

**TABLE 3-17
GROUNDWATER ANALYTICAL RESULTS - METALS AND PCBs
CHAMPAIGN MGP SITE
AMERENIP**

CONSTITUENT	Class I Groundwater Standard		UMW-102	UMW-104	UMW-105	UMW-106	UMW-107	UMW-108	UMW-109	UMW-110	UMW-111A	UMW-113	UMW-113 D	UMW-114	UMW-115	UMW-116	UMW-117	UMW-118	UMW-119	UMW-120	
	Units		9/16/2008	9/17/2008	9/16/2008	9/16/2008	9/16/2008	9/17/2008	9/17/2008	9/17/2008	9/17/2008	9/16/2008	9/16/2008	9/16/2008	9/16/2008	9/16/2008	9/17/2008	9/17/2008	9/16/2008	9/16/2008	
<u>Metals (6010B)</u>																					
Aluminum	3.5 ⁽¹⁾	mg/L	0.0652	0.0714	0.033	0.143	0.0546	0.111	0.0616	0.0708	0.023	0.0662	0.03	0.026	0.0562	0.05	0.0969	0.801	3.32	1.12	
Antimony	0.006	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Barium	2.0	mg/L	0.376	0.188	0.0477	0.0632	0.21	0.124	0.118	0.0818	0.0373	0.0504	0.0492	0.225	0.0232	0.0931	0.0993	0.0791	0.0627	0.0623	
Beryllium	0.004	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	
Cadmium	0.005	mg/L	<0.002	<0.002	0.0003	0.0003	<0.002	<0.002	<0.002	<0.002	0.0003	<0.002	0.0003	0.0004	0.0003	<0.002	<0.002	<0.002	<0.002	0.002	
Calcium	---	mg/L	143	121	146	243	95.1	139	202	163	193	247	242	124	375	154	79.2	154	93.8	74	
Chromium	0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0069	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0235	<0.01	<0.01	0.0056	<0.01	
Cobalt	1.0	mg/L	0.0056	0.0034	<0.01	0.0071	0.0045	<0.01	0.0063	0.0088	<0.01	0.0129	0.0115	0.0064	0.0083	0.0024	<0.01	<0.01	0.0035	<0.01	
Copper	0.65	mg/L	<0.01	0.003	<0.01	0.0047	<0.01	<0.01	0.0033	0.0036	0.0036	0.0032	<0.01	<0.01	0.0069	0.0038	0.0042	<0.01	0.0058	0.009	
Iron	5.0	mg/L	3.39	0.14	0.0857	0.396	6.41	0.0989	0.204	8.53	0.013	19.6	18.7	8.26	32.6	0.178	0.0655	0.769	3.89	0.898	
Magnesium	---	mg/L	26.2	21	64.5	110	61.7	44.3	79.9	23.9	79.8	41.3	40.2	69	52.7	73.7	24.4	28.1	29.1	25.5	
Manganese	0.15	mg/L	1.46	1.3	0.008	1.32	0.0526	0.0381	1.35	2.78	<0.005	2.56	2.52	0.242	0.303	0.138	0.148	0.144	0.294	0.0528	
Nickel	0.1	mg/L	<0.01	<0.01	<0.01	0.0041	<0.01	<0.01	0.698	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.408	0.0041	<0.01	0.0043	<0.01	
Potassium	---	mg/L	4.95	3.59	2.37	6.7	10.3	1.72	3.51	2.91	3.48	4.44	4.38	4.37	6.44	1.88	5.99	2.48	4.76	2.88	
Silver	0.05	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0032	<0.01	<0.01	0.0037	<0.01	<0.01	<0.01	<0.01	<0.01	
Sodium	---	mg/L	26.8	25.4	30.7	258	24.4	28.1	61.7	7.61	85.6	13.3	13.1	20.1	10.3	216	29.9	13.9	19.5	9.75	
Vanadium	0.049	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0049	<0.01	
Zinc	5.0	mg/L	<0.01	0.0136	0.004	0.0092	<0.01	0.008	0.0043	0.0107	0.0026	0.0103	0.0093	0.0023	0.0053	0.0038	0.0027	0.0063	0.0125	0.013	
Mercury 7470A	0.002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
<u>Metals (3020A)</u>																					
Arsenic	7060A	0.05	mg/L	0.0111	0.0017	<0.003	<0.003	0.0076	<0.003	<0.003	0.0133	<0.003	0.0169	0.0157	0.0251	0.0224	<0.003	0.0014	<0.003	0.0017	<0.003
Lead	7421	0.0075	mg/L	<0.002	0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	0.0005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0005	0.0024	0.0023	
Selenium	7740	0.05	mg/L	<0.006	<0.006	<0.006	<0.006	<0.006	0.0038	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	
Thallium	7841	0.002	mg/L	<0.002	<0.002	<0.002	0.0006	<0.002	<0.002	0.0008	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Cyanide (9012A)	0.2	mg/L	<0.007	0.209	0.126	0.304	0.889	0.046	0.006	1.01	<0.007	1.08	1.08	2.68	3.19	0.009	0.006	0.046	0.024	0.011	
<u>Polychlorinated Biphenyls (PCBs) 8082</u>																					
Aroclor 1016	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1221	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1232	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1242	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1248	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1254	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1260	---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	

