GZA
GeoEnvironmental, Inc.

Engineers and Scientists

July 27, 2006
File No. 21.0056192.00

Mr. Richard Eisenman
Delphi
PO Box 92700
Rochester, New York 14692

Re: Vapor Intrusion Investigation
Building 6
Lockport, New York

Dear Mr. Eisenman:

364 Nagel Drive
Buffalo
New York
14225
716-685-2300
Fax: 716-685-3629
www.gza.com

GZA GeoEnvironmental of New York (GZA) is pleased to submit this letter report to Delphi Thermal summarizing the results of the vapor intrusion investigation sampling done in the southern portion of Building 6 at the Lockport Facility (see Figure 1 in Attachment 1). GZA collected indoor air, sub-slab and outdoor ambient air samples on July 6, 2006. Trichloroethylene (TCE) was detected above method detection limits in the indoor air, sub-slab and outdoor air samples and tetrachloroethylene (PCE) was detected only in the sub-slab sample above method detection limits. However, the concentrations detected are not considered a significant concern. Based on Regulatory guidance documentation, the detected concentrations are classified as a "potential" exposure pathway. Due to the industrial nature of the work conducted at the facility, we do not believe that additional work related to vapor intrusion within Building 6 is warranted.

PURPOSE

The purpose of the vapor intrusion sampling investigation was to determine if contaminant vapors from the northern edge of an on-Site groundwater plume (orientated in a west to east direction) are impacting indoor air quality within the southern portion of Building 6, also known as the "Model Shop". Soil vapor samples were collected from along the southern exterior wall of Building 6 in October 2005 and soil vapors containing chlorinated solvents were found in exterior soils near the building foundation (See Background section for further discussion).

The majority of Building 6 consists of slab-on-grade floor construction, particularly nearest to the identified groundwater plume. A basement, containing a Brine Vault and Dyno Pits, is located under the northern portion of Building 6 (see Figure 1). The Brine Vault is not generally occupied and the Dyno Pits are considered a confined space. The southern wall of this basement is located approximately 380 feet north of the southern exterior wall of Building 6.

BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) requested that Delphi Thermal investigate and evaluate the potential of vapor intrusion into Building 6 due to the documented chlorinated solvent groundwater plume that exists at the Site. NYSDEC made this request in a May 26, 2005 letter to Delphi Thermal.

GZA was retained by Delphi Thermal to assess if vapors from the chlorinated solvent groundwater plume (orientated in a west to east direction south of Building 6) were present in subsurface soils near Building 6. The following activities were done as part of the soil vapor sampling.

- Prepared a Work Plan dated September 12, 2005 that was submitted to NYSDEC and approved.
- Installed three temporary subsurface soil vapor probes along the southern exterior wall of Building 6 (see Figure 1) to collected soil vapor samples.
- Collected soil vapor samples from the three exterior locations.
- Submitted the three soil vapor samples collected for chemical analysis for five compounds of concern (tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethene (cis-DCE), trans-1,2-dichloroethene (trans-DCE) and vinyl chloride (VC)) via EPA Method TO-15.
- Prepared a letter report dated October 27, 2005.

Findings of the laboratory testing of the three exterior subsurface soil vapor samples collected and analyzed are presented below.

Sample ID	Tetrachloroethylene (ug/m^3)	Trichloroethylene (ug/m^3)
SV-101305-1	1.4	4.0
SV-101305-2	64	3.7
SV-101305-3	3.5	ND

Notes:
1) ug/m^3 – micrograms per cubic meter
2) ND – non detect
3) Table contains results of samples detected above method detection limits.

Cis-DCE, trans-DCE and VC were not detected at concentrations above method detection limits in the three soil vapor samples sent for laboratory analysis.

NYSDEC and the New York State Department of Health (NYSDOH) reviewed the October 27, 2005 letter report and requested in a letter to Delphi Thermal, dated March 14, 2006 that additional work be done. The letter requested that Delphi complete sub-slab and indoor sampling to further evaluate the potential impact to Building 6 from the groundwater plume.

GZA prepared and submitted to NYSDEC/ NYSDOH, a Work Plan dated April 14, 2006, on behalf of Delphi Thermal, to investigate the potential for vapor intrusion into Building 6. NYSDEC/NYSDOH provided three comments in a May 5, 2006 letter regarding the Work Plan. A response letter was prepared and submitted by GZA, dated June 19, 2006, regarding the three comments. NYSDEC issued an electronic mail transmission on July 5, 2006 which indicated that the Work Plan was acceptable and vapor intrusion sampling could proceed.

SCOPE OF WORK

To accomplish Delphi Thermal's objectives and meet the intent of the approved work plan, the following activities were done.

- Reviewed a product inventory, provided by Delphi Thermal, for the products and chemicals used within the Model Shop of Building 6
- Collected two indoor air, one sub-slab air and one outdoor ambient air sample for laboratory testing.
- Performed a cursory visual product inventory of chemicals and products located within the sampling area.
- Submitted the four air samples collected for chemical analysis for compounds of concern via EPA Method TO-15.

FIELD ACTIVITIES

This section describes the field activities done as part of the Building 6 vapor intrusion investigation.

PRODUCT INVENTORY REVIEW

Delphi Thermal compiled and reviewed a comprehensive list of chemicals and products that are stored and used within the sampling area, the Model Shop of Building 6 (see Attachment 2). The purpose of the product inventory review was to determine if compounds of concern (PCE, TCE, cis-DCE, trans-DCE and VC) are present within products and chemicals currently used within the Model Shop of Building 6. Prior to initiating the air sampling, Delphi also provided GZA a spreadsheet with the compounds of concern and the products within the sampling area that contain the compounds of concern (see Attachment 2). One product was identified on the spreadsheet, Weld-On for Acrylic, (contains TCE), that was located within the sampling area. Delphi Thermal indicated that the product was listed on the product inventory list, but was no longer used within the sampling area (Model Shop).

During the air sampling event, GZA made visual observations of the chemicals and products in the area of the sampling to determine if products and/or chemicals observed contained compounds of concern. Products and chemicals observed did not appear to contain the compounds of concern. Specifically, GZA did not observe Weld-On for Acrylic within the Model Shop sampling area.

