Table 1. Newcastle Groundwater and Surface Water Data

				Groundwater					Surface Water	
				MW-1	MW-2	MW-2D	MW-3	MW-5	SW-6	SW-7
Parameter	**Units**	**GWQS**	**MCL**	2/23/2010	2/23/2010	2/23/2010	2/23/2010	2/17/2010	2/23/2010	2/23/2010
Field Data										
Temperature	°C			8.93	- -	- -	10.63	11.47	11.90	7.49
pH	standard	6.5-8.5 **		7.23	- -	- -	7.58	6.41	7.70	8.49
Specific Conductivity	uS/cm		700 **	**866**	- -	- -	**759**	655	**859**	418
Conventionals										
Ammonia	mg-N/L			0.097	0.482	0.431	0.470	0.070	0.191	0.045
Chemical Oxygen Demand	mg/L			12.9	22.9	17.1	13.2	5.00 U	6.21	9.41
Chloride	mg/L	250 **	250 **	3.3	16.5	15.9	6.8	6	5.0	4.9
Dissolved Hardness	mg/L CaCO3			530	330	330	92	320	310	140
Nitrate	mg-N/L	10 *	10 *	0.010 U	0.337 J	0.814 J	0.010 U	0.010 U	0.059	0.779
Nitrate + Nitrite	mg-N/L			0.010 U	0.358 J	0.814 J	0.010 U	0.010 U	0.059	0.779
Nitrite	mg-N/L		1 *	0.010 U	0.021 J	0.010 UJ	0.010 U	0.010 U	0.010 U	0.010 U
Sulfate	mg/L	250 **	250 **	217	23.6	20.8	32.9	96.1	112	48.8
Total Dissolved Solids	mg/L	500 **	500 **	**584**	497	444	451	415	**519**	236
Total Organic Carbon	mg/L			1.50	4.47 J	2.25 J	3.15	2.54 U	1.59	5.28
Dissolved Metals										
Arsenic	mg/L	0.00005 ***	0.01 *	**0.0008**	**0.0007**	**0.0006**	**0.0037**	**0.0227**	**0.0036**	**0.001**
Calcium	mg/L			141	80.4	80.2	19.1	73.5	62.4	31.4
Iron	mg/L	0.3 **	0.3 **	**1.08**	**0.69**	**0.66**	**1.45**	**5.09**	**0.65**	0.07
Magnesium	mg/L			43.6	32	31.6	10.7	33.3	38.2	15.8
Manganese	mg/L	0.05 **	0.05 **	**0.093**	**0.118**	**0.113**	0.043	**0.642**	**0.28**	**0.052**
Zinc	mg/L	5 **	5 **	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

Notes:

GWQS = Water Quality Standards for Ground Waters of the State of Washington (173-200 WAC)
MCL = Maximum Contaminant Level, Washington State Drinking Water Regulations (Chapter 246-290 WAC)
* = Primary contaminant criteria
** = Secondary contaminant criteria
*** = Carcinogenic contaminant criteria
= Exceeds GWQS or MCL
J = Estimated value
D = Duplicate sample
U = Compound undetected at the specified reporting limit
UJ = Non-detected at approximate detection limit
- - = Field parameters were inadventently not analyzed at well MW-2