



August 12, 2010

Mr. Jeffrey J. Kavanaugh
State Cleanup Section
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204

**RE: Vapor Residential Sampling & Mitigation Report
Former Harman-Becker Automotive Systems, Inc.
1201 South Ohio Street
Martinsville, Morgan County, Indiana
State Cleanup Site #1996-06-183
SESCO Project No. 3872**

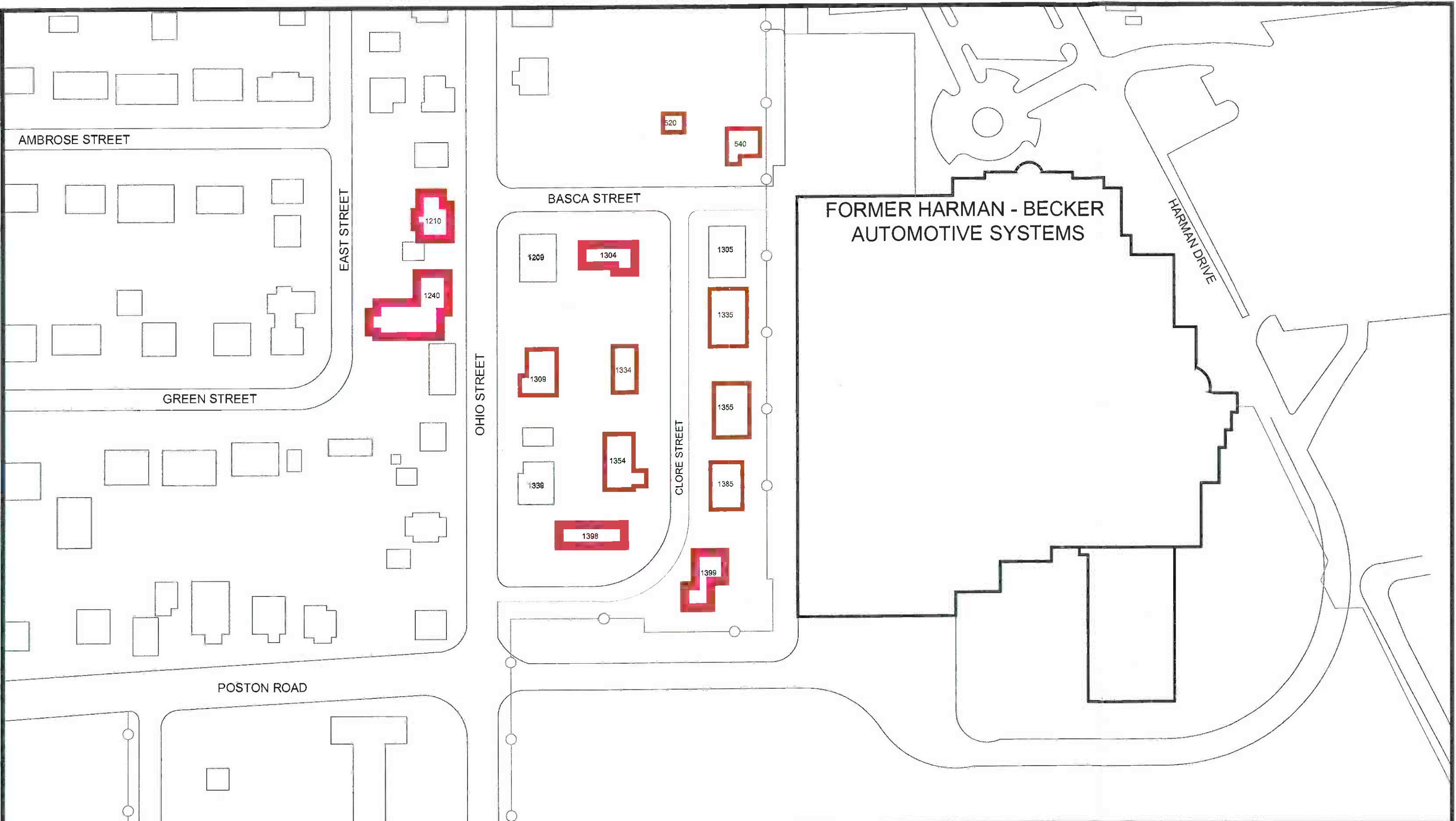
Dear Mr. Kavanaugh:

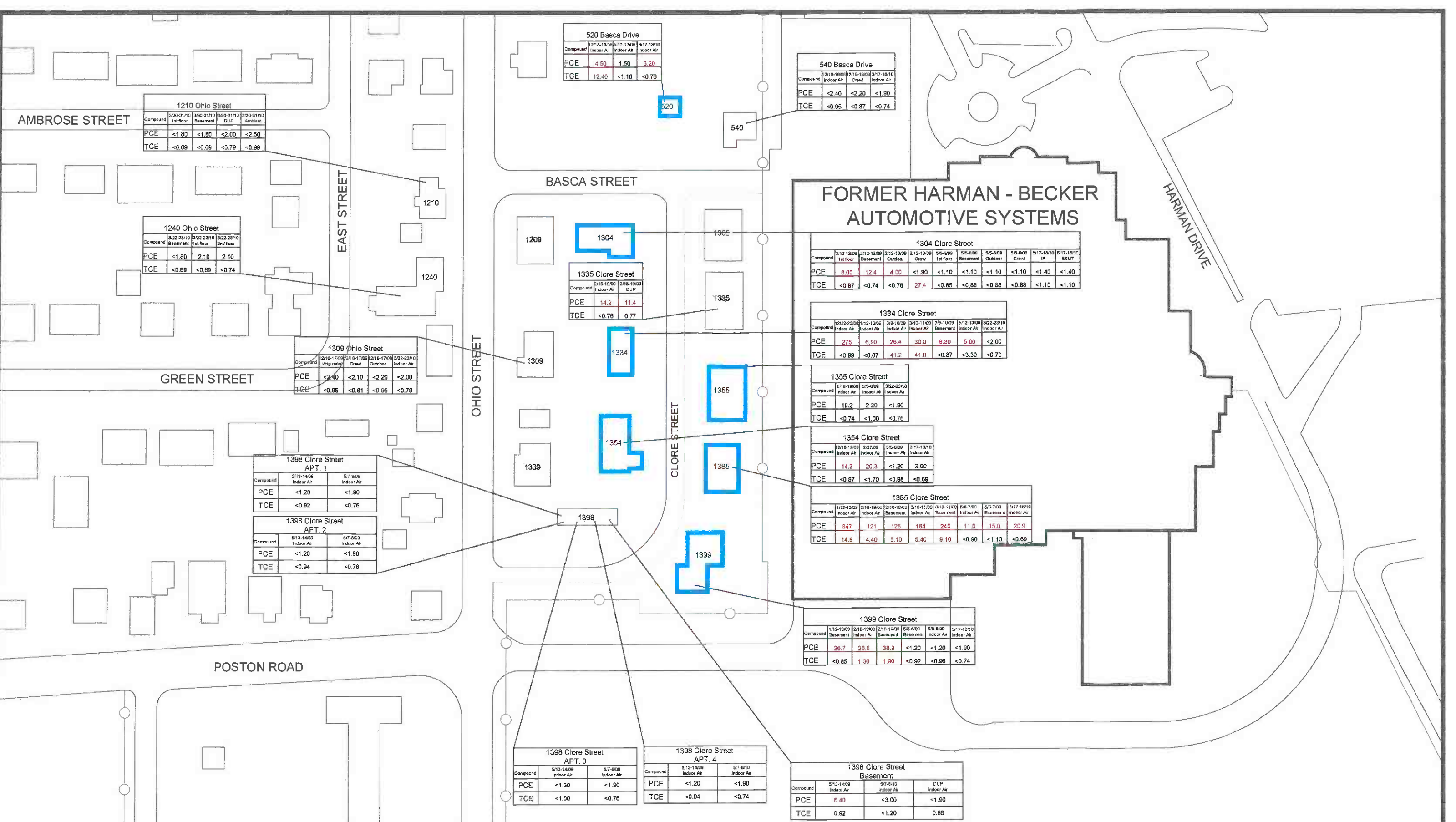
SESCO Group (SESCO) respectfully submits this *Vapor Residential Sampling & Mitigation Report*, for the Former Harman-Becker Automotive Systems facility, located at 1201 South Ohio Street, Martinsville, Indiana (the Site). This report summarizes the results of the vapor intrusion sampling events of the residential area immediately downgradient of the Site and recommended actions. The sampling activities were conducted to address potential vapor intrusion in the residences, in accordance with *Indiana Department of Environmental Management (IDEM) Draft Vapor Intrusion Pilot Program Guidance Supplement (February 4, 2010)* regulations and guidelines.

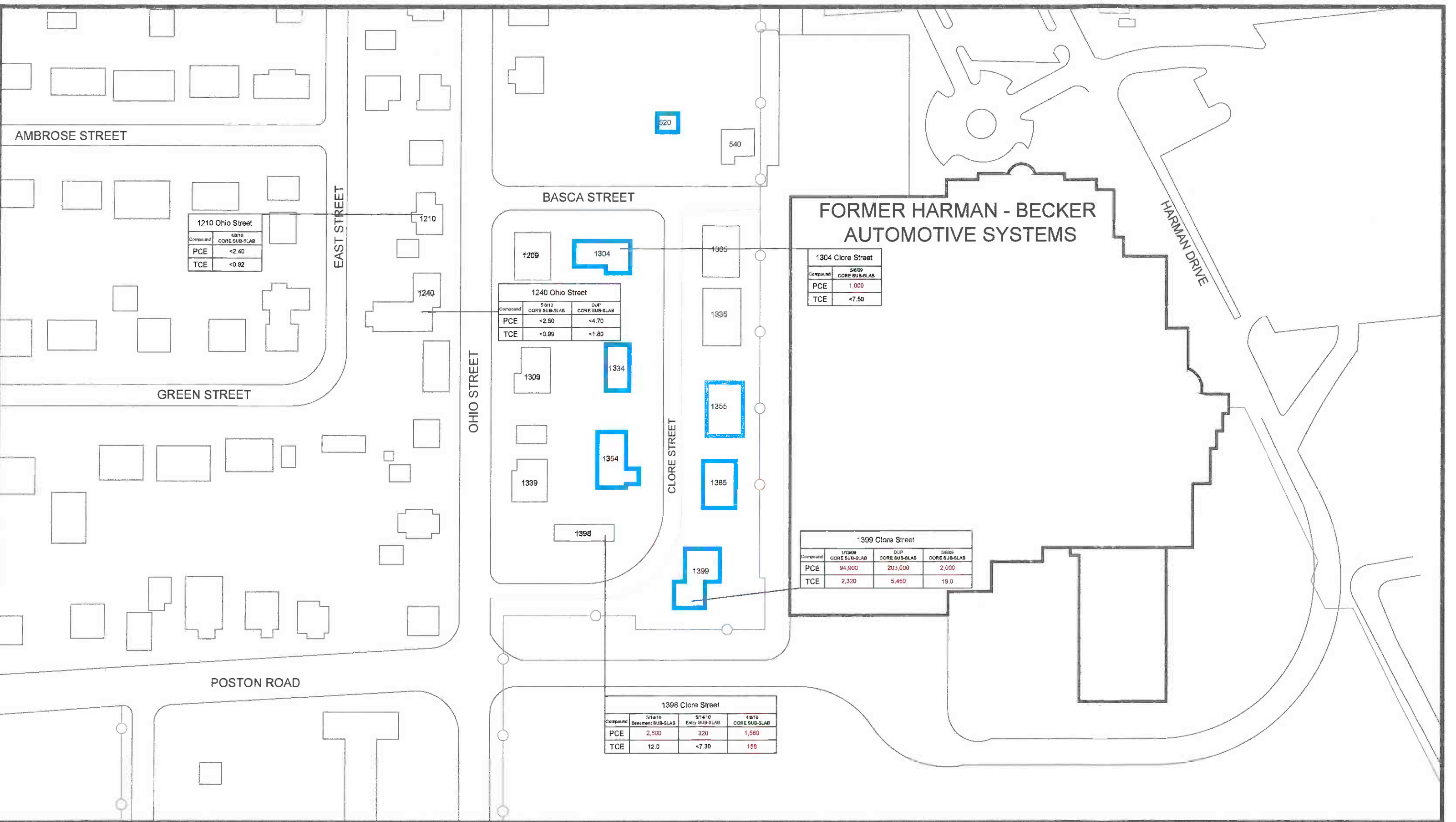
Indoor air vapor samples were collected from 11 single-family residences and one (1) four-unit apartment building from March through May 2010. Sub-slab vapor samples were collected from three (3) of the residences and the apartment building, during the same period. The locations of the residences are included as **Figure 1**. Seven (7) of the residences have vapor mitigation systems. The locations of the residences with systems are included on **Figures 2 and 3**.

