Hatch Mott MacDonald
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February 18, 2016

Mr. Raymond Codey
Borough Administrator
Borough of Madison
Hartley Dodge Memorial
50 Kings Road
Madison, NJ 07940

Re: Hartley Dodge Memorial Building
Former Police Department UST
Status Report - Summary of Environmental Sample Results

Dear Mr. Codey:

The Borough of Madison retained Hatch Mott MacDonald to provide Licensed Site Remediation Professional (LSRP) services for the contamination associated with the former 550-gallon underground storage tank (UST). Since we were retained, HMM prepared the public notification requirements, provided documents to resolve discrepancies in NJDEP UST records, and collected soil and groundwater samples.

HMM collected soil samples from former boring HD-7 to delineate the vertical extent of soil contamination, and from new soil boring HD-13 to provide horizontal delineation. The sample locations are shown on the attached site plan. The soil sample results successfully delineated the contamination. The sample results are attached.

At the location of HD-7, HMM collected a groundwater grab sample from 30-35 feet below the ground surface to provide vertical delineation of groundwater contamination. This groundwater sample result exceeded the NJDEP Ground Water Quality Standards (GWQS), and was, in fact, the highest concentrations of dissolved gasoline contaminants ever detected. The sample results are attached.

In order to meet the NJDEP May 7, 2016 report deadline, additional groundwater sampling needs to be completed for vertical and horizontal delineation. Borings will need to be installed at the location of HD-7 and three surrounding locations, with groundwater samples collected from 30-35 feet and 45-50 feet. These samples will be analyzed for volatile organic compounds, as required for gasoline constituents.

A sonic drill rig has been scheduled in order to drill to the desired depths. The drilling will occur at the beginning of March, as soon as the sonic drill rig is available. Two of the boreholes will require soft digging prior to drilling to ensure that no utilities will be impacted. The groundwater sample results should be available at the end of March. Should the results meet the delineation requirements, the Remedial Investigation Report will be able to be completed by the deadline. If the results are not favorable, the Borough will need to notify the NJDEP that the deadline will not be met.

Hatch Mott MacDonald

The cost for the additional remedial investigation work is approximately $12,000, which includes the drilling subcontractor, laboratory analysis, and consulting.

Just so that you are aware, the concentrations that were observed in the soils and groundwater will require remedial actions to remove this source area. The remedial actions will need to be evaluated for efficacy and cost effectiveness before being proposed to the NJDEP in a Remedial Action Workplan. Remedial actions are not included within our current scope of work.

Please call me if you have any questions.

