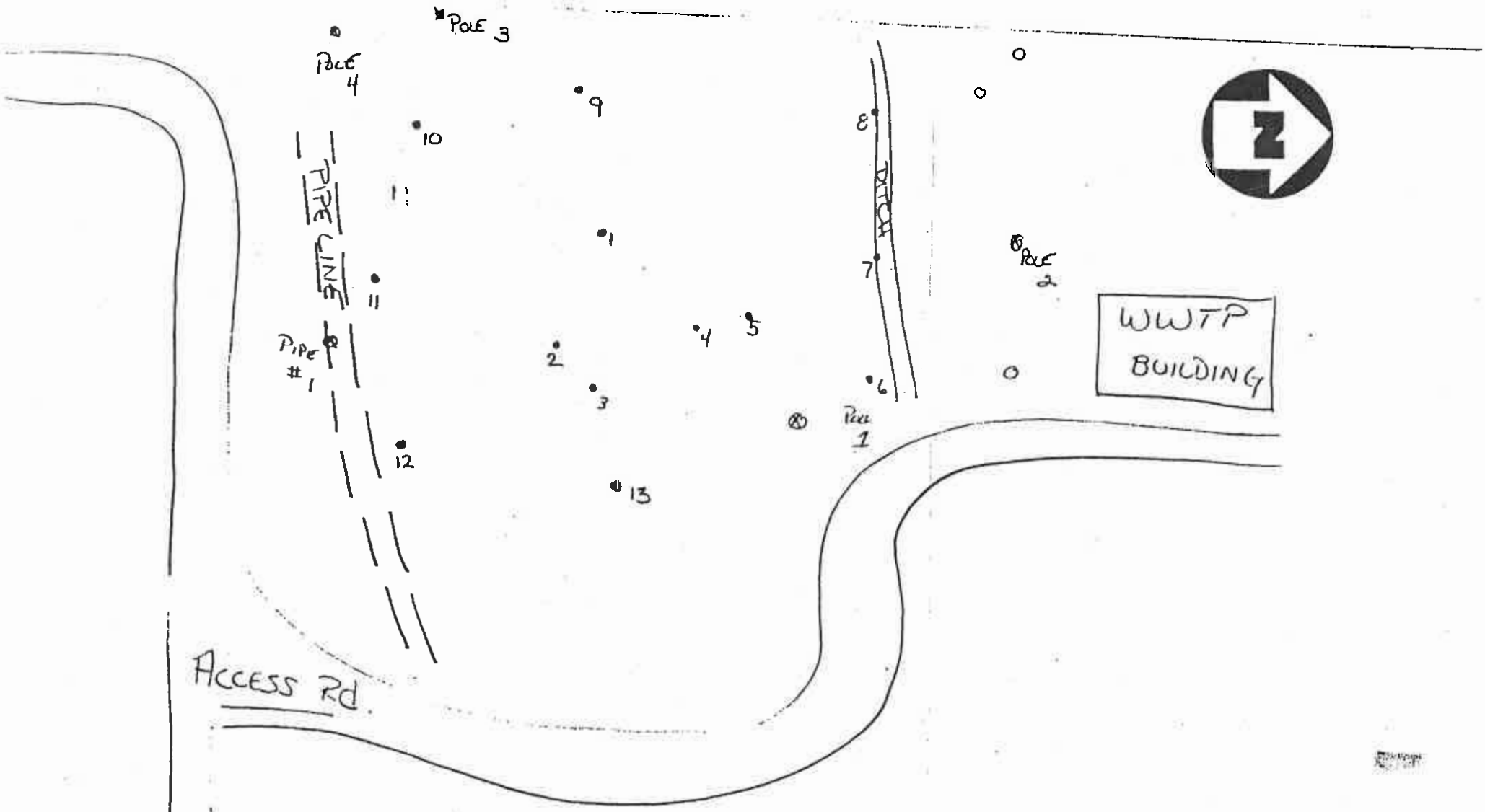
JEFFREY L. CASE
CHEMICAL ENGINEER

REVIEWED BY

WILLIAM WENTWORTH
ASST. MANAGER, REPORTS

APPROVED BY

GARTH GLENN
MANAGER, FIT III



NITRO DUMP

A - 0" - 12"
B - 12" - 24"
C - 24" - 36"