1 Vapor Intrusion Sampling Procedures

Indoor air vapor samples were collected from 12 residential buildings, immediately downgradient of the Site, from March through May 2010. Sub-slab vapor samples were









Environmental Investigation & Remediation

Scale in Feet

1" = 100'-0"

LEGEND

DUP Duplicate Sample

PCE Tetrachloroethylene

TCE Trichloroethylene

All results in ug/m3

All Red Values are above IDEM 30 Year Chronic Indoor Air Action Level

PCE 32 ug/m3

TCE 12 ug/m3

Residential Sub-Slab Analytical Results Map

Former Harman - Becker

FIGURE # 3

PROJECT #3872

DRAWN BY: P.G.G.

DRAWN ON: 5/22/10

Table 1. Residential Indoor Air, Crawl Space, and Ambient Air VOC Analytical Results
Former Harman-Becker Automotive Systems
1201 South Ohio Street
Martinsville, Indiana

				All results in ug/m ³																														
Address	Home Owner	Sample ID	Date(s) Sampled	Acetone	Benzene	2-Butanone (MEK)	Chloromethane	Cyclohexane	Dichlorodifluoromethane	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethyl Acetate	Ethylbenzene	4-Ethyltoluene	n-Heptane	n-Hexane	4-Methyl-2-Pentanone (MIBK)	Methylene Chloride	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Acetate	Vinyl Chloride	Total Xylenes	All Other VOCs		
IDEM 30-Year Chronic Residential Indoor Air Action Level *				3,300	2.50	5,100	N/A	6,200	N/A	510	210	37.0	73.0	3,300	1,100	N/A	N/A	210	3,100	42.0	1,100	3.20	5,100	2,300	1.20	730	6.20	6.20	210	2.20	110	Various		
520 Basca Drive	Rhine	520 Basca Indoor LR	12/18 - 19/2008	NA	NA	NA	NA	NA	NA	<2.40	<2.40	<2.40	<2.40	NA	NA	NA	NA	NA	NA	NA	NA	4.50	NA	<3.20	12.40	NA	NA	NA	NA	<1.50	NA	NA		
		520 Basca Crawl	12/18 - 19/2008	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	6.30	NA	<1.50	<0.74	NA	NA	NA	NA	<0.70	NA	NA		
		520 Basca Outdoor	12/18 - 19/2008	NA	NA	NA	NA	NA	NA	<1.80	<1.80	<1.80	<1.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3.00	NA	<2.40	<1.20	NA	NA	NA	NA	<1.10	NA	NA	
		Vapor Mitigation System Installed 2/18/2009																																
		520 Basca Indoor LR	5/12 - 13/2009	NA	NA	NA	NA	NA	NA	<0.86	<0.84	<0.84	<0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.50	NA	<1.20	<1.10	NA	NA	NA	NA	<0.54	NA	NA	
		520 Basca Crawl	5/12 - 13/2009	NA	NA	NA	NA	NA	NA	<0.79	<0.78	<0.78	<0.78	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.60	NA	<1.10	<1.00	NA	NA	NA	NA	<0.50	NA	NA	
		520 Basca Outdoor	5/12 - 13/2009	NA	NA	NA	NA	NA	NA	<0.77	<0.76	<0.76	<0.76	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.30	NA	<1.00	<1.00	NA	NA	NA	NA	<0.49	NA	NA	
		520 Basca IA	3/17 - 3/18/2010	37.6	1.10	4.10	1.30	<0.94	1.60	<1.10	<1.10	<1.10	<1.10	<1.00	<1.20	<3.40	<1.10	<0.99	<1.10	2.60	<1.20	3.20	4.40	<1.50	<0.76	<1.50	<3.40	<3.40	3.00	<0.72	<2.40	BDL		
Vapor Mitigation System Upgraded 6/25/2010																																		
540 Basca Drive	Chastain	540 Basca Indoor LR	12/18 - 19/2008	NA	NA	NA	NA	NA	NA	<1.40	<1.40	<1.40	<1.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.40	NA	<1.90	<0.95	NA	NA	NA	NA	<0.90	NA	NA	
		540 Basca Crawl	12/18 - 19/2008	NA	NA	NA	NA	NA	NA	<1.30	<1.30	<1.30	<1.30	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2.20	NA	<1.70	<0.87	NA	NA	NA	NA	<0.83	NA	NA	
		540 Basca IA	3/17 - 3/18/2010	4.30	<0.87	<0.80	<0.56	<0.91	<1.30	<1.10	<1.10	<1.10	<1.10	1.20	<1.20	<3.40	<1.10	<0.96	<1.10	<0.95	<1.20	<1.90	<1.00	<1.50	<0.74	1.60	<3.40	<3.40	<0.95	<0.70	<2.40	BDL		
1210 Ohio Street	Johns	1210 Ohio IA 1F	3/30 - 31/2010	4.00	<0.81	0.90	<0.52	<0.85	<1.20	<1.00	<1.00	<1.00	<1.00	1.20	<1.10	<3.10	<1.00	<0.90	<1.00	1.50	<1.10	<1.80	1.70	<1.40	<0.69	<1.40	<3.10	<3.10	<0.89	<0.65	<2.20	BDL		
		1210 Ohio IA BSMT	3/30 - 31/2010	1.50	<0.81	<0.75	<0.52	<0.85	<1.20	<1.00	<1.00	<1.00	<1.00	<0.91	<1.10	<3.10	<1.00	<0.90	<1.00	<0.89	<1.10	<1.80	<0.96	<1.40	<0.69	<1.40	<3.10	<3.10	<0.89	<0.65	<2.20	BDL		
		DUP-1 (1210 Ohio IA BSMT)	3/30 - 31/2010	5.90	<0.93	<0.86	<0.60	<0.97	<1.40	<1.20	<1.20	<1.20	<1.20	1.20	<1.30	<3.60	<1.20	1.30	<1.20	3.60	<1.20	<2.00	2.90	<1.60	<0.79	<1.60	<3.60	<3.60	<1.00	<0.74	<2.50	BDL		
		AA-1	3/30 - 31/2010	13.5	<1.20	<1.10	<0.76	<1.20	<1.80	<1.50	<1.50	<1.50	<1.50	<1.30	<1.60	<4.50	<1.50	10.5	<1.50	73.8	<1.60	<2.50	<1.40	<2.00	<0.99	<2.00	<4.50	<4.50	<1.30	<0.94	<3.20	BDL		
1240 Ohio Street	Stierwalt	1240 Ohio IA BSMT	3/22 - 23/2010	13.0	18.3	<0.75	<0.52	8.80	3.00	<1.00	<1.00	<1.00	<1.00	<0.91	13.1	8.30	12.1	24.1	<1.00	<0.89	<1.10	<1.80	104	<1.40	<0.69	<1.40	24.6	7.00	<0.89	<0.65	71.2	BDL		
		1240 Ohio IA 1F	3/22 - 23/2010	32.7	26.0	6.30	<0.52	12.0	3.80	<1.00	<1.00	<1.00	<1.00	<0.91	20.2	11.1	16.9	33.7	<1.00	<0.89	<1.10	2.10	155	<1.40	<0.69	1.50	37.5	10.1	<0.89	<0.65	111	BDL		
		1240 Ohio IA 2F	3/22 - 23/2010	74.1	26.5	42.1	<0.56	13.2	3.90	<1.10	<1.10	<1.10	<1.10	<0.98	19.9	13.10	16.9	41.4	<1.10	<0.95	<1.20	2.10	143	<1.50	<0.74	1.70	44.1	12.6	<0.95	<0.70	109.5	BDL		
1309 Ohio Street	Thomas	1309 S. Ohio Indoor LR	12/16 - 17/2008	NA	NA	NA	NA	NA	NA	<1.40	<1.40	<1.40	<1.40	NA	NA	NA	NA	NA	NA	NA	NA	<2.40	NA	<1.90	<0.95	NA	NA	NA	NA	<0.90	NA	NA		
		1309 S. Ohio Crawl	12/16 - 17/2008	NA	NA	NA	NA	NA	NA	<1.20	<1.20	<1.20	<1.20	NA	NA	NA	NA	NA	NA	NA	NA	<2.10	NA	<1.60	<0.81	NA	NA	NA	NA	<0.72	NA	NA		
		1309 S. Ohio Outdoor	12/16 - 17/2008	NA	NA	NA	NA	NA	NA	<1.30	<1.20	<1.20	<1.20	NA	NA	NA	NA	NA	NA	NA	NA	<2.20	NA	<1.70	<0.85	NA	NA	NA	NA	<0.80	NA	NA		
		1309 Ohio IA	3/22 - 23/2010	<0.69	<0.93	<0.86	<0.60	<0.97	<1.40	<1.20	<1.20	<1.20	<1.20	<1.00	<1.30	<3.60	<1.20	<1.00	<1.20	<1.00	<1.20	<2.00	<1.10	<1.60	<0.79	<1.60	<3.60	<3.60	<1.00	<0.74	<2.50	BDL		
1304 Clore Street	Payne	1304 Clore Indoor LR	2/12 - 2/13/2009	NA	NA	NA	NA	NA	NA	<1.30	<1.30	<1.30	<1.30	NA	NA	NA	NA	NA	NA	NA	NA	8.00	NA	<1.70	<0.87	NA	NA	NA	NA	<0.83	NA	NA		
		1304 Clore Basement	2/12 - 2/13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.4	NA	2.10	<0.74	NA	NA	NA	NA	<0.70	NA	NA	
		1304 Clore Crawl	2/12 - 2/13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.00	NA	<1.50	<0.76	NA	NA	NA	NA	<0.72	NA	NA	
		1304 Clore Outdoor	2/12 - 2/13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.90	NA	<1.50	27.4	NA	NA	NA	NA	<0.70	NA	NA	
		Vapor Mitigation System Installed 3/16/2009																																
		1304 Clore Indoor LR	5/5 - 5/6/2009	NA	NA	NA	NA	NA	NA	<0.64	<0.63	<0.63	<0.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.10	NA	<0.86	<0.85	NA	NA	NA	NA	<0.85	NA	NA
		1304 Clore Basement	5/5 - 5/6/2009	NA	NA	NA	NA	NA	NA	<0.66	<0.65	<0.65	<0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.10	NA	<0.89	<0.88	NA	NA	NA	NA	<0.88	NA	NA
		1304 Clore Outdoor	5/5 - 5/6/2009	NA	NA	NA	NA	NA	NA	<0.66	<0.65	<0.65	<0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.10	NA	<0.89	<0.88	NA	NA	NA	NA	<0.88	NA	NA
		1304 Clore Crawl	5/5 - 5/6/2009	NA	NA	NA	NA	NA	NA	<0.66	<0.65	<0.65	<0.65	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.10	NA	<0.89	<0.88	NA	NA	NA	NA	<0.88	NA	NA	
1304 Clore IA	5/17 - 5/18/2010	48.0	4.80	7.10	1.50	2.10	<0.99	<0.80	<0.79	<0.79	<0.79	<0.79	NA	3.20	1.10	3.20	5.60	<5.10	2.10	<0.85	<1.40	27.0	<1.10	<1.10	2.90	4.10	1.10	<0.70	<0.51	14.6	BDL			
1304 Clore BSMT	5/17 - 5/18/2010	45.0	3.80	12.0	1.60	2.00	2.70	<0.80	<0.79	<0.79	<0.79	<0.79	NA	2.40	<0.98	2.90	5.60	<5																