Very truly yours,
Hatch Mott MacDonald

Roy Redmond, LSRP
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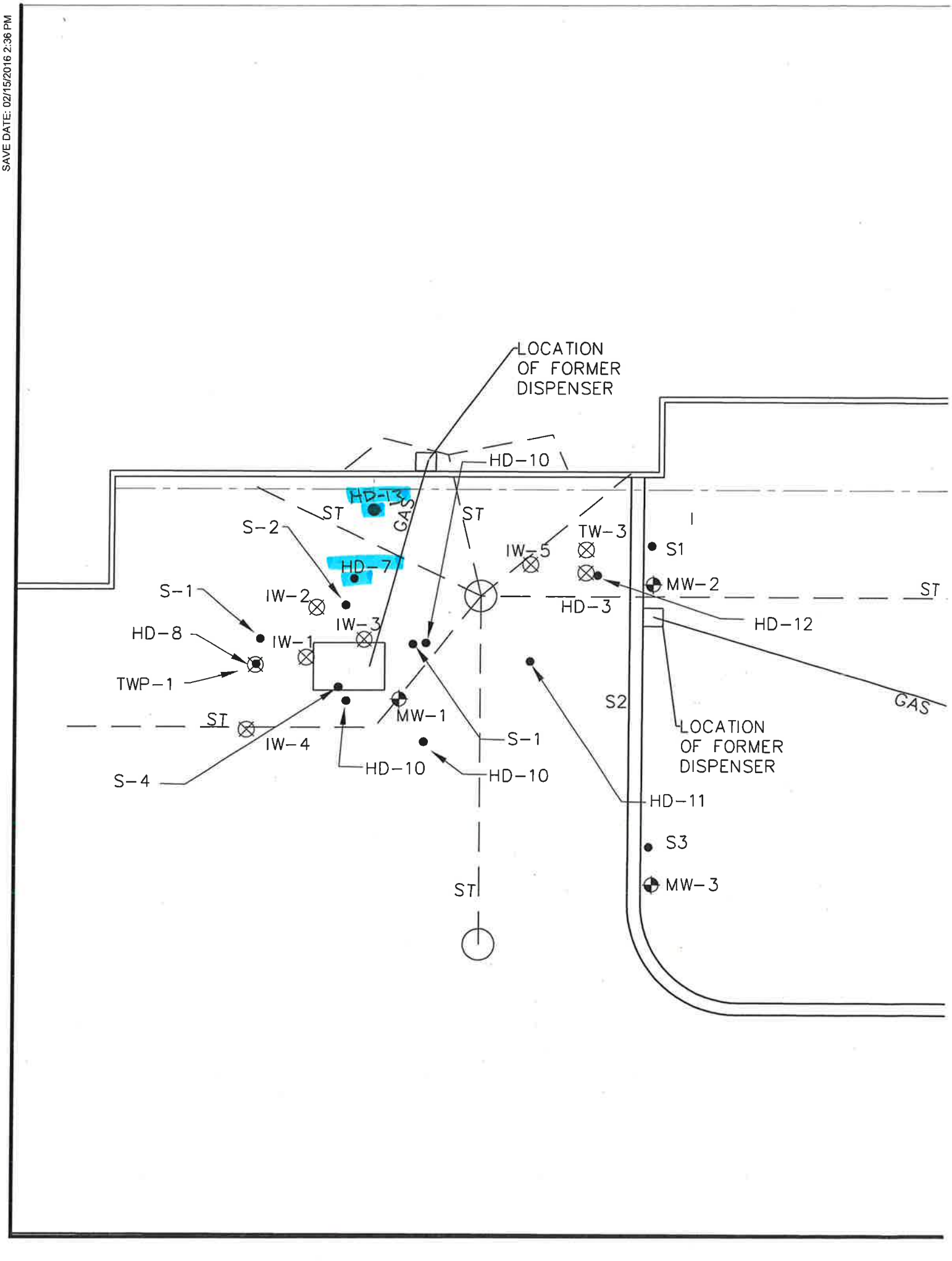
c: Jim Burnet, Madison
Robert Vogel, PE, Madison

