

SAMPLING TRIP REPORT

SITE NAME: PFAS and 1,4-Dioxane EC sampling: 18 Mile Creek, Diaz Chemical, Crown Cleaners, and GCL Tie and Treating, Inc. Superfund Sites

CERCLIS ID NUMBER: N/A

SAMPLING DATE: 11-20 June 2019

CLP CASE NUMBER: None

SITE LOCATION: Lockport, Holley, Carthage, and Village of Sidney, New York

SAMPLE CRITERIA: Samples are provided to New York State for their analyses and actions as required.

1. Laboratories Receiving Samples:

Sample Type	Site/Number of Samples	Name and Address of Laboratory
Ground Water – PFAS standard 21+ list	18 Mile Creek: 6	Eurofins Test America 30 Community Drive Suite 11 South Burlington, VT
	Diaz Chemical: 5	
	Crown Cleaners: 5	
	GCL Tie: 5	
Ground Water – 1,4-Dioxane	18 Mile Creek: 6	Eurofins Test America 777 New Durham Rd Edison, NJ
	Diaz Chemical: 5	
	Crown Cleaners: 5	
	GCL Tie: 5	

2. Sample Dispatch Data:

The total number of samples delivered to the laboratory were 21 with a volume of 500 ml per sample per analysis. Of the 21 samples delivered to the laboratory, 13 were groundwater samples, 4 were duplicate samples, and 4 were rinsate blank samples. All 21 samples were delivered to Eurofins Test America Laboratory in Edison, NJ by the EPA field team for processing. All samples were collected using GeoInsight's PFAS free, high-density polyethylene HydraSleeves.

On 10 June 2019, the field team consisting of EPA Region II personnel Michael A. Mercado, Charren Cabaroy, and Graham Ellison traveled to Batavia, NY for the sampling event at both 18 Mile Creek and Diaz Chemical sites.

On 11 June 2019, the field team traveled to the 18 Mile Creek site. The groundwater wells identified for sampling were: MW-23, MW-20, MW-21, MW-05, and MW-18. Samples were collected from MW-23, MW-20, MW-21, AND MW-18. MW-05 was not sampled due to the presence of Teflon tubing inside the well. An equipment rinsate blank sample (RB-1) was collected on 12 June 2019. MW-21 was selected for the matrix spike/matrix spike duplicate analyses (MS/MSD). A duplicate sample was collected from monitoring well MW-20 and was named BF9R4 – TAG MC-4-D and 4-P. All samples were placed on ice and secured overnight.

On 12 June 2019, the field team traveled to the Diaz Chemical site. EPA Region II personnel met with NYSDEC representatives at the site. The groundwater wells identified for sampling were: MW-101S, MW-11S, MW-11D, and MW-111SR. A walk through the site was performed and discovered that two

groundwater wells identified for sampling as MW-11S & MW-11D contained Teflon tubing inside the wells and could not be sampled for PFAS. In place of MW-11S and MW-11D, samples were collected from MW-106SR. RB-1 is the equipment rinsate blank sample for Diaz Chemical Site and MW-106SR was selected for the matrix spike/matrix spike duplicate analyses. The duplicate sample for Diaz Chemical Site is monitoring well MW-111SR and it was named BF9S3 – TAG DC-3-D and 3-P. All samples collected on 11 June 2019 from 18 Mile Creek Site and samples collected in the morning of 12 June 2019 from Diaz Chemical Site were placed on ice and secured overnight.

On 13 June 2019, all samples collected were transported by the EPA field team to the Eurofins Test America Laboratory in Edison, NJ in four coolers, to accommodate the two lab facilities involved (VT and NJ). Two coolers contained samples for PFAS analyses intended for the Eurofins Test America Laboratory in Burlington, VT and the two others for 1,4-Dioxane analysis by the Eurofins Test America Laboratory in Edison, NJ. All samples were placed on ice and tagged. A completed chain of custody accompanied each cooler. (See Attachment 1 for copies of all Chain of Custody forms).

On 16 June 2019, the field team consisting of EPA Region II personnel Michael A. Mercado, Charren Cabaroy, and Graham Ellison traveled to Watertown, NY for the sampling event at the Crown Cleaners site.

