

TABLE 5
MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY (Units as milligrams per liter [mg/L])
OCTOBER 2005

Sample ID	Sample Location	Ca	Mg	K	Na	Fe	Mn	Cl	SO ₄ ⁻²	Total Alkalinity	Nitrate (as N)	Nitrite (as N)	TDS
101905-07	IRA-27	120	21	5.9	150	<0.10	<0.10	65	310	220	17	<0.020	940
101905-08	IRA-29	64	9.5	5.1	83	<0.10	0.64	26	150	170	3.2	0.16	480
102705-41	IRA-30	170	26	4.5	130	<0.10	<0.010	66	250	310	36	<0.020	1000
101905-09	IRA-31	100	6.6	4.7	200	<0.10	<0.010	150	280	140	10	<0.020	920
101905-10	IRA-31 (Dup)	100	6.5	4.6	190	<0.10	<0.010	130	250	140	9.5	<0.020	930
110305-46	SJ-MW-2	240	36	14	270	<0.050	0.040	NS	NS	NS	NS	NS	NS

Notes:

NS - Not Sampled

Analyses: TDS - total dissolved solids, N-nitrogen

Analytes: Ca-calcium, Mg-magnesium, K-potassium, Na-sodium, Fe- Iron, Mn-Manganese, Cl-chloride, SO₄⁻²-sulfate

TABLE 5 (Continued)

**MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY (Units As mg/L Unless Otherwise Noted)**

MAY 2004

Sample ID	Sample Location	Ca	Mg	K	Na	Cl	F	SO ₄ ⁻²	Total Alkalinity	Ortho-phosphate	Nitrate (as N)	TKN (as N)	Ammonia (as N)	Hexavalent Chromium	TDS
052704-31	IRA-12-210 (dup)	71	5.9	4.7	220	140	0.40	270	180	<0.10	9.1	<1.3	<0.50	<0.010	870
052404-16	IRA-13-210	180	17	5.0	110	140	<0.40	320	180	<0.10	10	<1.3	<0.50	0.030	930
051904-05	IRA-16	190	30	9.5	200	180	0.59	330	290	<0.10	26	2.8	1.2	<0.010	1200
051904-03	IRA-17	120	21	6.9	180	130	0.94	170	330	<0.10	4.2	2.4	0.81	<0.010	830
051904-04	IRA-19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.010	NS
05 2704-32	IRA-21	180	28	8.8	140	110	0.50	120	250	<0.10	32	<1.3	<0.50	<0.010	1000
052004-09	IRA-22	180	26	8.3	160	96	0.59	210	200	<0.10	0.013	2.2	0.55	<0.010	1100
061604-38	IRA-24	140	16	10	85	110	<0.40	190	160	<0.10	9.8	<1.3	<0.50	<0.010	710
052704-34	IRA-25	160	13	4.6	90	160	<0.40	200	160	<0.10	7.8	<1.3	0.50	0.023	800
052704-35	IRA-26	140	14	4.0	85	150	<0.40	190	160	<0.10	7.8	<1.3	0.50	0.016	780

Notes: NS Not Sampled
 Units mg/L milligrams per liter
 Analyses TDS total dissolved solids
 Analytes Ca -calcium Mg -magnesium Cl -chloride F -fluoride
 K -potassium Na -sodium SO₄⁻² -sulfate HCO₃⁻¹ bicarbonate
 N -nitrogen TKN -total Kjeldahl nitrogen CO₃⁻² -carbonate OH⁻¹ -hydroxide

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GENERAL CHEMISTRY (Units As mg/L Unless Otherwise Noted)