PLOT DATE: 02/15/2016 2:45 PM
SAVE DATE: 02/15/2016 2:36 PM



Borough of Madison
Hartley Dodge Memorial Building

Soil Sample Results

Sample Name and Depth Lab ID Sample Date	NJDEP Residential Direct Contact Standarc	NJDEP Non-Residential Direct Contact Standard	NJDEP Impact To Ground Water Standard	HD-7 39.5-40 6010573-01 1/21/2016 8:45			HD-13 15.5-16 6010573-02 1/21/2016 12:15			HD-13 21.5-22 6010573-03 1/21/2016 12:50			HD-13 27.5-28 6010573-04 1/21/2016 13:30		
Compound				Result	Qualifier		Result	Qualifier		Result	Qualifier		Result	Qualifier	
Percent Solids				80.2			76.6			83.6			85.5		
VOCs				Result	Qualifier	MDL	Result	Qualifier	MDL	Result	Qualifier	MDL	Result	Qualifier	MDL
1,1,1-Trichloroethane	290	4200	0.3	0.000350	U	0.000350	0.000323	U	0.000323	0.000286	U	0.000286	0.000329	U	0.000329
1,1,2,2-Tetrachloroethane	1	3	0.007	0.000331	U	0.000331	0.000306	U	0.000306	0.000271	U	0.000271	0.000311	U	0.000311
1,1,2-Trichloro-1,2,2 Trifluoroethane	NS	NS	NS	0.00103	U	0.00103	0.000948	U	0.000948	0.000839	U	0.000839	0.000963	U	0.000963
1,1,2-Trichloroethane	2	6	0.02	0.000404	U	0.000404	0.000373	U	0.000373	0.000330	U	0.000330	0.000379	U	0.000379
1,1-Dichloroethane	8	24	0.2	0.000350	U	0.000350	0.000323	U	0.000323	0.000286	U	0.000286	0.000329	U	0.000329
1,1-Dichloroethene	11	150	0.008	0.000444	U	0.000444	0.000410	U	0.000410	0.000363	U	0.000363	0.000416	U	0.000416
1,2,3-Trichlorobenzene	NS	NS	NS	0.000518	U	0.000518	0.000478	U	0.000478	0.000423	U	0.000423	0.000486	U	0.000486
1,2,4-Trichlorobenzene	73	820	0.7	0.000639	U	0.000639	0.000590	U	0.000590	0.000522	U	0.000522	0.000600	U	0.000600
1,2-Dibromo-3-chloropropane	0.08	0.2	0.005	0.000585	U	0.000585	0.000540	U	0.000540	0.000478	U	0.000478	0.000549	U	0.000549
1,2-Dibromoethane	0.008	0.04	0.005	0.000302	U	0.000302	0.000279	U	0.000279	0.000247	U	0.000247	0.000284	U	0.000284
1,2-Dichlorobenzene	5300	59000	17	0.000423	U	0.000423	0.000391	U	0.000391	0.000346	U	0.000346	0.000397	U	0.000397
1,2-Dichloroethane	0.9	3	0.005	0.0287		0.000338	0.000312	U	0.000312	0.000276	U	0.000276	0.0531		0.000317
1,2-Dichloropropane	2	5	0.005	0.000393	U	0.000393	0.000363	U	0.000363	0.000321	U	0.000321	0.000369	U	0.000369
1,3-Dichlorobenzene	5300	59000	19	0.000176	U	0.000176	0.000163	U	0.000163	0.000144	U	0.000144	0.000165	U	0.000165
1,4-Dichlorobenzene	5	13	2	0.000345	U	0.000345	0.000319	U	0.000319	0.000282	U	0.000282	0.000324	U	0.000324
2-Butanone	3100	44000	0.9	0.000391	U	0.000391	0.000361	U	0.000361	0.000320	U	0.000320	0.000367	U	0.000367
2-Hexanone	NS	NS	NS	0.000224	U	0.000224	0.000207	U	0.000207	0.000183	U	0.000183	0.000210	U	0.000210
4-Methyl-2-pentanone	NS	NS	NS	0.000300	U	0.000300	0.000277	U	0.000277	0.000245	U	0.000245	0.000281	U	0.000281
Acetone	70000	NS	19	0.000727	U	0.000727	0.0839		0.000671	0.000594	U	0.000594	0.0862		0.000682
Benzene	2	5	0.005	0.101		0.000218	1.56	D	0.0212	1.92	D	0.0173	0.442		0.000205
Bromochloromethane	NS	NS	NS	0.000443	U	0.000443	0.000408	U	0.000408	0.000362	U	0.000362	0.000415	U	0.000415
Bromodichloromethane	1	3	0.005	0.000301	U	0.000301	0.000278	U	0.000278	0.000246	U	0.000246	0.000282	U	0.000282
Bromoform	81	280	0.03	0.000421	U	0.000421	0.000389	U	0.000389	0.000344	U	0.000344	0.000395	U	0.000395