NUS CORPORATION
A Halliburton Company

Case Number

Site Name Nitro Dump

TDD Number 8407-39

Date 9-15-84

Analysis | Lab | Airbill Number

SAMPLE DESCRIPTION	PHASE	TIME	~~ORGANIC TRAFFIC REPORT~~	INORGANIC TRAFFIC REPORT	~~ORGANIC~~ TAG NUMBER	INORGANIC TAG NUMBER	SAMPLER	
1 DC008801	SOL	0805	1A		3-33751		MJN	6"-1' AUGER #1
2 DC008802	SOL	0805	1B		52		MJN	1'-2' AUGER #2
3 DC008803	SOL	0805	1C		53		MJN	2'-3' AUGER #2
4 DC008804	SOL	1045	2		54		RC/MJN	
5 DC008805	SOL	0905	3A		55		MJN	6"-1' AUGER #3
6 DC008806	SOL	0905	3B		56		MJN	1'-2' AUGER #3
7 DC008808	SOL	1040	4		58		RC/MJN	
8 DC008809	SOL	1025	5A		59		RC/MJN	
9 DC008810	SOL	1025	5B		60		RC/MJN	

Project Leader Signature Jeffery L Case Date 9-16-84

Case Number

Site Name NITRO DUMP

TDD Number 8407-39

Date 9-15-84

Analysis	Lab	Airbill Number

SAMPLE DESCRIPTION	PHASE	TIME	~~ORGANIC TRAFFIC REPORT~~	INORGANIC TRAFFIC REPORT	~~ORGANIC~~ TAG NUMBER	INORGANIC TAG NUMBER	SAMPLER	
1 DC008811	SOL	1025	5C		3-33761		RC/MJN	
2 DC008812	SOL	0935	6		" 62		MN	DUPLICATE MADE
3 DC008813	SOL	0930	7		" 63		MN	
4 DC008814	SOL	0925	8		" 64		MN	
5 DC008815	SOL	0940	9		" 65		MN	
6 DC008816	SOL	0945	10		" 66		MN	
7 DC008817	SOL	0950	11		" 67		MN	
8 DC008818	SOL	0955	12		" 68		MN	
9 DC008819	SOL	1050	13		" 69		RC/MN	

Project Leader Signature Jeffery J. Case Date 9/16/84

Case Number

Site Name NITRO DUMP

TDD Number 8407-39

Date 9-15-84

Analysis

Lab

Airbill Number

SAMPLE DESCRIPTION	PHASE	TIME	SAMPLER	~~ORGANIC~~ TRAFFIC REPORT	INORGANIC TRAFFIC REPORT	~~ORGANIC~~ TAG NUMBER	INORGANIC TAG NUMBER	
DC008820	SOL	0950	CM	2-D		3-33770		
DC008821	AQ	0850	BP	RINSEATE		" 71		
DC008822	SOL	0820	JC	SPIKE		" 72		
DC008823	SOL	1117	MF	BLANK		" 73		
DC008824	SOL	1117	MF	BLANK TO BE SPIKED		" 74		DUP OF BLANK

Project Leader Signature Jeffrey L Case

Date 9-16-84

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
ANNAPOLIS, MARYLAND 21401

301-224-2740
FTS-922-3752

DATE : November 29, 1984

SUBJECT: Dioxin QA Review Case 3275
Environmental Testing and Certification Corp., Nitro, West Virginia

FROM : John Austin (3ES21) JA
Chemist

TO : Walter Lee (3HW12)
Environmental Scientist

Reporting errors detected in QA review of the initial report have been confirmed and corrected. The attached corrected data report was obtained from the laboratory. A final typed copy will be supplied when available.

Due to an out of control spiking standard, this sample set was extracted twice at the laboratory. For the second extraction, from which all results were reported, no sample remained for reanalysis for DC008822, the performance evaluation sample.

Analysis of sample DC008817 is to be repeated because no internal standard or surrogates were recovered.

Analysis of sample DC008814 failed to obtain a detection limit $\leq$1 ppb after extra cleanup. No further analysis of this sample will be attempted unless requested.