MAY 2004

Sample ID	Sample Location	Ca	Mg	K	Na	Cl	F	SO ₄ ⁻²	Total Alkalinity	Ortho-phosphate	Nitrate (as N)	TKN (as N)	Ammonia (as N)	Hexavalent Chromium	TDS
052504-19	Crescent Manor	100	4.0	3.5	110	150	<0.40	160	92	<0.10	2.4	<1.3	<0.50	<0.010	620
052504-20	Douglas Well	180	12	5.3	130	180	<0.40	300	160	<0.10	7.7	<1.3	<0.50	<0.010	930
052504-23	FWID-61	58	3.5	2.1	42	51	<0.40	65	110	<0.10	1.7	<1.3	<0.50	<0.010	300
052504-21	FWID-70	57	<2.0	3.4	160	170	0.73	190	88	<0.10	1.2	<1.3	<0.50	<0.010	690
052504-22	FWID-72	38	<2.0	2.7	140	130	0.43	96	82	<0.10	1.0	<1.3	<0.50	<0.010	470
052004-08	IRA-1	20	<2.0	2.9	190	79	0.48	170	170	<0.10	1.7	<1.3	0.51	<0.010	580
052604-28	IRA-2	140	11	5.6	170	170	<0.40	290	210	<0.10	10	<1.3	0.50	0.069	980
052704-29	IRA-3	140	15	5.4	140	160	<0.40	250	190	<0.10	9.4	<1.3	<0.50	<0.010	850
052404-12	IRA-4	32	3.8	11	260	140	0.47	230	150	<0.10	9.4	<1.3	<0.50	<0.010	790
052404-13	IRA-5	90	4.2	3.9	160	85	<0.40	190	190	<0.10	8.9	<1.3	<0.50	<0.010	650
052004-07	IRA-6	130	10	5.8	220	190	<0.40	300	220	<0.10	11	2.3	<0.50	<0.010	1000
052004-10	IRA-7	86	6.7	5.0	200	150	0.53	290	170	<0.10	6.6	1.8	<0.50	<0.010	880
052004-11	IRA-7(dup)	87	6.9	5.0	220	150	0.52	290	180	<0.10	6.7	1.4	<0.50	<0.010	890
052704-33	IRA-8	140	11	6.2	220	200	<0.40	290	240	<0.10	12	<1.3	0.50	0.034	1100
052704-36	IRA-9	170	12	5.4	150	170	<0.40	280	180	<0.10	11	<1.3	<0.50	0.31	940
05 2404-18	IRA-10-100**	44	4.4	5.7	97	NS	NS	NS	NS	NS	NS	NS	NS	<0.010	NS
052404-17	IRA-10-230	170	11	4.6	92	170	<0.40	250	130	<0.10	7.9	<1.3	<0.50	<0.010	880
052404-14	IRA-11-70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
052404-15	IRA-11-210	150	9.7	5.3	170	150	<0.40	280	190	<0.10	12	<1.3	<0.50	0.14	900
051904-06	IRA-12-70	87	17	5.9	160	NS	NS	NS	NS	NS	NS	NS	NS	<0.010	NS
052704-30	IRA-12-210	73	6.1	4.7	230	140	0.40	270	180	<0.10	9.1	<1.3	<0.50	<0.010	900

TABLE 5A

**MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY (Units As mg/L Unless Otherwise Noted)**

MAY 2004

Sample ID	Sample Location	Ca	Mg	K	Na	Cl	F	SO ₄ ⁻²	Total Alkalinity	Ortho-phosphate	Nitrate (as N)	TKN (as N)	Ammonia (as N)	Hexavalent Chromium	TDS
052604-27	IRA-14 (2)	110	5.7	5.2	180	160	<0.40	290	190	<0.10	9.6	<1.3	0.50	0.90	940
052604-26	IRA-14 (3)	94	4.0	4.2	170	120	<0.40	260	160	<0.10	5.2	<1.3	0.50	<0.010	790
052604-25	IRA-14 (4)	100	<2.0	4.8	230	250	<0.40	350	60	<0.10	0.59	<1.3	0.50	<0.010	970
052604-24	IRA-14 (5)	87	2.2	4.5	180	160	<0.40	320	70	<0.10	<0.20	<1.3	0.50	<0.010	810

Notes:

Units

mg/L milligrams per liter

Analyses

TDS total dissolved solids

Analytes

Ca -calcium Mg -magnesium

K -potassium Na -sodium

N -nitrogen TKN -total Kjeldahl nitrogen

Cl -chloride

SO₄⁻² -sulfateCO₃⁻² -carbonate

F -fluoride

HCO₃⁻¹ bicarbonateOH⁻¹ -hydroxide

TABLE 5 (Continued)

**MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY**

MAY, 2003

Sample ID	Sample Location	Total ICP Metals						Anions			Alkalinity				Nitrogen, Nitrate (as N)	TDS (mg/L)
		Ca	Fe	Mg	Mn	K	Na	Cl	F	SO ₄ ⁻²	HCO ₃ ⁻¹	CO ₃ ⁻²	OH ⁻¹	Total		
050703-05	IRA-17	190	3.9	29	2.1	9.8	160	130	0.45	440	290	<2.0	<2.0	290	14	1300
050903-32	IRA-19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
050703-14	IRA-21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
050603-07	IRA-22	230	2.8	36	1.2	18	160	120	0.54	280	280	<2.0	<2.0	280	110	1500
060503-01	IRA-25 (6/5/03)	170	15	18	0.61	11	94	160	<0.40	200	180	<2.0	<2.0	180	8.3	870
062303-01	IRA-25 (6/23/03)	150	4.1	13	0.32	6.4	87	150	0.62	190	160	<2.0	<2.0	160	7.7	780
050503-01	IRA-26 (5/5/03)	160	0.75	15	0.23	4.7	88	160	<0.40	210	150	<2.0	<2.0	150	9.1	820
060503-02	IRA-26 (6/5/03)	150	0.53	15	0.098	4.5	88	150	<0.40	200	150	<2.0	<2.0	150	2.0	860
062303-02	IRA-26 (6/23/03)	160	0.37	16	0.052	4.4	86	150	<0.40	200	150	<2.0	<2.0	150	8.3	780
050903-33	Baker Tank	110	1.4	9.9	0.38	69	190	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: ⁽¹⁾= Holding time were exceeded for these samples
NA not analyzed

Units	mg/L	milligrams per liter		
Analyses	TDS	total dissolved solids		
Analytes	Ca	calcium	Mg	magnesium
	Mn	manganese	Fe	iron
	K	potassium	Na	sodium
	Cl	chloride	F	fluoride
	SO ₄ ⁻²	sulfate	HCO ₃ ⁻¹	bicarbonate
	CO ₃ ⁻²	carbonate	OH ⁻¹	hydroxide

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SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY

MAY, 2003

Sample ID	Sample Location	Total ICP Metals						Anions			Alkalinity				Nitrogen, Nitrate (as N)	TDS (mg/L)
		Ca	Fe	Mg	Mn	K	Na	Cl	F	SO ₄ ⁻²	HCO ₃ ⁻¹	CO ₃ ⁻²	OH ⁻¹	Total		
050703-16	Crescent Manor	100	0.19	4.0	<0.010	3.4	100	140	<0.40	160	90	<2.0	<2.0	90	2.8	660 ⁽¹⁾
050703-23	Douglas Well	190	0.33	13	0.038	5.2	130	190	<0.40	330	170	<2.0	<2.0	170	8.8	1000 ⁽¹⁾
050703-17	FWID-61	60	<0.10	3.4	<0.010	<2.0	39	48	<0.40	65	110	<2.0	<2.0	110	1.5	340 ⁽¹⁾
050703-18	FWID-72	38	<0.10	<2.0	<0.010	2.7	140	130	<0.40	100	78	<2.0	<2.0	78	0.74	480 ⁽¹⁾
050603-08	IRA-1	19	0.11	<2.0	<0.010	2.6	180	64	<0.40	170	170	<2.0	<2.0	170	1.1	570
050803-29	IRA-2	150	0.14	11	<0.010	5.4	170	180	<0.40	300	190	<2.0	<2.0	190	11	1000 ⁽¹⁾
050803-30	IRA-3	170	1.6	18	0.019	5.4	150	160	<0.40	290	210	<2.0	<2.0	210	13	990 ⁽¹⁾
050803-31	IRA-3 (dup)	170	3.3	19	0.024	5.6	140	160	<0.40	300	210	<2.0	<2.0	210	13	990 ⁽¹⁾
050503-02	IRA-4	40	26	8.9	1.3	14	250	130	<0.40	220	160	<2.0	<2.0	160	8.9	830
050603-09	IRA-5	94	<0.050	4.3	<0.010	3.8	170	82	<0.40	190	180	<2.0	<2.0	180	9.2	710
050603-10	IRA-6	120	0.15	9.0	<0.010	5.4	210	170	<0.40	300	210	<2.0	<2.0	210	8.6	1000
050603-11	IRA-6 (dup)	120	0.093	9.1	<0.010	5.3	210	170	<0.40	360	210	<2.0	<2.0	210	8.4	1000
050603-06	IRA-7	98	0.18	7.4	<0.010	5.2	230	160	<0.40	310	200	<2.0	<2.0	200	7.8	940
050703-20	IRA-8	150	<0.10	12	<0.010	5.9	190	180	<0.40	310	230	<2.0	<2.0	230	12	920
050703-21	IRA-9	170	0.12	12	<0.010	5.3	140	160	<0.40	310	180	<2.0	<2.0	180	10	960 ⁽¹⁾
050703-22	IRA-9 (dup)	170	0.23	12	<0.010	5.3	140	160	<0.40	300	190	<2.0	<2.0	190	10	840
050703-13	IRA-10-100**	65	0.29	7.7	0.37	16	150	23	0.43	120	350	<2.0	<2.0	350	0.99	580
050503-04	IRA-10-230	190	<0.050	13	<0.010	5.0	95	190	<0.40	280	120	<2.0	<2.0	120	9.6	1000
050703-19	IRA-11-210	150	<0.10	9.5	<0.010	5.2	180	150	<0.40	300	170	<2.0	<2.0	170	11	970
050603-12	IRA-12-210	65	0.13	5.3	<0.010	4.4	210	110	<0.40	280	170	<2.0	<2.0	170	6.4	820
050503-03	IRA-13-210	190	0.075	18	<0.010	5.1	110	130	<0.40	340	180	<2.0	<2.0	180	9.5	960
050703-15	IRA-16	200	3.6	30	0.074	29	200	200	0.51	410	320	<2.0	<2.0	320	23	1400

TABLE 5 A
MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
GENERAL CHEMISTRY

MAY, 2003

Sample ID	Sample Location	Total ICP Metals						Anions			Alkalinity				Nitrogen, Nitrate (as N)	TDS (mg/L)
		Ca	Fe	Mg	Mn	K	Na	Cl	F	SO ₄ ⁻²	HCO ₃ ⁻¹	CO ₃ ⁻²	OH ⁻¹	Total		
050503-24	IRA-14	190	0.15	17	<0.010	5.1	120	170	<0.40	380	160	<2.0	<2.0	160	8.6	960
050503-25	IRA-14	130	0.26	6.8	0.52	5.3	180	180	<0.40	320	180	<2.0	<2.0	180	9.4	960
050503-26	IRA-14	110	<0.050	4.0	0.23	4.6	190	170	<0.40	320	140	<2.0	<2.0	140	6.8	930
050503-27	IRA-14	110	0.27	<2.0	0.61	5.0	230	270	<0.40	360	54	<2.0	<2.0	54	0.28	1000
050503-28	IRA-14	89	0.55	2.4	1.4	4.7	180	170	<0.40	340	73	<2.0	<2.0	73	<0.20	820

Units	mg/L	milligrams per liter		
Analyses	TDS	total dissolved solids		
Analytes	Ca	calcium	Mg	magnesium
	Mn	manganese	Fe	iron
	K	potassium	Na	sodium
	Cl	chloride	F	fluoride
	SO ₄ ⁻²	sulfate	HCO ₃ ⁻¹	bicarbonate
	CO ₃ ⁻²	carbonate	OH ⁻¹	hydroxide

