APPENDIX F

Analytical Data Quality Evaluation - SGS Accutest vs. TestAmerica

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Analytical Data Quality Evaluation - SGS Accutest vs. TestAmerica

- Table F-1 - Analytical Results Comparison of Contaminant Detections and RPD Calculations - June 2016 Split Samples SGS Accutest vs. TestAmerica

- Table F-2 - Summary of Volatile Organic Compounds (VOCs) in Groundwater - June 2016 Split Samples SGS Accutest vs. TestAmerica

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Appendix F
Analytical Data Quality Evaluation
SGS Accutest vs. TestAmerica

In June 2016, a comparative evaluation of analytical sample data (collected from 36 Site monitoring wells) independently reported by SGS Accutest and TestAmerica was completed as a way of quantifying the data variability between the laboratories, and ultimately support the laboratory switch from SGS Accutest to TestAmerica.

The split samples were collected from monitoring wells that have historically displayed high (> 100 µg/L), medium (10 to 100 µg/L), and low (non-detect to 10 µg/L) concentrations of VOCs and 1,4-dioxane. A table (Table F-1) summarizing the laboratories analytical data for contaminants detected above MDL values is presented in this appendix. Tables F-2 and F-3 summarize the VOC and 1,4-dioxane analytical results for the split samples. As shown in the attached Table F-1, the majority of detections show very good agreement between the two laboratories. Twelve compounds (acetone, benzene, chlorobenzene, cis-1,2-DCE, cyclohexane, dichlorofluoromethane, ethylbenzene, 1,1-DCA, 1,1-DCE, 1,2-DCA, 1,3-dichlorobenzene, MEK) were detected at very low concentrations by one laboratory and not the other.[1] Refer to Tables F-2 and F-3 for review of all the analytical data (including non-detects).

Different dilutions performed by each lab as well as the slight, non-homogeneous nature of the sample matrix could be the reasons for the varying results.

Due to the satisfactory precision between results from both laboratories and similarity of results in the 36 monitoring wells evaluated relative to historical project data, it was concluded that any data generated by the new laboratory (TestAmerica) are reliable and may be used for decision-making purposes.

[1] Discrepancies in constituent detections (i.e., detect vs. non-detect) occurred because one of the laboratories achieved lower MDLs, detecting certain contaminants at significantly lower concentrations.

APPENDIX F

Analytical Data Quality Evaluation - SGS Accutest vs. TestAmerica

• Table F-1 - Analytical Results Comparison of Contaminant Detections and RPD Calculations - June 2016 Split Samples SGS Accutest vs. TestAmerica

Appendix F - Table F-1
Analytical Results Comparison of Contaminant Detections and RPD Calculations
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

Client Sample ID:	Compound	GWQS	Units	SGS Accutest Result		TestAmerica Result	
MW-201A_PR21.75	Tetrachloroethene	*1*	ppb	0.76	J	**1.5**	
MW-171A_PR26.75	trans-1,2-Dichloroethene	100	ppb	0.45	J	0.84	J
MW-201_PR28.75	trans-1,2-Dichloroethene	*100*	ppb	5.8		3.6	
DW-31C_PR436.8	1,4-Dioxane	*0.4*	ppb	**11.5**		**7.3**	
MW-201_PR28.75	Trichloroethene	*1*	ppb	***399***		**260**	
MW-376C_PR119.8	cis-1,2-Dichloroethene	*70*	ppb	1.4		0.93	J
DW-29C_PR438.8	Tetrachloroethene	*1*	ppb	**22.4**		**15**	
DW-44B_PR256.8	1,4-Dioxane	*0.4*	ppb	***58.2***		**40**	
MW-201B_PR41.8	Vinyl Chloride	*1*	ppb	***9.9***		**14**	
MW-171A_PR26.75	1,1-Dichloroethene	*1*	ppb	**1.3**		0.93	J
MW-171A_PR26.75	Vinyl Chloride	*1*	ppb	0.48	J	0.35	J
DW-13B_PR171.75	1,4-Dioxane	*0.4*	ppb	**38.7**		**53**	
MW-104B_PR30.1	1,1-Dichloroethene	*1*	ppb	**1.5**		**1.1**	
MW-353C_PR124.25	Acetone	*6000*	ppb	135		100	
DW-34B_PR286.75	1,4-Dioxane	*0.4*	ppb	**64**		***47.6***	
MW-377C_PR109.8	Trichloroethene	*1*	ppb	**12.1**		**9**	
MW-104B_PR30.1	trans-1,2-Dichloroethene	100	ppb	1.6		1.2	
DW-42A_PR103.8	Acetone	*6000*	ppb	212		160	
MW-201_PR28.75	Chlorobenzene	*50*	ppb	38.4		29	
MW-266C_PR86.85	1,4-Dioxane	*0.4*	ppb	**22.5**		**17**	
DW-29C_PR438.8	Trichloroethene	*1*	ppb	**2.1**		**1.6**	
MW-271C_PR126.8	Trichloroethene	*1*	ppb	***23.5***		***18***	
MW-201B_PR41.8	1,1-Dichloroethene	*1*	ppb	**10**		***13***	
MW-271C_PR126.8	Tetrachloroethene	*1*	ppb	***1690***		**1300**	
DW-29C_PR438.8	Acetone	*6000*	ppb	92.3		71	
DW-31B_PR316.8	1,4-Dioxane	*0.4*	ppb	**39**		**30.1**	
MW-104B_PR30.1	Chlorobenzene	*50*	ppb	2.2		1.7	
MW-353C_PR124.25	Chloroform	*70*	ppb	2.2	J	1.7	J
DW-8B_PR188.75	2-Butanone (MEK)	*300*	ppb	12.4		9.6	
MW-103A_PR11.6	1,4-Dioxane	*0.4*	ppb	**34**		***43.9***	
MW-201_PR28.75	1,2-Dichloroethane	*2*	ppb	**4.9**	J	**3.8**	
MW-271C_PR126.8	Chloroform	*70*	ppb	2.7	J	2.1	J
MW-201_PR28.75	1,1-Dichloroethene	*1*	ppb	**16.7**		**13**	
MW-104B_PR30.1	Trichloroethene	*1*	ppb	**19.2**		**15**	
MW-201_PR28.75	Tetrachloroethene	*1*	ppb	***742***		**580**	
MW-201A_PR21.75	trans-1,2-Dichloroethene	*100*	ppb	2.8		2.2	
MW-378C_PR98.8	Chloroform	*70*	ppb	3.3		2.6	
MW-201_PR28.75	1,4-Dichlorobenzene	*75*	ppb	9.6		7.6	
MW-353C_PR124.25	Trichloroethene	*1*	ppb	***18.9***		***15***	
DW-41C_PR426.8	Acetone	*6000*	ppb	151		120	
MW-378C_PR98.8	Acetone	*6000*	ppb	207		260	
MW-416C_PR104.3	1,4-Dioxane	*0.4*	ppb	***478***		***600***	
MW-271C_PR126.8	Acetone	*6000*	ppb	163		130	
MW-201A_PR21.75	1,1-Dichloroethene	*1*	ppb	**2.5**		**2**	
MW-201_PR28.75	Benzene	*1*	ppb	1	J	0.8	J
MW-208C_PR76.75	1,4-Dioxane	*0.4*	ppb	***21.7***		**27**	
MW-15B-GRAB	Tetrachloroethene	*1*	ppb	**33.8**		***42***	
MW-378C_PR98.8	Trichloroethene	*1*	ppb	**49.2**		**40**	
MW-376C_PR119.8	2-Butanone (MEK)	*300*	ppb	10.6		13	
MW-376C_PR119.8	Trichloroethene	*1*	ppb	**11.1**		**9.1**	
MW-378C_PR98.8	2-Butanone (MEK)	*300*	ppb	24.3		20	
MW-377C_PR109.8	2-Butanone (MEK)	*300*	ppb	14		17	
MW-201_PR28.75	Vinyl Chloride	*1*	ppb	***194***		**160**	
DW-29C_PR438.8	Toluene	600	ppb	0.33	J	0.4	J
MW-201A_PR21.75	1,2-Dichloroethane	*2*	ppb	**4.2**		**3.5**	
MW-353C_PR124.25	cis-1,2-Dichloroethene	*70*	ppb	1.8	J	1.5	J
DW-42A_PR103.8	Chloroform	*70*	ppb	1.2		1	
MW-171A_PR26.75	cis-1,2-Dichloroethene	*70*	ppb	46.5		39	
MW-201A_PR21.75	1,4-Dichlorobenzene	*75*	ppb	15.5		13	
MW-126B_PR41.8	1,4-Dioxane	*0.4*	ppb	***155***		***130***	
DW-44C_PR360.8	1,4-Dioxane	*0.4*	ppb	***54.6***		**65**	
DW-8B_PR188.75	Tetrachloroethene	*1*	ppb	**269**		**320**	
MW-377C_PR109.8	Chloroform	*70*	ppb	1.9		1.6	J
DW-8B_PR188.75	cis-1,2-Dichloroethene	*70*	ppb	21.3		18	
MW-378C_PR98.8	Tetrachloroethene	*1*	ppb	***284***		**240**	
MW-378C_PR98.8	cis-1,2-Dichloroethene	*70*	ppb	1.3		1.1	
DW-8B_PR188.75	Acetone	*6000*	ppb	189		160	
MW-201_PR28.75	1,2-Dichlorobenzene	*600*	ppb	41.3		35	
MW-171C_PR66.75	Trichloroethene	*1*	ppb	**22.3**		**19**	
MW-353C_PR124.25	Tetrachloroethene	*1*	ppb	***1290***		**1100**	
MW-171A_PR26.75	Trichloroethene	*1*	ppb	**21.1**		**18**	
MW-201A_PR21.75	Vinyl Chloride	*1*	ppb	***350***		**410**	
MW-201B_PR41.8	Tetrachloroethene	*1*	ppb	***1880***		**2200**	
DW-37B_PR296.8	Acetone	*6000*	ppb	152		130	

