

"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","375-73-5","PFBS","1.76","ng/L","J","0.844","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","307-24-4","PFHxA","15.5","ng/L","","1.03","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","375-85-9","PFHpA","20.7","ng/L","","0.279","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","355-46-4","PFHxS","37.5","ng/L","","0.447","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","335-67-1","PFOA","45.6","ng/L","","0.307","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","1763-23-1","PFOS","83.5","ng/L","","0.381","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","375-95-1","PFNA","154","ng/L","","0.382","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","335-76-2","PFDA","11.1","ng/L","","0.703","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","2355-31-9","MeFOSAA","2.36","ng/L","U","0.778","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","2058-94-8","PFUnA","62.1","ng/L","","0.495","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","2991-50-6","EtFOSAA","2.36","ng/L","U","0.646","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","307-55-1","PFDoA","2.36","ng/L","U","0.373","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","72629-94-8","PFTTrDA","2.36","ng/L","U","0.233","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","376-06-7","PFTeDA","2.36","ng/L","U","0.356","LOD","","TRG","","","3.77","LOQ","YES","-99","","0.265","0.001","2.36",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C3-PFBS","13C3-PFBS","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFHxA","13C2-PFHxA","112","%R","","-99","NA","","IS","112","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C4-PFHpA","13C4-PFHpA","87.5","%R","","-99","NA","","IS","87.5","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","18O2-PFHxS","18O2-PFHxS","91.9","%R","","-99","NA","","IS","91.9","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFOA","13C2-PFOA","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C8-PFOS","13C8-PFOS","83.1","%R","","-99","NA","","IS","83.1","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C5-PFNA","13C5-PFNA","94.6","%R","","-99","NA","","IS","94.6","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFDA","13C2-PFDA","83.4","%R","","-99","NA","","IS","83.4","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","d3-MeFOSAA","d3-MeFOSAA","83.2","%R","","-99","NA","","IS","83.2","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFUnA","13C2-PFUnA","79.6","%R","","-99","NA","","IS","79.6","","-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","d5-EtFOSAA","d5-

EtFOSAA","77.1","%R","",-99","NA","","IS","77.1","",-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFDoA","13C2-  
PFDoA","82.4","%R","",-99","NA","","IS","82.4","",-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-20171129","Modified EPA Method 537","Initial","1701829-01","Vista","13C2-PFTeDA","13C2-  
PFTeDA","114","%R","",-99","NA","","IS","114","",-99","NA","YES","100","","0.265","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","375-73-  
5","PFBS","2.33","ng/L","U","0.836","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","307-24-  
4","PFHxA","2.33","ng/L","U","1.02","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","375-85-  
9","PFHpA","2.33","ng/L","U","0.276","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","355-46-  
4","PFHxS","2.33","ng/L","U","0.442","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","335-67-  
1","PFOA","2.33","ng/L","U","0.304","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","1763-23-  
1","PFOS","2.33","ng/L","U","0.377","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","375-95-  
1","PFNA","2.33","ng/L","U","0.378","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","335-76-  
2","PFDA","2.33","ng/L","U","0.696","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","2355-31-  
9","MeFOSAA","2.33","ng/L","U","0.771","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33  
",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","2058-94-  
8","PFUnA","2.33","ng/L","U","0.490","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","2991-50-  
6","EtFOSAA","2.33","ng/L","U","0.640","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33"  
",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","307-55-  
1","PFDoA","2.33","ng/L","U","0.370","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","72629-94-  
8","PFTTrDA","2.33","ng/L","U","0.231","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",""  
"  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","376-06-  
7","PFTeDA","2.33","ng/L","U","0.353","LOD","","TRG","","","3.74","LOQ","YES","-99","","0.268","0.001","2.33",  
"  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C3-PFBS","13C3-  
PFBS","118","%R","",-99","NA","","IS","118","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C2-PFHxA","13C2-  
PFHxA","103","%R","",-99","NA","","IS","103","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C4-PFHpA","13C4-  
PFHpA","96.6","%R","",-99","NA","","IS","96.6","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","18O2-PFHxS","18O2-  
PFHxS","79.5","%R","",-99","NA","","IS","79.5","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C2-PFOA","13C2-  
PFOA","101","%R","",-99","NA","","IS","101","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C8-PFOS","13C8-  
PFOS","101","%R","",-99","NA","","IS","101","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C5-PFNA","13C5-  
PFNA","96.1","%R","",-99","NA","","IS","96.1","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","13C2-PFDA","13C2-  
PFDA","78.2","%R","",-99","NA","","IS","78.2","",-99","NA","YES","100","","0.268","0.001","-99",""  
"FT-MW08S-FRB-20171129","Modified EPA Method 537","Initial","1701829-02","Vista","d3-MeFOSAA","d3-

MeFOSAA", "76.6", "%R", "", "-99", "NA", "", "IS", "76.6", "", "-99", "NA", "YES", "100", "", "0.268", "0.001", "-99", ""  
"FT-MW08S-FRB-20171129", "Modified EPA Method 537", "Initial", "1701829-02", "Vista", "13C2-PFUnA", "13C2-  
PFUnA", "87.5", "%R", "", "-99", "NA", "", "IS", "87.5", "", "-99", "NA", "YES", "100", "", "0.268", "0.001", "-99", ""  
"FT-MW08S-FRB-20171129", "Modified EPA Method 537", "Initial", "1701829-02", "Vista", "d5-EtFOSAA", "d5-  
EtFOSAA", "82.9", "%R", "", "-99", "NA", "", "IS", "82.9", "", "-99", "NA", "YES", "100", "", "0.268", "0.001", "-99", ""  
"FT-MW08S-FRB-20171129", "Modified EPA Method 537", "Initial", "1701829-02", "Vista", "13C2-PFDoA", "13C2-  
PFDoA", "92.5", "%R", "", "-99", "NA", "", "IS", "92.5", "", "-99", "NA", "YES", "100", "", "0.268", "0.001", "-99", ""  
"FT-MW08S-FRB-20171129", "Modified EPA Method 537", "Initial", "1701829-02", "Vista", "13C2-PFTeDA", "13C2-  
PFTeDA", "122", "%R", "", "-99", "NA", "", "IS", "122", "", "-99", "NA", "YES", "100", "", "0.268", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "375-73-  
5", "PFBS", "1.65", "ng/L", "J", "0.882", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "307-24-  
4", "PFHxA", "14.6", "ng/L", "", "1.07", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "375-85-  
9", "PFHpA", "19.5", "ng/L", "", "0.291", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "355-46-  
4", "PFHxS", "36.4", "ng/L", "", "0.467", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "335-67-  
1", "PFOA", "38.1", "ng/L", "", "0.321", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "1763-23-  
1", "PFOS", "62.3", "ng/L", "", "0.398", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "375-95-  
1", "PFNA", "132", "ng/L", "", "0.399", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "335-76-  
2", "PFDA", "12.3", "ng/L", "", "0.734", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "2355-31-  
9", "MeFOSAA", "2.46", "ng/L", "U", "0.813", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "2058-94-  
8", "PFUnA", "56.6", "ng/L", "", "0.517", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "2991-50-  
6", "EtFOSAA", "2.46", "ng/L", "U", "0.675", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "307-55-  
1", "PFDoA", "2.46", "ng/L", "U", "0.390", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "72629-94-  
8", "PFTTrDA", "2.46", "ng/L", "U", "0.243", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "376-06-  
7", "PFTeDA", "2.46", "ng/L", "U", "0.372", "LOD", "", "TRG", "", "", "3.94", "LOQ", "YES", "-99", "", "0.254", "0.001", "2.46", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C3-PFBS", "13C3-  
PFBS", "121", "%R", "", "-99", "NA", "", "IS", "121", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C2-PFHxA", "13C2-  
PFHxA", "115", "%R", "", "-99", "NA", "", "IS", "115", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C4-PFHpA", "13C4-  
PFHpA", "100", "%R", "", "-99", "NA", "", "IS", "100", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "18O2-PFHxS", "18O2-  
PFHxS", "109", "%R", "", "-99", "NA", "", "IS", "109", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C2-PFOA", "13C2-  
PFOA", "99.6", "%R", "", "-99", "NA", "", "IS", "99.6", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C8-PFOS", "13C8-  
PFOS", "106", "%R", "", "-99", "NA", "", "IS", "106", "", "-99", "NA", "YES", "100", "", "0.254", "0.001", "-99", ""  
"FT-DUP01-20171129", "Modified EPA Method 537", "Initial", "1701829-03", "Vista", "13C5-PFNA", "13C5-

PFNA","94.3","%R","",-99","NA","","IS","94.3","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","13C2-PFDA","13C2-  
PFDA","118","%R","",-99","NA","","IS","118","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","d3-MeFOSAA","d3-  
MeFOSAA","86.2","%R","",-99","NA","","IS","86.2","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","13C2-PFUnA","13C2-  
PFUnA","97.4","%R","",-99","NA","","IS","97.4","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","d5-EtFOSAA","d5-  
EtFOSAA","80.5","%R","",-99","NA","","IS","80.5","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","13C2-PFDoA","13C2-  
PFDoA","83.7","%R","",-99","NA","","IS","83.7","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-DUP01-20171129","Modified EPA Method 537","Initial","1701829-03","Vista","13C2-PFTeDA","13C2-  
PFTeDA","110","%R","",-99","NA","","IS","110","",-99","NA","YES","100","","0.254","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","375-73-  
5","PFBS","4.63","ng/L","","0.855","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","307-24-  
4","PFHxA","109","ng/L","","1.04","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","375-85-  
9","PFHpA","70.8","ng/L","","0.282","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","355-46-  
4","PFHxS","460","ng/L","","0.453","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","335-67-  
1","PFOA","367","ng/L","","0.311","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Dilution","1701829-04","Vista","1763-23-  
1","PFOS","818","ng/L","D","1.93","LOD","","TRG","","","19.1","LOQ","YES","-99","","0.262","0.001","11.9",""  
"FT-MW08I-20171129","Modified EPA Method 537","Dilution","1701829-04","Vista","375-95-  
1","PFNA","1870","ng/L","D","1.94","LOD","","TRG","","","19.1","LOQ","YES","-99","","0.262","0.001","11.9",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","335-76-  
2","PFDA","278","ng/L","","0.712","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","2355-31-  
9","MeFOSAA","2.39","ng/L","U","0.788","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","2058-94-  
8","PFUnA","478","ng/L","","0.502","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","2991-50-  
6","EtFOSAA","2.39","ng/L","U","0.655","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","307-55-  
1","PFDoA","2.39","ng/L","U","0.378","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","72629-94-  
8","PFTeDA","2.39","ng/L","U","0.236","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","376-06-  
7","PFTeDA","2.39","ng/L","U","0.361","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C3-PFBS","13C3-  
PFBS","110","%R","",-99","NA","","IS","110","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFHxA","13C2-  
PFHxA","114","%R","",-99","NA","","IS","114","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C4-PFHpA","13C4-  
PFHpA","114","%R","",-99","NA","","IS","114","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","18O2-PFHxS","18O2-  
PFHxS","103","%R","",-99","NA","","IS","103","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFOA","13C2-

PFOA","87.2","%R","",-99","NA","","IS","87.2","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Dilution","1701829-04","Vista","13C8-PFOS","13C8-  
PFOS","104","%R","D","-99","NA","","IS","104","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Dilution","1701829-04","Vista","13C5-PFNA","13C5-  
PFNA","99.2","%R","D","-99","NA","","IS","99.2","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFDA","13C2-  
PFDA","84.9","%R","",-99","NA","","IS","84.9","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","d3-MeFOSAA","d3-  
MeFOSAA","85.9","%R","",-99","NA","","IS","85.9","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFUnA","13C2-  
PFUnA","71.6","%R","",-99","NA","","IS","71.6","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","d5-EtFOSAA","d5-  
EtFOSAA","80.7","%R","",-99","NA","","IS","80.7","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFDoA","13C2-  
PFDoA","79.2","%R","",-99","NA","","IS","79.2","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW08I-20171129","Modified EPA Method 537","Initial","1701829-04","Vista","13C2-PFTeDA","13C2-  
PFTeDA","72.4","%R","",-99","NA","","IS","72.4","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","375-73-  
5","PFBS","2.47","ng/L","U","0.884","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","307-24-  
4","PFHxA","2.47","ng/L","U","1.08","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","375-85-  
9","PFHpA","2.47","ng/L","U","0.292","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","355-46-  
4","PFHxS","2.47","ng/L","U","0.468","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","335-67-  
1","PFOA","2.47","ng/L","U","0.321","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","1763-23-  
1","PFOS","2.47","ng/L","U","0.399","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","375-95-  
1","PFNA","2.47","ng/L","U","0.400","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","335-76-  
2","PFDA","2.47","ng/L","U","0.736","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","2355-31-  
9","MeFOSAA","2.47","ng/L","U","0.815","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47"  
,""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","2058-94-  
8","PFUnA","2.47","ng/L","U","0.519","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","2991-50-  
6","EtFOSAA","2.47","ng/L","U","0.677","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47"  
,""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","307-55-  
1","PFDoA","2.47","ng/L","U","0.391","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","72629-94-  
8","PFTTrDA","2.47","ng/L","U","0.244","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
,""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","376-06-  
7","PFTeDA","2.47","ng/L","U","0.373","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",  
,""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C3-PFBS","13C3-  
PFBS","135","%R","",-99","NA","","IS","135","",-99","NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFHxA","13C2-  
PFHxA","112","%R","",-99","NA","","IS","112","",-99","NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C4-PFHpA","13C4-

PFHpA","112","%R","",-99,"NA","","IS","112","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","18O2-PFHxS","18O2-  
PFHxS","105","%R","",-99,"NA","","IS","105","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFOA","13C2-  
PFOA","111","%R","",-99,"NA","","IS","111","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C8-PFOS","13C8-  
PFOS","120","%R","",-99,"NA","","IS","120","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C5-PFNA","13C5-  
PFNA","101","%R","",-99,"NA","","IS","101","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFDA","13C2-  
PFDA","74.7","%R","",-99,"NA","","IS","74.7","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","d3-MeFOSAA","d3-  
MeFOSAA","81.3","%R","",-99,"NA","","IS","81.3","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFUnA","13C2-  
PFUnA","74.4","%R","",-99,"NA","","IS","74.4","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","d5-EtFOSAA","d5-  
EtFOSAA","63.6","%R","",-99,"NA","","IS","63.6","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFDoA","13C2-  
PFDoA","65.2","%R","",-99,"NA","","IS","65.2","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW01S-20171130","Modified EPA Method 537","Initial","1701829-05","Vista","13C2-PFTeDA","13C2-  
PFTeDA","108","%R","",-99,"NA","","IS","108","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","375-73-  
5","PFBS","2.37","ng/L","U","0.846","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","307-24-  
4","PFHxA","2.37","ng/L","U","1.03","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","375-85-  
9","PFHpA","2.37","ng/L","U","0.279","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","355-46-  
4","PFHxS","2.37","ng/L","U","0.448","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","335-67-  
1","PFOA","2.37","ng/L","U","0.308","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","1763-23-  
1","PFOS","2.37","ng/L","U","0.382","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","375-95-  
1","PFNA","2.37","ng/L","U","0.383","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","335-76-  
2","PFDA","2.37","ng/L","U","0.705","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","2355-31-  
9","MeFOSAA","2.37","ng/L","U","0.780","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","2058-94-  
8","PFUnA","2.37","ng/L","U","0.497","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","2991-50-  
6","EtFOSAA","2.37","ng/L","U","0.648","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","307-55-  
1","PFDoA","2.37","ng/L","U","0.375","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","72629-94-  
8","PFTeDA","2.37","ng/L","U","0.234","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","376-06-  
7","PFTeDA","2.37","ng/L","U","0.357","LOD","","TRG","","","3.78","LOQ","YES","-99","","0.264","0.001","2.37",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C3-PFBS","13C3-

PFBS","125","%R","",-99","NA","","IS","125","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFHxA","13C2-  
PFHxA","95.2","%R","",-99","NA","","IS","95.2","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C4-PFHpA","13C4-  
PFHpA","98.6","%R","",-99","NA","","IS","98.6","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","18O2-PFHxS","18O2-  
PFHxS","113","%R","",-99","NA","","IS","113","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFOA","13C2-  
PFOA","115","%R","",-99","NA","","IS","115","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C8-PFOS","13C8-  
PFOS","97.6","%R","",-99","NA","","IS","97.6","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C5-PFNA","13C5-  
PFNA","101","%R","",-99","NA","","IS","101","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFDA","13C2-  
PFDA","77.9","%R","",-99","NA","","IS","77.9","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","d3-MeFOSAA","d3-  
MeFOSAA","71.3","%R","",-99","NA","","IS","71.3","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFUnA","13C2-  
PFUnA","87.1","%R","",-99","NA","","IS","87.1","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","d5-EtFOSAA","d5-  
EtFOSAA","83.0","%R","",-99","NA","","IS","83.0","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFDoA","13C2-  
PFDoA","101","%R","",-99","NA","","IS","101","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW02I-20171130","Modified EPA Method 537","Initial","1701829-06","Vista","13C2-PFTeDA","13C2-  
PFTeDA","120","%R","",-99","NA","","IS","120","",-99","NA","YES","100","","0.264","0.001","-99",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","375-73-  
5","PFBS","2.39","ng/L","U","0.854","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","307-24-  
4","PFHxA","2.39","ng/L","U","1.04","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","375-85-  
9","PFHpA","2.39","ng/L","U","0.282","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","355-46-  
4","PFHxS","2.39","ng/L","U","0.452","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","335-67-  
1","PFOA","2.39","ng/L","U","0.311","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","1763-23-  
1","PFOS","2.39","ng/L","U","0.385","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","375-95-  
1","PFNA","2.39","ng/L","U","0.387","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","335-76-  
2","PFDA","2.39","ng/L","U","0.711","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","2355-31-  
9","MeFOSAA","2.39","ng/L","U","0.787","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39"  
,""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","2058-94-  
8","PFUnA","2.39","ng/L","U","0.501","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","2991-50-  
6","EtFOSAA","2.39","ng/L","U","0.654","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39"  
,""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","307-55-  
1","PFDoA","2.39","ng/L","U","0.378","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","72629-94-  
8","PFTTrDA","2.39","ng/L","U","0.236","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
,""

"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","376-06-7","PFTeDA","2.39","ng/L","U","0.360","LOD","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39",  
""  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C3-PFBS","13C3-PFBS","144","%R","","-99","NA","","IS","144","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFHxA","13C2-PFHxA","103","%R","","-99","NA","","IS","103","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C4-PFHpA","13C4-PFHpA","101","%R","","-99","NA","","IS","101","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","18O2-PFHxS","18O2-PFHxS","82.7","%R","","-99","NA","","IS","82.7","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFOA","13C2-PFOA","104","%R","","-99","NA","","IS","104","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C8-PFOS","13C8-PFOS","93.6","%R","","-99","NA","","IS","93.6","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C5-PFNA","13C5-PFNA","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFDA","13C2-PFDA","71.0","%R","","-99","NA","","IS","71.0","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","d3-MeFOSAA","d3-MeFOSAA","90.9","%R","","-99","NA","","IS","90.9","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFUnA","13C2-PFUnA","94.6","%R","","-99","NA","","IS","94.6","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","d5-EtFOSAA","d5-EtFOSAA","93.5","%R","","-99","NA","","IS","93.5","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFDoA","13C2-PFDoA","96.8","%R","","-99","NA","","IS","96.8","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-MW01I-20171130","Modified EPA Method 537","Initial","1701829-07","Vista","13C2-PFTeDA","13C2-PFTeDA","134","%R","","-99","NA","","IS","134","","-99","NA","YES","100","","","0.262","0.001","-99",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","375-73-5","PFBS","2.34","ng/L","U","0.838","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","307-24-4","PFHxA","2.34","ng/L","U","1.02","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","375-85-9","PFHpA","2.34","ng/L","U","0.277","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","355-46-4","PFHxS","2.34","ng/L","U","0.443","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","335-67-1","PFOA","2.34","ng/L","U","0.305","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","1763-23-1","PFOS","2.34","ng/L","U","0.378","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","375-95-1","PFNA","2.34","ng/L","U","0.379","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","335-76-2","PFDA","2.34","ng/L","U","0.697","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","2355-31-9","MeFOSAA","2.34","ng/L","U","0.772","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","2058-94-8","PFUnA","2.34","ng/L","U","0.491","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","2991-50-6","EtFOSAA","2.34","ng/L","U","0.641","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",  
""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","307-55-



1","PFDaA","2.34","ng/L","U","0.371","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","72629-94-  
8","PFTTrDA","2.34","ng/L","U","0.231","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","376-06-  
7","PFTeDA","2.34","ng/L","U","0.353","LOD","","TRG","","","3.74","LOQ","YES","-99","","","0.267","0.001","2.34",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C3-PFBS","13C3-  
PFBS","118","%R","","-99","NA","","IS","118","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFHxA","13C2-  
PFHxA","105","%R","","-99","NA","","IS","105","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C4-PFHpA","13C4-  
PFHpA","98.0","%R","","-99","NA","","IS","98.0","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","18O2-PFHxS","18O2-  
PFHxS","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFOA","13C2-  
PFOA","115","%R","","-99","NA","","IS","115","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C8-PFOS","13C8-  
PFOS","95.4","%R","","-99","NA","","IS","95.4","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C5-PFNA","13C5-  
PFNA","88.9","%R","","-99","NA","","IS","88.9","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFDA","13C2-  
PFDA","81.6","%R","","-99","NA","","IS","81.6","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","d3-MeFOSAA","d3-  
MeFOSAA","81.1","%R","","-99","NA","","IS","81.1","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFUnA","13C2-  
PFUnA","81.8","%R","","-99","NA","","IS","81.8","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","d5-EtFOSAA","d5-  
EtFOSAA","71.7","%R","","-99","NA","","IS","71.7","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFDaA","13C2-  
PFDaA","81.4","%R","","-99","NA","","IS","81.4","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-DUP02-20171130","Modified EPA Method 537","Initial","1701829-08","Vista","13C2-PFTeDA","13C2-  
PFTeDA","71.1","%R","","-99","NA","","IS","71.1","","-99","NA","YES","100","","","0.267","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","375-73-  
5","PFBS","3.61","ng/L","J","0.865","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","307-24-  
4","PFHxA","35.8","ng/L","","1.05","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","375-85-  
9","PFHpA","19.2","ng/L","","0.285","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","355-46-  
4","PFHxS","451","ng/L","","0.457","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","335-67-  
1","PFOA","272","ng/L","","0.314","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","1763-23-  
1","PFOS","108","ng/L","","0.390","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","375-95-  
1","PFNA","451","ng/L","","0.391","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","335-76-  
2","PFDA","12.5","ng/L","","0.720","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","2355-31-  
9","MeFOSAA","2.41","ng/L","U","0.797","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","2058-94-  
8","PFUnA","180","ng/L","","0.507","LOD","","TRG","","","3.86","LOQ","YES","-99","","","0.259","0.001","2.41",""

"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","2991-50-6","EtFOSAA","2.41","ng/L","U","0.662","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
,"  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","307-55-1","PFD0A","2.41","ng/L","U","0.383","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","72629-94-8","PFTTrDA","2.41","ng/L","U","0.239","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","376-06-7","PFTeDA","2.41","ng/L","U","0.365","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C3-PFBS","13C3-PFBS","98.4","%R","","-99","NA","","IS","98.4","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFHxA","13C2-PFHxA","101","%R","","-99","NA","","IS","101","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C4-PFHpA","13C4-PFHpA","93.6","%R","","-99","NA","","IS","93.6","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","18O2-PFHxS","18O2-PFHxS","89.8","%R","","-99","NA","","IS","89.8","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFOA","13C2-PFOA","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C8-PFOS","13C8-PFOS","91.0","%R","","-99","NA","","IS","91.0","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C5-PFNA","13C5-PFNA","107","%R","","-99","NA","","IS","107","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFDA","13C2-PFDA","98.6","%R","","-99","NA","","IS","98.6","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","d3-MeFOSAA","d3-MeFOSAA","70.4","%R","","-99","NA","","IS","70.4","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFUnA","13C2-PFUnA","88.8","%R","","-99","NA","","IS","88.8","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","d5-EtFOSAA","d5-EtFOSAA","79.5","%R","","-99","NA","","IS","79.5","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFD0A","13C2-PFD0A","105","%R","","-99","NA","","IS","105","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW02S-20171130","Modified EPA Method 537","Initial","1701829-09","Vista","13C2-PFTeDA","13C2-PFTeDA","112","%R","","-99","NA","","IS","112","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","375-73-5","PFBS","1.85","ng/L","J","0.855","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","307-24-4","PFHxA","4.66","ng/L","","1.04","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","375-85-9","PFHpA","2.13","ng/L","J","0.282","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","355-46-4","PFHxS","2.65","ng/L","J","0.453","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","335-67-1","PFOA","3.35","ng/L","J","0.311","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","1763-23-1","PFOS","3.04","ng/L","J","0.386","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","375-95-1","PFNA","7.29","ng/L","","0.387","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","335-76-2","PFDA","2.39","ng/L","U","0.712","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
"FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","2355-31-

9","MeFOSAA","2.39","ng/L","U","0.789","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","2058-94-8","PFUnA","2.39","ng/L","U","0.502","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","2991-50-6","EtFOSAA","2.39","ng/L","U","0.655","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","307-55-1","PFDaA","2.39","ng/L","U","0.378","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","72629-94-8","PFTeDA","2.39","ng/L","U","0.236","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","376-06-7","PFTeDA","2.39","ng/L","U","0.361","LOD","","TRG","","","3.82","LOQ","YES","-99","","0.262","0.001","2.39",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C3-PFBS","13C3-PFBS","110","%R","","-99","NA","","IS","110","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFHxA","13C2-PFHxA","102","%R","","-99","NA","","IS","102","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C4-PFHpA","13C4-PFHpA","91.4","%R","","-99","NA","","IS","91.4","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","18O2-PFHxS","18O2-PFHxS","100","%R","","-99","NA","","IS","100","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFOA","13C2-PFOA","89.2","%R","","-99","NA","","IS","89.2","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C8-PFOS","13C8-PFOS","122","%R","","-99","NA","","IS","122","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C5-PFNA","13C5-PFNA","84.1","%R","","-99","NA","","IS","84.1","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFDA","13C2-PFDA","94.9","%R","","-99","NA","","IS","94.9","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","d3-MeFOSAA","d3-MeFOSAA","84.0","%R","","-99","NA","","IS","84.0","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFUnA","13C2-PFUnA","85.9","%R","","-99","NA","","IS","85.9","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","d5-EtFOSAA","d5-EtFOSAA","72.0","%R","","-99","NA","","IS","72.0","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFDaA","13C2-PFDaA","74.1","%R","","-99","NA","","IS","74.1","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW03S-20171130","Modified EPA Method 537","Initial","1701829-10","Vista","13C2-PFTeDA","13C2-PFTeDA","125","%R","","-99","NA","","IS","125","","-99","NA","YES","100","","0.262","0.001","-99",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","375-73-5","PFBS","1.15","ng/L","J","0.891","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","307-24-4","PFHxA","3.08","ng/L","J","1.08","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","375-85-9","PFHpA","1.30","ng/L","J","0.294","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","355-46-4","PFHxS","2.35","ng/L","J","0.471","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","335-67-1","PFOA","4.05","ng/L","","0.324","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","1763-23-1","PFOS","2.49","ng/L","U","0.402","LOD","","TRG","","","3.98","LOQ","YES","-99","","0.251","0.001","2.49",""  
","FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","375-95-