Table 1. Residential Indoor Air, Crawl Space, and Ambient Air VOC Analytical Results
Former Harman-Becker Automotive Systems
1201 South Ohio Street
Martinsville, Indiana

				All results in ug/m ³																															
Address	Home Owner	Sample ID	Date(s) Sampled	Acetone	Benzene	2-Butanone (MEK)	Chloromethane	Cyclohexane	Dichlorodifluoromethane	1,1-Dichloroethane	1,1-Dichloroethene	trans-1,2-Dichloroethene	Ethyl Acetate	Ethylbenzene	4-Ethyltoluene	n-Heptane	n-Hexane	4-Methyl-2-Pentanone (MIBK)	Methylene Chloride	Styrene	Tetrachloroethene	Toluene	1,1,1-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Acetate	Vinyl Chloride	Total Xylenes	All Other VOCs				
IDEM 30-Year Chronic Residential Indoor Air Action Level *				3,300	2.50	5,100	N/A	6,200	N/A	510	210	37.0	73.0	3,300	1,100	N/A	N/A	210	3,100	42.0	1,100	3.20	5,100	2,300	1.20	730	6.20	6.20	210	2.20	110	Various			
1355 Clore Street	Bryant	1355 Clore Indoor LR	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	19.2	NA	<1.50	<0.74	NA	NA	NA	NA	NA	<0.70	NA	NA			
		1355 Clore Crawl	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.20	<1.20	<1.20	<1.20	NA	NA	NA	NA	NA	NA	NA	49.8	NA	<1.60	<0.81	NA	NA	NA	NA	NA	<0.77	NA	NA			
		1355 Clore Outdoor	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.30	<1.20	<1.20	<1.20	NA	NA	NA	NA	NA	NA	NA	NA	<2.20	NA	<1.70	<0.85	NA	NA	NA	NA	NA	<0.80	NA	NA		
		Vapor Mitigation System Installed 3/18/2009																																	
		1355 Clore Indoor LR	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.76	<0.74	<0.74	<0.74	NA	NA	NA	NA	NA	NA	NA	2.20	NA	<1.00	<1.00	NA	NA	NA	NA	NA	<0.48	NA	NA		
		1355 Clore Crawl	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.79	<0.78	<0.78	<0.78	NA	NA	NA	NA	NA	NA	NA	5.40	NA	<1.10	<1.00	NA	NA	NA	NA	NA	<0.50	NA	NA		
				1355 Clore IA	3/22 - 23/2010	89.4	15.8	6.00	<0.58	9.20	1.70	<2.20	<1.10	<1.10	4.30	11.4	8.40	10.9	24.6	23.8	<0.98	<1.20	<1.90	90.9	<1.50	<0.76	<1.50	19.6	5.30	<0.98	<0.72	64.6	BDL		
1385 Clore Street	Ferguson	1385 Clore Indoor LR	1/12 - 13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	847	NA	<1.50	14.8	NA	NA	NA	NA	NA	<0.70	NA	NA			
		1385 Clore Crawl	1/12 - 13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	1,100	NA	<1.50	24.7	NA	NA	NA	NA	NA	<0.70	NA	NA			
		1385 Clore Crawl (Dup)	1/12 - 13/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	1,020	NA	<1.50	21.1	NA	NA	NA	NA	NA	<0.70	NA	NA			
		1385 Clore Outdoor	1/12 - 13/2009	NA	NA	NA	NA	NA	NA	<1.00	<1.00	<1.00	<1.00	NA	NA	NA	NA	NA	NA	NA	NA	<1.80	NA	<1.40	<0.69	NA	NA	NA	NA	NA	<0.65	NA	NA		
		Vapor Mitigation System Installed 2/11/2009																																	
		1385 Clore Indoor LR	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.40	<1.40	<1.40	<1.40	NA	NA	NA	NA	NA	NA	NA	NA	121	NA	<1.80	4.40	NA	NA	NA	NA	NA	<0.86	NA	NA		
		1385 Clore Indoor BR	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.80	<1.80	<1.80	<1.80	NA	NA	NA	NA	NA	NA	NA	NA	125	NA	<2.40	5.10	NA	NA	NA	NA	NA	<1.10	NA	NA		
		1385 Clore Crawl	2/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	193	NA	<1.50	37.2	NA	NA	NA	NA	NA	<0.70	NA	NA		
		Vapor Mitigation System Upgraded 3/4/2009																																	
		1385 Clore Outdoor	3/10 - 11/2009	NA	NA	NA	NA	NA	NA	NA	<1.50	<1.50	<1.50	<1.50	NA	NA	NA	NA	NA	NA	NA	NA	3.10	NA	<2.00	<0.99	NA	NA	NA	NA	NA	<0.94	NA	NA	
		1385 Clore Indoor LR	3/10 - 11/2009	NA	NA	NA	NA	NA	NA	NA	<1.30	<1.30	<1.30	<1.30	NA	NA	NA	NA	NA	NA	NA	NA	184	NA	<1.70	5.40	NA	NA	NA	NA	NA	<0.83	NA	NA	
		1385 Clore Indoor BR	3/10 - 11/2009	NA	NA	NA	NA	NA	NA	NA	<1.50	<1.50	<1.50	<1.50	NA	NA	NA	NA	NA	NA	NA	NA	240	NA	<2.10	9.10	NA	NA	NA	NA	NA	<0.98	NA	NA	
		1385 Clore Indoor BR (DUP)	3/10 - 11/2009	NA	NA	NA	NA	NA	NA	NA	<0.81	<0.79	<0.79	<0.79	NA	NA	NA	NA	NA	NA	NA	NA	230	NA	0.61J	7.40	NA	NA	NA	NA	NA	<0.51	NA	NA	
		1385 Clore Crawl	3/10 - 11/2009	NA	NA	NA	NA	NA	NA	NA	<1.50	<1.50	<1.50	<1.50	NA	NA	NA	NA	NA	NA	NA	NA	147	NA	<2.00	3.80	NA	NA	NA	NA	NA	<0.94	NA	NA	
		1385 Clore Crawl	5/6 - 7/2009	NA	NA	NA	NA	NA	NA	NA	<0.72	<0.71	<0.71	<0.71	NA	NA	NA	NA	NA	NA	NA	NA	23.0	NA	<0.98	<0.96	NA	NA	NA	NA	NA	<0.96	NA	NA	
		1385 Clore Indoor LR	5/6 - 7/2009	NA	NA	NA	NA	NA	NA	NA	<0.68	<0.67	<0.67	<0.67	NA	NA	NA	NA	NA	NA	NA	NA	11.0	NA	<0.92	<0.90	NA	NA	NA	NA	NA	<0.43	NA	NA	
1385 Clore Outdoor	5/6 - 7/2009	NA	NA	NA	NA	NA	NA	NA	<0.68	<0.67	<0.67	<0.67	NA	NA	NA	NA	NA	NA	NA	NA	<1.10	NA	<0.92	<0.90	NA	NA	NA	NA	NA	<0.43	NA	NA			
1385 Indoor BR	5/6 - 7/2009	NA	NA	NA	NA	NA	NA	NA	<0.81	<0.80	<0.80	<0.80	NA	NA	NA	NA	NA	NA	NA	NA	15.0	NA	<1.10	<1.10	NA	NA	NA	NA	NA	<0.51	NA	NA			
				Vapor Mitigation System Not Running 5/28/2009																															
				1385 Clore IA	3/17 - 18/2010	9.30	0.95	1.40	1.00	<0.85	1.70	<2.00	<1.00	<1.00	<1.00	<1.00	<0.91	<1.10	<3.10	<1.00	<0.90	<1.00	<0.89	<1.10	20.9	4.30	<1.40	<0.69	1.60	<3.10	<3.10	<0.89	<0.65	<2.20	BDL
1398 Clore Street	Martin	1398 Clore Street Apt. #1 LR	5/13 - 14/2009	NA	NA	NA	NA	NA	NA	<0.69	<0.68	<0.68	<0.68	NA	NA	NA	NA	NA	NA	NA	<1.20	NA	<0.93	<0.92	NA	NA	NA	NA	NA	<0.44	NA	NA			
		1398 Clore APT 1 IA	5/7 - 5/8/2010	<0.64	<0.87	<0.80	<0.56	<0.91	<1.30	<1.10	<1.10	<1.10	<1.10	<0.98	<1.20	<3.40	<1.10	<0.96	<1.10	<0.95	<1.20	<1.90	<1.00	<1.50	<0.74	<1.50	<3.40	<3.40	<0.95	<0.70	<2.40	BDL			
		1398 Clore Street Apt. #2 LR	5/13 - 14/2009	NA	NA	NA	NA	NA	NA	NA	<0.71	<0.69	<0.69	<0.69	NA	NA	NA	NA	NA	NA	NA	<1.20	NA	<0.95	<0.94	NA	NA	NA	NA	NA	<0.45	NA	NA		
		1398 Clore APT 2 IA	5/7 - 5/8/2010	29.7	2.80	5.70	<0.58	1.50	1.50	<1.10	<1.10	<1.10	<1.10	<1.00	1.80	<3.40	2.00	3.30	<1.10	1.20	1.70	<1.90	10.0	<1.50	<0.76	<1.50	<3.40	<3.40	4.70	<0.72	6.60	BDL			
		1398 Clore Street Apt. #3 LR	5/13 - 14/2009	NA	NA	NA	NA	NA	NA	NA	<0.79	<0.78	<0.78	<0.78	NA	NA	NA	NA	NA	NA	NA	<1.30	NA	<1.10	<1.00	NA	NA	NA	NA	NA	<0.50	NA	NA		
		1398 Clore APT 3 IA	5/7 - 5/8/2010	14.7	<0.90	2.30	<0.58	<0.94	1.40	<1.10	<1.10	<1.10	<1.10	3.90	1.60	<3.40	1.20	<0.99	<1.10	1.30	<1.20	<1.90	2.40	<1.50	<0.76	<1.50	<3.40	<3.40	<0.98	<0.72	5.30	BDL			
		1398 Clore Street Apt. #4 LR	5/13 - 14/2009	NA	NA	NA	NA	NA	NA	NA	<0.71	<0.69	<0.69	<0.69	NA	NA	NA	NA	NA	NA	NA	<1.20	NA	<0.95	<0.94	NA	NA	NA	NA	NA	<0.45	NA	NA		
		1398 Clore APT 4 IA	5/7 - 5/8/2010	1.10	<0.87	<0.80	<0.56	1.10	<1.30	<1.10	<1.10	<1.10	<1.10	<1.10	<0.98	1.40	<3.40	1.40	1.20	<1.10	3.20	<1.20	<1.90	<1.00	<1.50	<0.74	<1.50	<3.40	<3.40	<0.95	<0.70	4.60	BDL		
		1398 Clore Street Apt. Basement	5/13 - 14/2009	NA	NA	NA	NA	NA	NA	NA	<0.69	<0.68	<0.68	<0.68	NA	NA	NA	NA	NA	NA	NA	NA	6.40	NA	<0.93	<0.92	NA	NA	NA	NA	NA	<0.44	NA	NA	
		1398 Clore BSMT IA	5/7 - 5/8/2010	<1.00	<1.40	<1.30	<0.89	<1.40	<2.10	<1.70	<1.70	<1.70	<1.70	<1.70	<1.60	<1.90	<5.30	<1.80	<1.50	<1.80	<1.50	<1.90	<3.00	<1.60	<2.30	<2.30	<5.30	<5.30	<1.50	<1.10	<3.70	BDL			
		DUP-2 (1398 Clore BSMT IA)	5/7 - 5/8/2010	14.4	<0.87	3.50	<0.56	1.30	1.50	<1.10	<1.10	<1.10	<1.10	<1.10	<0.98	1.50	<3.40	<1.10	<0.96	<1.10	1.40	<1.20	<1.90	1.90	<1.50	0.88	<1.50	<3.40	<3.40	4.30	<0.70	4.80	BDL		
1399 Clore Street	Sweany	1399 Clore Indoor LR	12/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.20	<1.20	<1.20	<1.20	NA	NA	NA	NA	NA	NA	NA	26.6	NA	<1.60	1.30	NA	NA	NA	NA	NA	<0.74	NA	NA			
		1399 Clore Basement	12/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.70	<1.70	<1.70	<1.70	NA	NA	NA	NA	NA	NA	NA	38.9	NA	<2.30	1.90	NA	NA	NA	NA	NA	<1.10	NA	NA			
		1399 Clore Crawl	12/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.10	<1.10	<1.10	<1.10	NA	NA	NA	NA	NA	NA	NA	NA	<1.90	NA	<1.50	<0.76	NA	NA	NA	NA	NA	<0.72	NA	NA		
		1399 Clore Outdoor	12/18 - 19/2009	NA	NA	NA	NA	NA	NA	<1.60	<1.60	<1.60	<1.60	NA	NA	NA	NA	NA	NA	NA	NA	<2.80	NA	<2.20	1.10	NA	NA	NA	NA	NA	<1.00	NA	NA		
		1399 Clore Basement	1/12 - 13/2009	NA	NA	NA	NA	NA	NA	<1.30	<1.30	<1.30	<1.30	NA	NA	NA	NA	NA	NA	NA	NA	26.7	NA	<1.70	<0.85	NA	NA	NA	NA	NA	<0.80	NA	NA		
		Vapor Mitigation System Installed 2/12/2009																																	
		1399 Clore Basement	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.69	<0.68	<0.68	<0.68	NA	NA	NA	NA	NA	NA	NA	<1.20	NA	<0.93	<0.92	NA	NA	NA	NA	NA	<0.44	NA	NA		
		1399 Clore Indoor LR	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.72	<0.71	<0.71	<0.71	NA	NA	NA	NA	NA	NA	NA	<1.20	NA	<0.98	<0.96	NA	NA	NA	NA	NA	<0.46	NA	NA		
1399 Clore Crawl	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.54	<0.53	<0.53	<0.53	NA	NA	NA	NA	NA	NA	NA	1.40	NA	<0.73	<0.72	NA	NA	NA	NA	NA	<0.34	NA	NA				
1399 Clore Outdoor	5/5 - 6/2009	NA	NA	NA	NA	NA	NA	NA	<0.69	<0.68	<0.68	<0.68	NA	NA	NA	NA	NA	NA</																	