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		FWID-61			FWID-70			FWID-72			FWID-75		
Sample Date		12/12/2001			12/12/2001			12/12/2001			12/12/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	59	1.47205	2.9441	53	1.32235	2.6447	42	1.0479	2.0958	57	1.42215	2.8443
Magnesium	Mg ²⁺	3.5	0.14385	0.28805	<2.0			3.2	0.13152	0.26336	<2.0		
Manganese	Mn ²⁺	<0.010			<0.010			<0.010			<0.010		
Potassium	K ⁺	2	0.0512	0.0512	3.6	0.09216	0.09216	2.4	0.06144	0.06144	3.8	0.09728	0.09728
Sodium	Na ⁺	38	1.653	1.653	190	8.265	8.265	95	4.1325	4.1325	180	7.83	7.83
ANIONS			4.93635			11.00186			6.5531			10.77158	
Nitrate	NO ₃ ⁻	NA			NA			NA			NA		
Chloride	Cl ⁻	NA			NA			NA			NA		
Sulfate	SO ₄ ²⁻	NA			NA			NA			NA		
Bicarbonate	HCO ₃ ⁻	NA			NA			NA			NA		
Carbonate	CO ₃ ²⁻	NA			NA			NA			NA		
			0			0			0			0	
Balance (RPD)			100.00%			100.00%							

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		IRA-14 (290-300)			IRA-9			IRA-13-210			IRA-13-210 (dup)		
Sample Date		12/11/2001			12/13/2001			12/17/2001			12/17/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	57	1.42215	2.8443	170	4.2415	8.483	200	4.99	9.98	200	4.99	9.98
Magnesium	Mg ²⁺	2.9	0.11919	0.23867	12	0.4932	0.9876	18	0.7398	1.4814	18	0.7398	1.4814
Manganese	Mn ²⁺	1.2	0.02184	0.04368	< 0.010			0.038	0.0006916	0.0013832	0.031	0.0005642	0.0011284
Potassium	K ⁺	6.9	0.17664	0.17664	6.1	0.15616	0.15616	5.4	0.13824	0.13824	5.3	0.13568	0.13568
Sodium	Na ⁺	180	7.83	7.83	120	5.22	5.22	82	3.567	3.567	81	3.5235	3.5235
ANIONS			11.13329			14.84676			15.168023			15.121708	
Nitrate	NO ₃ ⁻	< 0.20			10	0.161	0.161	9.2	0.1472	0.1472	9.7	0.15617	0.15617
Chloride	Cl ⁻	180	5.076	5.076	150	4.23	4.23	120	3.384	3.384	120	3.384	3.384
Sulfate	SO ₄ ²⁻	150	1.56	3.12	290	3.016	6.032	320	3.328	6.656	320	3.328	6.656
Bicarbonate	HCO ₃ ⁻	170	3.4	3.4	190	3.8	3.8	180	3.6	3.6	190	3.8	3.8
Carbonate	CO ₃ ²⁻	< 2.0			< 5.0			< 2.0			< 2.0		
			11.596			14.223			13.7872			13.99617	
Balance (RPD)			-2.04%			2.15%			4.77%			3.87%	

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		IRA-14 (160-170)			IRA-14 (190-200)			IRA-14 (230-240)			IRA-14 (260-270)		
Sample Date		12/11/2001			12/11/2001			12/11/2001			12/11/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	180	4.491	8.982	140	3.493	6.286	100	2.495	4.99	100	2.495	4.99
Magnesium	Mg ²⁺	15	0.6165	1.2345	10	0.411	0.823	2.7	0.11097	0.22221	2.5	0.10275	0.20575
Manganese	Mn ²⁺	0.013	0.0002366	0.0004732	0.018	0.0003276	0.0006552	1.1	0.02002	0.04004	1.4	0.02548	0.05096
Potassium	K ⁺	5.7	0.14592	0.14592	5.8	0.14848	0.14848	5.6	0.14336	0.14336	5.7	0.14592	0.14592
Sodium	Na ⁺	120	5.22	5.22	140	6.09	6.09	220	9.57	9.57	220	9.57	9.57
ANIONS			15.582893			13.34748			14.92557			14.96263	
Nitrate	NO ₃ ⁻	7.3	0.11753	0.11753	10	0.161	0.161	0.3	0.00483	0.00483	0.2	0.00322	0.00322
Chloride	Cl ⁻	150	4.23	4.23	150	4.23	4.23	250	7.05	7.05	240	6.768	6.768
Sulfate	SO ₄ ²⁻	370	3.848	7.696	300	3.12	6.24	310	3.224	6.448	290	3.016	6.032
Bicarbonate	HCO ₃ ⁻	170	3.4	3.4	220	4.4	4.4	90	1.8	1.8	100	2	2
Carbonate	CO ₃ ²⁻	< 2.0			< 2.0			< 2.0			< 2.0		
			15.44353		15.031		15.30283		14.80322				
Balance (RPD)			0.45%		-5.93%		-1.25%		0.54%				