Bromomethane	25	59	0.04	0.000692	U	0.000692	0.000639	U	0.000639	0.000566	U	0.000566	0.000649	U	0.000649
Carbon disulfide	7800	110000	6	0.000344	U	0.000344	0.000318	U	0.000318	0.000281	U	0.000281	0.000323	U	0.000323
Carbon Tetrachloride	0.6	2	0.005	0.000361	U	0.000361	0.000333	U	0.000333	0.000295	U	0.000295	0.000339	U	0.000339
Chlorobenzene	510	7400	0.6	0.000348	U	0.000348	0.000321	U	0.000321	0.000284	U	0.000284	0.000326	U	0.000326
Chlorodibromomethane	3	8	0.005	0.000295	U	0.000295	0.000272	U	0.000272	0.000241	U	0.000241	0.000277	U	0.000277
Chloroethane	220	1100	NS	0.000409	U	0.000409	0.000377	U	0.000377	0.000334	U	0.000334	0.000384	U	0.000384
Chloroform	0.6	2	0.4	0.000403	U	0.000403	0.000372	U	0.000372	0.000329	U	0.000329	0.000378	U	0.000378
Chloromethane	4	12	NS	0.000923	U	0.000923	0.000852	U	0.000852	0.000755	U	0.000755	0.000866	U	0.000866
cis-1,2-Dichloroethene	230	560	0.3	0.000116	U	0.000116	0.000107	U	0.000107	0.0000948	U	0.0000948	0.000109	U	0.000109
cis-1,3-Dichloropropene	2	7	0.005	0.000303	U	0.000303	0.000280	U	0.000280	0.000248	U	0.000248	0.000285	U	0.000285
Cyclohexane	NS	NS	NS	0.000531	U	0.000531	0.000490	U	0.000490	0.000434	U	0.000434	0.000498	U	0.000498
Dichlorodifluoromethane	490	230000	39	0.000810	U	0.000810	0.000747	U	0.000747	0.000662	U	0.000662	0.000759	U	0.000759
EthylBenzene	7800	110000	13	0.000325	U	0.000325	1.19	D	0.0316	3.55	D	0.0257	0.313		0.000305
Isopropylbenzene	NS	NS	NS	0.000377	U	0.000377	0.0559		0.000348	0.183		0.000308	0.000353	U	0.000353
m+p-Xylenes	12000	170000	19	0.000906	J	0.000606	4.80	D	0.0589	13.5	D	0.0479	0.832		0.000568
Methyl Acetate	78000	NS	22	0.000318	U	0.000318	0.000293	U	0.000293	0.000260	U	0.000260	0.000298	U	0.000298
Methyl tert-Butyl Ether	110	320	0.2	0.000405	U	0.000405	0.000374	U	0.000374	0.000331	U	0.000331	0.000380	U	0.000380
Methylcyclohexane	NS	NS	NS	0.000386	U	0.000386	0.000356	U	0.000356	0.000316	U	0.000316	0.000362	U	0.000362
Methylene Chloride	34	97	0.01	0.000721	U	0.000721	0.000665	U	0.000665	0.000589	U	0.000589	0.000676	U	0.000676
o-Xylene	12000	170000	19	0.000308	U	0.000308	1.89	D	0.0300	5.57	D	0.0244	2.41	D	0.0273
Styrene	90	260	3	0.000343	U	0.000343	0.000317	U	0.000317	0.000280	U	0.000280	0.000322	U	0.000322
tert-Butyl alcohol	1400	11000	0.3	0.00504	U	0.00504	0.00465	U	0.00465	0.00412	U	0.00412	0.00473	U	0.00473
Tetrachloroethene	2	5	0.005	0.000237	U	0.000237	0.000219	U	0.000219	0.000194	U	0.000194	0.000223	U	0.000223
Toluene	6300	91000	7	0.000193	U	0.000193	0.787	D	0.0188	10.4	D	0.0153	2.26	D	0.0171
Total Xylenes	12000	170000	19	0.000906	J	0.000308	6.69	D	0.0300	19.1	D	0.0244	3.27	D	0.0273
trans-1,2-Dichloroethene	300	720	0.6	0.000325	U	0.000325	0.000300	U	0.000300	0.000266	U	0.000266	0.000305	U	0.000305
trans-1,3-Dichloropropene	2	7	0.005	0.000458	U	0.000458	0.000423	U	0.000423	0.000374	U	0.000374	0.000430	U	0.000430
Trichloroethene	7	20	0.01	0.000353	U	0.000353	0.000325	U	0.000325	0.000288	U	0.000288	0.000331	U	0.000331
Trichlorofluoromethane	23000	340000	34	0.000276	U	0.000276	0.000255	U	0.000255	0.000225	U	0.000225	0.000259	U	0.000259
Vinyl chloride	0.7	2	0.005	0.000456	U	0.000456	0.000421	U	0.000421	0.000372	U	0.000372	0.000428	U	0.000428
Tentatively Identified Compounds	NS	NS	NS	0	J		3.15	J		2.66	J		0.379	J	