Notes:

All samples analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) method TO-15.

ug/m³ - micrograms per meter cubed.

* - Indiana Department of Environmental Management (IDEM) Draft Vapor Intrusion Pilot Program Guidance Supplement (February 4, 2010).

RED Exceeds IDEM 30-Year Chronic Residential Indoor Air Action Level.

NA - Not analyzed.

N/A - Not applicable.

BDL - Results are below IDEM 30-year Residential Chronic Action Level.

IA - Indoor air sample.

AA - Ambient air sample

DUP - Duplicate sample.

1F - First floor.

2F - Second floor.

BSMT - Basement.

APT - Apartment.

LR - Living room (Keramida, Inc., nomenclature).

BR - Bedroom (Keramida, Inc., nomenclature).

Table 2. Residential Sub-Slab Vapor VOC Analytical Results
Former Harman-Becker Automotive Systems
1201 South Ohio Street
Martinsville, Indiana

Address	Home Owner	Sample	Date(s) Sampled	All results in ug/m ³																																				
				Acetone	Benzene	2- Butanone (MEK)	Carbon Disulfide	Chloroform	Chloromethane	Cyclohexane	1,2-Dichlorobenzene	Dichlorodifluoromethane	1,1-Dichloroethane	1,1,1-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethyl Acetate	Ethylbenzene	n-Heptane	Hexachloro-1,3-butadiene	n-Hexane	2-Hexanone	Methylene Chloride	4-Methyl-2-pentanone (MIBK)	Naphthalene	2-Propanol	Propylene	Styrene	Tetrachloroethene	Tetrahydrofuran	Toluene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes	All Other VOCs				
IDEM 30-Year Residential Sub-Slab Prompt Action Level *				N/A	25.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32.0	N/A	N/A	N/A	12.0	22.0	N/A	Various				
1210 Ohio Street	Johns	1210 Ohio SS	4/8/2010	353	<1.10	6.90	<1.10	<1.70	2.20	3.50	2.50	<1.70	<1.40	<1.40	<1.40	<1.40	5.10	2.20	<1.40	<3.70	19.2	<1.40	82.0	2.80	NA	NA	1.80	1.80	<2.40	<1.00	73.6	<1.80	<0.92	<0.87	8.50	BDL				
1240 Ohio Street	Stierwalt	1240 Ohio SS	5/6/2010	1.20	<1.20	<1.10	<1.10	3.10	<0.76	<1.20	<2.20	<1.80	<1.50	<1.50	<1.50	<1.50	<1.30	<1.60	<1.50	<1.50	6.30	<1.30	<1.50	<1.30	<1.50	<4.90	<4.50	<0.63	<1.60	<2.50	<1.10	<1.40	<2.00	<0.99	<0.94	4.20	BDL			
		DUP-1 (1240 Clore SS)	5/6/2010	32.6	<2.20	12.1	<2.10	27.4	<1.40	4.30	<4.00	<3.40	<2.80	<2.70	<2.70	<2.70	<2.50	<3.00	<2.80	<7.40	<2.40	<2.80	5.40	<2.80	9.80	1,340	<1.20	<2.90	<4.70	2.00		4.00	<1.80	<1.70	8.00	BDL				
1304 Clore Street	Payne	1304 Clore Sub-Slab	2/13/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.40	<1.40	<1.40	<1.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,990	NA	NA	746	2.50	<0.87	NA	NA				
		1304 Clore Sub-Slab (Dup)	2/13/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	<27.6	<27.2	<27.2	<27.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,100	NA	NA	631	<18.5	<17.5	NA	NA		
				Vapor Mitigation System Installed 3/16/2009																																				
		1304 Clore Sub-Slab	5/6/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.60	<5.50	<5.50	<5.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,000	NA	NA	16.0	<7.50	<3.60	NA	NA	
1398 Clore Street	Martin	1398 Clore Basement Sub-Slab	5/14/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<7.20	<7.10	<7.10	<7.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,600	NA	NA	13.0	12.0	<4.60	NA	NA
		1398 Clore Entry Sub-Slab	5/14/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.50	<5.40	<5.40	<5.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	320	NA	NA	<7.40	<7.30	<3.50	NA	NA
		1398 Clore SS	4/8/2010	201	2.10	7.30	1.40	<2.00	2.00	<1.40	<2.40	2.00	<1.60	<1.60	<1.80	<1.80	<1.50	<1.80	2.20	<4.40	6.20	2.50	18.2	<1.70	NA	NA	<0.70	<1.70	1,560	<1.20	8.20	4.70	158	<1.00	6.20	BDL	BDL			
1399 Clore Street	Sweaney	1399 Clore Sub-Slab	1/13/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.40	<1.40	<1.40	7.70	<1.40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	94,900	NA	NA	51.2	2,320	<0.87	NA	NA	
		1399 Clore Sub-Slab (Dup)	1/13/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.40	1.90	9.00	2.80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	203,000	NA	NA	51.8	5,450	0.92	NA	NA	
				Vapor Mitigation System Installed 2/12/2009																																				
		1399 Clore Sub-Slab	5/6/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<4.30	<4.20	<4.20	<4.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,000	NA	NA	<5.80	19.0	<2.70	NA	NA

Notes:
All samples analyzed for volatile organic compounds (VOCs) via United States Environmental Protection Agency (USEPA) method TO-15.
ug/m³ - micrograms per meter cubed.
* - Indiana Department of Environmental Management (IDEM) Draft Vapor Intrusion Pilot Program Guidance Supplement (February 4, 2010).

RED

 Exceeds IDEM 30-Year Residential Sub-Slab Prompt Action Level.
NA - Not analyzed.
N/A - Not applicable.
BDL - Results are below IDEM 30-Year Residential Sub-Slab Prompt Action Level.
DUP - Duplicate sample.
SS - Sub-slab sample.

Appendix A

Vapor Sampling Logs

SESCO
 GROUP

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 520 Basca Dr., Martinsville, IN
Collected By: T. Yates

Notes: Rhine Residence. Vapor mitigation system operating at time of sampling.

Sample Types:
IA - Indoor Air
SS - Sub-Slab
SG - Soil/Gas
AA - Ambient Air

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

 **SESCO**
G K O U P

[illegible]

Sample Types:
IA - Indoor Air
SS - Sub-Slab
SG - Soil/Gas
AA - Ambient Air

SESCO Vapor Sampling Sheet

Project Name: Former-Harman Becker Automotive Systems
 Project Number: 3872
 Task Number: 28

Project Address: 1201 South Ohio Street, Martinsville, Indiana
 Sample Location: 1210 Ohio St., Martinsville, IN
 Collected By: T. Yates



Sample Name	Sample Collection				Sample Type	Canister Type	Canister Number	Regulator Number	Initial Pressure (in./Hg)	Final Pressure (in./Hg)	Outdoor Temperature (°F)	Indoor Temperature (°F)	Analysis
	Start		Stop										
	Date	Time	Date	Time									
1210 Ohio IA 1F	3/30/2010	8:48	3/31/2010	8:51	IA	6L	1120	-	-28	0	45	71	VOCs TO-15
1210 Ohio IA BSMT	3/30/2010	8:49	3/31/2010	8:53	IA	6L	569	-	-28	0	45	68	VOCs TO-15
DUP-1	3/30/2010	8:49	3/31/2010	8:53	IA	6L	147	-	-28	1	45	68	VOCs TO-15
AA-1	3/30/2010	8:51	3/31/2010	8:54	AA	6L	962	-	-30	7	45	-	VOCs TO-15

Notes: Johns' residence. Home unoccupied during winter months. 1F - First Floor. BSMT - Basement.
DUP-1 collected at 1210 Ohio IA BSMT

Sample Types:
 IA - Indoor Air
 SS - Sub-Slab
 SG - Soil/Gas
 AA - Ambient Air

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

SESCO GROUP

[illegible]

Notes: Johns' residence. Sub-slab port installed on 4/6/2010 in basement.

