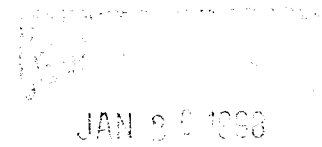




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RECEIVED, JAN 15 1998

Memorandum

To: ✓ Kimberly Tisa,
PCB Coordinator,
USEPA

Date: January 15, 1998

Project No.: 70632

From: Al Hanscom *ADH*
cc: Chris Jedsen, Boliden Metech
Marc Richards, VHIB

Re: Boliden-Metech
GW Sampling

Forwarded herewith is a copy of the revised groundwater monitoring well location plan. As you requested, MWs 4 and 5 have been shifted from the interior site locations originally proposed by VHIB to the periphery of the property.

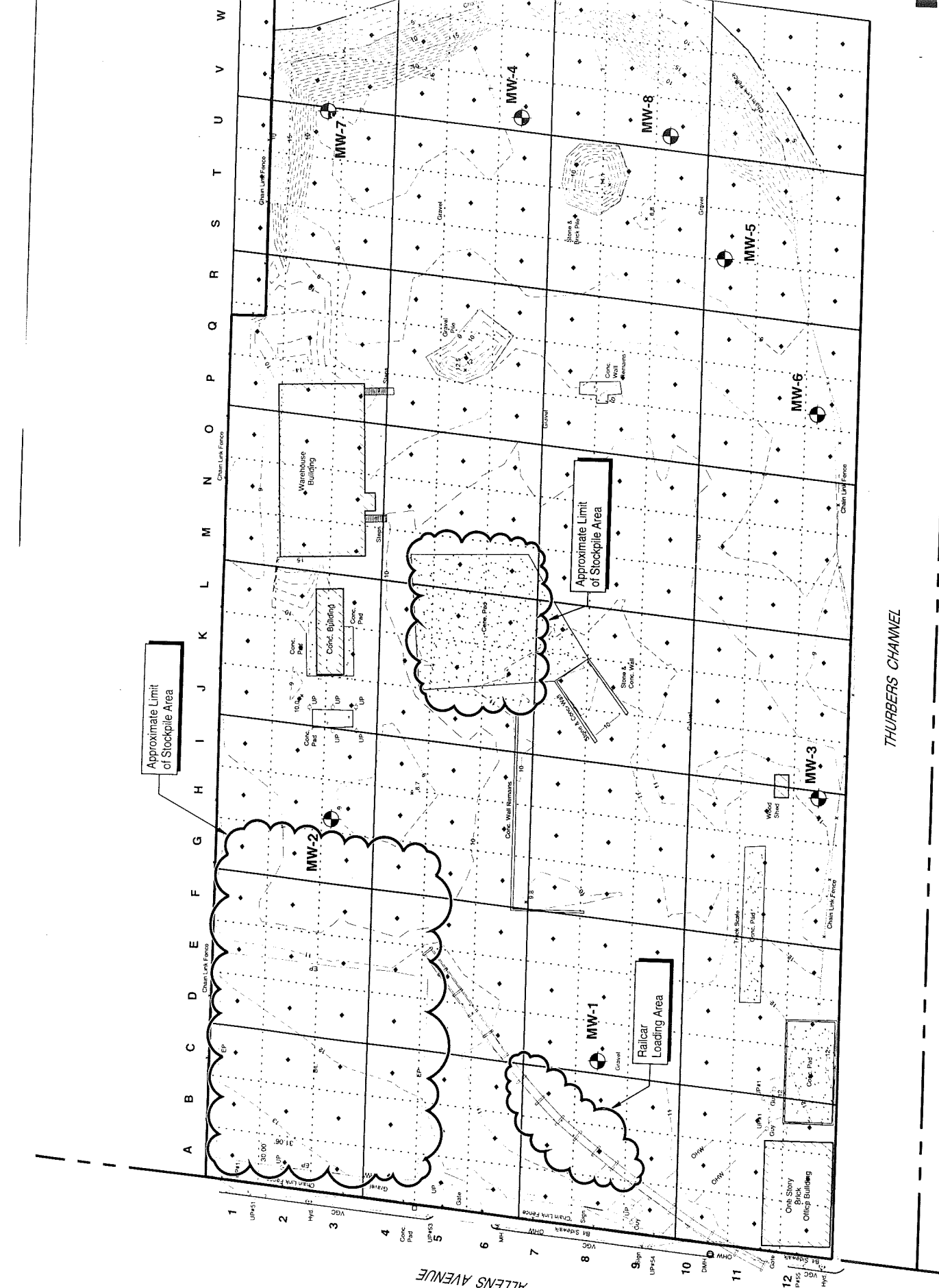
The monitoring wells will be installed in accordance with the EPA-approved work plan, and at your requested depth of 2 to 3 feet below mean low water.

