APPENDIX G
Existing Well Groundwater Quality Data

Table 1: Existing Well Information

Water Supply Feasibility Study
Murray Drive -- Whittamore Road Project
City of Chesapeake, VA

Address	Well Depth (ft bgs)	Screen Interval (ft bgs)	Yield (gpm)
Blue Ridge Road			
1505 Blue Ridge	60	50-60	
1521 Blue Ridge	93	60-70	
Centerville Turnpike			
815 Centerville	60	50-60	
1020 Centerville	80	70-80	
1104 Centerville	105	95-105	
Murray Drive			
1101 Murray	123	100-123	
1104 Murray	122	107-122	18
1204 Murray	80	67-80	12
1205 Murray		70-80	
1208 Murray	50	40-50	25
1212 Murray		46	
1215 Murray	43	38-43	25
1220 Murray		42	
1300 Murray	80	75-80	
1304 Murray		45	
1305 Murray	42	32-42	25
1312 Murray		45	
1313 Murray	80	50-80	20
1316 Murray	130	70-130	20
1317 Murray	48	43-48	25
1320 Murray	80	65-80	18
1324 Murray	90	85-90	10
1325 Murray	32	25-32	15
1328 Murray	45	35-45	20
1329 Murray	53	42-53	
1379 Murray	53	42-53	20
Whittamore Road			
1405 Whittamore	55	40-55	10
1407 Whittamore	41	20-40	
1469 Whittamore	42	37-42	

SUMMARY

# of wells w/ screen interval info	29
Screen interval =20-40 ft bgs	4
=40-70 ft bgs	16
=70-90 ft bgs	5
>100 ft bgs	4
Average well depth=	71 ft
# of wells w/ yield data	14
Average yield=	19 gpm