Additionally, a photoionization detector (PID) was used to establish the background level within the sampling area. The meter was calibrated and "zeroed" outside of the building prior to entering. A reading of approximately 2 parts per million (ppm) was noted during background screening. Establishing the background level within the sampling area was done rather than screening individual product containers due to the number of containers present. GZA observed approximate 50 different products or chemicals which were present at multiple work stations within the Model Shop sampling area.

INDOOR, SUB SLAB AND AMBIENT OUTDOOR AIR SAMPLING

GZA collected three types of air samples (sub-slab, indoor air and outdoor air) as part of the investigation. The samples were collected via methodologies identified in the New York State Department of Health (NYSDOH) Draft Guidance for Evaluating Soil Vapor Intrusion, February 2005.

Two indoor air samples were collected from the Model Shop of Building 6; one sample was collected from the large open general work area and the other was collected from an office in the sampling area (see Figure 2 in Attachment 1). The indoor air samples were collected from the breathing zone (approximately 3 feet above the slab-on-grade floor).

One sub-slab air sample was collected from under the slab-on-grade floor through an approximate 1/2-inch diameter hole drilled in a competent portion of the concrete floor. Clean, dedicated polyethylene tubing was placed into the hole to the bottom of the concrete slab which was approximately 10-inches thick. The tubing was sealed at the floor surface with modeling clay (see Figure 2 for approximate location).

One ambient outdoor air sample was collected from an exterior upwind location from Building 6. The wind direction the day of the sampling appeared to be coming out of the northwest therefore; this sample was collected from a grassy area located approximately 200 feet northwest of Building 6. The outdoor air sample was hung from a tripod for the sample duration at a height of approximately 4 feet above the ground surface (see Figure 1 for approximate location).

The air samples were collected for an approximate eight-hour duration (e.g., standard shift duration in a commercial/industrial facility) in general accordance with NYSDOH requirements. Air samples were collected using one-liter sampling canisters and were analyzed via USEPA Method TO-15 for the five compounds of concern.

ANALYTICAL TESTING

The four air samples collected were submitted to Centek Laboratories, LLC for chemical analysis. Each sample was tested for the five compounds of concern (PCE, TCE, cis-DCE, trans-DCE and VC) via analytical test method TO-15. The analytical methodologies used for the analysis of the air samples utilized a reporting limit of 0.25 ug/m^3 for TCE and 1 ug/m^3 for PCE.

ANALYTICAL TEST RESULTS

Findings of the laboratory testing of the three subsurface soil vapor samples analyzed are presented below. The analytical laboratory report is provided as Appendix 3.

Soil Vapor Sample Results

Sample ID	PCE (ug/m^3)	TCE (ug/m^3)
SV-070606-1, Outdoor Sample	ND	0.382
SV-070606-2, Indoor Office Sample	ND	0.655
SV-070606-3, Indoor General Work Area	ND	0.983
SV-070606-4, Sub-slab Sample	6.48	0.655

Notes:
1) ug/m^3 – micrograms per cubic meter
2) ND – non detect
3) Table contains results of samples detected above method detection limits.

PCE was detected above method detection limits in one sample, SV-070606-4, sent for analysis. This sample was the sub-slab air sample collected from within the general work area of the Model Shop. The detected PCE concentration of the sub-slab sample (6.48 ug/m^3) is 10 times less than the detected concentration of PCE from the exterior soil vapor sample SV-101305-2 (64 ug/m^3).

The detection of PCE in the sub-slab is considered to be a "potential" exposure scenario, because PCE was not detected above method detection limits in the two indoor air samples collected. According to the decision matrix for PCE, contained within the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion, February 2005 decision, no further action is required.

TCE was detected above method detection limits in the four air samples sent for analysis. The detected concentrations ranged from 0.383 ug/m^3 (SV-070606-1, outdoor sample) to 0.983 ug/m^3 (SV-070606-3, indoor general work area sample). These results are below the NYSDOH Air Guideline Value for TCE of 5 ug/m^3. When compared to the decision matrix for TCE in the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion, February 2005, the resultant action required is to take reasonable and practical actions to identify source(s) and reduce exposures. The source of TCE is likely attributed to the industrial nature of the work conducted at the Delphi Thermal Lockport facility and the historical or present use of various compounds during routine daily operations. Exposure duration is limited to normal working hours for employees in Building 6. Exposure concentrations are controlled by restricting the use of materials containing TCE. All measured concentrations are well below the OSHA exposure guidelines.

Cis-DCE, trans-DCE and VC were not detected at concentrations above method detection limits in the four air samples collected and sent for laboratory analysis.

It is GZA's opinion that the detection of TCE within the indoor air is due to former usage of the chemical inside the Model Shop area of Building 6 rather than from vapor intrusion. The following rationale is used to support our opinion.

- The detected concentration of TCE was higher in the general work area indoor air sample than the detected concentration of the sub-slab air sample.
- PCE was detected in the sub-slab sample and not in the two indoor air samples indicating that vapor intrusion is not occurring at a significant rate.
- According to Delphi Thermal Facility Maintenance, Building 6 is under positive pressure from its heating, ventilation and air-conditioning (HVAC) system. This system processes/changes the air within the building at a rate of two (minimum) to five (maximum) times per hour. The operation of the HVAC system serves to reduce exposure of Building 6 workers to potential soil vapors that may exist under the building or maybe present from the historical or current use of compounds.
- The general work area of the Model Shop has a wooded block floor which overlays a concrete slab-on-grade floor. If historical TCE spillage occurred within the general work area, the possibility exists for some minor absorption into the wooded floor. The detected concentrations may be due to residual TCE present within the Model Shop.

CONCLUSIONS

PCE was detected above method detection limits in one sample, SV-070606-4. This sub-slab air sample was collected from within the general work area of the Model Shop. The detected concentration of PCE was 6.48 ug/m^3, which is below the NYSDOH action level for sub-slab samples of 100 ug/m^3 and is designated as a "potential" exposure scenario. According to the decision matrix for PCE, contained in the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion, February 2005, no further action is required. PCE was not detected above method detection limits in the two indoor air or outdoor air samples tested.