Appendix F - Table F-1
Analytical Results Comparison of Contaminant Detections and RPD Calculations
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

Client Sample ID:	Compound	GWQS	Units	SGS Accutest Result		TestAmerica Result	
MW-201A_PR21.75	Toluene	*600*	ppb	0.49	J	0.42	J
MW-377C_PR109.8	Acetone	*6000*	ppb	180		210	
MW-201A_PR21.75	Benzene	*1*	ppb	0.63		0.54	J
DW-8B_PR188.75	Chloroform	*70*	ppb	0.87	J	0.75	J
MW-201B_PR41.8	1,2-Dichlorobenzene	*600*	ppb	61.5		71	
MW-201A_PR21.75	cis-1,2-Dichloroethene	*70*	ppb	**391**		**340**	
MW-171A_PR26.75	Tetrachloroethene	*1*	ppb	**195**		**170**	
MW-15B-GRAB	cis-1,2-Dichloroethene	*70*	ppb	44.5		39	
MW-201B_PR41.8	trans-1,2-Dichloroethene	*100*	ppb	3.6	J	4.1	J
MW-15B-GRAB	Chlorobenzene	*50*	ppb	0.58	J	0.51	J
DW-41C_PR426.8	Xylenes (total)	*1000*	ppb	2		1.76	J
MW-201A_PR21.75	Chlorobenzene	*50*	ppb	38.6		34	
MW-201B_PR41.8	cis-1,2-Dichloroethene	*70*	ppb	**973**		**1100**	
MW-201A_PR21.75	1,2-Dichlorobenzene	*600*	ppb	64.4		57	
DW-41C_PR426.8	Tetrachloroethene	*1*	ppb	**6.3**		**7.1**	
MW-15B-GRAB	Trichloroethene	*1*	ppb	**16.9**		**15**	
DW-42A_PR103.8	cis-1,2-Dichloroethene	*70*	ppb	12.3		11	
MW-104C_PR76.75	1,4-Dioxane	*0.4*	ppb	**41.3**		**46**	
MW-201C_PR92.8	Acetone	*6000*	ppb	477		530	
MW-104B_PR30.1	Vinyl Chloride	*1*	ppb	**3.2**		**2.9**	
MW-376C_PR119.8	Tetrachloroethene	*1*	ppb	***699***		**770**	
MW-22A_PR40.75	1,4-Dioxane	*0.4*	ppb	**34.1**		**31**	
MW-126C_PR76.8	1,4-Dioxane	*0.4*	ppb	***100***		***110***	
MW-201_PR28.75	Acetone	*6000*	ppb	146		160	
MW-171C_PR66.75	cis-1,2-Dichloroethene	*70*	ppb	41.6		38	
DW-8B_PR188.75	Trichloroethene	*1*	ppb	**12**		**11**	
MW-171C_PR66.75	Chloroform	*70*	ppb	1.2	J	1.1	
MW-171C_PR66.75	1,1-Dichloroethene	*1*	ppb	**1.2**	J	**1.1**	
MW-15B-GRAB	Vinyl Chloride	*1*	ppb	**3.8**		**4.1**	
MW-201A_PR21.75	Trichloroethene	*1*	ppb	**2.8**		**2.6**	
MW-376C_PR119.8	Chloroform	*70*	ppb	1.4		1.3	J
DW-42A_PR103.8	Tetrachloroethene	*1*	ppb	**53**		**57**	
MW-104B_PR30.1	Dichlorodifluoromethane	*1000*	ppb	5.9		5.5	
MW-377C_PR109.8	cis-1,2-Dichloroethene	*70*	ppb	1.6		1.5	J
MW-201_PR28.75	cis-1,2-Dichloroethene	*70*	ppb	**810**		**760**	
MW-201C_PR92.8	2-Butanone (MEK)	*300*	ppb	14.9		14	
MW-376C_PR119.8	Acetone	*6000*	ppb	149		140	
DW-41C_PR426.8	Trichloroethene	*1*	ppb	**1.6**		**1.7**	
MW-104B_PR30.1	cis-1,2-Dichloroethene	*70*	ppb	**151**		**160**	
MW-171C_PR66.75	Tetrachloroethene	*1*	ppb	**453**		**480**	
DW-29C_PR438.8	2-Butanone (MEK)	*300*	ppb	7.2	J	6.8	
DW-41C_PR426.8	2-Butanone (MEK)	*300*	ppb	3.6	J	3.4	J
MW-104B_PR30.1	Acetone	*6000*	ppb	69.2		73	
MW-201C_PR92.8	Trichloroethene	*1*	ppb	**8.8**		**8.4**	
MW-1G_PR10.75	1,4-Dioxane	*0.4*	ppb	**9.1**		**8.7**	
DW-37B_PR296.8	Chloroform	*70*	ppb	0.75	J	0.72	J
MW-201B_PR41.8	Trichloroethene	*1*	ppb	***1250***		***1200***	
MW-201C_PR92.8	Tetrachloroethene	*1*	ppb	**187**		**180**	
MW-201C_PR92.8	cis-1,2-Dichloroethene	*70*	ppb	11.4		11	
MW-104B_PR30.1	Tetrachloroethene	*1*	ppb	**15.5**		**15**	
MW-377C_PR109.8	Tetrachloroethene	*1*	ppb	***484***		**500**	
MW-266B_PR61.95	1,4-Dioxane	*0.4*	ppb	**18.4**		**19**	
DW-42A_PR103.8	Trichloroethene	*1*	ppb	**6.4**		**6.2**	
DW-29C_PR438.8	cis-1,2-Dichloroethene	*70*	ppb	0.32	J	0.33	J
MW-201B_PR41.8	1,4-Dichlorobenzene	*75*	ppb	13.7		14	
MW-201B_PR41.8	1,2-Dichloroethane	*2*	ppb	**9.9**		**9.7**	
DW-37B_PR296.8	Tetrachloroethene	*1*	ppb	**10.8**		**11**	
MW-201C_PR92.8	Chloroform	*70*	ppb	0.78	J	0.77	J
MW-201A_PR21.75	Acetone	*6000*	ppb	178	J	180	
DW-41C_PR426.8	cis-1,2-Dichloroethene	*70*	ppb	18.2		18	
MW-201B_PR41.8	Acetone	*6000*	ppb	100		99	
MW-416B_PR49.25	1,4-Dioxane	*0.4*	ppb	**25.2**		**25**	
DW-13-D2_PR241.8	1,4-Dioxane	*0.4*	ppb	**12.9**		**13**	
MW-201B_PR41.8	Chlorobenzene	*50*	ppb	40.1		40	
DW-37B_PR296.8	cis-1,2-Dichloroethene	*70*	ppb	1.7		1.7	
DW-37B_PR296.8	Trichloroethene	*1*	ppb	**1.8**		**1.8**	
DW-41C_PR426.8	Toluene	600	ppb	1.6		1.6	
DW-41C_PR426.8	Vinyl Chloride	*1*	ppb	0.38	J	0.38	J
MW-201B_PR41.8	Benzene	*1*	ppb	**1.1**	J	**1.1**	J

GWQS = NJDEP's Ground Water Quality Standard.

Bold indicates concentrations above the GWQS.

Values in italics indicate MDL above applicable criterion.

1,4-dioxane samples were analyzed by method SW846 8260C SIM.

J = Estimated value below sample reporting limit.