Table 2: Existing Well Water Quality

Water Supply Feasibility Study

Murray Drive -- Whittamore Road Project

City of Chesapeake, VA

Address	Date	As (mg/L)	Ba (mg/L)	Cr (mg/L)	Cd (mg/L)	Pb (mg/L)	Se (mg/L)	Ag (mg/L)	V (mg/L)	Hg (mg/L)	B (mg/L)	Co (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	Sb (mg/L)	Be (mg/L)	Tl (mg/L)	Cu (mg/L)	Fe (mg/L)	CN (mg/L)	F (mg/L)
Primary MCL		**0.010**	**2.000**	**0.100**	**0.005**	**0.015**	**0.050**		**N/A**	**0.002**		**N/A**		**N/A**		**0.006**	**0.004**	**0.002**	**1.3**		**0.2**	**4**
Secondary MCL								**0.100**					**0.050**		**5.000**					**0.3**		**2**
WHO											**0.500**											
Blue Ridge Road																						
1505 Blue Ridge	12/05/01	<0.002	<0.1	<0.0005	0.0005	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.26	<0.05	0.034	<0.003	0.0008	<0.001	<0.015	1.99	<0.005	<0.1
1521 Blue Ridge	12/04/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	<0.1
1533 Blue Ridge	04/14/08	<	0.0740	<	<	<	<	<	<	<	0.2000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Centerville Turnpike																						
815 Centerville	12/03/01	0.004	<0.1	0.001	0.0001	0.003	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	<0.1
833 Centerville	04/08/08	<	0.0260	<	<	<	<	<	<	<	0.0340	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
901 Centerville	04/08/08	<	<	<	<	0.0100	<	<	<	<	0.0840	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
905 Centerville	12/04/01	<0.002	<0.1	<0.0005	0.0002	0.005	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	0.115	<0.1	<0.005	<0.1
909 Centerville	04/14/08	<	<	<	<	0.0020	<	<	<	<	0.0580	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
911 Centerville	04/14/08	<	<	<	<	<	<	<	<	<	0.0190	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1004 Centerville	12/05/01	<0.002	<0.1	<0.0005	<0.0001	0.009	<0.002	<0.0002	NT	<0.0002	NT	NT	0.17	<0.05	0.04	<0.003	0.0005	<0.001	0.402	5.53	<0.005	<0.1
1004 Centerville	12/05/01	<0.002	<0.1	<0.0005	<0.0001	0.002	<0.002	<0.0002	NT	<0.0002	NT	NT	0.18	<0.05	0.04	<0.003	0.0005	<0.001	0.362	5.67	<0.005	<0.1
1020 Centerville	12/03/01	<0.002	<0.1	<0.0005	0.0002	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.07	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	1.97	<0.005	<0.1
1102 Centerville	04/07/08	<	<	<	<	<	<	<	<	<	0.0410	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1104 Centerville	12/03/01	<0.002	<0.1	0.001	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.04	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.38	<0.005	<0.1
1104 Centerville	04/08/08	<	<	<	<	0.0020	<	<	<	<	0.0530	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1200 Centerville	04/12/08	<	<	<	<	<	<	<	<	<	0.0450	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1208 Centerville	04/12/08	<	<	<	<	<	<	<	<	<	0.0440	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1216 Centerville	04/12/08	<	<	<	<	<	<	<	<	<	0.0450	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1224 Centerville	12/04/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	<0.1
1224 Centerville	04/12/08	<	<	<	<	<	<	<	<	<	0.0440	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1228 Centerville	04/12/08	<	<	<	<	<	<	<	<	<	0.0450	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Murray Drive																						
1101 Murray	12/10/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.19	<0.005	0.24
1101 Murray	04/06/08	<	0.1020	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1101 Murray	04/06/08	<	0.0690	<	0.0015	0.0020	<	<	<	<	0.0200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1101 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.108	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1101 Murray	07/18/08	<0.0020	0.083	<0.001	<0.0005	0.001	<0.0020	<0.001	<0.005	<0.0002	0.022	<0.005	0.250	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1104 Murray	12/06/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.24
1104 Murray	04/12/08	<	<	<	<	<	<	<	<	<	0.1370	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1104 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	0.011	<0.0020	<0.001	<0.005	<0.0002	0.148	<0.005	<0.005	<0.005	0.147	NT	NT	NT	NT	NT	NT	NT
1105 Murray	11/30/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.001	0.069	<0.1	<0.005	0.17
1105 Murray	04/07/08	<	<	<	<	<	<	<	<	<	0.1500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1105 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.159	<0.005	<0.005	<0.005	0.009	NT	NT	NT	NT	NT	NT	NT
1108 Murray	04/12/08	<	<	<	<	<	<	<	<	<	0.1150	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1108 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.122	<0.005	0.007	<0.005	0.010	NT	NT	NT	NT	NT	NT	NT
1109 Murray	04/07/08	<	0.0100	<	0.0005	0.0010	<	<	<	<	0.0180	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1112 Murray	12/04/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.19	<0.005	0.2
1112 Murray	04/07/08	<	<	<	<		<	<	<	<	0.1430	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Address	Date	As (mg/L)	Ba (mg/L)	Cr (mg/L)	Cd (mg/L)	Pb (mg/L)	Se (mg/L)	Ag (mg/L)	V (mg/L)	Hg (mg/L)	B (mg/L)	Co (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	Sb (mg/L)	Be (mg/L)	Tl (mg/L)	Cu (mg/L)	Fe (mg/L)	CN (mg/L)	F (mg/L)
Primary MCL		**0.010**	**2.000**	**0.100**	**0.005**	**0.015**	**0.050**		**N/A**	**0.002**		**N/A**		**N/A**		**0.006**	**0.004**	**0.002**	**1.3**		**0.2**	**4**
Secondary MCL								**0.100**					**0.050**		**5.000**					**0.3**		**2**
WHO											**0.500**											
Murray Drive																						
1113 Murray	12/04/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.16
1113 Murray	04/07/08	<	<	<	<	0.0010	<	<	<	<	0.1640	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1113 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.180	<0.005	<0.005	<0.005	0.006	NT	NT	NT	NT	NT	NT	NT
1116 Murray	12/06/01	<0.002	<0.1	<0.0005	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.22	<0.005	0.24
1116 Murray	05/12/08	<	<	<	<	<	<	<	<	<	0.1620	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1117 Murray	12/04/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.001	<0.015	0.27	<0.005	0.18
1117 Murray	04/08/08	<	<	<	<	<	<	<	<	<	0.1440	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1117 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.158	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1120 Murray	04/12/08	<	<	<	<	<	<	<	<	<	0.1720	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1120 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.187	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1121 Murray	04/07/08	<	<	<	<	0.0010	<	<	<	<	0.0200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1124 Murray	12/06/01	<0.002	<0.1	<0.0005	0.0001	0.004	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	0.021	<0.003	<0.0001	<0.001	<0.015	0.31	<0.005	0.26
1124 Murray	04/06/08	<	0.1220	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1124 Murray	07/18/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.128	<0.005	0.007	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1125 Murray	11/30/01	<0.002	<0.1	<0.0005	0.0001	0.002	<0.002	<0.0002	NT	0.0007	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.002	<0.015	0.15	<0.005	0.16
1125 Murray	04/14/08	<	<	<	<	<	<	<	<	<	0.1890	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1200 Murray	04/06/08	<	0.2080	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1200 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.220	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1201 Murray	12/10/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.23	<0.005	0.29
1201 Murray	04/06/08	<	0.1950	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1201 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.206	<0.005	<0.005	<0.005	0.013	NT	NT	NT	NT	NT	NT	NT
1204 Murray	12/04/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.32	<0.005	0.25
1204 Murray	04/08/08	<	<	<	<	<	<	<	<	<	0.1590	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1204 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.174	<0.005	0.008	<0.005	0.138	NT	NT	NT	NT	NT	NT	NT
1205 Murray	04/07/08	<	<	<	<	<	<	<	<	<	0.1550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1205 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.167	<0.005	0.006	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1208 Murray	12/04/01	<0.002	<0.1	0.001	<0.0001	0.006	<0.002	0.0003	NT	<0.0002	NT	NT	0.11	<0.05	<0.015	<0.003	<0.0001	<0.001	1.623	1.07	<0.005	0.19
1208 Murray	04/12/08	<	0.0070	<	<	0.0020	<	<	<	<	0.1130	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1209 Murray	04/06/08	<	0.1920	<	<	0.0580	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1209 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005		<0.0020	<0.001	<0.005	<0.0002	0.202	<0.005	0.008	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1212 Murray	04/27/08	<	0.0080	<	<	0.0050	<	<	<	<	0.1310	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1213 Murray	04/06/08	<	0.3960	<	<	0.0010	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1213 Murray	04/27/08	<	<	<	<	0.0020	<	<	<	<	0.4020	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1213 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	0.006	0.0029	<0.001	<0.005	<0.0002	0.403	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1215 Murray	12/06/01	<0.002	<0.1	<0.0005	0.0004	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	0.026	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.29
1215 Murray	04/06/08	<	0.1040	<	<	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1215 Murray	07/18/08	<0.0020	0.017	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.116	<0.005	0.119	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1216 Murray	04/07/08	<	<	<	<	<	<	<	<	<	0.2940	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1216 Murray	04/27/08	<	<	<	<	0.0020	<	<	<	<	0.3010	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1216 Murray	07/19/08	<0.0020	<0.005	<0.001	<0.0005	<0.001	0.0029	<0.001	<0.005	<0.0002	0.305	<0.005	0.010	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1219 Murray	04/12/08	<	0.0120	<	<	<	<	<	<	<	0.0890	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1220 Murray	04/07/08	<	0.0120	<	<	<	<	<	<	<	0.1040	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1220 Murray	07/18/08	<0.0020	0.012	<0.001	<0.0005	0.004	<0.0020	<0.001	<0.005	<0.0002	0.113	<0.005	0.096	<0.005	0.113	NT	NT	NT	NT	NT	NT	NT

