

**BRAUN**<sup>SM</sup>  
**INTERTEC**

RECEIVED  
DEC 13 1999  
By \_\_\_\_\_

---

**Case Summary and Close Out Form**

Strategic Materials  
12305 West Silver Spring Road  
Milwaukee, Wisconsin

*Prepared For*

**Wisconsin Department of Natural Resources**

02 - 41 - 236 897  
02 - 41 - 236 898  
02 - 41 - 236 899  
02 - 41 - 236 900

FID # 241486630

✶

02-41-396284

MLW opened this as new evidence of  
a different release)

Project Number CNEX-99-249A  
December 10, 1999

---

Braun Intertec Corporation

Engineers and Scientists  
Serving the Built and  
Natural Environments

December 10, 1999

Project CNEX-99-249A

Mr. Randall Slinkard  
Strategic Materials, Inc.  
5151 San Felipe, Suite 1400  
Houston, Texas 77056-3609

Dear Mr. Slinkard:

Re: Case Summary and Close-out Form for Strategic Materials Site, 12305 West Silver Spring Road,  
Milwaukee, Wisconsin

Please find enclosed Wisconsin Department of Natural Resources (WDNR) Form 4400-202 (Case  
Summary and Close-Out Form) for your site.

If you have any questions or need additional information, please contact Mark Gretebeck or Ted Hubbes  
at (608) 781-7277.

Sincerely,  
Braun Intertec Corporation



Ted R. Hubbes, PG  
Environmental Geologist



Mark L. Gretebeck  
Project Manager

Attachment:  
Form 4400-202, Case Summary and Close Out Form

**BRAUN**<sup>SM</sup>  
**INTERTEC**

**Braun Intertec Corporation**  
2831 Larson Street  
La Crosse, Wisconsin 54603-1814  
608-781-7277 Fax: 781-7279

*Engineers and Scientists Serving  
the Built and Natural Environments*

December 10, 1999

Project CNEX-99-249A

Program Assistant/BRR Program  
Wisconsin Department of Natural Resources Box 12436  
2300 North Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212

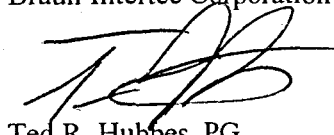
BRR Representative:

Re: Case Summary and Close-out Form for the Strategic Materials Site (formerly known as Allwaste, Inc.), 12305 West Silver Spring Road, Milwaukee, Wisconsin, FID # 241486630

Please find enclosed Wisconsin Department of Natural Resources (WDNR) Form 4400-202 (Case Summary and Close-Out Form) for the referenced site. Enclosed is a \$750.00 check for WDNR review. Site remediation was recently completed in two areas of the site (identified as Areas 3 and 4) formerly occupied by large, stationary glass-processing machinery. Remediation in other areas of the site was previously completed and has been summarized in this report.

If you have any questions or need additional information, please contact Mark Gretebeck or Ted Hubbes at (608) 781-7277.

Sincerely,  
Braun Intertec Corporation



Ted R. Hubbes, PG  
Environmental Geologist



Mark L. Gretebeck  
Project Manager

Attachments: Form 4400-202, Case Summary and Close Out Form  
\$750.00 Check

c: Mr. Randall Slinkard, Strategic Materials

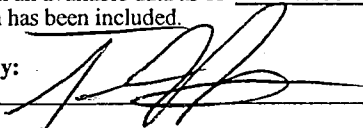
WDNR BRRTS Case #: 241486630 (FID)

WDNR Site Name: Strategic Materials, Inc.

NOTE: Use of this form is required by the Department for any case close out application filed pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code. Completion of this form is mandatory for applications for case closure. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than viewing close out requests and determining the need for additional response action.

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of 12/99 (date). I have read the Case Summary and Close Out Form Instructions and all required information has been included.

Form Completed By:



12.10.99

(Signature)

(Date)

Printed Name: Ted R. Hubbes

Company Name: Braun Intertec Corporation

If not site owner, relationship to site owner: Environmental Consultant

Address: 2831 Larson Street, La Crosse, WI 54603

Telephone Number: (608) 781-7277

FAX Number: (608) 781-7279

Environmental Consultant (if different then above): \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: ( ) \_\_\_\_\_ FAX Number: ( ) \_\_\_\_\_

**FOR DEPARTMENT USE ONLY**

Type of Case: LUST Spill ER Land Recycling Other \_\_\_\_\_ DNR Reviewer: \_\_\_\_\_

WDNR Site Name: Strategic Materials, Inc.

Complete Site Address: 12305 West Silver Spring Road, Milwaukee, Wisconsin

WDNR BRRTS Case #: \_\_\_\_\_

FID #: 241486630

ECFA Claim #: \_\_\_\_\_

Responsible Party Name: Strategic Materials, Inc.

Complete Responsible Party Address: 5151 San Felipe, Suite 1400 Houston, Texas 77056-3609

Site Legal Description: NW 1/4, NW 1/4, Sec 31, T 8 N, R 21 E

Town: Milwaukee

County: Milwaukee

Latitude: 88° 4' 0"

Longitude: 43° 7' 0"

Type Of Closure Requested:

Soil

< NR 720.09/720.11 Generic RCLs  
 NR 720.19(2) Soil Performance Stds.  
 NR 720.19(3) Site Specific Stds.

Groundwater

< NR 140.10 Table 1 & Table 2 Values  
 NR 140.28(2) PAL Exemption  
 NR 726.05(2)(b) Natural Attenuation

Contaminant Type(s): gasoline, diesel, waste oilQuantity Released: UnknownDate of Incident/Discovery: May 13, 1994Zoning of Property: Industrial (ID-40)Enforcement Actions Closed Out? Yes  No  NAPermits Closed Out? Yes  No  NA1. CASE HISTORY AND JUSTIFICATION FOR CLOSURE ATTACHED?  Yes  No

2. SOIL PRE-REMEDIAL ANALYTICAL RESULTS

Extent Defined?  Yes  No Soil Type(s): fill materials, silty clay Depth to Bedrock: > 50 feetPotential Receptors for Direct Contact (i.e. vapor migration, contaminated soil left in place): noneTables of Pre-remedial Analytical Results Attached?  Yes  No Maps of Pre-remedial Sample Locations Attached?  Yes  No

3. SOIL POST REMEDIATION ANALYTICAL RESULTS

Remedial Action Completed?  Yes  No 720.19 Analysis?  Yes  No (If yes, attach supporting documentation)Were Soils Excavated?  Yes  No Quantity: 1,900 tons Disposal Method: LandfillFinal Confirmation Sampling Methods: Floor and sidewall soil samplesSoil Disposal Form Attached?  Yes  No Final Disposal Location: Orchard Ridge Landfill, Menomonee Falls, WisconsinEstimated volume of insitu soils exceeding NR 720 RCLs: none knownTables for Post Remedial Analytical Results Attached?  Yes  No Maps of Post Remedial Sample Locations Attached?  Yes  NoBrief Description of Remedial Action Taken: Excavation and landfill disposal of approximately 1,900 tons of soil.

4. GROUNDWATER ANALYTICAL RESULTS

Potential Receptors for Groundwater Migration Pathway: NoneExtent of Contamination Defined?  Yes  No  NA Remedial Action Completed?  Yes  No  NA# of Sample Rounds: 3 Depth(s) to Groundwater/Flow Direction(s): 8 to 12 feet below ground surface, southeastField Analyses?  Yes  No Lab Analyses?  Yes  No # of Sampling Points: 9# NR 141 Monitoring Wells Sampled: 9 # Temporary Groundwater Sampling Points Sampled: 0# Recovery Sumps Sampled: 0 # Municipal Wells Sampled: 0 # Private Wells Sampled: 0Has DNR Been Notified of Substances in Groundwater w/o Standards?  Yes  NoAny Potable Wells Within 1200 Feet of Site?  Yes  No If Yes, How Many? 9Have They Been Sampled?  Yes  No Have Well Owners/Occupants Been Notified of Results?  Yes  No  NAPreventive Action Limit Exceeded?  Yes  No (If Yes, identify location(s)) MW-4, MW-10.Enforcement Standard Exceeded?  Yes  No (If Yes, identify location(s)) MW-4.Tables of Analytical Results Attached?  Yes  No Map of Groundwater Sample Locations Attached?  Yes  NoBrief Description of Remedial Action Taken: Source removal

**FOR DEPARTMENT USE ONLY**

**FIRST REVIEW DATE:** \_\_\_\_\_ [ ] Approved [ ] Denied

\_\_\_\_\_  
(Signature)                      (Signature)                      (Signature)                      (Signature)

**SECOND REVIEW DATE:** \_\_\_\_\_ [ ] Approved [ ] Denied

\_\_\_\_\_  
(Signature)                      (Signature)                      (Signature)                      (Signature)

**COMMITTEE RECOMMENDATION:**

\_\_\_\_\_ **Closure Approved Per:**

- \_\_\_\_\_ No Restrictions
- \_\_\_\_\_ Groundwater Use Restriction
- \_\_\_\_\_ Zoning Verification
- \_\_\_\_\_ Deed Restriction
- \_\_\_\_\_ Deed Affidavit
- \_\_\_\_\_ Site Specific Close Out Letter Necessary
- \_\_\_\_\_ Well Abandonment Documentation
- \_\_\_\_\_ Soil Disposal Documentation
- \_\_\_\_\_ Public Notice Needed
- \_\_\_\_\_ NR 140 Exemption For: \_\_\_\_\_

\_\_\_\_\_ Specific Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ **Closure Denied, Needs More:**

- \_\_\_\_\_ Investigation
- \_\_\_\_\_ Groundwater Monitoring
- \_\_\_\_\_ Soil Remediation
- \_\_\_\_\_ Groundwater Remediation
- \_\_\_\_\_ Documentation Of Soil Landspreading Or Biopile Destiny
- \_\_\_\_\_ Specific Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
Case Summary and Close Out Form Instructions

Form 4400 -202  
5/98

The Case Summary and Close Out Form and attached instructions have been designed by staff in the Bureau for Remediation and Redevelopment to provide responsible parties, environmental consultants, Department staff, and other interested parties with a checklist of information that must be evaluated prior to case closure. The closure of a case means that the Department has determined that no further response is required at that time. Various closure options are available within Department codes. Responsible parties and their consultants should specify the options sought for closure for the soils and groundwater at their site. Groundwater quality standards found in NR 140 and soil standards found in NR 720 must generally be met. However, some closure options allow closure where groundwater or soil standards are not met provided that deed or groundwater use restrictions are imposed on the subject property. A previously closed case may be reopened by the Department if information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare or the environment.

In order to expedite the closure process for your case, you should submit a complete and accurate submittal according to the following instructions. Submit the Case Summary and Close Out Form and required attachments as a stand alone document and **please do not** submit the close out request in a bound report. The information supplied should succinctly summarize the chronological history of the entire case and should reinforce the justification for closure. Submission of tabulated analytical results from previous reports are acceptable (i.e. it is not necessary to create new tables). However, do not submit previously submitted reports themselves as attachments. **Submittals with incomplete forms and/or documentation will be returned.** The following should be included in the order shown:

- (A) **Case Summary and Close Out Form** must be complete. A brief, **written** case history, justification for case closure and description of the remedial action taken must be included. The type of closure requested for both the soil and groundwater must be indicated.
- (B) **Site Map**, per NR 716.15(2)(d)5-6, to scale showing the layout of the buildings, roads, tank and/or discharge locations, utilities, receptors, monitoring and potable wells, property lines and other relevant features of the site. If possible, the scale should be 1 inch = 10 or 20 feet.
- (C) **Pre-Remedial Soil Analytical Results Table(s)** which show the analytical results and sample depths of all of the pre-remedial soil samples (i.e. tank pull, site investigation, etc.). If more than one table, please put them in chronological order. Highlight those results which exceed the NR 720 soil standards. Provide the level of detection for results which are below the detection level (i.e. don't just list as ND). Identify the depth of the water table. All data must be in table format as identified in NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets)
- (D) **Pre-Remedial Soil Sample Location Map(s)** which show the locations of the items from B, above, and the soil sample locations from C, above. Highlight those sample locations which exceed NR 720. Maps should be prepared according to the applicable portions of NR 716.15(2)(h)1. You may submit more than one map.
- (E) **Pre-Remedial Geologic Cross Section(s)** including source location(s), extent of soil and groundwater contamination, soil sample locations, water table elevation, and bedrock elevation, if encountered. Maps should be prepared according to NR 716.15(2)(g)5-8 and NR 716.15(2)(h)1-2.
- (F) **Post-Remedial Soil Analytical Results Table(s)** which show the analytical results and sample depths of all of the post-remedial soil samples. Highlight the analyses which exceed NR 720 soil standards. Provide the level of detection for analytical results which are below the detection level (i.e. don't just list as ND). Identify the depth of the water table. All data must be in table format as identified in NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets).
- (G) **Post-Remedial Soil Sample Location Map(s)** which show the locations of items from B, above, and the soil sample locations from F, above. Highlight those sample locations which exceed NR 720. Maps should be prepared according to the applicable portions of NR 716.15(2)(h)1. You may submit more than one map.
- (H) **Post-Remedial Geologic Cross Section(s)** including former source location(s), remaining soil contamination, soil sample locations, extent of excavation, water table elevation, and bedrock elevation, if encountered. Maps should be prepared according to NR 716.15(2)(g)5-8 and NR 716.15(2)(h)1-2.
- (I) **Groundwater Analytical Results Table(s)** showing all of the site's historical groundwater analytical results in chronological order. Highlight those results which exceeded NR 140 (differentiate between PAL and ES exceedances). All data must be in table format as identified in NR 716.15(2)(g)3 and 716.15(2)(h)3, (i.e. do not submit lab data sheets). Differentiate between pre-remedial, remedial and post-remedial samples (i.e. identify when the groundwater remediation system was active/inactive).
- (J) **Groundwater Sample Location Map(s)** which show the locations of the items from B, above, and all of the monitoring wells/sumps/extraction wells/potable wells. Highlight those wells which have PAL or ES exceedances (in the most recent round of sampling, differentiate between PAL and ES). Maps should be prepared according to the applicable portions of NR 716.15(2)(h)1. You may submit more than one map.
- (K) **Groundwater Contour Map(s)** which show the historical changes in direction, elevation and/or gradient. Provide one map if data is consistent. Maps should be prepared according to the applicable portions of NR 716.15(2)(g)5-8 and NR 716.15(2)(h)1-2.

## Case Summary

A Phase I Environmental Site Assessment (Phase I ESA) completed in 1994, identified areas of potential impacted soils at the site. Soil samples collected during a subsequent Phase II ESA confirmed the presence of petroleum constituents and polynuclear aromatic hydrocarbons (PAHs) at concentrations greater than Wisconsin Administrative Code, Chapter NR720 generic soil standards and Wisconsin Department of Natural Resources (WDNR) suggested generic soil cleanup levels, respectively (Swanson Environmental 1994a and 1994b).

A site investigation was completed in 1994-1995 (Swanson Environmental 1995). The site investigation addressed the following five specific areas of the site:

- **Area 1 (waste oil aboveground storage tank (AST))** - Detections of diesel range organics (DRO) were reported in a surficial soil sample (HA-1) collected during the Phase II ESA (Attachment A1). Subsequent soil samples collected in this area (GP-7, GP-8, GP-9) had no detections greater than NR720 generic soil standards (Attachment A2). Based on these results, no further action was recommended in Area 1 (Swanson Environmental 1995).
- **Area 2 (gasoline and diesel ASTs)** - Detections of DRO and gasoline range organics (GRO) were reported in a hand-auger soil sample (HA-2) collected during the Phase II ESA (Attachment A1). Three other soil samples collected in this area (HA-3a, GP-5, GP-6) also had detections greater than NR720 generic soil standards (Attachment A2). Soil excavation and off-site treatment was recommended for Area 2 (Swanson Environmental 1995). In December 1996, approximately 350 tons of petroleum impacted soils were excavated from this area and disposed of off site. Soil samples collected from the walls and floor of the excavation had no detections greater than NR720 generic soil standards (Braun Intertec Corporation 1997, Attachment A3). In addition, the groundwater monitoring well (MW-2) adjacent to the excavated area had no detections of petroleum constituents.
- **Area 3 (Former Kramer System)** - Detections of DRO and GRO were reported in a hand auger soil sample (HA-3) collected during the Phase II ESA. Two other soil samples collected in this area (HA-1a, GP-3) had detections greater than NR720 generic soil standards. Soil excavation and off-site treatment was recommended for Area 3 (Swanson Environmental 1995). The remediation was completed on November 23, 1999. Approximately 140 tons of impacted soils were excavated from Area 3 (to a depth of 0.5-3.5 feet) and disposed of at the Orchard Ridge Landfill in Menomonee Falls, Wisconsin (Figure 1, Attachment B). Soil samples collected from the floor of the excavation had no detections greater than NR720 generic soil standards (Attachment C).
- **Area 4 (Former 12-Mesh System)** - A detection of DRO was reported in a hand auger soil sample (HA-4) collected during the Phase II ESA. One additional soil sample collected in this area (HA-2a) had detections greater than NR720 generic soil standards. Soil excavation and off-site treatment was recommended for Area 4 (Swanson Environmental 1995). The remediation was completed on November 23, 1999. Approximately 80 tons of impacted soils were excavated from Area 4 (to a maximum depth of 2.5 feet) and disposed of at the Orchard Ridge Landfill in Menomonee Falls, Wisconsin (Figure 1, Attachment B). Soil samples collected from the floor of the excavation had no detections greater than NR720 generic soil standards (Attachment C).
- **Burn Pit Area** - Benzo (a) pyrene was detected in groundwater samples from MW-4 at a concentration greater than NR 140 groundwater enforcement standards (ESs) (Attachment A2). Based on the results of the site investigation, soil excavation and off-site treatment was



recommended for the burn pit area (Swanson Environmental 1995). In June 1997, approximately 1,273 tons of impacted soils were excavated from this area and disposed of off site. Soil samples collected from the walls and floor of the excavation had no detections greater than NR720 generic soil standards (Braun Intertec Corporation 1998, Attachment A4). Monitoring wells in the area of the burn pit (MW-4, MW-7, MW-8, MW-9) were abandoned during the excavation. Groundwater samples from a replacement monitoring well (MW-10) had detections of benzo (a) pyrene greater than NR 140 Preventive Action Limits (PALs). A letter dated August 12, 1998, indicated the WDNR granted a PAL exemption for benzo (a) pyrene and approved closure for the burn pit area.

