FINAL ENGINEERING REPORT
VCA SITE V00223-6

575 East Mill Street
City of Little Falls
Herkimer County, New York

September 2003

Revised
9/25/03

B U C K

BUCK ENGINEERING

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FINAL ENGINEERING REPORT
VCA SITE V00223-6

575 East Mill Street
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Herkimer County, New York

September 2003

Prepared for:

The New York State Department of
Environmental Conservation
Region 6 Headquarters
Division of Environmental Remediation
317 Washington Street
Watertown, New York

Attn: Darrel Sweredoski, P.E.
Regional Hazardous Waste
Remediation Engineer

Revision Recd 9/5/03

Prepared by:

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C. Photographs of Remediation Activities
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Note: The Quality Assurance Project Manual is bound separately and includes DUSR, project organization chart, laboratory SOPs, QC manual, and validator resume.

1.0 INTRODUCTION AND BACKGROUND

This Final Engineering Report (the "Report") is submitted on behalf of the SPX Corporation (successor to United Dominion Industries) and Feldmeier Equipment, Inc. (the "Volunteers") in support of VCA # D6-0001-99-11. The Report describes remediation activities undertaken by the Volunteers and approved by the Department that occurred in 2002 at the eastern side of 575 East Mill Street, Little Falls, New York (the "Property").

The original Voluntary Cleanup Agreement ("VCA") between the Volunteers and the Department was executed in February 2000. The Final Investigative Report was submitted in July 2001, and a Proposed Work Plan was submitted in January 2002. As the western portion of the Property had previously been used as a Manufactured Gas Plan ("MGP") facility, the MGP facility's successor, Niagara Mohawk, entered into a Voluntary Cleanup Order ("VCO") with the Department to remediate MGP-related contamination.

A proposed VCA modification, awaiting only Niagara Mohawk's submittal of a metes and bounds demarcation map for execution, modifies the western limit of the Volunteers' responsibility under the VCA. This amendment was agreed to in principle by Niagara Mohawk, the Volunteers and the Department at a meeting on July 2, 2003 in Albany, New York. The new western limit is specifically defined in exhibit "B" of the amendment, but is a north-south line passing through the existing new tank building at approximately its east-west midpoint. This amendment effectively removes responsibility for remediation of the previous coal-gas manufacturing facility site from the Volunteers.

The report also includes a narrative description of a test-pit excavation activity that occurred in April 2002 at the southwest corner of the current new tank building. This narrative is appended to the report for the record. No remediation occurred during this activity and the area is no longer included in the geographic boundaries of the amended VCA.

2.0 SCOPE OF WORK

In order to expedite remediation efforts, Region 6 personnel approved an Interim Remediation Measures (IRM) activity with the general guidance that the IRM elements be conducted as they were proposed in the Work Plan. These elements included:

- Excavation at the previous tannery location at the southeast portion of the property. The objective was to remove soils with visible indications of tar-like contamination.
- Construction of an asphalt pavement cap over portions of the previous tannery site. The purpose of the cap was to preclude public access and exposure to soils with chromium contamination.

3.0 DESCRIPTION OF ACTIVITIES AND FINDINGS

a. Tar-like Material Remediation – Previous Tannery Site

On September 16 and 17, 2002, excavation activities were performed by Gary Dyer, Inc. in the southeastern portion of the property where a tar-like material was discovered during prior investigations at the site. The purpose of the excavation activities was to locate the tar-like material and excavate all of the material that could be visibly identified in that area, and drum it for later off-site disposal.

The excavation activities, which extended approximately 4.5 feet below grade to bedrock, uncovered a relatively small amount of tar-like material overlaid with fill material. The tar-like material was generally less than two inches thick over an area approximately 20 sf in size and was lying directly on the bedrock. A photoionization detector was used to determine if volatile hydrocarbons were present in the soil, and readings were consistently less than 1 ppm. The tar-like material, which was characteristically black and easily identifiable against the surrounding fill material, was subsequently excavated by backhoe and shovel and drummed for later off-site disposal. One 55-gallon drum of contaminated soil was removed from the site by Safety Kleen on November 5, 2002 and disposed of at a landfill facility in Smithfield, Kentucky. Because the contaminated material in the excavation was lying on uneven bedrock and had a somewhat sticky texture, a small amount of the material could not be removed from the various minute bedrock crevices and some staining was observed on the bedrock. Mr. Philip Waite, P.E. was present and determined by visual observation that as much material as was practicable was removed from the excavation. Soil samples were obtained for laboratory analysis from the south and north sidewalls of the excavation, approximately 2" off bedrock (SS#1 and SS#2, respectively).

After obtaining the two soil samples, the excavation was backfilled and the area was re-graded.

The soil samples were analyzed for volatile and semi-volatile organic compounds by ASP-95-1 and ASP-95-2, respectively. The Data Usability Summary Report pertaining to the samples has been included in an appendix.

A summary table of the findings is provided in ***Table 1***.

Section 3 – Description of Activities and Findings (Con't)

TABLE 1

Sampling Date	Sampling Point	Compound/Testing	Sample Concentration (ppm)
9/17/02	SS#1	*VOCs*	ND
	(South wall)		
		SVOCs/PAHs	
		Acenaphthene	3.5
		Dibenzofuran	2.5
		Fluorene	4.9
		Phenanthrene	43
		Anthracene	11
		Carbazole	4
		Fluoranthene	39
		Pyrene	32
		Benzo(a)anthracene	34
		Chrysene	34
		Benzo(b)fluoranthene	8.6
		Benzo(k)fluoranthene	12
		Benzo(a)pyrene	8.6
		Indeno(1,2,3-cd)pyrene	6.7
		Benzo(g,h,i)perylene	6.4
		TOTAL SVOCs/PAHs	***250.2***
9/17/02	SS#2	*VOCs*	ND
	(North wall)		
		SVOCs/PAHs	
		Phenanthrene	13
		Anthracene	2.3
		Fluoranthene	12
		Pyrene	11
		Benzo(a)anthracene	5.2
		Chrysene	5.2
		Benzo(b)fluoranthene	3.1
		Benzo(k)fluoranthene	3
		TOTAL SVOCs/PAHs	***54.8***

ND - None Detected

The proposed IRM cleanup goal for this property cited in a June 26, 2003 correspondence from John Spellman, P.E. of NYSDEC to James F. Morgan of Niagara Mohawk/A National Grid Company, is a total PAH concentration of less than 500 ppm per sample.

Table 1 indicates that the Total SVOCs/PAHs for SS#1 and SS#2 were 250.2 ppm and 54.8 ppm, respectively. Therefore, the remediation was considered successful and no operation and maintenance (O & M) plan is required for this portion of the site.

Additional IRM activities in this portion of the site included an attempt to sample groundwater monitoring well #5 which is located approximately 40 feet east of the soil remediation excavation. No groundwater sample was obtained from the well because it was dry. This well has typically been dry since its construction which would likely indicate that there is no viable overburden groundwater in this portion of the site.

Section 3 – Description of Activities and Findings (Con't)

b. Chromium-contaminated Soil Remediation – Previous Tannery Site

The prior investigative activities performed in this portion of the property identified Chromium in the surface soils in the driveway north of the unused 7-story tannery structure. One sample from TP-3-1 had measurable hexavalent chromium. The Chromium is likely to have originated from the former tannery operations, which concluded at the site more than 80 years ago. Because of the material's age, the absence of a further contaminant source, and absence of off-site contaminant migration, a asphalt cap was designed. After grading the area on October 7, 2002, Tri-County Paving performed the paving operations over the Chromium contaminated area on October 9, 2002. Approximately 3 inches of asphalt was placed and compacted over an area encompassing more than 3,000 SF in the northeast portion of the subject property (former tannery area). The area that was asphalt-paved for remediation purposes is shown on the map included in an appendix. Upon completion of the remediation paving activities, the remainder of the parking area (encompassing nearly 10,000 SF) was paved. These activities were visually confirmed by Buck Engineering, LLC. Photographs of the asphalt-paving activities have been included in an appendix.

In order to insure that the Chromium-contaminated soils are not disturbed, an operation and maintenance plan is proposed consisting of the following elements:

- The asphalt-paved area will be reviewed on at least a semi-annual basis for cracks and defects.
- Cracked pavement and defects will be sealed and repaired in a manner that will not require excavation or disturbance of the Chromium-contaminated soils.
- Excavation activities will not be permitted in the paved area overlying the Chromium-contaminated soils without prior notification and submission of an excavation plan to the NYSDEC Region 6 offices in Watertown.

4.0 HUMAN EXPOSURE – LIMITED EVALUATION

The following discussion presents an evaluation of the potential for human exposure to contaminants present in the former tannery portion of the Feldmeier site. This evaluation is not a comprehensive evaluation, but is limited to those contaminants in the areas where remediation activities took place in September and October 2002, as described in Section 2 of this report.