1","PFNA","1.50","ng/L","J","0.403","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","335-76-  
2","PFDA","2.49","ng/L","U","0.742","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","2355-31-  
9","MeFOSAA","2.49","ng/L","U","0.821","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49"  
","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","2058-94-  
8","PFUnA","2.49","ng/L","U","0.523","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","2991-50-  
6","EtFOSAA","2.49","ng/L","U","0.682","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49"  
","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","307-55-  
1","PFDaA","2.49","ng/L","U","0.394","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","72629-94-  
8","PFTTrDA","2.49","ng/L","U","0.246","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49",""  
"  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","376-06-  
7","PFTeDA","2.49","ng/L","U","0.376","LOD","","","TRG","","","3.98","LOQ","YES","-99","","","0.251","0.001","2.49",  
"  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C3-PFBS","13C3-  
PFBS","125","%R","","","-99","NA","","","IS","125","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFHxA","13C2-  
PFHxA","118","%R","","","-99","NA","","","IS","118","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C4-PFHpA","13C4-  
PFHpA","113","%R","","","-99","NA","","","IS","113","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","18O2-PFHxS","18O2-  
PFHxS","91.6","%R","","","-99","NA","","","IS","91.6","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFOA","13C2-  
PFOA","114","%R","","","-99","NA","","","IS","114","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C8-PFOS","13C8-  
PFOS","95.5","%R","","","-99","NA","","","IS","95.5","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C5-PFNA","13C5-  
PFNA","85.0","%R","","","-99","NA","","","IS","85.0","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFDA","13C2-  
PFDA","77.3","%R","","","-99","NA","","","IS","77.3","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","d3-MeFOSAA","d3-  
MeFOSAA","93.3","%R","","","-99","NA","","","IS","93.3","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFUnA","13C2-  
PFUnA","99.2","%R","","","-99","NA","","","IS","99.2","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","d5-EtFOSAA","d5-  
EtFOSAA","78.4","%R","","","-99","NA","","","IS","78.4","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFDaA","13C2-  
PFDaA","103","%R","","","-99","NA","","","IS","103","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-MW09I-20171130","Modified EPA Method 537","Initial","1701829-11","Vista","13C2-PFTeDA","13C2-  
PFTeDA","149","%R","","","-99","NA","","","IS","149","","","-99","NA","YES","100","","","0.251","0.001","-99","","  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","375-73-  
5","PFBS","1.07","ng/L","J","0.912","LOD","","","TRG","","","4.08","LOQ","YES","-99","","","0.245","0.001","2.55","","  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","307-24-  
4","PFHxA","2.70","ng/L","J","1.11","LOD","","","TRG","","","4.08","LOQ","YES","-99","","","0.245","0.001","2.55","","  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","375-85-  
9","PFHpA","1.49","ng/L","J","0.301","LOD","","","TRG","","","4.08","LOQ","YES","-99","","","0.245","0.001","2.55","","  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","355-46-  
4","PFHxS","2.34","ng/L","J","0.482","LOD","","","TRG","","","4.08","LOQ","YES","-99","","","0.245","0.001","2.55","","  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","335-67-

1","PFOA","4.29","ng/L","","0.332","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","1763-23-  
1","PFOS","2.55","ng/L","U","0.411","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","375-95-  
1","PFNA","1.23","ng/L","J","0.413","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","335-76-  
2","PFDA","2.55","ng/L","U","0.759","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","2355-31-  
9","MeFOSAA","2.55","ng/L","U","0.840","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55"  
",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","2058-94-  
8","PFUnA","2.55","ng/L","U","0.535","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","2991-50-  
6","EtFOSAA","2.55","ng/L","U","0.698","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55"  
",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","307-55-  
1","PFDaA","2.55","ng/L","U","0.403","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","72629-94-  
8","PFTDA","2.55","ng/L","U","0.252","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",""  
"  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","376-06-  
7","PFTeDA","2.55","ng/L","U","0.385","LOD","","TRG","","","4.08","LOQ","YES","-99","","0.245","0.001","2.55",  
,""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C3-PFBS","13C3-  
PFBS","114","%R","","-99","NA","","IS","114","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFHxA","13C2-  
PFHxA","98.0","%R","","-99","NA","","IS","98.0","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C4-PFHpA","13C4-  
PFHpA","88.9","%R","","-99","NA","","IS","88.9","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","18O2-PFHxS","18O2-  
PFHxS","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFOA","13C2-  
PFOA","103","%R","","-99","NA","","IS","103","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C8-PFOS","13C8-  
PFOS","107","%R","","-99","NA","","IS","107","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C5-PFNA","13C5-  
PFNA","96.3","%R","","-99","NA","","IS","96.3","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFDA","13C2-  
PFDA","109","%R","","-99","NA","","IS","109","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","d3-MeFOSAA","d3-  
MeFOSAA","111","%R","","-99","NA","","IS","111","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFUnA","13C2-  
PFUnA","121","%R","","-99","NA","","IS","121","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","d5-EtFOSAA","d5-  
EtFOSAA","92.6","%R","","-99","NA","","IS","92.6","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFDaA","13C2-  
PFDaA","96.4","%R","","-99","NA","","IS","96.4","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-DUP03-20171130","Modified EPA Method 537","Initial","1701829-12","Vista","13C2-PFTeDA","13C2-  
PFTeDA","111","%R","","-99","NA","","IS","111","","-99","NA","YES","100","","0.245","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","375-73-  
5","PFBS","1.46","ng/L","J","0.865","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","307-24-  
4","PFHxA","14.6","ng/L","","1.05","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","375-85-

9","PFHpA","18.6","ng/L","","0.286","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","355-46-  
4","PFHxS","53.1","ng/L","","0.458","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","335-67-  
1","PFOA","66.3","ng/L","","0.315","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","1763-23-  
1","PFOS","180","ng/L","","0.390","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","375-95-  
1","PFNA","216","ng/L","","0.391","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","335-76-  
2","PFDA","1.05","ng/L","J","0.720","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","2355-31-  
9","MeFOSAA","2.41","ng/L","U","0.797","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41"  
",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","2058-94-  
8","PFUnA","2.41","ng/L","U","0.507","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","2991-50-  
6","EtFOSAA","2.41","ng/L","U","0.662","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41"  
",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","307-55-  
1","PFDoA","2.41","ng/L","U","0.383","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","72629-94-  
8","PFTTrDA","2.41","ng/L","U","0.239","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","376-06-  
7","PFTeDA","2.41","ng/L","U","0.365","LOD","","TRG","","","3.86","LOQ","YES","-99","","0.259","0.001","2.41",""  
"  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C3-PFBS","13C3-  
PFBS","123","%R","","-99","NA","","IS","123","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFHxA","13C2-  
PFHxA","109","%R","","-99","NA","","IS","109","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C4-PFHpA","13C4-  
PFHpA","87.7","%R","","-99","NA","","IS","87.7","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","18O2-PFHxS","18O2-  
PFHxS","115","%R","","-99","NA","","IS","115","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFOA","13C2-  
PFOA","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C8-PFOS","13C8-  
PFOS","96.6","%R","","-99","NA","","IS","96.6","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C5-PFNA","13C5-  
PFNA","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFDA","13C2-  
PFDA","110","%R","","-99","NA","","IS","110","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","d3-MeFOSAA","d3-  
MeFOSAA","75.3","%R","","-99","NA","","IS","75.3","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFUnA","13C2-  
PFUnA","79.1","%R","","-99","NA","","IS","79.1","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","d5-EtFOSAA","d5-  
EtFOSAA","76.4","%R","","-99","NA","","IS","76.4","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFDoA","13C2-  
PFDoA","87.4","%R","","-99","NA","","IS","87.4","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW05I-20171130","Modified EPA Method 537","Initial","1701829-13","Vista","13C2-PFTeDA","13C2-  
PFTeDA","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","","0.259","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","375-73-

5","PFBS","2.39","ng/L","U","0.855","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","307-24-  
4","PFHxA","2.39","ng/L","U","1.04","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","375-85-  
9","PFHpA","2.39","ng/L","U","0.282","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","355-46-  
4","PFHxS","2.39","ng/L","U","0.452","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","335-67-  
1","PFOA","2.39","ng/L","U","0.311","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","1763-23-  
1","PFOS","2.39","ng/L","U","0.385","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","375-95-  
1","PFNA","2.39","ng/L","U","0.387","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","335-76-  
2","PFDA","2.39","ng/L","U","0.712","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","2355-31-  
9","MeFOSAA","2.39","ng/L","U","0.788","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39"  
"  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","2058-94-  
8","PFUnA","2.39","ng/L","U","0.501","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","2991-50-  
6","EtFOSAA","2.39","ng/L","U","0.654","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39"  
"  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","307-55-  
1","PFDaA","2.39","ng/L","U","0.378","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","72629-94-  
8","PFTTrDA","2.39","ng/L","U","0.236","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39","","  
"  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","376-06-  
7","PFTeDA","2.39","ng/L","U","0.361","LOD","","","TRG","","","3.82","LOQ","YES","-99","","","0.262","0.001","2.39",  
"  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C3-PFBS","13C3-  
PFBS","111","%R","","","-99","NA","","","IS","111","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFHxA","13C2-  
PFHxA","98.5","%R","","","-99","NA","","","IS","98.5","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C4-PFHpA","13C4-  
PFHpA","78.8","%R","","","-99","NA","","","IS","78.8","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","18O2-PFHxS","18O2-  
PFHxS","81.0","%R","","","-99","NA","","","IS","81.0","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFOA","13C2-  
PFOA","93.1","%R","","","-99","NA","","","IS","93.1","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C8-PFOS","13C8-  
PFOS","84.1","%R","","","-99","NA","","","IS","84.1","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C5-PFNA","13C5-  
PFNA","94.2","%R","","","-99","NA","","","IS","94.2","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFDA","13C2-  
PFDA","93.5","%R","","","-99","NA","","","IS","93.5","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","d3-MeFOSAA","d3-  
MeFOSAA","61.0","%R","","","-99","NA","","","IS","61.0","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFUnA","13C2-  
PFUnA","76.0","%R","","","-99","NA","","","IS","76.0","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","d5-EtFOSAA","d5-  
EtFOSAA","73.2","%R","","","-99","NA","","","IS","73.2","","","-99","NA","YES","100","","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFDaA","13C2-

PFDaA","78.5","%R","",-99","NA","","IS","78.5","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW07S-20171130","Modified EPA Method 537","Initial","1701829-14","Vista","13C2-PFTeDA","13C2-  
PFTeDA","104","%R","",-99","NA","","IS","104","",-99","NA","YES","100","","0.262","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","375-73-  
5","PFBS","1.43","ng/L","J","0.871","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","307-24-  
4","PFHxA","5.05","ng/L","","1.06","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","375-85-  
9","PFHpA","3.94","ng/L","","0.288","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","355-46-  
4","PFHxS","21.9","ng/L","","0.461","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","335-67-  
1","PFOA","4.86","ng/L","","0.317","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","1763-23-  
1","PFOS","20.9","ng/L","","0.393","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","375-95-  
1","PFNA","28.3","ng/L","","0.394","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","335-76-  
2","PFDA","1.14","ng/L","J","0.725","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","2355-31-  
9","MeFOSAA","2.43","ng/L","U","0.803","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43  
",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","2058-94-  
8","PFUnA","2.43","ng/L","U","0.511","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","2991-50-  
6","EtFOSAA","2.43","ng/L","U","0.667","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43"  
",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","307-55-  
1","PFDaA","2.43","ng/L","U","0.385","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","72629-94-  
8","PFTTrDA","2.43","ng/L","U","0.240","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",""  
"  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","376-06-  
7","PFTeDA","2.43","ng/L","U","0.367","LOD","","TRG","","","3.89","LOQ","YES","-99","","0.257","0.001","2.43",  
,""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C3-PFBS","13C3-  
PFBS","112","%R","",-99","NA","","IS","112","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFHxA","13C2-  
PFHxA","100","%R","",-99","NA","","IS","100","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C4-PFHpA","13C4-  
PFHpA","82.6","%R","",-99","NA","","IS","82.6","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","18O2-PFHxS","18O2-  
PFHxS","89.7","%R","",-99","NA","","IS","89.7","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFOA","13C2-  
PFOA","105","%R","",-99","NA","","IS","105","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C8-PFOS","13C8-  
PFOS","81.3","%R","",-99","NA","","IS","81.3","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C5-PFNA","13C5-  
PFNA","88.0","%R","",-99","NA","","IS","88.0","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFDA","13C2-  
PFDA","81.5","%R","",-99","NA","","IS","81.5","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","d3-MeFOSAA","d3-  
MeFOSAA","77.2","%R","",-99","NA","","IS","77.2","",-99","NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFUnA","13C2-



PFUnA","102","%R","",-99,"NA","","IS","102","",-99,"NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","d5-EtFOSAA","d5-  
EtFOSAA","70.6","%R","",-99,"NA","","IS","70.6","",-99,"NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFDoA","13C2-  
PFDoA","102","%R","",-99,"NA","","IS","102","",-99,"NA","YES","100","","0.257","0.001","-99",""  
"FT-MW05S-20171130","Modified EPA Method 537","Initial","1701829-15","Vista","13C2-PFTeDA","13C2-  
PFTeDA","122","%R","",-99,"NA","","IS","122","",-99,"NA","YES","100","","0.257","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","375-73-  
5","PFBS","2.50","ng/L","U","0.895","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","307-24-  
4","PFHxA","2.50","ng/L","U","1.09","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","375-85-  
9","PFHpA","2.50","ng/L","U","0.296","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","355-46-  
4","PFHxS","2.50","ng/L","U","0.474","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","335-67-  
1","PFOA","2.50","ng/L","U","0.326","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","1763-23-  
1","PFOS","2.50","ng/L","U","0.404","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","375-95-  
1","PFNA","2.50","ng/L","U","0.405","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","335-76-  
2","PFDA","2.50","ng/L","U","0.745","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","2355-31-  
9","MeFOSAA","2.50","ng/L","U","0.825","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50"  
,""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","2058-94-  
8","PFUnA","2.50","ng/L","U","0.525","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","2991-50-  
6","EtFOSAA","2.50","ng/L","U","0.685","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50"  
,""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","307-55-  
1","PFDoA","2.50","ng/L","U","0.396","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","72629-94-  
8","PFTTrDA","2.50","ng/L","U","0.247","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",""  
,""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","376-06-  
7","PFTeDA","2.50","ng/L","U","0.378","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",  
,""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C3-PFBS","13C3-  
PFBS","120","%R","",-99,"NA","","IS","120","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFHxA","13C2-  
PFHxA","108","%R","",-99,"NA","","IS","108","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C4-PFHpA","13C4-  
PFHpA","99.9","%R","",-99,"NA","","IS","99.9","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","18O2-PFHxS","18O2-  
PFHxS","104","%R","",-99,"NA","","IS","104","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFOA","13C2-  
PFOA","95.9","%R","",-99,"NA","","IS","95.9","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C8-PFOS","13C8-  
PFOS","116","%R","",-99,"NA","","IS","116","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C5-PFNA","13C5-  
PFNA","92.6","%R","",-99,"NA","","IS","92.6","",-99,"NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFDA","13C2-

PFDA","70.7","%R","",-99","NA","","IS","70.7","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","d3-MeFOSAA","d3-  
MeFOSAA","56.1","%R","",-99","NA","","IS","56.1","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFUnA","13C2-  
PFUnA","76.9","%R","",-99","NA","","IS","76.9","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","d5-EtFOSAA","d5-  
EtFOSAA","50.2","%R","",-99","NA","","IS","50.2","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFDoA","13C2-  
PFDoA","71.4","%R","",-99","NA","","IS","71.4","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-20171130","Modified EPA Method 537","Initial","1701829-16","Vista","13C2-PFTeDA","13C2-  
PFTeDA","131","%R","",-99","NA","","IS","131","",-99","NA","YES","100","","0.250","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","375-73-  
5","PFBS","2.32","ng/L","U","0.833","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","307-24-  
4","PFHxA","2.32","ng/L","U","1.01","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","375-85-  
9","PFHpA","2.32","ng/L","U","0.275","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","355-46-  
4","PFHxS","2.32","ng/L","U","0.441","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","335-67-  
1","PFOA","2.32","ng/L","U","0.303","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","1763-23-  
1","PFOS","2.32","ng/L","U","0.376","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","375-95-  
1","PFNA","2.32","ng/L","U","0.377","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","335-76-  
2","PFDA","2.32","ng/L","U","0.694","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","2355-31-  
9","MeFOSAA","2.32","ng/L","U","0.768","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","2058-94-  
8","PFUnA","2.32","ng/L","U","0.489","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","2991-50-  
6","EtFOSAA","2.32","ng/L","U","0.638","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","307-55-  
1","PFDoA","2.32","ng/L","U","0.369","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","72629-94-  
8","PFTTrDA","2.32","ng/L","U","0.230","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","376-06-  
7","PFTeDA","2.32","ng/L","U","0.351","LOD","","TRG","","","3.72","LOQ","YES","-99","","0.269","0.001","2.32",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C3-PFBS","13C3-  
PFBS","121","%R","",-99","NA","","IS","121","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFHxA","13C2-  
PFHxA","106","%R","",-99","NA","","IS","106","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C4-PFHpA","13C4-  
PFHpA","105","%R","",-99","NA","","IS","105","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","1802-PFHxS","1802-  
PFHxS","91.7","%R","",-99","NA","","IS","91.7","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFOA","13C2-  
PFOA","102","%R","",-99","NA","","IS","102","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C8-PFOS","13C8-

PFOS","85.1","%R","",-99","NA","","IS","85.1","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C5-PFNA","13C5-  
PFNA","97.6","%R","",-99","NA","","IS","97.6","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFDA","13C2-  
PFDA","78.8","%R","",-99","NA","","IS","78.8","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","d3-MeFOSAA","d3-  
MeFOSAA","66.3","%R","",-99","NA","","IS","66.3","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFUnA","13C2-  
PFUnA","85.7","%R","",-99","NA","","IS","85.7","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","d5-EtFOSAA","d5-  
EtFOSAA","57.0","%R","",-99","NA","","IS","57.0","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFDoA","13C2-  
PFDoA","80.7","%R","",-99","NA","","IS","80.7","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW06I-FRB-20171130","Modified EPA Method 537","Initial","1701829-17","Vista","13C2-PFTeDA","13C2-  
PFTeDA","122","%R","",-99","NA","","IS","122","",-99","NA","YES","100","","0.269","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","375-73-  
5","PFBS","2.47","ng/L","U","0.885","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","307-24-  
4","PFHxA","1.79","ng/L","J","1.08","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","375-85-  
9","PFHpA","0.823","ng/L","J","0.292","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","355-46-  
4","PFHxS","1.58","ng/L","J","0.468","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","335-67-  
1","PFOA","2.96","ng/L","J","0.322","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","1763-23-  
1","PFOS","2.47","ng/L","U","0.399","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","375-95-  
1","PFNA","0.826","ng/L","J","0.400","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","335-76-  
2","PFDA","2.47","ng/L","U","0.736","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","2355-31-  
9","MeFOSAA","2.47","ng/L","U","0.815","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","2058-94-  
8","PFUnA","2.47","ng/L","U","0.519","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","2991-50-  
6","EtFOSAA","2.47","ng/L","U","0.677","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","307-55-  
1","PFDoA","2.47","ng/L","U","0.391","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","72629-94-  
8","PFTTrDA","2.47","ng/L","U","0.244","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","376-06-  
7","PFTeDA","2.47","ng/L","U","0.373","LOD","","TRG","","","3.95","LOQ","YES","-99","","0.253","0.001","2.47",""  
"  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C3-PFBS","13C3-  
PFBS","115","%R","",-99","NA","","IS","115","",-99","NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFHxA","13C2-  
PFHxA","91.6","%R","",-99","NA","","IS","91.6","",-99","NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C4-PFHpA","13C4-  
PFHpA","113","%R","",-99","NA","","IS","113","",-99","NA","YES","100","","0.253","0.001","-99",""

"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","18O2-PFHxS","18O2-PFHxS","98.6","%R","",-99,"NA","","IS","98.6","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFOA","13C2-PFOA","114","%R","",-99,"NA","","IS","114","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C8-PFOS","13C8-PFOS","118","%R","",-99,"NA","","IS","118","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C5-PFNA","13C5-PFNA","116","%R","",-99,"NA","","IS","116","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFDA","13C2-PFDA","108","%R","",-99,"NA","","IS","108","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","d3-MeFOSAA","d3-MeFOSAA","84.7","%R","",-99,"NA","","IS","84.7","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFUnA","13C2-PFUnA","104","%R","",-99,"NA","","IS","104","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","d5-EtFOSAA","d5-EtFOSAA","97.9","%R","",-99,"NA","","IS","97.9","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFDoA","13C2-PFDoA","131","%R","",-99,"NA","","IS","131","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW10I-20171130","Modified EPA Method 537","Initial","1701829-18","Vista","13C2-PFTeDA","13C2-PFTeDA","111","%R","",-99,"NA","","IS","111","",-99,"NA","YES","100","","0.253","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","375-73-5","PFBS","2.48","ng/L","U","0.887","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","307-24-4","PFHxA","1.13","ng/L","J","1.08","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","375-85-9","PFHpA","2.48","ng/L","U","0.293","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","355-46-4","PFHxS","0.694","ng/L","J","0.469","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","335-67-1","PFOA","2.48","ng/L","U","0.323","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","1763-23-1","PFOS","2.48","ng/L","U","0.400","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","375-95-1","PFNA","2.48","ng/L","U","0.401","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","335-76-2","PFDA","2.48","ng/L","U","0.739","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","2355-31-9","MeFOSAA","2.48","ng/L","U","0.818","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","2058-94-8","PFUnA","2.48","ng/L","U","0.520","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","2991-50-6","EtFOSAA","2.48","ng/L","U","0.679","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","307-55-1","PFDoA","2.48","ng/L","U","0.393","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","72629-94-8","PFTTrDA","2.48","ng/L","U","0.245","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","376-06-7","PFTeDA","2.48","ng/L","U","0.374","LOD","","TRG","","","3.97","LOQ","YES","-99","","0.252","0.001","2.48",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C3-PFBS","13C3-PFBS","120","%R","",-99,"NA","","IS","120","",-99,"NA","YES","100","","0.252","0.001","-99",""

"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFHxA","13C2-PFHxA","97.3","%R","",-99,"NA","","IS","97.3","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C4-PFHpA","13C4-PFHpA","92.3","%R","",-99,"NA","","IS","92.3","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","18O2-PFHxS","18O2-PFHxS","98.2","%R","",-99,"NA","","IS","98.2","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFOA","13C2-PFOA","97.0","%R","",-99,"NA","","IS","97.0","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C8-PFOS","13C8-PFOS","108","%R","",-99,"NA","","IS","108","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C5-PFNA","13C5-PFNA","107","%R","",-99,"NA","","IS","107","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFDA","13C2-PFDA","66.6","%R","",-99,"NA","","IS","66.6","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","d3-MeFOSAA","d3-MeFOSAA","77.9","%R","",-99,"NA","","IS","77.9","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFUnA","13C2-PFUnA","99.9","%R","",-99,"NA","","IS","99.9","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","d5-EtFOSAA","d5-EtFOSAA","76.1","%R","",-99,"NA","","IS","76.1","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFDoA","13C2-PFDoA","82.0","%R","",-99,"NA","","IS","82.0","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-MW06S-20171130","Modified EPA Method 537","Initial","1701829-19","Vista","13C2-PFTeDA","13C2-PFTeDA","101","%R","",-99,"NA","","IS","101","",-99,"NA","YES","100","","0.252","0.001","-99",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","375-73-5","PFBS","2.40","ng/L","U","0.861","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","307-24-4","PFHxA","2.40","ng/L","U","1.05","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","375-85-9","PFHpA","2.40","ng/L","U","0.284","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","355-46-4","PFHxS","2.40","ng/L","U","0.456","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","335-67-1","PFOA","2.40","ng/L","U","0.313","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","1763-23-1","PFOS","2.40","ng/L","U","0.388","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","375-95-1","PFNA","2.40","ng/L","U","0.390","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","335-76-2","PFDA","2.40","ng/L","U","0.717","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","2355-31-9","MeFOSAA","2.40","ng/L","U","0.794","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","2058-94-8","PFUnA","2.40","ng/L","U","0.505","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","2991-50-6","EtFOSAA","2.40","ng/L","U","0.659","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","307-55-1","PFDoA","2.40","ng/L","U","0.381","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","72629-94-8","PFTTrDA","2.40","ng/L","U","0.238","LOD","","TRG","","","3.85","LOQ","YES","-99","","0.260","0.001","2.40",""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","376-06-

7","PFTeDA","2.40","ng/L","U","0.363","LOD","","TRG","","","3.85","LOQ","YES","-99","","","0.260","0.001","2.40",  
""  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C3-PFBS","13C3-  
PFBS","104","%R","","","-99","NA","","IS","104","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFHxA","13C2-  
PFHxA","103","%R","","","-99","NA","","IS","103","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C4-PFHpA","13C4-  
PFHpA","106","%R","","","-99","NA","","IS","106","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","18O2-PFHxS","18O2-  
PFHxS","67.6","%R","","","-99","NA","","IS","67.6","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFOA","13C2-  
PFOA","92.6","%R","","","-99","NA","","IS","92.6","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C8-PFOS","13C8-  
PFOS","92.6","%R","","","-99","NA","","IS","92.6","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C5-PFNA","13C5-  
PFNA","77.7","%R","","","-99","NA","","IS","77.7","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFDA","13C2-  
PFDA","88.8","%R","","","-99","NA","","IS","88.8","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","d3-MeFOSAA","d3-  
MeFOSAA","67.3","%R","","","-99","NA","","IS","67.3","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFUnA","13C2-  
PFUnA","68.1","%R","","","-99","NA","","IS","68.1","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","d5-EtFOSAA","d5-  
EtFOSAA","57.1","%R","","","-99","NA","","IS","57.1","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFDoA","13C2-  
PFDoA","57.8","%R","","","-99","NA","","IS","57.8","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"FT-EB01-20171130","Modified EPA Method 537","Initial","1701829-20","Vista","13C2-PFTeDA","13C2-  
PFTeDA","91.9","%R","","","-99","NA","","IS","91.9","","","-99","NA","YES","100","","","0.260","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","375-73-  
5","PFBS","2.50","ng/L","U","0.895","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","307-24-  
4","PFHxA","2.50","ng/L","U","1.09","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","375-85-  
9","PFHpA","2.50","ng/L","U","0.296","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","355-46-  
4","PFHxS","2.50","ng/L","U","0.474","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","335-67-  
1","PFOA","2.50","ng/L","U","0.326","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","1763-23-  
1","PFOS","2.50","ng/L","U","0.404","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","375-95-  
1","PFNA","2.50","ng/L","U","0.405","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","335-76-  
2","PFDA","2.50","ng/L","U","0.745","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","2355-31-  
9","MeFOSAA","2.50","ng/L","U","0.825","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","2058-94-  
8","PFUnA","2.50","ng/L","U","0.525","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","2991-50-  
6","EtFOSAA","2.50","ng/L","U","0.685","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","307-55-  
1","PFDoA","2.50","ng/L","U","0.396","LOD","","TRG","","","4.00","LOQ","YES","-99","","","0.250","0.001","2.50",  
"