In addition to the impacted soils removed in Areas 3 and 4 on November 23, 1999, several areas with minor surficial soil staining were excavated to a depth of 1-3 feet. Soil samples collected in these areas had no detections of DRO (Attachment C).

One additional round of groundwater elevations and groundwater samples was collected from several monitoring wells on November 23, 1999. Top of casing elevations from the three remaining monitoring wells (MW-3, MW-6 and MW-10) were resurveyed. Groundwater elevation measurements indicate a flow direction to the southeast (Figure 2). Groundwater samples from the two wells which were accessible to sampling (MW-3, MW-10) had no detections exceeding NR140 PALs (Attachment C).

### Summary and Conclusions

- Soil remediation consisting of excavation and off-site disposal has addressed all known areas of surficial soil contamination identified in previous environmental assessments.
- The WDNR has previously granted a PAL exemption for benzo (a) pyrene, the only compound which has been detected at levels greater than PAL in groundwater samples from the site. A confirmatory round of groundwater samples collected on November 23, 1999, had no detections exceeding NR140 PALs.
- There were no potable wells, surface waters or wetlands known to be impacted by the release. There was no indication that a bedrock aquifer has been impacted. Petroleum free product was not detected at the site.
- No further monitoring or remediation is warranted and unconditional site closure is requested.

### References

Braun Intertec Corporation, 1997. Area 2 Soil Remediation at the Strategic Materials Site, 12305 West Silver Spring Drive, Milwaukee, Wisconsin.

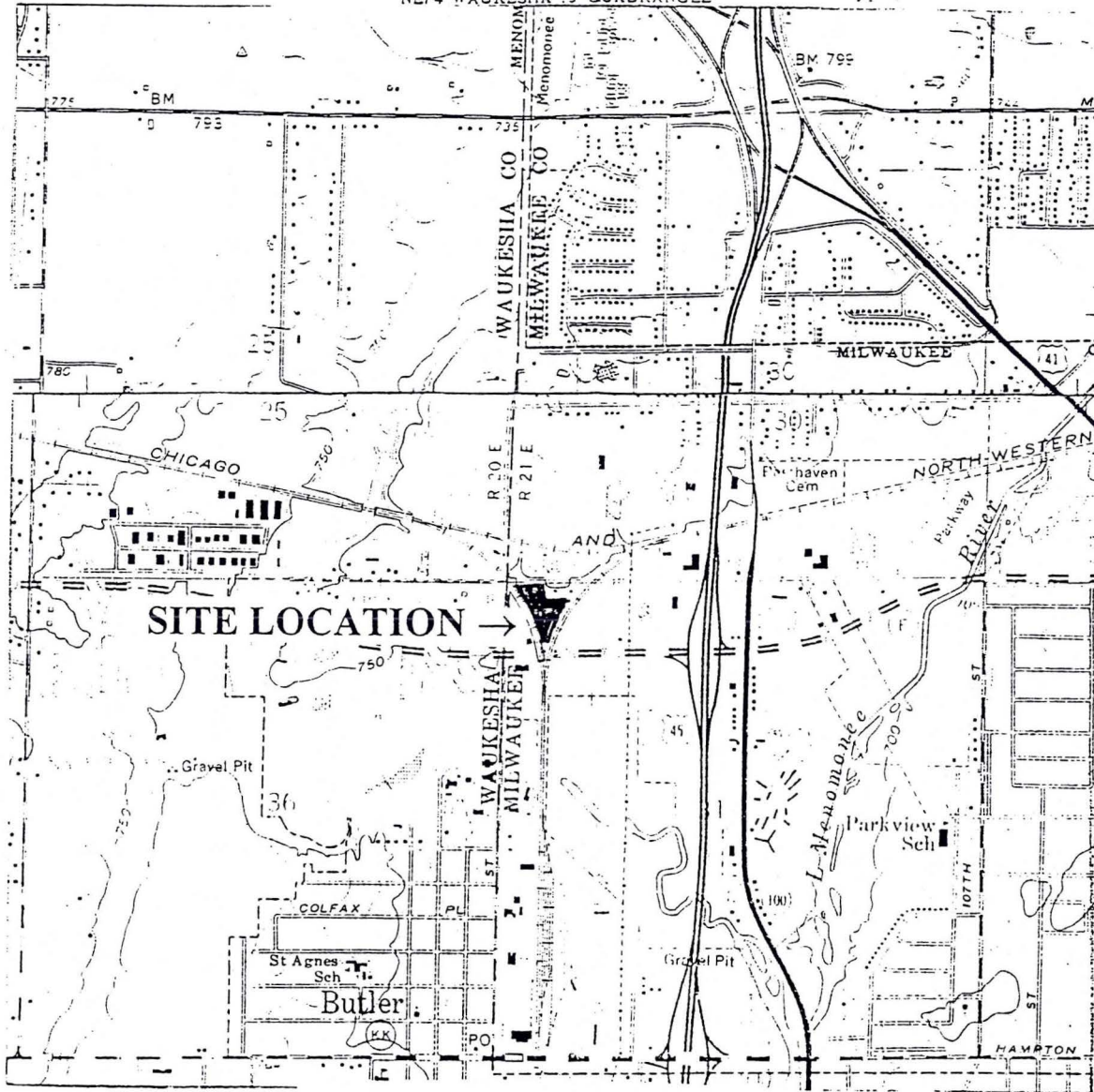
Braun Intertec Corporation, 1998. Burn Pit Remediation at the Strategic Materials Site, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Swanson Environmental, 1994a. Initial Site Investigation Results and Workplan, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Swanson Environmental, 1994b. Initial Site Investigation Results and Workplan, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Swanson Environmental, 1995. Subsurface Investigation Report, Former Allwaste Recycling, Inc., 12305 West Silver Spring Road, Milwaukee, Wisconsin.

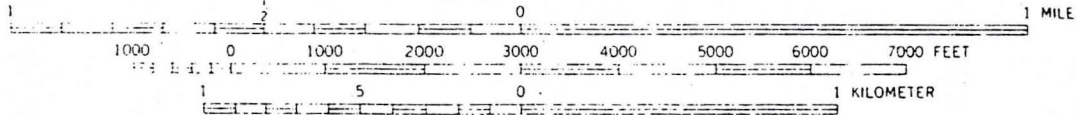
MENOMONEE FALLS QUADRANGLE  
 WISCONSIN  
 7.5 MINUTE SERIES (TOPOGRAPHIC)  
 NE/4 WAUKESHA 15' QUADRANGLE



WAUWATOSA QUADRANGLE  
 WISCONSIN  
 7.5 MINUTE SERIES (TOPOGRAPHIC)  
 SE 4 WAUKESHA 15' QUADRANGLE



SCALE 1:24 000

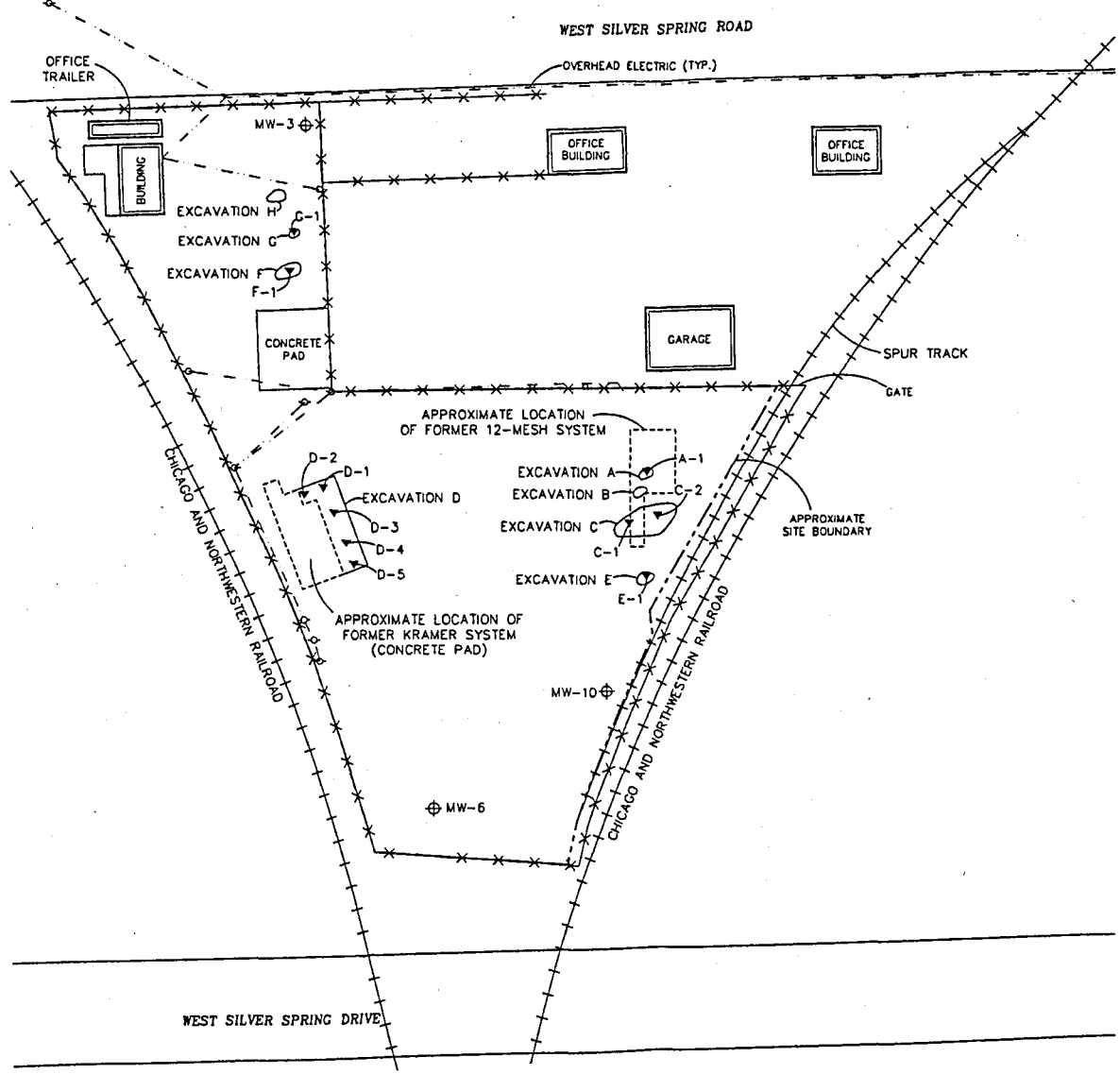


CONTOUR INTERVAL 10 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

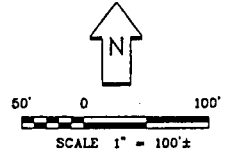
**BRAUN**  
**INTERTEC**

Site Location Map  
 Phase I Environmental Site Assessment  
 Strategic Materials Site  
 12305 West Silver Spring Road - Milwaukee, Wisconsin

INT	DATE	SHEET
DRAWN BY: TRH	10/27/99	OF
APP'D BY:	10/27/99	
JOB NO. CNEX-99-232		
DWG. NO.	FIGURE NO.	
SCALE	1	



**LEGEND**  
 ⊕ MONITORING WELL LOCATION  
 ▼ SOIL SAMPLING LOCATION

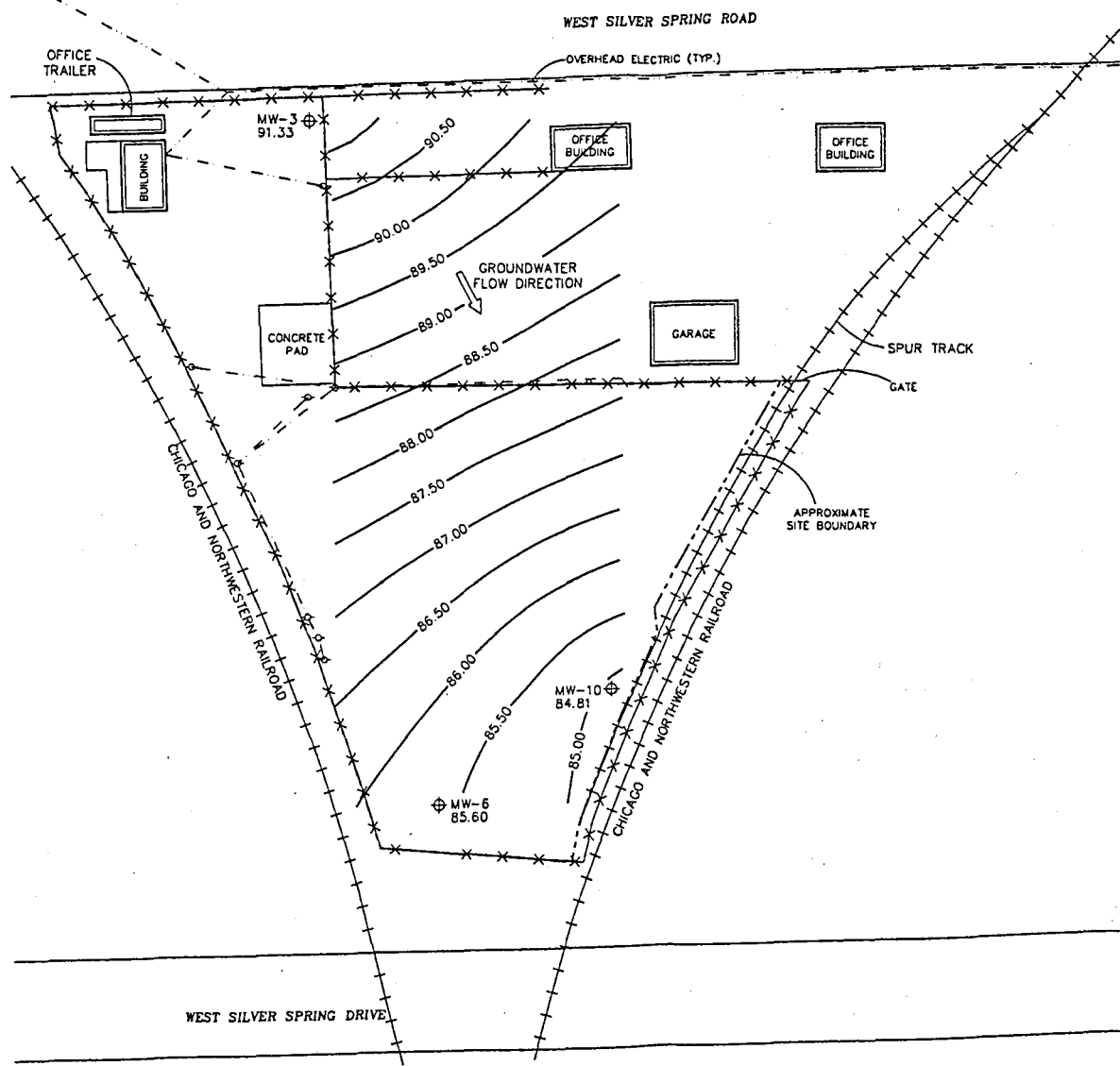


**BRAUN**  
**INTERTEC**

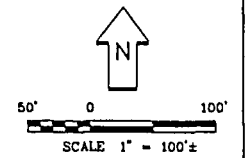
SOIL EXCAVATION LOCATIONS (11/23/99)  
 CASE SUMMARY AND CLOSEOUT  
 STRATEGIC MATERIALS, INC.  
 MILWAUKEE, WI

INT	DATE
DRAWN BY: BJB	11-2-99
APP'D BY: TH	12-9-99
JOB NO. CNEX-99-232A	
DWG. NO. NE9232A	SHEET OF
SCALE 1" = 100'±	

FIGURE NO. 2



- LEGEND**
- ⊕ MONITORING WELL LOCATION
  - 85.60 GROUNDWATER ELEVATION (FT)
  - GROUNDWATER CONTOUR ELEVATION (FT)