TCE was detected above method detection limits in the four air samples sent for analysis. The detected concentrations ranged from 0.383 ug/m^3 (SV-070606-1, outdoor sample) to 0.983 ug/m^3 (SV-070606-3, indoor general work area sample).

- The detected concentrations of TCE are below the NYSDOH Air Guideline Value of 5 ug/m^3.
- When comparing the two indoor air samples and one sub-slab sample to the decision matrix for TCE in the NYSDOH Draft Guidance for Evaluating Soil Vapor Intrusion, February 2005, the resultant action required is to take reasonable and practical actions to identify source(s) and reduce exposures.

Cis-1,2-dichloroethene, trans-1,2-dichloroethene and vinyl chloride were not detected at concentrations above method detection limits in the four air samples collected and sent for laboratory analysis.

It is GZA's opinion that vapor intrusion from the identified on-Site subsurface groundwater plume is not impacting indoor air within Building 6. The detection of TCE within the indoor air of Building 6 is likely the result of historic or current activities at this industrial facility. Actions currently being utilized by Delphi Thermal, which consist of reducing the use of compounds/products that contain PCE and/or TCE and maintaining the Building 6 HVAC system, are suitable in reducing employee exposure. GZA does not recommend additional work regarding vapor intrusion within Building 6.

We appreciate the opportunity to continue to work with you on this project. Should you have any questions or require additional information following your review, please do not hesitate to contact the undersigned.

Sincerely,

GZA GEOENVIRONMENTAL OF NEW YORK

Christopher Boron
Project Manager

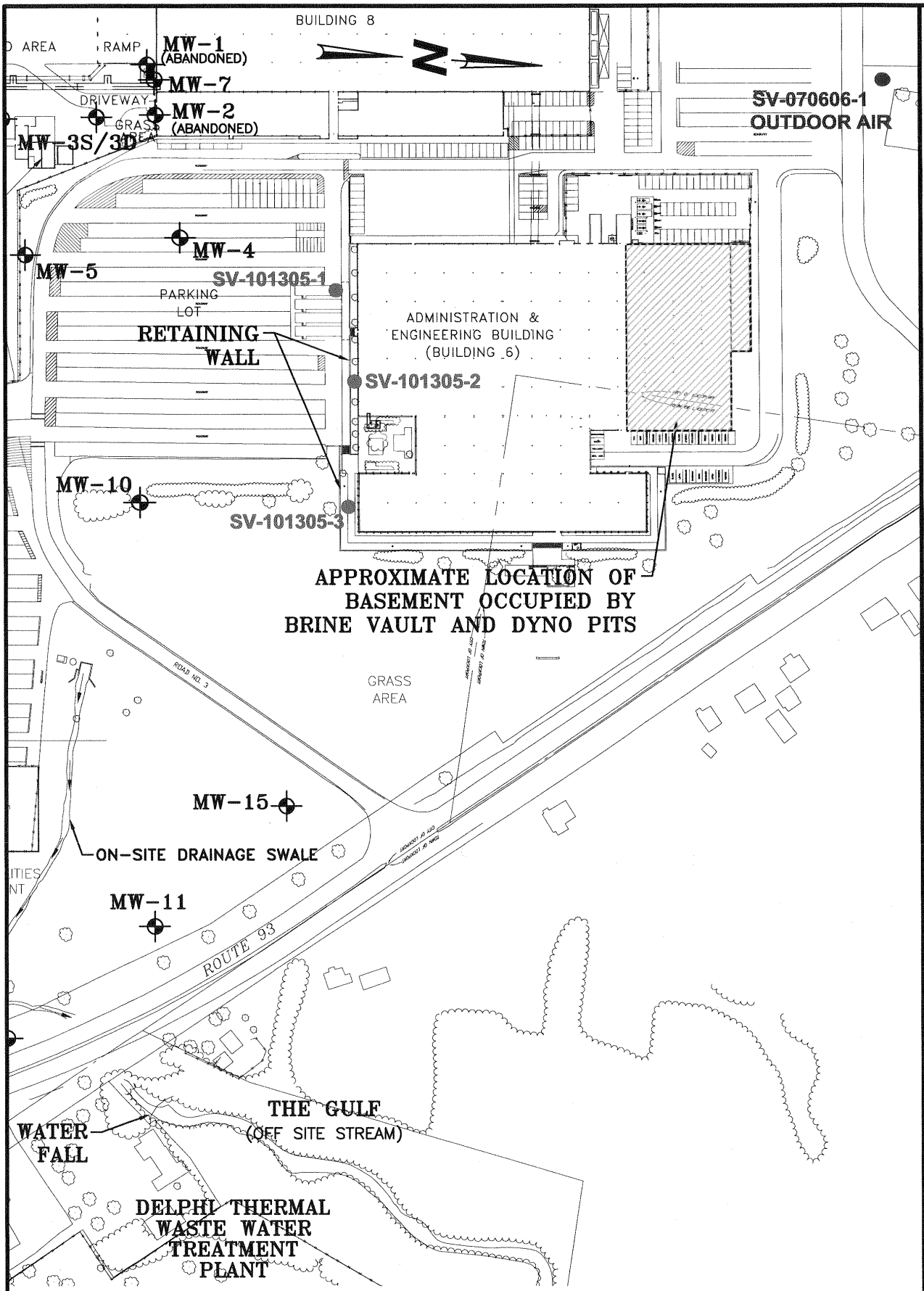
Ernest R. Hanna, P.E.
Principal

Attachments: 1 – Figure 1: Site Plan & Soil Vapor Sampling Location Plan and
Figure 2: Building 6 Interior Sampling Location Plan
2 – Product Inventory Lists
3 – Analytical Laboratory Report

cc: Mr. Glenn May (NYSDEC – Region 9)
Mr. Mathew Forcucci (NYSDOH)
Ms. Hillie LaDue (Delphi, Lockport)

ATTACHMENT 1

FIGURES



LEGEND:

MW-3S	APPROXIMATE LOCATION AND DESIGNATION OF EXISTING MONITORING WELL INSTALLED BY GZA
SV-101305-1	APPROXIMATE LOCATION OF EXTERIOR SOIL VAPOR SAMPLING POINT
SV-070606-1 OUTDOOR AIR	APPROXIMATE LOCATION OF EXTERIOR OUTDOOR AIR SAMPLING POINT