"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","72629-94-8","PFTTrDA","2.50","ng/L","U","0.247","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",  
"  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","376-06-7","PFTeDA","2.50","ng/L","U","0.378","LOD","","TRG","","","4.00","LOQ","YES","-99","","0.250","0.001","2.50",  
"  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C3-PFBS","13C3-PFBS","116","%R","","-99","NA","","IS","116","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFHxA","13C2-PFHxA","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C4-PFHpA","13C4-PFHpA","90.9","%R","","-99","NA","","IS","90.9","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","18O2-PFHxS","18O2-PFHxS","95.3","%R","","-99","NA","","IS","95.3","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFOA","13C2-PFOA","99.6","%R","","-99","NA","","IS","99.6","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C8-PFOS","13C8-PFOS","87.1","%R","","-99","NA","","IS","87.1","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C5-PFNA","13C5-PFNA","90.4","%R","","-99","NA","","IS","90.4","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFDA","13C2-PFDA","92.9","%R","","-99","NA","","IS","92.9","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","d3-MeFOSAA","d3-MeFOSAA","72.5","%R","","-99","NA","","IS","72.5","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFUnA","13C2-PFUnA","74.7","%R","","-99","NA","","IS","74.7","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","d5-EtFOSAA","d5-EtFOSAA","70.5","%R","","-99","NA","","IS","70.5","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFDoA","13C2-PFDoA","68.9","%R","","-99","NA","","IS","68.9","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BLK1","Modified EPA Method 537","Initial","B7L0073-BLK1","Vista","13C2-PFTeDA","13C2-PFTeDA","64.6","%R","","-99","NA","","IS","64.6","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","375-73-5","PFBS","38.3","ng/L","","0.895","LOD","","TRG","95.8","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","307-24-4","PFHxA","33.1","ng/L","","1.09","LOD","","TRG","82.8","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","375-85-9","PFHpA","40.0","ng/L","","0.296","LOD","","TRG","99.9","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","355-46-4","PFHxS","34.6","ng/L","","0.474","LOD","","TRG","86.4","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","335-67-1","PFOA","36.4","ng/L","","0.326","LOD","","TRG","91.1","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","1763-23-1","PFOS","34.6","ng/L","","0.404","LOD","","TRG","86.4","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","375-95-1","PFNA","36.8","ng/L","","0.405","LOD","","TRG","92.0","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","335-76-

2","PFDA","33.0","ng/L","","0.745","LOD","","TRG","82.5","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50",  
","  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","2355-31-  
9","MeFOSAA","40.9","ng/L","","0.825","LOD","","TRG","102","","4.00","LOQ","YES","40.0","","0.250","0.001","2  
.50",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","2058-94-  
8","PFUnA","45.1","ng/L","","0.525","LOD","","TRG","113","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50"  
,"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","2991-50-  
6","EtFOSAA","44.4","ng/L","","0.685","LOD","","TRG","111","","4.00","LOQ","YES","40.0","","0.250","0.001","2.  
50",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","307-55-  
1","PFDoA","36.1","ng/L","","0.396","LOD","","TRG","90.2","","4.00","LOQ","YES","40.0","","0.250","0.001","2.50  
,"  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","72629-94-  
8","PFTTrDA","43.2","ng/L","","0.247","LOD","","TRG","108","","4.00","LOQ","YES","40.0","","0.250","0.001","2.5  
0",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","376-06-  
7","PFTeDA","36.8","ng/L","","0.378","LOD","","TRG","92.1","","4.00","LOQ","YES","40.0","","0.250","0.001","2.5  
0",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C3-PFBS","13C3-  
PFBS","109","%R","","-99","NA","","IS","109","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFHxA","13C2-  
PFHxA","110","%R","","-99","NA","","IS","110","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C4-PFHpA","13C4-  
PFHpA","104","%R","","-99","NA","","IS","104","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","18O2-PFHxS","18O2-  
PFHxS","106","%R","","-99","NA","","IS","106","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFOA","13C2-  
PFOA","118","%R","","-99","NA","","IS","118","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C8-PFOS","13C8-  
PFOS","116","%R","","-99","NA","","IS","116","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C5-PFNA","13C5-  
PFNA","103","%R","","-99","NA","","IS","103","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFDA","13C2-  
PFDA","94.0","%R","","-99","NA","","IS","94.0","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","d3-MeFOSAA","d3-  
MeFOSAA","79.2","%R","","-99","NA","","IS","79.2","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFUnA","13C2-  
PFUnA","88.2","%R","","-99","NA","","IS","88.2","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","d5-EtFOSAA","d5-  
EtFOSAA","79.1","%R","","-99","NA","","IS","79.1","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFDoA","13C2-  
PFDoA","85.3","%R","","-99","NA","","IS","85.3","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-BS1","Modified EPA Method 537","Initial","B7L0073-BS1","Vista","13C2-PFTeDA","13C2-  
PFTeDA","113","%R","","-99","NA","","IS","113","","-99","NA","YES","100","","0.250","0.001","-99",  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","375-73-  
5","PFBS","33.7","ng/L","H","0.931","LOD","","TRG","69.9","","4.16","LOQ","YES","41.6","FT-MW08I-  
20171129","0.240","0.001","2.60",  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","307-24-  
4","PFHxA","132","ng/L","H","1.13","LOD","","TRG","55.1","","4.16","LOQ","YES","41.6","FT-MW08I-  
20171129","0.240","0.001","2.60",  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","375-85-  
9","PFHpA","127","ng/L","H","0.307","LOD","","TRG","134","","4.16","LOQ","YES","41.6","FT-MW08I-



20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","355-46-4","PFHxS","410","ng/L","H","0.493","LOD","","TRG","-120","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","335-67-1","PFOA","378","ng/L","H","0.339","LOD","","TRG","28.6","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Dilution","B7L0073-MS1","Vista","1763-23-1","PFOS","1570","ng/L","D, H","2.10","LOD","","TRG","360","","20.8","LOQ","YES","208","FT-MW08I-20171129","0.240","0.001","13.0",""  
"B7L0073-MS1","Modified EPA Method 537","Dilution","B7L0073-MS1","Vista","375-95-1","PFNA","1280","ng/L","D, H","2.11","LOD","","TRG","-287","","20.8","LOQ","YES","208","FT-MW08I-20171129","0.240","0.001","13.0",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","335-76-2","PFDA","441","ng/L","H","0.775","LOD","","TRG","392","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","2355-31-9","MeFOSAA","33.3","ng/L","","0.858","LOD","","TRG","80.0","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","2058-94-8","PFUnA","513","ng/L","","0.546","LOD","","TRG","84.7","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","2991-50-6","EtFOSAA","43.0","ng/L","","0.713","LOD","","TRG","103","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","307-55-1","PFDoA","34.8","ng/L","","0.412","LOD","","TRG","83.6","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","72629-94-8","PFTTrDA","35.1","ng/L","","0.257","LOD","","TRG","84.4","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","376-06-7","PFTeDA","39.0","ng/L","","0.393","LOD","","TRG","93.7","","4.16","LOQ","YES","41.6","FT-MW08I-20171129","0.240","0.001","2.60",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C3-PFBS","13C3-PFBS","120","%R","","-99","NA","","IS","120","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFHxA","13C2-PFHxA","110","%R","","-99","NA","","IS","110","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C4-PFHpA","13C4-PFHpA","97.1","%R","","-99","NA","","IS","97.1","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","18O2-PFHxS","18O2-PFHxS","101","%R","","-99","NA","","IS","101","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFOA","13C2-PFOA","97.0","%R","","-99","NA","","IS","97.0","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Dilution","B7L0073-MS1","Vista","13C8-PFOS","13C8-PFOS","71.5","%R","D","-99","NA","","IS","71.5","","-99","NA","YES","100","FT-MW08I-20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Dilution","B7L0073-MS1","Vista","13C5-PFNA","13C5-PFNA","107","%R","D","-99","NA","","IS","107","","-99","NA","YES","100","FT-MW08I-

20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFDA","13C2-PFDA","96.6","%R","","-99","NA","","IS","96.6","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","d3-MeFOSAA","d3-MeFOSAA","91.5","%R","","-99","NA","","IS","91.5","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFUnA","13C2-PFUnA","90.5","%R","","-99","NA","","IS","90.5","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","d5-EtFOSAA","d5-EtFOSAA","67.7","%R","","-99","NA","","IS","67.7","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFDoA","13C2-PFDoA","85.6","%R","","-99","NA","","IS","85.6","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS1","Modified EPA Method 537","Initial","B7L0073-MS1","Vista","13C2-PFTeDA","13C2-PFTeDA","123","%R","","-99","NA","","IS","123","","-99","NA","YES","100","FT-MW08I-  
20171129","0.240","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","375-73-5","PFBS","33.4","ng/L","","0.866","LOD","","TRG","86.4","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","307-24-4","PFHxA","28.2","ng/L","","1.05","LOD","","TRG","73.0","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","375-85-9","PFHpA","41.2","ng/L","","0.286","LOD","","TRG","106","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","355-46-4","PFHxS","36.5","ng/L","","0.458","LOD","","TRG","93.1","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","335-67-1","PFOA","32.8","ng/L","","0.315","LOD","","TRG","84.8","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","1763-23-1","PFOS","30.8","ng/L","","0.390","LOD","","TRG","79.6","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","375-95-1","PFNA","33.5","ng/L","","0.392","LOD","","TRG","86.7","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","335-76-2","PFDA","38.3","ng/L","","0.721","LOD","","TRG","99.0","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","2355-31-9","MeFOSAA","40.3","ng/L","","0.798","LOD","","TRG","104","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","2058-94-8","PFUnA","47.0","ng/L","","0.508","LOD","","TRG","122","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","2991-50-6","EtFOSAA","43.5","ng/L","","0.663","LOD","","TRG","113","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","307-55-1","PFDoA","33.0","ng/L","","0.383","LOD","","TRG","85.3","","3.87","LOQ","YES","38.7","FT-MW01S-

20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","72629-94-  
8","PFTTrDA","22.5","ng/L","H","0.239","LOD","","TRG","58.2","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","376-06-  
7","PFTeDA","42.4","ng/L","","0.365","LOD","","TRG","110","","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.258","0.001","2.42",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C3-PFBS","13C3-  
PFBS","107","%R","","-99","NA","","IS","107","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFHxA","13C2-  
PFHxA","115","%R","","-99","NA","","IS","115","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C4-PFHpA","13C4-  
PFHpA","85.6","%R","","-99","NA","","IS","85.6","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","18O2-PFHxS","18O2-  
PFHxS","107","%R","","-99","NA","","IS","107","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFOA","13C2-  
PFOA","100","%R","","-99","NA","","IS","100","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C8-PFOS","13C8-  
PFOS","116","%R","","-99","NA","","IS","116","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C5-PFNA","13C5-  
PFNA","107","%R","","-99","NA","","IS","107","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFDA","13C2-  
PFDA","98.2","%R","","-99","NA","","IS","98.2","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","d3-MeFOSAA","d3-  
MeFOSAA","71.7","%R","","-99","NA","","IS","71.7","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFUnA","13C2-  
PFUnA","65.5","%R","","-99","NA","","IS","65.5","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","d5-EtFOSAA","d5-  
EtFOSAA","64.1","%R","","-99","NA","","IS","64.1","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFDoA","13C2-  
PFDoA","116","%R","","-99","NA","","IS","116","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MS2","Modified EPA Method 537","Initial","B7L0073-MS2","Vista","13C2-PFTeDA","13C2-  
PFTeDA","78.5","%R","","-99","NA","","IS","78.5","","-99","NA","YES","100","FT-MW01S-  
20171130","0.258","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","375-73-  
5","PFBS","36.0","ng/L","","0.876","LOD","","TRG","79.9","13.4","3.92","LOQ","YES","39.2","FT-MW08I-  
20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","307-24-  
4","PFHxA","140","ng/L","H","1.07","LOD","","TRG","79.3","36.0","3.92","LOQ","YES","39.2","FT-MW08I-  
20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","375-85-  
9","PFHpA","122","ng/L","","0.289","LOD","","TRG","130","3.03","3.92","LOQ","YES","39.2","FT-MW08I-

20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","355-46-4","PFHxS","490","ng/L","H","0.464","LOD","","TRG","77.3","924","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","335-67-1","PFOA","374","ng/L","H","0.319","LOD","","TRG","18.2","44.4","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Dilution","B7L0073-MSD1","Vista","1763-23-1","PFOS","1220","ng/L","D, H","1.97","LOD","","TRG","204","55.3","19.6","LOQ","YES","196","FT-MW08I-20171129","0.255","0.001","12.3",""  
"B7L0073-MSD1","Modified EPA Method 537","Dilution","B7L0073-MSD1","Vista","375-95-1","PFNA","1700","ng/L","D, H","1.98","LOD","","TRG","-86.2","108","19.6","LOQ","YES","196","FT-MW08I-20171129","0.255","0.001","12.3",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","335-76-2","PFDA","361","ng/L","H","0.729","LOD","","TRG","212","59.6","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","2355-31-9","MeFOSAA","36.3","ng/L","","0.808","LOD","","TRG","92.6","14.6","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","2058-94-8","PFUnA","607","ng/L","H","0.514","LOD","","TRG","329","118","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","2991-50-6","EtFOSAA","37.0","ng/L","","0.671","LOD","","TRG","94.5","8.61","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","307-55-1","PFDoA","35.3","ng/L","","0.388","LOD","","TRG","90.1","7.48","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","72629-94-8","PFTTrDA","31.5","ng/L","","0.242","LOD","","TRG","80.3","4.98","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","376-06-7","PFTeDA","34.4","ng/L","","0.370","LOD","","TRG","87.7","6.62","3.92","LOQ","YES","39.2","FT-MW08I-20171129","0.255","0.001","2.45",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C3-PFBS","13C3-PFBS","110","%R","","-99","NA","","IS","110","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFHxA","13C2-PFHxA","108","%R","","-99","NA","","IS","108","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C4-PFHpA","13C4-PFHpA","93.2","%R","","-99","NA","","IS","93.2","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","18O2-PFHxS","18O2-PFHxS","81.6","%R","","-99","NA","","IS","81.6","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFOA","13C2-PFOA","93.9","%R","","-99","NA","","IS","93.9","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Dilution","B7L0073-MSD1","Vista","13C8-PFOS","13C8-PFOS","95.8","%R","D","-99","NA","","IS","95.8","","-99","NA","YES","100","FT-MW08I-20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Dilution","B7L0073-MSD1","Vista","13C5-PFNA","13C5-PFNA","89.6","%R","D","-99","NA","","IS","89.6","","-99","NA","YES","100","FT-MW08I-

20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFDA","13C2-PFDA","98.0","%R","","-99","NA","","IS","98.0","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","d3-MeFOSAA","d3-MeFOSAA","62.3","%R","","-99","NA","","IS","62.3","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFUnA","13C2-PFUnA","63.8","%R","","-99","NA","","IS","63.8","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","d5-EtFOSAA","d5-EtFOSAA","68.6","%R","","-99","NA","","IS","68.6","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFDoA","13C2-PFDoA","77.2","%R","","-99","NA","","IS","77.2","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD1","Modified EPA Method 537","Initial","B7L0073-MSD1","Vista","13C2-PFTeDA","13C2-PFTeDA","96.5","%R","","-99","NA","","IS","96.5","","-99","NA","YES","100","FT-MW08I-  
20171129","0.255","0.001","-99",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","375-73-5","PFBS","30.6","ng/L","","0.865","LOD","","TRG","79.0","8.95","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","307-24-4","PFHxA","28.2","ng/L","","1.05","LOD","","TRG","72.9","0.137","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","375-85-9","PFHpA","32.9","ng/L","","0.286","LOD","","TRG","85.1","21.9","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","355-46-4","PFHxS","33.2","ng/L","","0.458","LOD","","TRG","84.7","9.45","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","335-67-1","PFOA","33.2","ng/L","","0.315","LOD","","TRG","85.7","1.06","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","1763-23-1","PFOS","31.4","ng/L","","0.390","LOD","","TRG","81.2","1.99","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","375-95-1","PFNA","29.8","ng/L","","0.392","LOD","","TRG","77.0","11.9","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","335-76-2","PFDA","31.0","ng/L","","0.720","LOD","","TRG","80.0","21.2","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","2355-31-9","MeFOSAA","31.0","ng/L","","0.798","LOD","","TRG","80.0","26.1","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","2058-94-8","PFUnA","36.9","ng/L","","0.508","LOD","","TRG","95.3","24.6","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","2991-50-6","EtFOSAA","43.6","ng/L","","0.662","LOD","","TRG","113","0","3.87","LOQ","YES","38.7","FT-MW01S-  
20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","307-55-1","PFDoA","32.0","ng/L","","0.383","LOD","","TRG","82.8","2.97","3.87","LOQ","YES","38.7","FT-MW01S-

20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","72629-94-8","PFTTrDA","37.2","ng/L","H","0.239","LOD","","TRG","96.1","49.1","3.87","LOQ","YES","38.7","FT-MW01S-20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","376-06-7","PFTeDA","34.2","ng/L","","0.365","LOD","","TRG","88.2","22.0","3.87","LOQ","YES","38.7","FT-MW01S-20171130","0.259","0.001","2.41",""  
"B7L0073-MSD2","Modified EPA Method 537","Initial","B7L0073-MSD2","Vista","13C3-PFBS","13C3-PFBS","115","%R","","-99","NA","","IS","115","","-99","NA","YES","100","FT-MW01S-20171130","0.259","0.001","-99",""  
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"112G08005-WE05","112G08005-WE05","FT-MW08S-FRB-20171129","11/29/2017 15:12","AQ","1701829-02","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 01:26","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00",""

"112G08005-WE05","112G08005-WE05","FT-DUP01-20171129","11/29/2017 12:00","AQ","1701829-03","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 01:37","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW08I-20171129","11/29/2017 15:22","AQ","1701829-04","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 01:48","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW08I-20171129","11/29/2017 15:22","AQ","1701829-04","NM","","3.90","Modified EPA Method 537","METHOD","Dilution","12/12/2017 13:15","12/30/2017 06:08","Vista","COA","WET","NA","5","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW01S-20171130","11/30/2017 09:35","AQ","1701829-05","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 01:59","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW02I-20171130","11/30/2017 08:49","AQ","1701829-06","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 02:10","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW01I-20171130","11/30/2017 09:32","AQ","1701829-07","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 02:22","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-DUP02-20171130","11/30/2017 09:00","AQ","1701829-08","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 02:33","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW02S-20171130","11/30/2017 09:52","AQ","1701829-09","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 02:44","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW03S-20171130","11/30/2017 11:18","AQ","1701829-10","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 02:55","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW09I-20171130","11/30/2017 11:22","AQ","1701829-11","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 03:06","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-DUP03-20171130","11/30/2017 12:00","AQ","1701829-12","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 03:51","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW05I-20171130","11/30/2017 12:00","AQ","1701829-13","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 04:02","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW07S-20171130","11/30/2017 13:36","AQ","1701829-14","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017 04:14","Vista","COA","WET","NA","1","NA","NA","01/01/1900 00:00","100","B7L0073","B7L0073","NA","S7L0088","1701829","12/01/2017 09:20","01/01/1900 00:00","" "112G08005-WE05","112G08005-WE05","FT-MW05S-20171130","11/30/2017 12:55","AQ","1701829-15","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017

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20","NM","","3.90","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017  
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MSD2","MSD","",-99","Modified EPA Method 537","METHOD","Initial","12/12/2017 13:15","12/28/2017  
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## TETRA TECH

## INTERNAL CORRESPONDENCE

**TO:** K. FRANCISCO **DATE:** MARCH 9, 2018  
**FROM:** TERRI L. SOLOMON **COPIES:** DV FILE  
**SUBJECT:** ORGANIC DATA VALIDATION – POLYFLUOROALKYL SUBSTANCES (PFAS)  
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP), CALVERTON  
SAMPLE DELIVERY GROUP (SDG) 1701829

**SAMPLES:** 17/Groundwater  
FT-DUP01-20171129 FT-DUP02-20171130  
FT-DUP03-20171130 FT-MW01I-20171130  
FT-MW01S-20171130 FT-MW02I-20171130  
FT-MW02S-20171130 FT-MW03S-20171130  
FT-MW05I-20171130 FT-MW05S-20171130  
FT-MW06I-20171130 FT-MW06S-20171130  
FT-MW07S-20171130 FT-MW08I-20171129  
FT-MW08S-20171129 FT-MW09I-20171130  
FT-MW10I-20171130  
  
2/Field Reagent Blank (FRB)  
FT-MW06I-FRB-20171130 FT-MW08S-FRB-20171129  
  
1/Equipment Blank  
FT-EB01-20171130

### Overview

The sample set for NWIRP Calverton, SDG 1701829 consisted of seventeen (17) aqueous environmental samples, two (2) FRB samples and one (1) equipment blank. All samples were analyzed for polyfluoroalkyl substances (PFAS). Three (3) field duplicate sample pairs, FT-MW08S-20171129 / FT-DUP01-20171129, FT-MW01I-20171130 / FT-DUP02-20171130 and FT-MW09I-20171130 / FT-DUP03-20171130 were included in this SDG.

The samples were collected by Tetra Tech, Inc. on November 29 and 30, 2017 and analyzed by Vista Analytical Laboratory. All analyses were conducted in accordance with EPA Method 537 Modified analytical and reporting protocols. The data contained in this SDG was validated with regard to the following parameters:

- \* • Data completeness
- \* • Hold times/Sample Preservation
- \* • LC/MS/MS System Tuning and Performance
- Initial/Continuing Calibrations
- \* • Laboratory Method Blank Results
- \* • Field Reagent Blank Results
- \* • Isotope Dilution Analyte Surrogate Recoveries
- Matrix Spike / Matrix Spike Duplicate Recoveries
- \* • Ongoing Precision Recovery (OPR) Results
- \* • Compound Identification
- \* • Compound Quantitation
- \* • Detection Limits

The symbol (\*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, and documentation supporting these findings is presented in Appendix C.

### **PFAS**

The matrix spike (MS) percent recoveries (%Rs) for perfluorobutanesulfonic acid and perfluorohexanoic acid were below the quality control limits and the %R for perfluoroheptanoic acid was above the quality control limits for sample FT-MW08I-20171129. The matrix spike duplicate (MSD) %Rs were outside quality control limits. The MS/MSD relative percent difference (RPDs) for perfluorohexanoic acid was outside the quality control limits. The detected results for the aforementioned compounds were qualified as estimated (J).

The MS %R for perfluorotridecanoic acid was below the quality control limit for sample FT-MW01S-20171130. The MSD %R and MS/MSD RPD were within quality control limit. The nondetected results reported for the aforementioned compound in the affected sample was qualified as estimated (UJ).

Detected results reported below the Limit of Quantitation (LOQ) but above the Method Detection Limit (MDL) were qualified as estimated, (J). Non-detected results were reported to the LOD.

### **Additional Comments**

It was noted by the laboratory that the original analyses of samples FT-DUP02-20171130, FT-DUP03-20171130, FT-EB01-20171130, FT-MW01I-20171130, FT-MW01S-20171130, FT-MW03S-20171130, FT-MW06I-20171130, FT-MW06I-FRB-20171130, FT-MW06S-20171130, FT-MW07S-20171130, FT-MW08I-20171129, FT-MW09I-20171130 and FT-MW10I-20171130 had one or more injected internal standards outside quality control limits. The laboratory re-injected the samples and all quality control criteria passed except FT-DUP02-20171130. All re-injected results are reported. No validation action was required for sample FT-DUP02-20171130 as the injected internal standard does not affect sample results.

Sample FT-MW08I-20171129 was analyzed at a 5X dilution for perfluorononanoic acid and perfluorooctane sulfonic acid.

The continuing calibration performed on 12/28/17 @ 3:29 had %Rs for perfluorotridecanoic acid and perfluorotetradecanoic acid which exceeded laboratory quality control limit. All samples were affected. No validation actions were warranted as the aforementioned sample results were nondetects.

The MS and/or MSD %Rs for perfluorohexanesulfonic acid, perfluorooctanesulfonic acid, pentadecafluorooctanoic acid, perfluorononanoic acid, perfluorodecanoic acid and perfluoroundecanoic acid were outside the quality control limits for sample FT-MW08I-20171129. No validation actions were required as the sample results were greater than four times the spike added.

Samples with detections and their associated FRBs are summarized below for the PFAS fraction. No detected results were present in any FRBs.

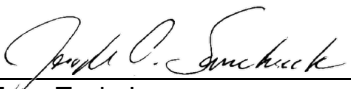
<b><u>Sample</u></b>	<b><u>Associated FRB</u></b>
FT-DUP01-20171129	FT-MW08S-FRB-20171129
FT-MW08I-20171129	FT-MW08S-FRB-20171129
FT-MW08S-20171129	FT-MW06I-FRB-20171130
FT-DUP03-20171130	FT-MW06I-FRB-20171130
FT-MW02S-20171130	FT-MW06I-FRB-20171130
FT-MW03S-20171130	FT-MW06I-FRB-20171130
FT-MW05I-20171130	FT-MW06I-FRB-20171130
FT-MW05S-20171130	FT-MW06I-FRB-20171130
FT-MW06S-20171130	FT-MW06I-FRB-20171130
FT-MW09I-20171130	FT-MW06I-FRB-20171130
FT-MW10I-20171130	FT-MW06I-FRB-20171130

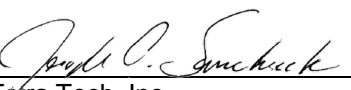
### **Executive Summary**

**Laboratory Performance Issues:** None.

**Other Factors Affecting Data Quality:** Detected results below the LOQ were estimated. Several MS/MSD %Rs and RPDs were noncompliant.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017), the Environmental Protection Agency document EPA/600/R-08/092, Method 537, "Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)", (September 2009) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (2013). The text of this report has been formulated to address only those areas affecting data quality.