Address	Date	As (mg/L)	Ba (mg/L)	Cr (mg/L)	Cd (mg/L)	Pb (mg/L)	Se (mg/L)	Ag (mg/L)	V (mg/L)	Hg (mg/L)	B (mg/L)	Co (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	Sb (mg/L)	Be (mg/L)	Tl (mg/L)	Cu (mg/L)	Fe (mg/L)	CN (mg/L)	F (mg/L)
Primary MCL		0.010	2.000	0.100	0.005	0.015	0.050		N/A	0.002		N/A		N/A		0.006	0.004	0.002	1.3		0.2	4
Secondary MCL								0.100					0.050		5.000					0.3		2
WHO											0.500											
Murray Drive																						
1300 Murray	11/30/01	<0.002	<0.1	<0.0005	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.28	<0.05	<0.015	<0.003	<0.0001	0.001	<0.015	5.92	<0.005	0.12
1300 Murray	04/12/08	<	<	<	<	<	<	<	<	<	0.0670	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1301 Murray	11/30/01	<0.002	<0.1	<0.0005	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.002	<0.015	0.27	<0.005	0.23
1301 Murray	04/07/08	<	<	<	<	0.0010	<	<	<	<	0.5600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1301 Murray	07/19/08	<0.002	<0.005	<0.001	<0.0005	0.001	0.0045	<0.001	<0.005	<0.0002	0.586	<0.005	<0.005	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1304 Murray	04/14/08	<	<	<	<	0.0040	<	<	<	<	0.0420	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1304 Murray	04/27/08	<	0.0160	<	<	0.0040	<	<	<	<	0.0500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1305 Murray	04/12/08	<	<	<	<	<	<	<	<	<	0.0490	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1305 Murray	04/12/08	<	0.0210	<	<	0.0030	<	<	<	<	0.0680	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1308 Murray	12/10/01	<0.002	<0.1	<0.0005	0.0004	0.003	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	1.54	<0.1	<0.005	0.36
1308 Murray	04/27/08	<	0.0220	<	0.0008	0.0020	<	<	<	<	0.0550	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1309 Murray	04/12/08	<	0.0240	<	<	0.0020	<	<	<	<	0.0490	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1312 Murray	04/14/08	<	0.0780	<	0.0010	0.0070	<	<	<	<	0.0500	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1313 Murray	04/12/08	<	0.0140	<	0.0008	<	<	<	<	<	<	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1316 Murray	04/08/08	<	0.0300	<	0.0010	<	<	<	<	<	0.0090	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1317 Murray	11/30/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.23	<0.05	<0.015	<0.003	<0.0001	0.001	<0.015	7.5	<0.005	0.23
1317 Murray	04/06/08	<	0.0180	<	0.0007	<	<	<	<	<	0.0200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1320 Murray	11/30/01	<0.002	<0.1	<0.0005	0.0002	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.002	0.051	0.16	<0.005	0.12
1320 Murray	04/08/08	<	<	<	<	<	<	<	<	<	0.2150	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1320 Murray	07/19/08	<0.0020	0.027	<0.001	<0.0005	0.013	<0.0020	<0.001	<0.005	<0.0002	0.269	<0.005	0.017	<0.005	0.021	NT	NT	NT	NT	NT	NT	NT
1321 Murray	04/08/08	<	<	<	<	0.0010	<	<	<	<	0.0070	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1324 Murray	12/03/01	<0.002	<0.1	<0.0005	0.0001	0.002	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.17
1324 Murray	04/06/08	<	<	<	<	<	<	<	<	<	0.0130	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1324 Murray	04/27/08	<	0.0110	<	0.0008	0.0270	<	<	<	<	0.0200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1325 Murray	11/30/01	<0.002	<0.1	<0.0005	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.25
1325 Murray	04/12/08	<	0.0100	<	0.0012	0.0310	<	<	<	<	0.0090	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1325 Murray	07/19/08	<0.0020	0.009	<0.001	<0.0005	0.001	<0.0020	<0.001	<0.005	<0.0002	0.018	<0.005	0.298	<0.005	0.011							
1328 Murray																						
1329 Murray	12/10/01	<0.002	<0.1	0.001	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.008	<0.015	<0.1	<0.005	0.37
1329 Murray	04/06/08	<	<	<	<	<	<	<	<	<	0.0140	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1329 Murray	05/12/08	<	0.0110	<	0.0009	<	<	<	<	<	0.0190	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1379 Murray																						
Whittamore Road																						
1109 Whittamore	11/30/01	0.003	<0.1	<0.0005	<0.0001	0.002	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	<0.1
1109 Whittamore	04/07/08	<	0.0610	<	<	0.0090	<	<	<	<	0.0210	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1204 Whittamore	12/04/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	0.036	<0.003	<0.0001	<0.001	<0.015	1.47	<0.005	0.17
1404 Whittamore	04/07/08	<	0.0230	<	<	<	<	<	<	<	0.0530	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1405 Whittamore	11/30/01	<0.002	<0.1	<0.0005	0.0002	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.001	<0.015	<0.1	<0.005	0.12
1407 Whittamore	11/30/01	<0.002	<0.1	<0.0005	0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	0.32	<0.005	<0.1
1408 Whittamore	04/27/08	<	0.0600	<	<	0.0010	<	<	<	<	0.0870	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1411 Whittamore	04/12/08	<	0.0460	<	<	0.0130	<	<	<	<	0.1330	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1412 Whittamore	04/07/08	<	0.0590	<	<	0.0010	<	<	<	<	0.1840	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1419 Whittamore	05/12/08	<	0.0120	<	<	<	<	<	<	<	0.0510	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Address	Date	As (mg/L)	Ba (mg/L)	Cr (mg/L)	Cd (mg/L)	Pb (mg/L)	Se (mg/L)	Ag (mg/L)	V (mg/L)	Hg (mg/L)	B (mg/L)	Co (mg/L)	Mn (mg/L)	Ni (mg/L)	Zn (mg/L)	Sb (mg/L)	Be (mg/L)	Tl (mg/L)	Cu (mg/L)	Fe (mg/L)	CN (mg/L)	F (mg/L)