Qualifiers:
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected

Borough of Madison
Hartley Dodge Memorial Building

Groundwater Sample Results

Sample Name	May 2012 NJDEP	HD-7 TWP			FB			TB		
Lab ID	Ground Water	6010573-05			6010573-06			6010573-07		
Sample Depth	Quality Standards	30-35			-			-		
Compound	ug/L	1/21/2016 12:30			1/22/2016 12:20			1/22/2016 12:25		
VOCs		Result	Qualifier	MDL	Result	Qualifier	MDL	Result	Qualifier	MDL
1,1,1-Trichloroethane	30	1.08	U	1.08	0.216	U	0.216	0.216	U	0.216
1,1,2,2-Tetrachloroethane	1	1.09	U	1.09	0.218	U	0.218	0.218	U	0.218
1,1,2-Trichloro-1,2,2 Trifluoroethane	NS	2.73	U	2.73	0.546	U	0.546	0.546	U	0.546
1,1,2-Trichloroethane	3	2.38	U	2.38	0.476	U	0.476	0.476	U	0.476
1,1-Dichloroethane	50	1.96	U	1.96	0.393	U	0.393	0.393	U	0.393
1,1-Dichloroethene	1	0.745	U	0.745	0.149	U	0.149	0.149	U	0.149
1,2,3-Trichlorobenzene	NS	2.44	U	2.44	0.488	U	0.488	0.488	U	0.488
1,2,4-Trichlorobenzene	9	2.18	U	2.18	0.437	U	0.437	0.437	U	0.437
1,2-Dibromo-3-chloropropane	0.02	5.45	U	5.45	1.09	U	1.09	1.09	U	1.09
1,2-Dibromoethane	0.03	1.60	U	1.60	0.320	U	0.320	0.320	U	0.320
1,2-Dichlorobenzene	600	1.05	U	1.05	0.210	U	0.210	0.210	U	0.210
1,2-Dichloroethane	2	1.53	U	1.53	0.306	U	0.306	0.306	U	0.306
1,2-Dichloropropane	1	1.34	U	1.34	0.267	U	0.267	0.267	U	0.267
1,3-Dichlorobenzene	600	1.44	U	1.44	0.287	U	0.287	0.287	U	0.287
1,4-Dichlorobenzene	75	1.19	U	1.19	0.238	U	0.238	0.238	U	0.238
2-Butanone	300	4.35	U	4.35	0.870	U	0.870	0.870	U	0.870
2-Hexanone	300	3.18	U	3.18	0.635	U	0.635	0.635	U	0.635
4-Methyl-2-pentanone	NS	3.19	U	3.19	0.638	U	0.638	0.638	U	0.638
Acetone	6000	2.10	U	2.10	0.419	U	0.419	0.419	U	0.419
Benzene	1	**14,100**	D	64.5	0.129	U	0.129	0.129	U	0.129
Bromochloromethane	NS	1.54	U	1.54	0.307	U	0.307	0.307	U	0.307
Bromodichloromethane	1	1.29	U	1.29	0.258	U	0.258	0.258	U	0.258
Bromoform	4	2.10	U	2.10	0.421	U	0.421	0.421	U	0.421
Bromomethane	10	3.51	U	3.51	0.702	U	0.702	0.702	U	0.702
Carbon disulfide	700	2.38	U	2.38	0.477	U	0.477	0.477	U	0.477
Carbon Tetrachloride	1	1.86	U	1.86	0.372	U	0.372	0.372	U	0.372
Chlorobenzene	50	1.50	U	1.50	0.300	U	0.300	0.300	U	0.300
Chlorodibromomethane	1	2.52	U	2.52	0.504	U	0.504	0.504	U	0.504
Chloroethane	5	1.50	U	1.50	0.299	U	0.299	0.299	U	0.299
Chloroform	70	1.82	U	1.82	0.365	U	0.365	0.365	U	0.365
Chloromethane	NS	3.79	U	3.79	0.758	U	0.758	0.758	U	0.758
cis-1,2-Dichloroethene	70	1.76	U	1.76	0.352	U	0.352	0.352	U	0.352