On 17 June 2019, the field team traveled to the Crown Cleaners site. EPA Region II personnel met with NYSDEC representatives at the site. We did a walk through the site and discovered that three of the four wells identified for sampling contained Passive Diffusion Bag (PDB) sampling devices in place. Since these bags could contain PFAS products and potentially cause cross contamination, these wells could not be sampled. The field team searched for wells that did not contain passive diffusion bags to use in place of the 3 wells. Alternate wells were located, and the EPA field team proceeded to collect samples from well MW-04D in place of MW-04S and from well ERT-41I in place of both ERT-36I and ERT-35S. An equipment rinsate blank sample (RB-1) was collected. ERT-33D was selected for the matrix spike/matrix spike duplicate analyses (MS/MSD). A duplicate sample is from monitoring well MW-41I and was named BF9P3 – TAG CC-3-D and 3-P. All samples were placed on ice and secured overnight.

On 18 June 2019, the field team consisting of EPA Region II personnel Michael A. Mercado, Charren Cabaroy, and Graham Ellison traveled to Vestal, NY for the sampling event at the GCL Tie site.

On 19 June 2019, the field team traveled to the GCL Tie site. We stopped in at Mead Westvaco Security Office, signed-in and picked-up badges. The groundwater wells identified for sampling were: MW-3S, MW-11B, MW-12I, and MW-15I. The on-site monitoring well to be sampled was MW-3S. Upon opening the well, it was noticed that the meter and cables that were removed and set aside one month prior, was placed back into the well. Since the materials and cable may contain PFAS compounds and potentially cause cross contamination, this well could not be sampled. All the wells near MW-3S (except for MW-3D) contained Teflon tubing, thus were not suitable as substitutes for sampling due to potential cross contamination issues. Well MW-3D did not contain Teflon tubing but a large wasp nest (equivalent to the size of a baseball) was present. For safety reasons, well MW-3D was not sampled. Samples were collected from the other three wells on the Mead Westvaco facility. An equipment rinsate blank sample (RB-1) collected. MW-12I was selected for the matrix spike/matrix spike duplicate analyses (MS/MSD). A duplicate sample is from monitoring well MW-11B and was named BF9Q4 – TAG GT-4-D and 4-P. Prior to departing the facility, we signed out and returned the badges to the office. All samples were placed on ice and secured overnight.

On 20 June 2019, all samples collected were transported by the EPA field team to the Eurofins Test America Laboratory in Edison, NJ in four coolers, to accommodate the two lab facilities involved (VT and NJ). Two coolers contained samples for PFAS analyses intended for the Eurofins Test America Laboratory in Burlington, VT and the two others for 1,4-Dioxane analysis by the Eurofins Test America Laboratory in Edison, NJ. All samples were placed on ice and tagged. A completed chain of custody accompanied each cooler. (See Attachment 1 for copies of all Chain of Custody forms).

3. Sampling Personnel:

Name	Organization	Site Duties
Michael A. Mercado	USEPA Region II DESA/HWSB	Project Manager/Sample Management
Graham Ellison	USEPA Region II DESA/HWSB	Field Personnel
Charren Cabaroy	USEPA Region II DESA/HWSB	Field Personnel
Amelia Jackson	USEPA Region II DESA/HWSB	Quality Assurance Officer

4. Sample Descriptions:

[illegible]

Crown Cleaners Site						
BF9P0	CC-0-P	RB-1	17JUN19/1700	PFAS	Eurofins Test America	Rinsate Blank
	CC-0-D			1,4-Dioxane		
BF9P1	CC-1-P	MW-04D	17JUN19/1030	PFAS	Eurofins Test America	Upgradient well
	CC-1-D			1,4-Dioxane		
BF9P2	CC-2-P	ERT-41I	17JUN19/1130	PFAS	Eurofins Test America	Downgradient well
	CC-2-D			1,4-Dioxane		
BF9P3	CC-3-P	ERT-41I	17JUN19/1130	PFAS	Eurofins Test America	Duplicate of ERT-41I Downgradient well
	CC-3-D			1,4-Dioxane		
BF9P4	CC-4-P	MW-33D	17JUN19/1110	PFAS	Eurofins Test America	On-site well MS/MSD
	CC-4-D			1,4-Dioxane		
BF9P5	CC-5-P	ERT-(4S/35S/36I)	Not Sampled	PFAS	Eurofins Test America	Not Sampled
	CC-5-D			1,4-Dioxane		
GCL Tie Site						
BF9Q0	GT-0-P	RB-1	19JUN19/1600	PFAS	Eurofins Test America	Rinsate Blank
	GT-0-D			1,4-Dioxane		
BF9Q1	GT-1-P	MW-15I	19JUN19/1115	PFAS	Eurofins Test America	Upgradient well
	GT-1-D			1,4-Dioxane		
BF9Q2	GT-2-P	MW-3S	Not Sampled	PFAS	Eurofins Test America	Not Sampled
	GT-2-D			1,4-Dioxane		
BF9Q3	GT-3-P	MW-11B	19JUN19/1050	PFAS	Eurofins Test America	Downgradient well
	GT-3-D			1,4-Dioxane		
BF9Q4	GT-4-P	MW-11B	19JUN19/1050	PFAS	Eurofins Test America	Duplicate of MW-11B Downgradient well
	GT-4-D			1,4-Dioxane		
BF9Q5	GT-5-P	MW-12I	19JUN19/1015	PFAS	Eurofins Test America	On-site well MS/MSD
	GT-5-D			1,4-Dioxane		