Notes:
 ug/L Micrograms per liter
 (1) Non-TACO or provisional RO provided by the IEPA
 <5 Not detected at the method detection limit identified
 Constituent exceeds Class I Groundwater Standard

**TABLE 3-17
GROUNDWATER ANALYTICAL RESULTS - METALS AND PCBs
CHAMPAIGN MGP SITE
AMERENIP**

CONSTITUENT	Class I		UMW-121 9/16/2008	UMW-300 9/18/2008	UMW-301 9/17/2008	UMW-302 9/16/2008	UMW-303 9/17/2008	UMW-303 D 9/17/2008	UMW-304 9/16/2008	UMW-305 9/16/2008	UMW-306 9/16/2008	UMW-307 9/16/2008	
	Groundwater Standard	Units											
<u>Metals (6010B)</u>													
Aluminum	3.5 ⁽¹⁾	mg/L	0.514	0.467	0.0748	0.0644	0.205	0.194	0.0625	0.717	0.045	0.134	
Antimony	0.006	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Barium	2.0	mg/L	0.098	0.0796	0.082	0.0505	0.035	0.0374	0.0966	0.0711	0.0667	0.0971	
Beryllium	0.004	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	0.005	mg/L	0.0005	0.0003	<0.002	<0.002	<0.002	0.0003	<0.002	<0.002	<0.002	<0.002	
Calcium	---	mg/L	114	154	139	145	150	155	166	129	67.1	145	
Chromium	0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Cobalt	1.0	mg/L	0.0032	0.0037	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Copper	0.65	mg/L	0.0034	0.003	<0.01	<0.01	<0.01	<0.01	<0.01	0.0031	<0.01	<0.01	
Iron	5.0	mg/L	0.822	0.482	0.869	2.41	1.13	1.18	0.139	1.23	2.4	2.26	
Magnesium	---	mg/L	29.5	57.8	54.5	69.3	52.2	53.7	58.9	46.9	64	57.7	
Manganese	0.15	mg/L	0.432	0.164	0.142	0.0422	0.0787	0.0822	0.0415	0.0877	0.0163	0.0201	
Nickel	0.1	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Potassium	---	mg/L	4.12	3.7	2.5	2.19	2.76	2.83	2.11	10.1	56.3	5.78	
Silver	0.05	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0032	<0.01	<0.01	<0.01	
Sodium	---	mg/L	33.5	31.6	27.1	24.9	32.6	30.9	24.2	39.5	34.8	32.9	
Vanadium	0.049	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Zinc	5.0	mg/L	0.0048	0.0075	<0.01	0.0096	0.0036	0.0062	<0.01	0.0032	<0.01	0.0024	
Mercury 7470A	0.002	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
<u>Metals (3020A)</u>													
Arsenic	7060A	0.05	mg/L	0.0011	0.0007	<0.003	<0.003	0.0062	0.0067	<0.003	0.0076	0.0025	0.0022
Lead	7421	0.0075	mg/L	0.0004	<0.002	<0.002	<0.002	<0.002	0.0006	<0.002	<0.002	<0.002	<0.002
Selenium	7740	0.05	mg/L	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	
Thallium	7841	0.002	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Cyanide (9012A)		0.2	mg/L	0.438	<0.007	0.007	0.119	<0.007	<0.007	0.038	0.01	0.019	0.007
<u>Polychlorinated Biphenyls (PCBs) 8082</u>													
Aroclor 1016		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1221		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1232		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1242		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1248		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1254		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Aroclor 1260		---	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	

Notes:

ug/L Micrograms per liter

(1) Non-TACO or provisional RO provided by the IEPA

<5 Not detected at the method detection limit identified

Constituent exceeds Class I Groundwater Standard