Primary MCL		0.010	2.000	0.100	0.005	0.015	0.050		N/A	0.002		N/A		N/A		0.006	0.004	0.002	1.3		0.2	4
Secondary MCL								0.100					0.050		5.000					0.3		2
WHO											0.500											
Whittamore Road																						
1420 Whittamore	12/06/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.29	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	1.17	<0.005	0.15
1420 Whittamore	12/06/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.26	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	1.12	<0.005	0.18
1420 Whittamore	04/08/08	<	0.0430	<	<	<	<	<	<	<	0.9050	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1428 Whittamore	04/12/08	<	0.0300	<	<	<	<	<	<	<	0.6120	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1428 Whittamore	07/18/08	<0.0020	0.032	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.713	<0.005	0.181	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1433 Whittamore	11/30/01	<0.002	<0.1	<0.0005	0.0002	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	0.001	<0.015	<0.1	<0.005	0.11
1436 Whittamore	12/06/01	<0.002	<0.1	<0.0005	0.0002	0.010	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.17
1436 Whittamore	12/06/01	<0.002	<0.1	<0.0005	<0.0001	0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	<0.03	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	<0.1	<0.005	0.18
1436 Whittamore	04/12/08	<	0.0150	<	<	<	<	<	<	<	0.3290	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1436 Whittamore	07/18/08	<0.0020	0.025	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.385	<0.005	0.138	<0.005	<0.005							
1437 Whittamore	04/27/08	<	0.0740	<	<	0.0010	<	<	<	<	0.0450	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1439 Whittamore	04/07/08	<	0.0220	<	<	0.0010	<	<	<	<	0.0140	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1440 Whittamore	04/14/08	<	0.0910	<	<	<	<	<	<	<	0.0290	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1441 Whittamore	11/30/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.08	<0.05	0.021	<0.003	<0.0001	0.001	0.032	0.8	<0.005	0.1
1441 Whittamore	04/14/08	<	<	<	<	0.0010	<	<	<	<	0.0220	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1443 Whittamore	04/07/08	<	0.0190	<	<	0.0030	<	<	<	<	0.0060	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1445 Whittamore	04/06/08	<	0.0120	<	<	0.0010	<	<	<	<	0.0370	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1448 Whittamore	04/06/08	<	0.0370	0.0010	<	0.0020	<	<	<	<	0.0450	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1451 Whittamore	04/14/08	<	0.0220	<	<	<	<	<	<	<	0.0770	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1453 Whittamore	04/14/08	<	<	<	<	0.0030	<	<	<	<	0.0410	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1457 Whittamore	04/06/08	<	<	<	<	<	<	<	<	<	0.0280	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1457 Whittamore	04/27/08	<	0.0220	<	<	0.0020	<	<	<	<	0.0320	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1461 Whittamore	04/07/08	<	0.0230	<	<	<	<	<	<	<	0.0330	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1463 Whittamore	04/07/08	<	0.0220	<	<	<	<	<	<	<	0.0160	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1465 Whittamore	04/07/08	<	0.0200	<	<	<	<	<	<	<	0.0250	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1469 Whittamore	12/06/01	<0.002	<0.1	<0.0005	<0.0001	<0.001	<0.002	<0.0002	NT	<0.0002	NT	NT	0.1	<0.05	<0.015	<0.003	<0.0001	<0.001	0.03	1.14	<0.005	0.21
1473 Whittamore	12/10/01	<0.002	<0.1	0.008	<0.0001	0.008	<0.002	0.0004	NT	<0.0002	NT	NT	<0.03	<0.05	0.04	<0.003	<0.0001	<0.001	0.447	0.24	<0.005	0.24
1473 Whittamore	04/07/08	<	0.0140	<	<	0.0010	<	<	<	<	0.0140	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1605 Whittamore	04/14/08	<	0.0360	<	<	<	<	<	<	<	0.1210	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1609 Whittamore	04/12/08	<	0.0350	<	<	0.0020	<	<	<	<	0.1130	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1609 Whittamore	07/18/08	<0.0020	0.034	<0.001	<0.0005	0.002	<0.0020	<0.001	<0.005	<0.0002	0.128	<0.005	0.721	<0.005	0.012	NT	NT	NT	NT	NT	NT	NT
1612 Whittamore	04/07/08	<	0.0300	<	<	<	<	<	<	<	0.1090	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1612 Whittamore	07/19/08	<0.0020	0.029	<0.001	<0.0005	<0.001	<0.0020	<0.001	<0.005	<0.0002	0.116	<0.005	0.213	<0.005	<0.005	NT	NT	NT	NT	NT	NT	NT
1613 Whittamore	04/14/08	<	0.0190	<	0.0013	<	<	<	<	<	0.0740	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1621 Whittamore	04/08/08	<	0.0110	<	0.0005	<	<	<	<	<	0.0100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1629 Whittamore	04/14/08	<	0.0330	<	<	<	<	<	<	<	0.0780	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Fentress Road																						
1441 Fentress	12/04/01	<0.002	<0.1	<0.0005	<0.0001	0.002	<0.002	<0.0002	NT	<0.0002	NT	NT	0.230	<0.05	<0.015	<0.003	<0.0001	<0.001	<0.015	3.2	<0.005	<0.1