NOTES:

1. BASE MAP ADAPTED FROM AN AUTOCAD FILE PROVIDED BY DELPHI HARRISON THERMAL SYSTEMS.
2. SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

DRAWN BY: DEW

DATE: JULY 2006

GZA GeoEnvironmental of New York

SCALE IN FEET

0 100 200 400

DELPHI THERMAL SYSTEMS

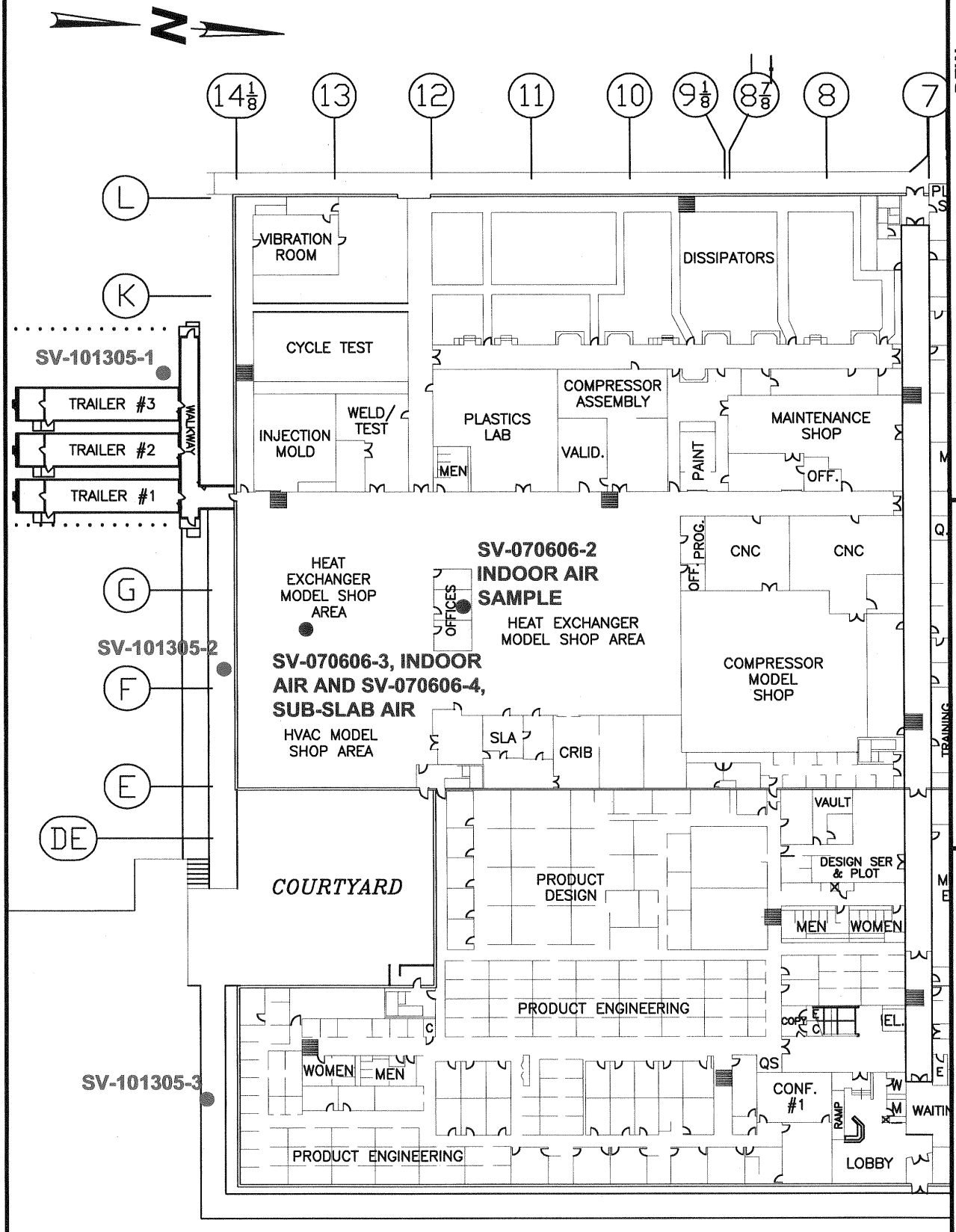
VAPOR INTRUSION SAMPLING, BUILDING 6

200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

SITE PLAN AND SOIL VAPOR SAMPLING LOCATION PLAN

PROJECT No.
21.0056192.00

FIGURE No.
1



DRAWN BY: DEW

DATE: JULY 2006

GZA GeoEnvironmental of New York

SCALE IN FEET

0 30 60 120

DELPHI THERMAL SYSTEMS

VAPOR INTRUSION SAMPLING, BUILDING 6

200 UPPER MOUNTAIN ROAD
LOCKPORT, NEW YORK

INTERIOR SITE PLAN AND SOIL VAPOR/ INDOOR AIR SAMPLING LOCATION PLAN

PROJECT No.
21.0056192.00

FIGURE No.
2

LEGEND:

INDOOR AIR SAMPLE ● — APPROXIMATE LOCATION OF INTERIOR AND SUBSLAB AIR SAMPLING POINTS

SV-101305-1 ● — APPROXIMATE LOCATION OF PREVIOUS EXTERIOR SOIL VAPOR SAMPLING POINT

NOTES:

1. BASE MAP ADAPTED FROM AN AUTOCAD FILE PROVIDED BY DELPHI HARRISON THERMAL SYSTEMS.

2. SIZE AND LOCATION OF EXISTING SITE FEATURES SHOULD BE CONSIDERED APPROXIMATE.

ATTACHMENT 2

PRODUCT INVENTORY LISTS

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
00340 GRAY RUST CONTROL PRIMER
00341 LIGHT GRAY PRIMER
00711 PENETRANT-LUBRICANT
01210 OSHA SAFETY ORANGE
01515 DARK BLUE
01830 HAVOLINE MOTOR OIL SAE 30
02316 MULTIGEAR LUBRICANT EP SAE 80W-90
111 VALVE LUBRICANT & SEALANT
140 STICK WAX
140-0613 SUPERACRYLIC CONTROLS RUST SPRAY ENAMEL GRAY METAL PRIMER
14-113 HOT RED
142 MICCRO SUPREME LAYOUT DYE-PURPLE
149-L 1 SHOT LETTERING ENAMEL
154-2398 XYLENE (XYLOL)
1631 BLACK LACQUER KRYLON INDUSTRIAL MAINTENANCE AEROSOL
18486-H BLACK WATER REDUCIBLE CONDENSER PAINT
20005 ACRYSOL
20747 HI-TECH SAFETY SOLVENT
2180 B CASTING RESIN
2180A CASTING RESIN
3M SCOTCH WELD STRUCTURAL PLASTIC ADHESIVE 8010 NS (PART B)
3M SCOTCH WELD STRUCURAL PLASTIC ADHESIVE 8010 NS, (PART A)
3M SUPER 77 SPRAY ADHESIVE (11-4257-9)
5-MINUTE EPOXY GEL RESIN
5-MINUTE EPOXY HARDENER
60T CATALYST SOLUTION
7113 ACTIVATOR
76 EXTRA DUTY GEAR LUBE 7EP
76 UNAX AW 46
76 WAY OIL HD 68
A01770 OSHA GLOSS BLACK
A40W5 CLASSIC 99 SEMI-GLOSS ALKYD ENAMEL, PURE WHITE (BASE X)

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
A40W7 CLASSIC 99 SEMI-GLOSS ALKYD ENAMEL, BASE Z
A48N36 OIL STAIN, DANISH WALNUT
A67V1 POLYURETHANE VARNISH, HIGH GLOSS
A6W16 A-100 EXTERIOR FLAT LATEX PAINT, WHITE
AC 500, ACIDIC RUST, SCALE & OIL REMOVER
ACCELERATOR 711
ACCULUBE
ACCURA SI 40-ND, AR & HC TYPE SL MATERIAL
ACCU-SURF
ACETONE 00140
ACETONE/TENITE SLURRY
ACETYLENE, DISSOLVED
AIR
AIRLUBE 10W/NR (AIR LUBE 10W/NR)
AKULON M-1751 BK
AKULON M-1751 NATL
ALCRYN 2060 BK
ALCRYN 2070 BK
ALPHA ALUMINA
ALUMINUM WELDING WIRE AND METALLIZING WIRE 4043
AMCO 33
ANCHORLUBE G-771
ANTI-SEIZE LUBRICANT (76764)
ARGON, REFRIGERATED LIQUID
ARN SLURRY
AURALLOY 500 (SILVER SOLDER) 8775; 8781
B21W201 PROMAR 200 INTERIOR LATEX GLOSS ENAMEL, PURE WHITE (BASE X)
B28W200 PREPRITE 200 INTERIOR LATEX PRIMER, WHITE
B54R38 INDUSTRIAL ENAMEL, SAFETY RED
B54W101 INDUSTRIAL ENAMEL, PURE WHITE

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
B54W103/SW1279 RARE WINE CUSTOM INDUSTRIAL ENAMEL
B58AQ555 ARMORSEAL 550SL 100% SOLIDS LEVELING EPOXY COATING (PART A)
BETA1
BETA4
BETA5
BIOCIDE 300
BLACK PIGMENT
BLUE RIBBON PRIME NEATSFOOT COMPOUND
BLUE TOOLMAKER'S INK #6001
BRAZO FLUX
BRILLIANIZE, KLEENMASTER PRODUCTS
C-77 SHRINK-FREE SPACKLING
CAB/COB FLUX SLURRY
CAST-IT 2000 HARDENER
CAST-IT 2000 RESIN
CAST-IT 2000 SLOW HARDENER
CAT 1300
CATALYST SOLUTION
CATALYST SOLUTION - CATL2
CELANEX 2002 EF-NAT (HB0264; CX1000)
CELCON M90-04 CF2001
CHEVRON SRI GREASE
CIBATOOL SL 5170
CIBATOOL SL5530
CIMSTAR 50CL
CIMTAP
CLOVER SILICON CARBIDE GREASE MIX - ALL GRADES CLOVER LAPPING AND GRIND COMPOUND - ALL GRADES
COOL-TOOL II
CREEPER PENETRATING OIL
CYCOLAC RESIN ZA5-4500
D1261-2
DAYBRAZE 729

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
DELRIN ACETAL RESIN CUSTOM COLORS ALL IN SYNONYM LIST DEL001
DIELECTRIC FLUID
DL WATERLESS HAND CLEANER
DOW CORNING 200 FLUID, 20 CST
DOW CORNING MB50-001 MASTERBATCH
DOW CORNING MB50-321 MASTERBATCH
DOW CORNING Z MOLY POWDER
DOW H701-20NA POLYPROPYLENE RESIN (53889)
DOWANOL TPM GLYCOL ETHER
DRAW LUBE 485 (DL-485)
DUBL-CHEK CLEANER/REMOVER DR-60 (AEROSOL)
DUBL-CHEK D-100 & D-350 DEVELOPER (AEROSOLS)
DUBL-CHEK DYE PENETRANT DP-40 (AEROSOL)
DY-CHEK/FLUOR-CHEK NAD DEVELOPER PSU
DYLON LEAK DETECTOR
EDM-244
ENVY INSTANT CLEANER GERMICIDAL - AEROSOL
EPK 0151 HARDENER
EPK 0151 RESIN
EPK 1C HARDNER
EPK 1C RESIN
EPK 615, PART A
EPON RESIN 828
EPOXI-PATCH KIT 6C PART B (HARDENER)
EPOXY 907 TWO PART ADHESIVE PART A
EPOXY 907 TWO PART ADHESIVE PART B
EPOXY HARDENER TCC-116A
EPOXY HARDENER TCC-117
ETHANOL BLEND 20% GASOLINE
E-Z DEGLOSSER
F5134T2-4 TFPP BLACK 20% (F5134 T2-4)