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		IRA-1			IRA-11-210			IRA-10-100			IRA-2		
Sample Date		12//27/2001			12/13/2001			12/17/2001			12/13/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	20	0.499	0.998	150	3.7425	7.485	71	1.77145	3.5429	140	3.493	6.286
Magnesium	Mg ²⁺	<2.0			9.7	0.39867	0.79831	13	0.5343	1.0699	10	0.411	0.823
Manganese	Mn ²⁺	0.012	0.0002184	0.0004368	0.081	0.0014742	0.0029484	0.38	0.006916	0.013832	0.016	0.0002912	0.0005824
Potassium	K ⁺	3	0.0768	0.0768	6.2	0.15872	0.15872	5.5	0.1408	0.1408	6.3	0.16128	0.16128
Sodium	Na ⁺	180	7.83	7.83	140	6.09	6.09	120	5.22	5.22	170	7.395	7.395
ANIONS			8.9052368			14.53203			9.987432			14.66528	
Nitrate	NO ₃ ⁻	1	0.0161	0.0161	9	0.1449	0.1449	1.8	0.02898	0.02898	11	0.1771	0.1771
Chloride	Cl ⁻	55	1.551	1.551	130	3.666	3.666	38	1.0716	1.0716	160	4.512	4.512
Sulfate	SO ₄ ²⁻	170	1.768	3.536	280	2.912	5.824	120	1.248	2.496	290	3.016	6.032
Bicarbonate	HCO ₃ ⁻	160	3.2	3.2	190	3.8	3.8	240	4.8	4.8	200	4	4
Carbonate	CO ₃ ²⁻	16	0.16	0.31984	< 2.0			< 2.0			< 2.0		
			8.3031			13.4349			8.39658			14.7211	
Balance (RPD)			3.50%			3.92%			8.65%			-0.19%	

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		IRA-12-210			IRA-8			IRA-16			IRA-5		
Sample Date		12/13/2001			12/13/2001			12/13/2001			12/17/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	59	1.47205	2.9441	150	3.7425	6.735	180	4.491	8.982	91	2.27045	4.0859
Magnesium	Mg ²⁺	4.9	0.20139	0.40327	12	0.4932	0.9876	27	1.1097	2.2221	4	0.1644	0.3292
Manganese	Mn ²⁺	< 0.010			< 0.010			0.17	0.003094	0.006188	< 0.010		
Potassium	K ⁺	4.8	0.12288	0.12288	6.7	0.17152	0.17152	25	0.64	0.64	4.1	0.10496	0.10496
Sodium	Na ⁺	200	8.7	8.7	200	8.7	8.7	180	7.83	7.83	120	5.22	5.22
ANIONS			12.17025			16.59412			19.680288			9.74006	
Nitrate	NO ₃ ⁻	5.4	0.08694	0.08694	14	0.2254	0.2254	NA			11	0.1771	0.1771
Chloride	Cl ⁻	94	2.6508	2.6508	170	4.794	4.794	NA			65	1.833	1.833
Sulfate	SO ₄ ²⁻	240	2.496	4.992	310	3.224	6.448	NA			180	1.872	3.744
Bicarbonate	HCO ₃ ⁻	180	3.6	3.6	230	4.6	4.6	NA			190	3.8	3.8
Carbonate	CO ₃ ²⁻	< 2.0			< 2.0			NA			< 2.0		
			11.32974			16.0674						9.5541	
Balance (RPD)			3.58%			1.61%			100.00%			0.96%	