5. Additional Comments:

A total of 21 samples were submitted to Eurofins Test America Laboratory. The number of samples includes:

- 13 Ground Water samples for PFAS and 1,4-Dioxane, including four MS/MSD
- Four field duplicates
- Four rinsate blanks

The largest issue encountered with the sampling of the wells for PFAS and 1,4-dioxane is the presence of Teflon tubing or Passive diffusion bags in the wells, possibly causing cross contamination. These items may add PFAS contaminants to the water in the wells, resulting in a biased high result. As such, the field team will not collect samples from wells containing these materials, rather alternative wells without these materials are sought and sampled.

Enclosed is a table titled: "PFAS/1,4-Dioxane Sampling Event: Well Key Log for Upper New York State Sites". The Key Log provides by Site: Well Numbers, both the alphanumeric # and TAG# assigned to the samples from the wells, GPS location in Lat/Long for each well sampled using Google Maps (WGS84), Diameter of the wells, Screen Locations (ft), and Sampling Depths (ft).

Report Prepared By: Michael A. Mercado

Date June 27, 2019

Site	Address				EPA RPM		Phone #	
18 Mile Creek	198-300 Mill Street, Lockport, NY 14094				Jaclyn Kondrk		(212) 637-4317	
	Well#	Sample#	TAG #	GPS		Diameter (inches)	Screen Location (ft)	Sampling Depth (ft)
				Lat	Long			
	MW-23 (UG)	BF9R1	MC-1-(P&D)	43.175064	-78.689373	2"	38.2-43.2	43.2
	MW-20 (OS)	BF9R3	MC-3-(P&D)	43.17623	-78.688289	2"	43.4-48.4	48.4
	MW-21 (OS)	BF9R5	MC-5-(P&D)	43.176788	-78.687917	2"	38.7-43.7	43.7
	MW-18 (DG)	BF9R6	MC-6-(P&D)	43.178533	-78.689763	2"	35.9-45.9	45.9
MW-05 (DG)	Not Sampled		43.179121	-78.688635	2"	13-23	Not Sampled	
Site	Address				EPA RPM		Phone #	
Diaz Chemical	40 Jackson St. Are A, Holley, NY 14470				John DiMartino		(212) 637-4270	
	Well#	Sample#	TAG #	GPS		Diameter (inches)	Screen Location (ft)	Sampling Depth (ft)
				Lat	Long			
	MW-101S (UG)	BF9S1	DC-1-(P&D)	43.2225	-78.0289	2"	7-14	14
	MW-106SR (OS)	BF9S5	DC-5-(P&D)	43.2237	-78.0302	4"	36-46	43.6
	MW-111SR (DG)	BF9S2	DC-2-(P&D)	43.2227	-78.0259	4"	15-25	25
MW-11 (S&D)	Not Sampled						Not Sampled	
Site	Address				EPA RPM		Phone #	
Crown Cleaners	35920 State Route 3, Carthage, NY 13619				Pam Tames		(212) 637-4255	
	Well#	Sample#	TAG #	GPS		Diameter (inches)	Screen Location (ft)	Sampling Depth (ft)
				Lat	Long			
	MW-04D (UG)	BF9P1	CC-1-(P&D)	44.0234	-75.6532	2"	49-59	59
	ERT-33D (OS)	BF9P4	CC-4-(P&D)	44.0233	-75.6535	2"	38-48	48
	ERT-41I (DG)	BF9P2	CC-2(P&D)	44.0236	-75.6525	2"	25-35	35
ERT-35S,-36I, -4S	Not Sampled						Not Sampled	
Site	Address				EPA RPM		Phone #	
GCL Ties	Delaware Avenue, Village of Sidney, NY 13838				Damian Duda		(212) 637-4269	
	Well#	Sample#	TAG #	GPS		Diameter (inches)	Screen Location (ft)	Sampling Depth (ft)
				Lat	Long			
	MW-15I (UG)	BF9Q1	GT-1-(P&D)	42.3045	75-4108	2"	113-123	123
	MW-12I (OS)	BF9Q5	GT-5-(P&D)	42.3021	-75.4114	2"	45-55	55
	MW-11B (DG)	BF9Q3	GT-3(P&D)	42.3023	-75.4131	2"	150-170	170
MW-3S	Not Sampled				4"	10.3-20.3	Not Sampled	

