Appendix B

Data validation was performed for six analytical laboratory reports issued by Columbia Analytical Services identified as P1200947, P1201004, P1201043, P1201074, P1201121 and P1201247. Indoor air samples were analyzed for EPA Methods TO-15, TO-15 SIM and air-phase petroleum hydrocarbons (APH). Laboratory quality assurance/quality control (QA/QC) provided for each analysis was evaluated. All holding times were met for each analysis and method blank results were non-detect for all analyses. Laboratory control sample (LCS) spike recoveries were met for all analyses and surrogate spike recoveries were acceptable for the TO-15 methods. All laboratory duplicate results were acceptable. A small number of results required qualification due to field duplicate results. Co-elution of peaks was observed in two samples with high concentrations, however, this did not affect the quality of the data. Overall, the laboratory results demonstrated an acceptable level of accuracy (LCS and surrogate results) and precision (duplicate results). The few samples requiring qualification are all considered usable results.

Columbia Analytical Services
Service Request # P1200947

Sample ID	Chemical	Reported Conc. (ug/m^3)	Lab Flag	Qualified Value (ug/m^3)	Flag	Note
03-1F-030512	n-Nonane	3.6		3.6	J	(1)
01-1F-030512	methylene chloride	0.83		0.83	J	(2)
	vinyl acetate	8.1	U	8.1	UJ	(3)
	methyl methacrylate	1.9		1.9	J	(4)
	n-butyl acetate	4.3		4.3	J	(4)
	vinyl chloride	0.048		0.048	J	(2)
	TCE	0.29		0.29	J	(4)
	naphthalene	0.36		0.36	J	(4)
	C9-C12 aliphatics	21		21	J	(4)
	C9-C10 aromatics	12		12	J	(2)
51-1F-030512	methylene chloride	0.86	U	0.86	UJ	(5)
	vinyl acetate	18		18	J	(6)
	methyl methacrylate	3.2		3.2	J	(4)
	n-butyl acetate	3		3	J	(4)
	vinyl chloride	0.043	U	0.043	UJ	(5)
	TCE	0.47		0.47	J	(4)
	naphthalene	0.21		0.21	J	(4)
	C9-C12 aliphatics	40		40	J	(4)
	C9-C10 aromatics	8.6	U	8.6	UJ	(5)

Notes:
(1): Detected value is qualified as estimated and flagged with a J qualifier due to coelution with a non-target compound. The result may be biased high.
(2): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the parent sample but nondetect in the field duplicate. The result may be biased high.
(3): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the parent sample but detected in the field duplicate. The result may be biased low.
(4): Value is qualifed as estimated and flagged with a J qualifier based on a high relative percent difference (RPD) calculated between parent and field duplicate samples.
(5): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the field duplicate but detected in the parent sample. The result may be biased low.
(6): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the field duplicate but nondetect in the parent sample. The result may be biased high.

Columbia Analytical Services
Service Request # P1201043

Sample ID	Chemical	Reported Conc. (ug/m^3)	Lab Flag	Qualified Value (ug/m^3)	Flag	Note
15-1F-031212	Benzene	0.78		0.78	J	(1)
	m,p-Xylenes	1.6		1.6	J	(1)
	Tetrachloroethene	0.098		0.098	J	(2)
	C9-C12 aliphatics	15	U	15	UJ	(3)

52-1F-031212	Benzene	0.88	U	0.88	UJ	(4)
	m,p-Xylenes	1.8	U	1.8	UJ	(4)
	Tetrachloroethene	0.14		0.14	J	(2)
	C9-C12 aliphatics	19		19	J	(5)

Notes:
(1): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the sample but nondetect in the laboratory duplicate. The result may be biased high.
(2): Value is qualifed as estimated and flagged with a J qualifier based on a high relative percent difference (RPD) calculated between parent and field duplicate samples.
(3): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the parent sample but detected in the field duplicate. The result may be biased low.
(4): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the field duplicate but detected in the parent sample. The result may be biased low.
(5): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the field duplicate but nondetect in the parent sample. The result may be biased high.

Columbia Analytical Services
Service Request # P1201121

Sample ID	Chemical	Reported Conc. (ug/m^3)	Lab Flag	Qualified Value (ug/m^3)	Flag	Note
26-1F-031912	2-Propanol	11		11	J	(1)
19-1F-031412	Propene	2.4		2.4	J	(2)
	2-Propanol	12		12	J	(2)
	Tetrachloroethene	0.070		0.070	J	(2)
	C9-C12 aliphatics	17	U	17	UJ	(3)
53-1F-031412	Propene	0.72	U		UJ	(4)
	2-Propanol	1.4	U		UJ	(4)
	Tetrachloroethene	0.036	U		UJ	(4)
	C9-C12 aliphatics	20			J	(5)

Notes:
(1): Detected value is qualified as estimated and flagged with a J qualifier due to coelution with a non-target compound. The result may be biased high.
(2): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the sample but nondetect in the laboratory duplicate. The result may be biased high.
(3): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the parent sample but detected in the field duplicate. The result may be biased low.
(4): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the field duplicate but detected in the parent sample. The result may be biased low.
(5): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the field duplicate but nondetect in the parent sample. The result may be biased high.

Columbia Analytical Services
Service Request # P1201319

Sample ID	Chemical	Reported Conc. (ug/m^3)	Lab Flag	Qualified Value (ug/m^3)	Flag	Note
40-1F-032812	Trichlorotrifluoroethane	0.88	U	0.88	UJ	(1)
	Naphthalene	0.42		0.42	J	(2)
	1,2-Dichloroethane	0.36		0.36	J	(2)
	C9-C12 aliphatics	30		30	J	(2)
55-1F-032812	Trichlorotrifluoroethane	0.82		0.82	J	(3)
	Naphthalene	0.30		0.30	J	(2)
	1,2-Dichloroethane	0.24		0.24	J	(2)
	C9-C12 aliphatics	19		19	J	(2)

Notes:
(1): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the parent sample but detected in the field duplicate. The result may be biased low.
(2): Value is qualifed as estimated and flagged with a J qualifier based on a high relative percent difference (RPD) calculated between parent and field duplicate samples.
(3): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the field duplicate but nondetect in the parent sample. The result may be biased high.

Columbia Analytical Services
Service Request # P1201320

Sample ID	Chemical	Reported Conc. (ug/m^3)	Lab Flag	Qualified Value (ug/m^3)	Flag	Note
29-1F-032612	Propene	5.0		5.0	J	(1)
	2-Propanol	21		21	J	(1)
	Chloromethane	0.77		0.77	J	(2)
	Ethyl acetate	1.6		1.6	J	(2)
	n-Nonane	0.88		0.88	J	(2)
	d-Limonene	11		11	J	(1)
	Naphthalene	0.92		0.92	J	(1)
DUP-54	Propene	12		12	J	(1)
	2-Propanol	67		67	J	(1)
	Chloromethane	0.96	U	0.96	UJ	(3)
	Ethyl acetate	1.9	U	1.9	UJ	(3)
	n-Nonane	0.96	U	0.96	UJ	(3)
	d-Limonene	7.0		7.0	J	(1)
	Naphthalene	0.63		0.63	J	(1)

Notes:
(1): Value is qualifed as estimated and flagged with a J qualifier based on a high relative percent difference (RPD) calculated between parent and field duplicate samples.
(2): Value is qualified as estimated and flagged with a J qualifier as the chemical was detected in the sample but nondetect in the laboratory duplicate. The result may be biased high.
(3): Nondetect value is qualified as estimated and flagged with a UJ qualifier as the chemical was not detected in the field duplicate but detected in the parent sample. The result may be biased low.