TABLE 1
Summary of Well Completion and Geotechnical Data, Groundwater Capture and Vertical Gradient Evaluation

WELL NUMBER[1]	AQUIFER UNIT	NORTHING	EASTING	WELL DIAMETER	TOP OF CASING	DEPTH TO TOP OF SCREEN	DEPTH TO BOTTOM OF SCREEN	TOTAL WELL DEPTH	ELEVATION TOP OF SCREEN	ELEVATION BOTTOM OF SCREEN	ELEVATION MID-POINT OF SCREEN	WELL LOCATION	Sample Date	CHEMICAL DATA: Perchlorate	CHEMICAL DATA: Total Chromium	GROUNDWATER: Measured DTW	GROUNDWATER: GW Elevation	PHYSICAL PROPERTIES[3]: SAMPLE DEPTH	PORE FLUID SATURATION API RP40	POROSITY API RP40		DENSITY API RP40		MOISTURE CONTENT ASTM D2216	EFFECTIVE PERMEABILITY ASTM D5084	HYDRAULIC CONDUCTIVITY ASTM D5084	LITHOLOGY: FIELD	LITHOLOGY: LAB[2]	LITHOLOGY: Weight Percent Clay and Silt
																ft-toc	ft-msl	ft-bgs	WATER	TOTAL	AIR-FILLED	BULK	GRAIN						
		NAD(SPC)	NAD(SPC)	inches	ft-msl	ft-bgs	ft-bgs	ft-bgs	ft-msl	ft-msl	ft-msl			mg/L	mg/L				(%PV)	%	%	g/cc	g/cc	% (weight)	millidarcy	cm/s			%
BARRIER AND INTERCEPTOR WELL FIELD																													
M-129	Muddy Creek (UMCf)	26720079.636	828,806.426	2	1747.26	20	40	40	1724.48	1704.48	1714.5	East Barrier (Timet)	5/9/08	35.8	0.55	32.76	1714.50	35.5-36							1.10	1.05E-06	Clayey Silt		
													6/2/08	37.0	0.67	31.35	1715.91												
													1/6/09	--	--	31.49	1715.77												
													5/20/09	46.8	0.77	32.31	1714.95												
M-130	Muddy Creek (UMCf)	26719919.700	828,832.009	2	1749.23	20	40	40	1726.55	1706.55	1716.6	East Barrier (Timet)	5/9/08	35.5	0.021	28.12	1721.11	35.5-36							1.01	9.60E-07	Clayey Silt		
													6/2/08	37.8	0.048	28.07	1721.16												
													1/6/09	--	--	27.91	1721.32												
													5/20/09	49.8	0.71	27.92	1721.31												
M-131	Muddy Creek	26719770.566	827158.077	2	1754.13	29	39	40	1722.36	1712.36	1717.4	West Barrier	2/4/09	58.3	0.082	32.54	1721.59												
													5/5/09	60.9	0.082	32.94	1721.19												
M-132	Muddy Creek (UMCf)	26720048.491	828714.609	2	1744.27	79.7	89.7	90	1664.57	1654.57	1659.6	East Barrier	1/17/08	24.0	0.041	27.35	1716.92	60-60.5	91.7	59.6	4.9	1.08	2.68	50.8	2.97	2.87E-06	Sandy Silt	Silt	68.92
													2/5/08	23.2	0.046	27.51	1716.76												
													5/6/08	15.7	<0.01	27.28	1716.99												
													12/10/08	--	--	26.73	1,717.54												
													5/21/09	7.4	0.081	27.50	1,716.77												
M-133	Muddy Creek	26720067.292	828698.608	2	1743.62	60	70	70	1683.62	1673.62	1678.6	East Barrier	5/21/09	12.2	0.69	27.23	1716.39												
M-134	Muddy Creek (UMCf)	26719889.138	827144.353	2	1752.14	60	70	70	1692.14	1682.14	1687.1	West Barrier	1/17/08	124	0.056	34.51	1717.51												
													2/5/08	122	0.079	34.64	1717.50												
													5/11/08	122	0.12	33.22	1718.92												
													12/10/08	--	--	32.72	1719.42												
													5/20/09	123	0.1	34.00	1718.14												
M-135	Muddy Creek	26719890.173	827154.482	2	1751.85	29	39	39	1722.85	1712.85	1717.9	West Barrier	2/4/09	46	0.085	32.98	1718.87												