(UG) = Upgradient Samples, (DG) = Downgradient Samples, & (OS) = On-Site Samples

Attachment 1

Chain of Custody Forms

Ver. 01/03/2015

DOI: 10.1177/0013164418770189

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GCL Tie Chain of Custody Record for 1,4-Dioxane

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Phone: 732 648 3800 Fax: 732 648 3079

Chain of Custody Record

eurofins

Environment Testing
Test Centers

Client Information Client Contact: Michael Mercado Company: U.S. Environmental Protection Agency		Sampler: Name: Date: E-Mail: j.mercado@epa.gov	Center Tracking No.: 480-131004-20582-1 Page: Page 1 of 1
Address: USEPA Region II Document Control Room (DCR), Bldg. 205-239 City: Edison State Zip: NJ, 08857 Phone: 609-402-9013 (Ext) Email: Mercado.Michael@epa.gov		Due Date Requested: Lab Requested (day): Project: 48023514 S/N: 85046	Analysis Requested Preservation Codes: A - HCl B - HNO3 C - 2% Ascorbic D - HNO3/Ascorbic E - HNO3/Ascorbic F - HNO3/Ascorbic G - HNO3/Ascorbic H - HNO3/Ascorbic I - HNO3/Ascorbic J - HNO3/Ascorbic K - HNO3/Ascorbic L - HNO3/Ascorbic M - HNO3/Ascorbic N - HNO3/Ascorbic O - HNO3/Ascorbic P - HNO3/Ascorbic Q - HNO3/Ascorbic R - HNO3/Ascorbic S - HNO3/Ascorbic T - HNO3/Ascorbic U - HNO3/Ascorbic V - HNO3/Ascorbic W - HNO3/Ascorbic X - HNO3/Ascorbic Y - HNO3/Ascorbic Z - HNO3/Ascorbic Other: Special Instructions/Notes: Ruoset Blank Not Sampled MS/MSD
Sample Identification Sample Date: Sample Time: Sample Type: Matrix: Preservation Code: Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): TPC, PAH, PCBs, BTEX, L-14, 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135,136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153,154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171,172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189,190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207,208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225,226,227,228,229,230,231,232,233,234,235,236,237,238,239,240,241,242,243,244,245,246,247,248,249,250,251,252,253,254,255,256,257,258,259,260,261,262,263,264,265,266,267,268,269,270,271,272,273,274,275,276,277,278,279,280,281,282,283,284,285,286,287,288,289,290,291,292,293,294,295,296,297,298,299,300,301,302,303,304,305,306,307,308,309,310,311,312,313,314,315,316,317,318,319,320,321,322,323,324,325,326,327,328,329,330,331,332,333,334,335,336,337,338,339,340,341,342,343,344,345,346,347,348,349,350,351,352,353,354,355,356,357,358,359,360,361,362,363,364,365,366,367,368,369,370,371,372,373,374,375,376,377,378,379,380,381,382,383,384,385,386,387,388,389,390,391,392,393,394,395,396,397,398,399,400,401,402,403,404,405,406,407,408,409,410,411,412,413,414,415,416,417,418,419,420,421,422,423,424,425,426,427,428,429,430,431,432,433,434,435,436,437,438,439,440,441,442,443,444,445,446,447,448,449,450,451,452,453,454,455,456,457,458,459,460,461,462,463,464,465,466,467,468,469,470,471,472,473,474,475,476,477,478,479,480,481,482,483,484,485,486,487,488,489,490,491,492,493,494,495,496,497,498,499,500,501,502,503,504,505