U = Compound not detected above MDL.

APPENDIX F

Analytical Data Quality Evaluation - SGS Accutest vs. TestAmerica

• Table F-2 - Summary of Volatile Organic Compounds (VOCs) in Ground Water - June 2016
Split Samples SGS Accutest vs. TestAmerica

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	DW-8B_PR188.75		DW-8B_PR188.75		DW-29C_PR438.8		DW-29C_PR438.8		DW-37B_PR296.8		DW-37B_PR296.8	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
		LAB Sample ID:	460116035-14		JC22961-4		460116035-13		JC22961-3		JC22961-11		460116035-27	
		LAB:	TestAmerica Edison		Accutest		TestAmerica Edison		Accutest		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
Acetone	*67-64-1*	*6000*	160		189		71		92.3		152		130	
Benzene	*71-43-2*	*1*	0.090	U	0.14	U	0.091	J	0.14	U	0.14	U	0.090	U
Bromochloromethane	*74-97-5*	*100*	0.30	U	0.46	U	0.30	U	0.46	U	0.46	U	0.30	U
Bromodichloromethane	*75-27-4*	*1*	0.15	U	0.55	U	0.15	U	0.55	U	0.55	U	0.15	U
Bromoform	*75-25-2*	*4*	0.18	U	0.34	U	0.18	U	0.34	U	0.34	U	0.18	U
Bromomethane	*74-83-9*	*10*	0.18	U	0.46	U	0.18	U	0.46	U	0.46	U	0.18	U
2-Butanone (MEK)	*78-93-3*	*300*	9.6		12.4		6.8		7.2	J	1.9	U	2.2	U
Carbon Disulfide	*75-15-0*	*700*	0.22	U	0.33	U	0.22	U	0.33	U	0.33	U	0.22	U
Carbon tetrachloride	*56-23-5*	*1*	0.33	U	0.54	U	0.33	U	0.54	U	0.54	U	0.33	U
Chlorobenzene	*108-90-7*	*50*	0.24	U	0.17	U	0.24	U	0.17	U	0.17	U	0.24	U
Chloroethane	*75-00-3*	*5*	0.37	U	0.44	U	0.37	U	0.44	U	0.44	U	0.37	U
Chloroform	*67-66-3*	*70*	0.75	J	0.87	J	0.22	U	0.23	U	0.75	J	0.72	J
Chloromethane	*74-87-3*	*100*	0.22	U	0.96	U	0.22	U	0.96	U	0.96	U	0.22	U
cis-1,2-Dichloroethene	*156-59-2*	*70*	18		21.3		0.33	J	0.32	J	1.7		1.7	
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.16	U	0.19	U	0.16	U	0.19	U	0.19	U	0.16	U
Cyclohexane	*110-82-7*	*100*	0.26	U	0.73	U	0.26	U	0.73	U	0.73	U	0.26	U
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*0.23*	U	*0.69*	U	*0.23*	U	*0.69*	U	*0.69*	U	*0.23*	U
Dibromochloromethane	*124-48-1*	*1*	0.22	U	0.23	U	0.22	U	0.23	U	0.23	U	0.22	U
1,2-Dibromoethane	*106-93-4*	*0.03*	*0.19*	U	*0.22*	U	*0.19*	U	*0.22*	U	*0.22*	U	*0.19*	U
1,2-Dichlorobenzene	*95-50-1*	*600*	0.22	U	0.23	U	0.22	U	0.23	U	0.23	U	0.22	U
1,3-Dichlorobenzene	*541-73-1*	*600*	0.33	U	0.19	U	0.33	U	0.19	U	0.19	U	0.33	U
1,4-Dichlorobenzene	*106-46-7*	*75*	0.33	U	0.21	U	0.33	U	0.21	U	0.21	U	0.33	U
Dichlorodifluoromethane	*75-71-8*	*1000*	0.14	U	0.7	U	0.14	U	0.7	U	0.7	U	0.14	U
1,1-Dichloroethane	*75-34-3*	*50*	0.24	U	0.21	U	0.24	U	0.21	U	0.21	U	0.24	U
1,2-Dichloroethane	*107-06-2*	*2*	0.25	U	0.39	U	0.25	U	0.39	U	0.39	U	0.25	U
1,1-Dichloroethene	*75-35-4*	*1*	0.34	U	0.2	U	0.34	U	0.2	U	0.2	U	0.34	U
1,2-Dichloropropane	*78-87-5*	*1*	0.18	U	0.33	U	0.18	U	0.33	U	0.33	U	0.18	U
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*100-41-4*	*700*	0.30	U	0.2	U	0.30	U	0.2	U	0.2	U	0.30	U
2-Hexanone	*591-78-6*	*300*	0.72	U	1.5	U	0.72	U	1.5	U	1.5	U	0.72	U
Isopropylbenzene	*98-82-8*	*700*	0.32	U	0.16	U	0.32	U	0.16	U	0.16	U	0.32	U
Methyl Acetate	*79-20-9*	*7000*	0.58	U	1.5	U	0.58	U	1.5	U	1.5	U	0.58	U
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	0.13	U	0.34	U	0.13	U	0.34	U	0.34	U	0.13	U
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	0.63	U	1.2	U	0.63	U	1.2	U	1.2	U	0.63	U
Methylcyclohexane	*108-87-2*	*100*	0.22	U	0.78	U	0.22	U	0.78	U	0.78	U	0.22	U
Methylene chloride	*75-09-2*	*3*	0.21	U	0.35	U	0.21	U	0.35	U	0.35	U	0.21	U
Styrene	*100-42-5*	*100*	0.17	U	0.27	U	0.17	U	0.27	U	0.27	U	0.17	U
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	0.19	U	0.39	U	0.19	U	0.39	U	0.39	U	0.19	U
Tetrachloroethene	*127-18-4*	*1*	**320**		***269***		**15**		**22.4**		**10.8**		**11**	
Toluene	*108-88-3*	*600*	0.25	U	0.23	U	0.4	J	0.33	J	0.23	U	0.25	U
trans-1,2-Dichloroethene	*156-60-5*	*100*	0.18	U	0.36	U	0.18	U	0.36	U	0.36	U	0.18	U
trans-1,3-Dichloropropene	*10061-02-6*	*--*	0.19	U	0.26	U	0.19	U	0.26	U	0.26	U	0.19	U
Freon 113	*76-13-1*	*20000*	0.34	U	1.2	U	0.34	U	1.2	U	1.2	U	0.34	U
1,2,3-Trichlorobenzene	*87-61-6*	*100*	0.35	U	0.2	U	0.35	U	0.2	U	0.2	U	0.35	U
1,1,1-Trichloroethane	*71-55-6*	*30*	0.28	U	0.22	U	0.28	U	0.22	U	0.22	U	0.28	U
1,1,2-Trichloroethane	*79-00-5*	*3*	0.080	U	0.28	U	0.080	U	0.28	U	0.28	U	0.080	U
Trichloroethene	*79-01-6*	*1*	**11**		**12**		**1.6**		**2.1**		**1.8**		**1.8**	
Trichlorofluoromethane	*75-69-4*	*2000*	0.15	U	0.58	U	0.15	U	0.58	U	0.58	U	0.15	U
1,2,4-Trichlorobenzene	*120-82-1*	*9*	0.27	U	0.25	U	0.27	U	0.25	U	0.25	U	0.27	U
Vinyl Chloride	*75-01-4*	*1*	0.060	U	0.33	U	0.060	U	0.33	U	0.33	U	0.060	U
m,p-Xylene	*179601-23-1*	*--*	0.28	U	0.42	U	0.28	U	0.42	U	0.42	U	0.28	U
o-Xylene	*95-47-6*	*--*	0.32	U	0.21	U	0.32	U	0.21	U	0.21	U	0.32	U
Xylenes (total)	*1330-20-7*	*1000*	0.28	U	0.21	U	0.28	U	0.21	U	0.21	U	0.28	U
Total VOC TIC	*SRP170*	*500*	ND	U	ND		ND	U	ND		ND		ND	U