The two sites of concern with respect to human exposure are the Chromium-contaminated soils beneath the asphalt cap, and the area where tar-like materials were excavated, both of which are located on the eastern portion of the property. See the Site Remediation Activities Location Map.

The contaminants of concern include: 1) Chromium-contaminated soils in the northeastern portion of the site, and 2) tar-like material residue in the on-site soils containing high levels of PAHs.

Potential human exposure to these contaminants could occur via ingestion, dermal absorption, and/or inhalation of particulates released to the air. Current potential receptors include employees of Feldmeier Equipment, utility workers, or visitors or trespassers on the property.

Concerns with the identified contaminants led to specific remedial actions that have significantly limited current potential human exposure. These actions included capping the Chromium-contaminated soils via a 3-inch layer of asphalt and removing, to the extent possible, the tar-like material. However, future activities at the site could inadvertently expose people to these contaminants; therefore, deed restrictions will be put in place to limit this potential. The deed restrictions will limit site activities and human exposure and four have been outlined in the VCA agreement. Also, because there are PAHs above TAGM 4046 recommended cleanup objectives remaining in the area where the tar-like material residue was excavated, an additional deed restriction will be included that restricts excavation activities without prior notification and submission of an excavation plan to the NYSDEC Region 6 offices in Watertown.

Conclusion: Remediation activities have significantly limited potential current human exposure to site contaminants; however, the placement and enforcement of deed restrictions will further limit human exposure to site contaminants.

5.0 CONCLUSIONS

The following conclusions are made with respect to the work described in this Final Engineering Report:

Historic Coal Gas Manufacturing Area: Although this area was included in the original VCA description, the VCA amendment removes this area from the Volunteer's responsibility. Further investigation and remediation activities, if required, will be conducted by Niagara Mohawk/National Grid under their consent agreement. No further action is necessary by the Volunteers.

Historic Tannery Area – Tar-Like Material: Excavation was completed and visibly contaminated soils were removed according to the property work plan. The excavation extent was approved by Philip Waite, P.E. Two samples were obtained for laboratory analysis. Results of the laboratory analysis indicated that the samples were free of volatile organic compound (VOC) contamination. The semi-volatile (PAH) analyses indicated that total PAHs present in SS#1 and SS#2 were approximately 250 ppm and 54 ppm, respectively. These PAH concentrations are less than the 500 ppm concentration proposed as an IRM cleanup goal cited in a June 26, 2003 correspondence from John Spellman, P.E. of NYSDEC to James F. Morgan of Niagara Mohawk/A National Grid Company. It is concluded that the remediation of this area was effective and met the cleanup objective.

Historic Tannery Area – Chromium-contaminated Soil Remediation: In accordance with the proposed work plan, approximately 3,000 SF of pavement was placed over contaminated soils in October 2002 by Tri-County Paving of Herkimer, New York. It is our opinion that the pavement provides a satisfactory barrier to public exposure. Annual review of the asphalt integrity will provide adequate assurance that the soils remain contained beneath the asphalt.

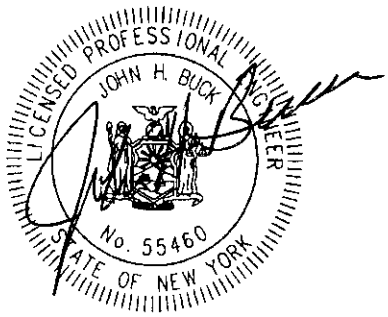
Recommendation

Based on the IRM activities completed and described in this Final Engineering Report, we request a finding from the Department that no further remedial action is required under the VCA.

6.0 ENGINEER'S CERTIFICATION

I certify that the IRM activities described in this report were personally witnessed by a person under my direct supervision and are believed to have adequately and successfully remediated the subject site in accordance with the amended VCA between the Volunteers and New York State.

The information in this report is presented truthfully and accurately to the best of my knowledge and belief.



John H. Buck, P.E.
LN 55460

7.0 APPENDICES

A. Site Remediation Activities Location Map

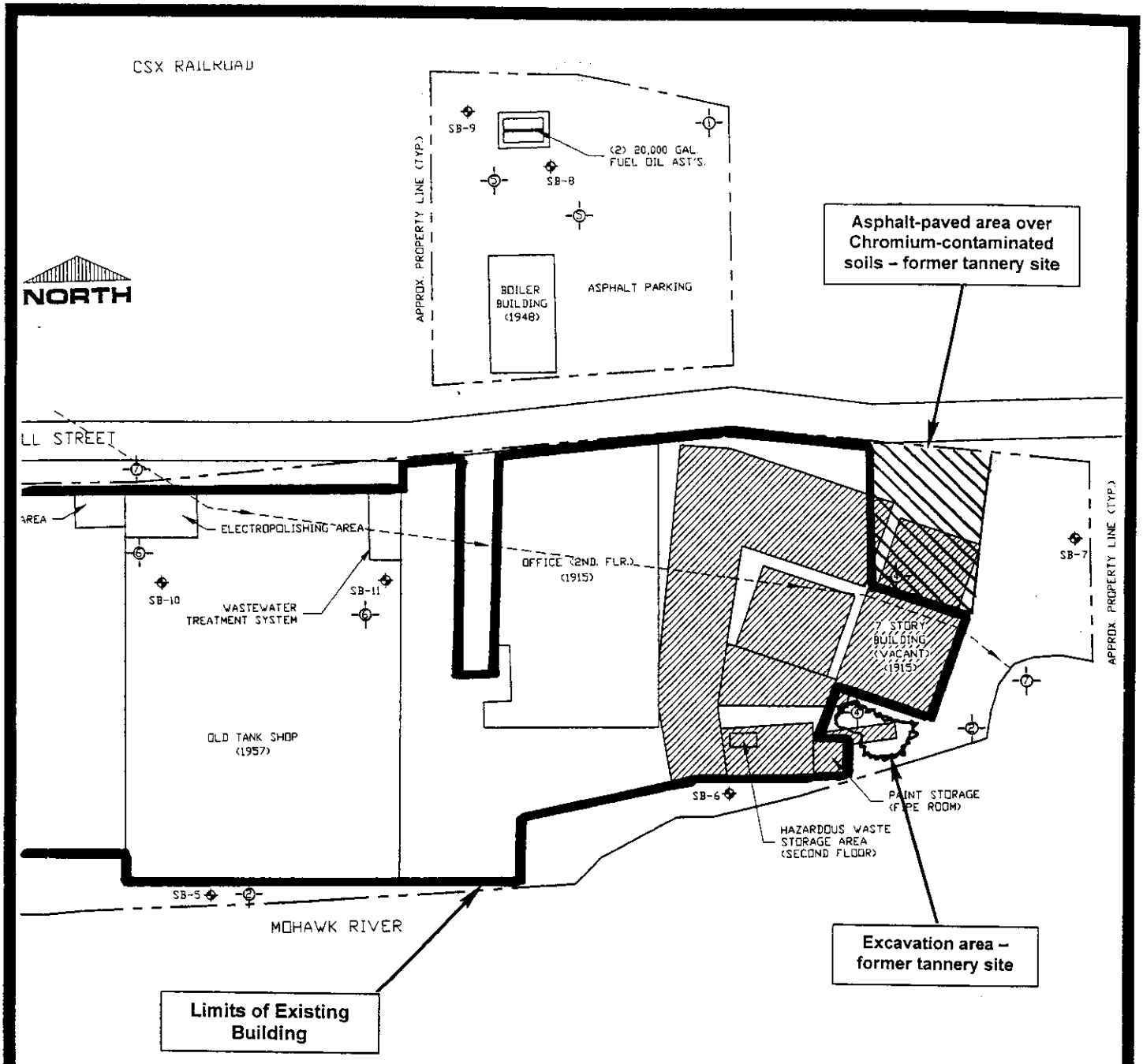
B. April 2002 Test Pit Excavation Activity Description

C. Photographs of Remediation Activities

D. ASP Data Summary Package

APPENDIX A

SITE REMEDIATION ACTIVITIES LOCATION MAP



BUCK ENGINEERING, LLC

Site Remediation Activities Location Map

Approx. Scale: 1" = 100'

Figure No: 1		Site Remediation Activities Location Map
Project: Final Engineering Report SPX Corporation Property Little Falls, NY	Prepared By: WCM	
Client: Mr. Daniel McGrade SPX Corporation Charlotte, NC	Project Location: 575 East Mill St., Little Falls, NY	SPX Corporation Site Little Falls, NY Base Map Dated: 6/20/99

APPENDIX B

APRIL 2002 TEST PIT EXCAVATION ACTIVITY DESCRIPTION

April 2002 Test Pit Excavation Activity Description

Historic Coal Gas Manufacturing Area

On April 12, 2002, a trip was made to the site by Wayne Matteson of Buck Engineering, LLC for the purpose of reviewing the area proposed for excavation and to delineate the lines of excavation. Mr. Kyle Brown of Feldmeier Equipment reviewed the area along with Mr. Matteson. The area proposed for the excavation activities was located near the southwest corner of the newest tank manufacturing building. This activity was conducted in preparation for the arrival of an excavation contractor on Monday, April 15, 2002.