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		IRA-6 (dup)			IRA-6			IRA-7			IRA-3		
Sample Date		12/10/2001			12/10/2001			12/10/2001			12/12/2001		
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	120	2.994	5.988	120	2.994	5.388	100	2.495	4.99	150	3.7425	7.485
Magnesium	Mg ²⁺	9.3	0.38223	0.76539	9.3	0.38223	0.76539	8.2	0.33702	0.67486	17	0.6987	1.3991
Manganese	Mn ²⁺	< 0.010			<0.010			<0.010			0.026	0.0004732	0.0009464
Potassium	K ⁺	6	0.1536	0.1536	5.8	0.14848	0.14848	5.8	0.14848	0.14848	5.5	0.1408	0.1408
Sodium	Na ⁺	210	9.135	9.135	210	9.135	9.135	230	10.005	10.005	100	4.35	4.35
ANIONS			16.04199			15.43687			15.81834			13.375846	
Nitrate	NO ₃ ⁻	9.2	0.14812	0.14812	9.1	0.14651	0.14651	8.2	0.13202	0.13202	11	0.176	0.176
Chloride	Cl ⁻	160	4.512	4.512	160	4.512	4.512	150	4.23	4.23	150	4.23	4.23
Sulfate	SO ₄ ²⁻	280	2.912	5.824	290	3.016	6.032	290	3.016	6.032	280	2.912	5.824
Bicarbonate	HCO ₃ ⁻	220	4.4	4.4	220	4.4	4.4	210	4.2	4.2	190	3.8	3.8
Carbonate	CO ₃ ²⁻	< 2.0			<2.0			<2.0			<2.0		
			14.88412		15.09051		14.59402				14.03		
Balance (RPD)			3.74%		1.13%		4.03%				-2.39%		

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter

TABLE 6**MIRACLE MILE WQARF SITE
SUMMARY OF GROUNDWATER ANALYTICAL DATA
INORGANICS (micrograms per liter [µg/L])****FOURTH QUARTER (DECEMBER) 2001**

Sample ID	Sample Location	Screened Interval (feet below TOC)	Dissolved Organic Carbon	Total Organic Carbon
121001-01	IRA-1	130-210	<1.0	1.94
121301-22	IRA-2	150-230	1.51	<1.0
121201-17	IRA-3	150-230	<1.0	<1.0
121701-26	IRA-5	130-210	<1.0	1.0
121001-03	IRA-6	138-203	NA	<1.0
121001-02	IRA-7	138-203	<1.0	<1.0
121301-23	IRA-8	140-200	2.03	<1.0
121301-18	IRA-9	145-225	<1.0	<1.0
121701-25	IRA-10-100	81.5-101.5	2.22	2.34
121301-20	IRA-11-210	150-210	<1.0	<1.0
121301-19	IRA-12-210	140-210	<1.0	<1.0
121701-27	IRA-13-210	150-210	<1.0	<1.0
121101-05	IRA-14	160-170	362	103
121101-068	IRA-14	190-200	65.7	312
121101-07	IRA-14	230-240	174	289
121101-08	IRA-14	260-270	208	210
121101-09	IRA-14	290-300	95.8	50.8