JA/jlm

! we took the RF to 3 sig digits & the average. Will send a correction

TCDD Data Report

Corrected data

: GC/MS
E: 3275

DATE:841115
GC COLUMN: 60M CPSIL-88

ETC Number	Sample Number	E/C	Grams Wet Weight	ppb TCDD	D.L.	Analytical Date	Analytical Time	320/322	332/334	Surrogate Percent Accuracy	Loss of Surrogate (ppb)	Area 320	Area 322	Area 257	Area 320+	Area 332	Area 334	Comments
1-300		/	10.00	ND	.06	841104	1650	-	.81	119	1.19	-	-	-	107906	170220	211267	
245	DC008824N	/	10.00	0.58	-	841104	1725	.82	.81	122	1.22	22875	27506	10324	161959	248086	307555	
01	DC008801	/	10.15	ND	.12	841106	0907	-	.81	125	1.23	-	-	-	82051	124278	152543	
02	DC008802	/	10.28	.06	~~.06~~	841106	0947	.70	.79	121	1.18	3605	5164	3067	255285	390509	493275	
03	DC008820	/	11.05	11.1	-	841106	1035	.74	.72	87	0.79	71198	95891	37667	18056	38783	50812	
04	DC008803	/	10.07	.10	-	841106	1105	.76	.82	110	1.08	12906	16484	6155	271127	434715	528021	
05	DC008804	/	11.29	ND	.05	841106	1145	-	.83	146	1.29	-	-	-	25229	32982	39673	
06	DC008805	/	10.50	ND	.12	841106	1220	-	.83	121	1.14	-	-	-	177582	278412	336417	
07	DC008806	/	10.36	ND	.12	841106	1300	-	.81	120	1.16	-	-	-	182405	286777	352349	
08	DC008808	/	10.98	ND	.22	841106	1340	-	.81	122	1.11	-	-	-	253090	388904	481405	
09	DC008809	/	10.10	.78	-	841106	1415	.74	.77	121	1.20	34026	46004	15070	185730	281988	365603	
10	DC008810	/	10.73	.68	-	841106	1450	.76	.79	123	1.15	33350	43915	11864	197983	299735	377038	
11	DC008811	/	10.72	.42	-	841106	1530	.78	.79	121	1.13	11638	14983	5353	109254	167760	212119	
12	DC008812	/	10.77	13.5	-	841106	2025	.75	.78	119	1.10	651329	864244	268963	188889	292775	374241	

TCDD Data Report

Corrected data

LAB: GC/MS
CASE: 3275

DATE: 841115
GC COLUMN: 50M CPSIL-88

ETC Number	Sample Number	E/C	Grams Wet Weight	ppb TCDD	D.L.	Analytical Date	Analytical Time	320/322	332/334	Surrogate Percent Accuracy	Surrogate Conc. (ppb)	Area 320	Area 322	Area 257	Area 328+	Area 332	Area 334	Comments
F5013	DC008813	/	10.80	ND	.99	841106	1940	-	.78	121	1.12	-	-	-	14191	21428	28009	
F5013R	DC008813D	/	10.70	.48	-	841107	1220	.72	.70	130	1.21	11099	15449	4895	107580	143854	205177	
F5014	DC008814	/	10.68	ND	1.40	841106	2110	-	.83	121	1.13	-	-	-	8490	10199	12288	*
F5015	DC008815	/	10.47	ND	.22	841106	2150	-	.79	128	1.22	-	-	-	35551	51592	65475	
F5016	DC008816	/	10.52	ND	.38	841106	2225	-	.78	134	1.27	-	-	-	16538	22780	28043	
F5017	DC008817	/	10.25	ND	-	841106	2320	-	-	-	-	-	-	-	-	-	-	*
F5018	DC008819	/	10.28	ND	.16	841107	1030	-	.80	135	1.31	-	-	-	137714	190312	239248	
F5020	DC008821	/	10.15	ND	.02	841107	1110	-	.80	121	1.19	-	-	-	667328	1027328	1286865	
F5018	DC008818		12.08	.79	-	841107	0915	.71	.83	120	0.99	14514	20187	6545	67466	105506	128163	
F5021	DC008823		11.33	ND	.02	841107	1145	-	.82	119	1.05	-	-	-	419005	666313	812678	

* Analysis to be Repeated

APPENDIX E

FACILITY MANUAL REGARDING EXCAVATION GUIDELINES AND NO-DIG AREAS

Title: **Excavations**

Revised by:
S. R. Bailey
Sr. Safety Engineer

Reviewed by:
P. D. Chambers
Labor/Management Safety Committee Representative

Reviewed by:
R. D. Archer
Labor/Management Safety Committee Representative

Approved by:
J. W. McKinney
Plant Manager

I. Purpose

To establish a program and permit system for conducting excavations.