,506,507,508,509,510,511,512,513,514,515,516,517,518,519,520,521,522,523,524,525,526,527,528,529,530,531,532,533,534,535,536,537,538,539,540,541,542,543,544,545,546,547,548,549,550,551,552,553,554,555,556,557,558,559,560,561,562,563,564,565,566,567,568,569,570,571,572,573,574,575,576,577,578,579,580,581,582,583,584,585,586,587,588,589,590,591,592,593,594,595,596,597,598,599,600,601,602,603,604,605,606,607,608,609,610,611,612,613,614,615,616,617,618,619,620,621,622,623,624,625,626,627,628,629,630,631,632,633,634,635,636,637,638,639,640,641,642,643,644,645,646,647,648,649,650,651,652,653,654,655,656,657,658,659,660,661,662,663,664,665,666,667,668,669,670,671,672,673,674,675,676,677,678,679,680,681,682,683,684,685,686,687,688,689,690,691,692,693,694,695,696,697,698,699,700,701,702,703,704,705,706,707,708,709,710,711,712,713,714,715,716,717,718,719,720,721,722,723,724,725,726,727,728,729,730,731,732,733,734,735,736,737,738,739,740,741,742,743,744,745,746,747,748,749,750,751,752,753,754,755,756,757,758,759,760,761,762,763,764,765,766,767,768,769,770,771,772,773,774,775,776,777,778,779,780,781,782,783,784,785,786,787,788,789,790,791,792,793,794,795,796,797,798,799,800,801,802,803,804,805,806,807,808,809,810,811,812,813,814,815,816,817,818,819,820,821,822,823,824,825,826,827,828,829,830,831,832,833,834,835,836,837,838,839,840,841,842,843,844,845,846,847,848,849,850,851,852,853,854,855,856,857,858,859,860,861,862,863,864,865,866,867,868,869,870,871,872,873,874,875,876,877,878,879,880,881,882,883,884,885,886,887,888,889,890,891,892,893,894,895,896,897,898,899,900,901,902,903,904,905,906,907,908,909,910,911,912,913,914,915,916,917,918,919,920,921,922,923,924,925,926,927,928,929,930,931,932,933,934,935,936,937,938,939,940,941,942,943,944,945,946,947,948,949,950,951,952,953,954,955,956,957,958,959,960,961,962,963,964,965,966,967,968,969,970,971,972,973,974,975,976,977,978,979,980,981,982,983,984,985,986,987,988,989,990,991,992,993,994,995,996,997,998,999,1000,1001,1002,1003,1004,1005,1006,1007,1008,1009,1010,1011,1012,1013,1014,1015,1016,1017,1018,1019,1020,1021,1022,1023,1024,1025,1026,1027,1028,1029,1030,1031,1032,1033,1034,1035,1036,1037,1038,1039,1040,1041,1042,1043,1044,1045,1046,1047,1048,1049,1050,1051,1052,1053,1054,1055,1056,1057,1058,1059,1060,1061,1062,1063,1064,1065,1066,1067,1068,1069,1070,1071,1072,1073,1074,1075,1076,1077,1078,1079,1080,1081,1082,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1109,1110,1111,1112,1113,1114,1115,1116,1117,1118,1119,1120,1121,1122,1123,1124,1125,1126,1127,1128,1129,1130,1131,1132,1133,1134,1135,1136,1137,1138,1139,1140,1141,1142,1143,1144,1145,1146,1147,1148,1149,1150,1151,1152,1153,1154,1155,1156,1157,1158,1159,1160,1161,1162,1163,1164,1165,1166,1167,1168,1169,1170,1171,1172,1173,1174,1175,1176,1177,1178,1179,1180,1181,1182,1183,1184,1185,1186,1187,1188,1189,1190,1191,1192,1193,1194,1195,1196,1197,1198,1199,1200,1201,1202,1203,1204,1205,1206,1207,1208,1209,1210,1211,1212,1213,1214,1215,1216,1217,1218,1219,1220,1221,12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