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	DW-41C_PR426.8		DW-41C_PR426.8		DW-42A_PR103.8		DW-42A_PR103.8		MW-15B_GRAB		MW-15B-GRAB	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/24/2016		6/24/2016	
		LAB Sample ID:	JC22961-9		460116035-25		JC22961-12		460116035-28		JC22966-25		460116035-37	
		LAB:	Accutest		TestAmerica Edison		Accutest		TestAmerica Edison		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
Acetone	*67-64-1*	*6000*	151		120		212		160		3.8	U	1.1	U
Benzene	*71-43-2*	*1*	0.14	U	0.11	J	0.14	U	0.090	U	0.14	U	0.090	U
Bromochloromethane	*74-97-5*	*100*	0.46	U	0.30	U	0.46	U	0.30	U	0.46	U	0.30	U
Bromodichloromethane	*75-27-4*	*1*	0.55	U	0.15	U	0.55	U	0.15	U	0.55	U	0.15	U
Bromoform	*75-25-2*	*4*	0.34	U	0.18	U	0.34	U	0.18	U	0.34	U	0.18	U
Bromomethane	*74-83-9*	*10*	0.46	U	0.18	U	0.46	U	0.18	U	0.46	U	0.18	U
2-Butanone (MEK)	*78-93-3*	*300*	3.6	J	3.4	J	3.3	J	2.2	U	1.9	U	2.2	U
Carbon Disulfide	*75-15-0*	*700*	0.33	U	0.22	U	0.33	U	0.22	U	0.33	U	0.22	U
Carbon tetrachloride	*56-23-5*	*1*	0.54	U	0.33	U	0.54	U	0.33	U	0.54	U	0.33	U
Chlorobenzene	*108-90-7*	*50*	0.17	U	0.24	U	0.17	U	0.24	U	0.58	J	0.51	J
Chloroethane	*75-00-3*	*5*	0.44	U	0.37	U	0.44	U	0.37	U	0.44	U	0.37	U
Chloroform	*67-66-3*	*70*	0.23	U	0.22	U	1.2		1		0.23	U	0.22	U
Chloromethane	*74-87-3*	*100*	0.96	U	0.22	U	0.96	U	0.22	U	0.96	U	0.22	U
cis-1,2-Dichloroethene	*156-59-2*	*70*	18.2		18		12.3		11		44.5		39	
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.19	U	0.16	U	0.19	U	0.16	U	0.19	U	0.16	U
Cyclohexane	*110-82-7*	*100*	0.73	U	0.26	U	0.73	U	0.26	U	0.73	U	0.26	U
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*0.69*	U	*0.23*	U	*0.69*	U	*0.23*	U	*0.69*	U	*0.23*	U
Dibromochloromethane	*124-48-1*	*1*	0.23	U	0.22	U	0.23	U	0.22	U	0.23	U	0.22	U
1,2-Dibromoethane	*106-93-4*	*0.03*	*0.22*	U	*0.19*	U	*0.22*	U	*0.19*	U	*0.22*	U	*0.19*	U
1,2-Dichlorobenzene	*95-50-1*	*600*	0.23	U	0.22	U	0.23	U	0.22	U	0.23	U	0.22	U
1,3-Dichlorobenzene	*541-73-1*	*600*	0.19	U	0.33	U	0.19	U	0.33	U	0.19	U	0.33	U
1,4-Dichlorobenzene	*106-46-7*	*75*	0.21	U	0.33	U	0.21	U	0.33	U	0.21	U	0.33	U
Dichlorodifluoromethane	*75-71-8*	*1000*	0.7	U	0.14	U	0.7	U	0.14	U	0.7	U	0.14	U
1,1-Dichloroethane	*75-34-3*	*50*	0.21	U	0.24	U	0.41	J	0.24	U	0.21	U	0.24	U
1,2-Dichloroethane	*107-06-2*	*2*	0.39	U	0.25	U	0.39	U	0.25	U	0.39	U	0.25	U
1,1-Dichloroethene	*75-35-4*	*1*	0.2	U	0.34	U	0.2	U	0.34	U	0.65	J	0.34	U
1,2-Dichloropropane	*78-87-5*	*1*	0.33	U	0.18	U	0.33	U	0.18	U	0.33	U	0.18	U
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*100-41-4*	*700*	0.39	J	0.30	U	0.2	U	0.30	U	0.2	U	0.30	U
2-Hexanone	*591-78-6*	*300*	1.5	U	0.72	U	1.5	U	0.72	U	1.5	U	0.72	U
Isopropylbenzene	*98-82-8*	*700*	0.16	U	0.32	U	0.16	U	0.32	U	0.16	U	0.32	U
Methyl Acetate	*79-20-9*	*7000*	1.5	U	0.58	U	1.5	U	0.58	U	1.5	U	0.58	U
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	0.34	U	0.13	U	0.34	U	0.13	U	0.34	U	0.13	U
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	1.2	U	0.63	U	1.2	U	0.63	U	1.2	U	0.63	U
Methylcyclohexane	*108-87-2*	*100*	0.78	U	0.22	U	0.78	U	0.22	U	0.78	U	0.22	U
Methylene chloride	*75-09-2*	*3*	0.35	U	0.21	U	0.35	U	0.21	U	0.35	U	0.21	U
Styrene	*100-42-5*	*100*	0.27	U	0.17	U	0.27	U	0.17	U	0.27	U	0.17	U
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	0.39	U	0.19	U	0.39	U	0.19	U	0.39	U	0.19	U
Tetrachloroethene	*127-18-4*	*1*	**6.3**		**7.1**		**53**		**57**		**33.8**		**42**	
Toluene	*108-88-3*	*600*	1.6		1.6		0.23	U	0.25	U	0.23	U	0.25	U
trans-1,2-Dichloroethene	*156-60-5*	*100*	0.36	U	0.18	U	0.36	U	0.18	U	0.36	U	0.18	U
trans-1,3-Dichloropropene	*10061-02-6*	*--*	0.26	U	0.19	U	0.26	U	0.19	U	0.26	U	0.19	U
Freon 113	*76-13-1*	*20000*	1.2	U	0.34	U	1.2	U	0.34	U	1.2	U	0.34	U
1,2,3-Trichlorobenzene	*87-61-6*	*100*	0.2	U	0.35	U	0.2	U	0.35	U	0.2	U	0.35	U
1,1,1-Trichloroethane	*71-55-6*	*30*	0.22	U	0.28	U	0.22	U	0.28	U	0.22	U	0.28	U
1,1,2-Trichloroethane	*79-00-5*	*3*	0.28	U	0.080	U	0.28	U	0.080	U	0.28	U	0.080	U
Trichloroethene	*79-01-6*	*1*	**1.6**		**1.7**		**6.4**		**6.2**		**16.9**		**15**	
Trichlorofluoromethane	*75-69-4*	*2000*	0.58	U	0.15	U	0.58	U	0.15	U	0.58	U	0.15	U
1,2,4-Trichlorobenzene	*120-82-1*	*9*	0.25	U	0.27	U	0.25	U	0.27	U	0.25	U	0.27	U
Vinyl Chloride	*75-01-4*	*1*	0.38	J	0.38	J	0.33	U	0.060	U	**3.8**		**4.1**	
m,p-Xylene	*179601-23-1*	*--*	1.4		1.2		0.42	U	0.28	U	0.42	U	0.28	U
o-Xylene	*95-47-6*	*--*	0.6	J	0.56	J	0.21	U	0.32	U	0.21	U	0.32	U
Xylenes (total)	*1330-20-7*	*1000*	2		1.76	J	0.21	U	0.28	U	0.21	U	0.28	U
Total VOC TIC	*SRP170*	*500*	ND		ND	U	ND		ND	U	ND		ND	U