													5/5/09	43	0.083	33.79	1718.06												
													8/4/09	40	0.085	33.65	1718.20												
M-136	Muddy Creek (UMCf)	26719889.774	827165.342	2	1751.87	80	90	90	1671.87	1661.87	1666.9	West Barrier	1/17/08	168	0.087	29.54	1722.33	62-62.5	89.4	65.1	6.9	0.94	2.68	63.3	3.08	2.91E-06	Clayey Silt	Silt	77.65
													2/5/08	116	0.073	29.77	1722.10												
													5/11/08	109	<0.01	29.16	1722.71												
													12/10/08	--	--	28.82	1723.05												
													5/21/09	117	0.083	29.35	1722.52												
M-157	Alluvium	26719762.920	827120.264	Soil Boring	NA	NA	NA	35	NA	NA	NA	West Barrier	8/20/09	45.2	--	--													
M-158	Alluvium	26719767.620	827137.777	Soil Boring	NA	NA	NA	35	NA	NA	NA	West Barrier	no sample																
I-AA	Muddy Creek	26719770.850	827174.400	6	1753.93	26	46	46	1727.93	1707.93	1717.93	West Barrier (Recovery)	2/3/09	115	0.08	32.45	1721.484												
													5/5/09	114	0.08	32.94	1720.994												
													8/3/09	113	0.07	32.69	1721.244												
I-AB	Muddy Creek (UMCf)	26719790.510	827224.980	6	1753.89	25	45	50	1725.57	1705.57	1715.57	West Barrier (Recovery)	no sample																
VERTICAL DELINEATION WELLS																													
M-149	Muddy Creek (UMCf)	828373.149	26718285.780	2	1796.81	100	120	120	1797.05	1677.05	1737.05	Vertical Delineation Well Adjacent to M-31A	9/16/09	556	0.014	46.57	1750.13												
													10/9/09	501	2.9	--													
													11/4/09	413	NS	42.62	1754.08												
M-150	Muddy Creek (UMCf)	828059.148	26719569.830	2	1758.86	125	145	145	1631.22	1611.22	1621.22	Vertical Delineation Well Adjacent to M-36	9/18/09	229	<0.01	59.86	1699.53												
													11/6/09	15	0.01	23.87	1735.52												
M-151	Muddy Creek (UMCf)	827643.033	26720826.750	2	1730.64	125	145	145	1602.85	1582.85	1592.85	Vertical Delineation Well Adjacent to M-100	9/25/09	0.07	<0.01	65.15	1665.49												
													11/12/09	0.004	0.02	17.62	1713.51												
M-152	Muddy Creek (UMCf)	826973.486	26722690.630	2	1698.50	125	145	145	1570.29	1550.29	1560.29	Vertical Delineation Well Adjacent to M-44	9/25/09	181	<0.01	26.36	1671.98												
													11/9/09	3.1	0.029	24.34	1674.00												
M-153	Muddy Creek (UMCf)	828385.605	26718287.910	2	1796.69	150	170	170	1647.08	1627.08	1637.08	Vertical Delineation Well Adjacent to M-31A	10/9/09	3.1	0.035	--													
													11/5/09	0.25	0.027	26.62	1770.08												
M-154	Muddy Creek (UMCf)	828047.739	26719568.610	2	1758.78	175	195	195	1581.28	1561.28	1571.28	Vertical Delineation Well Adjacent to M-36	10/3/09	1.6	<0.01	28.12	1731.27												
													11/6/09	0.067	0.018	14.66	1744.73												
M-155	Muddy Creek (UMCf)	827636.100	26720827.400	2	1730.69	200	220	220	1527.84	1507.84	1517.84	Vertical Delineation Well Adjacent to M-100	10/3/09	0.24	<0.01	--		211-212									sandy silt	clayey silt	83.99
													11/13/09	<0.004	0.028	0.09	1731.22												