**BRAUN**  
**INTERTEC**

GROUNDWATER CONTOUR MAP (11/23/99)  
CASE SUMMARY AND CLOSEOUT  
STRATEGIC MATERIALS, INC.  
MILWAUKEE, WI

INT	DATE
DRAWN BY: BUB	11-2-99
APP'D BY: TH	12-9-99
LAB NO: CNEX-99-232A	
DWG. NO: NIE9232A	SHEET OF
SCALE 1" = 100'±	

FIGURE NO. 3

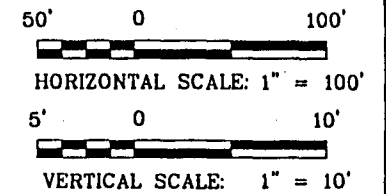
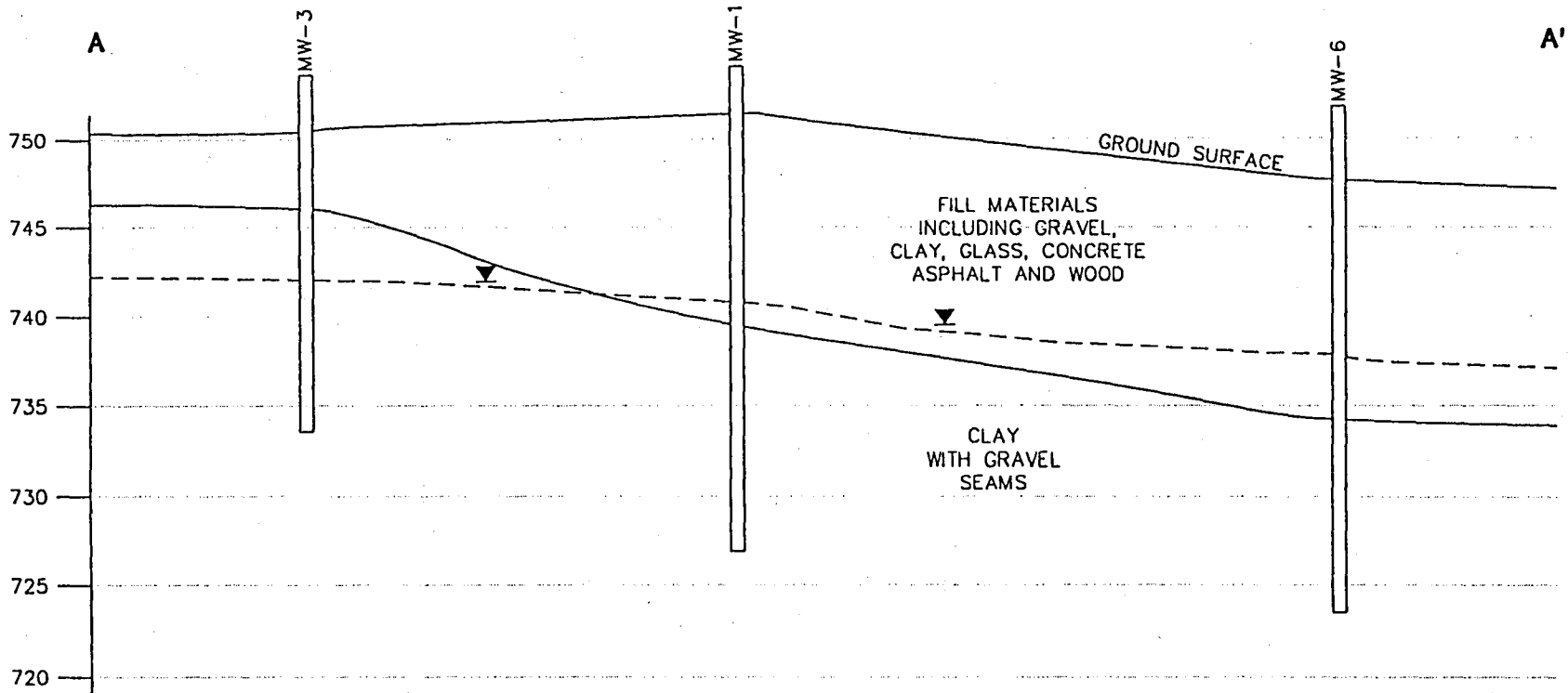
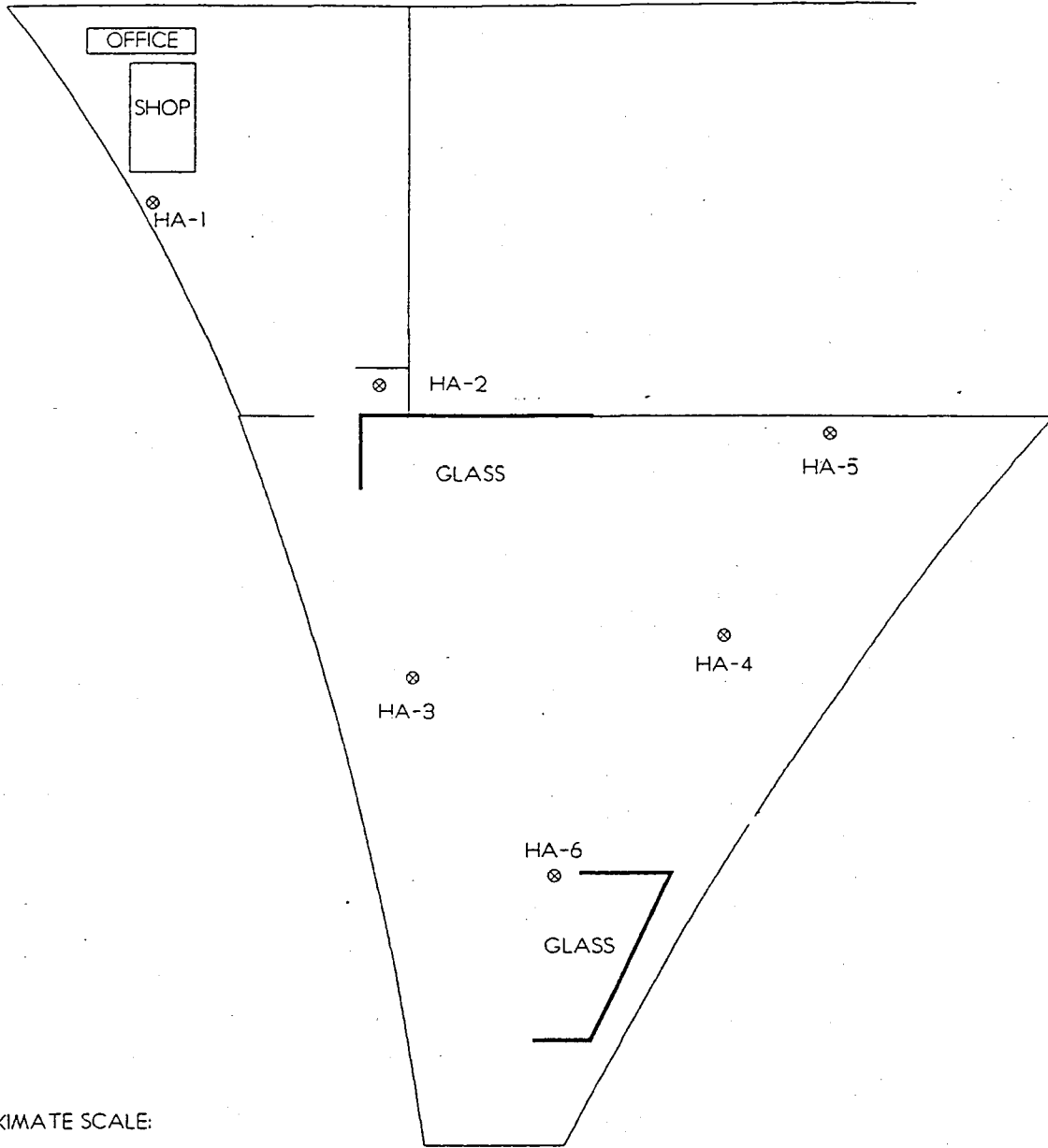


FIGURE NO. 4	INT	DATE
	DRAWN BY: BJB	12-9-99
	APP'D BY: TRH	12-9-99
	JOB NO. CNEX-99-232A	
	DWG. NO. NE9232A1	SHEET OF
SCALE AS SHOWN		

GEOLOGIC CROSS SECTION A-A'  
 CASE SUMMARY AND CLOSEOUT  
 STRATEGIC MATERIALS, INC.  
 MILWAUKEE, WI

**BRAUN™**  
**INTERTEC**

SILVER SPRING ROAD



APPROXIMATE SCALE:



SILVER SPRING DRIVE

FIGURE 2  
APPROXIMATE HAND AUGER LOCATIONS  
12305 W. SILVER SPRING ROAD  
MILWAUKEE, WI

DATE: 10/5/94

DRAWN BY: DLY

PROJECT: WE1932

APPROVED: JRM



SWANSON  
ENVIRONMENTAL, INC.

TABLE 1  
SOIL SAMPLE RESULTS (ppm)  
12305 West Silver Spring Road  
4/13/94

<u>Parameter</u>	<u>HA-1</u>	<u>HA-2</u>	<u>HA-3</u>	<u>HA-4</u>	<u>HA-5</u>	<u>HA-6</u>
DRO	2370	1800	3900	903	ND	
GRO	ND	580	110	ND	ND	
Arsenic	2.1					0.2
Barium	42.0					1.5
Cadmium	5					ND
Chromium	36					2
Lead	269					57
Mercury	ND					0.15
Silver	ND					ND
Selenium	ND					ND

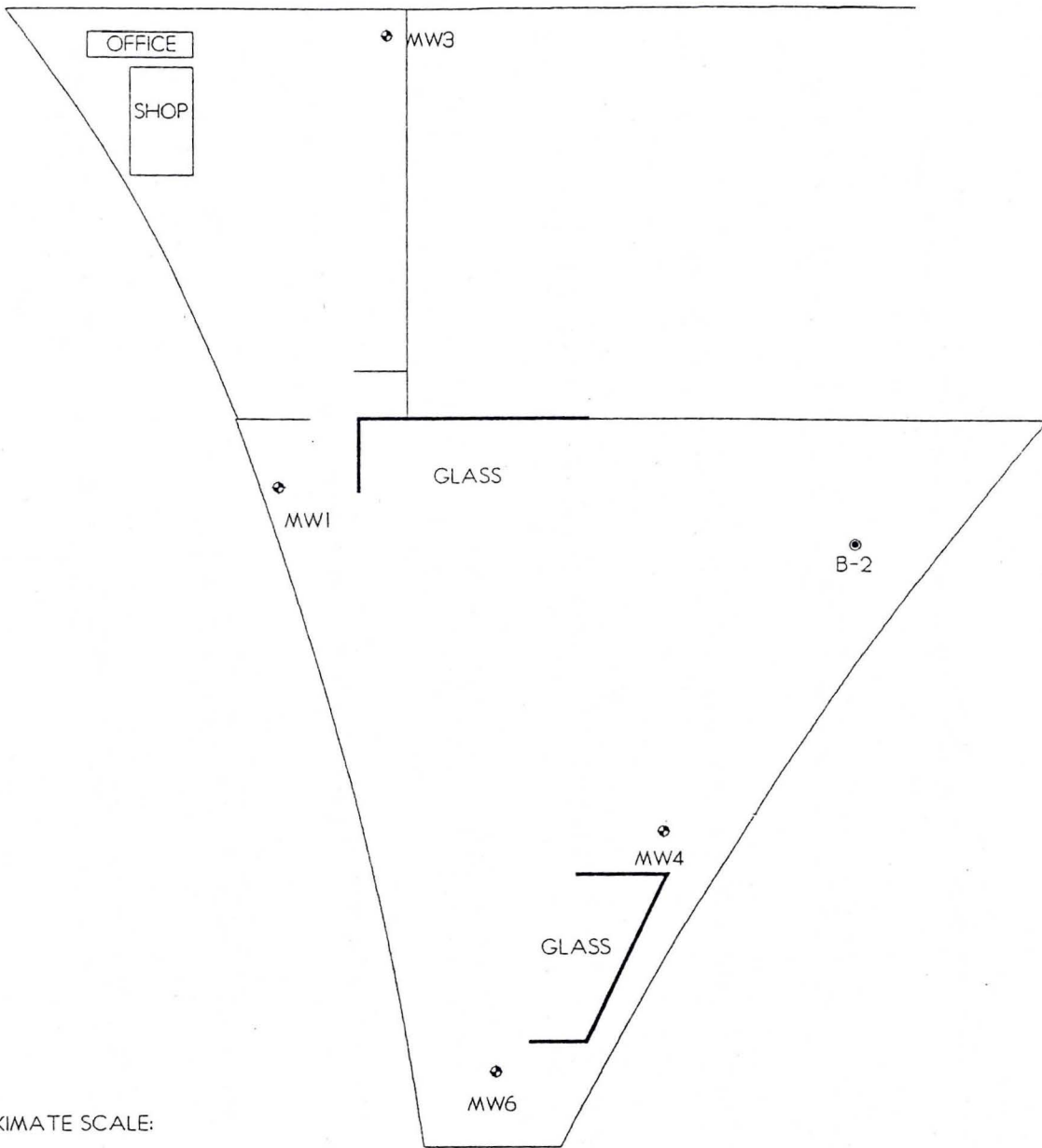
Sample results reveal high detects of DRO and GRO in several samples. The VOCs analysis revealed low levels of toluene in HA-4 and methylene chloride (a typical lab contaminant) in HA-3 and HA-4. All of the metal results are within common ranges fund in natural soil except for cadmium and lead in HA-1. This hand auger was installed under a waste oil tank, and thus the results are explainable.

#### B. Soil Boring Results

Several borings and groundwater monitoring wells were installed on-site on April 19 and 20, 1994. Drilling was conducted by Midwest Engineering. The boring (monitoring well) locations are shown in Figure 3. The borings/wells were placed in an attempt to identify the overall quality of soil and groundwater throughout the site and to determine a groundwater flow direction.

Borings were constructed per Wisconsin Administrative Code (WAC) NR 141 using hollow stem augers. Auger flights were steam cleaned between boreholes, and the decontaminated water was drummed and left on-site for future disposal. Split

SILVER SPRING ROAD



APPROXIMATE SCALE:



SILVER SPRING DRIVE

FIGURE 3  
APPROXIMATE BORING AND WELL LOCATIONS  
12305 W. SILVER SPRING ROAD  
MILWAUKEE, WI

DATE: 10/5/94	DRAWN BY: DLY
PROJECT: WE1932	APPROVED: JRM



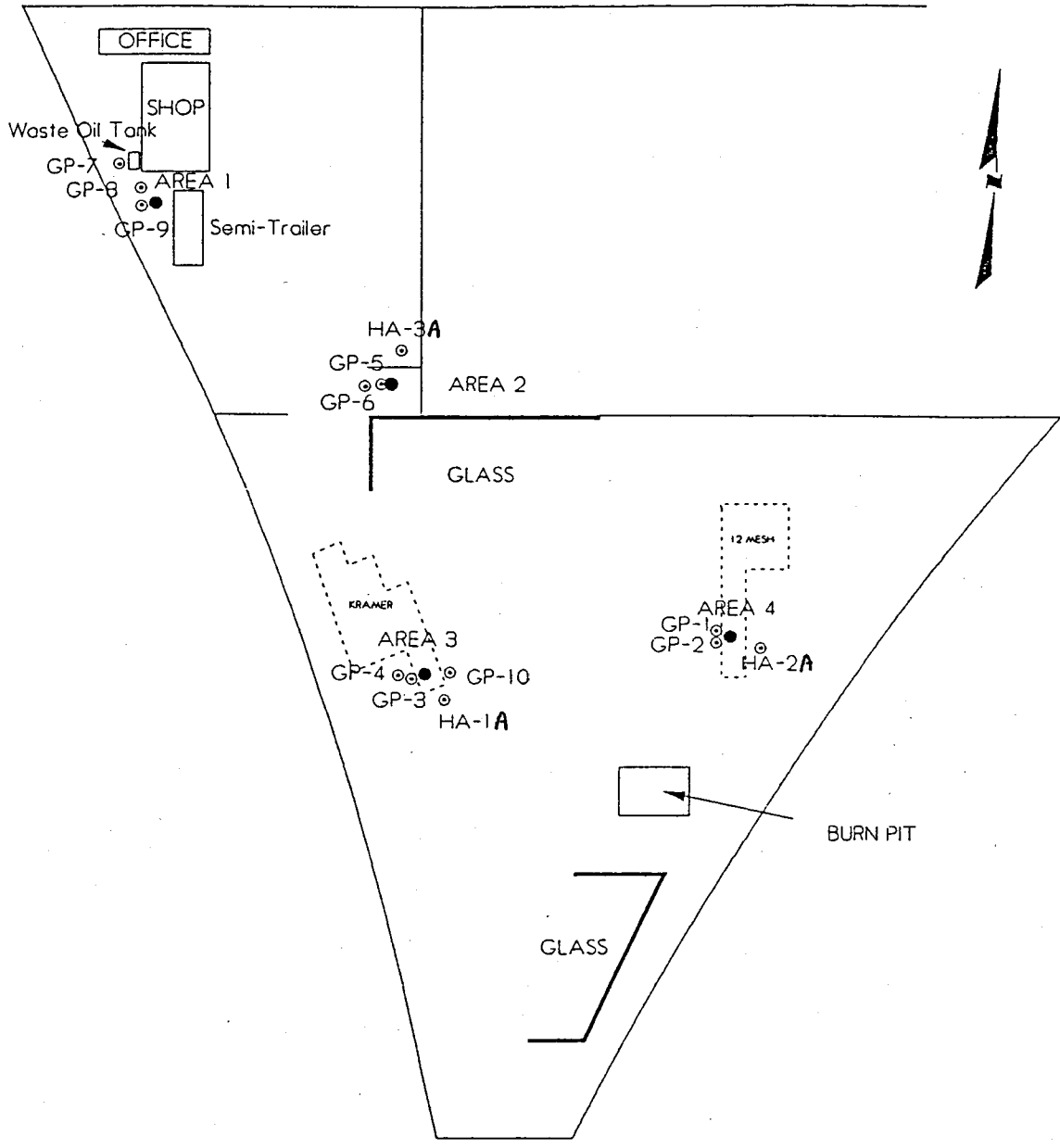
SWANSON  
ENVIRONMENTAL, INC.