Sample Types:
IA - Indoor Air
SS - Sub-Slab
SG - Soil/Gas
AA - Ambient Air

АНО «СЭС»

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1240 Ohio St., Martinsville, IN
Collected By: T. Yates

Notes: Stierwalt residence. Stierwalt repairs lawn mowers in his garage, restores clocks, & has industrial cleaners in residence.

Sample Types:
IA - Indoor Air
SS - Sub-Slab
SG - Soil/Gas
AA - Ambient Air

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

1201 South Ohio Street, Martinsville, Indiana
1240 Ohio St., Martinsville, IN
T. Yates

[illegible]

Notes: Stierwalt residence. Sub-slab port installed on 4/6/2010 in basement.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	28


SESCO
 GROUP

[illegible]

Notes: Thomas residence.

Thomas residence.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	28

1201 South Ohio Street, Martinsville, Indiana
1304 Clore St., Martinsville, IN
T. Yates



Payne residence. Basement had strong ammonia odor. Residence has two (2) vapor mitigation systems; one (1) for the basement and one (1) for the crawl space. Vapor mitigation systems operating at time of sampling.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

SESCO GROUP
Lombard Street, 10th Floor, New York, NY 10038

Notes: Brock residence. Vapor mitigation system operating at time of sampling.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1354 Clore St., Martinsville, IN
Collected By: T. Yates



Language used: English

[illegible]

Notes: Quakenbush residence. Vapor mitigation system operating at time of sampling.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

SESCO
 GROUP

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1355 Clore St., Martinsville, IN
Collected By: T. Yates

Notes: Bryant residence. Vapor mitigation system operating at time of sampling. Residents smoke cigarettes.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Project Name:	Former-Harman Becker Automotive Systems
Project Number:	3872
Task Number:	2B

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1385 Clore St., Martinsville, IN
Collected By: T. Yates

[illegible]

Notes: Ferguson residence. Residence vacant, electricity off, and vapor mitigation system not currently running. Vapor mitigation system not running at time of sampling.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

SESCO
GROUP

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1398 Clore St., Martinsville, IN
Collected By: T. Yates

Notes: Martin-owned apartment building. Sub-slab port installed on 4/6/2010 in basement.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

SESCO Vapor Sampling Sheet

Project Name: Former-Harman Becker Automotive Systems
 Project Number: 3872
 Task Number: 2B

Project Address:
 Sample Location:
 Collected By:

1201 South Ohio Street, Martinsville, Indiana
 1398 Clore St., Martinsville, IN
 T. Yates



Sample Name	Sample Collection				Sample Type	Canister Type	Canister Number	Regulator Number	Initial Pressure (in./Hg)	Final Pressure (in./Hg)	Outdoor Temperature (°F)	Indoor Temperature (°F)	Analysis
	Start		Stop										
	Date	Time	Date	Time									
1398 Clore APT 1	5/6/2010	10:09	5/7/2010	9:55	IA	6L	1275	330	-30	-1	57	77	VOCs TO-15
1398 Clore APT 2	5/6/2010	10:11	5/7/2010	9:56	IA	6L	1209	197	-30	-4	57	78	VOCs TO-15
1398 Clore APT 3	5/6/2010	10:13	5/7/2010	9:57	IA	6L	1211	214	-28	-1	57	72	VOCs TO-15
1398 Clore APT 4	40304	0.427083333	40305	0.415277778	IA	6L	1062	397	-28	-3	57	78	VOCs TO-15
1398 Clore BSMT	40304	0.433333333	40305	0.417361111	IA	6L	236	378	-30	-9	57	68	VOCs TO-15
DUP-2	40304	0.433333333	40305	0.417361111	IA	6L	1194	136	-26	0	57	68	VOCs TO-15

Notes: Martin-owned apartment building.
 Apartment #1 is vacant and has a strong ammonia smell.
 Apartment #2 has residents that smoke cigarettes.
 Apartment #3 has residents that smoke cigarettes.
 Apartment #4 has residents that smoke cigarettes.
 DUP-1 collected at 1398 Clore BSMT.

Sample Types:
 IA - Indoor Air
 SS - Sub-Slab
 SG - Soil/Gas
 AA - Ambient Air

Canister Types:
 1L - 1 liter canister
 6L - 6 liter canister

SESCO GROUP

Project Address: 1201 South Ohio Street, Martinsville, Indiana
Sample Location: 1399 Clore St., Martinsville, IN
Collected By: T. Yates

Notes: Sweeny residence. Vapor mitigation system not operating at time of sampling.

Sample Types:	Canister Types:
IA - Indoor Air	1L - 1 liter canister
SS - Sub-Slab	6L - 6 liter canister
SG - Soil/Gas	
AA - Ambient Air	

Appendix B

Indoor Air Building Survey Checklist



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Beverly Rhine Date: 3/17/10
Preparer's Affiliation: OWNER Phone #: 765-342-9908
Site Name: _____ Site #: _____

Site Address (include city and zip): 520 BASCA DRIVE
MARTINSVILLE, IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
<u>Beverly Rhine</u>	<u>520 BASCA DRIVE</u>	<u>F</u>	<u>MANAGER</u>

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: Single - Family Year constructed: 1952

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 1

Number of floors below grade: _____ (full basement crawl space / slab on grade)

Depth of basement below grade surface: NA ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): NA

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? *Yes / No* Sump pump? *Yes / No* Water in sump? *Yes / No*

Significant cracks present in basement floor? *Yes / No*

Significant cracks present in basement walls? *Yes / No*

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes / No*

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? *Yes / No / Don't know*

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard
other (specify): _____			

Type or ventilation system (circle all that apply):

central air conditioning	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify): _____		

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment (mowers, etc)		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor remover		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc		
Scented trees, wreaths, potpourri, etc.		
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? Yes No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes No

Do the occupants of the building have their clothes dry cleaned? Yes/No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes/No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes/No

If so, when and which chemicals? FERTILIZER

Has there ever been a fire in the building? Yes/No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes/No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

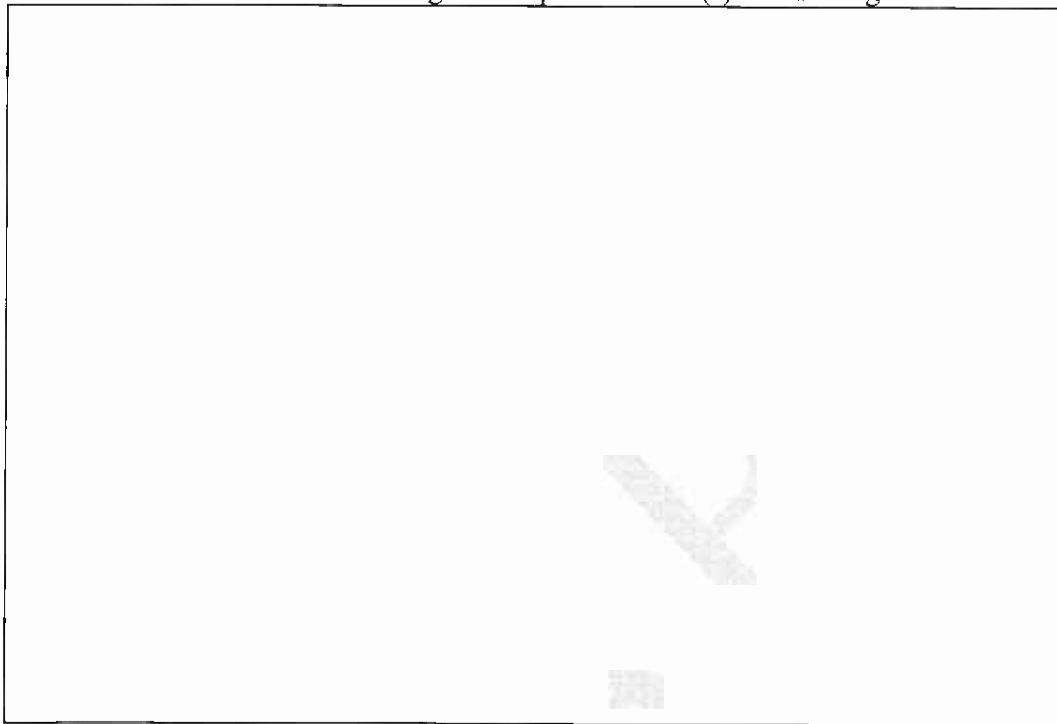
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: _____ Date: 3-22-2010

Preparer's Affiliation: _____ Phone #: _____

Site Name: Chastain home Site #: _____

Site Address (include city and zip): 540 BASCA DRIVE MARTINSVILLE, IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
Mark Chastain 31	540 BASCA DR	M	business owner
Joni Chastain 27	" Martinsville, IN	F	home-maker
Tarob Chastain 7	" 46151	M	
Jaylee Chastain 4	"	F	
Jayda Chastain 1 1/2	"	F	

-ACE Remodeling, LLC

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: Residential home Year constructed: 1953

Sensitive population: day care / nursing home / hospital / school / other (specify): family home

Number of floors at or above grade: 1 1/2

Number of floors below grade: _____ (full basement / crawl space / slab on grade)

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? Yes No Sump pump? Yes No Water in sump? Yes No

Significant cracks present in basement floor? N/A Yes / No

Significant cracks present in basement walls? N/A Yes / No

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No

Is there a whole house fan? Yes No

Septic system? Yes / Yes (but not used) No

Irrigation/private well? Yes / Yes (but not used) No

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? Yes No / Don't know

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans	outside - barn	
Gas-powered equipment (mowers, etc)	outside	
Kerosene storage cans	N/A	
Paints / thinners / strippers	barn	
Cleaning solvents	under sink - bleach	
Oven cleaners	N/A	
Carpet / upholstery cleaners	N/A	
Other house cleaning products	under sink - Windex/bleach	
Moth balls	N/A	
Polishes / waxes	N/A	
Insecticides	under - barn	
Furniture / floor remover	N/A	
Nail polish / polish remover		
Hairspray	under sink in bathroom	
Cologne / perfume	bedroom	
Air fresheners	bathroom	
Fuel tank (inside building)	N/A	NA
Wood stove or fireplace	N/A	NA
New Furniture / upholstery	N/A	
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc	N/A	
Scented trees, wreaths, potpourri, etc.	incense oil burner - kitchen hairs + been used in a week or two	
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? Yes / No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes / No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes / No

If so, when and which chemicals? last fall - *outside* home defense spray - ants.