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

			Sample No.:	MW-104B_PR30.1		MW-104B_PR30.1		MW-171A_PR26.75		MW-171A_PR26.75		MW-171C_PR66.75		MW-171C_PR66.75	
			Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
			LAB Sample ID:	JC22966-2		460116035-3		460116035-24		JC22960-5AA		JC22966-4		460116035-5	
			LAB:	Accutest		TestAmerica Edison		TestAmerica Edison		Accutest		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***													
Acetone	*67-64-1*	*6000*	69.2		73		1.1	U	5.6	J	15	U	1.1	U
Benzene	*71-43-2*	*1*	0.14	U	0.090	U	0.090	U	0.14	U	0.56	U	0.090	U
Bromochloromethane	*74-97-5*	*100*	0.46	U	0.30	U	0.30	U	0.46	U	1.9	U	0.30	U
Bromodichloromethane	*75-27-4*	*1*	0.55	U	0.15	U	0.15	U	0.55	U	*2.2*	U	0.15	U
Bromoform	*75-25-2*	*4*	0.34	U	0.18	U	0.18	U	0.34	U	1.4	U	0.18	U
Bromomethane	*74-83-9*	*10*	0.46	U	0.18	U	0.18	U	0.46	U	1.9	U	0.18	U
2-Butanone (MEK)	*78-93-3*	*300*	1.9	U	2.2	U	2.2	U	1.9	U	7.6	U	2.2	U
Carbon Disulfide	*75-15-0*	*700*	0.33	U	0.22	U	0.22	U	0.33	U	1.3	U	0.22	U
Carbon tetrachloride	*56-23-5*	*1*	0.54	U	0.33	U	0.33	U	0.54	U	*2.2*	U	0.33	U
Chlorobenzene	*108-90-7*	*50*	2.2		1.7		0.24	U	0.34	J	0.7	U	0.24	U
Chloroethane	*75-00-3*	*5*	0.44	U	0.37	U	0.37	U	0.44	U	1.8	U	0.37	U
Chloroform	*67-66-3*	*70*	0.23	U	0.22	U	0.22	U	0.23	U	1.2	J	1.1	
Chloromethane	*74-87-3*	*100*	0.96	U	0.22	U	0.22	U	0.96	U	3.9	U	0.22	U
cis-1,2-Dichloroethene	*156-59-2*	*70*	**151**		**160**		39		46.5		41.6		38	
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.19	U	0.16	U	0.16	U	0.19	U	0.74	U	0.16	U
Cyclohexane	*110-82-7*	*100*	0.73	U	0.26	U	0.26	U	0.73	U	2.9	U	0.26	U
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*0.69*	U	*0.23*	U	*0.23*	U	*0.69*	U	*2.7*	U	*0.23*	U
Dibromochloromethane	*124-48-1*	*1*	0.23	U	0.22	U	0.22	U	0.23	U	0.91	U	0.22	U
1,2-Dibromoethane	*106-93-4*	*0.03*	*0.22*	U	*0.19*	U	*0.19*	U	*0.22*	U	*0.89*	U	*0.19*	U
1,2-Dichlorobenzene	*95-50-1*	*600*	0.23	U	0.22	U	0.22	U	0.23	U	0.93	U	0.22	U
1,3-Dichlorobenzene	*541-73-1*	*600*	0.19	U	0.33	U	0.33	U	0.19	U	0.77	U	0.33	U
1,4-Dichlorobenzene	*106-46-7*	*75*	0.21	U	0.33	U	0.33	U	0.21	U	0.85	U	0.33	U
Dichlorodifluoromethane	*75-71-8*	*1000*	5.9		5.5		0.67	J	0.7	U	2.8	U	0.14	U
1,1-Dichloroethane	*75-34-3*	*50*	0.41	J	0.24	U	0.24	U	0.28	J	0.82	U	0.24	U
1,2-Dichloroethane	*107-06-2*	*2*	0.39	U	0.25	U	0.26	J	0.39	U	1.6	U	0.25	U
1,1-Dichloroethene	*75-35-4*	*1*	**1.5**		**1.1**		0.93	J	**1.3**		**1.2**	J	**1.1**	
1,2-Dichloropropane	*78-87-5*	*1*	0.33	U	0.18	U	0.18	U	0.33	U	*1.3*	U	0.18	U
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*100-41-4*	*700*	0.2	U	0.30	U	0.30	U	0.2	U	0.78	U	0.30	U
2-Hexanone	*591-78-6*	*300*	1.5	U	0.72	U	0.72	U	1.5	U	6	U	0.72	U
Isopropylbenzene	*98-82-8*	*700*	0.16	U	0.32	U	0.32	U	0.16	U	0.63	U	0.32	U
Methyl Acetate	*79-20-9*	*7000*	1.5	U	0.58	U	0.58	U	1.5	U	6.2	U	0.58	U
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	0.34	U	0.13	U	0.13	U	0.34	U	1.4	U	0.13	U
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	1.2	U	0.63	U	0.63	U	1.2	U	4.8	U	0.63	U
Methylcyclohexane	*108-87-2*	*100*	0.78	U	0.22	U	0.22	U	0.78	U	3.1	U	0.22	U
Methylene chloride	*75-09-2*	*3*	0.35	U	0.21	U	0.21	U	0.35	U	1.4	U	0.21	U
Styrene	*100-42-5*	*100*	0.27	U	0.17	U	0.17	U	0.27	U	1.1	U	0.17	U
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	0.39	U	0.19	U	0.19	U	0.39	U	*1.6*	U	0.19	U
Tetrachloroethene	*127-18-4*	*1*	**15.5**		**15**		**170**		**195**		**453**		**480**	
Toluene	*108-88-3*	*600*	0.23	U	0.25	U	0.25	U	0.23	U	0.91	U	0.25	U
trans-1,2-Dichloroethene	*156-60-5*	*100*	1.6		1.2		0.84	J	0.45	J	1.4	U	0.18	U
trans-1,3-Dichloropropene	*10061-02-6*	*--*	0.26	U	0.19	U	0.19	U	0.26	U	1	U	0.19	U
Freon 113	*76-13-1*	*20000*	1.2	U	0.34	U	0.34	U	1.2	U	4.6	U	0.34	U
1,2,3-Trichlorobenzene	*87-61-6*	*100*	0.2	U	0.35	U	0.35	U	0.2	U	0.8	U	0.35	U
1,1,1-Trichloroethane	*71-55-6*	*30*	0.22	U	0.28	U	0.28	U	0.22	U	0.86	U	0.28	U
1,1,2-Trichloroethane	*79-00-5*	*3*	0.28	U	0.080	U	0.080	U	0.28	U	1.1	U	0.080	U
Trichloroethene	*79-01-6*	*1*	**19.2**		**15**		**18**		**21.1**		**22.3**		**19**	
Trichlorofluoromethane	*75-69-4*	*2000*	0.58	U	0.15	U	0.15	U	0.58	U	2.3	U	0.15	U
1,2,4-Trichlorobenzene	*120-82-1*	*9*	0.25	U	0.27	U	0.27	U	0.25	U	0.99	U	0.27	U
Vinyl Chloride	*75-01-4*	*1*	**3.2**		**2.9**		0.35	J	0.48	J	*1.3*	U	0.060	U
m,p-Xylene	*179601-23-1*	*--*	0.42	U	0.28	U	0.28	U	0.42	U	1.7	U	0.28	U
o-Xylene	*95-47-6*	*--*	0.21	U	0.32	U	0.32	U	0.21	U	0.82	U	0.32	U
Xylenes (total)	*1330-20-7*	*1000*	0.21	U	0.28	U	0.28	U	0.21	U	0.82	U	0.28	U
Total VOC TIC	*SRP170*	*500*	ND		ND	U	ND	U	ND		ND		ND	U