**TABLE 3**  
**PRELIMINARY ANALYTICAL RESULTS (ppm)**  
**12305 West Silver Spring Road**  
**April 19-20, 1994**

Parameter	B-1 6-8'	B-1 18-20'	B-2 8-10'	B-2 12-14'	B-3 4-6'	B-3 14-16'	B-4 12-14'	B-4 22-24'	B-6 4-6'	B-6 12-14'
Arsenic	<29.8	<29.8	<30.5	<27.8	<29.1	<28.8	<27.9	<30.0	<27.4	<30.0
Barium	21.9	63.8	89.5	39.4	52.9	59.0	29.6	72.2	35.6	96.4
Cadmium	<0.60	<0.59	<0.61	<0.56	<0.58	<0.57	<0.56	<0.60	<0.55	<0.60
Chromium	10.3	21.8	31.0	158	17.9	19.7	9.76	26.5	13.5	31.9
Lead	36.9	11.9	22.5	13.3	11.6	9.77	72.0	11.4	78.8	13.8
Mercury	0.11	0.06	<0.05	<0.04	<0.05	0.05	0.08	0.07	0.06	0.08
Selenium	<29.8	<29.8	<30.5	<27.8	<29.1	<28.8	<27.9	<30.0	<27.4	<30.0
Silver	<0.60	<0.59	<0.61	<0.56	<0.58	<0.57	<0.56	<0.60	<0.55	<0.60


SILVER SPRING ROAD



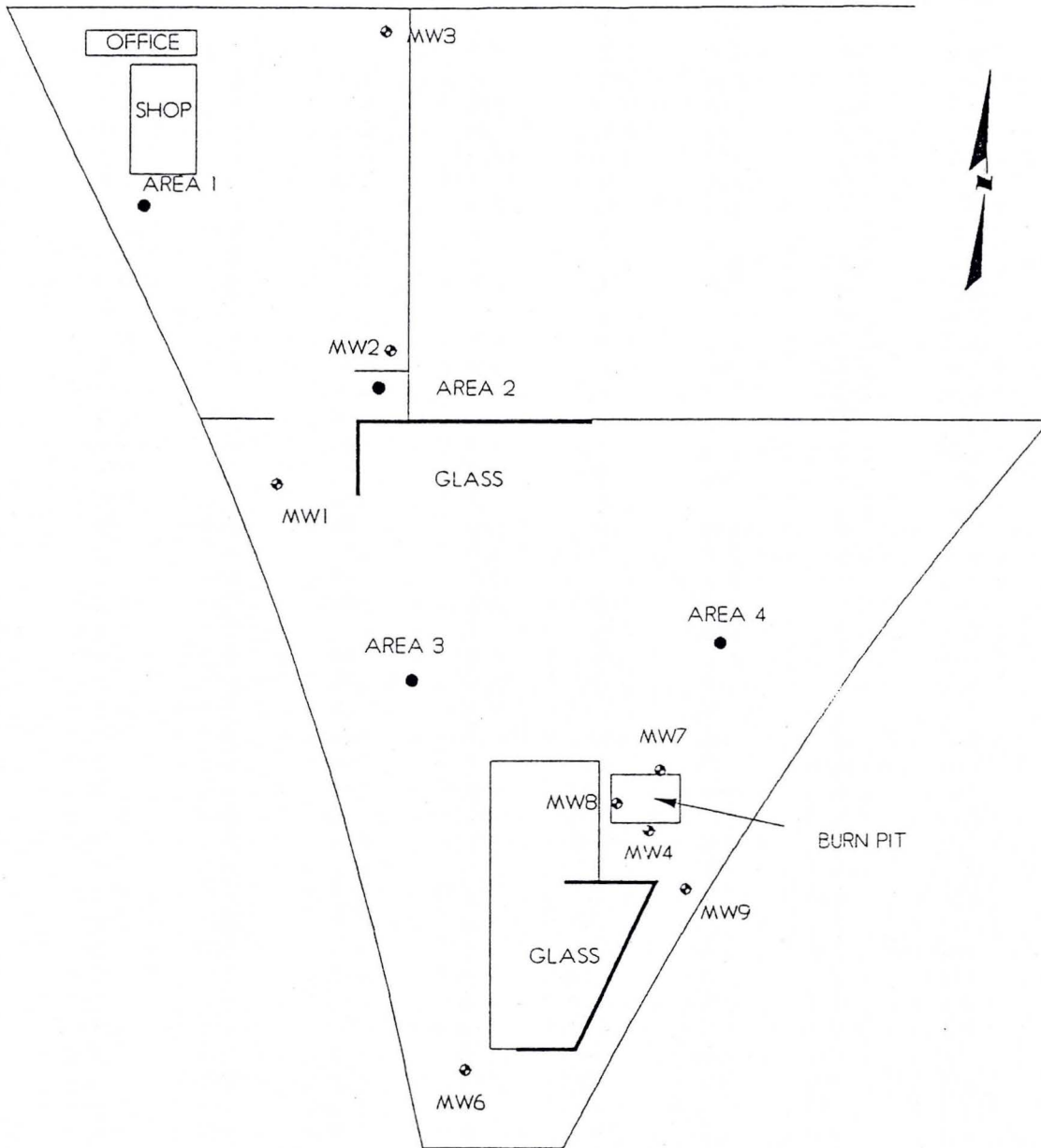
APPROXIMATE SCALE:



SILVER SPRING DRIVE

FIGURE 2 GEOPROBE & HAND-AUGER BORING LOCATIONS ALLWASTE	
DATE: 9/12/95	DRAWN BY: BHB
PROJECT: WE2019	APPROVED: WRH
 SWANSON ENVIRONMENTAL, INC.	

SILVER SPRING ROAD



APPROXIMATE SCALE:

0' 100'

SILVER SPRING DRIVE

FIGURE 3  
MONITORING WELL LOCATIONS  
ALLWASTE

DATE: 9/12/95	DRAWN BY: BHB
PROJECT: WE2019	APPROVED: WRH

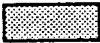



SWANSON  
ENVIRONMENTAL, INC.

TABLE 3 Soil Laboratory Analytical Results Allwaste Recycling, Inc.									
Compound (ug/kg)	GP-1 (2-4')	GP-2 (0-2')	GP-3 (2-4')	GP-4 (2-4')	GP-5 (0-2')	GP-5 (4-6')	GP-6 (2-4')	GP-7 (0-2')	
GRO/DRO (mg/kg)	62	42	160	21	2.3 94	140 4,600	7.2 32	9.6	
Lead (mg/kg)					22	27	51	11	
Cadmium (mg/kg)								<.58	
n-Butylbenzene					170	1100	<30	<5.8	
sec-Butylbenzene					21	510,000	<30	<5.8	
tert-Butylbenzene					22	<600	<30	<5.8	
Ethylbenzene					18	<600	<30	<5.8	
p-Isopropyltoluene					24	<600	<30	<5.8	
Naphthalene					170	510,000	1400	<29	
n-propylbenzene					40	<600	<30	<5.8	
1,2,4-Trimethylbenzene					93	1300	<60	<12	
1,3,5-Trimethylbenzene					56,000	<1200	<60	<12	
Total Xylenes					38,000	<1800	<90	<17	
Compound (ug/kg)	GP-8 (0-2')	GP-9 (0-2')	GP-9 (2-4')	GP-10 (0-2')	HA-1A (2')	HA-2A(1')	HA-3A (2')	B-10 (14-18')	B-10 (18-20')
GRO/DRO (mg/kg)	<5.9	<6.0	<6.0	15	200	630	4.9 280	<1.3 <6.5	<1.2 <6.1
Lead (mg/kg)	29	21	13				15	20	11
Cadmium (mg/kg)	<5.9	<.6	<.6						
n-Butylbenzene	<5.9	<6	<6				13	<6.5	<6.5
sec-Butylbenzene	<5.9	<6	<6				33	<6.5	<6.5
tert-Butylbenzene	<5.9	<6	<6				8.7	<6.5	<6.5
Ethylbenzene	<5.9	<6	<6				6.9	<6.5	<6.5
p-Isopropyltoluene	<5.9	<6	<6				7.8	<6.5	<6.5
Naphthalene	<30	<30	<30				110	<33	<33
n-Propylbenzene	<5.9	<6	<6				<5.4	<6.5	<6.5
Toluene	<5.9	<6	<6				8.4	<6.5	<6.5
1,2,4-Trimethylbenzene	<12	<12	<12				12	<13	<13
1,2,5-Trimethylbenzene	<12	<12	<12				<11	<13	<13
Total Xylenes	<18	<18	<18				<16	<20	<20

TABLE 4 PAH ANALYTICAL RESULTS							
Parameter	B-7 (12-14')	MW-7	B-8 (14-16')	MW-8	B-9 (18-20')	MW-9	MW-4
Acenaphthene	<190	<5	4800	5.7	<130	<5	<5
Acenaphthylene	<7500	<4	<17,000	15	<250	<4	<4
Anthracene	94	<.2	30,000	3.9	1	<.2	<.2
Benzo(a)anthracene	280	0.37	36,000	2.5	1	<.01	.056
Benzo(a)pyrene	130	.056	33,000	2.1	.76	<.01	.14
Benzo(b)fluoranthene	530	.03	21,000	1.7	<1.3	<.02	.10
Benzo(ghi)perylene	440	<.06	18,000	1.5	<2.5	<.06	.11
Benzo(k)fluoranthene	300	.014	12,000	.9	<.64	<.01	.045
Chrysene	330	<.05	17,000	1.5	<2.5	<.05	.19
Dibenzo(a,h)anthracene	210	<.02	4,900	.45	<1.3	<.02	.025
Fluoranthene	1,200	<1	120,000	12	<64	<1	4.3
Fluorene	280	<1	22,000	3.6	<6.4	<1	<1
Ideno(1,2,3-cd)pyrene	160	<.4	14,000	1.3	<25	<.4	<.4
1-Methyl naphthalene	230	<3	3,200	<3	<64	<3	<3
2-Methyl naphthalene	960	<3	43,000	7.6	<64	<3	<3
Naphthalene	1,800	<3	3,900	<3	<64	<3	<3
Phenanthrene	620	<.3	88,000	3.9	<6.4	<.3	<.3
Pyrene	230	<1	78,000	5.9	<25	<1	<1

Soil reported in ug/kg and groundwater in ug/L.

 exceeds NR 140 Enforcement Standards

 exceeds NR 140 Preventative Action Limit

## VI. CONCLUSIONS AND RECOMMENDATIONS

A subsurface investigation was conducted at the Allwaste Recycling facility to define the extent and degree of contamination surrounding four surface releases of petroleum

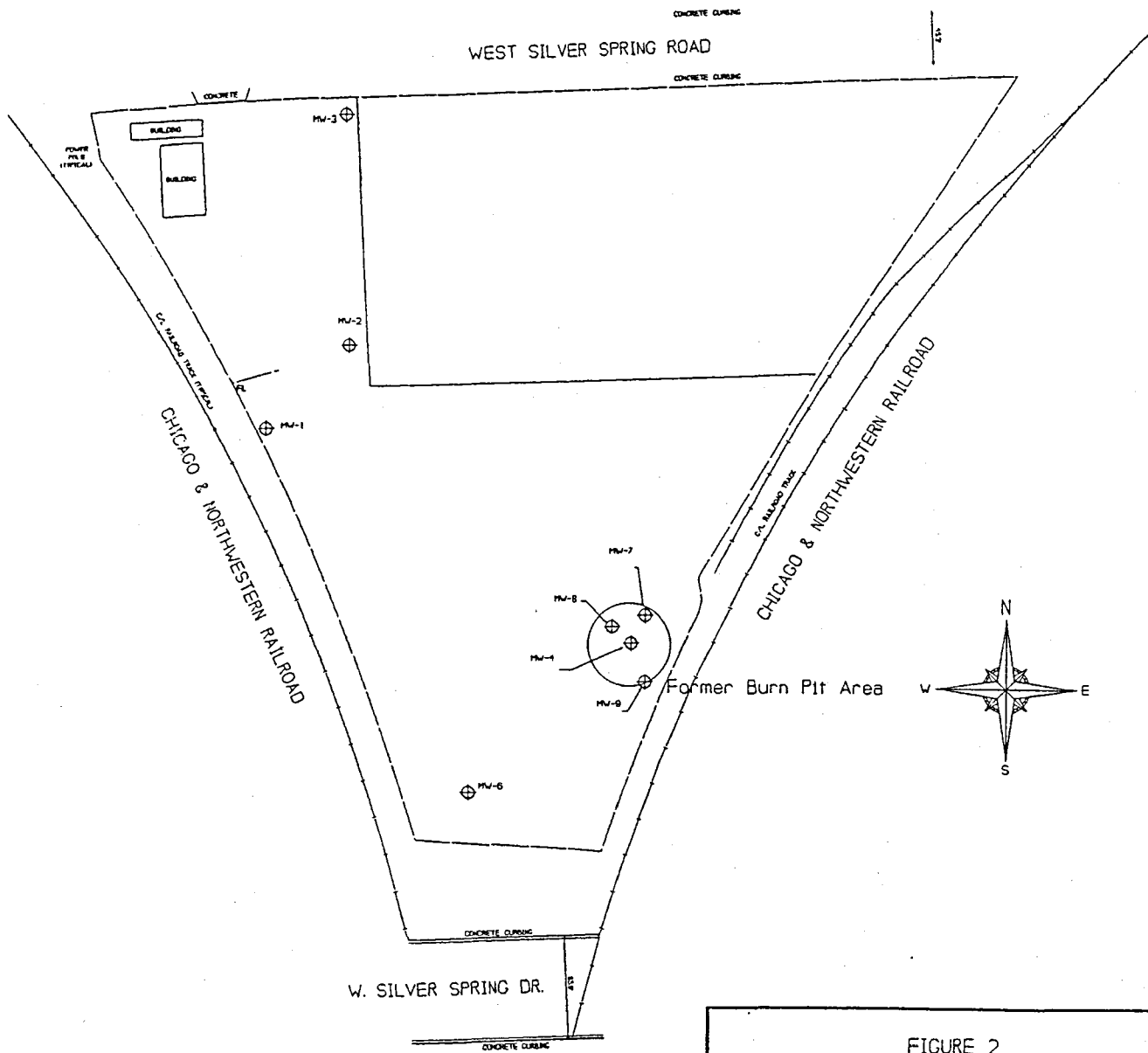


FIGURE 2  
 Site Layout Map  
 Strategic Materials, Inc.

DATE:	12/11/97	DRAWN BY:	BHB
PROJECT:	LWXX-97-106	APPROVED:	MLF

**BRAUN™**  
**INTERTEC** 3315 N. 124th Street, Unit N  
 Brookfield, Wisconsin 53005

State of Wisconsin  
Department of Natural Resources

WELL/DRILLHOLE/BOREHOLE ABANDONMENT  
Form 3300-5B  
Rev. 7-89

All abandonment work shall be performed in accordance with the provisions of Chapters NR 111, NR 112 or NR 141, Wis. Admin. Code, whichever is applicable. Also, see instructions on back.

(1) GENERAL INFORMATION		(2) FACILITY NAME	
Well/Drillhole/Borehole Location <u>MW-10</u>	County <u>Milwaukee</u>	Original Well Owner (If Known) <u>Strategic Materials, Inc.</u>	
NW 1/4 of NW 1/4 of Sec. <u>31</u> ; T. <u>8</u> N; R. <u>21</u> <input checked="" type="checkbox"/> E <input type="checkbox"/> W		Present Well Owner <u>Same</u>	
(If applicable) Gov: Lot _____ Grid Number _____		Street or Route <u>5751 San Felipe, Suite 1400</u>	
Grid Location ft. <input type="checkbox"/> N. <input type="checkbox"/> S., _____ ft. <input type="checkbox"/> E. <input type="checkbox"/> W.		City, State, Zip Code <u>Houston, TX 77056-3609</u>	
Civil Town Name <u>Milwaukee</u>		Facility Well No. and/or Name (If Applicable) WI Unique Well No. _____	
Street Address of Well <u>12305 West Silver Spring Road</u>		Reason for Abandonment <u>Site Closure</u>	
City, Village <u>Milwaukee, WI</u>		Date of Abandonment <u>2-17-00</u>	

WELL/DRILLHOLE/BOREHOLE INFORMATION		(4) Depth to Water (Feet) <u>14.78</u>	
(3) Original Well/Drillhole/Borehole Construction Completed On _____ (Date)		Pump & Piping Removed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable Liner(s) Removed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable Screen Removed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Applicable Casing Left in Place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, Explain _____	
<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Drillhole <input type="checkbox"/> Borehole	Construction Report Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Was Casing Cut Off Below Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Sealing Material Rise to Surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Did Material Settle After 24 Hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Was Hole Retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (Specify) _____		(5) Required Method of Placing Sealing Material	
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Dump Bailer <input type="checkbox"/> Other (Explain) _____	
Total Well Depth (ft.) <u>19.0</u> Casing Diameter (ins.) _____ (From ground surface)		(6) Sealing Materials	
Casing Depth (ft.) _____		For monitoring wells and monitoring well boreholes only <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Pellets <input type="checkbox"/> Clay-Sand Slurry <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite-Sand Slurry <input checked="" type="checkbox"/> Chipped Bentonite	
Was Well Annular Space Grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown If Yes, To What Depth? _____ Feet			