Re-test without softener.

Barn or irrigation water source

NT - Not tested for this analyte

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
FAX: 304.255.2572
Website: www.reiclabs.com

Improving the environment, one client at a time...

1208 MURRAY DR
WELL SCREEN 40-50ft
COLUMBIA AQUIFER

Mr. Russell Rountree
SCHNABEL ENGINEERING SOUTH LLC
300 ED WRIGHT LN SUITE 1
NEWPORT NEWS VA 23606

TEL: (757) 947-1220
FAX (757) 947-1220

RE: 08330106

Order No.: 0812H94

Dear Mr. Russell Rountree:

REI Consultants, Inc. received 1 sample(s) on 12/23/2008 for the analyses presented in the following report.

Please note two changes you may see on your report.

- Results for "Dissolved" parameters will be shown under a separate sample ID, rather than as a separate analysis under the same sample ID. The sample ID for "Dissolved" parameters will include "Field Filtered" or "Lab Filtered", as appropriate.
- Metals results will no longer be identified as "Total" or "Total Recoverable". The methods have not been changed, only their appearance on the report.

If you have any questions regarding these results, please do not hesitate to call.

Sincerely,

Scott Gross
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
FAX: 304.255.2572
Website: www.reiclabs.com

Improving the environment, one client at a time...

Report Narrative

Project Manager:: **Scott Gross**

WO#: **0812H94**
Date:

CLIENT: SCHNABEL ENGINEERING SOUTH LL
Project: 08330106

All analyses were performed using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. REI Consultants, Inc. (REIC) technical managers have verified compliance of reported results with the REIC's Quality Program and SOPs, except as noted in this case narrative. Any deviation from compliance is explained below and/or identified within the body of this report by a qualifier footnote which is defined at the bottom of each page.

All samples were analyzed using the methods stated in the analytical report without modification, unless otherwise noted.

All sample results are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5), may vary slightly from the sum of the individual parameter results. This apparent anomaly is caused by rounding individual results and summations at reporting, as required by EPA.

Following standard laboratory protocol, sample preservation, such as pH, is verified at time of extraction or analysis based on client requested parameters. Improper preservation is noted on the analytical bench sheet, extraction log, or preservation log and client is notified by close of following business day. All results are reported using preservation compliant samples unless otherwise noted in the analytical report.

The test results in this report meet all NELAP requirements for parameters for which accreditations are required or available. Any exceptions are noted in this report. This report may not be reproduced, except in full, without the written approval of REIC.

In compliance with federal guidelines and standard operating procedures, all reports, including raw data and supporting quality control, will be disposed of after five years unless otherwise arranged by the client via written notification or contract requirement.

If you have any questions please contact the project manager whose name is listed above.