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes / No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other (specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room): _____

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: Steady rain night before sampling

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

gas furnace was on during sampling.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Brad Stierwalt Date: 3-22-10

Preparer's Affiliation: _____ Phone #: _____

Site Name: _____ Site #: _____

Site Address (include city and zip): 1240 Ohio Street, Monticello, IN

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: RESIDENTIAL Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 2

Number of floors below grade: 1 (full basement) / crawl space / slab on grade)

Depth of basement below grade surface: 6 ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No

Significant cracks present in basement floor? Yes / No

Significant cracks present in basement walls? Yes / No

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No

Is there a whole house fan? Yes / No

Septic system? Yes / Yes (but not used) / No

Irrigation/private well? Yes / Yes (but not used) / No

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas electric fuel oil wood coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment (mowers, etc)		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor remover		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		
New carpeting / flooring		NA
Hobbies -- glues, paints, lacquers, photographic darkroom chemicals, etc		
Scented trees, wreaths, potpourri, etc.		
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes / No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? Yes No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes / No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor / Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room): _____

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical.
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Betty H. Payne Date: 5/18/10

Preparer's Affiliation: Homeowner Phone #: 765-342-8250

Site Name: _____ Site # _____

Site Address (include city and zip): 1304 Clare Dr. Martinsville, IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
Betty H. Payne 64	1304 Clare Dr. Mart.	F	Retired

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: _____ Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 1

Number of floors below grade: / (full basement / crawl space / slab on grade)

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? *Yes / No* Sump pump? *Yes / No* Water in sump? *Yes / No*

Significant cracks present in basement floor? *Yes / No*

Significant cracks present in basement walls? *Yes / No*

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes / No*

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? *Yes / No / Don't know*

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): yes (Ohio St)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans ✓	Garage	no
Gas-powered equipment (mowers, etc) ✓	Garage	no
Kerosene storage cans		
Paints / thinners / strippers ✓	Garage / Basement	no
Cleaning solvents ✓	House	no
Oven cleaners		
Carpet / upholstery cleaners ✓	Basement	no
Other house cleaning products	Kitchen	no
Moth balls ✓	Garage	no
Polishes / waxes ✓	Garage	no
Insecticides		
Furniture / floor remover		
Nail polish / polish remover		
Hairspray ✓	Bathroom	no
Cologne / perfume		
Air fresheners ✓	House	no
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc		
Scented trees, wreaths, potpourri, etc.		
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes No How often? _____

Last time someone smoked in the building? 25 hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? *Yes / No*

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? *Yes / No*

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? Yes / No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes / No If yes, when?

Has painting or staining been done in the building in the last 6 months? *Yes / No*

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () -

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify):

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other:

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

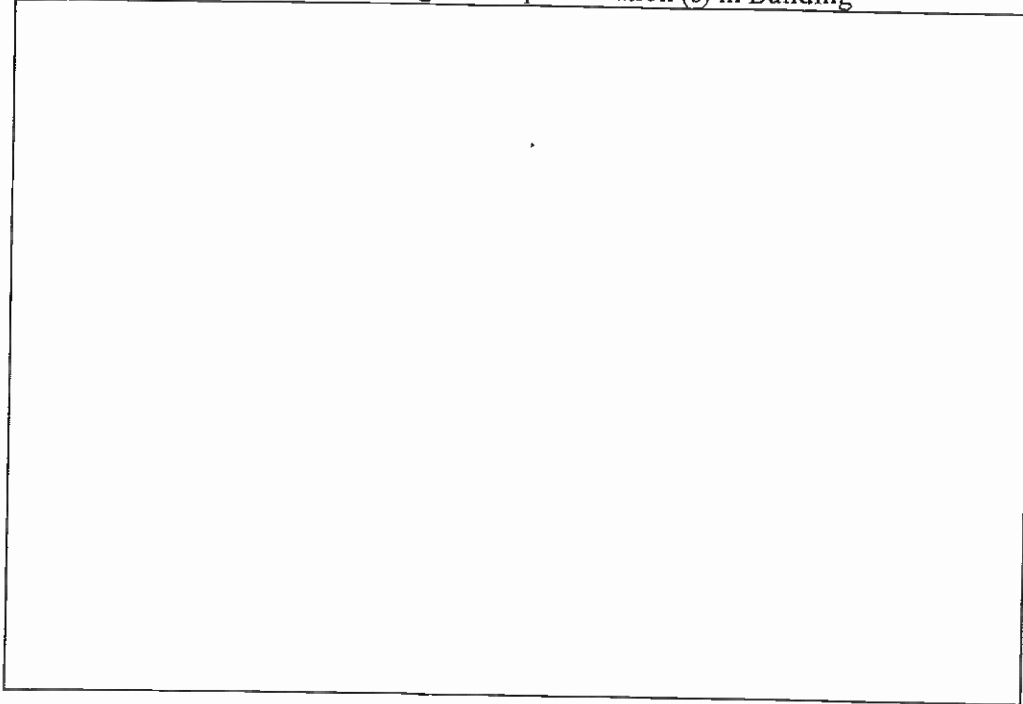
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were "Instructions for Occupants" followed? *Yes / No*

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?

Yes / No

Describe the general weather conditions: Rain

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical.
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.

5:22 0"



Steve Brock
Stephanie Brock / Property Owner

INDOOR AIR BUILDING SURVEY CHECKLIST

3-23-2010

Preparer's Name: _____ Date: _____

Preparer's Affiliation: _____ Phone #: _____

Site Name: _____ Site #: _____

Site Address (include city and zip): 1334 Clare Drive Martinsville IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
Stephen Brock	1334 Clare Dr.	M	High school / Paramedic
Stephanie Brock	" "	F	RN
Lucas Brock	" "	M	Student
Kara Brock	" "	F	" "

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: Ranch Home Year constructed: 21952

Sensitive population: day care / nursing home / hospital / school / other (specify): N/A

Number of floors at or above grade: 1

Number of floors below grade: 1 (full basement / crawl space / slab on grade) former garage converted to living space

Depth of basement below grade surface: 0 ft. Basement size: 0 ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): 0

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

* Vapor intrusion fans & Plastic Sheeting in crawl space placed in 2009 by Karmmedia. (Nothing Placed under Slab)

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No

Significant cracks present in basement floor? Yes / No NA

Significant cracks present in basement walls? Yes / No NA

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? NA / Yes / No

Is there a whole house fan? Yes / No

Septic system? Yes / Yes (but not used) / No

Irrigation/private well? Yes / Yes (but not used) / No

Type of ground cover outside of building: grass concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): via gas furnace

Type of ventilation system (circle all that apply):

central air conditioning ceiling mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): does not vent to outside

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III - Outside Contaminant Sources Former Harmon Becker Property

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): yes - Ohio Street

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s) All 1st Floor	Removed (Yes / No / NA)
Gasoline storage cans		NA
Gas-powered equipment (mowers, etc)		NA
Kerosene storage cans		NA
Paints / thinners / strippers	Utility Room	NO
Cleaning solvents	Kitchen & Utility Room	NO
Oven cleaners	Kitchen cabinet	NO
Carpet / upholstery cleaners	Kitchen cabinet	NO
Other house cleaning products	Kitchen cabinet / bathroom	NO
Moth balls		NA
Polishes / waxes	Kitchen cabinet	NO
Insecticides	Kitchen cabinet	NO
Furniture / floor remover	Kitchen cabinet	NO
Nail polish / polish remover	Hall closet / Sm bedroom KB	NO
Hairspray	Bathroom / Sm bedroom KB	NO
Cologne / perfume	Bathroom / Sm bedrooms X2	NO
Air fresheners	Living Room Not plugged in	NO
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery	none	
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc	Paints (cloth) bedroom (KB) Craft	NO
Scented trees, reaths, potpourri, etc.	Electric Candle burner – Living Room not utilized for 2-3 weeks	NO
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes (No) How often? _____

Last time someone smoked in the building? 1 month ago hours / days ago

Does the building have an attached garage directly connected to living space? Yes (No)

If so, is a car usually parked in the garage? Yes (No)

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes (No)

(Former garage prior to 1992)

Do the occupants of the building have their clothes dry cleaned? Yes / No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? Summer 2009

Do any of the occupants use solvents in work? Yes / No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No NA

Have any pesticides/herbicides been applied around the building or in the yard? Yes / No

If so, when and which chemicals? not in any recent years

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes / No

If yes, when? craft painting in LB's bedroom and where? (small project)

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room): Living Room 1st floor

Field/Sample ID# _____ Field/Sample ID # _____

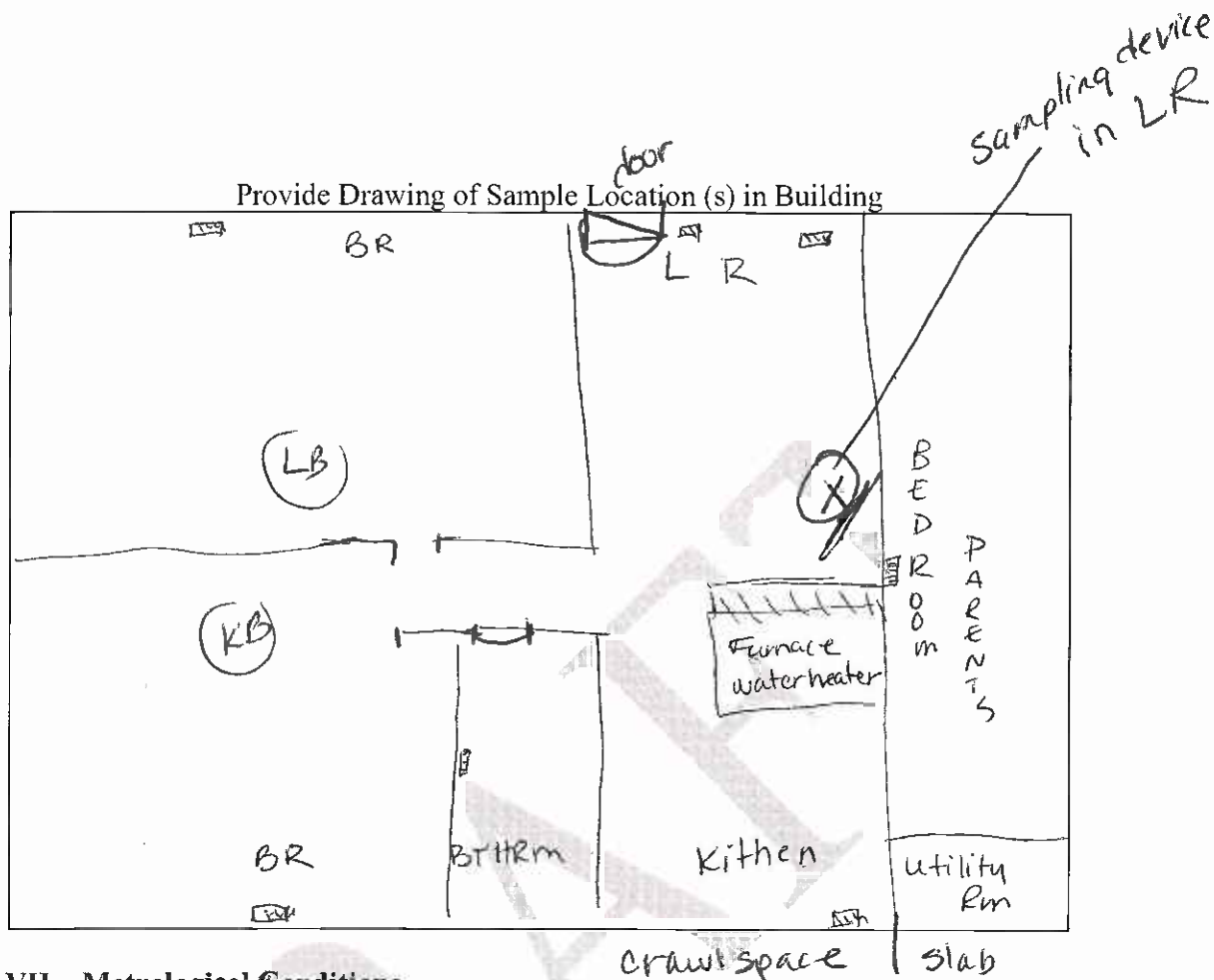
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Instructions given to occupants day sampling device placed – see notes on instructions for



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

This list was given to us on the day of placement of sampling device 3/22/2010

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents ✓
- Do not keep doors open. ✓
- Do not operate ventilation fans. (kitchen range hood used - does not ventilate outside)
- Do not use air fresheners or odor eliminators. (electric candle burner in place but not used)
- Do not smoke in the house to the extent practical. ✓
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater) ✓
- Do not use paints or varnishes. ✓
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners). Bathroom was cleaned 24 hrs prior (Limeaway)
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc. This was not allowed as we can not vacate our home.
- Do not partake in indoor hobbies that use solvents. ✓
- Do not apply pesticides. ✓
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks). ✓
- Do not operate or store automobiles in an attached garage. ✓

LSB



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Steve Quakenbush Date: 3-17-10

Preparer's Affiliation: _____ Phone #: _____

Site Name: _____ Site # _____

Site Address (include city and zip): 1354 Clove Street, Martinsville, IN

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: Brick Ranch Year constructed: 1950's

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 1

Number of floors below grade: 1 (full basement / crawl space / slab on grade)

Depth of basement below grade surface: 3 ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No

Significant cracks present in basement floor? Dir Yes / No

Significant cracks present in basement walls? Yes / No

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No

Is there a whole house fan? Yes / No

Septic system? Yes / Yes (but not used) / No

Irrigation/private well? Yes / Yes (but not used) / No

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? Yes / No / Don't know

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? unk.