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-201_PR28.75		MW-201_PR28.75		MW-201A_PR21.75		MW-201A_PR21.75		MW-201B_PR41.8		MW-201B_PR41.8	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
		LAB Sample ID:	JC22966-10		460116035-11		JC22966-11		460116035-12		JC22966-7		460116035-8	
		LAB:	Accutest		TestAmerica Edison		Accutest		TestAmerica Edison		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
Acetone	*67-64-1*	*6000*	146		160		178	J	180		100		99	
Benzene	*71-43-2*	*1*	1	J	0.8	J	0.63		0.54	J	**1.1**	J	**1.1**	J
Bromochloromethane	*74-97-5*	*100*	2.3	U	0.60	U	0.46	U	0.30	U	2.3	U	1.5	U
Bromodichloromethane	*75-27-4*	*1*	*2.8*	U	0.30	U	0.55	U	0.15	U	*2.8*	U	0.75	U
Bromoform	*75-25-2*	*4*	1.7	U	0.36	U	0.34	U	0.18	U	1.7	U	0.90	U
Bromomethane	*74-83-9*	*10*	2.3	U	0.36	U	0.46	U	0.18	U	2.3	U	0.90	U
2-Butanone (MEK)	*78-93-3*	*300*	9.5	U	4.4	U	1.9	U	2.2	U	9.5	U	11	U
Carbon Disulfide	*75-15-0*	*700*	1.7	U	0.44	U	0.33	U	0.22	U	1.7	U	1.1	U
Carbon tetrachloride	*56-23-5*	*1*	*2.7*	U	0.66	U	0.54	U	0.33	U	*2.7*	U	*1.7*	U
Chlorobenzene	*108-90-7*	*50*	38.4		29		38.6		34		40.1		40	
Chloroethane	*75-00-3*	*5*	2.2	U	0.74	U	0.44	U	0.37	U	2.2	U	1.9	U
Chloroform	*67-66-3*	*70*	1.1	U	0.44	U	0.23	U	0.22	U	1.1	U	1.1	U
Chloromethane	*74-87-3*	*100*	4.8	U	0.44	U	0.96	U	0.22	U	4.8	U	1.1	U
cis-1,2-Dichloroethene	*156-59-2*	*70*	**810**		**760**		**391**		**340**		**973**		**1100**	
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.93	U	0.32	U	0.19	U	0.16	U	0.93	U	0.80	U
Cyclohexane	*110-82-7*	*100*	3.6	U	0.52	U	0.73	U	0.26	U	3.6	U	1.3	U
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*3.4*	U	*0.46*	U	*0.69*	U	*0.23*	U	*3.4*	U	*1.2*	U
Dibromochloromethane	*124-48-1*	*1*	*1.1*	U	0.44	U	0.23	U	0.22	U	*1.1*	U	*1.1*	U
1,2-Dibromoethane	*106-93-4*	*0.03*	*1.1*	U	*0.38*	U	*0.22*	U	*0.19*	U	*1.1*	U	*0.95*	U
1,2-Dichlorobenzene	*95-50-1*	*600*	41.3		35		64.4		57		61.5		71	
1,3-Dichlorobenzene	*541-73-1*	*600*	0.97	U	0.66	U	0.39	J	0.33	U	0.97	U	1.7	U
1,4-Dichlorobenzene	*106-46-7*	*75*	9.6		7.6		15.5		13		13.7		14	
Dichlorodifluoromethane	*75-71-8*	*1000*	3.5	U	0.28	U	0.7	U	0.14	U	3.5	U	0.70	U
1,1-Dichloroethane	*75-34-3*	*50*	1	U	0.48	U	0.21	U	0.24	U	1	U	1.2	U
1,2-Dichloroethane	*107-06-2*	*2*	**4.9**	J	**3.8**		**4.2**		**3.5**		**9.9**		**9.7**	
1,1-Dichloroethene	*75-35-4*	*1*	**16.7**		**13**		**2.5**		**2**		**10**		***13***	
1,2-Dichloropropane	*78-87-5*	*1*	*1.6*	U	0.36	U	0.33	U	0.18	U	*1.6*	U	0.90	U
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*100-41-4*	*700*	0.98	U	0.60	U	0.2	U	0.30	U	0.98	U	1.5	U
2-Hexanone	*591-78-6*	*300*	7.6	U	1.4	U	1.5	U	0.72	U	7.6	U	3.6	U
Isopropylbenzene	*98-82-8*	*700*	0.79	U	0.64	U	0.16	U	0.32	U	0.79	U	1.6	U
Methyl Acetate	*79-20-9*	*7000*	7.7	U	1.2	U	1.5	U	0.58	U	7.7	U	2.9	U
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	1.7	U	0.26	U	0.34	U	0.13	U	1.7	U	0.65	U
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	6	U	1.3	U	1.2	U	0.63	U	6	U	3.2	U
Methylcyclohexane	*108-87-2*	*100*	3.9	U	0.44	U	0.78	U	0.22	U	3.9	U	1.1	U
Methylene chloride	*75-09-2*	*3*	1.8	U	0.42	U	0.35	U	0.21	U	1.8	U	1.1	U
Styrene	*100-42-5*	*100*	1.4	U	0.34	U	0.27	U	0.17	U	1.4	U	0.85	U
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	*2*	U	0.38	U	0.39	U	0.19	U	*2*	U	0.95	U
Tetrachloroethene	*127-18-4*	*1*	***742***		**580**		0.76	J	**1.5**		***1880***		**2200**	
Toluene	*108-88-3*	*600*	1.1	U	0.50	U	0.49	J	0.42	J	1.1	U	1.3	U
trans-1,2-Dichloroethene	*156-60-5*	*100*	5.8		3.6		2.8		2.2		3.6	J	4.1	J
trans-1,3-Dichloropropene	*10061-02-6*	*--*	1.3	U	0.38	U	0.26	U	0.19	U	1.3	U	0.95	U
Freon 113	*76-13-1*	*20000*	5.8	U	0.68	U	1.2	U	0.34	U	5.8	U	1.7	U
1,2,3-Trichlorobenzene	*87-61-6*	*100*	1	U	0.70	U	0.2	U	0.35	U	1	U	1.8	U
1,1,1-Trichloroethane	*71-55-6*	*30*	1.1	U	0.56	U	0.22	U	0.28	U	1.1	U	1.4	U
1,1,2-Trichloroethane	*79-00-5*	*3*	1.4	U	0.16	U	0.28	U	0.080	U	1.4	U	0.40	U
Trichloroethene	*79-01-6*	*1*	***399***		**260**		**2.8**		**2.6**		***1250***		***1200***	
Trichlorofluoromethane	*75-69-4*	*2000*	2.9	U	0.30	U	0.58	U	0.15	U	2.9	U	0.75	U
1,2,4-Trichlorobenzene	*120-82-1*	*9*	1.2	U	0.54	U	0.25	U	0.27	U	1.2	U	1.4	U
Vinyl Chloride	*75-01-4*	*1*	***194***		**160**		***350***		**410**		***9.9***		**14**	
m,p-Xylene	*179601-23-1*	*--*	2.1	U	0.56	U	0.42	U	0.28	U	2.1	U	1.4	U
o-Xylene	*95-47-6*	*--*	1	U	0.64	U	0.21	U	0.32	U	1	U	1.6	U
Xylenes (total)	*1330-20-7*	*1000*	1	U	0.56	U	0.21	U	0.28	U	1	U	1.4	U
Total VOC TIC	*SRP170*	*500*	ND		ND	U	ND		ND	U	ND		ND	U