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Terri L. Solomon  
Chemist/Data Validator

  
\_\_\_\_\_  
Tetra Tech, Inc.  
Joseph A. Samchuck  
Data Validation Manager

**Attachments:**

Appendix A - Qualified Analytical Results  
Appendix B – Results as Reported by the Laboratory  
Appendix C – Support Documentation

### **Data Qualifier Definitions**

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

<b>U</b>	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
<b>J</b>	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
<b>J+</b>	The result is an estimated quantity, but the result may be biased high.
<b>J-</b>	The result is an estimated quantity, but the result may be biased low.
<b>UJ</b>	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
<b>R</b>	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
<b>UR</b>	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

## **Appendix A**

Qualified Analytical Results

**Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's  $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors  $>40\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate
- Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
- Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

<b>PROJ_NO: 08005-WE05</b> <b>SDG: 1701829</b> <b>FRACTION: PFAS</b> <b>MEDIA: WATER</b>	NSAMPLE	FT-DUP01-20171129			FT-DUP02-20171130			FT-DUP03-20171130			FT-EB01-20171130		
	LAB_ID	1701829-03			1701829-08			1701829-12			1701829-20		
	SAMP_DATE	11/29/2017			11/30/2017			11/30/2017			11/30/2017		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	FT-MW08S-20171129			FT-MW01I-20171130			FT-MW09I-20171130					
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.46	U		2.34	U		2.55	U		2.4	U	
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.46	U		2.34	U		2.55	U		2.4	U	
PENTADEC AFLUOROOCTANOIC ACID		38.1			2.34	U		4.29			2.4	U	
PERFLUOROBUTANESULFONIC ACID		1.65	J	P	2.34	U		1.07	J	P	2.4	U	
PERFLUORODECANOIC ACID		12.3			2.34	U		2.55	U		2.4	U	
PERFLUORODODECANOIC ACID		2.46	U		2.34	U		2.55	U		2.4	U	
PERFLUOROHEPTANOIC ACID		19.5			2.34	U		1.49	J	P	2.4	U	
PERFLUOROHEXANESULFONIC ACID		36.4			2.34	U		2.34	J	P	2.4	U	
PERFLUOROHEXANOIC ACID		14.6			2.34	U		2.7	J	P	2.4	U	
PERFLUORONONANOIC ACID		132			2.34	U		1.23	J	P	2.4	U	
PERFLUOROOCTANE SULFONIC ACID		62.3			2.34	U		2.55	U		2.4	U	
PERFLUOROTETRADECANOIC ACID		2.46	U		2.34	U		2.55	U		2.4	U	
PERFLUOROTRIDECANOIC ACID		2.46	U		2.34	U		2.55	U		2.4	U	
PERFLUOROUNDECANOIC ACID		56.6			2.34	U		2.55	U		2.4	U	



<b>PROJ_NO: 08005-WE05</b> <b>SDG: 1701829</b> <b>FRACTION: PFAS</b> <b>MEDIA: WATER</b>	NSAMPLE	FT-MW01I-20171130			FT-MW01S-20171130			FT-MW02I-20171130			FT-MW02S-20171130		
	LAB_ID	1701829-07			1701829-05			1701829-06			1701829-09		
	SAMP_DATE	11/30/2017			11/30/2017			11/30/2017			11/30/2017		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.39	U		2.47	U		2.37	U		2.41	U	
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.39	U		2.47	U		2.37	U		2.41	U	
PENTADEC AFLUOROOCTANOIC ACID		2.39	U		2.47	U		2.37	U		272		
PERFLUOROBUTANESULFONIC ACID		2.39	U		2.47	U		2.37	U		3.61	J	P
PERFLUORODECANOIC ACID		2.39	U		2.47	U		2.37	U		12.5		
PERFLUORODODECANOIC ACID		2.39	U		2.47	U		2.37	U		2.41	U	
PERFLUOROHEPTANOIC ACID		2.39	U		2.47	U		2.37	U		19.2		
PERFLUOROHEXANESULFONIC ACID		2.39	U		2.47	U		2.37	U		451		
PERFLUOROHEXANOIC ACID		2.39	U		2.47	U		2.37	U		35.8		
PERFLUORONONANOIC ACID		2.39	U		2.47	U		2.37	U		451		
PERFLUOROOCTANE SULFONIC ACID		2.39	U		2.47	U		2.37	U		108		
PERFLUOROTETRADECANOIC ACID		2.39	U		2.47	U		2.37	U		2.41	U	
PERFLUOROTRIDECANOIC ACID		2.39	U		2.47	UJ	D	2.37	U		2.41	U	
PERFLUOROUNDECANOIC ACID		2.39	U		2.47	U		2.37	U		180		

<b>PROJ_NO: 08005-WE05</b> <b>SDG: 1701829</b> <b>FRACTION: PFAS</b> <b>MEDIA: WATER</b>	NSAMPLE	FT-MW03S-20171130			FT-MW05I-20171130			FT-MW05S-20171130			FT-MW06I-20171130		
	LAB_ID	1701829-10			1701829-13			1701829-15			1701829-16		
	SAMP_DATE	11/30/2017			11/30/2017			11/30/2017			11/30/2017		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	
PENTADEC AFLUOROOCTANOIC ACID		3.35	J	P	66.3			4.86			2.5	U	
PERFLUOROBUTANESULFONIC ACID		1.85	J	P	1.46	J	P	1.43	J	P	2.5	U	
PERFLUORODECANOIC ACID		2.39	U		1.05	J	P	1.14	J	P	2.5	U	
PERFLUORODODECANOIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	
PERFLUOROHEPTANOIC ACID		2.13	J	P	18.6			3.94			2.5	U	
PERFLUOROHEXANESULFONIC ACID		2.65	J	P	53.1			21.9			2.5	U	
PERFLUOROHEXANOIC ACID		4.66			14.6			5.05			2.5	U	
PERFLUORONONANOIC ACID		7.29			216			28.3			2.5	U	
PERFLUOROOCTANE SULFONIC ACID		3.04	J	P	180			20.9			2.5	U	
PERFLUOROTETRADECANOIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	
PERFLUOROTRIDECANOIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	
PERFLUOROUNDECANOIC ACID		2.39	U		2.41	U		2.43	U		2.5	U	

<b>PROJ_NO: 08005-WE05</b> <b>SDG: 1701829</b> <b>FRACTION: PFAS</b> <b>MEDIA: WATER</b>	NSAMPLE	FT-MW06I-FRB-20171130			FT-MW06S-20171130			FT-MW07S-20171130			FT-MW08I-20171129		
	LAB_ID	1701829-17			1701829-19			1701829-14			1701829-04		
	SAMP_DATE	11/30/2017			11/30/2017			11/30/2017			11/29/2017		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.32	U		2.48	U		2.39	U		2.39	U	
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.32	U		2.48	U		2.39	U		2.39	U	
PENTADEC AFLUOROOCTANOIC ACID		2.32	U		2.48	U		2.39	U		367		
PERFLUOROBUTANESULFONIC ACID		2.32	U		2.48	U		2.39	U		4.63	J	D
PERFLUORODECANOIC ACID		2.32	U		2.48	U		2.39	U		278		
PERFLUORODODECANOIC ACID		2.32	U		2.48	U		2.39	U		2.39	U	
PERFLUOROHEPTANOIC ACID		2.32	U		2.48	U		2.39	U		70.8	J	D
PERFLUOROHEXANESULFONIC ACID		2.32	U		0.694	J	P	2.39	U		460		
PERFLUOROHEXANOIC ACID		2.32	U		1.13	J	P	2.39	U		109	J	D
PERFLUORONONANOIC ACID		2.32	U		2.48	U		2.39	U		1870		
PERFLUOROOCTANE SULFONIC ACID		2.32	U		2.48	U		2.39	U		818	J	D
PERFLUOROTETRADECANOIC ACID		2.32	U		2.48	U		2.39	U		2.39	U	
PERFLUOROTRIDECANOIC ACID		2.32	U		2.48	U		2.39	U		2.39	U	
PERFLUOROUNDECANOIC ACID		2.32	U		2.48	U		2.39	U		478		

<b>PROJ_NO: 08005-WE05</b> <b>SDG: 1701829</b> <b>FRACTION: PFAS</b> <b>MEDIA: WATER</b>	NSAMPLE	FT-MW08S-20171129			FT-MW08S-FRB-20171129			FT-MW09I-20171130			FT-MW10I-20171130		
	LAB_ID	1701829-01			1701829-02			1701829-11			1701829-18		
	SAMP_DATE	11/29/2017			11/29/2017			11/30/2017			11/30/2017		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.36	U		2.33	U		2.49	U		2.47	U	
N-METHYL PERFLUOROOCTANE SULFONAMIDOACETIC ACID		2.36	U		2.33	U		2.49	U		2.47	U	
PENTADEC AFLUOROOCTANOIC ACID		45.6			2.33	U		4.05			2.96	J	P
PERFLUOROBUTANESULFONIC ACID		1.76	J	P	2.33	U		1.15	J	P	2.47	U	
PERFLUORODECANOIC ACID		11.1			2.33	U		2.49	U		2.47	U	
PERFLUORODODECANOIC ACID		2.36	U		2.33	U		2.49	U		2.47	U	
PERFLUOROHEPTANOIC ACID		20.7			2.33	U		1.3	J	P	0.823	J	P
PERFLUOROHEXANESULFONIC ACID		37.5			2.33	U		2.35	J	P	1.58	J	P
PERFLUOROHEXANOIC ACID		15.5			2.33	U		3.08	J	P	1.79	J	P
PERFLUORONONANOIC ACID		154			2.33	U		1.5	J	P	0.826	J	P
PERFLUOROOCTANE SULFONIC ACID		83.5			2.33	U		2.49	U		2.47	U	
PERFLUOROTETRADECANOIC ACID		2.36	U		2.33	U		2.49	U		2.47	U	
PERFLUOROTRIDECANOIC ACID		2.36	U		2.33	U		2.49	U		2.47	U	
PERFLUOROUNDECANOIC ACID		62.1			2.33	U		2.49	U		2.47	U	

## **Appendix B**

Results as Reported by the Laboratory

**Sample ID: FT-MW08S-20171129**
**Modified EPA Method 537**

Client Data				Laboratory Data			
Name:	Tetra Tech	Matrix:	Groundwater	Lab Sample:	1701829-01	Column:	BEH C18
Project:	112G08005-WE05	Date Collected:	29-Nov-17 15:12	Date Received:	01-Dec-17 09:20		
SDG:	WE05						

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.76	0.844	2.36	3.77	J	B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFHxA	15.5	1.03	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFHpA	20.7	0.279	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFHxS	37.5	0.447	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFOA	45.6	0.307	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFOS	83.5	0.381	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFNA	154	0.382	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFDA	11.1	0.703	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
MeFOSAA	ND	0.778	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFUnA	62.1	0.495	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
EtFOSAA	ND	0.646	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFDaA	ND	0.373	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFTDA	ND	0.233	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
PFTeDA	ND	0.356	2.36	3.77		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	108	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFHxA	IS	112	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C4-PFHpA	IS	87.5	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
18O2-PFHxS	IS	91.9	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFOA	IS	108	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C8-PFOS	IS	83.1	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C5-PFNA	IS	94.6	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFDA	IS	83.4	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
d3-MeFOSAA	IS	83.2	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFUnA	IS	79.6	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
d5-EtFOSAA	IS	77.1	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFDaA	IS	82.4	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1
13C2-PFTeDA	IS	114	50 - 150		B7L0073	12-Dec-17	0.265 L	28-Dec-17 01:15	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW08S-FRB-20171129**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	QC Water		Lab Sample:	1701829-02	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	29-Nov-17 15:12		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.836	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFHxA	ND	1.02	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFHpA	ND	0.276	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFHxS	ND	0.442	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFOA	ND	0.304	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFOS	ND	0.377	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFNA	ND	0.378	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFDA	ND	0.696	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
MeFOSAA	ND	0.771	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFUnA	ND	0.490	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
EtFOSAA	ND	0.640	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFDaA	ND	0.370	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFTDA	ND	0.231	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
PFTeDA	ND	0.353	2.33	3.74		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	118	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFHxA	IS	103	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C4-PFHpA	IS	96.6	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
18O2-PFHxS	IS	79.5	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFOA	IS	101	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C8-PFOS	IS	101	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C5-PFNA	IS	96.1	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFDA	IS	78.2	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
d3-MeFOSAA	IS	76.6	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFUnA	IS	87.5	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
d5-EtFOSAA	IS	82.9	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFDaA	IS	92.5	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1
13C2-PFTeDA	IS	122	50 - 150		B7L0073	12-Dec-17	0.268 L	28-Dec-17 01:26	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-DUP01-20171129**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	QC Water		Lab Sample:	1701829-03	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	29-Nov-17 12:00		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.65	0.882	2.46	3.94	J	B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFHxA	14.6	1.07	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFHpA	19.5	0.291	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFHxS	36.4	0.467	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFOA	38.1	0.321	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFOS	62.3	0.398	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFNA	132	0.399	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFDA	12.3	0.734	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
MeFOSAA	ND	0.813	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFUnA	56.6	0.517	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
EtFOSAA	ND	0.675	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFDaA	ND	0.390	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFTDA	ND	0.243	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
PFTeDA	ND	0.372	2.46	3.94		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	121	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFHxA	IS	115	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C4-PFHpA	IS	100	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
18O2-PFHxS	IS	109	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFOA	IS	99.6	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C8-PFOS	IS	106	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C5-PFNA	IS	94.3	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFDA	IS	118	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
d3-MeFOSAA	IS	86.2	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFUnA	IS	97.4	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
d5-EtFOSAA	IS	80.5	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFDaA	IS	83.7	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1
13C2-PFTeDA	IS	110	50 - 150		B7L0073	12-Dec-17	0.254 L	28-Dec-17 01:37	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.



**Sample ID: FT-MW08I-20171129**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-04	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	29-Nov-17 15:22		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	4.63	0.855	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFHxA	109	1.04	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFHpA	70.8	0.282	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFHxS	460	0.453	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFOA	367	0.311	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFOS	818	1.93	11.9	19.1	D	B7L0073	12-Dec-17	0.262 L	30-Dec-17 06:08	5
PFNA	1870	1.94	11.9	19.1	D	B7L0073	12-Dec-17	0.262 L	30-Dec-17 06:08	5
PFDA	278	0.712	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
MeFOSAA	ND	0.788	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFUnA	478	0.502	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
EtFOSAA	ND	0.655	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFDaA	ND	0.378	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFTDA	ND	0.236	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
PFTeDA	ND	0.361	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	110	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C2-PFHxA	IS	114	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C4-PFHpA	IS	114	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
18O2-PFHxS	IS	103	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C2-PFOA	IS	87.2	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C8-PFOS	IS	104	50 - 150	D	B7L0073	12-Dec-17	0.262 L	30-Dec-17 06:08	5
13C5-PFNA	IS	99.2	50 - 150	D	B7L0073	12-Dec-17	0.262 L	30-Dec-17 06:08	5
13C2-PFDA	IS	84.9	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
d3-MeFOSAA	IS	85.9	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C2-PFUnA	IS	71.6	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
d5-EtFOSAA	IS	80.7	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C2-PFDaA	IS	79.2	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1
13C2-PFTeDA	IS	72.4	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 01:48	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW01S-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-05	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 09:35		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.884	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFHxA	ND	1.08	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFHpA	ND	0.292	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFHxS	ND	0.468	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFOA	ND	0.321	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFOS	ND	0.399	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFNA	ND	0.400	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFDA	ND	0.736	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
MeFOSAA	ND	0.815	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFUnA	ND	0.519	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
EtFOSAA	ND	0.677	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFDaA	ND	0.391	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFTDA	ND	0.244	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
PFTeDA	ND	0.373	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	135	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFHxA	IS	112	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C4-PFHpA	IS	112	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
18O2-PFHxS	IS	105	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFOA	IS	111	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C8-PFOS	IS	120	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C5-PFNA	IS	101	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFDA	IS	74.7	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
d3-MeFOSAA	IS	81.3	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFUnA	IS	74.4	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
d5-EtFOSAA	IS	63.6	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFDaA	IS	65.2	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1
13C2-PFTeDA	IS	108	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 01:59	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW02I-20171130**

**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater	Lab Sample:	1701829-06	Column:	BEH C18		
Project:	112G08005-WE05	Date Collected:	30-Nov-17 08:49	Date Received:	01-Dec-17 09:20				
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.846	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFHxA	ND	1.03	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFHpA	ND	0.279	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFHxS	ND	0.448	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFOA	ND	0.308	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFOS	ND	0.382	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFNA	ND	0.383	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFDA	ND	0.705	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
MeFOSAA	ND	0.780	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFUnA	ND	0.497	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
EtFOSAA	ND	0.648	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFDaA	ND	0.375	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFTDA	ND	0.234	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
PFTeDA	ND	0.357	2.37	3.78		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	125	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFHxA	IS	95.2	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C4-PFHpA	IS	98.6	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
18O2-PFHxS	IS	113	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFOA	IS	115	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C8-PFOS	IS	97.6	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C5-PFNA	IS	101	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFDA	IS	77.9	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
d3-MeFOSAA	IS	71.3	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFUnA	IS	87.1	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
d5-EtFOSAA	IS	83.0	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFDaA	IS	101	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1
13C2-PFTeDA	IS	120	50 - 150		B7L0073	12-Dec-17	0.264 L	28-Dec-17 02:10	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW01I-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-07	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 09:32		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.854	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFHxA	ND	1.04	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFHpA	ND	0.282	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFHxS	ND	0.452	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFOA	ND	0.311	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFOS	ND	0.385	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFNA	ND	0.387	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFDA	ND	0.711	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
MeFOSAA	ND	0.787	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFUnA	ND	0.501	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
EtFOSAA	ND	0.654	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFDaA	ND	0.378	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFTDA	ND	0.236	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
PFTeDA	ND	0.360	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	144	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFHxA	IS	103	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C4-PFHpA	IS	101	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
18O2-PFHxS	IS	82.7	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFOA	IS	104	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C8-PFOS	IS	93.6	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C5-PFNA	IS	106	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFDA	IS	71.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
d3-MeFOSAA	IS	90.9	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFUnA	IS	94.6	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
d5-EtFOSAA	IS	93.5	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFDaA	IS	96.8	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1
13C2-PFTeDA	IS	134	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:22	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

Sample ID: FT-DUP02-20171130					Modified EPA Method 537					
Client Data  Name: Tetra Tech Project: 112G08005-WE05 SDG: WE05  Matrix: QC Water Date Collected: 30-Nov-17 09:00					Laboratory Data  Lab Sample: 1701829-08 Date Received: 01-Dec-17 09:20  Column: BEH C18					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.838	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFHxA	ND	1.02	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFHpA	ND	0.277	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFHxS	ND	0.443	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFOA	ND	0.305	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFOS	ND	0.378	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFNA	ND	0.379	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFDA	ND	0.697	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
MeFOSAA	ND	0.772	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFUnA	ND	0.491	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
EtFOSAA	ND	0.641	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFDoA	ND	0.371	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFTrDA	ND	0.231	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
PFTeDA	ND	0.353	2.34	3.74		B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	118	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFHxA	IS	105	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C4-PFHpA	IS	98.0	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
18O2-PFHxS	IS	108	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFOA	IS	115	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C8-PFOS	IS	95.4	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C5-PFNA	IS	88.9	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFDA	IS	81.6	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
d3-MeFOSAA	IS	81.1	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFUnA	IS	81.8	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
d5-EtFOSAA	IS	71.7	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFDoA	IS	81.4	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1
13C2-PFTeDA	IS	71.1	50 - 150			B7L0073	12-Dec-17	0.267 L	28-Dec-17 02:33	1

DL - Detection Limit

 LOD - Limit of Detection  
 LOQ - Limit of quantitation

 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL.

 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
 Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW02S-20171130**

**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-09	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 09:52		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	3.61	0.865	2.41	3.86	J	B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFHxA	35.8	1.05	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFHpA	19.2	0.285	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFHxS	451	0.457	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFOA	272	0.314	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFOS	108	0.390	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFNA	451	0.391	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFDA	12.5	0.720	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
MeFOSAA	ND	0.797	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFUnA	180	0.507	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
EtFOSAA	ND	0.662	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFDaA	ND	0.383	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFTDA	ND	0.239	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
PFTeDA	ND	0.365	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	98.4	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFHxA	IS	101	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C4-PFHpA	IS	93.6	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
18O2-PFHxS	IS	89.8	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFOA	IS	106	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C8-PFOS	IS	91.0	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C5-PFNA	IS	107	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFDA	IS	98.6	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
d3-MeFOSAA	IS	70.4	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFUnA	IS	88.8	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
d5-EtFOSAA	IS	79.5	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFDaA	IS	105	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1
13C2-PFTeDA	IS	112	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 02:44	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW03S-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-10	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 11:18		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.85	0.855	2.39	3.82	J	B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFHxA	4.66	1.04	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFHpA	2.13	0.282	2.39	3.82	J	B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFHxS	2.65	0.453	2.39	3.82	J	B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFOA	3.35	0.311	2.39	3.82	J	B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFOS	3.04	0.386	2.39	3.82	J	B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFNA	7.29	0.387	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFDA	ND	0.712	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
MeFOSAA	ND	0.789	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFUnA	ND	0.502	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
EtFOSAA	ND	0.655	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFDaA	ND	0.378	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFTDA	ND	0.236	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
PFTeDA	ND	0.361	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	110	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFHxA	IS	102	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C4-PFHpA	IS	91.4	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
18O2-PFHxS	IS	100	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFOA	IS	89.2	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C8-PFOS	IS	122	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C5-PFNA	IS	84.1	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFDA	IS	94.9	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
d3-MeFOSAA	IS	84.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFUnA	IS	85.9	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
d5-EtFOSAA	IS	72.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFDaA	IS	74.1	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1
13C2-PFTeDA	IS	125	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 02:55	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW09I-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-11	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 11:22		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.15	0.891	2.49	3.98	J	B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFHxA	3.08	1.08	2.49	3.98	J	B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFHpA	1.30	0.294	2.49	3.98	J	B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFHxS	2.35	0.471	2.49	3.98	J	B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFOA	4.05	0.324	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFOS	ND	0.402	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFNA	1.50	0.403	2.49	3.98	J	B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFDA	ND	0.742	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
MeFOSAA	ND	0.821	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFUnA	ND	0.523	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
EtFOSAA	ND	0.682	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFDaA	ND	0.394	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFTDA	ND	0.246	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
PFTeDA	ND	0.376	2.49	3.98		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	125	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFHxA	IS	118	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C4-PFHpA	IS	113	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
18O2-PFHxS	IS	91.6	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFOA	IS	114	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C8-PFOS	IS	95.5	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C5-PFNA	IS	85.0	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFDA	IS	77.3	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
d3-MeFOSAA	IS	93.3	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFUnA	IS	99.2	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
d5-EtFOSAA	IS	78.4	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFDaA	IS	103	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1
13C2-PFTeDA	IS	149	50 - 150		B7L0073	12-Dec-17	0.251 L	28-Dec-17 03:06	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.



**Sample ID: FT-DUP03-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-12	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 12:00		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.07	0.912	2.55	4.08	J	B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFHxA	2.70	1.11	2.55	4.08	J	B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFHpA	1.49	0.301	2.55	4.08	J	B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFHxS	2.34	0.482	2.55	4.08	J	B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFOA	4.29	0.332	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFOS	ND	0.411	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFNA	1.23	0.413	2.55	4.08	J	B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFDA	ND	0.759	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
MeFOSAA	ND	0.840	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFUnA	ND	0.535	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
EtFOSAA	ND	0.698	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFDaA	ND	0.403	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFTDA	ND	0.252	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
PFTeDA	ND	0.385	2.55	4.08		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	114	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFHxA	IS	98.0	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C4-PFHpA	IS	88.9	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
18O2-PFHxS	IS	108	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFOA	IS	103	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C8-PFOS	IS	107	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C5-PFNA	IS	96.3	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFDA	IS	109	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
d3-MeFOSAA	IS	111	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFUnA	IS	121	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
d5-EtFOSAA	IS	92.6	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFDaA	IS	96.4	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1
13C2-PFTeDA	IS	111	50 - 150		B7L0073	12-Dec-17	0.245 L	28-Dec-17 03:51	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW05I-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-13	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 12:00		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.46	0.865	2.41	3.86	J	B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFHxA	14.6	1.05	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFHpA	18.6	0.286	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFHxS	53.1	0.458	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFOA	66.3	0.315	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFOS	180	0.390	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFNA	216	0.391	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFDA	1.05	0.720	2.41	3.86	J	B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
MeFOSAA	ND	0.797	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFUnA	ND	0.507	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
EtFOSAA	ND	0.662	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFDaA	ND	0.383	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFTDA	ND	0.239	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
PFTeDA	ND	0.365	2.41	3.86		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	123	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFHxA	IS	109	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C4-PFHpA	IS	87.7	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
18O2-PFHxS	IS	115	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFOA	IS	106	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C8-PFOS	IS	96.6	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C5-PFNA	IS	106	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFDA	IS	110	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
d3-MeFOSAA	IS	75.3	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFUnA	IS	79.1	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
d5-EtFOSAA	IS	76.4	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFDaA	IS	87.4	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1
13C2-PFTeDA	IS	108	50 - 150		B7L0073	12-Dec-17	0.259 L	28-Dec-17 04:02	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW07S-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-14	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 13:36		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.855	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFHxA	ND	1.04	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFHpA	ND	0.282	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFHxS	ND	0.452	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFOA	ND	0.311	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFOS	ND	0.385	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFNA	ND	0.387	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFDA	ND	0.712	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
MeFOSAA	ND	0.788	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFUnA	ND	0.501	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
EtFOSAA	ND	0.654	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFDaA	ND	0.378	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFTDA	ND	0.236	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
PFTeDA	ND	0.361	2.39	3.82		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	111	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFHxA	IS	98.5	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C4-PFHpA	IS	78.8	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
18O2-PFHxS	IS	81.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFOA	IS	93.1	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C8-PFOS	IS	84.1	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C5-PFNA	IS	94.2	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFDA	IS	93.5	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
d3-MeFOSAA	IS	61.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFUnA	IS	76.0	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
d5-EtFOSAA	IS	73.2	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFDaA	IS	78.5	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1
13C2-PFTeDA	IS	104	50 - 150		B7L0073	12-Dec-17	0.262 L	28-Dec-17 04:14	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW05S-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-15	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 12:55		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	1.43	0.871	2.43	3.89	J	B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFHxA	5.05	1.06	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFHpA	3.94	0.288	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFHxS	21.9	0.461	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFOA	4.86	0.317	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFOS	20.9	0.393	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFNA	28.3	0.394	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFDA	1.14	0.725	2.43	3.89	J	B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
MeFOSAA	ND	0.803	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFUnA	ND	0.511	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
EtFOSAA	ND	0.667	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFDaA	ND	0.385	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFTDA	ND	0.240	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
PFTeDA	ND	0.367	2.43	3.89		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	112	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFHxA	IS	100	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C4-PFHpA	IS	82.6	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
18O2-PFHxS	IS	89.7	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFOA	IS	105	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C8-PFOS	IS	81.3	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C5-PFNA	IS	88.0	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFDA	IS	81.5	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
d3-MeFOSAA	IS	77.2	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFUnA	IS	102	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
d5-EtFOSAA	IS	70.6	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFDaA	IS	102	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1
13C2-PFTeDA	IS	122	50 - 150		B7L0073	12-Dec-17	0.257 L	28-Dec-17 04:25	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW06I-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-16	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 13:22		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.895	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFHxA	ND	1.09	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFHpA	ND	0.296	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFHxS	ND	0.474	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFOA	ND	0.326	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFOS	ND	0.404	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFNA	ND	0.405	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFDA	ND	0.745	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
MeFOSAA	ND	0.825	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFUnA	ND	0.525	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
EtFOSAA	ND	0.685	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFDaA	ND	0.396	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFTDA	ND	0.247	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
PFTeDA	ND	0.378	2.50	4.00		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	120	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFHxA	IS	108	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C4-PFHpA	IS	99.9	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
18O2-PFHxS	IS	104	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFOA	IS	95.9	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C8-PFOS	IS	116	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C5-PFNA	IS	92.6	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFDA	IS	70.7	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
d3-MeFOSAA	IS	56.1	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFUnA	IS	76.9	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
d5-EtFOSAA	IS	50.2	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFDaA	IS	71.4	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1
13C2-PFTeDA	IS	131	50 - 150		B7L0073	12-Dec-17	0.250 L	28-Dec-17 04:36	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW06I-FRB-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-17	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 13:22		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.833	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFHxA	ND	1.01	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFHpA	ND	0.275	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFHxS	ND	0.441	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFOA	ND	0.303	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFOS	ND	0.376	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFNA	ND	0.377	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFDA	ND	0.694	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
MeFOSAA	ND	0.768	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFUnA	ND	0.489	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
EtFOSAA	ND	0.638	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFDaA	ND	0.369	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFTDA	ND	0.230	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
PFTeDA	ND	0.351	2.32	3.72		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	121	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFHxA	IS	106	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C4-PFHpA	IS	105	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
18O2-PFHxS	IS	91.7	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFOA	IS	102	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C8-PFOS	IS	85.1	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C5-PFNA	IS	97.6	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFDA	IS	78.8	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
d3-MeFOSAA	IS	66.3	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFUnA	IS	85.7	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
d5-EtFOSAA	IS	57.0	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFDaA	IS	80.7	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1
13C2-PFTeDA	IS	122	50 - 150		B7L0073	12-Dec-17	0.269 L	28-Dec-17 04:47	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW10I-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-18	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 14:06		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.885	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFHxA	1.79	1.08	2.47	3.95	J	B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFHpA	0.823	0.292	2.47	3.95	J	B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFHxS	1.58	0.468	2.47	3.95	J	B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFOA	2.96	0.322	2.47	3.95	J	B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFOS	ND	0.399	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFNA	0.826	0.400	2.47	3.95	J	B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFDA	ND	0.736	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
MeFOSAA	ND	0.815	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFUnA	ND	0.519	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
EtFOSAA	ND	0.677	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFDaA	ND	0.391	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFTDA	ND	0.244	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
PFTeDA	ND	0.373	2.47	3.95		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	115	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFHxA	IS	91.6	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C4-PFHpA	IS	113	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
18O2-PFHxS	IS	98.6	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFOA	IS	114	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C8-PFOS	IS	118	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C5-PFNA	IS	116	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFDA	IS	108	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
d3-MeFOSAA	IS	84.7	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFUnA	IS	104	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
d5-EtFOSAA	IS	97.9	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFDaA	IS	131	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1
13C2-PFTeDA	IS	111	50 - 150		B7L0073	12-Dec-17	0.253 L	28-Dec-17 04:58	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