<1.0 = Not detected at or above the method reporting limit

NA = Not Applicable

TABLE 5

**MIRACLE MILE WQARF SITE
SUMMARY OF LIGHT HYDROCARBONS AND PERMANENT GASES**

FOURTH QUARTER (DECEMBER) 2001

Sample ID	Sample Location	Screened Interval (feet below TOC)	Carbon dioxide mg/L	Carbon monoxide mg/L	Ethane ng/L	Ethene ng/L	Iso-Butane ng/L	Methane µg/L	n-Butane ng/L	Nitrogen mg/L	Oxygen mg/L	Propane ng/L	Propene ng/L
121001-01	IRA-1	130-210	2.0	<0.40	59	300	<25	1.8	<25	15	3.0	<25	<25
121301-09	IRA-2	150-230	14	<0.40	30	170	<25	1.0	<25	14	5.0	<25	<25
121201-05	IRA-3	150-230	17	<0.40	60	300	<25	1.8	<25	17	7.1	<25	<25
121301-12	IRA-5	130-210	10	<0.40	13	44	31	1.3	<25	17	6.0	<25	<25
121001-03	IRA-6	138-203	9.5	<0.40	<5.0	800	37	0.48	<25	13	4.9	<25	32
121001-04	IRA-6 duplicate	138-203	12	<0.40	21	99	<25	3.4	<25	18	6.6	<25	<25
121001-02	IRA-7	138-203	9.4	<0.40	23	26	48	0.27	<25	21	7.4	30	64
121301-10	IRA-8	140-200	16	<0.40	21	26	77	0.24	38	22	8.2	33	62
121301-06	IRA-9	145-225	14	<0.40	19	24	<25	0.22	<25	16	5.9	<25	<25
121301-08	IRA-11-210	150-210	10	<0.40	47	94	35	1.6	<25	16	6.2	<25	<25
121301-07	IRA-12-210	140-210	6.8	<0.40	<5.0	570	43	0.33	<25	19	6.9	<25	270
121701-13	IRA-13-210	150-210	10	<0.40	56	240	<25	1.3	<25	21	8.9	<25	<25
121701-14	IRA-13-210 duplicate	150-210	11	<0.40	20	42	<25	0.20	<25	16	7.2	<25	<25
121101-01-14	IRA-14	160-170	12	NA	19	110	<25	200	<25	12	8.1	<25	<25
121101-02-14	IRA-14	190-200	15	NA	44	160	<25	330	<25	12	7.5	<25	<25
121101-03-14	IRA-14	230-240	7.3	NA	260	420	<25	3,000	<25	11	5.5	82	120
121201-04-14	IRA-14	260-270	5.9	NA	100	210	<25	1,400	<25	12	7.4	35	87
121201-05-14	IRA-14	290-300	15	NA	740	1,300	<25	6,600	68	8.1	6.0	220	300
121301-11	IRA-16	65.9-75.9	34	<0.40	33	600	80	0.72	<25	22	9.8	30	<25

TOC = **Top of Casing** **µg/L** = **micrograms per liter**
mg/L = **milligrams per liter** **NA** = **Not Applicable**
ng/L = **nanograms per liter**

TABLE 7

**MIRACLE MILE WQARF SITE
CATION-ANION COMPARISON**

FOURTH QUARTER (DECEMBER) 2001

Well ID		FWID-66			DOUGLAS			CRESCENT MANOR					
Sample Date		12/12/2001			12/12/2001			12/12/2001					
CATIONS		Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L	Results (mg/L)	mmole/L	meq/L
Calcium	Ca ²⁺	79	1.97105	3.9421	190	4.7405	9.481	150	3.7425	7.485			
Magnesium	Mg ²⁺	3.2	0.13152	0.26336	13	0.5343	1.0699	17	0.6987	1.3991			
Manganese	Mn ²⁺	0.017	0.0003094	0.0006188	0.034	0.0006188	0.0012376	0.026	0.0004732	0.0009464			
Potassium	K ⁺	3.1	0.07936	0.07936	5.6	0.14336	0.14336	5.5	0.1408	0.1408			
Sodium	Na ⁺	70	3.045	3.045	100	4.35	4.35	100	4.35	4.35			
ANIONS			7.3304388			15.04426			13.375846				
Nitrate	NO ₃ ⁻	NA			NA			NA					
Chloride	Cl ⁻	NA			NA			NA					
Sulfate	SO ₄ ²⁻	NA			NA			NA					
Bicarbonate	HCO ₃ ⁻	NA			NA			NA					
Carbonate	CO ₃ ²⁻	NA			NA			NA					
			0			0			0				
Balance (RPD)			100.00%			100.00%			100.00%				#DIV/0!

Criteria = +/- 10%

RPD = Relative % Difference

(mg/L) = milligrams per liter

mmole/L = millimoles per liter

meq/L = milliequivalents per liter