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
F5134T4-1 TFPP BLACK 40% (F5134T4-1 TALC-FILLED POLYPROPYLENE)
FANTASTIK ALL PURPOSE CLEANER
FINADRAW L-VG
FLEXBAR REPRORUBBER PUTTY MATERIAL CATALYST PASTE
FLEXBAR REPRORUBBER THIN POUR MATERIAL CATALYST PASTE
FLR-118
FLUX COATED BRAZING SHEET
FOAMTROL AF706
FOLDED TUBE FLUX PASTE (DLOCK-002)
FORCE 44
FREON 502 REFRIGERANT
GAS LEAK DETECTOR LOW TEMP
GENETRON 12
GENETRON 22
GLANCE CONCENTRATE GLASS CLEANER
GLYCERINE FREE CAB FLUX PASTE
GMARA ALL PURPOSE CLEANER (240)
GRAPHITE HIGH TEMPERATURE SURFACE COAT RESIN TCC-605
GREEN TEMPILAQ 175F(79C)
GREEN TEMPILAQ 275F(135C)
GREEN TEMPILAQ 313F(156C), 325F(163C), 350F(177C), 363F(184C)
GREEN TEMPILAQ 375F(191C), 388F(198C)
GREEN TEMPILAQ 400F(204C)
GREEN TEMPILAQ 425F(218C)
GREEN TEMPILAQ 450F(232C)
GREEN TEMPILAQ 475F(246C)
GREEN TEMPILAQ-488F(253C), 500F(260C), 525F(274C), 550F(288C)
HARDENER HV 1253
HD3496
HERCULES PRO POXY 20
HONING OIL

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
HYDRA-LUBE F-100 (SUMMER/WINTER GRADE)
HYSOL 6C EPK, ITEM # 83211-RESIN
HYSOL HD3201
HYSOL HD3475
HYSOL LE0029
HYSOL RE2038
HYVAC FLUSHING OIL
INDUSTRIAL PLASTERS
INLAND 19
IPA - ANHYDROUS
ISOPAR E BLUE LABEL THINNER
ISOPROPANOL ANHYDROUS
ISOPROPANOL ANHYDROUS, USP
JOHNSON MULTI
KE 1300T
KE 1310ST
KEM KROMIK UNIVERSAL METAL PRIMER (VOC COMP) WHITE B50WZ1
KIWI SHOE POLISH
KLEA 134A
KWIK FLUX #54
LEAK LOCK (CHEMISTRI MSDS)
LEAK-TEC 577-V
LEAROK 302C
LEAROK 309 (110-040)
LINDOL PLASTICIZER
LIQUID LEAK DETECTOR
LOCQUIC PRIMER T (AEROSOL)
LOCTITE 290 THREADLOCKER (29043: WICKING GRADE MEDIUM STRENGTH; 290 ADHESIVE/SEALANT; 29031)
LOCTITE 569 THREAD SEALANT HIGH STRENGTH HYDRAULIC SEALANT
LOCTITE 680 RETAINING COMPOUND HIGH STRENGTH
LTB-39-41 SSK NOCOLOK

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
LUBRIPLATE NO. 1200-2
LUBRIPLATE NO. 130-AA
LUBROL 230HR
LUS-CO-CUT 755HR
LUS-CO-FORM 966HR
M0BIL ALMO 525 603183-00 AIR TOOL OIL
M60B16
MA 300 ADHESIVE
MA 310 ACTIVATOR
MAGIC LENS CLEANING ANTI-FOGGING ANTI-STAT FLUID
MAGNESIUM ALLOY INGOT AZ91D
MECHANICAL PUMP OIL SUPERGRADE A
MINERAL SPIRITS NONEXEMPT
MN-142 (SEMI-SYNTHETIC METALWORKING FLUID)
MOBIL DTE 13M
MOBIL VACTRA OIL NO. 2
MOBIL VACTRA OIL NO. 2 SLC
MOBIL VELOCITE OIL #6
MOBIL VELOCITE OIL NO. 6 (600668-73)
MOBILTEMP SHC 32
MOBILUX EP 2
M-PYROL (1-METHYL-2-PYRROLIDINONE)
MURIATIC ACID
NATURAL GAS
NB0403086-3 ISO
NB0403092-3 POL
NICROBRAZ GREEN STOP-OFF, TYPE II
NITROGEN, REFRIGERATED LIQUID
NO. 7 RUBBING COMPOUND
NOVUS PLASTIC POLISH #2
NRW-35,36,37,38,56 & 354 EX-MB AND MB-400 FOR THE FOLLOWING GRADES: STANDARD (STD), EDM, LC, LT AND SC
NYPEL NYLON RESIN 2360 HS BK

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
OXYGEN, COMPRESSED
PACER TECHNOLOGY (ALL SIZES & GRADES)
PASTE WAX
PENSOLV L805 AEROSOL
PERMABOND 910
PERMABOND ANTISEIZE 82-9839
PERMA-LOK LH 050 78-4421
PERMA-LOK LH 150
PETROLEUM JELLY
PLASTILEASE 512-B
PLH-8/PLMH-1/PMCH-1
POLYETHYLENE 4012
POLYOUT PURGING COMPOUND
POLYWATER LUBRICANT J
POWER PAK #8209, #8210, #8211
PP5340 B2 40% MICA FILLED POLYPORPYLENE, BLACK
PP5410 B1 (GRPP BLACK 10%)
PRESTONE ANTIFREEZE/COOLANT
PRISM 401 SURF-INSENSITIVE INST ADH
PRISM 454 INSTANT ADHESIVE (21925) GEL
PROPANE
PROPYLENE GLYCOL
PRUSSIAN BLUE #35
QUAKER FORMULA (R) 625 HR
R2K4 XYLOL
R-373 RUBBER INS. ADHESIVE
R7K54 REDUCER NO. 54
REMOVABLE THREADLOCKER 242 (LOCTITE 242 THREADLOCKER MEDIUM STRENGTH 24231)
REN SHAPE-EXPRESS SEALER NO. 1 (CIBATOOL-EXPRESS SEALER NO. 1)
RENPIM-VG SG220 ISOCYANATE