**Sample ID: FT-MW06S-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	Groundwater		Lab Sample:	1701829-19	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 14:37		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.887	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFHxA	1.13	1.08	2.48	3.97	J	B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFHpA	ND	0.293	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFHxS	0.694	0.469	2.48	3.97	J	B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFOA	ND	0.323	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFOS	ND	0.400	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFNA	ND	0.401	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFDA	ND	0.739	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
MeFOSAA	ND	0.818	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFUnA	ND	0.520	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
EtFOSAA	ND	0.679	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFDaA	ND	0.393	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFTDA	ND	0.245	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
PFTeDA	ND	0.374	2.48	3.97		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	120	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFHxA	IS	97.3	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C4-PFHpA	IS	92.3	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
18O2-PFHxS	IS	98.2	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFOA	IS	97.0	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C8-PFOS	IS	108	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C5-PFNA	IS	107	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFDA	IS	66.6	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
d3-MeFOSAA	IS	77.9	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFUnA	IS	99.9	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
d5-EtFOSAA	IS	76.1	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFDaA	IS	82.0	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1
13C2-PFTeDA	IS	101	50 - 150		B7L0073	12-Dec-17	0.252 L	28-Dec-17 05:09	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.



**Sample ID: FT-EB01-20171130**
**Modified EPA Method 537**

Client Data					Laboratory Data				
Name:	Tetra Tech	Matrix:	QC Water		Lab Sample:	1701829-20	Column:	BEH C18	
Project:	112G08005-WE05	Date Collected:	30-Nov-17 15:00		Date Received:	01-Dec-17 09:20			
SDG:	WE05								

Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.861	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFHxA	ND	1.05	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFHpA	ND	0.284	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFHxS	ND	0.456	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFOA	ND	0.313	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFOS	ND	0.388	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFNA	ND	0.390	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFDA	ND	0.717	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
MeFOSAA	ND	0.794	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFUnA	ND	0.505	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
EtFOSAA	ND	0.659	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFDaA	ND	0.381	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFTDA	ND	0.238	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
PFTeDA	ND	0.363	2.40	3.85		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	104	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFHxA	IS	103	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C4-PFHpA	IS	106	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
18O2-PFHxS	IS	67.6	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFOA	IS	92.6	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C8-PFOS	IS	92.6	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C5-PFNA	IS	77.7	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFDA	IS	88.8	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
d3-MeFOSAA	IS	67.3	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFUnA	IS	68.1	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
d5-EtFOSAA	IS	57.1	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFDaA	IS	57.8	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1
13C2-PFTeDA	IS	91.9	50 - 150		B7L0073	12-Dec-17	0.260 L	28-Dec-17 05:21	1

DL - Detection Limit

LOD - Limit of Detection  
LOQ - Limit of quantitation

LCL-UCL- Lower control limit - upper control limit  
Results reported to the DL.

When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
Only the linear isomer is reported for all other analytes.

## **Appendix C**

Support Documentation

ANALYTE	ORIGINAL MW08S- 20171129	DUPLICATE DUP01- 20171129	RL	RPD	RPD > 30%	ORIGINAL SAMPLE CONC >5xRL	DUPLICATE SAMPLE CONC >5xRL	DIFFERENCE >2XRL
PENTADEC AFLUORO OCTANOIC ACID	45.6	38.1	3.77	17.92	FALSE	TRUE	TRUE	FALSE
PERFLUOROBUTANESULFONIC ACID	1.76	1.65	3.77	6.45	FALSE	FALSE	FALSE	FALSE
PERFLUORODECANOIC ACID	11.1	12.3	3.77	10.26	FALSE	FALSE	FALSE	FALSE
PERFLUOROHEPTANOIC ACID	20.7	19.5	3.77	5.97	FALSE	TRUE	TRUE	FALSE
PERFLUOROHXANESULFONIC ACID	37.5	36.4	3.77	2.98	FALSE	TRUE	TRUE	FALSE
PERFLUOROHXANOIC ACID	15.5	14.6	3.77	5.98	FALSE	FALSE	FALSE	FALSE
PERFLUORONONANOIC ACID	154	132	3.77	15.38	FALSE	TRUE	TRUE	TRUE
PERFLUORO OCTANE SULFONIC ACID	83.5	62.3	3.77	29.08	FALSE	TRUE	TRUE	TRUE
PERFLUOROUNDECANOIC ACID	62.1	56.6	3.77	9.27	FALSE	TRUE	TRUE	FALSE

ANALYTE	ORIGINAL MW09I- 20171130	DUPLICATE DUP03- 20171130	RL	RPD	RPD > 30%	ORIGINAL SAMPLE CONC >5xRL	DUPLICATE SAMPLE CONC >5xRL	DIFFERENCE >2XRL
PENTADEC AFLUORO OCTANOIC ACID	4.05	4.29	3.98	5.76	FALSE	FALSE	FALSE	FALSE
PERFLUOROBUTANESULFONIC ACID	1.15	1.07	3.98	7.21	FALSE	FALSE	FALSE	FALSE
PERFLUOROHEPTANOIC ACID	1.3	1.49	3.98	13.62	FALSE	FALSE	FALSE	FALSE
PERFLUOROHXANESULFONIC ACID	2.35	2.34	3.98	0.43	FALSE	FALSE	FALSE	FALSE
PERFLUOROHXANOIC ACID	3.08	2.7	3.98	13.15	FALSE	FALSE	FALSE	FALSE
PERFLUORONONANOIC ACID	1.5	1.23	3.98	19.78	FALSE	FALSE	FALSE	FALSE

1 of 2



## CHAIN OF CUSTODY

### For Laboratory Use Only

Work Order #: 1701829 Temp: 3.9 °C  
Storage ID: WR-2 Storage Secured: Yes ☒ No ☐

Project ID: 112G08006-WE05 PO#: \_\_\_\_\_ Sampler: LD/TB/BB  
(name)

TAT (check one): ☒ 21 days  
☐ 14 days ☐ 7 days Specify: \_\_\_\_\_  
Standard: ☒ Rush (surcharge may apply)

Invoice to: Name Company Address City State Ph# Fax#  
Tetra Tech 5700 Lake Wright Dr. Suite 102 Norfolk VA

Relinquished by (printed name and signature) Date Time Received by (printed name and signature) Date Time  
Lauren Donston Lauren Donston 11/30/17 1730 Ian Anguillo [Signature] 12/1/17 0957  
Relinquished by (printed name and signature) Date Time Received by (printed name and signature) Date Time

SHIP TO: Vista Analytical Laboratory  
1104 Windfield Way  
El Dorado Hills, CA 95762  
(916) 673-1520 \* Fax (916) 673-0106

ATTN: \_\_\_\_\_

Method of Shipment:  
FedEx

Tracking No.: \_\_\_\_\_

### Add Analysis(es) Requested

### Container(s)

Mod. EPA  
Method 537

EPA Method  
537(DW only)

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	PFOA I	UCMR3	537 List	Full List	Other: F. Below	PFOA I	UCMR3	PFAS LI	Comments
FT-MW08S-20171129	11-29-17	1512		2	P	GW			X						
FT-MW08S-FRB-20171129	11-29-17	1512		1		GA			X						FRB
FT-DUP01-20171129	11-29-17	1200		↓		GA									Duplicate
FT-MW08I-20171129	↓	1428	1522 AW	6		GW									MS/MSD
FT-MW01S-20171130	11-30-17	0845	0935 XA	6		GW									MS/MSD
FT-MW02I-20171130	↓	0849		2		↓									
FT-MW01I-20171130	↓	0932		2		↓									
FT-DUP02-20171130	↓	0900		2		GA									Duplicate
FT-MW02S-20171130	↓	0952		2		GW									
FT-MW03S-20171130	↓	1030	1118 XA	2	↓	GW			↓						

### Special Instructions/Comments:

~~Extract FRB. Only analyze FRB extract if parent sample~~  
Extract FRB. only analyze FRB extract if parent sample is positive for PFAS.

SEND  
DOCUMENTATION  
AND RESULTS TO:

Name: Kristi Francisco  
Company: Tetra Tech  
Address: 5700 Lake Wright Dr. Suite 102  
City: Norfolk State: VA Zip: 23502  
Phone: 757-466-4902 Fax: \_\_\_\_\_  
Email: Kristi.Francisco@tetratech.com

Container Types: P= HDPE, PJ= HDPE Jar  
O = Other: \_\_\_\_\_

Bottle Preservation Type: T = Thiosulfate,  
TZ = Trizma: \_\_\_\_\_

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment,  
SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: \_\_\_\_\_





# CHAIN OF CUSTODY

## For Laboratory Use Only

Work Order #: 1701821 Temp: 3.9 °C  
Storage ID: WR-2 Storage Secured: Yes ☒ No ☐

Project ID: 112G08005-WE05 PO#: \_\_\_\_\_ Sampler: LD/JB/BB  
(name)

TAT Standard: ☒ 21 days  
(check one): Rush (surcharge may apply)  
☐ 14 days ☐ 7 days Specify: \_\_\_\_\_

Invoice to: Name \_\_\_\_\_ Company \_\_\_\_\_ Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Ph# \_\_\_\_\_ Fax# \_\_\_\_\_

Tetra Tech 5700 Lake Wright Dr. Suite 102 Norfolk VA 757-466-4902

Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Lauren Dorston Rawten Dorston 11/30/17 1730 Ian Arguelles La Claver 12/1/17 0957

Relinquished by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Received by (printed name and signature) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

SHIP TO: Vista Analytical Laboratory  
1104 Windfield Way  
El Dorado Hills, CA 95762  
(916) 673-1520 \* Fax (916) 673-0106

Method of Shipment:  
Fed Ex

ATTN: \_\_\_\_\_

Tracking No.: \_\_\_\_\_

## Add Analysis(es) Requested

### Container(s)

Mod. EPA  
Method 537

EPA Method  
537(DW only)

Sample ID	Date	Time	Location/Sample Description	Quantity	Type	Matrix	PFOA/PFOS	UCMR3 PFAS List#	537 List: 14	Full List of 28	Other: Please List Below	PFOA/PFOS	UCMR3 PFAS List#	PFAS List: 14	Comments
FT-MW09I-20171130	11-30-17	1122		2	P	GW		X							
FT-DUP03-20171130	11-30-17	1200				QA									Duplicate
FT-MW05I-20171130		1200				GW									
FT-MW07S-20171130		1250	1336 <del>1250</del>			GW									
FT-MW05S-20171130		1255				GW									
FT-MW06I-20171130		1322				GW									
FT-MW06I-FRB-20171130		1322				QA									FRB
FT-MW10I-20171130		1406				GW									
FT-MW06S-20171130		1437				GW									
FT-EB01-20171130		1500				QA									Equipment Blank

Special Instructions/Comments: Extract FRB. only analyze FRB  
extract if parent sample is positive for PFAS

SEND  
DOCUMENTATION  
AND RESULTS TO:

Name: Kristi Francisco  
Company: Tetra Tech  
Address: 5700 Lake Wright Dr. Suite 102  
City: Norfolk State: VA Zip: 23502  
Phone: 757-466-4902 Fax: \_\_\_\_\_  
Email: Kristi.Francisco@tetratech.com

Container Types: P = HDPE, PJ = HDPE Jar  
O = Other: \_\_\_\_\_

Bottle Preservation Type: T = Thiosulfate,  
TZ = Trizma: \_\_\_\_\_

Matrix Types: AQ = Aqueous, DW = Drinking Water, EF = Effluent, PP = Pulp/Paper, SD = Sediment,  
SL = Sludge, SO = Soil, WW = Wastewater, B = Blood/Serum, O = Other: \_\_\_\_\_

# Sample Log-in Checklist

 Vista Work Order #: 1701829 TAT Std

<b>Samples Arrival:</b>	<b>Date/Time</b> 12/1/17 0920	<b>Initials:</b> FA	<b>Location:</b> WR-2 <b>Shelf/Rack:</b> N/A
<b>Logged In:</b>	<b>Date/Time</b> 12/2/17 1312	<b>Initials:</b> SR	<b>Location:</b> WR-2 <b>Shelf/Rack:</b> B6
<b>Delivered By:</b>	<input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> On Trac <input type="checkbox"/> GSO <input type="checkbox"/> DHL <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Other		
<b>Preservation:</b>	<input checked="" type="checkbox"/> Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> Dry Ice <input type="checkbox"/> None		
<b>Temp °C:</b> 3.8 (uncorrected)	<b>Time:</b> 0956		<b>Thermometer ID:</b> IR-1
<b>Temp °C:</b> 3.4 (corrected)	<b>Probe used:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

		YES	NO	NA
Adequate Sample Volume Received?		<input checked="" type="checkbox"/>		
Holding Time Acceptable?		<input checked="" type="checkbox"/>		
Shipping Container(s) Intact?		<input checked="" type="checkbox"/>		
Shipping Custody Seals Intact?		<input checked="" type="checkbox"/>		
Shipping Documentation Present?		<input checked="" type="checkbox"/>		
Airbill	Trk # 8102 9107 043	<input checked="" type="checkbox"/>		
Sample Container Intact?		<input checked="" type="checkbox"/>		
Sample Custody Seals Intact?				<input checked="" type="checkbox"/>
Chain of Custody / Sample Documentation Present?		<input checked="" type="checkbox"/>		
COC Anomaly/Sample Acceptance Form completed?			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
If Chlorinated or Drinking Water Samples, Acceptable Preservation?				<input checked="" type="checkbox"/>
<b>Preservation Documented:</b>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> <input type="checkbox"/> Trizma <input type="checkbox"/> None <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA <input type="checkbox"/>			
<b>Shipping Container</b>	<input checked="" type="checkbox"/> Vista <input type="checkbox"/> Client <input type="checkbox"/> Retain <input type="checkbox"/> Return <input type="checkbox"/> Dispose			

Comments:

**SDG Number WE05**

**Vista Work Order No. 1701829**

**Case Narrative**

**Sample Condition on Receipt:**

Fourteen groundwater samples and six QC water samples were received in good condition and within the method temperature requirements. The samples were received and stored securely in accordance with Vista standard operating procedures and EPA methodology.

**Analytical Notes:**

**Modified EPA Method 537**

Sample "FT-MW08I-20171129", as well as the associated MS/MSD, contained particulate and was centrifuged prior to extraction.

The samples were extracted and analyzed for a selected list of PFAS using Modified EPA Method 537.

**Holding Times**

The samples were extracted and analyzed within the method hold times.

**Quality Control**

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. No analytes were detected in the Method Blank above 1/2 the LOQ. The OPR recoveries were within the method acceptance criteria

The extracts of the following samples, as well as the Matrix Spike Duplicates, were re-injected because one or more Injection Internal Standard Analyte response areas were outside of criteria:

<u>Laboratory ID</u>	<u>Sample Name</u>
1701829-04	FT-MW08I-20171129
1701829-05	FT-MW01S-20171130
1701829-07	FT-MW01I-20171130
1701829-08	FT-DUP02-20171130
1701829-10	FT-MW03S-20171130
1701829-11	FT-MW09I-20171130
1701829-12	FT-DUP03-20171130
1701829-14	FT-MW07S-20171130
1701829-16	FT-MW06I-20171130
1701829-17	FT-MW06I-FRB-20171130
1701829-18	FT-MW10I-20171130
1701829-19	FT-MW06S-20171130
1701829-20	FT-EB01-20171130

The area criteria passed for all second injections except FT-DUP02-20171130. The results from the re-injections have been reported.

The labeled standard recoveries for all QC and field samples were within the acceptance criteria.

As requested, an MS/MSD was performed on sample "FT-MW08I-20171129" and "FT-MW01S-20171130". The MS/MSD recoveries and/or RPDs were out of the criteria for PFBS, PFHxA, PFHpA, PFHxS, PFOA, PFOS, PFNA, PFDA and PFUnA in "FT-MW08I-20171129" and for PFTrDA in "FT-MW01S-20171130".



# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701829-01	FT-MW08S-20171129	29-Nov-17 15:12	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-02	FT-MW08S-FRB-20171129	29-Nov-17 15:12	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-03	FT-DUP01-20171129	29-Nov-17 12:00	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-04	FT-MW08I-20171129	MS/MSD29-Nov-17 15:22	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-05	FT-MW01S-20171130	MS/MSD30-Nov-17 09:35	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-06	FT-MW02I-20171130	30-Nov-17 08:49	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-07	FT-MW01I-20171130	30-Nov-17 09:32	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-08	FT-DUP02-20171130	30-Nov-17 09:00	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-09	FT-MW02S-20171130	30-Nov-17 09:52	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-10	FT-MW03S-20171130	30-Nov-17 11:18	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-11	FT-MW09I-20171130	30-Nov-17 11:22	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-12	FT-DUP03-20171130	30-Nov-17 12:00	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-13	FT-MW05I-20171130	30-Nov-17 12:00	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-14	FT-MW07S-20171130	30-Nov-17 13:36	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-15	FT-MW05S-20171130	30-Nov-17 12:55	01-Dec-17 09:20	HDPE Bottle, 250 mL
				HDPE Bottle, 250 mL
1701829-16	FT-MW06I-20171130	30-Nov-17 13:22	01-Dec-17 09:20	HDPE Bottle, 250 mL

Vista Project: 1701829

Client Project: 112G08005-WE05

# Sample Inventory Report

Vista Sample ID	Client Sample ID	Sampled	Received	Components/Containers
1701829-16	FT-MW06I-20171130	30-Nov-17 13:22	01-Dec-17 09:20	HDPE Bottle, 250 mL
1701829-17	FT-MW06I-FRB-20171130	30-Nov-17 13:22	01-Dec-17 09:20	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701829-18	FT-MW10I-20171130	30-Nov-17 14:06	01-Dec-17 09:20	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701829-19	FT-MW06S-20171130	30-Nov-17 14:37	01-Dec-17 09:20	HDPE Bottle, 250 mL HDPE Bottle, 250 mL
1701829-20	FT-EB01-20171130	30-Nov-17 15:00	01-Dec-17 09:20	HDPE Bottle, 250 mL HDPE Bottle, 250 mL

## **DATA QUALIFIERS & ABBREVIATIONS**

<b>B</b>	<b>This compound was also detected in the method blank.</b>
<b>D</b>	<b>Dilution</b>
<b>E</b>	<b>The associated compound concentration exceeded the calibration range of the instrument.</b>
<b>H</b>	<b>Recovery and/or RPD was outside laboratory acceptance limits.</b>
<b>I</b>	<b>Chemical Interference</b>
<b>J</b>	<b>The amount detected is below the Reporting Limit/LOQ.</b>
<b>M</b>	<b>Estimated Maximum Possible Concentration. (CA Region 2 projects only)</b>
<b>*</b>	<b>See Cover Letter</b>
<b>Conc.</b>	<b>Concentration</b>
<b>NA</b>	<b>Not applicable</b>
<b>ND</b>	<b>Not Detected</b>
<b>TEQ</b>	<b>Toxic Equivalency</b>
<b>U</b>	<b>Not Detected (specific projects only)</b>

**Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.**

Sample ID: Method Blank					Modified EPA Method 537					
<div>Client Data</div> <div>Name: Tetra Tech Project: 112G08005-WE05</div> <div>Matrix: Aqueous</div>					<div>Laboratory Data</div> <div>Lab Sample: B7L0073-BLK1 Column: BEH C18</div>					
Analyte	Conc. (ng/L)	DL	LOD	LOQ	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	ND	0.895	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFHxA	ND	1.09	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFHpA	ND	0.296	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFHxS	ND	0.474	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFOA	ND	0.326	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFOS	ND	0.404	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFNA	ND	0.405	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFDA	ND	0.745	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
MeFOSAA	ND	0.825	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFUnA	ND	0.525	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
EtFOSAA	ND	0.685	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFDaA	ND	0.396	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFTTrDA	ND	0.247	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
PFTeDA	ND	0.378	2.50	4.00		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
Labeled Standards	Type	% Recovery	Limits		Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS	116	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFHxA	IS	106	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C4-PFHpA	IS	90.9	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
18O2-PFHxS	IS	95.3	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFOA	IS	99.6	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C8-PFOS	IS	87.1	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C5-PFNA	IS	90.4	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFDA	IS	92.9	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
d3-MeFOSAA	IS	72.5	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFUnA	IS	74.7	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
d5-EtFOSAA	IS	70.5	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFDaA	IS	68.9	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1
13C2-PFTeDA	IS	64.6	50 - 150			B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:45	1

DL - Detection Limit

 LOD - Limit of Detection  
 LOQ - Limit of quantitation

 LCL-UCL- Lower control limit - upper control limit  
 Results reported to the DL.

 When reported, PFHxS, PFOA and PFOS include both linear and branched isomers.  
 Only the linear isomer is reported for all other analytes.