II. Policy

This procedure applies to all Nitro Plant excavation work performed by Flexsys employees, contract personnel, vendors, or visitors and requires an Excavation Permit for any excavation 1-foot in depth or more or in any restricted areas regardless of depth.

Approval of an Excavation Permit does not negate the work's need for other Plant required permits.

III. Definitions

A. *Benching (Benching system)*

A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

B. *Competent Person*

One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them. Has specific training/experience/knowledge in soils analysis, protective systems, and OHSA standards and has successfully completed and passed an industry recognized excavation class and test.

C. *Contractor Representative*

A contract employee authorized and qualified by a contractor to sign a permit and to conduct hazard discussion with contract employees.

D. *Disposal Plan*

A pre-excavation plan used to determine potential soil contamination and to ensure the excavated soil is properly characterized as hazardous or non-hazardous, handled, stored, labeled, and disposed in accordance with applicable environmental rules and regulations.

E. *Excavation*

Any man-made cut, cavity, trench, or depression in an earth surface formed by earth removal.

F. *Excavator*

Any Plant or contract employee who will be performing the excavation work.

G. *Permit Approver*

A qualified owning department employee who has received training on the scope and intent of this procedure and demonstrated ability (to the trainer/certifier) to properly note compliance and approve excavation permits.

H. *Protective Systems*

A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

I. *Ramp*

An inclined walking or working surface that is used to gain access to one point from another and is constructed from earth or from structural materials such as steel or wood.

J. *Restricted Area*

Specific areas identified in Appendix A.

K. *Safety and Health Plan*

A plan evaluating the excavation for potential safety and health concerns and identifying appropriate corrective measures to protect personnel and existing structures, equipment, and infrastructure (electrical, sewers, water lines, etc.).

L. *Shield (Shield system)*

A structure that is able to withstand the forces imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Shields used in trenches are usually referred to as "trench boxes" or "trench shields".

M. *Sloping (Sloping system)*

A method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

N. *Trench (Trench excavation)*

A narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

IV. Responsibilities

A. Business Team Leaders:

Ensures that their Department complies with the procedure and that all appropriate employees receive procedure training.

B. Certified Flexsys Representative:

Ensures excavation contractors are knowledgeable and understand this procedure and the permitting system and ensures the contractor designates a Competent Person. For Flexsys performed excavations, designates a Competent Person.

C. Competent Person:

Designs excavation protective systems and ramps. Monitors water removal equipment and operation. Evaluates damaged protective material or equipment to determine their suitability for continued use. Inspects the excavation, adjacent areas, and protective systems daily (before the start of each shift) or after a rainstorm, a snowstorm, thawing, blasting, heavy vehicular traffic, compaction equipment use, or any other activity or change impacting the excavation. Make decisions using the requirements of OSHA standards (29 CFR 1926.650, .651, .652 Excavations).

D. Environmental Safety, Health, and Training Team:

Evaluates and approves/denies the Safety and Health Plan (for work involving restricted areas), the Disposal Plan, and blanket exceptions. When requested, specifies personal protective equipment and performs chemical specific testing (dusts, vapors, gases, etc.). Provides required procedure training and maintains training documentation and records.

E. Labor/Management Safety Committee

Reviews and revises this procedure as necessary and conducts periodic procedure compliance audits.

F. Operations Leaders:

Ensures all area personnel complete the required procedure training and that they properly implement the procedure. Verifies procedural compliance by periodically inspecting work in progress.

G. Owning Department Employees and Contractors:

Completes the required procedure training. Obtains and properly uses required safety equipment. Performs excavations in accordance to the Excavation Permit and the Excavation Procedure. Maintains safe conditions and good housekeeping practices at the work site.

H. Owning Department Manager:

Evaluates and approves/denies any procedure exceptions. For non-blanket exceptions, the Manager may assign a designee to perform this task.

I. Permit Approver:

Initiates and completes the Excavation Permit in accordance with the procedure, ensures that it is properly communicated, and that it receives the required approvals. Authorizes the permit to signify that excavation work may begin. The Permit Approver can not be an individual who will be performing the excavation.

J. Solutia Representative (or designee):

Reviews and approves/denies all Excavation Permits.