REI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H94
Client Sample ID:	1208 MURRAY DRIVE	**Lab ID:**	0812H94-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:25:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
METALS BY ICP			**E200.7**			Analyst: **BP**
Aluminum	0.267	mg/L	*	NA	0.100	12/31/2008 12:32:00 AM
Boron	0.111	mg/L		NA	0.100	12/31/2008 12:32:00 AM
Iron	1.79	mg/L	*	NA	0.100	12/31/2008 12:32:00 AM
Magnesium	18.9	mg/L		NA	0.500	12/31/2008 12:32:00 AM
Manganese	0.186	mg/L	*	NA	0.050	12/31/2008 12:32:00 AM
Silica (as SiO2)	27.6	mg/L		NA	0.210	12/29/2008 2:52:00 PM
Sodium	81.1	mg/L		NA	0.500	12/31/2008 12:32:00 AM
METALS BY ICP-MS			**E200.8**			Analyst: **BM**
Antimony	ND	mg/L		NA	0.0010	12/29/2008 4:19:09 PM
Arsenic	ND	mg/L		NA	0.0050	12/29/2008 4:19:09 PM
Barium	ND	mg/L		NA	0.100	12/29/2008 4:19:09 PM
Beryllium	ND	mg/L		NA	0.0020	12/29/2008 4:19:09 PM
Cadmium	ND	mg/L		NA	0.0010	12/29/2008 4:19:09 PM
Chromium	0.0071	mg/L		NA	0.0050	12/29/2008 4:19:09 PM
Cobalt	ND	mg/L		NA	0.100	12/29/2008 4:19:09 PM
Copper	ND	mg/L		NA	0.0500	12/29/2008 4:19:09 PM
Lead	ND	mg/L		NA	0.0050	12/29/2008 4:19:09 PM
Molybdenum	ND	mg/L		NA	0.100	12/29/2008 4:19:09 PM
Nickel	ND	mg/L		NA	0.0100	12/29/2008 4:19:09 PM
Selenium	ND	mg/L		NA	0.0050	12/29/2008 4:19:09 PM
Silver	ND	mg/L		NA	0.0500	12/29/2008 4:19:09 PM
Thallium	ND	mg/L		NA	0.0010	12/29/2008 4:19:09 PM
Vanadium	ND	mg/L		NA	0.0500	12/29/2008 4:19:09 PM
Zinc	0.0218	mg/L		NA	0.0100	12/29/2008 4:19:09 PM
HARDNESS, CALCIUM			**SM2340 B**			Analyst: **BP**
Hardness, Calcium (As CaCO3)	104	mg/L		NA	1.00	12/31/2008 12:32:00 AM
HARDNESS			**SM2340 B**			Analyst: **BP**
Hardness, Total (As CaCO3)	182	mg/L		NA	1.00	12/31/2008 12:32:00 AM
MERCURY, TOTAL			**E245.1**			Analyst: **CGW**
Mercury	ND	mg/L		NA	0.0010	12/30/2008 10:50:00 AM
SEMIVOLATILE ORGANIC COMPOUNDS BY EPA			**E504.1**			Analyst: **JG**
1,2-Dibromo-3-chloropropane	ND	mg/L		NA	0.000020	1/2/2009 6:07:05 PM
1,2-Dibromoethane	ND	mg/L		NA	0.000020	1/2/2009 6:07:05 PM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
MDL	Minimum Detection Limit	E	Estimated Value above quantitation range
NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limits
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

PRELIMINARY

PEI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H94
Client Sample ID:	1208 MURRAY DRIVE	**Lab ID:**	0812H94-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:25:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS			**E515.1**			Analyst: **JG**
2,4,5-TP (Silvex)	ND	mg/L		NA	0.000607	12/30/2008
2,4-D	ND	mg/L		NA	0.000121	12/30/2008
Dalapon	ND	mg/L		NA	0.00789	12/30/2008
Dinoseb	ND	mg/L		NA	0.000121	12/30/2008
Pentachlorophenol	ND	mg/L		NA	0.000607	12/30/2008
Picloram	ND	mg/L		NA	0.000607	12/30/2008
VOLATILE ORGANIC COMPOUNDS			**E524.2**			Analyst: **SDG**
Benzene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Carbon tetrachloride	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
1,2-Dichlorobenzene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
1,4-Dichlorobenzene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
1,2-Dichloroethane	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
1,1-Dichloroethene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
cis-1,2-Dichloroethene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
trans-1,2-Dichloroethene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
1,2-Dichloropropane	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Ethylbenzene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Methylene chloride	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Styrene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Tetrachloroethene	ND	µg/L		NA	1.0	12/29/2008 10:46:00 AM
Surr: 1,2-Dichlorobenzene-d4	88.2	%REC			75-125	12/29/2008 10:46:00 AM
Surr: 4-Bromofluorobenzene	94.5	%REC			75-125	12/29/2008 10:46:00 AM
RESIDUAL CHLORINE - LAB TEST, HOLD TIME E			**SM4500-CL-G**			Analyst: **CC**
Chlorine, Total Residual	ND	µg/L		NA	100	12/24/2008 11:30:00 AM
TURBIDITY			**SM2130 B**			Analyst: **CC**
Turbidity	2.87	NTU	*	NA	0.50	12/24/2008 9:30:00 AM
COLIFORM BY P/A			**SM9223 B**			Analyst: **CC**
Fecal Coliform	ABSENT	NA		NA	NA	12/24/2008 2:57:00 PM
Total Coliform	ABSENT	NA		NA	NA	12/24/2008 2:57:00 PM
CYANIDE			**E335.4**			Analyst: **BA**
Cyanide, Total	ND	mg/L		NA	0.020	12/24/2008 9:00:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Chloride	124	mg/L		NA	5.00	12/30/2008 11:04:00 PM

Key:

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NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limits
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

PRELIMINARY

REI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H94
Client Sample ID:	1208 MURRAY DRIVE	**Lab ID:**	0812H94-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:25:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Fluoride	0.33	mg/L		NA	0.20	12/30/2008 11:04:00 PM
Sulfate	24.2	mg/L		NA	5.00	12/30/2008 11:04:00 PM
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Nitrogen, Nitrate-Nitrite	ND	mg/L		NA	0.10	1/1/2009 9:01:00 AM
TOTAL DISSOLVED SOLIDS			**SM2540 C**			Analyst: **DSA**
Total Dissolved Solids	377	mg/L		NA	1	12/23/2008 6:05:00 PM
ALKALINITY			**SM2320 B**			Analyst: **DSA**
Alkalinity, Total (As CaCO3)	156	mg/L		NA	1.0	12/24/2008 7:45:00 AM
CORROSIVITY, LANGELIER INDEX			**SM2330 B**			Analyst: **IL**
Langelier Index	-0.77	at 20 °C		NA	NA	1/5/2009
PH - LAB TEST, HOLD TIME EXPIRED			**SM4500-H+-B**			Analyst: **DSA**
pH	6.98	SU		NA	NA	12/24/2008 7:45:00 AM
ORGANIC CARBON, TOTAL			**SM5310 C**			Analyst: **DSA**
Total Organic Carbon	2.01	mg/L		NA	1.00	12/24/2008 7:12:00 AM

Key:

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ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limits
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

PRELIMINARY

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
FAX: 304.255.2572
Website: www.reiclabs.com

Improving the environment, one client at a time...