The area was reviewed and three proposed trench excavation lines were drawn. Measurements were taken to identify pertinent objects along and near the building (i.e., doorways, overhead doors, storm sewer catch basins, groundwater monitoring well, etc.). A 10" corrugated plastic storm sewer line that discharges into a 16" corrugated metal storm sewer line was observed running parallel to the building, approximately 20 feet west of the building. The pipe discharges to the Mohawk River.

On Monday, April 15, 2002, excavation activities began. The purpose of the excavation activities was two-fold, 1) to determine if the gasometer associated with the prior manufactured gas operations conducted at the site was still present; and, 2) to determine if coal tar residue was present at the site.

Field Conditions: The weather was clear and sunny, approximately 70 deg F with a light SW wind. The Mohawk River was very high after 2 days of heavy rain.

Those in attendance during the excavation activities were as follows:

Elroy Moore, Feldmeier Equipment, Inc.
Jack Marsh, NYSDEC (Utica office)
Al McCarthy, A.S. McCarthy Construction, Inc.
John McCarthy, A.S. McCarthy Construction, Inc.
Thomas J. Wollen, Foster Wheeler
John Buck, Buck Engineering, LLC
Wayne Matteson, Buck Engineering, LLC

Excavation activities were begun at about 9 AM along the southernmost trench line. The asphalt pavement was scraped away and piled on-site and then a general soil excavation was conducted. At a depth of approximately 3 feet, brick and stone were encountered. As the excavation widened and deepened, it was apparent that this was a laid-up stone wall and the brick-lined gasometer structure. Excavation activities were conducted both inside and outside the gasometer rim. The gasometer appeared to have a diameter of approximately 40 feet with more than half of the gasometer once located beneath the building. Soil removed from the excavation was stockpiled on plastic and screened with a photoionization detector (PID) for volatile organic compounds. Soil material encountered was generally fill material (i.e., gravel, stone, composite soils, brick and debris). A second laid-up stone wall was encountered approximately 3 feet from the outside of the first stone wall. The area between the walls was excavated down to approximately 12 feet. An apparent stone footer associated with the first stone wall was encountered at a depth of 10 feet.

Test Pit Excavation Activity Description (Con't)

Groundwater was encountered in the excavation approximately 12 feet below grade; no excavating was conducted below the groundwater level. Groundwater appeared to be entering the excavation from both the north and south as the Mohawk River was very high. It is believed that the high river elevation was influencing the groundwater flow in the area and in the excavation location.

No visual evidence of soil or groundwater contamination was apparent in this test pit. No PID hits were encountered in any of the soils removed from the test pit. This first test pit encompassed an area approximately 15' wide x 20' long x 12' deep in size. These test pit activities were conducted between the building and the storm sewer line.

A second test pit was excavated approximately eight feet north of the first test pit and four feet north of the groundwater monitoring well. The excavation was performed in an east-west direction starting at the wall of the building. The asphalt was removed and stockpiled and the soil was excavated down to approximately 10 feet. Soils encountered in the first 10 feet appeared to be fill material where, at that depth, material that resembled coal tar was encountered. Excavation activities continued to a depth of approximately 12 feet. The apparent coal tar material was encountered the entire distance from 10-12 feet below grade. Groundwater was seeping in relatively slowly. PID readings on the contaminated material ranged from 3-15 ppm. Approximately 3 cubic yards of the apparent coal tar residue was separated out on plastic for later off-site disposal. The final trench dimensions were approximately 4' wide x 17' long x 12' deep. A soil sample of the apparent coal tar residue was obtained for laboratory analysis for characterization purposes. Laboratory results have been included in an appendix.

Both test pits were left open overnight but were protected by barriers to prevent unauthorized personnel from entering the excavations.

Additional excavation activities were conducted on April 16, 2002. The purpose of these excavation activities was to attempt to determine the northern and western limits of the coal tar residue discovered on the property.

Field Conditions: The weather was clear and sunny, approximately 80-85 deg F with a light SW wind. The Mohawk River remained very high and water was observed in the two existing test pits.

Those in attendance during the excavation activities were as follows:

Elroy Moore, Feldmeier Equipment, Inc.
Philip Waite, NYSDEC (Watertown office)
Darrel Sweredowski, NYSDEC (Watertown office)
Al McCarthy, A.S. McCarthy Construction, Inc.
Thomas J. Wollen, Foster Wheeler
John Buck, Buck Engineering, LLC
Wayne Matteson, Buck Engineering, LLC

Test Pit Excavation Activity Description (Con't)

McCarthy Construction began working at approximately 8:30 AM, first by trucking all asphalt cuttings from the previous day's activities off-site. At approximately 10:30 AM, trench excavation activities began at a location approximately 25 feet north of TP2. The excavation was performed in an east-west direction starting at the wall of the building. The asphalt was removed and stockpiled and the soil was excavated down to approximately 10 feet. Soils encountered in the first 10 feet appeared to be fill material where, at that depth, apparent coal tar residue was encountered. Also encountered were a section of cast iron pipe (6" inside diameter) and a section of wooden pipe (6" diameter). The wood pipe clearly contained coal tar residue. Excavation activities continued to a depth of approximately 13 feet. The apparent coal tar material was encountered the entire distance from 10-13 feet below grade. Groundwater was seeping in relatively slowly. PID readings on the contaminated material ranged from 5-25 ppm. Approximately 10 cubic yards of the apparent coal tar residue were separated out on plastic for later off-site disposal. The final trench dimensions were approximately 4' wide x 24' long x 13' deep. The storm sewer line, which was a 10" diameter corrugated polyethylene pipe at the trench location, was severed so as to complete the trench work and repaired during backfilling. Bedrock was encountered at 13'.

Other activities that occurred included further excavation inside the gasometer to determine how deep the gasometer is and if there is coal tar residue below the gasometer foundation. Due to the high groundwater level and loose fill material, only approximately 2 more feet of fill were excavated from the gasometer, thus making the total depth of the excavation nearly 14 feet deep. The soil along the sidewalls by the building gave way to an extent where it was thought that the integrity of the foundation wall might be in jeopardy; therefore, excavation activities were discontinued at that point. The bottom of the gasometer was not found by the excavation activities and was subsequently backfilled with the soils previously removed.

A fourth test pit was excavated approximately 30 feet north of the third test pit. The trench was excavated in an east-west direction to a depth of 8 feet. The trenching was discontinued on the east side of the storm drain so as not to undermine it or damage it. The soils encountered were fill material and no measurable PID readings were recorded for any of the soil excavated down to 7.5' below grade. At 7.5' a layer of apparent coal tar residue was discovered. The layer of coal tar was approximately 6 inches thick as bedrock was encountered at 8' below grade. No groundwater was encountered in the trench. PID readings from the coal tar ranged from 10-15 ppm.

Upon completion of all excavation activities, the test pits were filled with clean material. Coal tar residue was placed on and covered with plastic in a secure location on the property for later off-site disposal. A total of approximately 10-15 C.Y. of coal tar residue was excavated and stored on plastic during the two-day backhoe excavation period.

BUCK
ENVIRONMENTAL LABORATORIES, INC.
accredited environmental analysis

Lab Log No.: **0204233**

May 21, 2002

SPX CORPORATION
700 TERRACE POINT DRIVE
PO BOX 3301
MUSKEGON, MI 49443-3301

TEL:
FAX:

RE: 575 E MILL STREET

ATTN: Dan McGrade

Buck Environmental Labs, Inc. received 1 sample on 04/17/02 for the analyses presented in the following report.

The analytical results for your samples are presented on the enclosed laboratory report(s). In accordance with NYSDOH-ELAP and NELAC regulations, we are required to notify you of any aspects of the analysis that did not comply with these regulations. A summary of problems, notations, and non-compliant parameters is presented on the attached "Narrative". Any data qualifiers are noted directly on the laboratory report. The Laboratory also maintains a "Sample Receipt Checklist" and the submitted "Chain of Custody" form in its files that are available on request.

The pagination at the bottom of the narrative and reports indicates the total number of pages in the client submittal. No duplication of this report should be done without duplication of the entire package, including cover letter and narrative.

Thank you for the opportunity to provide these analytical services. Please contact Pamela Davis, Client Services Manager, or Barbara Houskamp, QA/QC Manager, with questions on the analysis.

Sincerely,

John H. Buck, P.E.
Laboratory Director

Buck Environmental Labs, Inc.
3821 Buck Drive, Cortland, NY 13045-5150
Tel 607.753.3403
Fax 607.753.3415
Info@Bucklabs.com

ELAP # 10795
EPA # NY00935

ACCREDITED IN ACCORDANCE WITH

Buck Environmental Labs, Inc. **Date:** *21-May-02*

CLIENT: SPX CORPORATION
Project: 575 E MILL STREET
Lab Order: 0204233

CASE NARRATIVE

Samples were analyzed using Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition or other methods specifically approved by NYSDOH-ELAP.