cis-1,3-Dichloropropene	1	1.47	U	1.47	0.294	U	0.294	0.294	U	0.294
Cyclohexane	NS	**976**	D	1.49	0.298	U	0.298	0.298	U	0.298
Dichlorodifluoromethane	1000	1.64	U	1.64	0.328	U	0.328	0.328	U	0.328
EthylBenzene	700	**13,600**	D	122	0.244	U	0.244	0.244	U	0.244
Isopropylbenzene	700	**563**	D	1.38	0.275	U	0.275	0.275	U	0.275
m+p-Xylenes	1000	**49,100**	D	230	0.461	U	0.461	0.461	U	0.461
Methyl Acetate	7000	1.86	U	1.86	0.373	U	0.373	0.373	U	0.373
Methyl tert-Butyl Ether	70	2.98	U	2.98	0.596	U	0.596	0.596	U	0.596
Methylcyclohexane	NS	**772**	D	1.11	0.222	U	0.222	0.222	U	0.222
Methylene Chloride	3	3.4	U	3.40	0.681	U	0.681	0.681	U	0.681
o-Xylene	1000	**21,400**	D	122	0.244	U	0.244	0.244	U	0.244
Styrene	100	0.88	U	0.880	0.176	U	0.176	0.176	U	0.176
tert-Butyl alcohol	100	40.8	U	40.8	8.17	U	8.17	8.17	U	8.17
Tetrachloroethene	1	2.33	U	2.33	0.466	U	0.466	0.466	U	0.466
Toluene	600	**56,000**	D	102	0.205	U	0.205	0.205	U	0.205
Total Xylenes	1000	**70,500**	D	122	0.244	U	0.244	0.244	U	0.244
trans-1,2-Dichloroethene	100	1.2	U	1.20	0.241	U	0.241	0.241	U	0.241
trans-1,3-Dichloropropene	1	1.4	U	1.40	0.279	U	0.279	0.279	U	0.279
Trichloroethene	1	0.73	U	0.730	0.146	U	0.146	0.146	U	0.146
Trichlorofluoromethane	2000	2.06	U	2.06	0.413	U	0.413	0.413	U	0.413
Vinyl chloride	1	0.785	U	0.785	0.157	U	0.157	0.157	U	0.157
1H-Indene, 2,3-dihydro-4-methyl-	NS	**499**	JD							
Benzene, 1,2,3,5-tetramethyl-	NS	**400**	JD							
Benzene, 1,2,3-trimethyl-	NS	**2,190**	JD							
Benzene, 1,2,4-trimethyl-	NS	**1,670**	JD							
Benzene, 1,3,5-trimethyl-	NS	**6,530**	JD							
Benzene, 1-ethyl-2,3-dimethyl-	NS	**825**	JD							
Benzene, 1-ethyl-2-methyl-	NS	**4,600**	JD							
Benzene, 1-methyl-3-propyl-	NS	**695**	JD							
Benzene, 1-methyl-4-(1-methylethyl)- (01	NS	**1,310**	JD							
Benzene, 1-methyl-4-(1-methylethyl)- (02	NS	**368**	JD							
Benzene, 2-ethyl-1,4-dimethyl-	NS	**575**	JD							
Benzene, propyl-	NS	**1,580**	JD							
Indan, 1-methyl-	NS	**359**	JD							
Indane	NS	**1,640**	JD							
TIC:Naphthalene	300	**410**	JD							
Tentatively Identified Compounds	100/500	**23,700**	J		**0**	J		**0**	J	

Qualifiers:
E - Concentration exceeds highest calibration standard
B - Indicates compound found in associated blank
D - Indicates result is based on a dilution
H - Alternate peak selection upon analytical review
J - Indicates estimated value for TICs and all results when detected below the RL
U - Indicates compound analyzed for but not detected