1204 MURRAY DR.
WELL SCREEN 67-80ft
YORKTOWN - EASTOVER AQUIFER

Mr. Russell Rountree
SCHNABEL ENGINEERING SOUTH LLC
300 ED WRIGHT LN SUITE 1
NEWPORT NEWS VA 23606

TEL: (757) 947-1220
FAX (757) 947-1220

RE: 08330106

Order No.: 0812H90

Dear Mr. Russell Rountree:

REI Consultants, Inc. received 1 sample(s) on 12/23/2008 for the analyses presented in the following report.

Please note two changes you may see on your report.

- Results for "Dissolved" parameters will be shown under a separate sample ID, rather than as a separate analysis under the same sample ID. The sample ID for "Dissolved" parameters will include "Field Filtered" or "Lab Filtered", as appropriate.
- Metals results will no longer be identified as "Total" or "Total Recoverable". The methods have not been changed, only their appearance on the report.

If you have any questions regarding these results, please do not hesitate to call.

Sincerely,

Scott Gross
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

225 Industrial Park Drive
Beaver, WV 25813
TEL: 304.255.2500
FAX: 304.255.2572
Website: www.reiclabs.com

Improving the environment, one client at a time...

Report Narrative

Project Manager:: **Scott Gross**

WO#: **0812H90**
Date:

CLIENT: SCHNABEL ENGINEERING SOUTH LL
Project: 08330106

All analyses were performed using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. REI Consultants, Inc. (REIC) technical managers have verified compliance of reported results with the REIC's Quality Program and SOPs, except as noted in this case narrative. Any deviation from compliance is explained below and/or identified within the body of this report by a qualifier footnote which is defined at the bottom of each page.

All samples were analyzed using the methods stated in the analytical report without modification, unless otherwise noted.

All sample results are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as Total Trihalomethanes (TTHM) and Total Haloacetic Acids (HAA5), may vary slightly from the sum of the individual parameter results. This apparent anomaly is caused by rounding individual results and summations at reporting, as required by EPA.

Following standard laboratory protocol, sample preservation, such as pH, is verified at time of extraction or analysis based on client requested parameters. Improper preservation is noted on the analytical bench sheet, extraction log, or preservation log and client is notified by close of following business day. All results are reported using preservation compliant samples unless otherwise noted in the analytical report.

The test results in this report meet all NELAP requirements for parameters for which accreditations are required or available. Any exceptions are noted in this report. This report may not be reproduced, except in full, without the written approval of REIC.

In compliance with federal guidelines and standard operating procedures, all reports, including raw data and supporting quality control, will be disposed of after five years unless otherwise arranged by the client via written notification or contract requirement.

If you have any questions please contact the project manager whose name is listed above.

REI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H90
Client Sample ID:	1204 MURRAY DRIVE	**Lab ID:**	0812H90-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:45:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
METALS BY ICP			**E200.7**			Analyst: **BP**
Aluminum	0.188	mg/L		NA	0.100	12/31/2008 12:27:00 AM
Boron	0.163	mg/L		NA	0.100	12/31/2008 12:27:00 AM
Iron	0.184	mg/L		NA	0.100	12/31/2008 12:27:00 AM
Magnesium	18.8	mg/L		NA	0.500	12/31/2008 12:27:00 AM
Manganese	ND	mg/L		NA	0.050	12/31/2008 12:27:00 AM
Silica (as SiO2)	19.2	mg/L		NA	0.210	12/29/2008 2:46:00 PM
Sodium	106	mg/L		NA	0.500	12/31/2008 12:27:00 AM
METALS BY ICP-MS			**E200.8**			Analyst: **BM**
Antimony	ND	mg/L		NA	0.0010	12/29/2008 4:01:58 PM
Arsenic	ND	mg/L		NA	0.0050	12/29/2008 4:01:58 PM
Barium	ND	mg/L		NA	0.100	12/29/2008 4:01:58 PM
Beryllium	ND	mg/L		NA	0.0020	12/29/2008 4:01:58 PM
Cadmium	ND	mg/L		NA	0.0010	12/29/2008 4:01:58 PM
Chromium	0.0052	mg/L		NA	0.0050	12/29/2008 4:01:58 PM
Cobalt	ND	mg/L		NA	0.100	12/29/2008 4:01:58 PM
Copper	ND	mg/L		NA	0.0500	12/29/2008 4:01:58 PM
Lead	ND	mg/L		NA	0.0050	12/29/2008 4:01:58 PM
Molybdenum	ND	mg/L		NA	0.100	12/29/2008 4:01:58 PM
Nickel	ND	mg/L		NA	0.0100	12/29/2008 4:01:58 PM
Selenium	ND	mg/L		NA	0.0050	12/29/2008 4:01:58 PM
Silver	ND	mg/L		NA	0.0500	12/29/2008 4:01:58 PM
Thallium	ND	mg/L		NA	0.0010	12/29/2008 4:01:58 PM
Vanadium	ND	mg/L		NA	0.0500	12/29/2008 4:01:58 PM
Zinc	0.0151	mg/L		NA	0.0100	12/29/2008 4:01:58 PM
HARDNESS, CALCIUM			**SM2340 B**			Analyst: **BP**
Hardness, Calcium (As CaCO3)	67.4	mg/L		NA	1.00	12/31/2008 12:27:00 AM
HARDNESS			**SM2340 B**			Analyst: **BP**
Hardness, Total (As CaCO3)	145	mg/L		NA	1.00	12/31/2008 12:27:00 AM
MERCURY, TOTAL			**E245.1**			Analyst: **CGW**
Mercury	ND	mg/L		NA	0.0010	12/30/2008 10:49:00 AM
SEMIVOLATILE ORGANIC COMPOUNDS BY EPA			**E504.1**			Analyst: **JG**
1,2-Dibromo-3-chloropropane	ND	mg/L		NA	0.000020	1/2/2009 5:53:07 PM
1,2-Dibromoethane	ND	mg/L		NA	0.000020	1/2/2009 5:53:07 PM