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-201C_PR92.8		MW-201C_PR92.8		MW-271C_PR126.8		MW-271C_PR126.8		MW-353C_PR124.25		MW-353C_PR124.25				
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016				
		LAB Sample ID:	JC22966-8		460116035-10		460116035-9		JC22966-9		460116035-15		JC22966-12				
		LAB:	Accutest		TestAmerica Edison		TestAmerica Edison		Accutest		TestAmerica Edison		Accutest				
Parameter (ug/l)	***CAS No.***	***GWQS***															
Acetone	*67-64-1*	*6000*	477		530		130		163		100		135				
Benzene	*71-43-2*	*1*	0.14	U	0.090	U	0.45	U	0.7	U	0.45	U	0.7	U			
Bromochloromethane	*74-97-5*	*100*	0.46	U	0.30	U	1.5	U	2.3	U	1.5	U	2.3	U			
Bromodichloromethane	*75-27-4*	*1*	0.55	U	0.15	U	0.75	U	*2.8*	U	0.75	U	*2.8*	U			
Bromoform	*75-25-2*	*4*	0.34	U	0.18	U	0.90	U	1.7	U	0.90	U	1.7	U			
Bromomethane	*74-83-9*	*10*	0.46	U	0.18	U	0.90	U	2.3	U	0.90	U	2.3	U			
2-Butanone (MEK)	*78-93-3*	*300*	14.9		14		11	U	9.5	U	11	U	9.5	U			
Carbon Disulfide	*75-15-0*	*700*	0.33	U	0.22	U	1.1	U	1.7	U	1.1	U	1.7	U			
Carbon tetrachloride	*56-23-5*	*1*	0.54	U	0.33	U	*1.7*	U	*2.7*	U	*1.7*	U	*2.7*	U			
Chlorobenzene	*108-90-7*	*50*	0.17	U	0.24	U	1.2	U	0.87	U	1.2	U	0.87	U			
Chloroethane	*75-00-3*	*5*	0.44	U	0.37	U	1.9	U	2.2	U	1.9	U	2.2	U			
Chloroform	*67-66-3*	*70*	0.78	J	0.77	J	2.1	J	2.7	J	1.7	J	2.2	J			
Chloromethane	*74-87-3*	*100*	0.96	U	0.22	U	1.1	U	4.8	U	1.1	U	4.8	U			
cis-1,2-Dichloroethene	*156-59-2*	*70*	11.4		11		4.4	J	1.5	U	1.5	J	1.8	J			
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.19	U	0.16	U	0.80	U	0.93	U	0.80	U	0.93	U			
Cyclohexane	*110-82-7*	*100*	0.73	U	0.46	J	1.3	U	3.6	U	1.3	U	3.6	U			
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*0.69*	U	*0.23*	U	*1.2*	U	*3.4*	U	*1.2*	U	*3.4*	U			
Dibromochloromethane	*124-48-1*	*1*	0.23	U	0.22	U	*1.1*	U	*1.1*	U	*1.1*	U	*1.1*	U			
1,2-Dibromoethane	*106-93-4*	*0.03*	*0.22*	U	*0.19*	U	*0.95*	U	*1.1*	U	*0.95*	U	*1.1*	U			
1,2-Dichlorobenzene	*95-50-1*	*600*	0.23	U	0.22	U	1.1	U	1.2	U	1.1	U	1.2	U			
1,3-Dichlorobenzene	*541-73-1*	*600*	0.19	U	0.33	U	1.7	U	0.97	U	1.7	U	0.97	U			
1,4-Dichlorobenzene	*106-46-7*	*75*	0.21	U	0.33	U	1.7	U	1.1	U	1.7	U	1.1	U			
Dichlorodifluoromethane	*75-71-8*	*1000*	0.7	U	0.14	U	0.70	U	3.5	U	0.70	U	3.5	U			
1,1-Dichloroethane	*75-34-3*	*50*	0.21	U	0.24	U	1.2	U	1	U	1.2	U	1	U			
1,2-Dichloroethane	*107-06-2*	*2*	0.39	U	0.25	U	1.3	U	2	U	1.3	U	2	U			
1,1-Dichloroethene	*75-35-4*	*1*	0.2	U	0.34	U	*1.7*	U	1	U	*1.7*	U	1	U			
1,2-Dichloropropane	*78-87-5*	*1*	0.33	U	0.18	U	0.90	U	*1.6*	U	0.90	U	*1.6*	U			
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND				
Ethylbenzene	*100-41-4*	*700*	0.2	U	0.30	U	1.5	U	0.98	U	1.5	U	0.98	U			
2-Hexanone	*591-78-6*	*300*	1.5	U	0.72	U	3.6	U	7.6	U	3.6	U	7.6	U			
Isopropylbenzene	*98-82-8*	*700*	0.16	U	0.32	U	1.6	U	0.79	U	1.6	U	0.79	U			
Methyl Acetate	*79-20-9*	*7000*	1.5	U	0.58	U	2.9	U	7.7	U	2.9	U	7.7	U			
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	0.34	U	0.13	U	0.65	U	1.7	U	0.65	U	1.7	U			
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	1.2	U	0.63	U	3.2	U	6	U	3.2	U	6	U			
Methylcyclohexane	*108-87-2*	*100*	0.78	U	0.22	U	1.1	U	3.9	U	1.1	U	3.9	U			
Methylene chloride	*75-09-2*	*3*	0.35	U	0.21	U	1.1	U	1.8	U	1.1	U	1.8	U			
Styrene	*100-42-5*	*100*	0.27	U	0.17	U	0.85	U	1.4	U	0.85	U	1.4	U			
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	0.39	U	0.19	U	0.95	U	*2*	U	0.95	U	*2*	U			
Tetrachloroethene	*127-18-4*	*1*	**187**		**180**		**1300**		***1690***		**1100**		***1290***				
Toluene	*108-88-3*	*600*	0.23	U	0.25	U	1.3	U	1.1	U	1.3	U	1.1	U			
trans-1,2-Dichloroethene	*156-60-5*	*100*	0.36	U	0.18	U	0.90	U	1.8	U	0.90	U	1.8	U			
trans-1,3-Dichloropropene	*10061-02-6*	*--*	0.26	U	0.19	U	0.95	U	1.3	U	0.95	U	1.3	U			
Freon 113	*76-13-1*	*20000*	1.2	U	0.34	U	1.7	U	5.8	U	1.7	U	5.8	U			
1,2,3-Trichlorobenzene	*87-61-6*	*100*	0.2	U	0.35	U	1.8	U	1	U	1.8	U	1	U			
1,1,1-Trichloroethane	*71-55-6*	*30*	0.22	U	0.28	U	1.4	U	1.1	U	1.4	U	1.1	U			
1,1,2-Trichloroethane	*79-00-5*	*3*	0.28	U	0.080	U	0.40	U	1.4	U	0.40	U	1.4	U			
Trichloroethene	*79-01-6*	*1*	**8.8**		**8.4**		***18***		***23.5***		***15***		***18.9***				
Trichlorofluoromethane	*75-69-4*	*2000*	0.58	U	0.15	U	0.75	U	2.9	U	0.75	U	2.9	U			
1,2,4-Trichlorobenzene	*120-82-1*	*9*	0.25	U	0.27	U	1.4	U	1.2	U	1.4	U	1.2	U			
Vinyl Chloride	*75-01-4*	*1*	0.33	U	0.060	U	0.30	U	*1.6*	U	0.30	U	*1.6*	U			
m,p-Xylene	*179601-23-1*	*--*	0.42	U	0.28	U	1.4	U	2.1	U	1.4	U	2.1	U			
o-Xylene	*95-47-6*	*--*	0.21	U	0.32	U	1.6	U	1	U	1.6	U	1	U			
Xylenes (total)	*1330-20-7*	*1000*	0.21	U	0.28	U	1.4	U	1	U	1.4	U	1	U			
Total VOC TIC	*SRP170*	*500*	ND		ND	U	ND	U	ND		ND	U	ND				

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

Appendix F - Table F-2
Summary of Volatile Organic Compounds (VOCs) in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-376C_PR119.8		MW-376C_PR119.8		MW-377C_PR109.8		MW-377C_PR109.8		MW-378C_PR98.8		MW-378C_PR98.8	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
		LAB Sample ID:	460116035-6		JC22966-5		JC22966-17		460116035-26		JC22966-16		460116035-22	
		LAB:	TestAmerica Edison		Accutest		Accutest		TestAmerica Edison		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
Acetone	*67-64-1*	*6000*	140		149		180		210		207		260	
Benzene	*71-43-2*	*1*	0.18	U	0.14	U	0.14	U	0.18	U	0.14	U	0.090	U
Bromochloromethane	*74-97-5*	*100*	0.60	U	0.46	U	0.46	U	0.60	U	0.46	U	0.30	U
Bromodichloromethane	*75-27-4*	*1*	0.30	U	0.55	U	0.55	U	0.30	U	0.55	U	0.15	U
Bromoform	*75-25-2*	*4*	0.36	U	0.34	U	0.34	U	0.36	U	0.34	U	0.18	U
Bromomethane	*74-83-9*	*10*	0.36	U	0.46	U	0.46	U	0.36	U	0.46	U	0.18	U
2-Butanone (MEK)	*78-93-3*	*300*	13		10.6		14		17		24.3		20	
Carbon Disulfide	*75-15-0*	*700*	0.44	U	0.33	U	0.33	U	0.44	U	0.33	U	0.22	U
Carbon tetrachloride	*56-23-5*	*1*	0.66	U	0.54	U	0.54	U	0.66	U	0.54	U	0.33	U
Chlorobenzene	*108-90-7*	*50*	0.48	U	0.17	U	0.17	U	0.48	U	0.17	U	0.24	U
Chloroethane	*75-00-3*	*5*	0.74	U	0.44	U	0.44	U	0.74	U	0.44	U	0.37	U
Chloroform	*67-66-3*	*70*	1.3	J	1.4		1.9		1.6	J	3.3		2.6	
Chloromethane	*74-87-3*	*100*	0.44	U	0.96	U	0.96	U	0.44	U	0.96	U	0.22	U
cis-1,2-Dichloroethene	*156-59-2*	*70*	0.93	J	1.4		1.6		1.5	J	1.3		1.1	
cis-1,3-Dichloropropene	*10061-01-5*	*--*	0.32	U	0.19	U	0.19	U	0.32	U	0.19	U	0.16	U
Cyclohexane	*110-82-7*	*100*	0.52	U	0.73	U	0.73	U	0.52	U	0.73	U	0.38	J
1,2-Dibromo-3-chloropropane	*96-12-8*	*0.02*	*0.46*	U	*0.69*	U	*0.69*	U	*0.46*	U	*0.69*	U	*0.23*	U
Dibromochloromethane	*124-48-1*	*1*	0.44	U	0.23	U	0.23	U	0.44	U	0.23	U	0.22	U
1,2-Dibromoethane	*106-93-4*	*0.03*	*0.38*	U	*0.22*	U	*0.22*	U	*0.38*	U	*0.22*	U	*0.19*	U
1,2-Dichlorobenzene	*95-50-1*	*600*	0.44	U	0.23	U	0.23	U	0.44	U	0.23	U	0.22	U
1,3-Dichlorobenzene	*541-73-1*	*600*	0.66	U	0.19	U	0.19	U	0.66	U	0.19	U	0.33	U
1,4-Dichlorobenzene	*106-46-7*	*75*	0.66	U	0.21	U	0.21	U	0.66	U	0.21	U	0.33	U
Dichlorodifluoromethane	*75-71-8*	*1000*	0.28	U	0.7	U	0.7	U	0.28	U	0.7	U	0.14	U
1,1-Dichloroethane	*75-34-3*	*50*	0.48	U	0.21	U	0.21	U	0.48	U	0.21	U	0.24	U
1,2-Dichloroethane	*107-06-2*	*2*	0.50	U	0.39	U	0.39	U	0.50	U	0.39	U	0.25	U
1,1-Dichloroethene	*75-35-4*	*1*	0.68	U	0.2	U	0.2	U	0.68	U	0.2	U	0.34	U
1,2-Dichloropropane	*78-87-5*	*1*	0.36	U	0.33	U	0.33	U	0.36	U	0.33	U	0.18	U
1,3-Dichloropropene (total)	*542-75-6*	*1*	ND		ND		ND		ND		ND		ND	
Ethylbenzene	*100-41-4*	*700*	0.60	U	0.2	U	0.2	U	0.60	U	0.2	U	0.30	U
2-Hexanone	*591-78-6*	*300*	1.4	U	1.5	U	1.5	U	1.4	U	1.5	U	0.72	U
Isopropylbenzene	*98-82-8*	*700*	0.64	U	0.16	U	0.16	U	0.64	U	0.16	U	0.32	U
Methyl Acetate	*79-20-9*	*7000*	1.2	U	1.5	U	1.5	U	1.2	U	1.5	U	0.58	U
Methyl Tert Butyl Ether (MTBE)	*1634-04-4*	*70*	0.26	U	0.34	U	0.34	U	0.26	U	0.34	U	0.13	U
4-methyl-2-pentanone (MIBK)	*108-10-1*	*100*	1.3	U	1.2	U	1.2	U	1.3	U	1.2	U	0.63	U
Methylcyclohexane	*108-87-2*	*100*	0.44	U	0.78	U	0.78	U	0.44	U	0.78	U	0.22	U
Methylene chloride	*75-09-2*	*3*	0.42	U	0.35	U	0.35	U	0.42	U	0.35	U	0.21	U
Styrene	*100-42-5*	*100*	0.34	U	0.27	U	0.27	U	0.34	U	0.27	U	0.17	U
1,1,2,2-Tetrachloroethane	*79-34-5*	*1*	0.38	U	0.39	U	0.39	U	0.38	U	0.39	U	0.19	U
Tetrachloroethene	*127-18-4*	*1*	**770**		***699***		***484***		**500**		***284***		**240**	
Toluene	*108-88-3*	*600*	0.50	U	0.23	U	0.23	U	0.50	U	0.23	U	0.25	U
trans-1,2-Dichloroethene	*156-60-5*	*100*	0.36	U	0.36	U	0.36	U	0.36	U	0.36	U	0.18	U
trans-1,3-Dichloropropene	*10061-02-6*	*--*	0.38	U	0.26	U	0.26	U	0.38	U	0.26	U	0.19	U
Freon 113	*76-13-1*	*20000*	0.68	U	1.2	U	1.2	U	0.68	U	1.2	U	0.34	U
1,2,3-Trichlorobenzene	*87-61-6*	*100*	0.70	U	0.2	U	0.2	U	0.70	U	0.2	U	0.35	U
1,1,1-Trichloroethane	*71-55-6*	*30*	0.56	U	0.22	U	0.22	U	0.56	U	0.22	U	0.28	U
1,1,2-Trichloroethane	*79-00-5*	*3*	0.16	U	0.28	U	0.28	U	0.16	U	0.28	U	0.080	U
Trichloroethene	*79-01-6*	*1*	**9.1**		**11.1**		**12.1**		**9**		**49.2**		**40**	
Trichlorofluoromethane	*75-69-4*	*2000*	0.30	U	0.58	U	0.58	U	0.30	U	0.58	U	0.15	U
1,2,4-Trichlorobenzene	*120-82-1*	*9*	0.54	U	0.25	U	0.25	U	0.54	U	0.25	U	0.27	U
Vinyl Chloride	*75-01-4*	*1*	0.12	U	0.33	U	0.33	U	0.12	U	0.33	U	0.060	U
m,p-Xylene	*179601-23-1*	*--*	0.56	U	0.42	U	0.42	U	0.56	U	0.42	U	0.28	U
o-Xylene	*95-47-6*	*--*	0.64	U	0.21	U	0.21	U	0.64	U	0.21	U	0.32	U
Xylenes (total)	*1330-20-7*	*1000*	0.56	U	0.21	U	0.21	U	0.56	U	0.21	U	0.28	U
Total VOC TIC	*SRP170*	*500*	ND	U	ND		ND		ND	U	ND		ND	U