Sample ID: OPR					Modified EPA Method 537					
<b>Client Data</b> Name: Tetra Tech Project: 112G08005-WE05					<b>Laboratory Data</b> Lab Sample: B7L0073-BS1 Column: BEH C18					
Analyte	Amt Found (ng/L)	Spike Amt	% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBS	38.3	40.0	95.8	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFHxA	33.1	40.0	82.8	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFHpA	40.0	40.0	99.9	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFHxS	34.6	40.0	86.4	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFOA	36.4	40.0	91.1	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFOS	34.6	40.0	86.4	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFNA	36.8	40.0	92.0	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFDA	33.0	40.0	82.5	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
MeFOSAA	40.9	40.0	102	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFUnA	45.1	40.0	113	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
EtFOSAA	44.4	40.0	111	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFDaA	36.1	40.0	90.2	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFTTrDA	43.2	40.0	108	60-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
PFTeDA	36.8	40.0	92.1	70-130		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
Labeled Standards	Type		% Rec	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBS	IS		109	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFHxA	IS		110	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C4-PFHpA	IS		104	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
18O2-PFHxS	IS		106	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFOA	IS		118	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C8-PFOS	IS		116	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C5-PFNA	IS		103	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFDA	IS		94.0	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
d3-MeFOSAA	IS		79.2	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFUnA	IS		88.2	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
d5-EtFOSAA	IS		79.1	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFDaA	IS		85.3	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1
13C2-PFTeDA	IS		113	50- 150		B7L0073	12-Dec-17	0.250 L	27-Dec-17 23:23	1

Sample ID: FT-MW08I-20171129

Modified EPA Method 537

Name:	Tetra Tech	Lab Sample:	B7L0073-MS1/B7L0073-MSD1	Source Lab Sample:	1701829-04
Project:	112G08005-WE05	QC Batch:	B7L0073	Date Extracted:	12-Dec-17
Matrix:	Aqueous	Samp Size:	0.240/0.255 L	Column:	BEH C18

Analyte	Sample (ng/L)	MS (ng/L)	MS Spike Amt	MS % Rec	MS Quals	MSD (ng/L)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	4.63	33.7	41.6	69.9	H	36.0	39.2	79.9	13.4		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFHxA	109	132	41.6	55.1	H	140	39.2	79.3	36.0	H	70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFHpA	70.8	127	41.6	134	H	122	39.2	130	3.03		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFHxS	460	410	41.6	-120	H	490	39.2	77.3	924	H	70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFOA	367	378	41.6	28.6	H	374	39.2	18.2	44.4	H	70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFOS	818	1570	208	360	D, H	1220	196	204	55.3	D, H	70-130	30	30-Dec-17 05:46	5	30-Dec-17 05:57	5
PFNA	1870	1280	208	-287	D, H	1700	196	86.2	108	D, H	70-130	30	30-Dec-17 05:46	5	30-Dec-17 05:57	5
PFDA	278	441	41.6	392	H	361	39.2	212	59.6	H	70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
MeFOSAA	ND	33.3	41.6	80.0		36.3	39.2	92.6	14.6		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFUnA	478	513	41.6	84.7		607	39.2	329	118	H	70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
EtFOSAA	ND	43.0	41.6	103		37.0	39.2	94.5	8.61		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFDaA	ND	34.8	41.6	83.6		35.3	39.2	90.1	7.48		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFTTrDA	ND	35.1	41.6	84.4		31.5	39.2	80.3	4.98		60-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1
PFTeDA	ND	39.0	41.6	93.7		34.4	39.2	87.7	6.62		70-130	30	27-Dec-17 23:56	1	28-Dec-17 00:07	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	120		110		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C2-PFHxA	IS	110		108		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C4-PFHpA	IS	97.1		93.2		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
18O2-PFHxS	IS	101		81.6		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C2-PFOA	IS	97.0		93.9		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C8-PFOS	IS	71.5	D	95.8	D	50-150	30-Dec-17 05:46	5	30-Dec-17 05:57	5
13C5-PFNA	IS	107	D	89.6	D	50-150	30-Dec-17 05:46	5	30-Dec-17 05:57	5
13C2-PFDA	IS	96.6		98.0		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
d3-MeFOSAA	IS	91.5		62.3		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C2-PFUnA	IS	90.5		63.8		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
d5-EtFOSAA	IS	67.7		68.6		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C2-PFDaA	IS	85.6		77.2		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1
13C2-PFTeDA	IS	123		96.5		50-150	27-Dec-17 23:56	1	28-Dec-17 00:07	1

**Sample ID: FT-MW01S-20171130**
**Modified EPA Method 537**

Name:	Tetra Tech	Lab Sample:	B7L0073-MS2/B7L0073-MSD2	Source Lab Sample:	1701829-05
Project:	112G08005-WE05	QC Batch:	B7L0073	Date Extracted:	12-Dec-17
Matrix:	Aqueous	Samp Size:	0.258/0.259 L	Column:	BEH C18

Analyte	Sample (ng/L)	MS (ng/L)	MS Spike Amt	MS % Rec	MS Quals	MSD (ng/L)	MSD Spike Amt	MSD % Rec	RPD	MSD Quals	%Rec Limits	RPD Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
PFBS	ND	33.4	38.7	86.4		30.6	38.7	79.0	8.95		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFHxA	ND	28.2	38.7	73.0		28.2	38.7	72.9	0.137		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFHpA	ND	41.2	38.7	106		32.9	38.7	85.1	21.9		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFHxS	ND	36.5	38.7	93.1		33.2	38.7	84.7	9.45		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFOA	ND	32.8	38.7	84.8		33.2	38.7	85.7	1.06		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFOS	ND	30.8	38.7	79.6		31.4	38.7	81.2	1.99		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFNA	ND	33.5	38.7	86.7		29.8	38.7	77.0	11.9		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFDA	ND	38.3	38.7	99.0		31.0	38.7	80.0	21.2		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
MeFOSAA	ND	40.3	38.7	104		31.0	38.7	80.0	26.1		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFUnA	ND	47.0	38.7	122		36.9	38.7	95.3	24.6		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
EtFOSAA	ND	43.5	38.7	113		43.6	38.7	113	0		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFDaA	ND	33.0	38.7	85.3		32.0	38.7	82.8	2.97		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFTTrDA	ND	22.5	38.7	58.2	H	37.2	38.7	96.1	49.1	H	60-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1
PFTeDA	ND	42.4	38.7	110		34.2	38.7	88.2	22.0		70-130	30	28-Dec-17 00:30	1	28-Dec-17 00:19	1

Labeled Standards	Type	MS % Rec	MS Quals	MSD % Rec	MSD Quals	Limits	MS Analyzed	MS Dil	MSD Analyzed	MSD Dil
13C3-PFBS	IS	107		115		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFHxA	IS	115		113		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C4-PFHpA	IS	85.6		102		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
18O2-PFHxS	IS	107		91.9		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFOA	IS	100		106		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C8-PFOS	IS	116		99.8		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C5-PFNA	IS	107		111		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFDA	IS	98.2		93.6		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
d3-MeFOSAA	IS	71.7		86.1		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFUnA	IS	65.5		64.3		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
d5-EtFOSAA	IS	64.1		59.3		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFDaA	IS	116		80.1		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1
13C2-PFTeDA	IS	78.5		99.0		50-150	28-Dec-17 00:30	1	28-Dec-17 00:19	1

# PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOQ as mRL)

B7L0073

Chemist: VC

Prep Date/Time: 12-Dec-17 10:05

13:15

VC 12/12/17

Prepared using: LCMS - SPE Extraction-LCMS

Date/Initials: 12/17/17 ST		Balance ID: HRMS-8									
Cen	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input type="checkbox"/>	B7L0073-BLK1	5	2	0	2	N/A	N/A	(0.250)	VC GEB 12/12/17	7C 12-12-17	7C GEB 12-12-17
<input type="checkbox"/>	B7L0073-BS1	5	2	0	2	↓	↓	(0.250)	✓	↓	↓
<input checked="" type="checkbox"/>	B7L0073-MS1 1701829-04	5	2	0	2	267.88	27.56	0.24032	✓	↓	↓
<input type="checkbox"/>	B7L0073-MS2 1701829-05	4	2	0	1	286.22	27.82	0.25840	✓	↓	↓
<input checked="" type="checkbox"/>	B7L0073-MSD1 1701829-04	5	2	0	2	282.35	26.96	0.25539	✓	↓	↓
<input type="checkbox"/>	B7L0073-MSD2 1701829-05	4	2	0	1	285.51	26.98	0.25853	✓	↓	↓
<input type="checkbox"/>	1701829-01	4	2	0	1	292.72	27.65	0.26507	✓	↓	↓
<input type="checkbox"/>	1701829-02	4	2	0	1	295.23	27.61	0.26762	✓	↓	↓
<input type="checkbox"/>	1701829-03	4	2	0	1	291.32	27.67	0.25365	✓	↓	↓
<input checked="" type="checkbox"/>	1701829-04	4.5	2	0	2	289.44	27.89	0.26155	VC 12-13-17	↓	↓
<input type="checkbox"/>	1701829-05	4	2	0	1	280.99	27.87	0.25312	✓	↓	↓
<input type="checkbox"/>	1701829-06	4	2	0	1	292.17	27.89	0.26433	✓	↓	↓
<input type="checkbox"/>	1701829-07	4	2	0	1	289.59	27.68	0.26191	✓	↓	↓
<input type="checkbox"/>	1701829-08	4	2	0	1	294.92	27.83	0.26709	✓	↓	↓
<input type="checkbox"/>	1701829-09	6	2	0	6	286.56	27.78	0.25878	✓	↓	↓

IS: 17L0402, 10mL (V3)	SPE Chem: Stata K-AW 33 <sup>200mg</sup> <sub>6mL</sub>	Notes:
IS SUP: NA	Ele SOLV: 0.5% Mthyl in Hexa/MeOH	
NS: 17L0402, 10mL (V2)	Final Volume(s) 1mL	
RS: 17L2507, 10mL (V4)		

Comments: Assume 1 g = 1 mL

Cen = Centrifuged



# PREPARATION BENCH SHEET

Matrix: Aqueous

Method: 537M PFAS DOD (LOQ as mRL)

B7L0073

Chemist: KC

Prep Date/Time: 12-Dec-17 10:03

Prepared using: LCMS - SPE Extraction-LCMS

13:15  
KC 12/12/17

		Date/Initials: 12/12/17 ST				Balance ID: HRMS-8					
Cen	VISTA Sample ID	pH Before	pH After	Chlorine (Cl)	Drops HCl Added	Bottle + Sample (g)	Bottle Only (g)	Sample Amt. (L)	IS/NS CHEM/WIT DATE	SPE	RS CHEM/WIT DATE
<input type="checkbox"/>	1701829-10	6	2	0	3	289.13	27.57	0.26156	KC GRB 12/12/17	KC 12-12-17	KC GRB 12-12-17
<input type="checkbox"/>	1701829-11	5	2	0	2	278.81	27.63	0.25118	✓	✓	✓
<input type="checkbox"/>	1701829-12	5	2	0	2	273.09	27.70	0.24539	✓	✓	✓
<input type="checkbox"/>	1701829-13	4	2	0	1	286.44	27.70	0.25874	✓	✓	✓
<input type="checkbox"/>	1701829-14	4	2	0	1	289.44	27.70	0.26174	✓	✓	✓
<input type="checkbox"/>	1701829-15	5	2	0	2	284.50	27.69	0.25681	✓	✓	✓
<input type="checkbox"/>	1701829-16	4	2	0	1	277.66	27.78	0.24988	✓	✓	✓
<input type="checkbox"/>	1701829-17	4	2	0	1	296.26	27.70	0.26856	✓	✓	✓
<input type="checkbox"/>	1701829-18	4	2	0	1	279.94	26.98	0.25296	✓	✓	✓
<input type="checkbox"/>	1701829-19	4	2	0	1	279.89	27.69	0.25220	✓	✓	✓
<input type="checkbox"/>	1701829-20	5	2	0	2	286.78	27.02	0.25976	✓	✓	✓

IS: <u>17L0402, 10 mL (V5)</u> IS SUP: <u>NA</u> NS: <u>17J1820, 10 mL (V2)</u> RS: <u>17K2507, 10 mL (V4)</u>	SPE Chem: <u>strata X-Au33 200nm</u> Ele SOLV: <u>0.5% NH<sub>4</sub>OH in MeOH/water</u> Final Volume(s): <u>1 mL</u>	Notes:
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Comments: Assume 1 g = 1 mL

Cen = Centrifuged  
Work Order 1701829

Batch: B7L0073

Matrix: Aqueous

LabNumber	WetWeight (Initial)	% Solids (Extraction Solids)	DryWeight	Final	Extracted	Ext By	Spike	SpikeAmount	ClientMatrix	Analysis
1701829-01	0.26507 ✓	MA	MA	1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-02	0.26762 ✓			1000	12-Dec-17 13:15	KC			QC Water	537M PFAS DOD (LOQ as
1701829-03	0.25365 ✓			1000	12-Dec-17 13:15	KC			QC Water	537M PFAS DOD (LOQ as
1701829-04	0.2616 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-05	0.25312 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-06	0.26433 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-07	0.26191 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-08	0.26709 ✓			1000	12-Dec-17 13:15	KC			QC Water	537M PFAS DOD (LOQ as
1701829-09	0.25878 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-10	0.26156 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-11	0.25118 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-12	0.24539 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-13	0.25874 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-14	0.26174 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-15	0.25681 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-16	0.24988 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-17	0.26856 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-18	0.25296 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-19	0.2522 ✓			1000	12-Dec-17 13:15	KC			Groundwater	537M PFAS DOD (LOQ as
1701829-20	0.25976 ✓			1000	12-Dec-17 13:15	KC			QC Water	537M PFAS DOD (LOQ as
B7L0073-BLK1	0.125 0.250 ✓	MA		1000	12-Dec-17 13:15	KC				QC
B7L0073-BS1	0.125 0.250 ✓	1/2/18		1000	12-Dec-17 13:15	KC	17J1820	10		QC
B7L0073-MS1	0.24032 ✓			1000	12-Dec-17 13:15	KC	17J1820	10		QC
B7L0073-MS2	0.2584 ✓			1000	12-Dec-17 13:15	KC	17J1820	10		QC
B7L0073-MSD1	0.25539 ✓			1000	12-Dec-17 13:15	KC	17J1820	10		QC
B7L0073-MSD2	0.25853 ✓			1000	12-Dec-17 13:15	KC	17J1820	10		QC

Dataset: U:\Q4.PRO\results\171227M2\171227M2-41.qld

Last Altered: Thursday, December 28, 2017 12:13:28 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:14:36 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Name: 171227M2\_41, Date: 28-Dec-2017, Time: 00:52:40, ID: ST171227M2-11 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.10e4	9.51e3	1.0000		1.47	1.53	14.4	10.233	102.3
2	2 PFPeA	263.1 > 218.9	1.19e4	1.14e4	1.0000		2.44	2.48	13.1	11.102	111.0
3	3 PFBS	299.0 > 79.7	2.77e3	1.42e3	1.0000		2.70	2.75	24.3	10.252	102.5
4	4 PFHxA	313.2 > 268.9	1.39e4	3.79e3	1.0000		3.20	3.24	18.3	9.009	90.1
5	5 PFHpA	363.0 > 318.9	1.44e4	9.60e3	1.0000		3.80	3.84	18.8	11.446	114.5
6	6 L-PFHxS	398.9 > 79.6	2.12e3	1.11e3	1.0000		3.95	3.98	23.9	11.197	112.0
7	8 6:2 FTS	427.1 > 407	3.16e3	1.47e4	1.0000		4.26	4.29	2.69	11.723	117.2
8	9 L-PFOA	413 > 368.7	1.49e4	1.47e4	1.0000		4.32	4.34	12.7	9.980	99.8
9	11 PFHpS	449 > 80.0	3.07e3	1.47e4	1.0000		4.43	4.44	2.62	8.911	89.1
10	12 PFNA	463.0 > 418.8	1.45e4	1.37e4	1.0000		4.75	4.76	13.2	8.609	86.1
11	13 PFOSA	498.1 > 77.8	2.76e3	2.59e3	1.0000		4.81	4.84	13.3	10.648	106.5
12	14 L-PFOS	499 > 79.9	3.16e3	3.17e3	1.0000		4.83	4.84	12.5	10.077	100.8
13	16 PFDA	513 > 468.8	1.52e4	1.05e4	1.0000		5.11	5.12	18.1	12.168	121.7
14	17 8:2 FTS	527 > 506.9	3.01e3	1.05e4	1.0000		5.09	5.10	3.60	10.689	106.9
15	18 N-MeFOSAA	570.1 > 419	6.94e3	5.37e3	1.0000		5.26	5.27	16.1	9.581	95.8
16	19 N-EtFOSAA	584.2 > 419	5.17e3	6.19e3	1.0000		5.42	5.42	10.4	8.677	86.8
17	20 PFUdA	563.0 > 518.9	1.21e4	1.17e4	1.0000		5.43	5.44	12.9	12.516	125.2
18	21 PFDS	598.8 > 80	3.40e3	1.17e4	1.0000		5.50	5.48	3.62	11.401	114.0
19	22 PFDoA	612.9 > 569.0	1.29e4	9.40e3	1.0000		5.70	5.71	17.2	9.757	97.6
20	23 N-MeFOSA	512.1 > 168.9	7.51e3	1.85e4	1.0000		5.77	5.87	60.8	53.734	107.5
21	24 PFTrDA	662.9 > 618.9	1.15e4	9.40e3	1.0000		5.95	5.95	15.2	9.310	93.1
22	25 PFTeDA	712.9 > 668.8	6.93e3	3.02e3	1.0000		6.16	6.16	28.7	10.654	106.5
23	26 N-EtFOSA	526.1 > 168.9	1.01e4	2.84e4	1.0000		6.15	6.23	53.5	50.666	101.3
24	27 PFHxDA	813.1 > 768.6	4.16e3	2.30e3	1.0000		6.48	6.48	9.06	9.987	99.9
25	28 PFODA	913.1 > 868.8	6.75e3	2.30e3	1.0000		6.70	6.70	14.7	10.483	104.8
26	29 N-MeFOSE	616.1 > 58.9	9.20e3	2.57e4	1.0000		6.30	6.32	53.7	44.436	88.9
27	30 N-EtFOSE	630.1 > 58.9	1.25e4	2.47e4	1.0000		6.42	6.47	76.1	57.420	114.8
28	31 13C4-PFBA	216.1 > 171.8	9.51e3	1.25e4	1.0000	1.000	1.47	1.52	9.53	9.530	76.2
29	32 13C3-PFPeA	266. > 221.8	1.14e4	1.64e4	1.0000	0.747	2.44	2.48	8.64	11.560	92.5
30	33 13C3-PFBS	302. > 98.8	1.42e3	1.64e4	1.0000	0.101	2.70	2.75	1.08	10.679	85.4
31	Work Order 2701829	315 > 269.8	3.79e3	1.64e4	1.0000	0.601	3.20	3.24	2.88	4.799	99.0

AC  
12/28/17

✓ JH.  
12/28/2017

10-120

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-41.qld

Last Altered: Thursday, December 28, 2017 12:13:28 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:14:36 Pacific Standard Time

Name: 171227M2\_41, Date: 28-Dec-2017, Time: 00:52:40, ID: ST171227M2-11 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	9.60e3	1.64e4	1.0000	0.676	3.80	3.84	7.30	10.788	86.3
33	36 18O2-PFHxS	403.0 > 102.6	1.11e3	3.53e3	1.0000	0.347	3.95	3.98	3.93	11.343	90.7
34	37 13C2-6:2 FTS	429.1 > 408.9	3.08e3	1.33e4	1.0000	0.210	4.26	4.29	2.90	13.824	110.6
35	38 13C2-PFOA	414.9 > 369.7	1.47e4	1.33e4	1.0000	0.990	4.32	4.34	13.8	13.944	111.6
36	39 13C5-PFNA	468.2 > 422.9	1.37e4	1.28e4	1.0000	0.845	4.75	4.76	13.3	15.788	126.3
37	40 13C8-PFOSA	506.1 > 77.7	2.59e3	1.45e4	1.0000	0.199	4.81	4.83	2.24	11.204	89.6
38	41 13C8-PFOS	507.0 > 79.9	3.17e3	3.69e3	1.0000	0.865	4.83	4.84	10.7	12.388	99.1
39	42 13C2-PFDA	515.1 > 469.9	1.05e4	1.35e4	1.0000	0.886	5.11	5.12	9.73	10.977	87.8
40	43 13C2-8:2 FTS	529.1 > 508.7	1.83e3	1.64e4	1.0000	0.136	5.09	5.10	1.39	10.264	82.1
41	44 d3-N-MeFOSAA	573.3 > 419	5.37e3	1.45e4	1.0000	0.409	5.26	5.27	4.63	11.320	90.6
42	45 d5-N-EtFOSAA	589.3 > 419	6.19e3	1.45e4	1.0000	0.474	5.42	5.42	5.33	11.260	90.1
43	46 13C2-PFUdA	565 > 519.8	1.17e4	1.45e4	1.0000	0.928	5.43	5.44	10.1	10.880	87.0
44	47 13C2-PFDoA	615.0 > 569.7	9.40e3	1.45e4	1.0000	0.636	5.70	5.71	8.10	12.735	101.9
45	48 d3-N-MeFOSA	515.2 > 168.9	1.85e4	1.45e4	1.0000	0.112	5.80	5.89	16.0	143.166	95.4
46	49 13C2-PFTeDA	714.8 > 669.6	3.02e3	1.45e4	1.0000	0.163	6.16	6.16	2.60	15.976	127.8
47	50 d5-N-ETFOSA	531.1 > 168.9	2.84e4	1.45e4	1.0000	0.170	6.16	6.24	24.5	144.388	96.3
48	51 13C2-PFHxDA	815 > 769.7	2.30e3	1.45e4	1.0000	0.394	6.48	6.48	1.98	5.028	100.6
49	52 d7-N-MeFOSE	623.1 > 58.9	2.57e4	1.45e4	1.0000	0.148	6.30	6.31	22.1	148.968	99.3
50	53 d9-N-EtFOSE	639.2 > 58.8	2.47e4	1.45e4	1.0000	0.154	6.42	6.46	21.3	138.073	92.0
51	54 13C3-PFBA	217. > 171.8	1.25e4	1.25e4	1.0000		1.47	1.52	12.5		
52	55 13C5-PFHxA	318 > 272.9	1.64e4	1.64e4	1.0000	1.000	3.20	3.24	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.53e3	3.53e3	1.0000	1.000	3.95	3.98	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.33e4	1.33e4	1.0000	1.000	4.32	4.34	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.28e4	1.28e4	1.0000	1.000	4.75	4.76	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	3.69e3	3.69e3	1.0000	1.000	4.83	4.84	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.35e4	1.35e4	1.0000	1.000	5.11	5.12	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.45e4	1.45e4	1.0000	1.000	5.43	5.44	12.5	12.500	100.0

50-150



Dataset: Untitled

Last Altered: Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:55:40 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171227M2_1	IPA	27-Dec-17	17:25:22
2	171227M2_2	ST171227M2-1 PFC CS-2 17L2606	27-Dec-17	17:36:41
3	171227M2_3	ST171227M2-2 PFC CS-1 17L2607	27-Dec-17	17:47:52
4	171227M2_4	ST171227M2-3 PFC CS0 17L2608	27-Dec-17	17:59:02
5	171227M2_5	ST171227M2-4 PFC CS1 17L2609	27-Dec-17	18:10:13
6	171227M2_6	ST171227M2-5 PFC CS2 17L2610	27-Dec-17	18:21:24
7	171227M2_7	ST171227M2-6 PFC CS3 17L2611	27-Dec-17	18:32:34
8	171227M2_8	ST171227M2-7 PFC CS4 17L2612	27-Dec-17	18:43:45
9	171227M2_9	ST171227M2-8 PFC CS5 17L2613	27-Dec-17	18:54:55
10	171227M2_10	ST171227M2-9 PFC CS6 17L2710	27-Dec-17	19:06:06
11	171227M2_11	ST171227M2-10 PFC CS7 17L1804	27-Dec-17	19:17:17
12	171227M2_12	IPA	27-Dec-17	19:28:28
13	171227M2_13	ICV171227M2-1 PFC ICV 17L2605	27-Dec-17	19:39:38
14	171227M2_14	IPA	27-Dec-17	19:50:49
15	171227M2_15	1701845-16 Pier D 0.25847	27-Dec-17	20:02:00
16	171227M2_16	1701845-17 BD-1 0.26049	27-Dec-17	20:13:10
17	171227M2_17	B7L0120-BS1 OPR 0.25	27-Dec-17	20:24:22
18	171227M2_18	B7L0120-BS1 LCS1 0.25	27-Dec-17	20:35:32
19	171227M2_19	IPA	27-Dec-17	20:46:43
20	171227M2_20	B7L0120-BLK1 Method Blank 0.25	27-Dec-17	20:57:53
21	171227M2_21	1701955-01 WR1712141615JLB 0.27017	27-Dec-17	21:09:04
22	171227M2_22	B7L0092-BS1 OPR 1	27-Dec-17	21:20:15
23	171227M2_23	B7L0092-BLK1 Method Blank 1	27-Dec-17	21:31:25
24	171227M2_24	B7L0092-MS1 Matrix Spike 16.49	27-Dec-17	21:42:36
25	171227M2_25	B7L0092-MSD1 Matrix Spike Dup 16.11	27-Dec-17	21:53:47
26	171227M2_26	1701841-01 OF-SLG01-1217 17.61	27-Dec-17	22:04:58
27	171227M2_27	1701841-02 OF-SLG02-1217 10.1	27-Dec-17	22:16:08
28	171227M2_28	1701841-03 OF-SLG02P-1217 6.48	27-Dec-17	22:27:19
29	171227M2_29	1701841-04 OF-SLG03-1217 11.57	27-Dec-17	22:38:30
30	171227M2_30	1701841-05 OF-SLG04-1217 5.07	27-Dec-17	22:49:41
31	171227M2_31	1701866-01 Soil-B101A 1.62	27-Dec-17	23:00:51

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Last Altered: Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:55:40 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171227M2_32	IPA	27-Dec-17	23:12:02
33	171227M2_33	B7L0073-BS1 OPR 0.125	27-Dec-17	23:23:12
34	171227M2_34	IPA	27-Dec-17	23:34:23
35	171227M2_35	B7L0073-BLK1 Method Blank 0.125	27-Dec-17	23:45:34
36	171227M2_36	B7L0073-MS1 Matrix Spike 0.24032	27-Dec-17	23:56:45
37	171227M2_37	B7L0073-MSD1 Matrix Spike Dup 0.25539	28-Dec-17	00:07:55
38	171227M2_38	B7L0073-MSD2 Matrix Spike Dup 0.25853	28-Dec-17	00:19:08
39	171227M2_39	B7L0073-MS2 Matrix Spike 0.2584	28-Dec-17	00:30:19
40	171227M2_40	IPA	28-Dec-17	00:41:30
41	171227M2_41	ST171227M2-11 PFC CS3 17L2611	28-Dec-17	00:52:40
42	171227M2_42	IPA	28-Dec-17	01:03:51
43	171227M2_43	1701829-01 FT-MW08S-20171129 0.26507	28-Dec-17	01:15:02
44	171227M2_44	1701829-02 FT-MW08S-FRB-20171129 0.267...	28-Dec-17	01:26:13
45	171227M2_45	1701829-03 FT-DUP01-20171129 0.25365	28-Dec-17	01:37:23
46	171227M2_46	1701829-04 FT-MW08I-20171129 0.2616	28-Dec-17	01:48:34
47	171227M2_47	1701829-05 FT-MW01S-20171130 0.25312	28-Dec-17	01:59:45
48	171227M2_48	1701829-06 FT-MW02I-20171130 0.26433	28-Dec-17	02:10:55
49	171227M2_49	1701829-07 FT-MW01I-20171130 0.26191	28-Dec-17	02:22:10
50	171227M2_50	1701829-08 FT-DUP02-20171130 0.26709	28-Dec-17	02:33:25
51	171227M2_51	1701829-09 FT-MW02S-20171130 0.25878	28-Dec-17	02:44:36
52	171227M2_52	1701829-10 FT-MW03S-20171130 0.26156	28-Dec-17	02:55:47
53	171227M2_53	1701829-11 FT-MW09I-20171130 0.25118	28-Dec-17	03:06:58
54	171227M2_54	IPA	28-Dec-17	03:18:08
55	171227M2_55	ST171227M2-12 PFC CS3 17L2611	28-Dec-17	03:29:19
56	171227M2_56	IPA	28-Dec-17	03:40:29
57	171227M2_57	1701829-12 FT-DUP03-20171130 0.24539	28-Dec-17	03:51:40
58	171227M2_58	1701829-13 FT-MW05I-20171130 0.25874	28-Dec-17	04:02:51
59	171227M2_59	1701829-14 FT-MW07S-20171130 0.26174	28-Dec-17	04:14:01
60	171227M2_60	1701829-15 FT-MW05S-20171130 0.25681	28-Dec-17	04:25:12
61	171227M2_61	1701829-16 FT-MW06I-20171130 0.24988	28-Dec-17	04:36:24
62	171227M2_62	1701829-17 FT-MW06I-FRB-20171130 0.26856	28-Dec-17	04:47:35
63	171227M2_63	1701829-18 FT-MW10I-20171130 0.25296	28-Dec-17	04:58:45
64	171227M2_64	1701829-19 FT-MW06S-20171130 0.2522	28-Dec-17	05:09:56
65	171227M2_65	1701829-20 FT-EB01-20171130 0.25976	28-Dec-17	05:21:07

Dataset:        Untitled

Last Altered:    Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed:        Thursday, December 28, 2017 12:55:40 Pacific Standard Time