If the understandings set forth in this memorandum are not consistent with our recent discussions, please call me.

TABLE 2 - TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		
		Latitude	Longitude	Time		Height		Mean	Spring	Mean Tide Level
				High Water	Low Water	High Water	Low Water			
	MASSACHUSETTS—cont.	North	West	h	m	ft	ft	ft	ft	ft
	Vineyard Sound Time meridian, 75° W			on Newport, p.40						
1085	Nobska Point	41° 31'	70° 39'	+0 41	+2 05	*0.43	*0.43	1.5	1.9	0.8
1087	Woods Hole									
1089	Little Harbor	41° 31'	70° 40'	+0 32	+2 21	*0.40	*0.40	1.4	1.8	0.8
1091	Oceanographic Institution	41° 32'	70° 40'	+0 22	+1 59	*0.52	*0.50	1.8	2.3	1.0
1093	Uncatena Island (south side)	41° 31'	70° 42'	+0 12	-0 22	*1.02	*1.02	3.6	4.5	1.9
	Tarpaulin Cove	41° 28'	70° 46'	+0 11	+1 23	*0.54	*0.54	1.9	2.4	1.0
1095	Quicks Hole									
	South side	41° 26'	70° 51'	-0 10	+0 09	*0.71	*0.71	2.5	3.1	1.3
1097	Middle	41° 27'	70° 51'	0 00	+0 10	*0.85	*0.85	3.0	3.7	1.6
1099	North side	41° 27'	70° 51'	-0 08	-0 08	*0.99	*0.99	3.5	4.4	1.8
	Buzzards Bay									
1101	Cuttyhunk Pond entrance	41° 25'	70° 55'	+0 01	+0 01	*0.97	*0.97	3.4	4.2	1.8
1103	Penikese Island	41° 27'	70° 55'	-0 17	-0 16	*0.97	*0.97	3.4	4.2	1.8
1105	Kettle Cove	41° 29'	70° 47'	+0 09	+0 02	*1.08	*1.08	3.8	4.7	2.1
1107	Chappaquoyt Point, West Falmouth Harbor	41° 36'	70° 39'	+0 10	+0 20	*1.10	*1.07	3.9	4.9	2.1
1109	West Falmouth Harbor	41° 36'	70° 39'	+0 21	+0 18	*1.14	*1.14	4.0	5.0	2.2
1111	Barlows Landing, Pocasset Harbor	41° 41'	70° 38'	+0 24	+0 18	*1.14	*1.14	4.0	5.0	2.2
1113	Abiels Ledge	41° 42'	70° 40'	+0 11	+0 16	*1.11	*1.11	3.9	4.9	2.2
1115	Monument Beach	41° 43'	70° 37'	+0 23	+0 18	*1.14	*1.14	4.0	5.0	2.2
1117	Cape Cod Canal, RR. bridge <6>	41° 44'	70° 37'	+1 15	-	*0.99	*0.99	3.5	4.1	1.9
1119	Great Hill	41° 43'	70° 43'	+0 12	+0 11	*1.15	*1.21	4.0	5.0	2.2
1121	Wareham, Wareham River	41° 45'	70° 43'	-0 22	+0 16	*1.16	*1.16	4.1	5.1	2.2
1123	Bird Island	41° 40'	70° 43'	+0 05	-0 02	*1.19	*1.19	4.2	5.2	2.3
1125	Marion, Sippican Harbor	41° 42'	70° 46'	+0 10	+0 12	*1.13	*1.13	4.0	4.9	2.2
1127	Mattapoisett, Mattapoisett Harbor	41° 39'	70° 49'	+0 11	+0 20	*1.09	*1.09	3.9	4.8	2.1
1129	West Island (west side)	41° 36'	70° 50'	+0 09	+0 08	*1.05	*1.05	3.7	4.6	1.9
1131	Clarks Point	41° 38'	70° 54'	+0 14	+0 24	*1.06	*1.06	3.6	4.5	2.0
1133	New Bedford	41° 38'	70° 55'	+0 07	+0 07	*1.05	*1.05	3.7	4.6	1.9
1135	Belleville, Acushnet River	41° 40'	70° 55'	+0 07	+0 09	*1.08	*1.08	3.8	4.7	2.1
1137	South Dartmouth, Apponagansett Bay	41° 35'	70° 57'	-0 25	+0 33	*1.05	*1.05	3.7	4.6	1.9
1139	Dumpling Rocks	41° 32'	70° 55'	+0 01	-0 02	*1.05	*1.05	3.7	4.6	1.9
	Westport River									
1141	Westport Harbor	41° 30'	71° 06'	+0 09	+0 33	*0.85	*0.85	3.0	3.7	1.6