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): no

Heavy vehicular traffic nearby (or other mobile sources): Street

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans	Shed	No
Gas-powered equipment (mowers, etc)	Garage Tank empty	No
Kerosene storage cans		
Paints / thinners / strippers	Garage	No
Cleaning solvents		No
Oven cleaners	None	No
Carpet / upholstery cleaners	None	No
Other house cleaning products	Glass, Dust spray	No
Moth balls		No
Polishes / waxes		
Insecticides	Shed	
Furniture / floor remover		
Nail polish / polish remover	None	
Hairspray	None	
Cologne / perfume	Both rooms	
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc		
Scented trees, wreaths, potpourri, etc.	Cond 10 Living room	No
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? Yes / No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes / No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes / No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes / No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

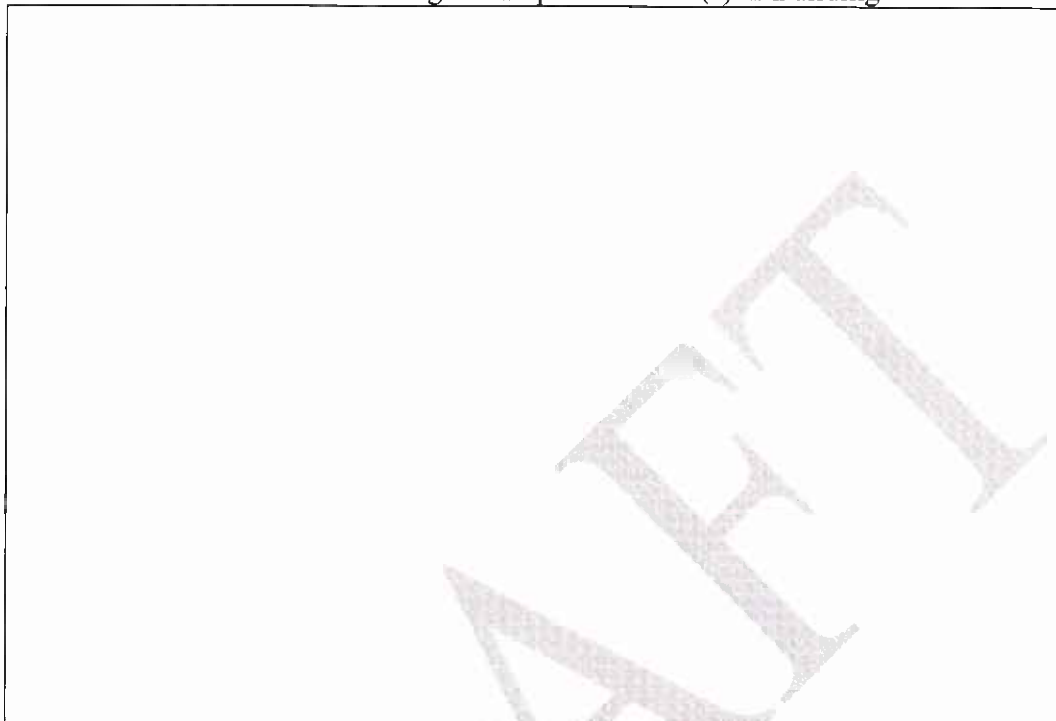
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: Clear - cool

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical.
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Sandy Dunn Date: 3-22-10

Preparer's Affiliation: _____ Phone #: _____

Site Name: _____ Site #: _____

Site Address (include city and zip): 1355 Clore Drive Martinsville, IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
Jonathan Dunn 46	1355 Clore Dr.	m	construction
Sandy Dunn 45		F	cook
Jon Dunn 20		m	construction
Amanda Dunn 16		F	cook-student
Rachel Dunn 14		F	student

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other _____

Describe building: _____ Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: _____

Number of floors below grade: _____ (full basement / crawl space / slab on grade)

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? Yes / No Sump pump? Yes / No Water in sump? Yes / No
Significant cracks present in basement floor? Yes / No
Significant cracks present in basement walls? Yes / No
Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Yes / No
Is there a whole house fan? Yes / No
Septic system? Yes / Yes (but not used) / No
Irrigation/private well? Yes / Yes (but not used) / No
Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____
Sub-slab vapor/moisture barrier in place? Yes / No / Don't know
Type of barrier: _____
Type of heating system (circle all that apply):
hot air circulation hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____
Type of ventilation system (circle all that apply):
central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____
Type of fuel utilized (circle all that apply):
Natural gas electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____
If yes: Site Name: _____ Site Number: _____
Other stationary sources nearby (gas stations, emission stacks, etc.): _____
Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans	—	
Gas-powered equipment (mowers, etc)	Garage	
Kerosene storage cans	—	
Paints / thinners / strippers	—	
Cleaning solvents	—	
Oven cleaners	under sink	NO
Carpet / upholstery cleaners	—	
Other house cleaning products	under sink	NO
Moth balls	—	
Polishes / waxes	—	
Insecticides	—	
Furniture / floor remover	—	
Nail polish / polish remover	—	
Hairspray	Bedroom	
Cologne / perfume	Bathroom	yes
Air fresheners	living room	yes
Fuel tank (inside building)	—	NA
Wood stove or fireplace	—	NA
New Furniture / upholstery	—	
New carpeting / flooring	—	NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc	—	
Scented trees, wreaths, potpourri, etc.	—	
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? ☒ Yes ☐ No How often? _____

Last time someone smoked in the building? _____ hours / days ago

Does the building have an attached garage directly connected to living space? ☒ Yes ☐ No

If so, is a car usually parked in the garage? Yes ☒ No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes ☒ No

Do the occupants of the building have their clothes dry cleaned? Yes No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical.
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Nadine Ferguson Date: 3-17-10

Preparer's Affiliation: _____ Phone #: 765-318-3044

Site Name: _____ Site #: _____

Site Address (include city and zip): 1385 Clear Lake Martinsville, IN 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
<u>None</u>			

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: Brick Ranch Year constructed: 1964

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 1

Number of floors below grade: 0 (full basement / crawl space / slab on grade)

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? *Yes / No* Sump pump? *Yes / No* Water in sump? *Yes / No*

Significant cracks present in basement floor? *Yes / No*

Significant cracks present in basement walls? *Yes / No*

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes / No*

Is there a whole house fan? *Yes* *No*

Septic system? *Yes / Yes (but not used)* *No*

Irrigation/private well? *Yes / Yes (but not used)* *No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? *Yes / No / Don't know*

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard
other (specify): <u>radiant floor</u>			

Type or ventilation system (circle all that apply):

<u>central air conditioning</u>	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify): _____		

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans		No
Gas-powered equipment (mowers, etc)		No
Kerosene storage cans		No
Paints / thinners / strippers		No
Cleaning solvents		No
Oven cleaners		No
Carpet / upholstery cleaners		No
Other house cleaning products		No
Moth balls		No
Polishes / waxes		No
Insecticides		No
Furniture / floor remover		No
Nail polish / polish remover		No
Hairspray		No
Cologne / perfume		No
Air fresheners		No
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		
New carpeting / flooring		NA
Hobbies – glues, paint , lacquers, photographic darkroom chemicals, etc		No
Scented trees, wreaths, potpourri, etc.		No
Other (specify):		None apply

None Entry

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes No How often? _____

Last time someone smoked in the building? YEARS hours / days ago

Does the building have an attached garage directly connected to living space? Yes No

If so, is a car usually parked in the garage? Yes No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes No

Do the occupants of the building have their clothes dry cleaned? Yes/No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes/No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes/No

Have any pesticides/herbicides been applied around the building or in the yard? Yes/No

If so, when and which chemicals? 3 yrs Ago Termites

Has there ever been a fire in the building? Yes/No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes/No

If yes, when? _____ and where? _____

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

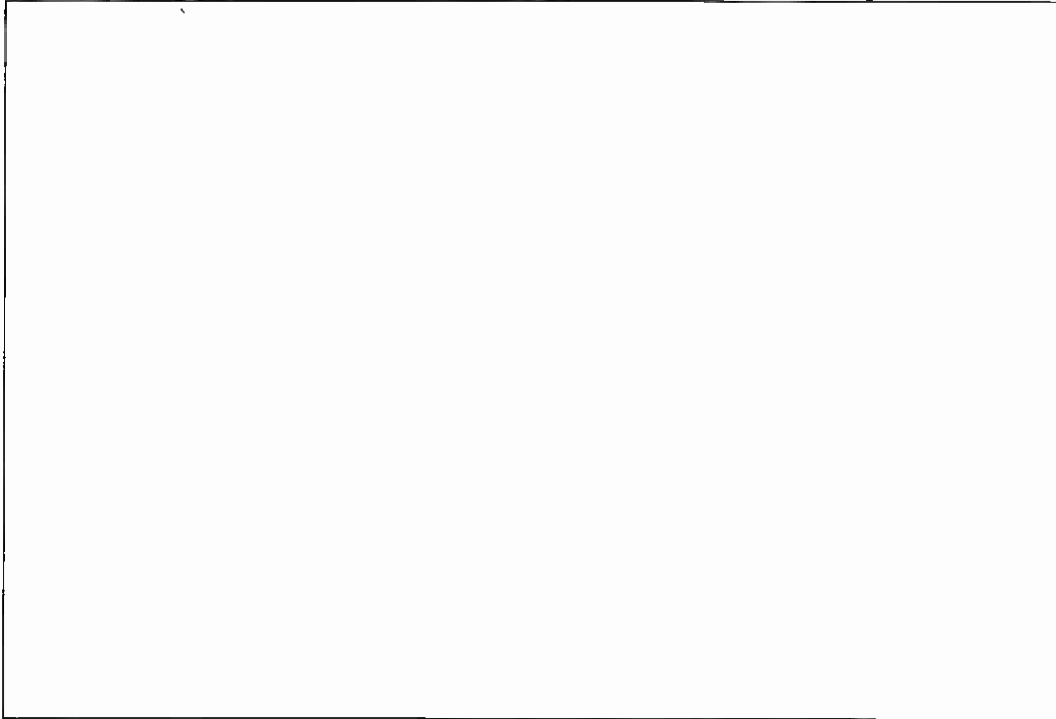
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.