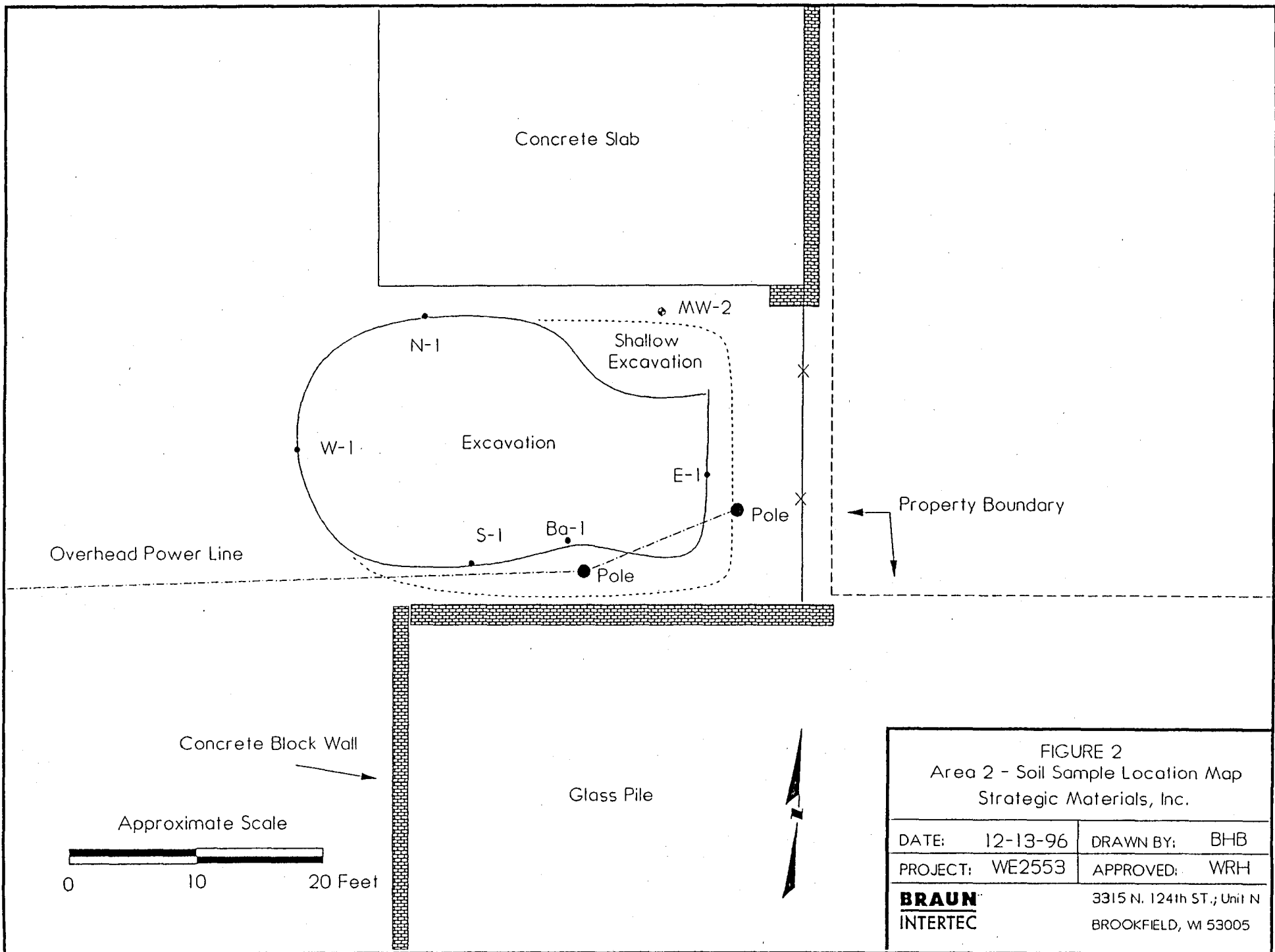
(7) Sealing Material Used	From (Ft.)	To (Ft.)	No. Yards, Sacks, Scaant or Volume	Mix Ratio or Mud Weight
<u>Bentonite chips</u>	<u>Surface</u>	<u>19.0</u>	<u>1.5</u>	

(8) Comments: \_\_\_\_\_

(9) Name of Person or Firm Doing Sealing Work  
Giles Engineering

Signature of Person Doing Work <u>[Signature]</u>	Date Signed <u>2-21-00</u>
Street of Route _____	Telephone Number ( ) _____
City, State, Zip Code _____	

(10) FOR DNR OR COUNTY USE ONLY	
Date Received/Inspected	District/County
Reviewer/Inspector	
Follow Up Necessary	



Overhead Power Line

Concrete Slab

MW-2

Shallow Excavation

N-1

W-1

Excavation

E-1

S-1

Ba-1

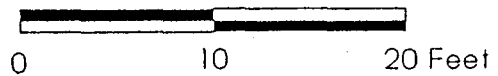
Pole

Property Boundary

Concrete Block Wall

Glass Pile

Approximate Scale



<p>FIGURE 2 Area 2 - Soil Sample Location Map Strategic Materials, Inc.</p>	
DATE: 12-13-96	DRAWN BY: BHB
PROJECT: WE2553	APPROVED: WRH
<p><b>BRAUN</b> INTERTEC</p>	<p>3315 N. 124th ST., Unit N BROOKFIELD, WI 53005</p>



#### IV. Laboratory Analytical Results

The laboratory results revealed that the remaining soil does not contain concentrations of petroleum constituents above NR 720 residual contaminant levels. Four of the five PVOC samples did not detect petroleum compounds above the laboratory detection limits. The north wall sample (N-1) revealed levels of toluene, 1,2,5-trimethylbenzene and xylenes at 60 ug/kg, 47 ug/kg and 140 ug/kg, respectively. Concentrations of DRO were all below 32 mg/kg and GRO was only detected in the N-1 sample at 7.5 mg/kg. Lead was detected in each of the samples, but concentrations were below the NR 720 residual contaminant level for an industrial site. The results are summarized in Table 2. Laboratory reports and chains-of-custody are presented as Appendix B.

TABLE 2 Laboratory Analytical Results Strategic Materials December 3, 1996						
	Ba-1	E-1	W-1	S-1	N-1	NR 720 RCL
GRO (mg/kg)	<5.6	<5.6	<5.9	<6.2	7.5	100*
DRO (mg/kg)	17	11	24	9	32	100*
Benzene	<4.8	<4.8	<4.8	<4.8	<4.8	5.5
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	2900
1,2,4-Trimethylbenzene	<8.9	<8.9	<8.9	<8.9	<8.9	NA
1,3,5-Trimethylbenzene	<8.2	<8.2	<8.2	<8.2	47	NA
Methyl-tert-butyl-ether	<12	<12	<12	<12	<12	NA
Toluene	<7.0	<7.0	<7.0	<7.0	60	1500
Xylenes	<4.9	<4.9	<4.9	<4.9	140	4100
Lead (mg/kg)	28	27	43	9.8	58	500**

PVOC results expressed in micrograms per kilogram (ug/kg).

\* Level for soil types with hydraulic conductivities of greater than  $10^{-6}$  cm/sec.

\*\* Level for an industrial site.

RCL = Residual Cleanup Level

NA - NR 720 has no established RCL for this compound.

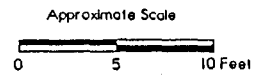
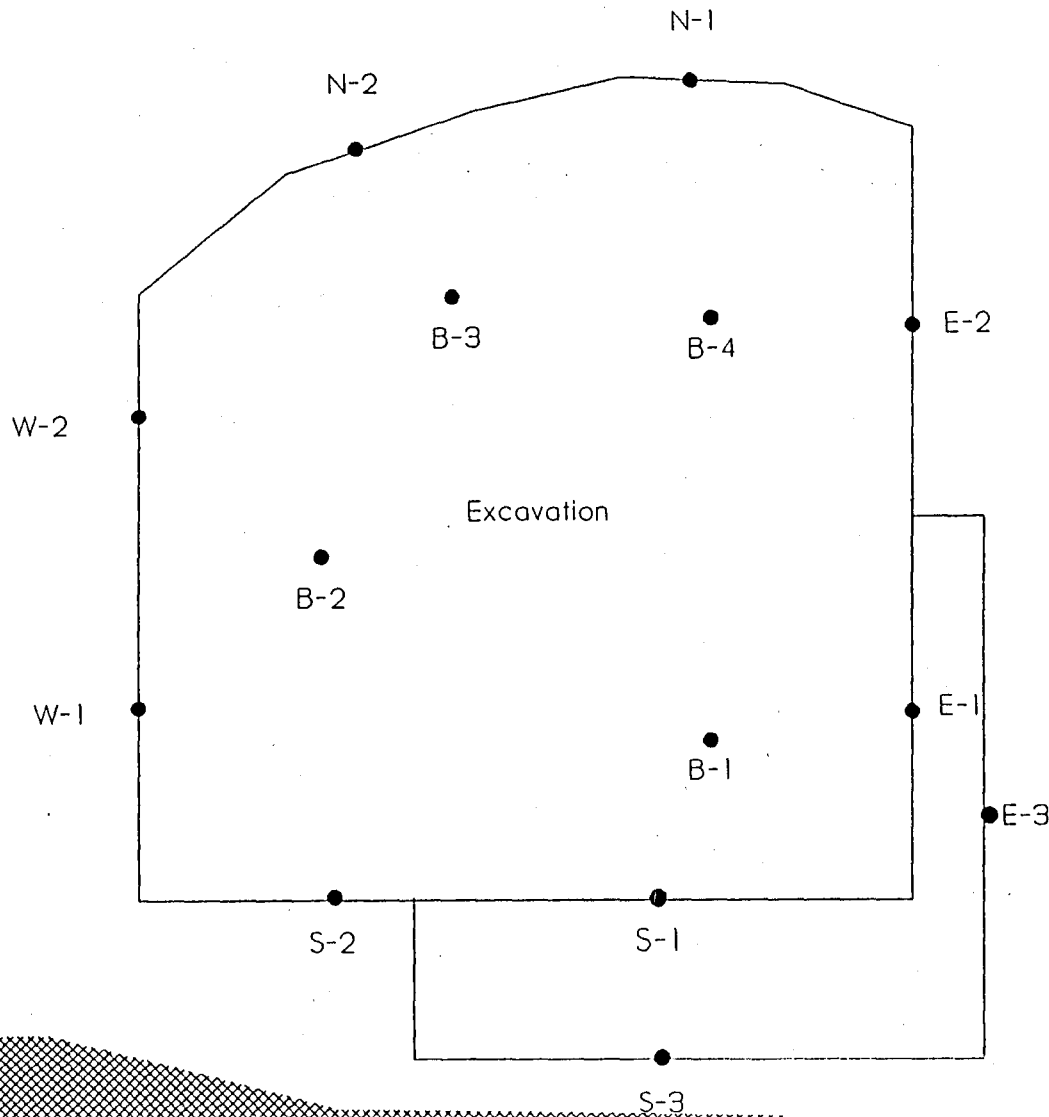
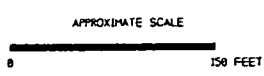
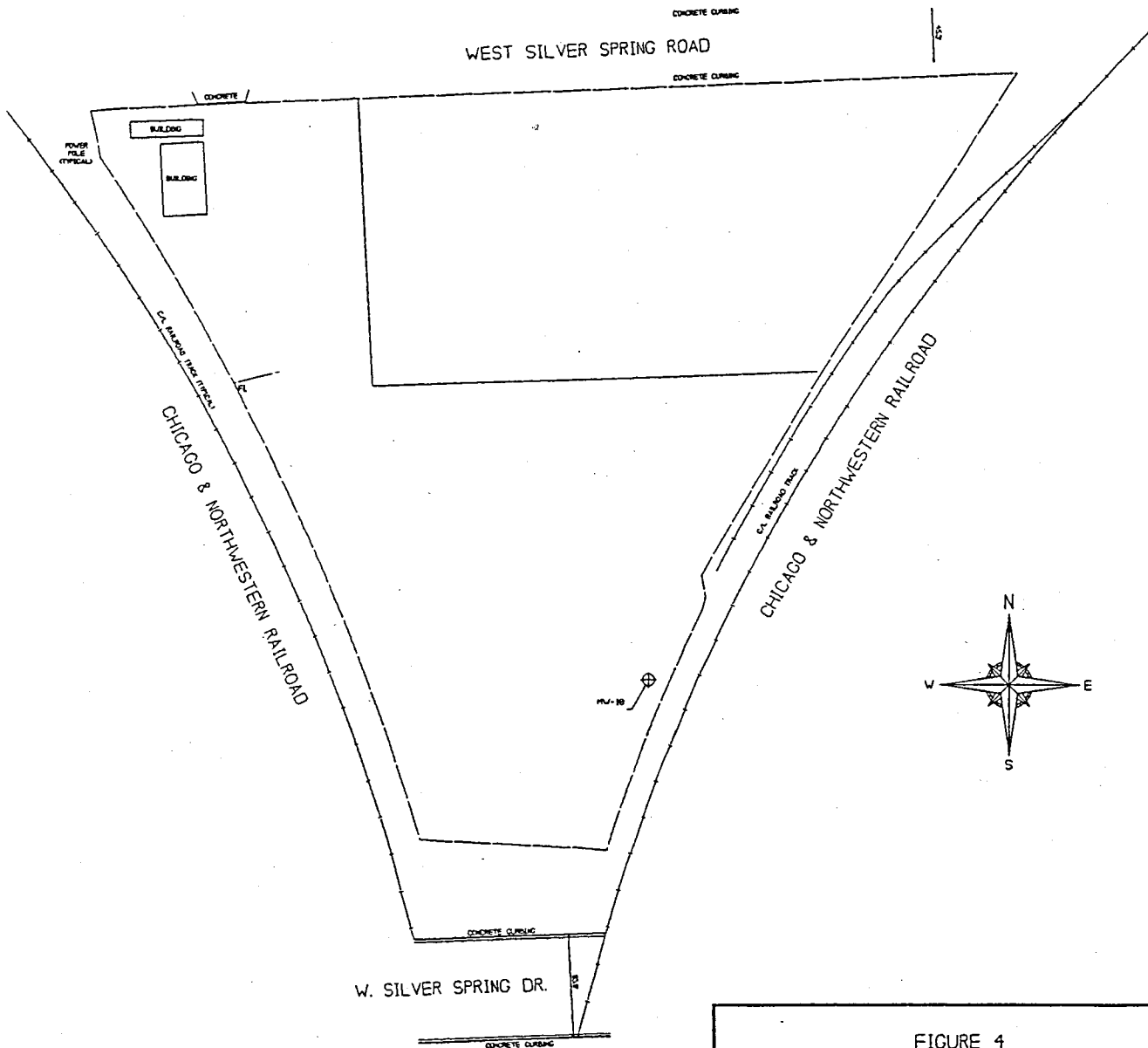


FIGURE 3  
Soil Sample Location Map  
Strategic Materials, Inc.

DATE: 7/28/97	DRAWN BY: BHB
JOB#: LWXX-97-106	APPROVED: MLF
<b>BRAUN</b> INTERTEC	3315 N. 124th ST., Unit N BROOKFIELD, WI 53005



<b>FIGURE 4</b> Monitoring Well MW-10 Location Map Strategic Materials, Inc.			
DATE:	12/11/97	DRAWN BY:	BHB
PROJECT:	LWXX-97-106	APPROVED:	MLF
<b>BRAUN™</b> <b>INTERTEC</b>		3315 N. 124th Street, Unit N Brookfield, Wisconsin 53005	

**Table 2**  
**Laboratory Soil Analytical Results (ug/kg)**  
**Strategic Materials**  
**June 24 and July 28, 1997**

	B-1 (18')	B-2 (22')	B-3 (25')	B-4 (25')	S-1 (16')	S-2 (12')	S-3 (10')
Acenaphthene	<48	<59	<48	<62	<4,900	<49	<61
Acenaphthylene	<96	<120	<96	<120	<9,800	<98	<100
Anthracene	13	<12	<9.6	<12	6,500	<9.8	<9.8
Benzo(a)anthracene	38	<2.9	<2.4	<3.1	14,700	<2.5	<2.4
Benzo(b)fluoranthene	26	<2.9	<2.4	<3.1	7,120	<2.5	<2.4
Benzo(k)fluoranthene	17	<2.9	<2.4	<3.1	9,080	<2.5	<3.0
Benzo(a)pyrene	51	<5.9	<4.8	<6.2	13,500	<4.9	<4.9
Benzo(ghi)perylene	55	<5.9	<4.8	<6.2	13,500	<4.9	<6.1
Chrysene	27	<5.9	<4.8	<6.2	11,500	<4.9	<4.9
Dibenzo(a,h)anthracene	<4.8	<5.9	<4.8	<6.2	<490	<4.9	<9.8
Fluoranthene	84	<12	<9.6	<12	35,600	<9.8	<9.8
Fluorene	<19	<23	<19	<25	3,190	<20	<20
Indeno(1,2,3-cd)pyrene	35	<5.9	<4.8	<6.2	7,850	<4.9	<4.9
1-Methylnaphthalene	<30	<37	<30	<39	<3,100	<31	<36
2-Methylnaphthalene	<30	<37	<30	<39	<3,100	<31	<30
Naphthalene	<30	<37	<30	<39	<3,100	<31	<36
Phenanthrene	22	<23	<19	<25	18,400	<20	<20
Pyrene	55	<12	<9.6	<12	29,400	<9.8	<9.8

Table 2 (continued)  
 Laboratory Soil Analytical Results (ng/kg)  
 Strategic Materials  
 June 24 and July 28, 1997

	E-1 (15')	E-2 (10')	E-3 (10')	W-1 (15')	W-2 (12')	N-1 (15')	N-2 (15')
Accnaphthene	<4,600	<44	<2,700	<49	<49	<60	<56
Accnaphthylene	<9,200	<87	<4,600	<98	<98	<120	<110
Anthracene	390	<8.7	<430	<9.8	70	<12	<11
Benzo(a)anthracene	1,490	<2.2	<110	7.1	208	<3.0	<2.8
Benzo(b)fluoranthene	791	<2.2	<110	3.3	110	<3.0	<2.8
Benzo(k)fluoranthene	183	<2.2	<140	2.6	120	<3.0	<2.8
Benzo(a)pyrene	1,150	<4.4	<220	7.8	195	<6.0	<5.6
Benzo(ghi)perylene	1,950	<4.4	<270	12	208	<6.0	<5.6
Chrysene	1,490	<4.4	<220	6.4	146	<6.0	<5.6
Dibenzo(a,h)anthracene	<460	<4.4	<430	<4.9	<4.9	<6.0	<5.6
Fluoranthene	3,670	<8.7	<430	9.2	598	<12	<11
Fluorene	<1,800	<17	<850	<20	34	<24	<22
Indeno(1,2,3-cd)pyrene	1,060	<4.4	<220	<4.9	134	<6.0	<5.6
1-Methylnaphthalene	<2,900	<27	<1,600	<30	<30	<38	<35
2-Methylnaphthalene	<2,900	<27	<1,400	<30	<30	<38	<35
Naphthalene	<2,900	<27	<1,600	<30	<30	<38	<35
Phenanthrene	1,260	<17	<850	<20	305	<24	<22
Pyrene	2,520	<8.7	<430	12	415	<12	<11

Elevated detection limits on E-1, E-3 and S-1 samples are due to matrix interference.