1143	Hix Bridge, East Branch	41° 34'	71° 04'	+1 40	+2 30	*0.77	*0.77	2.7	3.4	1.4
	RHODE ISLAND, Narragansett Bay									
1145	Sakonnet	41° 28'	71° 12'	-0 13	-0 01	*0.88	*0.86	3.1	3.9	1.7
1147	Anthony Point, Sakonnet River	41° 38'	71° 13'	-0 02	-0 02	*1.09	*1.07	3.8	4.8	2.1
1149	Beavertail Point	41° 27'	71° 24'	-0 05	+0 04	*0.99	*1.00	3.5	4.3	1.9
1151	Castle Hill	41° 28'	71° 22'	-0 05	+0 12	*0.94	*0.93	3.3	4.1	1.8
1153	NEWPORT	41° 30'	71° 20'							
1155	Conanicut Point	41° 34'	71° 22'							
1157	Prudence Island, (south end)	41° 35'	71° 19'	+0 07	-0 06	*1.07	*1.07	3.5	4.4	1.9
1159	Bristol Point	41° 39'	71° 16'	+0 08	-0 04	*1.08	*1.07	3.8	4.7	2.0
1161	Bristol Highlands	41° 39'	71° 16'	+0 18	+0 07	*1.14	*1.14	4.0	5.0	2.1
1163	Bristol Ferry	41° 42'	71° 18'	+0 08	-0 07	*1.18	*1.21	4.2	5.2	2.2
1165	Fall River, State Pier	41° 38'	71° 15'	+0 16	+0 01	*1.16	*1.14	4.1	5.1	2.2
	RHODE ISLAND and MASSACHUSETTS Narragansett Bay—cont.									
1167	Fall River, Massachusetts	41° 44'	71° 08'	+0 28	+0 29	*1.26	*1.26	4.4	5.5	2.4
1169	Taunton, Taunton River, Massachusetts	41° 53'	71° 06'	+1 06	+2 21	*0.79	*0.79	2.8	3.5	1.5
1171	Bristol, Bristol Harbor	41° 40'	71° 17'	+0 13	0 00	*1.16	*1.14	4.1	5.1	2.2
1173	Warren	41° 44'	71° 17'	+0 18	-0 01	*1.31	*1.29	4.6	5.7	2.5
1175	Nayatt Point	41° 43'	71° 20'	+0 09	-0 02	*1.31	*1.29	4.6	5.7	2.5
1177	Providence, State Pier #1	41° 48'	71° 24'	+0 11	-0 01	*1.28	*1.29	4.5	5.6	2.4
1179	Pawtucket, Seekonk River	41° 52'	71° 23'	+0 18	+0 09	*1.31	*1.29	4.6	5.8	2.5
1181	East Greenwich	41° 40'	71° 27'	+0 13	+0 03	*1.14	*1.14	4.0	5.0	2.1
1183	Wickford	41° 34'	71° 27'	+0 09	+0 02	*1.08	*1.07	3.8	4.7	2.0
1185	Narragansett Pier	41° 25'	71° 27'	-0 11	+0 11	*0.91	*0.93	3.2	4.0	1.7
	RHODE ISLAND, Outer Coast									
1187	Point Judith Harbor of Refuge	41° 22'	71° 29'	-0 10	+0 17	*0.88	*0.86	3.1	3.9	1.6
1189	Block Island (Great Salt Pond)	41° 11'	71° 35'	+0 02	+0 07	*0.74	*0.71	2.6	3.2	1.4
1191	Block Island (Old Harbor)	41° 10'	71° 33'	-0 17	+0 12	*0.83	*0.86	2.9	3.6	1.5
1193	Watch Hill Point	41° 18'	71° 52'	+0 41	+1 16	*0.74	*0.71	2.6	3.2	1.4
	on New London, p.44									
1195	Westerly, Pawcatuck River	41° 23'	71° 50'	-0 21	+0 03	*1.02	*1.00	2.6	3.1	1.5
	CONNECTICUT, Long Island Sound									
1197	Stonington, Fishers Island Sound	41° 20'	71° 54'	-0 32	-0 41	*1.05	*1.05	2.7	3.2	1.5
1199	Noank, Mystic River entrance	41° 19'	71° 59'	-0 22	-0 08	*0.89	*0.90	2.3	2.7	1.4
1201	West Harbor, Fishers Island, N.Y.	41° 16'	72° 00'	0 00	-0 06	*0.97	*0.97	2.5	3.0	1.4
1203	Silver Eel Pond, Fishers Island, N.Y.	41° 15'	72° 02'	-0 16	-0 04	*0.89	*0.89	2.3	2.7	1.3

Endnotes can be found at the end of table 2.



Approximate Limit of Stockpile Area

Approximate Limit of Stockpile Area

Railcar Loading Area

THURBERS CHANNEL

ALLENS AVENUE