V. Work Practices

All excavations greater than 1 foot in depth or in restricted areas regardless of depth require implementation of this procedure. The approval process includes work site inspections, job pre-planning and communications, procedure compliance evaluation, and completion of the permit form. Any additional safety precautions, special conditions, or protective equipment necessary for the job will be noted on the permit form.

When a job is not completed within the permit's specified time and until a new permit is generated, the permit must remain posted stating the job's status. A permit is only valid for continuous work by the original work crew.

If the Permit Approver changes during the duration of an open permit, the new Permit Approver may sign the existing permit, if they are in agreement with the permit and work conditions, or close the original permit and initiate a new permit.

Pre-Excavation

A. *Permit Approver:*

1. Initiates the Excavation Permit.
2. Determines if the excavation is in a restricted area or will expose workers to underground obstructions (see Appendix A).
3. Requests the Solutia Representative's (or designee) approval at least 2 days prior to the excavation. If the Solutia Representative is unavailable, leave requests on voice mail (Ext. 4204). For emergency excavations, the ESH/Training Team Leader or Construction Team Leader may approve as the designee.
4. Requests the Certified Flexsys Representative to assign a Competent Person.
5. If in a restricted area, requests the Business Team Leader (or designee) to develop a Safety and Health Plan.
6. Requests the Business Team Leader (or designee) to develop a Disposal Plan.
7. Contacts the ESH Department for any special testing and PPE requirements.
8. Instructs area Flexsys employees to prepare the work site and equipment (emptying, purging, cleaning, and isolation, etc.).
9. Instructs the Excavators to obtain the required safety equipment.
10. Identifies any known procedure exceptions and obtains Owning Department Manager (or designee) or Shift Supervisor (during off-hours, weekends, or holidays).
11. Obtains all required Excavation Permit signatures.

12. Determines the need for other Plant required permits (LOTO, Confined Space, etc.) and obtains as required.
13. Conducts hazard discussion with employees performing work. If contracted, discusses the hazards with the Contractor Representative or may elected to discuss hazards directly with contract employees.
14. Authorizes the Excavation Permit.
15. Inspects the work site before work begins.
16. Posts the Excavation Permit at the work site and at the area's designated permit posting location.

B. *Solutia Representative (or designee):*

1. Reviews and approves/denies the requested Excavation Permit.

C. *Certified Flexsys Representative:*

1. Ensures the contractor assigns a Competent Person. If Flexsys is performing the excavation, assigns a Flexsys Competent Person.

D. *Competent Person:*

1. Determines if protective systems are needed for excavations less than 5 foot deep.
2. For required excavations, determines and specifies protective systems, employee egress, and structural ramps for employees and equipment in accordance with OHSA standards.

E. *Business Team Leader (or designee):*

1. Prepares a Safety and Health Plan for any excavations in a restricted area. Obtains the ESH Department approval prior to excavating.
2. Prepares a Disposal Plan for the ESH Department's approval prior to performing the excavation.
3. Reviews and approves/denies any blanket exceptions.

F. *ESH Department:*

1. Reviews and approves/denies the Safety and Health and/or Disposal Plans and blanket exceptions.
2. When requested, specifies any PPE requirements or performs/has performed special testing.
3. Properly files blanket exceptions.

G. *Owning Department Manager or Shift Supervisor (during off-shifts, weekends, and holidays):*

1. Reviews and approves/denies any procedure exception. The Shift Supervisor may sign after obtaining the Owning Department Manager's (or designee) approval.
2. The Owning Department Manager must approve blanket exceptions, can not be approved by the Shift Supervisor. Copies of blanket exceptions are provided to the ESH Department within the next working day.

H. *Flexsys Employees:*

1. Prepares the work site and appropriate equipment by emptying, purging, cleaning, isolating, etc.

I. *Excavator:*

1. Attends the excavation's hazard discussion.
2. Obtains required safety equipment.

J. *Contractor Representative:*

1. Assigns a Competent Person.
2. Conducts hazard discussion with employees and/or contractors as requested by the Permit Approver.

Excavation

A. *Excavator:*

1. Ensures the Excavation Permit and the procedure are properly implemented.
2. Properly uses the required safety equipment.
3. Maintains safe-working conditions, including barricading the area to protect pedestrian and vehicle traffic and not storing removed earth, materials, or equipment within 3 feet of the excavation edge.
4. If the work is suspended (see Section VI), immediately shuts down the work to a safe standby mode and notifies the Permit Approver of the situation.