**Table 3**  
**B-10/MW-10 Analytical Results**  
**December 2, 1997**

	B-10 (7.5-9.5') (ug/kg)	MW-10 (ug/L)
Acenaphthene	< 62	< 0.96
Acenaphthylene	< 100	< 0.89
Anthracene	< 6.2	0.081
Benzo(a)anthracene	< 6.2	0.17
Benzo(b)fluoranthene	< 6.2	< 0.088
Benzo(k)fluoranthene	< 6.2	< 0.061
Benzo(a)pyrene	< 6.2	0.13
Benzo(ghi)perylene	< 6.2	< 0.11
Chrysene	< 6.2	0.13
Dibenzo(a,h)anthracene	< 12	< 0.13
Fluoranthene	< 12	0.40
Fluorene	< 12	< 0.075
Indeno(1,2,3-cd)pyrene	< 6.2	< 0.057
1-Methylnaphthalene	< 37	< 0.58
2-Methylnaphthalene	< 31	< 0.65
Naphthalene	< 37	< 0.31
Phenanthrene	< 6.2	0.19
Pyrene	< 6.2	0.22

<u>Day</u>	<u>Ticket</u>	<u>Cust. #</u>	<u>Customer Name</u>	<u>Truck #</u>	<u>Generator</u>	<u>Profile</u>	<u>Manifest #</u>	<u>Commodity Code</u>	<u># Extra Codes</u>	<u>Total Yardage</u>	<u>Tons</u>	
11/23/99	528857	0001307	BRAUN INTERTEC CORP	96	STRATEGIC MATERIALS	BIO26174	698315	BIO		0.00	29.880	
11/23/99	528863	0001307	BRAUN INTERTEC CORP	86	STRATEGIC MATERIALS	BIO26174	698316	BIO		0.00	29.220	
11/23/99	528869	0001307	BRAUN INTERTEC CORP	99	STRATEGIC MATERIALS	BIO26174	698317	BIO		0.00	28.830	
11/23/99	528885	0001307	BRAUN INTERTEC CORP	96	STRATEGIC MATERIALS	BIO26174	698319	BIO		0.00	29.530	
11/23/99	528988	0001307	BRAUN INTERTEC CORP	86	STRATEGIC MATERIALS	BIO26174	698320	BIO		0.00	29.090	
11/23/99	528398	0001307	BRAUN INTERTEC CORP	99	STRATEGIC MATERIALS	BIO26174	698321	BIO		0.00	29.770	
11/23/99	528916	0001307	BRAUN INTERTEC CORP	96	STRATEGIC MATERIALS	BIO26174	698322	BIO		0.00	28.800	
11/23/99	528922	0001307	BRAUN INTERTEC CORP	86	STRATEGIC MATERIALS	BIO26174	698323	BIO		0.00	27.340	
11/23/99	528932	0001307	BRAUN INTERTEC CORP	99	STRATEGIC MATERIALS	BIO26174	698324	BIO		0.00	31.590	
11/23/99	528954	0001307	BRAUN INTERTEC CORP	96	STRATEGIC MATERIALS	BIO26174	698325	BIO		0.00	12.310	
<b>Grand Total:</b>										10	0.00	278.360

F. 02

FAX NO.

DEC-10-99 FRI 09:21 AM ORCHARD RIDGE

**BRAUN**<sup>SM</sup>  
**INTERTEC**

**Braun Intertec Corporation**  
6875 Washington Avenue South  
Minneapolis, Minnesota 55439-0108  
612.941.5600 Fax: 942-4844

*Engineers and Scientists Serving  
the Built and Natural Environments®*

December 6, 1999

Report 99-08982  
Project CNEX-99-249A

Mr. Paul Tepp/LaCrosse  
Braun Intertec Corporation

Re: Braun Intertec

Braun Intertec Corporation received your analytical request on November 24, 1999. Analytical results are summarized on the following laboratory report.

Routine Braun Intertec Corporation QA/QC was followed. Quality control data have been reviewed.

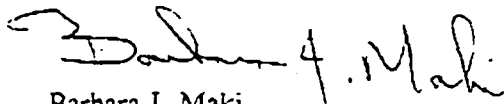
When possible these samples will be held by the laboratory for 14 days from the date of this report. The process of disposing or returning the samples will occur at that time. Arrangements can be made for extended sample storage by contacting us at this time.

We appreciate the opportunity to meet your analytical needs. If you have any questions or would like additional information, please contact:

**Project Manager:**  
Barbara Maki  
612-942-4820  
bmaki@brauncorp.com

**Sampling Supplies:**  
Client Services  
612-942-4930  
labservices@brauncorp.com

Sincerely,



Barbara J. Maki  
Project Manager

Attachments  
Chain of Custody  
Laboratory Results



Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Liquid  
 Lab Sample ID: 99-08982-01

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: Not Applicable  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: MW-3

Page: 1

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
<b>Petroleum Hydrocarbons</b>								
Diesel Range Organics	WI DRO	11/30/99	WI DRO	11/30/99	1.0	27	100	< 100 ug/l
Gasoline Range Organics	SW-846 5030	11/28/99	WI GRO	11/28/99	1.0	100	100	< 100 ug/l
<b>Polynuclear Aromatic Hydrocarbons (PAHs) (GC/MS), Total</b>								
Acenaphthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.1	< 2.1 ug/l
Acenaphthylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	< 2.1 ug/l
Anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.55	2.1	< 2.1 ug/l
Benzo(a)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	< 2.1 ug/l
Benzo(b)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.82	2.1	< 2.1 ug/l
Benzo(k)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.90	2.1	< 2.1 ug/l
Benzo(g,h,i)perylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.1	< 2.1 ug/l
Benzo(a)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.75	2.1	< 2.1 ug/l
Carbazole	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.4	5.2	< 5.2 ug/l
Chrysene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.59	2.1	< 2.1 ug/l
Dibenz(a,h)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.78	2.1	< 2.1 ug/l
Dibenzofuran	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.5	5.2	< 5.2 ug/l
Fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	< 2.1 ug/l
Fluorene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.52	2.1	< 2.1 ug/l
Indeno(1,2,3-cd)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.1	< 2.1 ug/l
2-Methylnaphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.7	5.2	< 5.2 ug/l
Naphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	5.2	< 5.2 ug/l
Phenanthrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.1	< 2.1 ug/l
Pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.57	2.1	< 2.1 ug/l
<b>*** Semi-Volatile Surrogates ***</b>								
2-Fluorobiphenyl	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	66 % rec
Nitrobenzene-d5	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	84 % rec
Terphenyl-d14	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	68 % rec

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Liquid  
 Lab Sample ID: 99-08982-02

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: Not Applicable  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: MW-10

Page: 2

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result	
<b>Petroleum Hydrocarbons</b>									
Diesel Range Organics	WI DRO	11/30/99	WI DRO	11/30/99	1.0	27	100	480 ug/l	gr
Gasoline Range Organics	SW-846 5030	11/28/99	WI GRO	11/28/99	1.0	100	100	<100 ug/l	
<b>Polynuclear Aromatic Hydrocarbons (PAHs) (GC/MS), Total</b>									
Acenaphthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.1	<2.1 ug/l	
Acenaphthylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	<2.1 ug/l	
Anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.55	2.1	<2.1 ug/l	
Benzo(a)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	<2.1 ug/l	
Benzo(b)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.82	2.1	<2.1 ug/l	
Benzo(k)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.90	2.1	<2.1 ug/l	
Benzo(g,h,i)perylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.1	<2.1 ug/l	
Benzo(a)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.75	2.1	<2.1 ug/l	
Carbazole	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.4	5.2	<5.2 ug/l	
Chrysene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.59	2.1	<2.1 ug/l	
Dibenz(a,h)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.78	2.1	<2.1 ug/l	
Dibenzofuran	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.5	5.2	<5.2 ug/l	
Fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.1	<2.1 ug/l	
Fluorene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.52	2.1	<2.1 ug/l	
Indeno(1,2,3-cd)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.1	<2.1 ug/l	
2-Methylnaphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.7	5.2	<5.2 ug/l	
Naphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	5.2	<5.2 ug/l	
Phenanthrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.1	<2.1 ug/l	
Pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.57	2.1	<2.1 ug/l	
<b>*** Semi-Volatile Surrogates ***</b>									
2-Fluorobiphenyl	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	68 % rec	
Nitrobenzene-d15	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	77 % rec	
Terphenyl-d14	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	64 % rec	

gr Although this analyte was not detected at significant levels in the method blank, it appears to be laboratory contamination.

(Report continued on next page)

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-03

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 16%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 1D@3.5'

Page: 3

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	<10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	84 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEK-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-04

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 7%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 3D@2.0'

Page: 4

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result	
<b>Petroleum Hydrocarbons</b>									
Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10	mg/kg
<b>Semi-Volatile Organic Compounds (GC/MS)</b>									
Acenaphthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066	mg/kg
Acenaphthylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066	mg/kg
Anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066	mg/kg
Benzo(a)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066	mg/kg
Benzo(b)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066	mg/kg
Benzo(k)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.066	<0.066	mg/kg
Benzo(g,h,i)perylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066	mg/kg
Benzo(a)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066	mg/kg
Carbazole	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.015	0.066	<0.066	mg/kg
Chrysene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066	mg/kg
Dibenz(a,h)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.066	<0.066	mg/kg
Dibenzofuran	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.021	0.066	<0.066	mg/kg
Fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0040	0.066	<0.066	mg/kg
Fluorene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.066	<0.066	mg/kg
Indeno(1,2,3-cd)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066	mg/kg
2-Methylnaphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.025	0.066	<0.066	mg/kg
Naphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.066	<0.066	mg/kg
Phenanthrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066	mg/kg
Pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066	mg/kg
<b>*** Semi-Volatile Surrogates ***</b>									
2-Fluorobiphenyl	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	40	% rec
Nitrobenzene-d5	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	54	% rec
Terphenyl-d14	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	48	% rec
<b>Inorganic</b>									
Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	93	%

(Report continued on next page)

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-05

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 17%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 4D@1.5'

Page: 5

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	83 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-06

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 15%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 5D@1.0'

Page: 6

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	85 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-07

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 17%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 1A@3.0'

Page: 7

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	<10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	83 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-08

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 6%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/24/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 1C@3.0'

Page: 8

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	94 %



Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-09

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 29%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/26/99  
 Date Reported: 12/06/99

Client Sample ID/Description: 2C@2.5'

Page: 9

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
<b>Petroleum Hydrocarbons</b>								
Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10 mg/kg
<b>Semi-Volatile Organic Compounds (GC/MS)</b>								
Acenaphthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066 mg/kg
Acenaphthylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066 mg/kg
Anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066 mg/kg
Benzo(a)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066 mg/kg
Benzo(b)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066 mg/kg
Benzo(k)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.066	<0.066 mg/kg
Benzo(g,h,i)perylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.066	<0.066 mg/kg
Benzo(a)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066 mg/kg
Carbazole	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.015	0.066	<0.066 mg/kg
Chrysene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066 mg/kg
Dibenz(a,h)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.066	<0.066 mg/kg
Dibenzofuran	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.021	0.066	<0.066 mg/kg
Fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0040	0.066	<0.066 mg/kg
Fluorene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.066	<0.066 mg/kg
Indeno(1,2,3-cd)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.066	<0.066 mg/kg
2-Methylnaphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.025	0.066	<0.066 mg/kg
Naphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.066	<0.066 mg/kg
Phenanthrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066 mg/kg
Pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.066	<0.066 mg/kg
<b>*** Semi-Volatile Surrogates ***</b>								
2-Fluorobiphenyl	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	48 % rec
Nitrobenzene-d5	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	48 % rec
Terphenyl-d14	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	56 % rec
<b>Inorganic</b>								
Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	71 %

Client: Braun Intertec  
Log-in: 99-08982  
Project Number: CNEK-99-249A  
PO Number:  
Client Reference:  
Matrix: Solid  
Lab Sample ID: 99-08982-10

Laboratory: Braun Intertec Corporation  
Lab Contact/Phone: B. Maki/612-942-4820  
Sampler: Braun  
% Moisture: 12%  
MDL: Method Detection Limit  
RL: Reporting Limit

Date Sampled: 11/23/99  
Date Received: 11/26/99  
Date Reported: 12/06/99

Client Sample ID/Description: EXC E@1.0'

Page: 10

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	<10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	88 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-11

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: 9%  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled: 11/23/99  
 Date Received: 11/26/99  
 Date Reported: 12/06/99

Client Sample ID/Description: EXC F@1.0'

Page: 11

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result
Petroleum Hydrocarbons Diesel Range Organics (dry weight)	WI DRO	11/30/99	WI DRO	12/01/99	1.0	0.98	10	< 10 mg/kg
Inorganic Solids, Total	-	-	EPA 160.3	11/29/99	1.0	-	-	91 %

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Solid  
 Lab Sample ID: 99-08982-12

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: Not Applicable  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled:  
 Date Received: 11/26/99  
 Date Reported: 12/06/99

Client Sample ID/Description: Method Blank

Page: 12

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result	
<b>Semi-Volatile Organic Compounds (GC/MS)</b>									
Acenaphthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.067	<0.067	mg/kg
Acenaphthylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.067	<0.067	mg/kg
Anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.067	<0.067	mg/kg
Benzo(a)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.067	<0.067	mg/kg
Benzo(b)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.067	<0.067	mg/kg
Benzo(k)fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.067	<0.067	mg/kg
Benzo(g,h,i)perylene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0070	0.067	<0.067	mg/kg
Benzo(a)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.067	<0.067	mg/kg
Carbazole	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.015	0.067	<0.067	mg/kg
Chrysene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.067	<0.067	mg/kg
Dibenz(a,h)anthracene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0080	0.067	<0.067	mg/kg
Dibenzofuran	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.021	0.067	<0.067	mg/kg
Fluoranthene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0040	0.067	<0.067	mg/kg
Fluorene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.067	<0.067	mg/kg
Indeno(1,2,3-cd)pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0060	0.067	<0.067	mg/kg
2-Methylnaphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.025	0.067	<0.067	mg/kg
Naphthalene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0090	0.067	<0.067	mg/kg
Phenanthrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.067	<0.067	mg/kg
Pyrene	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	0.0050	0.067	<0.067	mg/kg
<b>*** Semi-Volatile Surrogates ***</b>									
2-Fluorobiphenyl	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	72	% rec
Nitrobenzene-d5	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	79	% rec
Terphenyl-d14	SW-846 3545	12/01/99	SW-846 8270	12/02/99	1.0	-	-	57	% rec

(Report continued on next page)

Client: Braun Intertec  
 Log-in: 99-08982  
 Project Number: CNEX-99-249A  
 PO Number:  
 Client Reference:  
 Matrix: Liquid  
 Lab Sample ID: 99-08982-13

Laboratory: Braun Intertec Corporation  
 Lab Contact/Phone: B. Maki/612-942-4820  
 Sampler: Braun  
 % Moisture: Not Applicable  
 MDL: Method Detection Limit  
 RL: Reporting Limit

Date Sampled:  
 Date Received: 11/26/99  
 Date Reported: 12/06/99

Client Sample ID/Description: Method Blank

Page: 13

Compound	Extract Method	Extract Date	Analysis Method	Analysis Date	Dilution Factor	MDL	RL	Sample Result	
<b>Polynuclear Aromatic Hydrocarbons (PAHs) (GC/MS), Total</b>									
Acenaphthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.0	<2.0 ug/l	
Acenaphthylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.0	<2.0 ug/l	
Anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.55	2.0	<2.0 ug/l	
Benzo(a)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.0	<2.0 ug/l	
Benzo(b)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.82	2.0	<2.0 ug/l	
Benzo(k)fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.90	2.0	<2.0 ug/l	
Benzo(g,h,i)perylene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.0	<2.0 ug/l	
Benzo(a)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.75	2.0	<2.0 ug/l	
Carbazole	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.4	5.0	<5.0 ug/l	
Chrysene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.59	2.0	<2.0 ug/l	
Dibenz(a,h)anthracene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.78	2.0	<2.0 ug/l	
Dibenzofuran	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.5	5.0	<5.0 ug/l	
Fluoranthene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	2.0	<2.0 ug/l	
Fluorene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.52	2.0	<2.0 ug/l	
Indeno(1,2,3-cd)pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.76	2.0	<2.0 ug/l	
2-Methylnaphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	1.7	5.0	<5.0 ug/l	
Naphthalene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.54	5.0	<5.0 ug/l	
Phenanthrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.53	2.0	<2.0 ug/l	
Pyrene	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	0.57	2.0	<2.0 ug/l	
<b>*** Semi-Volatile Surrogates ***</b>									
2-Fluorobiphenyl	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	61 % rec	
Nitrobenzene-d5	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	73 % rec	
Terphenyl-d14	SW-846 3520	11/29/99	SW-846 8270	11/30/99	1.0	-	-	59 % rec	

(End of Report)



Braun Intertec Corporation  
 6875 Washington Ave S.  
 Edina, MN 55439-0108  
 (612) 942-4930 Fax (612) 942-4844  
 labservices@brauncorp.com

**REQUEST FOR LABORATORY ANALYTICAL SERVICES**

**IMPORTANT**

Date Results Requested: \_\_\_\_\_  
 Time \_\_\_\_\_  
 Rush Charges Authorized?  Yes  No  
 Rush / Quote # \_\_\_\_\_

Page \_\_\_\_ of \_\_\_\_

For Braun Intertec Use Only  
 Braun Intertec Project No. \_\_\_\_\_

<b>REPORT RESULTS TO</b>	Contact Name	Project ID/Project Name <b>CNEX-99-249A</b>	P.O. #
	Company <b>Strategic Materials</b>	Contact Name <b>Mark G.</b>	Company <b>Braun Intertec</b>
	Mailing Address <b>West Silver Spring</b>	Address <b>2831 Larson St</b>	
	City, State, Zip <b>Milwaukee, WI</b>	City, State, Zip <b>LaCross, WI</b>	
Telephone #	Fax #	Telephone #	Fax #

**Special Instructions and/or Specific Regulatory Requirements:**  
 (method, limit of detection, petrofund, reporting units)

**SEND INVOICE TO**

Number of Containers \_\_\_\_\_  
 Metals Field Filtered Y/N \_\_\_\_\_

**ANALYSIS REQUESTED**  
 (Enter an 'X' in the box below to indicate request)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	Metals Field Filtered Y/N	ANALYSIS REQUESTED										FOR LAB USE ONLY			
MW-3	11-23-99	3:30	water		7		X	X	X											
MW-10		4:10	water		7		X	X	X											
1D @ 3.5		1:00	Soil		3		X	X												
3D @ 2.0		1:15			3		X	X												
4D @ 1.5		1:30			3		X	X												
5D @ 1.0		1:45			3		X	X												
1A @ 3.0		2:00			3		X	X												
1C @ 3.0		2:15			3		X	X												
2E @ 2.5		2:30			3		X	X												

<b>CHAIN OF CUSTODY</b>	Collected by: <b>Paul Tepp</b> (print)	Collector's Signature: <b>Paul Tepp</b>		
	Relinquished by: <b>Paul Tepp</b>	Date/Time <b>11-25-99 5:01</b>	Received by: _____	Date/Time _____
	Relinquished by: _____	Date/Time _____	Received by: _____	Date/Time _____
Evidence Tape Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Sample Condition Upon Receipt: <input type="checkbox"/> Acceptable <input type="checkbox"/> Other _____	Temperature _____ °C <input type="checkbox"/> Received on Ice	Comments: <b>should have received the water samples on Wed. 11-24-99.</b>	

DEC 08 '99 10:34AM BRAUN INTERTEC BLDG2 P.15/16



**BRAUN<sup>SM</sup>**  
**INTERTEC**

**Braun Intertec Corporation**  
2831 Larson Street  
La Crosse, Wisconsin 54603-1814  
608-781-7277 Fax: 781-7279

*Engineers and Scientists Serving  
the Built and Natural Environments*

November 19, 1999

Project CNEX-99-232A

Mr. Randall Slinkard  
Strategic Materials, Inc.  
5151 San Felipe, Suite 1400  
Houston, TX 77056-3609

Dear Mr. Slinkard:

Re: Phase I Environmental Site Assessment for the Strategic Materials property located at  
12305 West Silver Spring Road in Milwaukee, Wisconsin

In accordance with your authorization on October 26, 1999, a Phase I Environmental Site Assessment (Phase I ESA) of the referenced property was completed. The objective of the Phase I ESA was to evaluate the property for indications of recognized environmental conditions. This Phase I ESA was performed in general conformance with the scope and limitations of ASTM Practice E 1527-97.