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WELL NUMBER[1]	AQUIFER UNIT	NORTHING	EASTING	WELL DIAMETER	TOP OF CASING	DEPTH TO TOP OF SCREEN	DEPTH TO BOTTOM OF SCREEN	TOTAL WELL DEPTH	ELEVATION TOP OF SCREEN	ELEVATION BOTTOM OF SCREEN	ELEVATION MID-POINT OF SCREEN	WELL LOCATION	Sample Date	CHEMICAL DATA		GROUNDWATER		PHYSICAL PROPERTIES[3]									LITHOLOGY		
														Perchlorate	Total Chromium	Measured DTW	GW Elevation	SAMPLE DEPTH	PORE FLUID SATURATION	POROSITY		DENSITY		MOISTURE CONTENT	EFFECTIVE PERMEABILITY	HYDRAULIC CONDUCTIVITY	FIELD	LAB[2]	Weight Percent Clay and Silt
																			API RP40	API RP40		API RP40		ASTM D2216	ASTM D5084	ASTM D5084			
																ft-toc	ft-msl	ft-bgs	WATER	TOTAL	AIR-FILLED	BULK	GRAIN						
		NAD(SPC)	NAD(SPC)	inches	ft-msl	ft-bgs	ft-bgs	ft-bgs	ft-msl	ft-msl	ft-msl			mg/L	mg/L				(%PV)	%	%	g/cc	g/cc	% (weight)	millidarcy	cm/s			%
M-156	Muddy Creek (UMCf)	26722690.740	826964.224	2	1698.38	175	195	195	1520.32	1500.32	1510.32	Vertical Delineation Well	10/3/09	0.75	<0.01	95.59	1602.75												
												Adjacent to M-44	11/11/09	0.055	0.01	18.46	1679.88												
ATHENS ROAD																													
ARP-4A	Alluvium (Qal)	26728411.808	829167.886	2	1615.47	17.7	32.7	33	1597.77	1582.77	1590.3	Athens - Downgradient	1/15/09	29.5	--	28.59	1586.88												
													2/11/09	28.4	<0.01	28.64	1586.83												
													3/11/09	28.0	--	28.71	1586.76												
													4/14/09	26.5	--	28.89	1586.58												
													5/12/09	27.4	<0.01	28.96	1586.51												
													6/10/09	25.5	--	29.04	1586.43												
													7/15/09	24.4	--	28.91	1586.56												
													8/10/09	26.0	<0.01	28.64	1586.83												
													9/17/09	28.4	--	28.89	1586.58												
ARP-5A	Alluvium (Qal)	26728458.427	829375.005	2	1616.10	12.7	37.7	38	1603.4	1578.4	1590.9	Athens - Downgradient	1/15/09	24.0	--	31.87	1584.23												
													2/11/09	24.0	0.056	32.15	1583.95												
													3/11/09	24.1	--	32.42	1583.68												
													4/14/09	21.8	--	32.64	1583.46												
													5/12/09	22.5	0.1	32.67	1583.43												
													6/10/09	21.0	--	32.64	1583.46												
													7/15/09	22.6	--	32.71	1583.39												
													8/10/09	24.0	0.0547	33.11	1582.99												
													9/17/09	23.9	--	32.74	1583.36												
ARP-6B	Alluvium (Qal)	26728499.917	829520.516	2	1615.56	27.7	42.7	43	1587.86	1572.86	1580.4	Athens - Downgradient	1/15/09	19.4	--	31.36	1584.20												
													2/11/09	18.6	0.12	31.61	1583.95												
													3/11/09	17.0	--	31.89	1583.67												
													4/14/09	14.6	--	32.09	1583.47												
													5/12/09	15.3	0.1	32.16	1583.40												
													6/10/09	15.5	--	32.11	1583.45												
													7/15/09	15.4	0.113	32.31	1583.25												
													8/10/09	16.1	--	32.59	1582.97												
													9/17/09	18.2	--	32.24	1583.32												
PC-134	Muddy Creek (UMCf)	26728126.415	828776.171	2	1613.35	59.7	69.7	70	1553.65	1543.65	1548.7	Athens - West Subchannel	1/18/08	<0.008	--	--	--												
													2/13/08	<0.008	<0.02	26.14	1587.21												
													5/11/08	0.04	<0.02	25.95	1591.06												
													8/13/08	0.05	<0.01	25.84	1587.51												
													12/10/08	--	--	25.54	1587.81												
PC-135	Alluvium (Qal)	26728123.177	828765.250	2	1612.79	19.7	49.7	50	1593.09	1563.09	1578.1	Athens - West Subchannel	1/18/08	11.2	--	28.71	1584.08	51-51.5	92.2	61	4.8	0.99	2.55	58.2	9.19	8.67E-06	Silty Sand	Silty Sand	38.62
													2/13/08	10.7	<0.02	28.72	1584.07												
													6/26/08	--	--	28.55	1588.7												
													8/13/08	9.6	<0.01	28.22	1584.57												
													12/10/08	--	--	28.06	1584.73												
PC-136	Alluvium (Qal)	26728191.374	829517.888	2	1615.08	17.7	37.7	38	1597.38	1577.38	1587.4	Athens - East Subchannel	1/18/08	139	--	30.83	1584.25												
													2/13/08	167	1.2	30.92	1584.16												
													5/14/08	169	4.0	30.86	1584.22												
PC-137	Muddy Creek (UMCf)	26728198.976	829517.568	2	1614.83	59.7	69.7	70	1555.13	1545.13	1550.1	Athens - East Subchannel	1/18/08	0.111	--	28.37	1586.46	61-61.5	89.6	59.9	6.2	1.09	2.73	49.4	1.12	1.05E-06	Silt	Silt	59.03
													2/13/08	0.103	<0.01	28.11	1586.72												
													5/11/08	0.054	<0.01	28.11	1586.72												

DEFINITIONS

--	Not tested or no value reported in the literature reviewed
%	Pecent
%PV	Percent of pore volume
%weight	Percent by weight
API	American Petroleum Institute
ASTM	American Standards Testing Materials
cm/s	centimeters per second
CPT	Cone penetrometer
FEET BGS	Depth in feet below ground surface
g/cc	grams per cubic centimeter (or milliliter)
LAB	Certified Analytical Laboratory (PTS Labs, Santa Fe Springs, California)
mg/kg	Milligrams per kilogram
NA	Not available/applicable

NOTES

(1)	Well borings are shown on Plate 1 of 2007-2008 Annual Performance Report (ENSR, 2008_)
(2)	Laboratory based its determination of soil type based on the 50th percentile (cumulative)
(3)	Laboratory reports are presented in Appendix D of 2007-2008 Annual Performance Report (ENSR, 2008_)
(4)	Comments are from the field notes