The following parameters did not meet the laboratory or regulatory QC requirements:

One surrogate recovery exceeded laboratory acceptance limits.

Glossary of terms and acronyms used in the lab reports:

CAS - Chemical Abstract Series identification for the analyte.
DF - "1" indicates that there was no dilution. Any other number indicates that the sample was diluted by that factor.
PQL - Practical Quantitation Limit - The lowest level that the lab would report a value.
Result -This is the numerical result of the analysis (in bold). An "ND" indicates that the analyte was not detected at greater than the PQL concentration.
Units - The units of measure for the analysis. Ug/L (ppb) and mg/L (ppm) are for liquid samples. Ug/kg (ppb) and mg/kg (ppm) are for solid based units.
Qual - An entry in this column indicates that the results are "qualified" according to the following codes (generally related to lab QC results):

J - The analyte was detected at less than the PQL, but the amount is not precisely known.
B - The analyte was detected in the lab blank indicating possible contamination.
E - The result is estimated because the measurement exceeded the upper calibration limit.
D - Surrogate recovery was low due to sample dilution.
S - Spike recovery was outsidelaboratory acceptance limits.
R - RPD was outside laboratory acceptance limits.
H - The measurement is estimated because the sample was analyzed after regulatory holding time expired.
* - The result exceeds the public drinking water maximum contaminant level.

BUCK
ENVIRONMENTAL LABORATORIES, INC.
accredited environmental analysis

Report Date: *21-May-02*
Lab Log No: **0204233**

CLIENT: SPX CORPORATION
700 TERRACE POINT DRIVE
PO BOX 3301
MUSKEGON, MI 49443-3301

Project: 575 E MILL STREET
Lab ID: 0204233-01A

Client Sample ID: TP2
Sampled By: W. MATTESON
Collection Date: 04/15/02
Received at Lab: 04/17/02
Matrix: SOIL

Analyses	CAS	DF	PQL	Result	Units	Qual
PAH'S BY EPA 8270		Analyst: **JHB**	Analysis Date:**05/08/02**			
Acenaphthene	83-32-9	10	3300	**6100**	µg/Kg	
Acenaphthylene	208-96-8	10	3300	**ND**	µg/Kg	
Anthracene	120-12-7	10	3300	**13000**	µg/Kg	
Benz(a)anthracene	56-55-3	10	3300	**7300**	µg/Kg	
Benzo(a)pyrene	50-32-8	10	3300	**4900**	µg/Kg	
Benzo(b)fluoranthene	205-99-2	10	3300	**6200**	µg/Kg	
Benzo(g,h,i)peryiene	191-24-2	10	3300	ND	µg/Kg	
Benzo(k)fluoranthene	207-08-9	10	3300	**6600**	µg/Kg	
Chrysene	218-01-9	10	3300	**7100**	µg/Kg	
Dibenz(a,h)anthracene	53-70-3	10	3300	ND	µg/Kg	
Fluoranthene	206-44-0	10	3300	**14000**	µg/Kg	
Fluorene	86-73-7	10	3300	**ND**	µg/Kg	
Indeno(1,2,3-cd)pyrene	193-39-5	10	3300	ND	µg/Kg	
Naphthalene	91-20-3	10	3300	**ND**	µg/Kg	
Phenanthrene	85-01-8	10	3300	**12000**	µg/Kg	
Pyrene	129-00-0	10	3300	**10000**	µg/Kg	
Surr: 2-Fluorobiphenyl	321-60-8	10	10-117.7	84.2	%REC	
Surr: Nitrobenzene-d5	4165-60-0	10	10-99	121	%REC	S
Surr: Terphenyl-d14	98904-43-9	10	10-120.7	83.8	%REC	

APPENDIX C

PHOTOGRAPHS OF REMEDIATION ACTIVITIES

Photograph of excavation activities in former tannery area of SPX property.

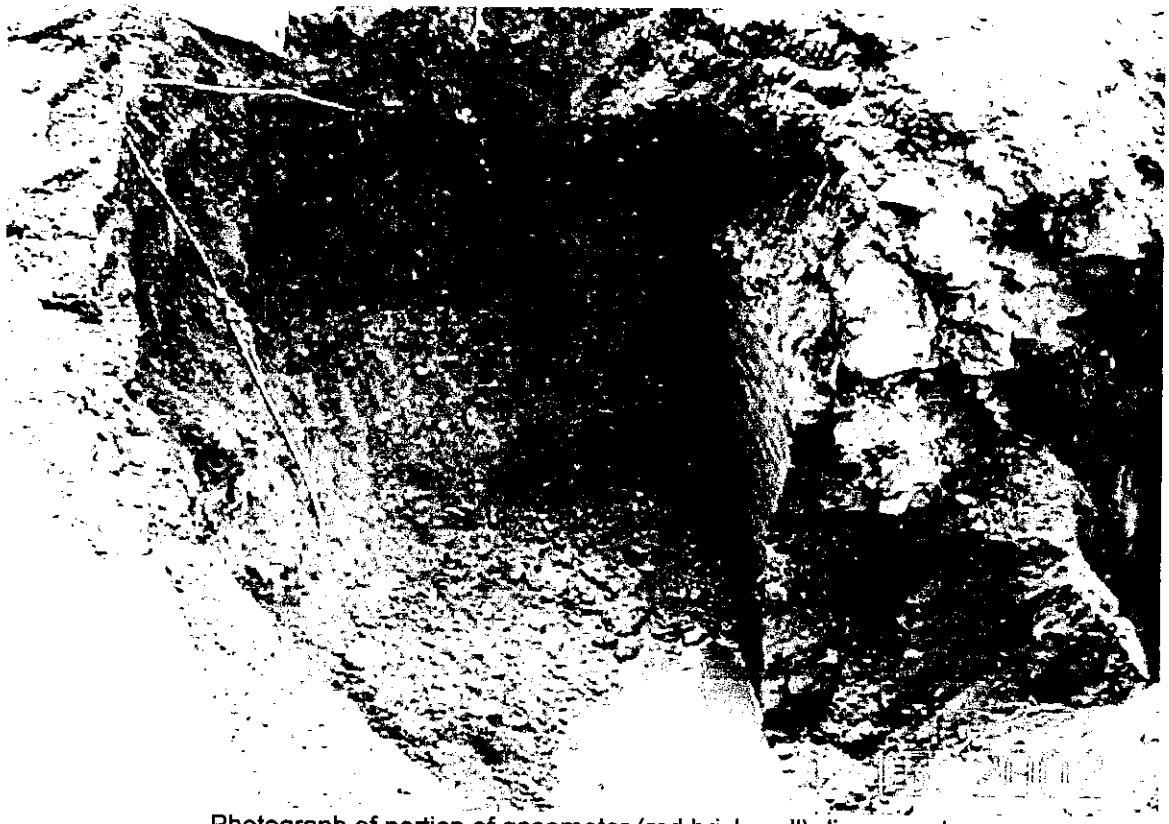
Photograph of material sampled in former tannery area of SPX property.

Photograph of former tannery area on SPX property; post-excavation.