Please refer to the attached report for the scope, methods and conclusions of our assessment.

We appreciate the opportunity to provide our professional services to you for this project. If you have any questions regarding the attached report, please contact Ted Hubbes or Mark Gretebeck at (608) 781-7277.

Sincerely,  
Braun Intertec Corporation



Ted R. Hubbes, PG  
Environmental Geologist

Attachment:  
Phase I Environmental Site Assessment Report



## Table of Contents

<b>A. Introduction</b> .....	<b>1</b>
A.1. Purpose.....	1
A.2. Scope of Services.....	1
A.3. Deviations from the ASTM Practice E 1527-97.....	1
<b>B. Site Description</b> .....	<b>2</b>
B.1. Location and Legal Description.....	2
B.2. <i>Site</i> and Vicinity Characteristics.....	2
B.3. Environmental Liens and Chain-of-Title Records.....	2
<b>C. Records Review and Interviews</b> .....	<b>3</b>
<b>C.1. Physical Setting Information</b> .....	<b>3</b>
C.2. Regulatory Information.....	4
C.3. Local Government Information .....	10
C.4. Historical Information.....	10
<b>D. Information from Site Reconnaissance and Interviews</b> .....	<b>11</b>
D.1. Known Current and Past Uses of the <i>Site</i> and Adjoining Properties .....	11
D.2. <i>Site</i> Layout.....	12
D.3. Hazardous Substances and Petroleum Products .....	12
D.4. Storage Tanks.....	13
D.5. Potential Polychlorinated Biphenyl (PCB)-Containing Equipment.....	13
D.6. Indications of Solid Waste Disposal.....	14
D.7. Utilities.....	14
<b>E. Findings and Conclusions</b> .....	<b>14</b>
<b>F. Assessment Limitations</b> .....	<b>15</b>
<b>G. Qualifications of Environmental Professionals</b> .....	<b>16</b>
<b>H. References</b> .....	<b>16</b>

### Appendices:

Appendix A	-	<i>Site</i> Location Map
Appendix B	-	<i>Site</i> Sketch
Appendix C	-	Property Chain of Title
Appendix D	-	Vista Report
Appendix E	-	Tank Database Printouts
Appendix F	-	Historical Aerial Photographs
Appendix G	-	City Directory Information
Appendix H	-	<i>Site</i> Photographs



**Braun Intertec Corporation**  
2831 Larson Street  
La Crosse, Wisconsin 54603-1814  
608-781-7277 Fax: 781-7279

*Engineers and Scientists Serving  
the Built and Natural Environments*

## **A. Introduction**

A Phase I Environmental Site Assessment (Phase I ESA) of the Strategic Materials property located at 12305 West Silver Spring Road in Milwaukee, Wisconsin, ( the *Site*) was completed to evaluate environmental conditions at the *Site*.

This report details the sources of information reviewed and obtained during the Phase I ESA.

### **A.1. Purpose**

The purpose of this Phase I ESA was to evaluate the *Site* for indications of recognized environmental conditions relating to the *Site*.

### **A.2. Scope of Services**

The services provided consisted of the following:

- Conducting this Phase I ESA in conformance with the scope and limitations of ASTM Practice E 1527-97 of the Strategic Materials property located at 12305 West Silver Spring Road in Milwaukee, Wisconsin.

Intentional deviations from the ASTM Practice E 1527-97 for this Phase I ESA, if any, are described in Section A.3. of this report.

### **A.3. Deviations from the ASTM Practice E 1527-97**

No intentional deviations from the ASTM Practice E 1527-97 were made in the completion of this Phase I ESA for the *Site*.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 2

## **B. Site Description**

### **B.1. Location and Legal Description**

The *Site* is located in the northwest quarter of the northwest quarter of Section 31, Township 8 North, Range 21 East, in the City of Milwaukee, Milwaukee County, Wisconsin (Appendix A). A detailed legal description was not provided for the *Site*.

### **B.2. Site and Vicinity Characteristics**

The triangular area bound by Silver Spring Road to the north and Chicago and Northwestern Railroad to the southwest and southeast (Appendix B) was originally one parcel with the address 12125 West Silver Spring Road, until approximately 1984 when it was divided into four Parcels. The *Site* is currently made up of two of these parcels.

At the time of this Phase I ESA, recycling operations at the *Site* had ceased and materials were being removed from the *Site*. The *Site* consisted of approximately 3 acres. The *Site* was irregular in shape. The *Site* was accessible from Silver Spring Road to the north (Appendix B). The *Site* is currently owned by Strategic Materials, Inc. (formerly known as Allwaste, Inc.).

The *Site* was bordered to the north by Silver Spring Road and several commercial businesses. The *Site* was bordered to the east and west by Chicago and Northwestern Railroad right-of-way. The *Site* was bordered to south by Silver Spring Drive. Properties in the area of the *Site* consist of industrial and commercial businesses.

### **B.3. Environmental Liens and Chain-of-Title Records**

No information regarding environmental liens was provided by Strategic Materials, Inc. A chain-of-title for the *Site* was not provided by Strategic Materials, Inc.

A chain-of-title report was completed as part of a previous Phase I ESA for the *Site* (Swanson Environmental Inc. 1994a) (Appendix C). The report indicated the *Site* was owned by the Milwaukee, Sparta and Northwestern Railroad (currently known as Chicago and Northwestern Railroad) from 1909 through 1963. From 1963 through 1984, the *Site* was owned by Highway Pavers, Inc. Employees Profit Sharing and Retirement Plan Trust Fund. From 1984 through 1986, the *Site* was owned by Mr. Charles W. Aring, Jr. The *Site* was owned by Mr. William Thessin and

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 3

Ms. Margi King from 1986 through 1987 and by Ms. King from 1987 through 1994. The *Site* is currently owned by Strategic Materials, Inc. (formerly known as Allwaste, Inc.).

## C. Records Review and Interviews

### C.1. Physical Setting Information

**C.1.a. General Geologic Conditions.** The topography of the *Site* slopes to the south/southeast. According to the United States Geological Survey, Wauwatosa quadrangle topographic map, the elevation of the *Site* ranges from approximately 740 to 750 feet above mean sea level.

The *Site* lies in an area of glacial till deposits including clay, silt, sand and gravel. The estimated thickness of unconsolidated deposits in the area is approximately 50 to 100 feet (Skinner, E.L., and Borman, R.G., 1973, Water Resources of the Wisconsin-Lake Michigan Basin).

The bedrock units beneath the unconsolidated soils consist of dolomite formations. The thickness of the dolomite formations is approximately 750 feet (Skinner, E.L., and Borman, R.G., 1973, Water Resources of Wisconsin-Lake Michigan Basin).

**C.1.b. General Hydrogeology.** Groundwater is present at the *Site* at a depth of approximately 8 to 12 feet below ground surface. Groundwater flow direction is to the southeast (Swanson Environmental, 1995). A detailed groundwater study was not part of the scope of services for this project.

**C.1.c. Water Well Database.** Water well database information was obtained from Vista Information Solutions, Inc. (Vista). There was documentation of one public supply water well within 1/2 mile of the *Site*. The well was listed as United States Geological Survey Well ID#430707088042101. This well is approximately 0.38 miles to the west of the *Site* and extends to a depth of 1,697 feet below ground surface. There was documentation of approximately 30 additional industrial, commercial and residential wells within 1/2 mile of the *Site*. Most of the documented wells were installed in the 1950s and 1960s. The City of Milwaukee Water Works Department confirmed that the *Site* and properties adjacent to the *Site* are connected to city water.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 4

## C.2. Regulatory Information

Regulatory information pertaining to the *Site* and surrounding area was obtained from Vista. The regulatory information is reported in the form of Federal Database Records and State Database Records (Appendix D).

**C.2.a. Federal Database Records.** The Federal Database Records report summarized the following United States Environmental Protection Agency (USEPA) databases and lists, which were evaluated by Vista for current listings of verified and potential hazardous waste problem facilities located at, adjacent to or within ASTM Standard Search Distances from the *Site*.

- **USEPA National Priorities List (NPL)** - The NPL is the USEPA's national listing of uncontrolled or abandoned hazardous waste facilities identified for priority remedial actions under the Superfund Program.
- **USEPA Corrective Action Report (CORRACTS)** - CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.
- **USEPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)** - The CERCLIS is the USEPA's national listing of actual and potential hazardous waste sites.
- **USEPA Treatment, Storage, and Disposal Facilities (TSD)** - TSD is a listing of RCRA permitted treatment, storage, and disposal facilities.
- **USEPA RCRA Violations/Enforcement Actions (RCRA Viol)** - RCRA Violators are facilities which have been cited for RCRA Violations at least once since 1980. RCRA Enforcements are enforcement actions taken against RCRA violators.
- **USEPA Toxic Release Inventory (TRIS)** - TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under Records of Emergency Release Notification.
- **USEPA Emergency Response Notification System (ERNS)** - The ERNS is the USEPA's national listing of releases of oil and hazardous substances reported to the USEPA, U.S. Coast Guard, the National Response Center and the Department of Transportation.
- **USEPA Generators (GNRTR)** - Small and large generators of hazardous waste required to register their hazardous waste activity under the Resource Conservation and Recovery Act (RCRA).

The Unmapped Sites list is a compilation of facilities from all of the above databases that could not be specifically located. Please note that limited information was provided for sites on the Unmapped sites list. Some sites may not be specifically located due to the lack of information provided. Therefore, the potential impact to the *Site* from facilities listed on the Unmapped Sites list cannot always be determined based on the available information.

Strategic Materials, Inc.  
 Project CNEX-99-232A  
 November 19, 1999  
 Page 5

The following table contains a summary of the findings:

Table 1

Database	Site	Search Distance (Miles)	<1/8	1/8-1/4	1/4-1/2	1/2-1	Total Listed
NPL	0	1	0	0	0	0	0
CORRACTS	0	1	0	0	0	0	0
TSD	0	1/2	0	0	0	-	0
CERCLIS	1	1/2	0	0	0	-	1
TRIS	0	3/4	0	0	-	-	0
RCRA Viol	0	3/4	0	0	-	-	0
ERNS	0	1/8	0	-	-	-	0
RCRA-GNRTR	0	1/8	3	-	-	-	3

The Highway Pavers site, 12125 West Silver Spring Road, is listed by CERCLIS as a No Further Remedial Action Planned (NFRAP) site. The 12125 address occupied by Highway Pavers included the *Site*. A preliminary assessment was completed in 1985 and the property was qualified as a "lower priority". The site was listed as a NFRAP site in 1989. Additional information was obtained from the WDNR file for the Highway Pavers site (Section C.2.d.).

Three RCRA Small Quantity Generator (SQG) sites were listed within 1/8-mile radius of the *Site*. None of the listed SQG facilities are located adjacent to the *Site*. A facility that is listed as a SQG facility has been permitted to store and/or dispose of hazardous materials. Identification of a facility as a SQG facility does not imply that a release has occurred at the facility.

Review of the unmapped sites list did not identify any federal facilities within corresponding ASTM Standard specified search distances from the *Site*.

**C.2.b. State Database Records.** The Vista report included a compilation of the following Wisconsin Department of Natural Resources (WDNR) databases and lists of verified and potential hazardous waste problem facilities located at, adjacent to or within ASTM Standard Search Distances from the *Site*:

- **SPL - State Superfund Permanent List of Priorities.** The SPL list identifies hazardous waste sites where investigation and cleanup are needed, activities leading to cleanup are underway, or cleanup actions have been completed and long-term monitoring or maintenance continues.

Strategic Materials, Inc.  
 Project CNEX-99-232A  
 November 19, 1999  
 Page 6

- **SCL** - State Environmental Response and Repair List (SCL). The SCL contains records from the WDNR Environmental Response and Repair Section, which include the Environmental Repair Program database, the Hazard Ranking List and Voluntary Investigation Program.
- **LUST** - WDNR Leaking Underground Storage Tanks. LUST records contain an inventory of reported leaking underground storage tank incidents.
- **SWLF** - Solid Waste Landfills. SWLF records list the permitted soil waste landfills, incinerators, or transfer stations.
- **Water Wells** - The Groundwater Water Site Inventory (GWSI) database information provided by the U.S. Geological Survey.
- **UST/AST** - Underground or Aboveground Storage Tanks registered with the state.
- **SPILLS** - WDNR Spills list. A list of hazardous material spills in Wisconsin.

The Unmapped Sites list is a compilation of facilities from the above databases which could not be specifically located. Please note that limited information was provided for sites listed on the Unmapped Sites list. Some sites may not be specifically located due to the lack of information provided. Therefore, the potential impact to the *Site* from facilities listed on the Unmapped Sites list cannot always be determined based on the available information.

The following table contains a summary of the findings:

**Table 2**

Database	Site	Search Distance (Miles)	<1/8	1/8-1/4	1/4-1/2	1/2-1	Total Listed
SPL	0	1	0	0	0	0	0
SCL	1	1/2	1	2	1	-	5
LUST	0	1/2	2	9	14	-	25
SWLF	0	1/2	1	1	0	-	2
Water Wells	0	1/2	0	0	1	-	1
UST/AST	1	1/4	2	12	-	-	15
SPILLS	0	1/8	0	-	-	-	0

The *Site* was listed as a SCL site under the name Allwaste, Inc. Additional information was obtained from the WDNR file (Section C.2.e.). Three 250-gallon ASTs containing gasohol, diesel and used oil were also registered for the *Site*. The ASTs are registered as active/in service.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 7

Four additional SCL facilities were listed within 1/2 mile of the *Site*. The nearest of the SCL sites identified, Sprinkmann Sons, is located across Silver Spring Road to the north/northeast of the *Site*. Pollutants listed for the *Site* include volatile organic compounds (VOCs) and chlorinated solvents. No further information was available. Based on the groundwater flow direction in the vicinity of the *Site* (see Section C.1.b.), there is a potential for groundwater contamination associated with the Sprinkmann Sons site to impact the groundwater quality beneath the *Site*. Groundwater sampling conducted to date at the *Site* indicates the release at the Sprinkmann Sons site had not affected soil or groundwater at the *Site* in the locations sampled. However, a potential exists that the release at the Sprinkmann Sons site could impact the groundwater at the *Site* in the future, or has impacted the *Site* at locations which have not been sampled.

The three remaining SCL sites are located in the downgradient or sidegradient directions from the *Site*. Therefore, it is not likely that groundwater contamination originating from the remaining SCL facilities (if groundwater contamination exists) has impacted the soil or groundwater beneath the *Site*. However, based on available information, it is unknown whether contamination associated with these SCL facilities has had an adverse impact to the *Site*.

Twenty-five LUST facilities were listed within a 1/2-mile radius of the *Site*. Please refer to Appendix D of this report for a listing of the LUST facilities located within corresponding ASTM Standard specified search distances of the *Site*.

The Sprinkmann Sons site is listed as a high priority LUST site with soil and groundwater contamination. No further information was available. As discussed above, there is a potential for groundwater contamination associated with the Sprinkmann Sons site to impact the groundwater quality beneath the *Site*.

The twenty-four remaining LUST sites are located in the downgradient or sidegradient directions from the *Site*. Therefore, it is not likely that groundwater contamination originating from the remaining LUST facilities (if groundwater contamination exists) has impacted the soil or groundwater beneath the *Site*. However, based on available information, it is unknown whether contamination associated with these LUST facilities has had an adverse impact to the *Site*.