**Compound name: PFBA**

	Name	ID	Acq.Date	Acq.Time
66	171227M2_66	IPA	28-Dec-17	05:32:17
67	171227M2_67	ST171227M2-13 PFC CS3 17L2611	28-Dec-17	05:43:28
68	171227M2_68	IPA	28-Dec-17	05:54:39



Dataset: U:\Q4.PRO\results\171227M2\171227M2-55.qld

Last Altered: Thursday, December 28, 2017 12:36:45 Pacific Standard Time  
Printed: Thursday, December 28, 2017 12:37:39 Pacific Standard Time

Ⓐ PFTTrDA, PFTeDA > 130%

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

AC 12/28/17

JHA 12/28/2017

Name: 171227M2\_55, Date: 28-Dec-2017, Time: 03:29:19, ID: ST171227M2-12 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.09e4	9.56e3	1.0000		1.47	1.53	14.3	10.149	101.5
2	2 PFPeA	263.1 > 218.9	1.05e4	1.06e4	1.0000		2.44	2.48	12.4	10.507	105.1
3	3 PFBS	299.0 > 79.7	2.83e3	1.51e3	1.0000		2.70	2.75	23.5	9.899	99.0
4	4 PFHxA	313.2 > 268.9	1.39e4	3.78e3	1.0000		3.20	3.24	18.3	9.000	90.0
5	5 PFHpA	363.0 > 318.9	1.33e4	9.05e3	1.0000		3.80	3.84	18.4	11.235	112.4
6	6 L-PFHxS	398.9 > 79.6	1.87e3	1.20e3	1.0000		3.95	3.98	19.5	9.170	91.7
7	8 6:2 FTS	427.1 > 407	3.28e3	1.56e4	1.0000		4.26	4.29	2.63	11.469	114.7
8	9 L-PFOA	413 > 368.7	1.47e4	1.56e4	1.0000		4.32	4.35	11.9	9.318	93.2
9	11 PFHpS	449 > 80.0	3.22e3	1.56e4	1.0000		4.43	4.45	2.58	8.796	88.0
10	12 PFNA	463.0 > 418.8	1.43e4	1.20e4	1.0000		4.75	4.76	14.9	9.715	97.1
11	13 PFOSA	498.1 > 77.8	2.61e3	2.53e3	1.0000		4.81	4.84	12.9	10.317	103.2
12	14 L-PFOS	499 > 79.9	2.98e3	3.25e3	1.0000		4.83	4.84	11.5	9.248	92.5
13	16 PFDA	513 > 468.8	1.40e4	1.02e4	1.0000		5.11	5.13	17.1	11.464	114.6
14	17 8:2 FTS	527 > 506.9	2.37e3	1.02e4	1.0000		5.09	5.10	2.90	8.507	85.1
15	18 N-MeFOSAA	570.1 > 419	8.14e3	6.00e3	1.0000		5.26	5.27	17.0	10.061	100.6
16	19 N-EtFOSAA	584.2 > 419	7.25e3	6.35e3	1.0000		5.42	5.43	14.3	11.851	118.5
17	20 PFUdA	563.0 > 518.9	1.51e4	1.53e4	1.0000		5.43	5.44	12.3	11.911	119.1
18	21 PFDS	598.8 > 80	3.92e3	1.53e4	1.0000		5.50	5.48	3.20	10.074	100.7
19	22 PFDoA	612.9 > 569.0	1.14e4	8.20e3	1.0000		5.70	5.71	17.4	9.903	99.0
20	23 N-MeFOSA	512.1 > 168.9	6.99e3	1.74e4	1.0000		5.77	5.87	60.1	53.173	106.3
21	24 PFTTrDA	662.9 > 618.9	1.48e4	8.20e3	1.0000		5.95	5.95	22.6	13.699	137.0
22	25 PFTeDA	712.9 > 668.8	9.84e3	3.19e3	1.0000		6.16	6.16	38.5	14.616	146.2
23	26 N-EtFOSA	526.1 > 168.9	1.01e4	2.72e4	1.0000		6.15	6.23	55.8	52.846	105.7
24	27 PFHxDA	813.1 > 768.6	4.99e3	2.89e3	1.0000		6.48	6.48	8.64	9.528	95.3
25	28 PFODA	913.1 > 868.8	7.69e3	2.89e3	1.0000		6.70	6.70	13.3	9.510	95.1
26	29 N-MeFOSE	616.1 > 58.9	1.12e4	2.50e4	1.0000		6.30	6.32	67.2	55.446	110.9
27	30 N-EtFOSE	630.1 > 58.9	1.03e4	2.52e4	1.0000		6.42	6.47	61.3	46.268	92.5
28	31 13C4-PFBA	216.1 > 171.8	9.56e3	1.21e4	1.0000	1.000	1.47	1.52	9.84	9.837	78.7
29	32 13C3-PFPeA	266. > 221.8	1.06e4	1.40e4	1.0000	0.747	2.44	2.48	9.45	12.646	101.2
30	33 13C3-PFBS	302. > 98.8	1.51e3	1.40e4	1.0000	0.101	2.70	2.75	1.35	13.286	106.3
31	34 13C3-PFHxA	315 > 269.8	3.78e3	1.40e4	1.0000	0.601	3.20	3.24	3.38	5.623	112.5

70-130

50-150



Dataset: U:\Q4.PRO\results\171227M2\171227M2-55.qld

Last Altered: Thursday, December 28, 2017 12:36:45 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:37:39 Pacific Standard Time

Name: 171227M2\_55, Date: 28-Dec-2017, Time: 03:29:19, ID: ST171227M2-12 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	9.05e3	1.40e4	1.0000	0.676	3.80	3.84	8.08	11.942	95.5
33	36 18O2-PFHxS	403.0 > 102.6	1.20e3	3.62e3	1.0000	0.347	3.95	3.98	4.13	11.905	95.2
34	37 13C2-6:2 FTS	429.1 > 408.9	3.28e3	1.42e4	1.0000	0.210	4.26	4.29	2.89	13.771	110.2
35	38 13C2-PFOA	414.9 > 369.7	1.56e4	1.42e4	1.0000	0.990	4.32	4.35	13.7	13.854	110.8
36	39 13C5-PFNA	468.2 > 422.9	1.20e4	1.40e4	1.0000	0.845	4.75	4.76	10.7	12.634	101.1
37	40 13C8-PFOSA	506.1 > 77.7	2.53e3	1.47e4	1.0000	0.199	4.81	4.84	2.14	10.744	86.0
38	41 13C8-PFOS	507.0 > 79.9	3.25e3	4.19e3	1.0000	0.865	4.83	4.84	9.71	11.218	89.7
39	42 13C2-PFDA	515.1 > 469.9	1.02e4	1.31e4	1.0000	0.886	5.11	5.13	9.77	11.023	88.2
40	43 13C2-8:2 FTS	529.1 > 508.7	1.67e3	1.40e4	1.0000	0.136	5.09	5.10	1.49	10.957	87.7
41	44 d3-N-MeFOSAA	573.3 > 419	6.00e3	1.47e4	1.0000	0.409	5.26	5.27	5.09	12.461	99.7
42	45 d5-N-EtFOSAA	589.3 > 419	6.35e3	1.47e4	1.0000	0.474	5.42	5.42	5.38	11.363	90.9
43	46 13C2-PFUdA	565 > 519.8	1.53e4	1.47e4	1.0000	0.928	5.43	5.44	13.0	14.004	112.0
44	47 13C2-PFDoA	615.0 > 569.7	8.20e3	1.47e4	1.0000	0.636	5.70	5.71	6.95	10.932	87.5
45	48 d3-N-MeFOSA	515.2 > 168.9	1.74e4	1.47e4	1.0000	0.112	5.80	5.89	14.8	132.511	88.3
46	49 13C2-PFTeDA	714.8 > 669.6	3.19e3	1.47e4	1.0000	0.163	6.16	6.16	2.71	16.655	133.2
47	50 d5-N-ETFOSA	531.1 > 168.9	2.72e4	1.47e4	1.0000	0.170	6.16	6.24	23.1	136.202	90.8
48	51 13C2-PFHxDA	815 > 769.7	2.89e3	1.47e4	1.0000	0.394	6.48	6.48	2.45	6.216	124.3
49	52 d7-N-MeFOSE	623.1 > 58.9	2.50e4	1.47e4	1.0000	0.148	6.30	6.32	21.2	143.014	95.3
50	53 d9-N-EtFOSE	639.2 > 58.8	2.52e4	1.47e4	1.0000	0.154	6.42	6.46	21.4	138.830	92.6
51	54 13C3-PFBA	217. > 171.8	1.21e4	1.21e4	1.0000		1.47	1.52	12.5		
52	55 13C5-PFHxA	318 > 272.9	1.40e4	1.40e4	1.0000	1.000	3.20	3.24	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.62e3	3.62e3	1.0000	1.000	3.95	3.98	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.42e4	1.42e4	1.0000	1.000	4.32	4.34	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.40e4	1.40e4	1.0000	1.000	4.75	4.76	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	4.19e3	4.19e3	1.0000	1.000	4.83	4.84	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.31e4	1.31e4	1.0000	1.000	5.11	5.13	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.47e4	1.47e4	1.0000	1.000	5.43	5.44	12.5	12.500	100.0

50-150  
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Dataset: Untitled

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Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171227M2_1	IPA	27-Dec-17	17:25:22
2	171227M2_2	ST171227M2-1 PFC CS-2 17L2606	27-Dec-17	17:36:41
3	171227M2_3	ST171227M2-2 PFC CS-1 17L2607	27-Dec-17	17:47:52
4	171227M2_4	ST171227M2-3 PFC CS0 17L2608	27-Dec-17	17:59:02
5	171227M2_5	ST171227M2-4 PFC CS1 17L2609	27-Dec-17	18:10:13
6	171227M2_6	ST171227M2-5 PFC CS2 17L2610	27-Dec-17	18:21:24
7	171227M2_7	ST171227M2-6 PFC CS3 17L2611	27-Dec-17	18:32:34
8	171227M2_8	ST171227M2-7 PFC CS4 17L2612	27-Dec-17	18:43:45
9	171227M2_9	ST171227M2-8 PFC CS5 17L2613	27-Dec-17	18:54:55
10	171227M2_10	ST171227M2-9 PFC CS6 17L2710	27-Dec-17	19:06:06
11	171227M2_11	ST171227M2-10 PFC CS7 17L1804	27-Dec-17	19:17:17
12	171227M2_12	IPA	27-Dec-17	19:28:28
13	171227M2_13	ICV171227M2-1 PFC ICV 17L2605	27-Dec-17	19:39:38
14	171227M2_14	IPA	27-Dec-17	19:50:49
15	171227M2_15	1701845-16 Pier D 0.25847	27-Dec-17	20:02:00
16	171227M2_16	1701845-17 BD-1 0.26049	27-Dec-17	20:13:10
17	171227M2_17	B7L0120-BS1 OPR 0.25	27-Dec-17	20:24:22
18	171227M2_18	B7L0120-BSD1 LCSD 0.25	27-Dec-17	20:35:32
19	171227M2_19	IPA	27-Dec-17	20:46:43
20	171227M2_20	B7L0120-BLK1 Method Blank 0.25	27-Dec-17	20:57:53
21	171227M2_21	1701955-01 WR1712141615JLB 0.27017	27-Dec-17	21:09:04
22	171227M2_22	B7L0092-BS1 OPR 1	27-Dec-17	21:20:15
23	171227M2_23	B7L0092-BLK1 Method Blank 1	27-Dec-17	21:31:25
24	171227M2_24	B7L0092-MS1 Matrix Spike 16.49	27-Dec-17	21:42:36
25	171227M2_25	B7L0092-MSD1 Matrix Spike Dup 16.11	27-Dec-17	21:53:47
26	171227M2_26	1701841-01 OF-SLG01-1217 17.61	27-Dec-17	22:04:58
27	171227M2_27	1701841-02 OF-SLG02-1217 10.1	27-Dec-17	22:16:08
28	171227M2_28	1701841-03 OF-SLG02P-1217 6.48	27-Dec-17	22:27:19
29	171227M2_29	1701841-04 OF-SLG03-1217 11.57	27-Dec-17	22:38:30
30	171227M2_30	1701841-05 OF-SLG04-1217 5.07	27-Dec-17	22:49:41
31	171227M2_31	1701866-01 Soil-B101A 1.62	27-Dec-17	23:00:51

Vista Analytical Laboratory

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Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171227M2_32	IPA	27-Dec-17	23:12:02
33	171227M2_33	B7L0073-BS1 OPR 0.125	27-Dec-17	23:23:12
34	171227M2_34	IPA	27-Dec-17	23:34:23
35	171227M2_35	B7L0073-BLK1 Method Blank 0.125	27-Dec-17	23:45:34
36	171227M2_36	B7L0073-MS1 Matrix Spike 0.24032	27-Dec-17	23:56:45
37	171227M2_37	B7L0073-MSD1 Matrix Spike Dup 0.25539	28-Dec-17	00:07:55
38	171227M2_38	B7L0073-MSD2 Matrix Spike Dup 0.25853	28-Dec-17	00:19:08
39	171227M2_39	B7L0073-MS2 Matrix Spike 0.2584	28-Dec-17	00:30:19
40	171227M2_40	IPA	28-Dec-17	00:41:30
41	171227M2_41	ST171227M2-11 PFC CS3 17L2611	28-Dec-17	00:52:40
42	171227M2_42	IPA	28-Dec-17	01:03:51
43	171227M2_43	1701829-01 FT-MW08S-20171129 0.26507	28-Dec-17	01:15:02
44	171227M2_44	1701829-02 FT-MW08S-FRB-20171129 0.267...	28-Dec-17	01:26:13
45	171227M2_45	1701829-03 FT-DUP01-20171129 0.25365	28-Dec-17	01:37:23
46	171227M2_46	1701829-04 FT-MW08I-20171129 0.2616	28-Dec-17	01:48:34
47	171227M2_47	1701829-05 FT-MW01S-20171130 0.25312	28-Dec-17	01:59:45
48	171227M2_48	1701829-06 FT-MW02I-20171130 0.26433	28-Dec-17	02:10:55
49	171227M2_49	1701829-07 FT-MW01I-20171130 0.26191	28-Dec-17	02:22:10
50	171227M2_50	1701829-08 FT-DUP02-20171130 0.26709	28-Dec-17	02:33:25
51	171227M2_51	1701829-09 FT-MW02S-20171130 0.25878	28-Dec-17	02:44:36
52	171227M2_52	1701829-10 FT-MW03S-20171130 0.26156	28-Dec-17	02:55:47
53	171227M2_53	1701829-11 FT-MW09I-20171130 0.25118	28-Dec-17	03:06:58
54	171227M2_54	IPA	28-Dec-17	03:18:08
55	171227M2_55	ST171227M2-12 PFC CS3 17L2611	28-Dec-17	03:29:19
56	171227M2_56	IPA	28-Dec-17	03:40:29
57	171227M2_57	1701829-12 FT-DUP03-20171130 0.24539	28-Dec-17	03:51:40
58	171227M2_58	1701829-13 FT-MW05I-20171130 0.25874	28-Dec-17	04:02:51
59	171227M2_59	1701829-14 FT-MW07S-20171130 0.26174	28-Dec-17	04:14:01
60	171227M2_60	1701829-15 FT-MW05S-20171130 0.25681	28-Dec-17	04:25:12
61	171227M2_61	1701829-16 FT-MW06I-20171130 0.24988	28-Dec-17	04:36:24
62	171227M2_62	1701829-17 FT-MW06I-FRB-20171130 0.26856	28-Dec-17	04:47:35
63	171227M2_63	1701829-18 FT-MW10I-20171130 0.25296	28-Dec-17	04:58:45
64	171227M2_64	1701829-19 FT-MW06S-20171130 0.2522	28-Dec-17	05:09:56
65	171227M2_65	1701829-20 FT-EB01-20171130 0.25976	28-Dec-17	05:21:07

Dataset:       Untitled

Last Altered:   Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed:        Thursday, December 28, 2017 12:55:40 Pacific Standard Time

**Compound name: PFBA**

	Name	ID	Acq.Date	Acq.Time
66	171227M2_66	IPA	28-Dec-17	05:32:17
67	171227M2_67	ST171227M2-13 PFC CS3 17L2611	28-Dec-17	05:43:28
68	171227M2_68	IPA	28-Dec-17	05:54:39

Dataset: U:\Q4.PRO\results\171227M2\171227M2-67.qld

Last Altered: Thursday, December 28, 2017 12:40:59 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:41:59 Pacific Standard Time

① PFOSA > 130%

AC 12/28/17

✓ JIA- 12/28/2017

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Name: 171227M2\_67, Date: 28-Dec-2017, Time: 05:43:28, ID: ST171227M2-13 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.12e4	1.03e4	1.0000		1.47	1.52	13.7	9.707	97.1
2	2 PFPeA	263.1 > 218.9	1.20e4	1.16e4	1.0000		2.44	2.48	13.0	11.014	110.1
3	3 PFBS	299.0 > 79.7	2.94e3	1.58e3	1.0000		2.70	2.75	23.3	9.826	98.3
4	4 PFHxA	313.2 > 268.9	1.31e4	3.29e3	1.0000		3.20	3.24	19.8	9.745	97.5
5	5 PFHpA	363.0 > 318.9	1.31e4	8.81e3	1.0000		3.80	3.84	18.6	11.360	113.6
6	6 L-PFHxS	398.9 > 79.6	2.36e3	1.36e3	1.0000		3.95	3.98	21.6	10.147	101.5
7	8 6:2 FTS	427.1 > 407	2.74e3	1.30e4	1.0000		4.26	4.29	2.65	11.540	115.4
8	9 L-PFOA	413 > 368.7	1.17e4	1.30e4	1.0000		4.32	4.34	11.3	8.885	88.9
9	11 PFHpS	449 > 80.0	3.54e3	1.30e4	1.0000		4.43	4.44	3.42	11.602	116.0
10	12 PFNA	463.0 > 418.8	1.28e4	9.89e3	1.0000		4.75	4.76	16.2	10.522	105.2
11	13 PFOSA	498.1 > 77.8	3.05e3	2.23e3	1.0000		4.81	4.83	17.1	13.655	136.5
12	14 L-PFOS	499 > 79.9	3.58e3	3.15e3	1.0000		4.83	4.84	14.2	11.436	114.4
13	16 PFDA	513 > 468.8	1.33e4	1.02e4	1.0000		5.11	5.12	16.2	10.841	108.4
14	17 8:2 FTS	527 > 506.9	2.57e3	1.02e4	1.0000		5.09	5.09	3.14	9.259	92.6
15	18 N-MeFOSAA	570.1 > 419	7.56e3	4.94e3	1.0000		5.26	5.27	19.1	11.341	113.4
16	19 N-EtFOSAA	584.2 > 419	5.18e3	6.06e3	1.0000		5.42	5.42	10.7	8.876	88.8
17	20 PFUdA	563.0 > 518.9	1.17e4	1.26e4	1.0000		5.43	5.43	11.7	11.280	112.8
18	21 PFDS	598.8 > 80	3.79e3	1.26e4	1.0000		5.50	5.48	3.77	11.845	118.5
19	22 PFDoA	612.9 > 569.0	1.15e4	8.25e3	1.0000		5.70	5.70	17.4	9.880	98.8
20	23 N-MeFOSA	512.1 > 168.9	7.09e3	1.77e4	1.0000		5.77	5.86	60.0	53.018	106.0
21	24 PFTTrDA	662.9 > 618.9	1.36e4	8.25e3	1.0000		5.95	5.94	20.7	12.527	125.3
22	25 PFTeDA	712.9 > 668.8	7.31e3	2.69e3	1.0000		6.16	6.16	33.9	12.735	127.4
23	26 N-EtFOSA	526.1 > 168.9	1.05e4	2.94e4	1.0000		6.15	6.23	53.5	50.630	101.3
24	27 PFHxDA	813.1 > 768.6	3.24e3	2.41e3	1.0000		6.48	6.47	6.70	7.401	74.0
25	28 PFODA	913.1 > 868.8	7.00e3	2.41e3	1.0000		6.70	6.69	14.5	10.346	103.5
26	29 N-MeFOSE	616.1 > 58.9	1.09e4	2.77e4	1.0000		6.30	6.32	58.8	48.582	97.2
27	30 N-EtFOSE	630.1 > 58.9	1.27e4	2.79e4	1.0000		6.42	6.46	68.3	51.499	103.0
28	31 13C4-PFBA	216.1 > 171.8	1.03e4	1.31e4	1.0000	1.000	1.47	1.52	9.81	9.807	78.5
29	32 13C3-PFPeA	266. > 221.8	1.16e4	1.40e4	1.0000	0.747	2.44	2.48	10.4	13.896	111.2
30	33 13C3-PFBS	302. > 98.8	1.58e3	1.40e4	1.0000	0.101	2.70	2.74	1.41	13.924	111.4
31	Work Order 171227M2-67	315 > 269.8	3.29e3	1.40e4	1.0000	0.601	3.20	3.24	2.95	4.912	98.5

70-130

50-150

Page 1 of 1010

Dataset: U:\Q4.PRO\results\171227M2\171227M2-67.qld

Last Altered: Thursday, December 28, 2017 12:40:59 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:41:59 Pacific Standard Time

Name: 171227M2\_67, Date: 28-Dec-2017, Time: 05:43:28, ID: ST171227M2-13 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	8.81e3	1.40e4	1.0000	0.676	3.80	3.84	7.89	11.660	93.3
33	36 18O2-PFHxS	403.0 > 102.6	1.36e3	3.54e3	1.0000	0.347	3.95	3.98	4.82	13.911	111.3
34	37 13C2-6:2 FTS	429.1 > 408.9	3.11e3	1.30e4	1.0000	0.210	4.26	4.29	2.99	14.231	113.8
35	38 13C2-PFOA	414.9 > 369.7	1.30e4	1.30e4	1.0000	0.990	4.32	4.34	12.4	12.549	100.4
36	39 13C5-PFNA	468.2 > 422.9	9.89e3	1.23e4	1.0000	0.845	4.75	4.76	10.0	11.852	94.8
37	40 13C8-PFOSA	506.1 > 77.7	2.23e3	1.32e4	1.0000	0.199	4.81	4.83	2.11	10.589	84.7
38	41 13C8-PFOS	507.0 > 79.9	3.15e3	3.64e3	1.0000	0.865	4.83	4.84	10.8	12.507	100.1
39	42 13C2-PFDA	515.1 > 469.9	1.02e4	1.20e4	1.0000	0.886	5.11	5.12	10.6	11.976	95.8
40	43 13C2-8:2 FTS	529.1 > 508.7	2.07e3	1.40e4	1.0000	0.136	5.09	5.09	1.85	13.633	109.1
41	44 d3-N-MeFOSAA	573.3 > 419	4.94e3	1.32e4	1.0000	0.409	5.26	5.26	4.69	11.467	91.7
42	45 d5-N-EtFOSAA	589.3 > 419	6.06e3	1.32e4	1.0000	0.474	5.42	5.41	5.75	12.136	97.1
43	46 13C2-PFUDa	565 > 519.8	1.26e4	1.32e4	1.0000	0.928	5.43	5.43	11.9	12.862	102.9
44	47 13C2-PFDoA	615.0 > 569.7	8.25e3	1.32e4	1.0000	0.636	5.70	5.71	7.82	12.293	98.3
45	48 d3-N-MeFOSA	515.2 > 168.9	1.77e4	1.32e4	1.0000	0.112	5.80	5.89	16.8	150.658	100.4
46	49 13C2-PFTeDA	714.8 > 669.6	2.69e3	1.32e4	1.0000	0.163	6.16	6.16	2.55	15.703	125.6
47	50 d5-N-ETFOSA	531.1 > 168.9	2.94e4	1.32e4	1.0000	0.170	6.16	6.24	27.8	164.205	109.5
48	51 13C2-PFHxDA	815 > 769.7	2.41e3	1.32e4	1.0000	0.394	6.48	6.47	2.29	5.810	116.2
49	52 d7-N-MeFOSE	623.1 > 58.9	2.77e4	1.32e4	1.0000	0.148	6.30	6.31	26.3	176.865	117.9
50	53 d9-N-EtFOSE	639.2 > 58.8	2.79e4	1.32e4	1.0000	0.154	6.42	6.46	26.4	171.637	114.4
51	54 13C3-PFBA	217. > 171.8	1.31e4	1.31e4	1.0000		1.47	1.52	12.5		
52	55 13C5-PFHxA	318 > 272.9	1.40e4	1.40e4	1.0000	1.000	3.20	3.23	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	3.54e3	3.54e3	1.0000	1.000	3.95	3.98	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.30e4	1.30e4	1.0000	1.000	4.32	4.34	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.23e4	1.23e4	1.0000	1.000	4.75	4.76	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	3.64e3	3.64e3	1.0000	1.000	4.83	4.84	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.20e4	1.20e4	1.0000	1.000	5.11	5.12	12.5	12.500	100.0
58	61 13C7-PFUDa	570.1 > 524.8	1.32e4	1.32e4	1.0000	1.000	5.43	5.43	12.5	12.500	100.0

50-150  
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Last Altered: Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:55:40 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171227M2_1	IPA	27-Dec-17	17:25:22
2	171227M2_2	ST171227M2-1 PFC CS-2 17L2606	27-Dec-17	17:36:41
3	171227M2_3	ST171227M2-2 PFC CS-1 17L2607	27-Dec-17	17:47:52
4	171227M2_4	ST171227M2-3 PFC CS0 17L2608	27-Dec-17	17:59:02
5	171227M2_5	ST171227M2-4 PFC CS1 17L2609	27-Dec-17	18:10:13
6	171227M2_6	ST171227M2-5 PFC CS2 17L2610	27-Dec-17	18:21:24
7	171227M2_7	ST171227M2-6 PFC CS3 17L2611	27-Dec-17	18:32:34
8	171227M2_8	ST171227M2-7 PFC CS4 17L2612	27-Dec-17	18:43:45
9	171227M2_9	ST171227M2-8 PFC CS5 17L2613	27-Dec-17	18:54:55
10	171227M2_10	ST171227M2-9 PFC CS6 17L2710	27-Dec-17	19:06:06
11	171227M2_11	ST171227M2-10 PFC CS7 17L1804	27-Dec-17	19:17:17
12	171227M2_12	IPA	27-Dec-17	19:28:28
13	171227M2_13	ICV171227M2-1 PFC ICV 17L2605	27-Dec-17	19:39:38
14	171227M2_14	IPA	27-Dec-17	19:50:49
15	171227M2_15	1701845-16 Pier D 0.25847	27-Dec-17	20:02:00
16	171227M2_16	1701845-17 BD-1 0.26049	27-Dec-17	20:13:10
17	171227M2_17	B7L0120-BS1 OPR 0.25	27-Dec-17	20:24:22
18	171227M2_18	B7L0120-BSD1 LCSD 0.25	27-Dec-17	20:35:32
19	171227M2_19	IPA	27-Dec-17	20:46:43
20	171227M2_20	B7L0120-BLK1 Method Blank 0.25	27-Dec-17	20:57:53
21	171227M2_21	1701955-01 WR1712141615JLB 0.27017	27-Dec-17	21:09:04
22	171227M2_22	B7L0092-BS1 OPR 1	27-Dec-17	21:20:15
23	171227M2_23	B7L0092-BLK1 Method Blank 1	27-Dec-17	21:31:25
24	171227M2_24	B7L0092-MS1 Matrix Spike 16.49	27-Dec-17	21:42:36
25	171227M2_25	B7L0092-MSD1 Matrix Spike Dup 16.11	27-Dec-17	21:53:47
26	171227M2_26	1701841-01 OF-SLG01-1217 17.61	27-Dec-17	22:04:58
27	171227M2_27	1701841-02 OF-SLG02-1217 10.1	27-Dec-17	22:16:08
28	171227M2_28	1701841-03 OF-SLG02P-1217 6.48	27-Dec-17	22:27:19
29	171227M2_29	1701841-04 OF-SLG03-1217 11.57	27-Dec-17	22:38:30
30	171227M2_30	1701841-05 OF-SLG04-1217 5.07	27-Dec-17	22:49:41
31	171227M2_31	1701866-01 Soil-B101A 1.62	27-Dec-17	23:00:51