Key:

MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
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NA	Not Applicable	H	Holding times for preparation or analysis exceeded
ND	Not Detected at the PQL or MDL	S	Spike/Surrogate Recovery outside accepted recovery limits
PQL	Practical Quantitation Limit	*	Value exceeds Maximum Contaminant Level
TIC	Tentatively Identified Compound, Estimated Concentration		

PRELIMINARY

REI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H90
Client Sample ID:	1204 MURRAY DRIVE	**Lab ID:**	0812H90-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:45:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
SEMIVOLATILE ORGANIC COMPOUNDS			**E515.1**			Analyst: **JG**
2,4,5-TP (Silvex)	ND	mg/L		NA	0.000608	12/30/2008
2,4-D	ND	mg/L		NA	0.000122	12/30/2008
Dalapon	ND	mg/L		NA	0.00790	12/30/2008
Dinoseb	ND	mg/L		NA	0.000122	12/30/2008
Pentachlorophenol	ND	mg/L		NA	0.000608	12/30/2008
Picloram	ND	mg/L		NA	0.000608	12/30/2008
VOLATILE ORGANIC COMPOUNDS			**E524.2**			Analyst: **SDG**
Benzene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Carbon tetrachloride	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
1,2-Dichlorobenzene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
1,4-Dichlorobenzene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
1,2-Dichloroethane	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
1,1-Dichloroethene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
cis-1,2-Dichloroethene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
trans-1,2-Dichloroethene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
1,2-Dichloropropane	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Ethylbenzene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Methylene chloride	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Styrene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Tetrachloroethene	ND	µg/L		NA	1.0	12/30/2008 1:37:00 PM
Surr: 1,2-Dichlorobenzene-d4	80.1	%REC			75-125	12/30/2008 1:37:00 PM
Surr: 4-Bromofluorobenzene	85.0	%REC			75-125	12/30/2008 1:37:00 PM
RESIDUAL CHLORINE - LAB TEST, HOLD TIME E			**SM4500-CL-G**			Analyst: **CC**
Chlorine, Total Residual	ND	µg/L		NA	100	12/24/2008 10:00:00 AM
TURBIDITY			**SM2130 B**			Analyst: **CC**
Turbidity	0.65	NTU	*	NA	0.50	12/24/2008 9:30:00 AM
COLIFORM BY P/A			**SM9223 B**			Analyst: **CC**
Fecal Coliform	ABSENT	NA		NA	NA	12/24/2008 2:15:00 PM
Total Coliform	ABSENT	NA		NA	NA	12/24/2008 2:15:00 PM
CYANIDE			**E335.4**			Analyst: **BA**
Cyanide, Total	ND	mg/L		NA	0.020	12/24/2008 9:00:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Chloride	136	mg/L		NA	10.0	12/29/2008 6:39:00 PM

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PRELIMINARY

REI Consultants, Inc. Analytical Results

Date: *08-Jan-09*

CLIENT:	SCHNABEL ENGINEERING SOUTH LLC	**WorkOrder:**	0812H90
Client Sample ID:	1204 MURRAY DRIVE	**Lab ID:**	0812H90-01A
Project:	08330106	**Collection Date:**	12/22/2008 4:45:00 PM
Site ID:	CHESAPEAKE WATER MAIN, VA	**Matrix:**	DRINKING WATER

Analyses	Result	Units	Qual	MDL	PQL	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Fluoride	0.46	mg/L		NA	0.20	12/29/2008 6:39:00 PM
Sulfate	13.9	mg/L		NA	5.00	12/29/2008 6:39:00 PM
ANIONS BY ION CHROMATOGRAPHY			**E300.0**			Analyst: **CW**
Nitrogen, Nitrate-Nitrite	ND	mg/L		NA	0.10	1/1/2009 8:42:00 AM
TOTAL DISSOLVED SOLIDS			**SM2540 C**			Analyst: **DSA**
Total Dissolved Solids	401	mg/L		NA	1	12/23/2008 6:05:00 PM
ALKALINITY			**SM2320 B**			Analyst: **DSA**
Alkalinity, Total (As CaCO3)	162	mg/L		NA	1.0	12/23/2008 3:06:00 PM
CORROSIVITY, LANGELIER INDEX			**SM2330 B**			Analyst: **IL**
Langelier Index	0.14	at 20 °C		NA	NA	1/5/2009
PH - LAB TEST, HOLD TIME EXPIRED			**SM4500-H+-B**			Analyst: **DSA**
pH	8.07	SU		NA	NA	12/23/2008 3:06:00 PM
ORGANIC CARBON, TOTAL			**SM5310 C**			Analyst: **DSA**
Total Organic Carbon	1.45	mg/L		NA	1.00	12/24/2008 7:12:00 AM

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MCL	Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
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PRELIMINARY