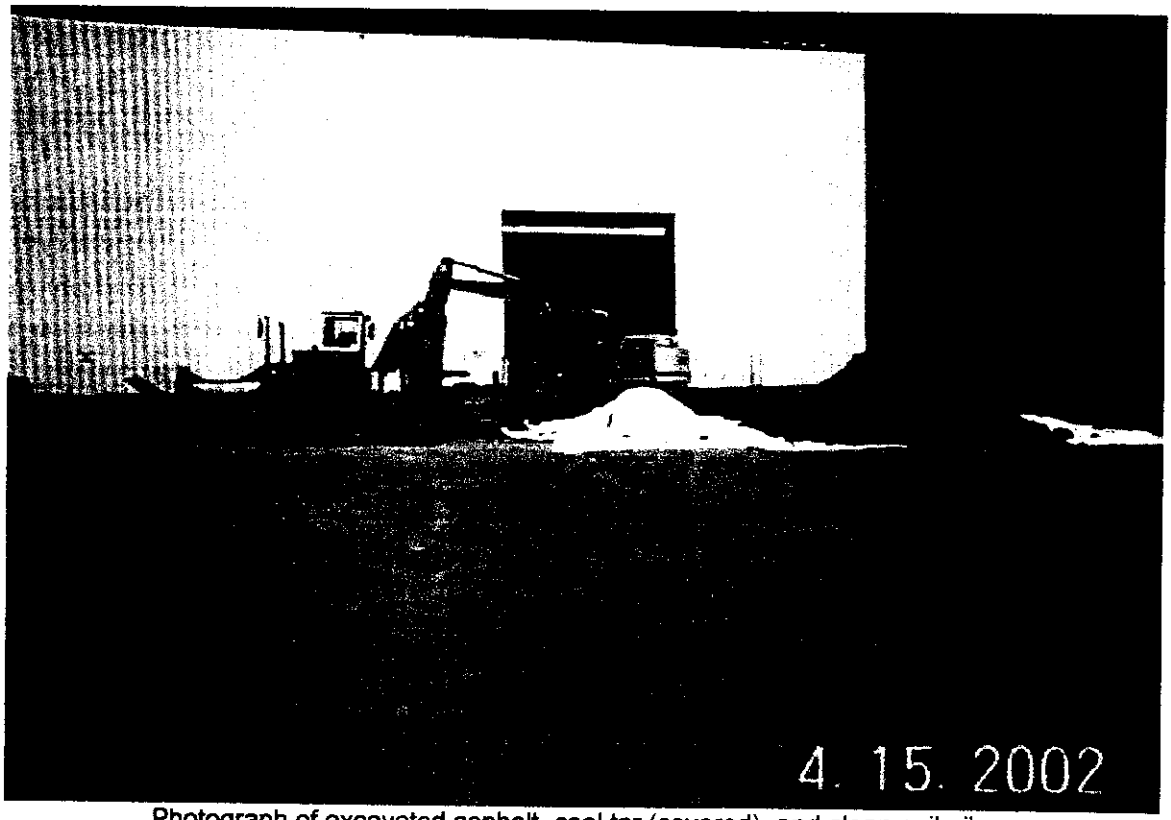
Photograph of paving activities in northeast portion of SPX property
over chromium-contaminated soils.

Photograph of apparent coal tar material being separated for later off-site disposal.

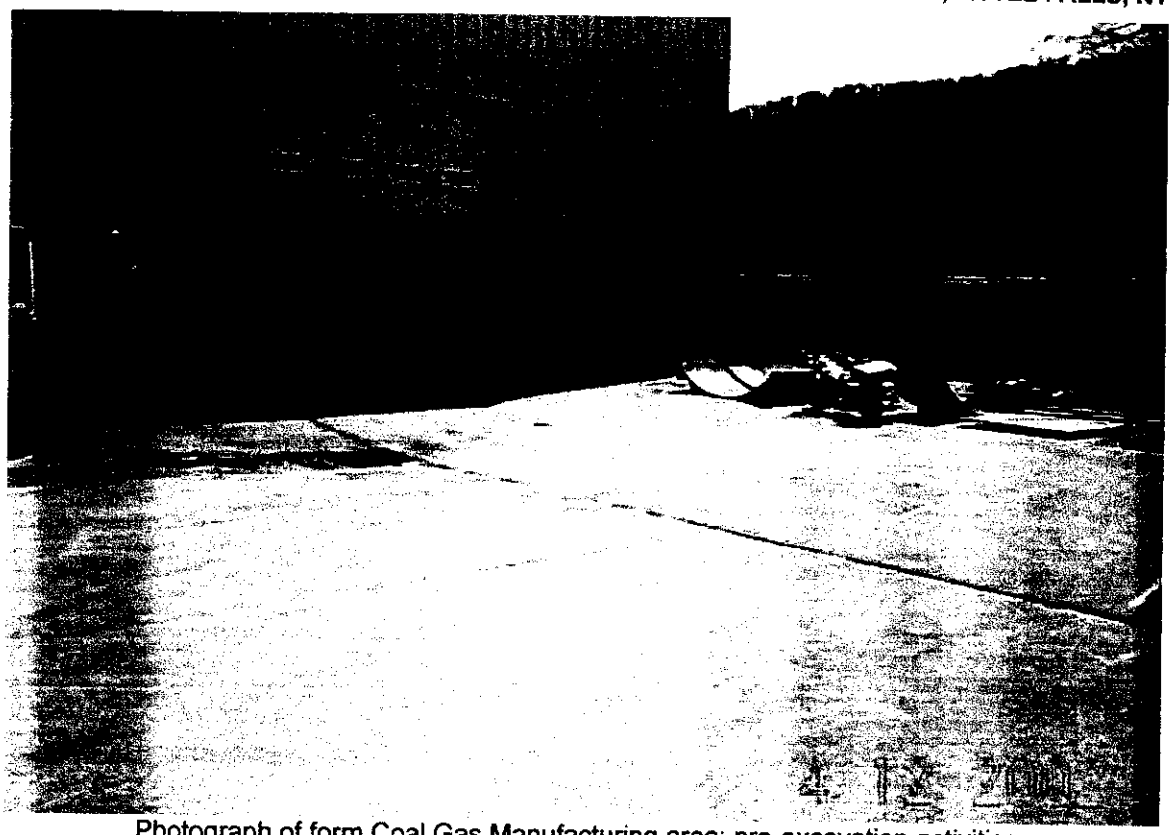
Photograph of groundwater in excavation outside of gasometer.



Photograph of portion of gasometer (red brick wall) discovered during excavation activities.



Photograph of excavated asphalt, coal tar (covered), and clean soil piles.



Photograph of form Coal Gas Manufacturing area; pre-excavation activities.

Photograph of pavement broken up by excavation contractor.

Photograph of completed post-excavation paving in former coal gas manufacturing location.

Photograph of completed paving over northernmost trench in former coal gas manufacturing area.

Photograph of second trench north of gasometer excavation.

Photograph of northernmost trench.

Photograph of excavation where gasometer was found.

Photograph of first trench located north of gasometer excavation,
where coal tar-like material was found.

APPENDIX D

ASP DATA SUMMARY PACKAGE

Summary Data Package

SDG BEL0228

prepared for

SPX Corporation
13515 Ballantyne Corporate Place
Charlotte, NC

by

Buck Environmental Laboratories, Inc.
3821 Buck Drive
Cortland, NY 13045

January 3, 2003

SDG NARRATIVE January 3, 2003

This laboratory narrative applies to samples from Feldmeier Equipment, Inc., 575 East Mill Street, Little Falls, NY. The samples were taken by Wayne Matteson from Buck Engineering, LLC following plans for a VCP Investigation. This data package reports the analytical work performed on the samples received. The soil samples received carried sample identifications as listed in the table below. Also shown are the BEL laboratory assigned identification numbers. The samples were assigned to sample delivery group number **BEL0228.**

SAMPLING DATE	SAMPLE ID	BEL SAMPLE ID	VOLATILES by ASP-95-1	SEMI-VOLATILES by ASP-95-2
09/17/02	SS#1 – South	0209163-01	X	X
09/17/02	SS#2 – North	0209163-04	X	X
09/17/02	MS - SS#1	0209163-02	X	X
09/17/02	MSD - SS#1	0209163-03	X	X

The samples arrived 9/17/02 at 16:00 PM by hand delivery of the sampler, Wayne Matteson. The BEL Inorganics supervisor, Shirley Towner, accepted the samples. There was one cooler in the delivery with samples intact. There were no custody seals. The sample temperatures were recorded at 19.7°C. The laboratory identification number 0209163 was assigned to these samples.

Comments on BEL analytical quality control review are as follows:

SDG BEL0228

GC/MS Volatiles

Holding Time: Met acceptance criteria.
Surrogate Recovery: Met acceptance criteria.
MBS : Met acceptance criteria.
MS/MSD: Recoveries of benzene, toluene and chlorobenzene were above the QC limits on both MS and MSD. The trichlorobenzene MS recovery was 138%, above the QC limit of 137%. All five RPD's were acceptable.
Holding Time: Met acceptance criteria.
Surrogate Recovery: Met acceptance criteria.
MBS : Met acceptance criteria.

GC/MS Volatiles (cont.)

MS/MSD: Recoveries of benzene, toluene and chlorobenzene were above the QC limits on both MS and MSD. The trichlorobenzene MS recovery was 138%, above the QC limit of 137%. All five RPD's were acceptable.

Instrument Tune: Met acceptance criteria.

Internal Standards Met method acceptance criteria.

Initial Calibration: The following compounds did not meet the minimum RRF on the initial calibration (all standards below the method required limit): tetrachloroethene, 1,1,2,2-tetrachloroethene, bromoform, and trichloroethene. Bromodichloromethane did not meet the required minimum RRF on the 50, 100, and 200 standards, so the average RRF on the ICAL was 0.191, below the required 0.200. All %RSD were acceptable.

Continuing Calibration: The compounds tetrachloroethene, 1,1,2,2-tetrachloroethene, bromoform, trichloroethene and bromodichloromethane were below the minimum RRF. All %D were acceptable.

The ASP 95-1 analysis was completed on a GC/MS equipped with a J & W DB-624 20 m-.18 mm ID column and using a Supelco VOCARB 3000 trap.

GC/MS Semi-Volatiles

Holding Time: VTSR was 9/17/02. Extraction was completed on 10/6/02, nine days beyond the method hold time. Analysis was performed the day following extraction and met method hold times.