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
RENPIM-VG SG220 POLYOL
RESIN SG200A
RP 3215-2 HARDENER
RP 3215-2 RESIN
RP 38 ALUMINUM GRANULES
RP 40 ALUMINUM SHOT
RP 4037 HARDENER (DT 177-147 HARDENER)
RP 4037 RESIN
RP 76 (RP-76; RP76)
RP 79-2
RP 803
RP 805
RPCURE 100 AR SL MATERIAL
RTV700
S 2705
S00100 WHITE LITHIUM LUBE
S00203 PENETRATING OIL
S01310 OSHA YELLOW
S01470 OSHA GREEN
S01760 INDUSTRIAL ACRYLIC ENAMEL, ALUMINUM
S01800 OSHA SAFETY WHITE TOUGH COAT ACRYLIC ENAMEL - 5 AEROSOL (OSHA GL. WHITE)
S206 SILICONE MOLD RELEASE
S236 URETHANE MOLD RELEASE
SAFETAP
SAFETY-KLEEN REFINED SOLVENT F
SANTOPRENE GENERAL PURPOSE THERMOPLASTIC RUBBER GRADES 101, 103, 201, 203
SANTOPRENE THERMOPLASTIC RUBBER MOLDING GRADES 111-35,45,45W219,55,64,73,80,87 & 211-35,45,55,64,73,80,87 & 213-40
SCOTCH-WELD 1838-A EPOXY ADHESIVE (GREEN)
SCOTCH-WELD 1838-B EPOXY ADHESIVE (GREEN)

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
SCREWLOOSE (SILOO SCREWLOOSE)
SG200B CASTING RESIN
SG95A CASTING RESIN
SG95B CASTING RESIN
SH-130 INDUSTRIAL LUBRICANT 4040 (FORMERLY DYNAHONE)
SILICONE SPRAY PARTING AGENT S512
S-KLENZ
SKL-HF/S SPOTCHECK PENETRANT
SMALL SCREW THREADLOCKER 222MS
SO1110 OSHA SAFETY RED TOUGH COAT ACRYLIC ENAMEL - 2
SPACKLING POWDER
SPECTRUS NX106
SPOOLARC 85
SPOTCHECK CLEANER/REMOVER SKC-NF (AEROSOL)
SPRAYON 00880 GENERAL PURPOSE CLEANER
STARRETT CLEANER
STEEL RED LAYOUT FLUID, TRANSPARENT RED STAINING COLOR 80296,80396,80496,80696,80896,80996,87496,81796,81891
SUN T MINERAL SPIRITS
SUPER BONDER 495 GENERAL PURPOSE INST ADH
SUPER HIL-TONE
SUPER X-5 AND X-10 MARKER, ALL COLORS
SUPERFLEX RED RTV SILICONE ADHESIVE SEALANT 59630 (SUPERFLEX H TEMP SILICONE ADH/SLNT RED)
SUVA 134A
SYNSPAR GP
TAFA 4140 MASTER RELEASE-BRUSHABLE
TAFA TAFALOY MOLDMAKING WIRE-204M
TASCSONIC PLUS
TCC-125
TCC-126
TCC-607 HIGH TEMPERATURE EPOXY RESIN
TEMPILAQ GREEN 200F(93C), 206F(97C), 213F(101C)

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
TEMPILAQ GREEN 225F(107C), 238F(114C), 250F(121C)
TEMPILAQ GREEN 300F(149C)
TEMPILAQ GREEN LABEL THINNER
THE CLEANER (2995)
THREAD CUTTING OIL DARK
TOOL-SAVER
TPC SOLVENT
TRIM E206
TRIM SOL
TRIM WHAMEX
TRIPROPYLENE GLYCOL
TURCO DY-CHEK PENETRANT PSU
UCON LUBRICANT 5599 (X-2027)
UCON REFRIGERATION LUBRICANT 488
UNION 76 SUPER MOTOR OIL 10W/40
UNION 76 UNAX RX-220
UNISEAL 707
UNOCAL MULTIPURPOSE ATF
UNOCAL UNAX AW 32
UNOCAL UNAX AW 68
VC 40 SILICONE RUBBER COMPOUND
VC 60T SILICONE RUBBER COMPOUND
VIBRA-GLO L-GM
VISCOTENE AEROSOL
VYDYNE 21SP NYLON RESIN BLACK
VYDYNE 21SP NYLON RESIN NATURAL
VYRAM 9000 SERIES THERMOPLASTIC RUBBER
W&B CONCENTRATE 5510
WD-40 AEROSOL
WELD-ON 3 FOR ACRYLIC
WEST SYSTEM 105 EPOXY RESIN
WEST SYSTEM 205 FAST HARDENER

DELPHI THERMAL - LOCKPORT, NY
ACTIVE CHEMICALS FOR DEPT. 669 - MODEL SHOP
Tradename
WINSOR DUREL 92385C-DR
X-7 DEBONDER
X9111-35W222 DEVELOPMENTAL VYRAM THERMOPLASTIC RUBBER
ZEP DYNA 143
ZYTEL 101 NC010

DELPHI THERMAL - LOCKPORT, NY: PRODUCT INVENTORY REVIEW FOR DEPT. 669 (MODEL SHOP)							
Constituent Name	**CAS #**	**Constituent Description**	**Product Name**	**Delphi FID #**	**Site CUA #**	**MSDSNet Status**	**Notes**
Tetrachloroethylene	127-18-4		Perchloroethylene	102580	3635	Inactive	Hasn't been used in the dept. since the early '90s. Will investigate to insure that all containers have been removed.
			Frekote #34	104411	1474	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Safety Kleen 105 Solvent Recycled Oil	107318	1070	N/A	This was never used in the dept.
			Perchloroethylene SVG	140717	2644	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Immersion Cleaner & Cold Parts Cleaner	237304	4250	N/A	This was never used in the dept. Chemical is no longer used on-site.
Trichloroethylene	79-01-6		Trichlor	140363	53	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Neu-Tri Solvent 56530	141083	2651	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Locquic Primer NF	180034	Not available	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Pangofol Black - Codes: 992/996/997/998	214276	4726	N/A	This was never used in the dept. Chemical is no longer used on-site.
			Weld-On for Acrylic	227756	4571	Active	Currently used in the dept. All containers will be removed at least 24 hrs. prior to sampling.
Vinyl Chloride	75-01-4					N/A	This constituent does not appear on current or historical chemical lists
1,2 Dichloroethylene - CIS	156-59-2	This is CIS only				N/A	This constituent does not appear on current or historical chemical lists
1,2 Dichloroethylene - Trans	156-60-5	This is Trans only				N/A	This constituent does not appear on current or historical chemical lists
1,2 Dichloroethylene	540-59-0	This is a mixture of CIS & Trans				N/A	This constituent does not appear on current or historical chemical lists
	25323-30-2	This is a mixture of 1,1Dichloroethylene and either CIS or Trans 1,2 Dichloroethylene				N/A	This constituent does not appear on current or historical chemical lists

