

May 6, 2004

de maximis, inc.

10A Winslow Court
P.O. Box 352
Weatogue, Connecticut 06089

Attention: John Hunt

Subject: February 2004 Semiannual Groundwater Sampling Results
NMI Site, Concord, Massachusetts

Dear John:

GeoSyntec Consultants is pleased to provide you with the groundwater monitoring data from the February 2004 semiannual sampling round. Table 1 provides a summary of analytes detected during this sampling round. Table 2 summarizes the isotopic and total uranium results for the groundwater samples.

If you have any questions regarding this summary, please do not hesitate to contact either of the undersigned at (978) 263-9588.

Sincerely,



Jamie L. deLemos, M.S.
Staff Geologist



Douglas G. Larson, Ph.D., P.E.
Associate

Attachment

cc:

Table 1
 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
 February 2004 Sampling Round
 NMI Site, Concord, MA

Method Group	Parameter	Units	GZW-10-1-02252004 2/25/2004	GZW-10-1-02252004-DUP 2/25/2004	GZW-6-3-02242004 2/24/2004	GZW-6-3-02252004 2/25/2004	GZW-7-1-02242004 2/24/2004	GZW-7S-02242004 2/24/2004	HB-07-02242004 2/24/2004	HB-10-02252004 2/25/2004	HB-10S-02252004 2/25/2004	HB-12-02242004 2/24/2004	HBPZ-2R-02252004 2/25/2004	MW-8A-02242004 2/24/2004
Alkalinity														
	Alkalinity, Calcium Carbonate	µg/L	122000/	124000/		153000/	19500/	19500/	24600/	23600/	27700/	52300/	30800/	22600/
Anions														
	Nitrate	µg/L	27700/H	28100/H		682/	1600/	2300/	6240/	1910/	43/J	3010/	2900/	2380/
	Nitrite	µg/L	100/U	100/U		100/U	100/U	100/U	100/U	100/U	100/U	100/U	100/U	100/U
	Sulfate	µg/L	527000/	540000/		484000/	8720/	9950/	15900/	10900/	4900/	17500/	15100/	9800/
	Sulfide	µg/L	100/U	100/U	39.3/J		100/U	100/U	100/U	100/U	100/U	27.8/J	100/U	26.3/J
Metals														
	Aluminum	µg/L	33.7/	49.7/		3540/	2.4/B	4.99/B	13.3/B	6.61/B	254/	156/	5.36/B	13.6/B
	Calcium	µg/L	162000/	162000/		124000/	14000/	14600/	14200/	15500/	11100/	16000/	11500/	11600/
	Iron	µg/L	615/	658/		2330/	58.3/	58.2/	71.1/	56/	993/	314/	43.7/	58.1/
	Iron, Ferrous	µg/L	50/HU	50/HU		282/	50/HU	50/HU	41.2/HJ	50/HU	67.1/	199/H	198/	50/HU
	Magnesium	µg/L	48800/E	49200/E		37500/E	3100/E	3100/E	2860/E	3450/E	2950/E	9490/E	6490/E	6240/E
	Manganese	µg/L	523/	596/		469/	2.08/B	6.11/	10.6/	144/	442/	22.7/	26.1/	11.9/
	Sodium	µg/L	45600/	47900/		40100/	9070/	10700/	18800/	14100/	9550/	15200/	13600/	10800/
	Uranium	µg/L				67.7/								534/
Total Organic Carbon														
	Total Organic Carbon (TOC)	µg/L	1660/	1810/		960/	515/	516/	405/	1200/	3200/	1720/	1130/	665/
Uranium														
	U-233/234	pCi/L	31.9/	29.2/	30/		5.39/	5.03/	3.92/	0.0775/U	0.127/U	257/	114/	18.3/
	U-235/236	pCi/L	1.21/	1.07/	1.47/		0.987/	0.739/	0.472/	-0.0338/U	-0.0445/U	52.2/	17.3/	3.02/
	U-235	%	0.892/	0.859/	0.976/		0.361/	0.3/	0.251/	-	-	0.408/	0.277/	0.33/
	U-238	pCi/L	20.9/	19.2/	23.2/		42.4/	38.2/	29.2/	0.0562/U	0.365/	1980/	968/	142/

Notes: "J"=Compound detected below method quantitation limit, estimated value provided.
 "B"=Compound detected in Laboratory blank analysis.
 "U"=Compound not detected above method quantitation limit, quantitation limit provided.
 "H"=Analytical holding time exceeded
 "E" = Indicates compounds whose concentrations exceed the calibration range of the instrument
 Highlighted cells indicate negative detections of U-235/236 (pCi/L) reported by the laboratory (i.e., detections below background). Negative detections are indicated by dashes in the U-235 percentage row.
 GeoSyntec collected the groundwater samples on February 24 and 25, 2004. Laboratory analyses were performed by General Engineering Laboratories of Columbia, South Carolina.

Table 2
SUMMARY OF URANIUM CONCENTRATIONS DETECTED IN GROUNDWATER SAMPLES
February 2004 Sampling Round
NMI Site, Concord, MA

Sample Location	Alpha Spec. Results				Total U (ICP) $\mu\text{g/L}$	$\text{U}^{238}/\text{U}^{235}$ Ratio	% U^{238}	% U^{235}
	U^{234} $\mu\text{g/L}$	U^{235} $\mu\text{g/L}$	U^{238} $\mu\text{g/L}$	Total U $\mu\text{g/L}$				
GZW-10	0.00513	0.565	62.20	62.77		110.01	99.09	0.90
GZW-10 dup	0.00469	0.500	57.14	57.65		114.29	99.12	0.87
GZW-6-3	0.00482	0.687	69.05	69.74	67.7	100.52	99.01	0.98
GZW-7-1	0.00087	0.461	126.19	126.65		273.60	99.64	0.36
GZW-7S	0.00081	0.345	113.69	114.04		329.23	99.70	0.30
HB-10	0.00001	-0.016	0.17	0.17		-	99.99	-
HB-10S	0.00002	-0.021	1.09	1.09		-	100.00	-
HB-12	0.04132	24.393	5892.86	5917.29		241.58	99.59	0.41
HB-7	0.00063	0.221	86.90	87.13		394.02	99.75	0.25
HBPZ-2R	0.01833	8.084	2880.95	2889.05		356.37	99.72	0.28
MW-8A	0.00294	1.411	422.62	424.03	534	299.47	99.67	0.33

Notes:

1. Natural uranium is roughly 0.7% U^{235} , and the $\text{U}^{238}/\text{U}^{235}$ ratio is approximately 130 to 180.
2. Depleted uranium is roughly 0.2% U^{235} , and the $\text{U}^{238}/\text{U}^{235}$ ratio is approximately 400 to 500.
3. GZW-10 and GZW-6-3 are both bedrock wells; the others are overburden wells.
4. Highlighted cells indicate negative detections of U-235 (pCi/L) reported by the laboratory (i.e., detections below background).
5. Negative U-235 detections are indicated by dashes in the U-235 ratio and percentage columns.