Surrogate Recovery: Met method acceptance criteria for both samples. Both MS and MSD were run at dilutions and surrogates were diluted out. The MBS and SBLK had surrogates S7 (TBP) and S8 (TPH) exceed the advisory limits.

MBS (LCS): The recoveries were acceptable for all compounds except 1,4-dichlorobenzene and n-nitrosodi-n-propylamine. These two recoveries were slightly below the lower limit.

MS/MSD: The MS recovery of pyrene exceeded the QC limits. The MSD recovery of pyrene and %RPD were acceptable. All other compounds were diluted out.

Method Blank: There is one blank in the package; it was non-detect for all compounds.

GC/MS Semi-Volatiles (cont.)

- Instrument Performance: The tune met acceptance criteria.
  Internal Standards: The SBLK had four internal standards (IS1, IS2, IS3, and IS4) that exceeded the upper limit. The internal standards met criteria for all sample data.

The EPA 8270 analysis was completed on a GC/MS equipped with a Restek RTX-5MS-30 m.-.25 mm ID column.

Please call Barbara Houskamp, QA Manager, at BEL if you have any questions or need any further information regarding this submittal.

I certify that to the best of my knowledge and belief, this data package is in compliance with the terms and conditions of the Analytical Services Protocol, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

John H. Buck, P.E.
Laboratory Director

1-04-03
Date

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY
Contract Lab Sample Information Sheet (CLSIS)

		Analytical Requirements				
Customer Sample Code	Laboratory Sample Code	VOA GC/MS Method	BNA GC/MS Method	Pesticide PCB's Method	Metals	Other
MS – SS#1	0209163-02	ASP 95-1	ASP 95-2	-	-	-
MSD – SS#2	0209163-03	ASP 95-1	ASP 95-2	-	-	-
SS#1 – SOUTH WALL	0209163-01	ASP 95-1	ASP 95-2	-	-	-
SS#2 – NORTH WALL	0209163-04	ASP 95-1	ASP 95-2	-	-	-

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
GC/MS VOLATILE (VOA) ANALYSIS
Contract Lab Sample Information Sheet (CLSIS)

Laboratory Sample Code	Matrix	Date Collected	Date Received at Lab	Date Extracted	Date Analyzed
0209163-01	SOIL	9/17/02	9/17/02	N/A	9/26/02
0209163-02	SOIL	9/17/02	9/17/02	N/A	9/26/02
0209163-03	SOIL	9/17/02	9/17/02	N/A	9/26/02
0209163-04	SOIL	9/17/02	9/17/02	N/A	9/26/02

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SAMPLE PREPARATION AND ANALYSIS SUMMARY
GC/MS SEMIVOLATILE (SVOA) ANALYSIS
Contract Lab Sample Information Sheet (CLSIS)

Laboratory Sample Code	Matrix	Date Collected	Date Received at Lab	Date Extracted	Date Analyzed
0209163-01	SOIL	9/17/02	9/17/02	10/06/02	10/07/02
0209163-02	SOIL	9/17/02	9/17/02	10/06/02	10/07/02
0209163-03	SOIL	9/17/02	9/17/02	10/06/02	10/07/02
0209163-04	SOIL	9/17/02	9/17/02	10/06/02	10/07/02

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS #1 - SOUTH WALL

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01A

Sample wt/vol: 5 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 17.4 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene chloride	26	B
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS #1 - SOUTH WALL

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01A

Sample wt/vol: 5 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 17.4 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
1330-20-7	Xylenes, Total	12	U

1F

EPA SAMPLE NO.

SS #1 - SOUTH WALL

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01A

Sample wt/vol: 5 (g/mL) G Lab File ID: 0901009.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 17.4 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 2 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000110-54-3	Hexane	2.82	13	BNJ
2.	unknown	2.85	9	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS #2 - NORTH WALL

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-04A

Sample wt/vol: 5 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 16.8 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene chloride	22	B
67-64-1	Acetone	12	U
75-15-0	Carbon disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS #2 - NORTH WALL

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-04A

Sample wt/vol: 5 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 16.8 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
1330-20-7	Xylenes, Total	12	U

1F

EPA SAMPLE NO.

SS #2 - NORTH WALL

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-04A

Sample wt/vol: 5 (g/mL) G Lab File ID: 1001010.D

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: not dec. 16.8 Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 3 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000110-54-3	Hexane	2.83	17	BNJ
2.	unknown (16.2)	16.20	6	J
3.	unknown (16.55)	16.55	7	J

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCE) #	SMC3 (TOL) #	OTHER	TOT OUT
01	VBLK01	96	96	96		0
02	SS #1 - SOUTH WAL	82	105	108		0
03	SS #2 - NORTH WAL	60	102	115		0
04	SS #1 MS	80	104	115		0
05	SS #1 MSD	81	102	112		0
06	MBS01	94	100	98		0

		QC Limit
SMC1 (BFB)	= 4-Bromofluorobenzene	(59-113)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(70-121)
SMC3 (TOL)	= Toluene-d8	(84-138)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: Buck Environmental Labs, I Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0228

Sample ID MBS01 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	SPIKE CONCENTRATION (µg/Kg)	SPIKE % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	66	132	59-172
Trichloroethene	50	0	60.2	120	62-137
Benzene	50	0	64.7	130	66-142
Toluene	50	0	61.8	124	59-139
Chlorobenzene	50	0	63.9	128	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Buck Environmental Labs, I Contract:

Lab Code: 10795 Case No.: SAS No.: SDG No.: BEL0228

Matrix Spike - EPA Sample No.: SS #1 - SOUTH WALL Level:(low/med) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	55	0	92	167	59-172
Trichloroethene	55	0	76	138*	62-137
Benzene	55	0	94	171*	66-142
Toluene	55	0	96	175*	59-139
Chlorobenzene	55	0	88	160*	60-133

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	59	82.1	139	18	22	59-172
Trichloroethene	59	72.1	122	12	24	62-137
Benzene	59	88.9	151*	12	21	66-142
Toluene	59	92.4	156*	11	21	59-139
Chlorobenzene	59	85.2	144*	11	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 7 out of 10 outside limits

COMMENTS:

4A

EPA SAMPLE NO.

VBLK01

VOLATILE METHOD BLANK SUMMARY

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Lab File ID: 0801008.D Lab Sample ID: VBLK01

Date Analyzed: 09/26/02 Time Analyzed: 18:20

GC Column: J&W,DB6 ID: .18 (mm) Heated Purge: (Y/N) Y

Instrument ID: MSD3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	S #1 - SOUTH WAL	0209163-01A	0901009.D	18:51
02	S #2 - NORTH WAL	0209163-04A	1001010.D	19:22
03	SS #1 MS	0209163-02A	1101011.D	19:53
04	SS #1 MSD	0209163-03A	1201012.D	20:24
05	MBS01	MBS01	1301013.D	20:55

COMMENTS: _____

_____

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: VBLK01

Sample wt/vol: 5 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene chloride	13	
67-64-1	Acetone	10	U
75-15-0	Carbon disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: VBLK01

Sample wt/vol: 5 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
1330-20-7	Xylenes, Total	10	U

1F

EPA SAMPLE NO.

VBLK01

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: VBLK01

Sample wt/vol: 5 (g/mL) G Lab File ID: 0801008.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 09/26/02

GC Column: J&W,DB624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 000110-54-3	Hexane	2.82	10	NJ

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: SAS No.: _____ SDG No.: BEL0228

Lab File ID (Standard): 0401004.D Date Analyzed: 09/26/02

EPA Sample No.(VSTD050##): VSTD050 Time Analyzed: 16:15

Instrument ID: MSD3 Heated Purge: (Y/N) Y

GC Column: J&W,DB6 ID: .18 (mm)

		IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	61445	3.98	715829	5.66	486586	10.39
	UPPER LIMIT	122890	4.48	1431658	6.16	973172	10.89
	LOWER LIMIT	30723	3.48	357915	5.16	243293	9.89
	EPA SAMPLE						
01	VBLK01	60217	3.97	715925	5.67	485061	10.39
02	SS #1 - SOUTH W	41495	3.98	458713	5.68	249259	10.40
03	SS #2 - NORTH W	45857	3.98	419965	5.67	248143	10.40
04	SS #1 MS	40199	3.98	456952	5.67	243710	10.39
05	SS #1 MSD	41662	3.98	459320	5.67	256576	10.39
06	MBS01	56010	3.97	663648	5.67	464052	10.39

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS #1 - SOUTH WALL

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01B

Sample wt/vol: 30 (g/mL) G Lab File ID: 1201012.d

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: 17.4 Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/07/02

Injection Volume: 2 (µL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	Bis(2-chloroethyl)ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
108-60-1	Bis(2-chloroisopropyl)ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitrosodi-n-propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U

1D

EPA SAMPLE NO.