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
ND = Not Detected
J = Estimated value below sample reporting limit
U = Compound not detected above MDL
Values in italics indicate MDL above applicable criterion.

APPENDIX F

Analytical Data Quality Evaluation - SGS Accutest vs. TestAmerica

• Table F-3 - Summary of 1,4-Dioxane in Ground Water - June 2016 Split Samples SGS Accutest vs. TestAmerica

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	DW-13B_PR171.75	DW-13B_PR171.75	DW-13-D2_PR241.8	DW-13-D2_PR241.8	DW-31B_PR316.8	DW-31B_PR316.8
		Date Sampled:	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016
		LAB Sample ID:	JC22961-16	460116035-32	JC22961-17	460116035-34	460116035-17	JC22961-6
		LAB:	Accutest	TestAmerica Edison	Accutest	TestAmerica Edison	TestAmerica Edison	Accutest
Parameter (ug/l)	***CAS No.***	***GWQS***						
1,4-Dioxane	*123-91-1*	*0.4*	**38.7**	**53**	**12.9**	**13**	**39**	**30.1**

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

	Sample No.:	DW-31C_PR436.8	DW-31C_PR436.8	DW-34B_PR286.75	DW-34B_PR286.75	DW-44B_PR256.8	DW-44B_PR256.8
	Date Sampled:	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016
	LAB Sample ID:	JC22961-15	460116035-31	460116035-2	JC22961-2	JC22961-7	460116035-20
	LAB:	Accutest	TestAmerica Edison	TestAmerica Edison	Accutest	Accutest	TestAmerica Edison
Parameter (ug/l)	***CAS No.***	***GWQS***					
1,4-Dioxane	*123-91-1*	*0.4*	**11.5**	**7.3**	**64**	***47.6***	***58.2***	**40**

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	DW-44C_PR360.8		DW-44C_PR360.8		MW-1G_PR10.75		MW-1G_PR10.75		MW-22A_PR40.75		MW-22A_PR40.75	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
		LAB Sample ID:	JC22961-8		460116035-23		JC22966-6		460116035-7		JC22966-13		460116035-16	
		LAB:	Accutest		TestAmerica Edison		Accutest		TestAmerica Edison		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
1,4-Dioxane	*123-91-1*	*0.4*	***54.6***		**65**		**9.1**		**8.7**		**34.1**		**31**	

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-103A_PR11.6	MW-103A_PR11.6	MW-104C_PR76.75	MW-104C_PR76.75	MW-126B_PR41.8	MW-126B_PR41.8
		Date Sampled:	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016
		LAB Sample ID:	460116035-21	JC22960-3	JC22966-3	460116035-4	JC22966-21	460116035-33
		LAB:	TestAmerica Edison	Accutest	Accutest	TestAmerica Edison	Accutest	TestAmerica Edison
Parameter (ug/l)	***CAS No.***	***GWQS***						
1,4-Dioxane	*123-91-1*	*0.4*	**34**	***43.9***	**41.3**	**46**	***155***	***130***

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-126C_PR76.8		MW-126C_PR76.8		MW-208C_PR76.75		MW-208C_PR76.75		MW-266B_PR61.95		MW-266B_PR61.95	
		Date Sampled:	6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016		6/23/2016	
		LAB Sample ID:	JC22966-22		460116035-35		JC22966-23		460116035-36		JC22966-19		460116035-29	
		LAB:	Accutest		TestAmerica Edison		Accutest		TestAmerica Edison		Accutest		TestAmerica Edison	
Parameter (ug/l)	***CAS No.***	***GWQS***												
1,4-Dioxane	*123-91-1*	*0.4*	***100***		***110***		***21.7***		**27**		**18.4**		**19**	

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.

Appendix F - Table F-3
Summary of 1,4-Dioxane in Ground Water
Hoffmann-La Roche Inc. - Nutley, New Jersey
June 2016 Split Samples SGS Accutest vs. TestAmerica

		Sample No.:	MW-266C_PR86.85	MW-266C_PR86.85	MW-416B_PR49.25	MW-416B_PR49.25	MW-416C_PR104.3	MW-416C_PR104.3
		Date Sampled:	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016	6/23/2016
		LAB Sample ID:	JC22966-20	460116035-30	JC22966-14	460116035-18	JC22966-15	460116035-19
		LAB:	Accutest	TestAmerica Edison	Accutest	TestAmerica Edison	Accutest	TestAmerica Edison
Parameter (ug/l)	***CAS No.***	***GWQS***						
1,4-Dioxane	*123-91-1*	*0.4*	**22.5**	**17**	**25.2**	**25**	***478***	***600***

GWQS = NJDEP's Ground Water Quality Standard
Bold indicates concentrations above the GWQS
Values in italics indicate MDL above applicable criterion.
1,4-dioxane samples were analyzed by method SW846 8260C SIM.