INDOOR AIR BUILDING SURVEY CHECKLIST

Preparer's Name: Tonya Osborne Date: May 6, 2010
 Preparer's Affiliation: _____ Phone #: 765-343-2562
 Site Name: _____ Site #: _____
 Site Address (include city and zip): 1398 Clove Dr. Apt 4
Martinsville 46151

Part I – Occupants

List of Current Occupants/Occupation (include children)

Name (Age)	Address: (Lot # or apt. #)	Sex (M/F)	Occupation
John Doe (42)	112 South St. Lot # 12	M	geologist
Tonya Osborne 25	1398 Clove Dr. Apt 4	F	
Arianna Fulkord 19	"	F	-
Trevor Fulkord 3	"	M	-
Gabriella Fulkord 8 months	"	F	-

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / commercial / industrial / other

Describe building: _____ Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors at or above grade: 2

Number of floors below grade: _____ (full basement / crawl space / slab on grade)

Depth of basement below grade surface: _____ ft. Basement size: _____ ft²

Basement floor construction: concrete / dirt / slab / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify): _____

Basement sump present? *Yes / No* Sump pump? *Yes / No* Water in sump? *Yes / No*

Significant cracks present in basement floor? *Yes / No*

Significant cracks present in basement walls? *Yes / No*

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes / No*

Is there a whole house fan? *Yes / No*

Septic system? *Yes / Yes (but not used) / No*

Irrigation/private well? *Yes / Yes (but not used) / No*

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Sub-slab vapor/moisture barrier in place? *Yes / No / Don't know*

Type of barrier: _____

Type of heating system (circle all that apply):

hot air circulation hot air radiation wood steam radiation
heat-pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

central air conditioning mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

Natural gas / electric / fuel oil / wood / coal / solar / kerosene / other (specify): _____

Part III – Outside Contaminant Sources

Contaminated site within 50-ft (BTEX) or 100-ft (Chlorinated)? _____

If yes: Site Name: _____ Site Number: _____

Other stationary sources nearby (gas stations, emission stacks, etc.): _____

Heavy vehicular traffic nearby (or other mobile sources): _____

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor & room), and whether the item was removed from the building 48 hours prior to the indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the start of the indoor air sampling event.

Potential Sources	Location (s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment (mowers, etc)		no
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		no
Oven cleaners		no
Carpet / upholstery cleaners		no
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor remover		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		no
Air fresheners		no
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New Furniture / upholstery		NA
New carpeting / flooring		NA
Hobbies – glues, paints, lacquers, photographic darkroom chemicals, etc		NA
Scented trees, wreaths, potpourri, etc.		NA
Other (specify):		

Part V – Miscellaneous Items

Do any occupants of the building smoke? Yes / No How often? 2 people 2 packs/day

Last time someone smoked in the building? 8:00 a.m. hours / days ago

Does the building have an attached garage directly connected to living space? Yes / No

If so, is a car usually parked in the garage? Yes / No

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? Yes / No

Do the occupants of the building have their clothes dry cleaned? Yes No

If yes, how often? Weekly / monthly / 3-4 times a year

When was the last dry cleaned garment brought home? _____

Do any of the occupants use solvents in work? Yes No

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Yes / No

Have any pesticides/herbicides been applied around the building or in the yard? Yes No

If so, when and which chemicals? _____

Has there ever been a fire in the building? Yes / No If yes, when? _____

Has painting or staining been done in the building in the last 6 months? Yes / No

If yes, when? _____ and where? Kitchen apt 4 hallway

Part VI – Sampling Information

Company/Consultant: _____ Phone number: () _____ - _____

Sample Source: Indoor Air / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Sampler Type: 400 mL – 1.0 L Summa Canister / 6 L Summa Canister / Other
(specify): _____

Analytical Method: TO-14A / TO-15 / TO-15 SIM / other: _____

Laboratory: _____

Sample locations (floor, room):

Field/Sample ID# _____ Field/Sample ID # _____

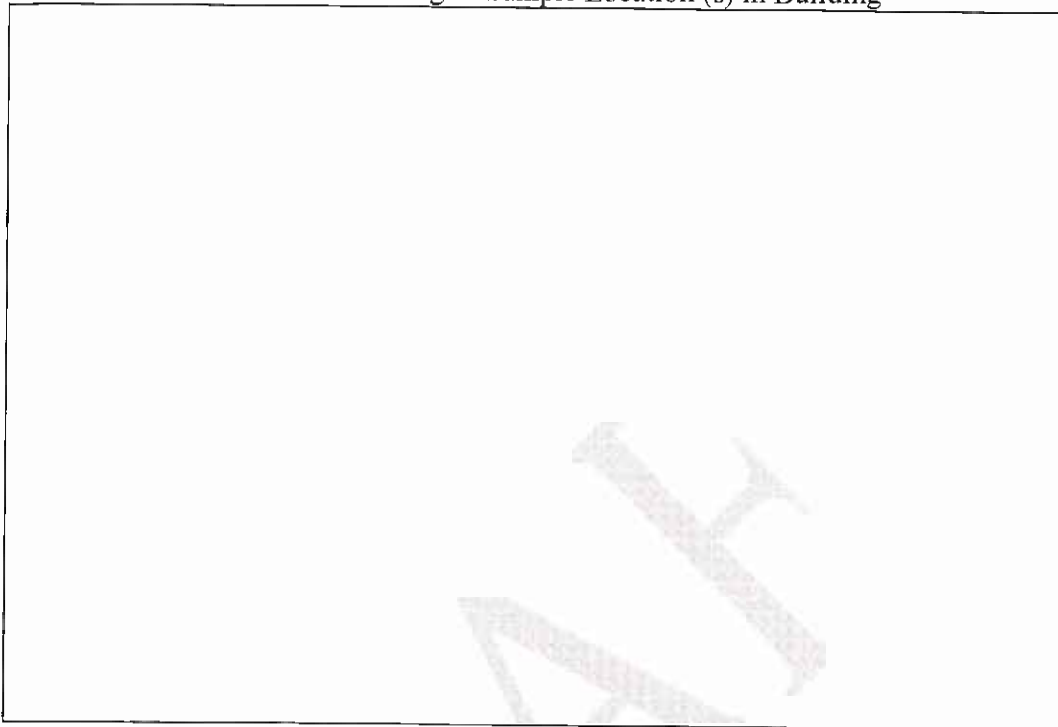
Field/Sample ID# _____ Field/Sample ID # _____

Field/Sample ID# _____ Field/Sample ID # _____

Were “Instructions for Occupants” followed? Yes / No

If not, describe modifications: _____

Provide Drawing of Sample Location (s) in Building



Part VII – Metrological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event?
Yes / No

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

Recommended Instructions for Residents

The following is a suggested list for residents to follow (to the extent practical) in order to reduce interference in obtaining representative samples. IDEM suggests that these items be followed starting at least 48 hours prior to and during the sampling event.

- Do not open windows, fireplace opening or vents
- Do not keep doors open.
- Do not operate ventilation fans.
- Do not use air fresheners or odor eliminators.
- Do not smoke in the house to the extent practical.
- Do not use wood stoves, fireplace or auxiliary heating equipment (e.g., kerosene heater)
- Do not use paints or varnishes.
- Do not use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners, and floor cleaners).
- Do not use cosmetics, including hair spray, nail polish, nail polish remover, perfume, etc.
- Do not partake in indoor hobbies that use solvents.
- Do not apply pesticides.
- Do not store containers of gasoline, oil or petroleum-based or other solvents within the house or attached garage (except for fuel oil tanks).
- Do not operate or store automobiles in an attached garage.

Appendix C

Laboratory Analytical Data

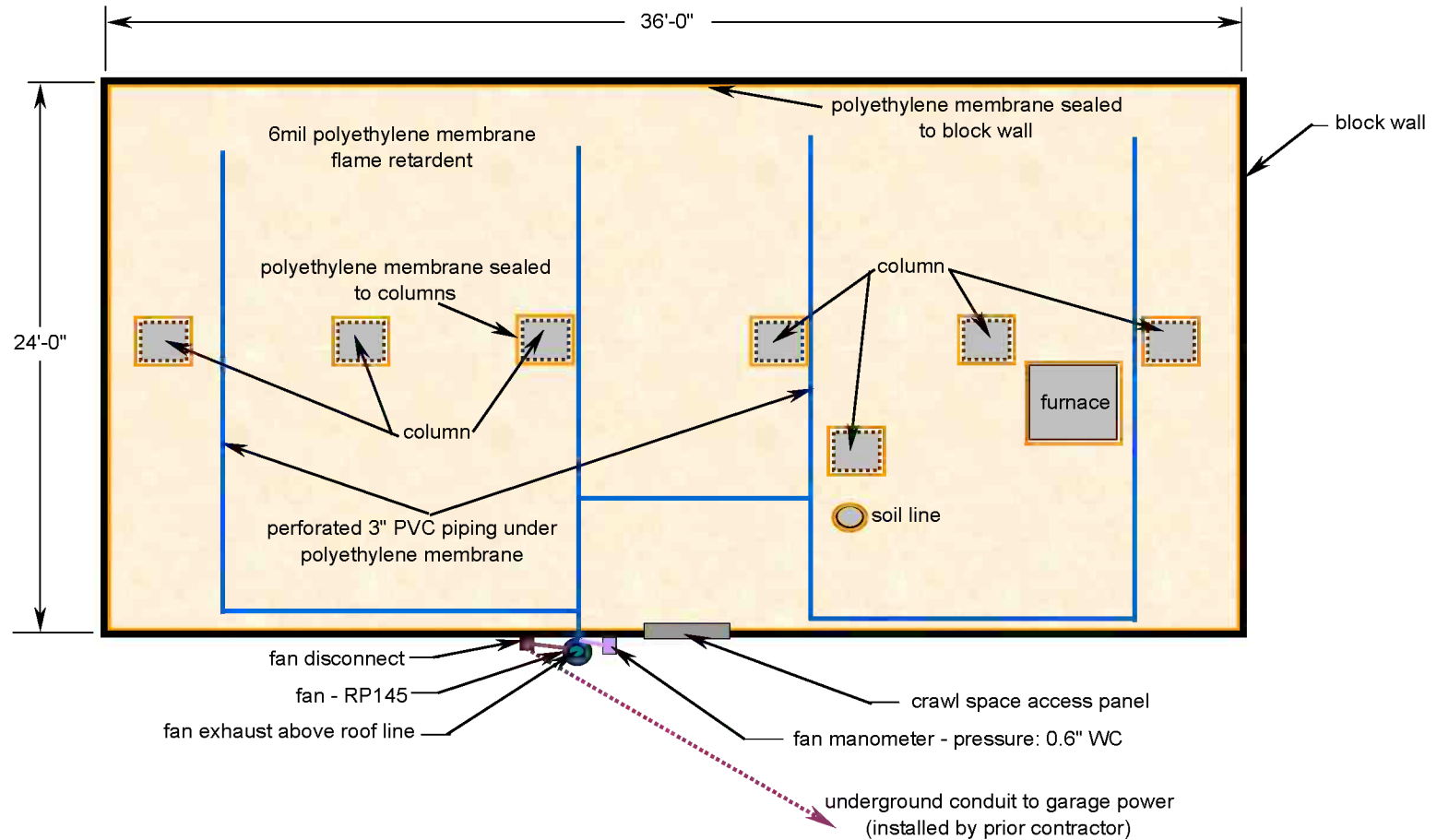
Appendix D

Individual Residential Indoor Air Reports

Appendix E

520 Basca Drive Sub-Membrane Depressurization System Schematics

Basca Drive



Alpine Environmental Services, Inc.
1146 Central Avenue
Albany, NY 12205
(518)453-0146

P. Schnitzer

June 2010

Revision 0

Sub-Membrane Depressurization System

Installed June 25, 2010

520 Basca Drive
Martinsville, Indiana 46151