In addition to the *Site*, 14 UST/AST facilities were listed within a 1/4-mile radius of the *Site*. The Sprinkmann Sons has one 2,000-gallon unleaded gasoline UST registered as closed/removed. The 13 remaining UST/AST sites are located in the downgradient or sidegradient directions from the *Site*. Therefore, it is not likely that groundwater contamination originating from the remaining UST/AST facilities (if groundwater contamination exists) has



Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 8

impacted the soil or groundwater beneath the *Site*. However, based on available information, it is unknown whether contamination associated with these UST/AST facilities has had an adverse impact to the *Site*.

Insulation Removal Ltd., listed at the address currently occupied by Sprinkmann Sons (12100 West Silver Spring Road), was listed with the Wisconsin Solid and Hazardous Waste Information System. One additional site, Incinerator Boiler Corp, 11930 West Silver Spring Drive, was also listed. This listing does not imply a release has occurred at either facility. No further information was available.

Review of the unmapped sites list did not identify any state facilities within corresponding ASTM Standard specified search distances from the *Site*.

**C.2.c. Additional Records - Wisconsin Department of Commerce Tank Database Review.**

A review of the Wisconsin Department of Commerce tank database for the *Site* was completed. The results of the database review identified three 250-gallon (gasohol, diesel, and used oil) USTs at the *Site*. The tank database printouts are contained in Appendix E.

**C.2.d. Additional Records - Wisconsin Department of Natural Resources file review -**

**Highway Pavers, 12125 West Silver Spring Road (FID #241376850).** The file labeled Highway Pavers (also known as Zenith Tech.) was reviewed at the WDNR office in Madison, Wisconsin. The file contained a letter to Highway Pavers from the WDNR dated September 2, 1975, indicating the *Site* was being filled with materials such as wood, metal cans, metals drums, etc. The letter stated that landfilling operations at the *Site* were to be restricted to earth and small amounts of broken concrete. A file memo dated January 22, 1976, indicated that deposited refuse material had been removed, further filling was restricted to clean earth material and the WDNR was closing their file on the *Site*.

A site screening inspection (SSI) was completed for the *Site* in 1989 (Ecology and the Environment, Inc. 1989). The SSI included the collection of eight soil samples and three groundwater samples. The report indicated that volatile and semi-volatile organic compounds were detected in samples of soil from the *Site*. The report also indicated that compounds were detected in the groundwater samples collected from water supply wells greater than 1 mile from the *Site*.

A letter in the file to the USEPA from WDNR dated October 26, 1989, questioned the EPA decision to not require further investigation at the *Site*. The WDNR requested the EPA to reconsider it's recommendation for the No Further Remedial Action Planned (NFRAP) status of the *Site*.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 9

No further information was present in the WDNR file.

**C.2.e. Additional Records - Wisconsin Department of Natural Resources file review - Allwaste Recycling, 12305 West Silver Spring Road (FID#241486630).** The file labeled Allwaste Recycling was reviewed at the WDNR Southeast Regional Headquarters in Milwaukee, Wisconsin. The file contained letters indicating a release was detected at the *Site*. The following five areas of concern were discovered during a Phase I/II ESA at the *Site* (Swanson Environmental 1994a):

- Area 1 - waste oil AST near the garage building.
- Area 2 - three ASTs in the center of the *Site*.
- Area 3 - Kramer System in the west-central portion of the *Site*.
- Area 4 - 12-Mesh System in the east-central portion of the *Site*.
- Burn Pit - in the southeastern area of the *Site*.

The following recommendations were noted in a *Subsurface Investigation Report* (Swanson Environmental, 1995):

- No further action in Area 1.
- Excavation and off-site treatment of surficial soils in Areas 2 through 4.
- Further investigation in the burn pit area.

Area 2 was remediated in 1997 (Braun Intertec 1997). Approximately 350 tons of impacted soils were removed from Area 2. Samples collected from the excavation floor and sidewalls had petroleum constituent concentrations less than WDNR standards. The report did not request closure due to the other environmental issues at the *Site*.

Further investigation and remediation was completed in the burn pit area (Braun Intertec, 1998). Approximately 1,644 tons of impacted soils were removed from the burn pit area. Samples collected from the excavation floor and sidewalls had petroleum constituent concentrations less than WDNR standards. Benzo (a) pyrene was detected in groundwater samples at a concentrations greater than WDNR Preventive Action Limits (PALs). Closure was requested for Area 2 and the burn pit area. Complete site closure was not requested due to the other environmental issues at the *Site*.

A letter in the file from the WDNR to Allwaste, Inc. dated August 12, 1998, indicated the WDNR had granted a PAL exemption for benzo (a) pyrene and approved site closure for the burn pit area only.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 10

### **C.3. Local Government Information**

Various City of Milwaukee offices were contacted for information regarding the *Site*. The following sections discuss the information that was obtained.

**C.3.a. City of Milwaukee Fire Department.** A search for information regarding the presence of USTs and ASTs and the occurrence of hazardous material spills located on the *Site* was completed by the City of Milwaukee Fire Department. The Fire Department had no records of any USTs, ASTs, hazardous material releases or other environmental concerns at the addresses 12305 and 12125 West Silver Spring Road.

**C.3.b. City of Milwaukee Inspection Department.** Records were reviewed at the City of Milwaukee Inspection Department for information regarding past and present land use of the *Site*. The Inspection Department had numerous records for the *Site* including building, plumbing and electrical permits and inspection reports dated 1969 through 1994.

**C.3.c. City of Milwaukee Zoning Department.** The City of Milwaukee Zoning Department was contacted for information regarding the *Site*. The Zoning Department indicated the *Site* is zoned ID40, an industrial zoning classification.

### **C.4. Historical Information**

**C.4.a. Historical Aerial Photographs.** Aerial photographs dated 1963, 1967, 1970, 1975, 1980, 1985, 1990 and 1995 from the Southeast Wisconsin Regional Planning Commission were reviewed. Copies of the 1963, 1975, 1985 and 1995 aerial photographs are attached in Appendix F.

In the 1963 aerial photograph, the *Site* appeared to be vacant. The northeastern portion of the *Site* appeared to have been graded. In the 1967 aerial photograph, a building was added on the current 12101 West Silver Spring Road Parcel. The southwest portion of the *Site* remained vacant. In the 1970 aerial photograph, the current garage building was present on the *Site* and buildings were present on the current 12101 and 12125 West Silver Spring Road Parcels. In the 1975 and 1980 aerial photographs, numerous semi-trailers were located on the *Site*. A settling pond or pit appears to have been located in the southeast portion of the *Site*. A road extended along the western property boundary. In the 1985 aerial photograph, the *Site* appears mostly vacant with the exception of the three buildings and approximately 20 semi-trailers parking on the *Site*. The settling pond or pit noted on the previous aerial photographs was still present. In the 1990 and 1995 aerial photographs, a fence was installed along the northeast property

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 11

boundary to separate the *Site* from the current 12101 and 12125 West Silver Spring Road Parcels. Approximately 20 semi-trailers were parked on the *Site* and the adjacent properties to the northeast. Several railcars were parked on the spur track adjacent to the *Site* in the 1995 aerial photograph.

**C.4.b. Sanborn Fire Insurance Maps.** No Sanborn Fire Insurance Maps covering the *Site* area were available.

**C.4.c. City Directories.** Milwaukee City Directories from the years 1957, 1965, 1974, 1979, 1984, 1987, 1991 and 1997 were reviewed for information pertaining to the address of 12305 Silver Spring Road (Appendix G). There was no information regarding the 12305 West Silver Spring Road address from 1957 through 1984. The 1987 through 1997 city directories listed Strategic Materials at 12305 West Silver Spring Road. In 1965, Zenith Tech. (highway construction) was listed at the address of 12101 West Silver Spring Road. From 1974 through 1984, Zenith Tech. (highway construction) was listed at the address of 12125 West Silver Spring Road. From 1987 through 1997, Great Lakes Contact Lenses was listed at the address of 12125 West Silver Spring Road.

## **D. Information from *Site* Reconnaissance and Interviews**

A *Site* reconnaissance was completed on October 28, 1999. Information was obtained from the following individuals regarding the *Site*:

- Mr. Javier Juarez - *Site* representative, Strategic Materials, Inc.

*Site* photographs are attached in Appendix H.

### **D.1. Known Current and Past Uses of the *Site* and Adjoining Properties**

Mr. Javier Juarez, *Site* representative for Strategic Materials, Inc. indicated the *Site* was used as a glass recycling facility for at least 10 to 12 years prior to being shut down on August 20, 1999. The recycling process consisted of hauling in recyclable glass, crushing the glass, and hauling it off site. At the time of this assessment, the recycling operations at the *Site* has ceased and materials were being removed from the *Site*.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 12

The *Site* was located on Silver Spring Road. The *Site* consisted of an approximately 3-acre irregular shaped lot. Land use surrounding the *Site* was comprised of industrial and commercial properties. The *Site* was bordered to the north by Silver Spring Road and two commercial businesses: Great Lakes contact lenses (12125 West Silver Spring Road), which appeared to be vacant, and Track, Truck & Equipment Co., Inc. (12101 West Silver Spring Road). Several additional commercial/industrial businesses were located to the north of West Silver Spring Road. Chicago and Northwestern Railroad right-of-way and commercial/industrial businesses were located to the southeast and southwest of the *Site*. West Silver Spring Drive and commercial/industrial businesses were located to the south of the *Site*.

#### D.2. *Site* Layout

Two buildings were present in the northwest corner of the *Site*; an office trailer and a service garage building. The garage included of two service bays, two small offices and a small second floor area. Mr. Juarez indicated the garage is used for vehicle maintenance. One floor drain was located in the building. Mr. Juarez indicated the floor drain is connected to the sewer system.

Two small storage sheds were located in the northeastern corner of the *Site*. Several portions of the *Site* are covered with concrete pads. The portion of the *Site* not covered with buildings or concrete pads was covered with gravel and crushed glass. Mr. Juarez indicated the *Site* is re-graded periodically and that crushed limestone fill is occasionally brought onto the *Site*.

During the reconnaissance, the *Site* topography appeared relatively flat and sloped to the southeast. Surface water was not observed on the *Site*. Several piles of fill, debris and scrap metals were noted on the *Site*. Numerous piles of concrete blocks were noted on the *Site*.

#### D.3. Hazardous Substances and Petroleum Products

Hazardous substances and petroleum products observed on the *Site* include the following:

- Three ASTs containing waste oil, gasoline and diesel fuel were present near the southwest corner of the garage building. According to Mr. Juarez, the gasoline AST was empty and the diesel AST was nearly empty and would not be refilled after use of the remaining contents.
- Two ASTs were present in the upstairs of the garage building. Mr. Juarez indicated the ASTs contained machine oil.
- Seven 55-gallon drums containing waste oil and used oil dry were located on pallets behind the garage building. The drums containing oil dry were unsealed.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 13

- A sealed 55-gallon drum was located on a pallet to the southwest of the garage building. Mr. Juarez indicated the drum contained diesel fuel.
- A sealed 55-gallon drum of unknown contents was located in the upstairs of the garage building.
- A 30-gallon drum of grease was present in the garage building.
- An unsealed drum containing a grease-like substance was located near an abandoned semi trailer in the northeastern area of the *Site*.
- A 1,000-gallon propane AST was present in the northwest corner of the *Site*.
- The concrete floor in the garage building was stained with petroleum products. The concrete floor was not pitted or cracked.
- Two areas of soil staining were noted on the *Site*. The first area was present near the concrete pad in the north central portion of the *Site*. The second area was present near the loading ramp in the east central portion of the *Site*. The soil staining appeared to be surficial.
- Five cans of paint products were located in the garage building.
- Several containers of compressed gases (oxygen and acetylene) were present at various locations on the *Site*. Mr. Juarez indicated these were used for welding of recycling containers.

Mr. Juarez indicated the above mentioned ASTs and drums were to be emptied and removed from the *Site*.

No further indications of spills, leaks or storage of hazardous substances or petroleum products were noted on the *Site* at the time of our reconnaissance.

#### **D.4. Storage Tanks**

As discussed in Section D.3., five ASTs were noted during the *Site* reconnaissance. Mr. Juarez was not aware of any USTs at the *Site*. The previous Phase I ESA indicated that several additional ASTs were located at various locations on the *Site* (Swanson Environmental, 1994a).

#### **D.5. Potential Polychlorinated Biphenyl (PCB)-Containing Equipment**

Four pole-mounted transformers were located adjacent to the northern and northeastern property boundaries. None of the transformers appeared to be leaking. The transformers were labeled Wisconsin Electric Power Company (WEPCO) #9300308, #530974, #8701152, and #9405862. Mr. Tim Krueger, Hazardous Waste Specialist, of WEPCO was contacted for information regarding the transformers. Mr. Krueger reported that transformer #530974 has a 2 percent

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 14

probability of containing PCBs based on WEPCO data on transformers of similar type and age. Mr. Krueger reported that the remaining transformers do not contain PCB's.

Fluorescent light fixtures were noted in the garage building at the *Site*. The fluorescent light fixture ballasts were not inspected for dielectric fluids containing PCBs as part of this Phase I ESA. Ballasts operating these lights, unless specifically labeled "No PCBs", are suspected to contain PCBs. Suspect PCB containing light ballasts in buildings to be demolished should be removed and disposed of properly prior to demolition.

#### **D.6. Indications of Solid Waste Disposal**

Piles of fill materials, crushed glass, discarded electrical equipment and minor amounts of scrap metal and miscellaneous solid wastes were present at various locations on the *Site*. Numerous garbage cans and dumpsters with recyclable materials and solid wastes were located on the *Site*. Mr. Juarez reported that solid wastes including plastic and paper were transported to Orchard Ridge landfill in Menomonee Falls, Wisconsin. Metals caps, lids, etc. that come to the *Site* with the glass were segregated in a roll-off container and transported to Miller Compressing for recycling. Mr. Juarez was not aware of any incidence of dumping or landfilling at the *Site*.

#### **D.7. Utilities**

Mr. Juarez indicated the *Site* has access to City of Milwaukee water and sewer utilities. Mr. Juarez also reported that Wisconsin Energy (formerly Wisconsin Electric Power Company and Wisconsin Gas) supplies electric and natural gas services for the *Site*. Three disconnected natural gas unions were located in the northeastern portion of the *Site*. Mr. Juarez indicated these unions were formerly used for operation of the 12-mesh system in the northeast area of the *Site*. Mr. Juarez was not aware of any wells or septic systems at the *Site*.

### **E. Findings and Conclusions**

This Phase I ESA of the *Site* was completed in conformance with the scope and limitations of the ASTM Practice E 1527-94. Any exceptions to, or deletions from, this practice are described in Section F of this report. This assessment has revealed the following recognized environmental conditions in connection with the *Site*:

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 15

- Solid waste including wood, metal cans and metal drums was used as fill material at the *Site* in the 1970s when it was occupied by Highway Pavers, Inc. Benzo (a) pyrene and arsenic concentrations greater than current NR 720 soil standards were detected in surficial soil samples collected in a Site Screening Inspection performed for the USEPA in 1989. The *Site* was listed as a No Further Remedial Action Planned (NFRAP) site by the USEPA.
- Surficial soil contamination was identified in a previous Phase I ESA near waste oil AST area near the garage building (Area 1). No further action was recommended after investigation in this area.
- Surficial soil contamination was also identified in a previous Phase I ESA near three removed ASTs in the center of the *Site* (Area 2). Soil excavation and off-site disposal appears to have been adequately remediated this area.
- A previous Phase I ESA noted surficial soil contamination in the area of the Kramer System in the west-central portion of the *Site* (Area 3). It is recommended that contaminated soils in this area be excavated and properly disposed of.
- Surficial soil contamination was also noted in a previous Phase I ESA near the 12-Mesh System in the east-central portion of the *Site* (Area 4). It is recommended that contaminated soils in this area be excavated and properly disposed of.
- Surficial soil contamination was also identified in a previous Phase I ESA at the Burn Pit area in the southeastern area of the *Site*. Soil excavation and off-site disposal appears to have been adequately remediated this area.
- Soil staining was identified in two additional areas of the *Site*. It is recommended that surficial contaminated soils in these areas be excavated and properly disposed of.
- It is recommended that all unused ASTs and all drums be emptied and removed from the *Site* in accordance with all applicable regulations.

## **F. Assessment Limitations**

The findings and conclusions submitted in this report are based on the procedures described in the ASTM Practice E 1527-97. The scope of services for this project did not include the collection of soil samples or laboratory analysis of soil samples, the installation of groundwater



Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 16

monitoring wells or laboratory analyses of groundwater samples. In addition, the scope of services for the Phase I ESA did not include an evaluation of the *Site* for the presence of radon, lead, asbestos containing building materials (ACBM), or urea formaldehyde.

In performing its services, Braun Intertec used that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same locality. No warranty is made or intended.

## G. Qualifications of Environmental Professionals

A Braun Intertec Statement of Qualifications for this Phase I ESA project will be provided to Strategic Materials, Inc. upon request.

## H. References

Braun Intertec, 1997. Area 2 Soil Remediation at the Strategic Materials Site, 12305 West Silver Spring Drive, Milwaukee, Wisconsin.

Braun Intertec, 1998. Burn Pit Remediation at the Strategic Materials Site, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Ecology and the Environment, 1989. Site Screening Inspection Report for Highway Pavers, Milwaukee, Wisconsin.

Skinner, E.L.; and Borman, R.G., 1973. Water Resources of Wisconsin-Lake Michigan Basin.

Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 1997. Annual Book of ASTM Standards, Vol. 11.04, E 1527-97.

Swanson Environmental, 1994a. Phase I and Phase II Environmental Site Investigation, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Swanson Environmental, 1994b. Initial Site Investigation Results and Workplan, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Strategic Materials, Inc.  
Project CNEX-99-232A  
November 19, 1999  
Page 17

Swanson Environmental, 1994c. Initial Site Investigation Results and Workplan, 12305 West Silver Spring Road, Milwaukee, Wisconsin.

Swanson Environmental, 1995. Subsurface Investigation Report, Former Allwaste Recycling, Inc., 12305 West Silver Spring Road, Milwaukee, Wisconsin.