B. *Competent Person:*

1. Before each shift, inspects the excavation, adjacent areas, protective systems, and egress systems and signs the Permit's Shift Sign-Off Log.
2. Monitors water removal equipment and operations.
3. When necessary, evaluates any damaged protective material or equipment to determine their suitability for continued use.
4. After any activity or change (for example: rain, snow, thawing, heavy equipment /vehicle and compaction equipment use, etc.) impacting the excavation, inspects the excavation, adjacent areas, and protective systems.

C. *Permit Approver:*

1. If the work is suspended (see Section VI), reopens the permit by confirming the initial approval conditions and requirements are satisfied and the work can proceed in a safe manner.
2. Should a procedure exception occur during the excavation process, suspends the work and obtains appropriate approval of the Owning Department Manager (or designee) or Shift Supervisor (during off-shifts, weekends, or holidays).

D. *Operations Leader:*

1. Verifies the permit procedure is properly implemented through periodic inspections of work in progress.

Post Excavation

A. *Excavator:*

1. Ensures the job is complete and housekeeping around the work site is acceptable.
2. Returns the safety equipment to the proper storage location.
3. Signs off on the Excavation Permit indicating the job is complete and the work site is in an acceptable condition.

B. *Permit Approver:*

1. Signs off on the Excavation Permit indicating the job is complete and the work site is in an acceptable condition.
2. Retrieves the Excavation Permits at the work site and at the designated permit posting location.
3. Delivers both copies of the closed permit to the Operations Leader.

C. *Operations Leader:*

1. Reviews the closed permit and signs off.
2. Sends a hard copy to the ESH Department and maintains a copy in the department files for 1 year.

D. *ESH Department:*

1. Files closed Excavation Permits and maintain them for 1 year.

VI. Permit Suspension

In order to ensure the job's safe completion, any of the following conditions will require suspending the work until the permit is reopened by the Permit Approver. Any person may suspend a permit.

- There is a partial or total change of the work crew.
- Work will be interrupted for two hours or more.
- Any change in a work site condition that creates an environmental, safety, and/or health hazard.
- An emergency occurs in the department/area.
- There is a change to the original work assignment.

VII. Exceptions

The Owning Department Manager (or designee) must approve any procedure exceptions. For off-shifts, weekends or holidays, the Shift Supervisor may obtain the Owning Department Manager's (or designee) approval and sign the exception.

Blanket exceptions shall be included in Unit Operating Instructions and/or displayed at the designated permit area. These exceptions require the Owning Department Manager, Business Team Leader, and ESH/Training Team Leader approval. The ESH Department will maintain a file of all exceptions for 1 year or as long as the exception is applicable.

VIII. Auditing

The Labor/Management Safety Committee shall audit this procedure annually. The audit process shall include the following:

A. Identification of deviations or inadequacies associated with the procedure.

B. Discussions with employees actively involved with permitting to verify their understanding of procedure responsibilities and practices.

C. Review of past permit and training records to verify completeness and compliance.

IX. Training

A. All Flexsys employees, visitors, vendors and contractors whose job duties may involve the Excavation Procedure shall receive training on this procedure.

B. Training shall be provided to each affected employee before being assigned duties as outlined in this procedure.

C. The Labor/Management Safety Committee will specify the necessity for training when procedure revisions are made.

D. All training shall be documented using the Plant's training documentation system.

X. Procedure Review/Revision

A. The Labor/Management Safety Committee shall conduct periodic reviews and make revisions as necessary.

B. The ESH Department shall distribute procedure revision.

XI. References

A. 29 CFR 1926.650, .651, .652 Excavations

Excavation Permit
(Front Page)

Date: Area/Bldg.: Duration of Permit (Circle): (Day)

(Night)

Issued to:

Location of excavation:

Description of work:

Prepared for Excavation	Yes	No	N/A	
Areas / Lines cleaned / Isolated	____	____	____	
Restricted Area (see Appendix A)	____	____		
Disposition of excavated material	____	____ *	____	
Properly benched/shored for ? 5' depth	____	____ *		***Requires Exception**
Properly barricaded	____	____ *		
Anticipated Obstructions (see Appendix A):				
Electrical (below or above ground)	____	____		
Natural Gas Lines	____	____		
City Water / Fire Water / Sewers	____	____		

Special precautions/equipment:

Other permits required (check required): ☐ Hot Work ☐ Breaking Into ☐ LOTO ☐ Confined Space ☐ Other