SS #1 - SOUTH WALL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01B

Sample wt/vol: 30 (g/mL) G Lab File ID: 1201012.d

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: 17.4 Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/07/02

Injection Volume: 2 (µL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
111-91-1	Bis(2-chloroethoxy)methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	48000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	48000	U
131-11-3	Dimethyl phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U
99-09-2	3-Nitroaniline	48000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	48000	U
100-02-7	4-Nitrophenol	48000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethyl phthalate	20000	U
7005-72-3	4-Chlorophenyl phenyl ether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	48000	U
534-52-1	4,6-Dinitro-2-methylphenol	48000	U
86-30-6	N-Nitrosodiphenylamine	20000	U
101-55-3	4-Bromophenyl phenyl ether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	48000	U
85-01-8	Phenanthrene	43000	
120-12-7	Anthracene	20000	U
86-74-8	Carbazole	20000	U
84-74-2	Di-n-butyl phthalate	20000	U
206-44-0	Fluoranthene	39000	

1D

EPA SAMPLE NO.

SS #1 - SOUTH WALL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: 0209163-01B

Sample wt/vol: 30 (g/mL) G Lab File ID: 1201012.d

Level: (low/med) LOW Date Received: 09/17/02

% Moisture: 17.4 Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/07/02

Injection Volume: 2 (µL) Dilution Factor: 50.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
129-00-0	Pyrene	32000	
85-68-7	Butyl benzyl phthalate	20000	U
91-94-1	3,3´-Dichlorobenzidine	20000	U
56-55-3	Benz(a)anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	Bis(2-ethylhexyl)phthalate	20000	U
117-84-0	Di-n-octyl phthalate	20000	U
205-99-2	Benzo(b)fluoranthene	20000	U
207-08-9	Benzo(k)fluoranthene	20000	U
0-00-0	Benzo(a)pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)pyrene	20000	U
53-70-3	Dibenz(a,h)anthracene	20000	U
191-24-2	Benzo(g,h,i)perylene	20000	U

(1) Cannot be separated from Diphenylamine

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (2CP) #	S2 (2FP) #	S3 (DCB) #	S4 (FBP) #	S5 (NBZ) #	S6 (PHL) #	S7 (TBP) #	S8 (TPH) #	TOT OUT
01	SS #1 - SOUTH	65	53	62	60	74	67	51	62	0
02	SS #1 MSD	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	8
03	SBLK-02246	84	62	88	81	84	73	141 *	214 *	2
04	MBS-02246	95	77	86	114	106	84	277 *	284 *	2
05	SS #1 - SOUTH	40	33	76	50	32	43	0 *	118	1
06	SS #1 MS	0 *	0 *	0 *	0 *	0 *	0 *	0 *	0 *	8
07	SS #2 - NORTH	78	67	74	86	92	81	66	83	0

			QC LIMITS	
S1	(2CP)	= 2-Chlorophenol-d4	(25-121)	
S2	(2CP)	= 2-Chlorophenol-d4	(20-130)	
S3	(2FP)	= 2-Fluorophenol	(25-121)	
S4	(DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	
S5	(FBP)	= 2-Fluorobiphenyl	(30-115)	
S6	(NBZ)	= Nitrobenzene-d5	(23-120)	
S7	(PHL)	= Phenol-d5	(24-113)	(advisory)
S8	(TBP)	= 2,4,6-Tribromophenol	(19-122)	(advisory)
S9	(TPH)	= Terphenyl-d14	(18-137)	(advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: Buck Environmental Labs, I Contract:

Lab Code: 10795 Case No.: C SAS No.: SDG No.: BEL0228

Sample ID LCS-02246 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	SPIKE CONCENTRATION (µg/Kg)	SPIKE % REC #	QC. LIMITS REC.
Phenol	5000	0	1400	28	26-90
2-Chlorophenol	5000	0	1700	35	25-102
1,4-Dichlorobenzene	3333	0	770	23*	28-104
N-Nitrosodi-*n*-propylamine	3333	0	1200	37*	41-126
1,2,4-Trichlorobenzene	3333	0	1400	42	38-107
4-Chloro-3-methylphenol	5000	0	2700	54	26-103
Acenaphthene	3333	0	1800	53	31-137
4-Nitrophenol	5000	0	4500	89	11-114
2,4-Dinitrotoluene	3333	0	1600	48	28-89
Pentachlorophenol	5000	0	4100	82	17-109
Pyrene	3333	0	2600	78	35-142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 2 out of 11 outside limits

COMMENTS:

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Buck Environmental Labs, I Contract:

Lab Code: 10795 Case No.: C SAS No.: SDG No.: BEL0228

Matrix Spike - EPA Sample No.: SS #1 - SOUTH WALL Level: (low/med) LOW

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	6053.26874	0	0	0*	26-90
2-Chlorophenol	6053.26874	0	0	0*	25-102
1,4-Dichlorobenzene	4035.10894	0	0	0*	28-104
N-Nitrosodi-n-propylamine	4035.10894	0	0	0*	41-126
1,2,4-Trichlorobenzene	4035.10894	0	0	0*	38-107
4-Chloro-3-methylphenol	6053.26874	0	0	0*	26-103
Acenaphthene	4035.10894	0	0	0*	31-137
4-Nitrophenol	6053.26874	0	0	0*	11-114
2,4-Dinitrotoluene	4035.10894	0	0	0*	28-89
Pentachlorophenol	6053.26874	0	0	0*	17-109
Pyrene	4035.10894	32284.0999316133	47417.2717745571	375*	35-142

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	6053.26874	0	0*	0	35	26-90
2-Chlorophenol	6053.26874	0	0*	0	50	25-102
1,4-Dichlorobenzene	4035.10894	0	0*	0	27	28-104
N-Nitrosodi-n-propylamine	4035.10894	0	0*	0	38	41-126
1,2,4-Trichlorobenzene	4035.10894	0	0*	0	23	38-107
4-Chloro-3-methylphenol	6053.26874	0	0*	0	33	26-103
Acenaphthene	4035.10894	0	0*	0	19	31-137
4-Nitrophenol	6053.26874	0	0*	0	50	11-114
2,4-Dinitrotoluene	4035.10894	0	0*	0	47	28-89
Pentachlorophenol	6053.26874	0	0*	0	47	17-109
Pyrene	4035.10894	37000	110	25	36	35-142

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 21 out of 22 outside limits

COMMENTS:

4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK-02246

Lab Name: Buck Environmental Labs, Inc Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Lab File ID: 1001010.d Lab Sample ID: SBLK-02246

Instrument ID: MSD2 Date Extracted: 10/06/02

Matrix: (soil/water) SOIL Date Analyzed: 10/07/02

Level: (low/med) LOW Time Analyzed: 16:55

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	#1 - SOUTH WA	0209163-01B	0601006.d	10/7/02
2	SS #1 MSD	0209163-03B	0801008.d	10/7/02
3	~~#2 - NORTH WA~~	~~0209163-04B~~	~~0901009.d~~	~~10/7/02~~ BW
4	MBS-02246	MBS-02246	1101011.d	10/7/02
5	#1 - SOUTH WA	0209163-01B	1201012.d	10/7/02
6	SS #1 MS	0209163-02B	1301013.d	10/7/02
7	#2 - NORTH WA	0209163-04B	1401014.d	10/7/02

COMMENTS:

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-02246

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: MB-02246

Sample wt/vol: 30 (g/mL) G Lab File ID: 0201002.d

Level: (low/med) LOW Date Received:

% Moisture: Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/16/02

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	Bis(2-chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitrosodi-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U

1D

EPA SAMPLE NO.

MB-02246

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: MB-02246

Sample wt/vol: 30 (g/mL) G Lab File ID: 0201002.d

Level: (low/med) LOW Date Received:

% Moisture: Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/16/02

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
111-91-1	Bis(2-chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethyl phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethyl phthalate	330	U
7005-72-3	4-Chlorophenyl phenyl ether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl phenyl ether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	800	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butyl phthalate	330	U
206-44-0	Fluoranthene	330	U

1D

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-02246

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: MB-02246

Sample wt/vol: 30 (g/mL) G Lab File ID: 0201002.d

Level: (low/med) LOW Date Received:

% Moisture: Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µL) Date Analyzed: 10/16/02

Injection Volume: 2 (µL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG	Q
129-00-0	Pyrene	330	U
85-68-7	Butyl benzyl phthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benz(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) Cannot be separated from Diphenylamine

1G

EPA SAMPLE NO.