created by: H. LaDue

ATTACHMENT 3

ANALYTICAL LABORATORY REPORT

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206

Phone (315) 431-9730 * Fax (315) 431-9731 * Emergency 24/7 (315) 416-2751

NELAC Certifacate No. 11830

www.CentekLabs.com

Friday, July 14, 2006

Mr. Chris Boron
GZA GeoEnvironmental of NY
364 Nagel Drive
Buffalo, NY 14225

TEL: 716-685-2300
FAX 716-685-3629

RE: Delphi Thermal Lockport

Dear Mr. Chris Boron:

Order No.: C0607001

Centek Laboratories, LLC received 4 sample(s) on 7/10/2006 for the analyses presented in the following report.

Analytical results relate to samples as received at laboratory. We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service.

Please contact your client service representative, Michael Palmer at (315) 431-9730, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

Michael Palmer
Director of Client Services

Centek Laboratories, LLC

Date: *17-Jul-06*

CLIENT: GZA GeoEnvironmental of NY
Project: Delphi Thermal Lockport
Lab Order: C0607001

CASE NARRATIVE

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

CENTEK LABORATORIES, LLC

Chain of Custody

143 Midler Park Drive • Syracuse, New York 13206 • Phone: (315) 431-9730

Company Name: GZA GeoEnvironmental		Site Name: Delphi Thermal Lockport	
Client Contact:		Phone No.:	Project No. 21.0056192.0

	SEND REPORT TO:	SEND INVOICE TO:
Name	Chris Boron	
Company	GZA GeoEnvironmental	SAME
Address	364 Nagel Drive	
Phone	716-685-8300	
Fax	716-685-3629	
E-mail	cboron@gza.com	

Method of Payment:

Purchase Order No.:	Credit Card (type):	
Authorization: Mike Palmer	Card No.:	Date Exp:

Turnaround Time Requested:

Same Day:	Next Day (24 hours)	~~Normal~~ (5 business days)	Other (specify)

Sample Identification	Date Sampled	Canister Number	Regulator Number	Analysis Requested	Comments
SV-070606-1	7/6/06	192	384	TO-15	See List Below
SV-070606-2	↓	264	262	↓	↓
SV-070606-3		223	398		
SV-070606-4		287	385		
		455-5/06			
Test Samples via TO-15 for the follow Compounds of Concern: PCE					
TCE					
Vinyl Chloride					
cis-1,2-DCE					
trans 1,2-DCE					
				Level II per Mr. Boron to mf 7/10/06	

Sampled By: Chris Boron		Name of Courier: UPS	
Company: GZA			
Relinquished by: (sign) Chris Boron	Date: 7/6/06	Time: 1800	Received by: (sign) UPS Drop off
Relinquished by: (sign)	Date:	Time:	Received by: (sign)
Relinquished by: (sign)	Date: 7/7/06	Time: 9:30	Received for lab by: (sign) M. Palmer

Centek Laboratories, LLC

Date: *14-Jul-06*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SV-070606-1
Lab Order:	C0607001	**Tag Number:**	142,384
Project:	Delphi Thermal Lockport	**Collection Date:**	7/6/2006
Lab ID:	C0607001-001A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	7/10/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Trichloroethene	0.382	0.218		ug/m3	1	7/10/2006
Vinyl chloride	ND	0.390		ug/m3	1	7/10/2006

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *14-Jul-06*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SV-070606-2
Lab Order:	C0607001	**Tag Number:**	274,262
Project:	Delphi Thermal Lockport	**Collection Date:**	7/6/2006
Lab ID:	C0607001-002A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: LL
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	7/10/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Trichloroethene	0.655	0.218		ug/m3	1	7/10/2006
Vinyl chloride	ND	0.390		ug/m3	1	7/10/2006

NOTES:

*Surrogate recovery was outside accepted reporting limits. Based on the chromatographic evidence, it appears that the contamination is from a fuel.

Qualifiers:	B Analyte detected in the associated Method Blank	E	Value above quantitation range
	H Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
	JN Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *14-Jul-06*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SV-070606-3
Lab Order:	C0607001	**Tag Number:**	223,398
Project:	Delphi Thermal Lockport	**Collection Date:**	7/6/2006
Lab ID:	C0607001-003A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Tetrachloroethylene	ND	1.03		ug/m3	1	7/10/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Trichloroethene	0.983	0.218		ug/m3	1	7/10/2006
Vinyl chloride	ND	0.390		ug/m3	1	7/10/2006

Qualifiers:

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
JN	Non-routine analyte. Quantitation estimated.
S	Spike Recovery outside accepted recovery limits
E	Value above quantitation range
J	Analyte detected at or below quantitation limits
ND	Not Detected at the Reporting Limit

Centek Laboratories, LLC

Date: *14-Jul-06*

CLIENT:	GZA GeoEnvironmental of NY	**Client Sample ID:**	SV-070606-4
Lab Order:	C0607001	**Tag Number:**	287,385
Project:	Delphi Thermal Lockport	**Collection Date:**	7/6/2006
Lab ID:	C0607001-004A	**Matrix:**	AIR

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 TCE BY METHOD TO15		**TO-15**				Analyst: **LL**
cis-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Tetrachloroethylene	6.48	1.03		ug/m3	1	7/10/2006
trans-1,2-Dichloroethene	ND	0.604		ug/m3	1	7/10/2006
Trichloroethene	0.655	0.218		ug/m3	1	7/10/2006
Vinyl chloride	ND	0.390		ug/m3	1	7/10/2006

NOTES:

* Surrogate recovery was outside accepted reporting limits. Based on the chromatographic evidence, it appears that the contamination is from a fuel.

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected at or below quantitation limits
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		