Communications	**Person**
Multi-day approval of all excavations:	***Solutia Representative***
Safety and Health Plan for Restricted Excavations (Only):	ESH Approval
Disposal Plan for all Excavations:	ESH Approval
Work Site Management:	Competent Person
Operations Communication:	Lead Operating Technician
Hazard Discussion with:	Individuals Performing Work Contractor Representative
Exceptions (*) Approved by:	Owning Dept. Manager/Shift Supervisor
Action Taken (*):	

Permit originated/approved by: Permit Approver (Owning Dept. Person)

NOTES:
1. The person approving this permit cannot perform the work authorized by this permit alone.
2. For a change in the Permit Approver - either sign this permit (if in agreement with conditions) or close it and issue new permit.

This permit reflects conditions at the time of issuance. If conditions change, stop work and contact Permit Approver.

Permit Closure

Properly compacted: Y / N (leave barricaded and incomplete if no)

Individual performing work: Date: Time: Job Complete: Y / N

Permit Approver: Date: Time: Field Permit Retrieved: Y / N

Area Supervisor Review Completed by: Date:

Return closed permit to ESH Department

Excavation Permit
Shift Sign-Off Log
(Back Page)

Owning Department Name:

Date	Shift/Time	Competent Person's Signature

APPENDIX A
Links to Plant Drawings

Double click on the hyperlink below to properly view the drawing from the Myriad program.

Plant Plot Plan Dioxin Restriction Areas

http://nitroweb.flexsys.com/files/cadd/procedures/5848c01.dgn

WWTP Dioxin Restriction Areas

http://nitroweb.flexsys.com/files/cadd/procedures/5848c02.dgn

Underground Drawings

http://nitroweb.flexsys.com/files/cadd/procedures/5641c01.dgn	Underground Key Map
http://nitroweb.flexsys.com/files/cadd/procedures/5641c02.dgn	Underground Area A – B42, B43
http://nitroweb.flexsys.com/files/cadd/procedures/5641c03.dgn	Underground Area B – B43, B36
http://nitroweb.flexsys.com/files/cadd/procedures/5641c04.dgn	Underground Area C-Easter, H-South, G-Southeast – B25, B36, B31, Acetone S/T
http://nitroweb.flexsys.com/files/cadd/procedures/5641c05.dgn	Underground Area C-West – B30, Caustic Storage
http://nitroweb.flexsys.com/files/cadd/procedures/5641c06.dgn	Underground Area D – B18, B19
http://nitroweb.flexsys.com/files/cadd/procedures/5641c07.dgn	Underground Area E
http://nitroweb.flexsys.com/files/cadd/procedures/5641c08.dgn	Underground Area F&G, B29, B31, B26
http://nitroweb.flexsys.com/files/cadd/procedures/5641c09.dgn	Underground Area H-North-B25, B26, B41, B34, B55
http://nitroweb.flexsys.com/files/cadd/procedures/5641c10.dgn	Underground Areas I-South & J-South
http://nitroweb.flexsys.com/files/cadd/procedures/5641c11.dgn	Underground Areas I-North & J-North B91
http://nitroweb.flexsys.com/files/cadd/procedures/5641c12.dgn	Underground Areas K&L, B90, B91, B17
http://nitroweb.flexsys.com/files/cadd/procedures/5641c13.dgn	Underground Areas M-West –B44, B47, B48, B49, B50
http://nitroweb.flexsys.com/files/cadd/procedures/5641c14.dgn	Underground Areas M-East-B44, B47, B48, B57, B66
http://nitroweb.flexsys.com/files/cadd/procedures/5641c15.dgn	Underground Areas N-B9, NaMBT Storage Tank
http://nitroweb.flexsys.com/files/cadd/procedures/5641c16.dgn	Underground Area O-Aniline TBA, H2SO4 Storage Tanks
http://nitroweb.flexsys.com/files/cadd/procedures/5641c17.dgn	Underground Areas P-South, T-South and Q-B75
http://nitorweb.flexsys.com/files/cadd/procedures/5641c18.dgn	Underground Area R – B1, B3, B5
http://nitroweb.flexsys.com/files/cadd/procedures/5641c19.dgn	Underground Areas S, V, W,X, Y and Z B67, B68, B69
http://nitroweb.flexsys.com/files/cadd/procedures/5641c20.dgn	Underground Areas P-North, U &V-B77, B96