MB-02246

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Buck Environmental Labs, Inc. Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

Matrix: (soil/water) SOIL Lab Sample ID: MB-02246

Sample wt/vol: 30 (g/mL) G Lab File ID: 0201002.d

Level: (low/med) LOW Date Received:

% Moisture: Decanted: (Y/N) N Date Extracted: 10/06/02

Concentrated Extract Volume: 1000 (µl) Date Analyzed: 10/16/02

Injection Volume: 2 (µl) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: Extraction: (Type)

Number TICs found: 8 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1. 141-78-6	Acetic acid, ethyl ester	3.79	710	NJ
2.	Unknown (6.077)	6.08	190	J
3.	Unknown (6.311)	6.31	420	J
4.	Unknown (6.643)	6.64	18000	J
5.	Unknown (6.77)	6.77	3700	J
6.	Unknown (7.053)	7.05	230	J
7.	Unknown (7.404)	7.40	3400	J
8.	Unknown (8.077)	8.08	630	J

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

EPA Sample No.(SSTD050##): SSTD 025 Date Analyzed: 10/07/02

Lab File ID (Standard): 0401004.d Time Analyzed: 12:18

Instrument ID: MSD2 GC Column: RTX-5Si ID: .25 (mm)

		IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	63638	8.43	199156	10.12	94526	12.64
	UPPER LIMIT	127276	8.93	398312	10.62	189052	13.14
	LOWER LIMIT	31819	7.93	99578	9.62	47263	12.14
	EPA SAMPLE NO.						
01	SS #1 - SOUTH W	122499	8.43	341621	10.12	148089	12.64
02	SS #1 MSD	124527	8.42	287727	10.12	131724	12.64
03	SS #2 - NORTH W	130525*	8.42	455272*	10.12	197801*	12.64
04	SBLK-02246	134219*	8.44	473775*	10.12	258226*	12.63
05	MBS-02246	109805	8.44	326166	10.11	169127	12.64
06	SS #1 - SOUTH W	124421	8.42	393352	10.11	169954	12.64
07	SS #1 MS	112898	8.41	354722	10.11	179952	12.63
08	SS #2 - NORTH W	114556	8.42	252719	10.11	171502	12.64

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

page 1 of 1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Buck Environmental Labs, In Contract: _____

Lab Code: 10795 Case No.: C SAS No.: _____ SDG No.: BEL0228

EPA Sample No.(SSTD050##): SSTD 025 Date Analyzed: 10/07/02

Lab File ID (Standard): 0401004.d Time Analyzed: 12:18

Instrument ID: MSD2 GC Column: RTX-5Si ID: .25 (mm)

		IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STD	124163	14.80	45034	19.19	18552	22.30
	UPPER LIMIT	248326	15.30	90068	19.69	37104	22.80
	LOWER LIMIT	62082	14.30	22517	18.69	9276	21.80
	EPA SAMPLE NO.						
01	SS #1 - SOUTH	226172	14.82	77393	19.22	21621	22.32
02	SS #1 MSD	192518	14.80	62222	19.19	22887	22.31
03	~~SS #2 - NORTH~~	~~161504~~	~~14.80~~	~~47920~~	~~19.19~~	~~19907~~	~~22.31~~ BLK
04	SBLK-02246	288635*	14.79	89923	19.19	32237	22.32
05	MBS-02246	218587	14.80	75336	19.20	36198	22.30
06	SS #1 - SOUTH	190903	14.80	61125	19.18	19776	22.29
07	SS #1 MS	180123	14.80	58299	19.18	21690	22.30
08	SS #2 - NORTH	225116	14.80	68284	19.20	11792	22.33

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

ENVIRONMENTAL LABORATORIES, INC.
3821 Buck Drive, P.O. Box 5150
Cortland, NY 13045-5150

LABORATORY LOG NO. 0209163

CHAIN OF CUSTODY RECORD

NOTE: *The information given on this form was supplied by the client and authorizes the Laboratory to proceed with analysis according to the Standard Terms and Conditions of Buck Environmental Laboratories, Inc. provided on the reverse side of this chain-of-custody. The client authorization signature acknowledges that the terms are acceptable and agreed to by the client.*

CLIENT: Dan McGrale
ADDRESS: SPX Corporation
13515 Ballantyne Corp. Place
PHONE NO.: Charlotte, NC 28277
REPORT TO ATTN.: John

NORMAL QA/QC:
PREMIUM QA/QC: SDG BEL0228
NORMAL TURNAROUND: ✓
EXPEDITE AT PREMIUM:
CLIENT AUTHORIZ. SIGN.:

PROJECT NAME: Little Falls ICP - Feldmeier
PO NO.:
SAMPLED BY: Wayne Matteson

ANALYSIS REQUESTED

DATE	TIME	LOCATION	#SP 95-1	ASP 95-2	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED
9/17	11 AM	SS#1 - South Wall	X	X	S	G	2	100mL	—
9/17	11 AM	MS - SS#1	X	X	S	G	2	100 mL	—
9/17	11 AM	MSD - SS#1	X	X	S	G	2	100 mL	—
9/17	11 AM	SS#2 - North Wall	X	X	S	G	2	150 mL	—

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
9/17	4 PM	1 Wayne Matteson	1 Shirley Towne
		2	2
		3	3
		4	4

ADDITIONAL COMMENTS:

Buck Environmental Labs, Inc.

Sample Receipt Checklist

Client Name SPX

Work Order Numbe 0209163

Checklist completed by Pamela Davis 9/18/02
Signature | Date

Date and Time Receive 09/17/02

Received by: SET

Reviewed by RLT 9-18-02
Initials | Date

Matrix:

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	Yes ☐	No ☐	
	No VOA vials submitted ☑		
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Sample Custodies Tracked on the Following Internal Chains:

Dept:	Area	By	On
MSSEMI	Ref 02	RLT	9-18-02
MSVOA	Ref 09	RLT	9-18-02

SampID	ClientSampID	TagNo
01A	SS #1 - SOUTH WALL	
01B	SS #1 - SOUTH WALL	
02A	SS #1 MS	
03A	SS #1 MSD	
04A	SS #2 - NORTH WALL	
02B	SS #1 MS	
03B	SS #1 MSD	
04B	SS #2 - NORTH WALL	

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Sample Login Summary

WorkOrder **0209163**

SampID	Received	ClientSampID	CollectionDate	Matrix	Bottle	Qty	Storage	pH	Temp	COOLER	Edited
209163-01A	09/17/02	SS #1 - SOUTH WALL	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-01B	09/17/02	SS #1 - SOUTH WALL	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-02A	09/17/02	SS #1 MS	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-02B	09/17/02	SS #1 MS	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-03A	09/17/02	SS #1 MSD	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-03B	09/17/02	SS #1 MSD	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-04A	09/17/02	SS #2 - NORTH WALL	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											
209163-04B	09/17/02	SS #2 - NORTH WALL	09/17/02	Soil		1	REF07		19.7		
SDG BEL0228											
9/17/02 Imp Temp. exceeds acceptance criteria.											

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Buck Environmental Lab, Inc.

Internal Chain of Custody

Ref # 07

BEL Job # 0209163

ClientID: SPX

Dept: MSVOA

Relinquished By: Shirley E Turner Date: 9-18-02 Testing:

Received By: Date: Testing:

BEL Sample ID		Sample Removal And Return Tracking																	
		Removed				Returned		Removed				Returned		Removed				Returned	
		Date	Time	By	*	Date	Time	Date	Time	By	*	Date	Time	Date	Time	By	*	Date	Time
-01A	1	9/12/02	1400	TCE	A	9/12/02	1300	9/26/02	1330	TCE	A								
-02A	1	9/12/02	1400	TCE	A	9/12/02	1300	9/26/02	1330	TCE	A								
-03A	1	9/12/02	1400	TCE	A	9/12/02	1300	9/26/02	1330	TCE	A								
-04A	1	9/12/02	1400	TCE	A	9/12/02	1300	9/26/02	1330	TCE	A								

* Reasons for Removal: A = Analysis DW = Dry Weight SS = Sub-sample D = Depleted Sample

Page 1 of 1

Buck Environmental Lab, Inc.

Internal Chain of Custody

Ref # 2

BEL Job # 0206193

Client ID: BROOME_SOLID

Dept: MSSEMI

Relinquished By: _____ Date: _____ Testing: M8270 Exp_A

Received By: Cory Cook Date: 6-17-02 Testing: _____

BEL Sample ID		Sample Removal And Return Tracking																	
		Removed				Returned		Removed				Returned		Removed				Returned	
		Date	Time	By	*	Date	Time	Date	Time	By	*	Date	Time	Date	Time	By	*	Date	Time
-12F	1	6-21-02	8:00	CL		Depleted													
-12F	2																		
-13F	1	6/21/02	8:00	CL		Depleted													
-13F	2																		
-14F	1	6-21-02	8:00	CL		Depleted													
-14F	2																		
-15F	1	6-21-02	8:00	CL		Depleted													
-15F	2																		
-16F	1	6-21-02	8:00	CL		Depleted													
-16F	2																		
-17F	1	6-21-02	8:00	CL		Depleted													
-17F	2																		

Depleted

12-9-02

D

* Reasons for Removal: A = Analysis DW = Dry Weight SS = Sub-sample D = Depleted Sample