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Last Altered: Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed: Thursday, December 28, 2017 12:55:40 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171227M2_32	IPA	27-Dec-17	23:12:02
33	171227M2_33	B7L0073-BS1 OPR 0.125	27-Dec-17	23:23:12
34	171227M2_34	IPA	27-Dec-17	23:34:23
35	171227M2_35	B7L0073-BLK1 Method Blank 0.125	27-Dec-17	23:45:34
36	171227M2_36	B7L0073-MS1 Matrix Spike 0.24032	27-Dec-17	23:56:45
37	171227M2_37	B7L0073-MSD1 Matrix Spike Dup 0.25539	28-Dec-17	00:07:55
38	171227M2_38	B7L0073-MSD2 Matrix Spike Dup 0.25853	28-Dec-17	00:19:08
39	171227M2_39	B7L0073-MS2 Matrix Spike 0.2584	28-Dec-17	00:30:19
40	171227M2_40	IPA	28-Dec-17	00:41:30
41	171227M2_41	ST171227M2-11 PFC CS3 17L2611	28-Dec-17	00:52:40
42	171227M2_42	IPA	28-Dec-17	01:03:51
43	171227M2_43	1701829-01 FT-MW08S-20171129 0.26507	28-Dec-17	01:15:02
44	171227M2_44	1701829-02 FT-MW08S-FRB-20171129 0.267...	28-Dec-17	01:26:13
45	171227M2_45	1701829-03 FT-DUP01-20171129 0.25365	28-Dec-17	01:37:23
46	171227M2_46	1701829-04 FT-MW08I-20171129 0.2616	28-Dec-17	01:48:34
47	171227M2_47	1701829-05 FT-MW01S-20171130 0.25312	28-Dec-17	01:59:45
48	171227M2_48	1701829-06 FT-MW02I-20171130 0.26433	28-Dec-17	02:10:55
49	171227M2_49	1701829-07 FT-MW01I-20171130 0.26191	28-Dec-17	02:22:10
50	171227M2_50	1701829-08 FT-DUP02-20171130 0.26709	28-Dec-17	02:33:25
51	171227M2_51	1701829-09 FT-MW02S-20171130 0.25878	28-Dec-17	02:44:36
52	171227M2_52	1701829-10 FT-MW03S-20171130 0.26156	28-Dec-17	02:55:47
53	171227M2_53	1701829-11 FT-MW09I-20171130 0.25118	28-Dec-17	03:06:58
54	171227M2_54	IPA	28-Dec-17	03:18:08
55	171227M2_55	ST171227M2-12 PFC CS3 17L2611	28-Dec-17	03:29:19
56	171227M2_56	IPA	28-Dec-17	03:40:29
57	171227M2_57	1701829-12 FT-DUP03-20171130 0.24539	28-Dec-17	03:51:40
58	171227M2_58	1701829-13 FT-MW05I-20171130 0.25874	28-Dec-17	04:02:51
59	171227M2_59	1701829-14 FT-MW07S-20171130 0.26174	28-Dec-17	04:14:01
60	171227M2_60	1701829-15 FT-MW05S-20171130 0.25681	28-Dec-17	04:25:12
61	171227M2_61	1701829-16 FT-MW06I-20171130 0.24988	28-Dec-17	04:36:24
62	171227M2_62	1701829-17 FT-MW06I-FRB-20171130 0.26856	28-Dec-17	04:47:35
63	171227M2_63	1701829-18 FT-MW10I-20171130 0.25296	28-Dec-17	04:58:45
64	171227M2_64	1701829-19 FT-MW06S-20171130 0.2522	28-Dec-17	05:09:56
65	171227M2_65	1701829-20 FT-EB01-20171130 0.25976	28-Dec-17	05:21:07



Dataset:        Untitled

Last Altered:    Thursday, December 28, 2017 12:53:47 Pacific Standard Time

Printed:        Thursday, December 28, 2017 12:55:40 Pacific Standard Time

**Compound name: PFBA**

	Name	ID	Acq Date	Acq Time
66	171227M2_66	IPA	28-Dec-17	05:32:17
67	171227M2_67	ST171227M2-13 PFC CS3 17L2611	28-Dec-17	05:43:28
68	171227M2_68	IPA	28-Dec-17	05:54:39

Dataset: U:\Q4.PRO\results\171229M2\171229M2-103.qld

Last Altered: Saturday, December 30, 2017 09:46:21 Pacific Standard Time

Printed: Saturday, December 30, 2017 14:24:01 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122917.mdb 30 Dec 2017 09:38:17

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-29-17\_FULL.cdb 29 Dec 2017 16:04:07

Name: 171229M2\_103, Date: 30-Dec-2017, Time: 08:34:17, ID: ST171229M2-15 PFC CS3 17L2611, Description: PFC CS3 17L2611

AC 12/30/17  
rja 12/30/2017

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.33e4	1.16e4	1.0000		1.47	1.41	14.4	10.539	105.4
2	2 PFPeA	263.1 > 218.9	1.38e4	1.35e4	1.0000		2.35	2.37	12.8	10.779	107.8
3	3 PFBS	299.0 > 79.7	3.46e3	1.96e3	1.0000		2.70	2.64	22.1	10.235	102.4
4	4 PFHxA	313.2 > 268.9	1.68e4	4.40e3	1.0000		3.12	3.13	19.1	10.232	102.3
5	5 PFHpA	363.0 > 318.9	1.28e4	9.99e3	1.0000		3.75	3.74	16.1	10.213	102.1
6	6 L-PFHxS	398.9 > 79.6	2.51e3	1.52e3	1.0000		3.85	3.89	20.7	9.758	97.6
7	8 6:2 FTS	427.1 > 407	3.42e3	1.68e4	1.0000		4.20	4.20	2.55	10.282	102.8
8	9 L-PFOA	413 > 368.7	1.54e4	1.68e4	1.0000		4.25	4.26	11.5	9.433	94.3
9	11 PFHpS	449 > 80.0	3.82e3	1.68e4	1.0000		4.35	4.36	2.85	11.342	113.4
10	12 PFNA	463.0 > 418.8	1.51e4	1.28e4	1.0000		4.70	4.69	14.7	9.464	94.6
11	13 PFOSA	498.1 > 77.8	3.60e3	3.43e3	1.0000		4.81	4.75	13.1	9.862	98.6
12	14 L-PFOS	499 > 79.9	4.52e3	3.69e3	1.0000		4.75	4.76	15.3	11.478	114.8
13	16 PFDA	513 > 468.8	1.45e4	1.53e4	1.0000		5.05	5.06	11.8	7.894	78.9
14	17 8:2 FTS	527 > 506.9	3.46e3	1.53e4	1.0000		5.02	5.02	2.82	9.174	91.7
15	18 N-MeFOSAA	570.1 > 419	8.63e3	6.39e3	1.0000		5.20	5.20	16.9	10.145	101.5
16	19 N-EtFOSAA	584.2 > 419	8.01e3	7.30e3	1.0000		5.42	5.36	13.7	10.289	102.9
17	20 PFUdA	563.0 > 518.9	1.75e4	1.94e4	1.0000		5.35	5.37	11.3	9.165	91.6
18	21 PFDS	598.8 > 80	4.24e3	1.94e4	1.0000		5.50	5.42	2.74	7.734	77.3
19	22 PFDoA	612.9 > 569.0	1.80e4	1.24e4	1.0000		5.70	5.65	18.2	8.542	85.4
20	23 N-MeFOSA	512.1 > 168.9	7.16e3	1.84e4	1.0000		5.77	5.81	58.2	52.316	104.6
21	24 PFTTrDA	662.9 > 618.9	1.87e4	1.24e4	1.0000		5.95	5.90	18.9	10.849	108.5
22	25 PFTeDA	712.9 > 668.8	1.29e4	4.71e3	1.0000		6.16	6.11	34.3	10.218	102.2
23	26 N-EtFOSA	526.1 > 168.9	9.91e3	2.73e4	1.0000		6.15	6.19	54.4	54.460	108.9
24	27 PFHxDA	813.1 > 768.6	5.34e3	3.04e3	1.0000		6.48	6.44	8.78	9.014	90.1
25	28 PFODA	913.1 > 868.8	9.49e3	3.04e3	1.0000		6.70	6.67	15.6	10.657	106.6
26	29 N-MeFOSE	616.1 > 58.9	7.79e3	2.12e4	1.0000		6.30	6.32	55.2	43.320	86.6
27	30 N-EtFOSE	630.1 > 58.9	8.76e3	2.35e4	1.0000		6.42	6.47	56.0	45.607	91.2
28	31 13C3-PFBA	216.1 > 171.8	1.16e4	1.48e4	1.0000	0.783	1.47	1.41	9.83	12.546	100.4
29	32 13C3-PFPeA	266. > 221.8	1.35e4	1.68e4	1.0000	0.807	2.44	2.37	10.0	12.412	99.3
30	33 13C3-PFBS	302. > 98.8	1.96e3	1.68e4	1.0000	0.108	2.70	2.64	1.46	13.490	107.9
31	34 13C2-PFHxA	315 > 269.8	4.40e3	1.68e4	1.0000	0.636	3.20	3.13	3.27	5.138	102.8

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-103.qld

Last Altered: Saturday, December 30, 2017 09:46:21 Pacific Standard Time  
Printed: Saturday, December 30, 2017 14:24:01 Pacific Standard Time

Name: 171229M2\_103, Date: 30-Dec-2017, Time: 08:34:17, ID: ST171229M2-15 PFC CS3 17L2611, Description: PFC CS3 17L2611

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	9.99e3	1.68e4	1.0000	0.652	3.80	3.74	7.42	11.375	91.0
33	36 18O2-PFHxS	403.0 > 102.6	1.52e3	4.34e3	1.0000	0.321	3.95	3.89	4.37	13.615	108.9
34	37 13C2-6:2 FTS	429.1 > 408.9	3.36e3	1.69e4	1.0000	0.192	4.26	4.20	2.50	12.995	104.0
35	38 13C2-PFOA	414.9 > 369.7	1.68e4	1.69e4	1.0000	0.945	4.32	4.26	12.4	13.163	105.3
36	39 13C5-PFNA	468.2 > 422.9	1.28e4	1.56e4	1.0000	0.832	4.75	4.68	10.3	12.366	98.9
37	40 13C8-PFOSA	506.1 > 77.7	3.43e3	1.98e4	1.0000	0.204	4.81	4.75	2.17	10.626	85.0
38	41 13C8-PFOS	507.0 > 79.9	3.69e3	4.67e3	1.0000	0.948	4.83	4.77	9.86	10.405	83.2
39	42 13C2-PFDA	515.1 > 469.9	1.53e4	1.51e4	1.0000	0.986	5.11	5.06	12.7	12.838	102.7
40	43 13C2-8:2 FTS	529.1 > 508.7	2.54e3	1.68e4	1.0000	0.124	5.09	5.02	1.88	15.132	121.1
41	44 d3-N-MeFOSAA	573.3 > 419	6.39e3	1.98e4	1.0000	0.391	5.26	5.20	4.04	10.319	82.6
42	45 d5-N-EiFOSAA	589.3 > 419	7.30e3	1.98e4	1.0000	0.451	5.42	5.35	4.61	10.218	81.7
43	46 13C2-PFUdA	565 > 519.8	1.94e4	1.98e4	1.0000	0.900	5.43	5.37	12.2	13.579	108.6
44	47 13C2-PFDoA	615.0 > 569.7	1.24e4	1.98e4	1.0000	0.617	5.70	5.65	7.81	12.658	101.3
45	48 d3-N-MeFOSA	515.2 > 168.9	1.84e4	1.98e4	1.0000	0.097	5.80	5.83	11.6	119.539	79.7
46	49 13C2-PFTeDA	714.8 > 669.6	4.71e3	1.98e4	1.0000	0.196	6.16	6.11	2.98	15.204	121.6
47	50 d5-N-ETFOSA	531.1 > 168.9	2.73e4	1.98e4	1.0000	0.147	6.16	6.21	17.3	117.840	78.6
48	51 13C2-PFHxDA	815 > 769.7	3.04e3	1.98e4	1.0000	0.435	6.48	6.44	1.92	4.420	88.4
49	52 d7-N-MeFOSE	623.1 > 58.9	2.12e4	1.98e4	1.0000	0.108	6.30	6.31	13.4	123.714	82.5
50	53 d9-N-EiFOSE	639.2 > 58.8	2.35e4	1.98e4	1.0000	0.116	6.42	6.46	14.8	128.410	85.6
51	54 13C4-PFBA	217. > 171.8	1.48e4	1.48e4	1.0000	1.000	1.47	1.41	12.5	12.500	100.0
52	55 13C5-PFHxA	318 > 272.9	1.68e4	1.68e4	1.0000	1.000	3.20	3.13	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	4.34e3	4.34e3	1.0000	1.000	3.95	3.89	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.69e4	1.69e4	1.0000	1.000	4.32	4.25	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.56e4	1.56e4	1.0000	1.000	4.75	4.69	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	4.67e3	4.67e3	1.0000	1.000	4.83	4.76	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.51e4	1.51e4	1.0000	1.000	5.11	5.06	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.98e4	1.98e4	1.0000	1.000	5.43	5.37	12.5	12.500	100.0

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Dataset: Untitled

Last Altered: Saturday, December 30, 2017 14:34:40 Pacific Standard Time

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Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122917.mdb 30 Dec 2017 09:38:17

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-29-17\_FULL.cdb 29 Dec 2017 16:04:07

Compound name: PFBA

	Name	ID	Acq Date	Acq Time
1	171229M2_1	IPA	29-Dec-17	13:20:29
2	171229M2_2	ST171229M2-1 PFC CS-2 17L2606	29-Dec-17	13:31:42
3	171229M2_3	ST171229M2-2 PFC CS-1 17L2607	29-Dec-17	13:42:53
4	171229M2_4	ST171229M2-3 PFC CS0 17L2608	29-Dec-17	13:54:04
5	171229M2_5	ST171229M2-4 PFC CS1 17L2609	29-Dec-17	14:05:15
6	171229M2_6	ST171229M2-5 PFC CS2 17L2610	29-Dec-17	14:16:26
7	171229M2_7	ST171229M2-6 PFC CS3 17L2611	29-Dec-17	14:27:38
8	171229M2_8	ST171229M2-7 PFC CS4 17L2612	29-Dec-17	14:38:48
9	171229M2_9	ST171229M2-8 PFC CS5 17L2613	29-Dec-17	14:49:59
10	171229M2_10	ST171229M2-9 PFC CS6 17L2710	29-Dec-17	15:01:10
11	171229M2_11	ST171229M2-10 PFC CS7 17L1804	29-Dec-17	15:12:20
12	171229M2_12	IPA	29-Dec-17	15:23:31
13	171229M2_13	ICV171229M2-1 PFC ICV 17L2907	29-Dec-17	15:34:42
14	171229M2_14	ICV171229M2-2 PFC ICV 17L1201	29-Dec-17	15:54:47
15	171229M2_15	IPA		
16	171229M2_16	B7L0125-BS1 OPR 0.25	29-Dec-17	16:20:48
17	171229M2_17	B7L0125-BSD1 LCSD 0.25	29-Dec-17	16:31:57
18	171229M2_18	B7L0125-BLK1 Method Blank 0.25	29-Dec-17	16:43:08
19	171229M2_19	1701850-01 REEPDW022 0.11501	29-Dec-17	16:54:19
20	171229M2_20	1701850-02 REEPDW023 0.11853	29-Dec-17	17:05:30
21	171229M2_21	1701850-03 REEPDW024 0.117	29-Dec-17	17:16:48
22	171229M2_22	1701850-04 REEPDW025 0.11877	29-Dec-17	17:27:59
23	171229M2_23	1701850-05 REEPDW026 0.1191	29-Dec-17	17:39:09
24	171229M2_24	1701850-06 REEPDW027 0.12081	29-Dec-17	17:50:20
25	171229M2_25	1701850-07 REEPDW028 0.11799	29-Dec-17	18:01:31
26	171229M2_26	1701850-08 REEPDW029 0.12009	29-Dec-17	18:12:42
27	171229M2_27	1701850-10 REEPDW502 0.09932	29-Dec-17	18:23:52
28	171229M2_28	IPA	29-Dec-17	18:35:03
29	171229M2_29	ST171229M2-11 PFC CS3 17L2611	29-Dec-17	18:46:14
30	171229M2_30	IPA	29-Dec-17	18:57:24
31	171229M2_31	1701850-11 REEPDW031 0.11718	29-Dec-17	19:08:35

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Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
32	171229M2_32	1701850-12 REEPDW032 0.11903	29-Dec-17	19:19:45
33	171229M2_33	1701850-13 REEPDW033 0.12087	29-Dec-17	19:30:56
34	171229M2_34	1701850-14 REEPDW034 0.12073	29-Dec-17	19:42:07
35	171229M2_35	1701940-01 REEPDW040FRB 0.11341	29-Dec-17	19:53:18
36	171229M2_36	1701940-02 REEPDW041FRB 0.11678	29-Dec-17	20:04:31
37	171229M2_37	1701940-03 REEPDW042FRB 0.11364	29-Dec-17	20:15:44
38	171229M2_38	1701802-01RE1 FC-MW02SR1-NP-20171128...	29-Dec-17	20:26:54
39	171229M2_39	1701802-02RE1 FC-MW02SR1-P1-20171128 ...	29-Dec-17	20:38:04
40	171229M2_40	1701802-03RE1 FC-MW02SR1-P2-20171128 ...	29-Dec-17	20:49:15
41	171229M2_41	1701802-04RE1 FC-MW02SR1-P3-20171128 ...	29-Dec-17	21:00:26
42	171229M2_42	1701802-05RE1 FC-MW02SR1-FRB-2017112...	29-Dec-17	21:11:37
43	171229M2_43	1701802-06RE1 FC-MW02IR1-NP-20171128 ...	29-Dec-17	21:22:47
44	171229M2_44	1701802-07RE1 FC-MW02IR1-P1-20171128 ...	29-Dec-17	21:33:58
45	171229M2_45	IPA	29-Dec-17	21:45:09
46	171229M2_46	ST171229M2-12 PFC CS0 17L2608	29-Dec-17	21:56:19
47	171229M2_47	IPA	29-Dec-17	22:07:32
48	171229M2_48	1701802-08RE1 FC-MW02IR1-P2-20171128 ...	29-Dec-17	22:18:51
49	171229M2_49	1701802-09RE1 FC-MW02IR1-P3-20171128 ...	29-Dec-17	22:30:05
50	171229M2_50	IPA	29-Dec-17	22:41:16
51	171229M2_51	B7L0171-BS1 OPR 0.25	29-Dec-17	22:52:26
52	171229M2_52	IPA	29-Dec-17	23:03:37
53	171229M2_53	B7L0171-BLK1 Method Blank 0.25	29-Dec-17	23:14:47
54	171229M2_54	B7L0171-MS1 Matrix Spike 0.25217	29-Dec-17	23:25:59
55	171229M2_55	B7L0171-MSD1 Matrix Spike Dup 0.2644	29-Dec-17	23:37:09
56	171229M2_56	1701929-01 SB01 0.26085	29-Dec-17	23:48:20
57	171229M2_57	1701929-02 EB01 0.26531	29-Dec-17	23:59:31
58	171229M2_58	1701929-03 UXOSite11-GW-GMMW04-20171...	30-Dec-17	00:10:41
59	171229M2_59	1701929-04 UXOSite11-GW-GMMW08-20171...	30-Dec-17	00:21:52
60	171229M2_60	1701929-05 UXOSite11-GW-GMMW10-20171...	30-Dec-17	00:33:02
61	171229M2_61	1701929-06 IRSite13-GW-BUAMW011-20171...	30-Dec-17	00:44:13
62	171229M2_62	1701929-07 IRSite13-GW-BUAMW015-20171...	30-Dec-17	00:55:25
63	171229M2_63	1701929-08 IRSite13-GW-BUAMW012-20171...	30-Dec-17	01:06:43
64	171229M2_64	1701929-09 IRSite13-GW-BUAMW016-20171...	30-Dec-17	01:17:53
65	171229M2_65	IPA	30-Dec-17	01:29:05

Dataset: Untitled

Last Altered: Saturday, December 30, 2017 14:34:40 Pacific Standard Time

Printed: Saturday, December 30, 2017 14:35:25 Pacific Standard Time

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
66	171229M2_66	ST171229M2-13 PFC CS3 17L2611	30-Dec-17	01:40:17
67	171229M2_67	IPA	30-Dec-17	01:51:27
68	171229M2_68	1701929-10 DUP01 27034	30-Dec-17	02:02:42
69	171229M2_69	1701929-11 IRSite13-GW-BUAMW010-20171...	30-Dec-17	02:14:01
70	171229M2_70	1701929-12 IRSite13-GW-BUAMW002-20171...	30-Dec-17	02:25:16
71	171229M2_71	1701943-01 WI-A06-6-S-04-1217 0.125	30-Dec-17	02:36:26
72	171229M2_72	1701943-03 WI-A06-6-S-19-1217 0.12062	30-Dec-17	02:47:37
73	171229M2_73	1701943-05 WI-A06-6-S-19P-1217 0.11997	30-Dec-17	02:58:48
74	171229M2_74	1701943-07 WI-A06-6-S-31-1217 0.12406	30-Dec-17	03:09:59
75	171229M2_75	1701943-09 WI-A06-EB07-121117 0.12057	30-Dec-17	03:21:10
76	171229M2_76	1701943-11 WI-A06-6-S-08-1217 0.12355	30-Dec-17	03:32:20
77	171229M2_77	1701943-13 WI-A06-EB08-121217 0.12255	30-Dec-17	03:43:31
78	171229M2_78	IPA	30-Dec-17	03:54:41
79	171229M2_79	ST171229M2-14 PFC CS0 17L2608	30-Dec-17	04:05:52
80	171229M2_80	IPA	30-Dec-17	04:17:05
81	171229M2_81	B7L0092-MS1@20X Matrix Spike 16.49	30-Dec-17	04:28:22
82	171229M2_82	B7L0092-MSD1@20X Matrix Spike Dup 16.11	30-Dec-17	04:39:32
83	171229M2_83	1701841-01@20X OF-SLG01-1217 17.61	30-Dec-17	04:50:43
84	171229M2_84	1701841-02@20X OF-SLG02-1217 10.1	30-Dec-17	05:01:54
85	171229M2_85	1701841-03@20X OF-SLG02P-1217 6.48	30-Dec-17	05:13:05
86	171229M2_86	1701841-04@10X OF-SLG03-1217 11.57	30-Dec-17	05:24:15
87	171229M2_87	1701841-05@10X OF-SLG04-1217 5.07	30-Dec-17	05:35:26
88	171229M2_88	B7L0073-MS1@5X Matrix Spike 0.24032	30-Dec-17	05:46:37
89	171229M2_89	B7L0073-MSD1@5X Matrix Spike Dup 0.25539	30-Dec-17	05:57:47
90	171229M2_90	1701829-04@5X FT-MW081-20171129 0.2616	30-Dec-17	06:08:58
91	171229M2_91	IPA	30-Dec-17	06:20:09
92	171229M2_92	B7K0027-BLK1 Method Blank 1	30-Dec-17	06:31:20
93	171229M2_93	B7L0069-BLK1 Method Blank 1	30-Dec-17	06:42:30
94	171229M2_94	B7L0069-BS2 OPR 1	30-Dec-17	06:53:41
95	171229M2_95	B7L0069-BS3 OPR 1	30-Dec-17	07:04:51
96	171229M2_96	B7L0069-BS4 OPR 1	30-Dec-17	07:16:02
97	171229M2_97	B7L0069-BS5 OPR 1	30-Dec-17	07:27:13
98	171229M2_98	B7K0027-BS1 OPR 1	30-Dec-17	07:38:24
99	171229M2_99	B7K0027-BS2 OPR 1	30-Dec-17	07:49:34

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Dataset: Untitled

Last Altered: Saturday, December 30, 2017 14:34:40 Pacific Standard Time

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**Compound name: PFBA**

	Name	ID	Acq.Date	Acq.Time
100	171229M2_100	B7K0027-BS3 OPR 1	30-Dec-17	08:00:45
101	171229M2_101	B7K0027-BS4 OPR 1	30-Dec-17	08:11:55
102	171229M2_102	IPA	30-Dec-17	08:23:07
103	171229M2_103	ST171229M2-15 PFC CS3 17L2611	30-Dec-17	08:34:17
104	171229M2_104	IPA	30-Dec-17	08:45:28
105	171229M2_105	B7L0072-BS1 OPR 3	30-Dec-17	08:56:39
106	171229M2_106	B7L0181-BS1 OPR 1	30-Dec-17	09:07:50
107	171229M2_107	IPA	30-Dec-17	09:19:01
108	171229M2_108	B7L0072-BLK1 Method Blank 3	30-Dec-17	09:30:12
109	171229M2_109	B7L0181-BLK1 Method Blank 1	30-Dec-17	09:41:22
110	171229M2_110	1701617-01 1644210 1.2	30-Dec-17	09:52:33
111	171229M2_111	1701618-01 103017B 3	30-Dec-17	10:03:44
112	171229M2_112	1701629-01 102017A 3	30-Dec-17	10:14:55
113	171229M2_113	1701629-01RE1 102017A 1	30-Dec-17	10:26:05
114	171229M2_114	IPA	30-Dec-17	10:37:16
115	171229M2_115	ST171229M2-16 PFC CS3 17L2611	30-Dec-17	10:48:27
116	171229M2_116	IPA	30-Dec-17	10:59:39

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122317.mdb 28 Dec 2017 08:41:53

Calibration: U:\Q4.PRO\CurveDB\IC18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

**Compound name: PFBA**Correlation coefficient:  $r = 0.999714$ ,  $r^2 = 0.999428$ Calibration curve:  $1.41688 * x + -0.0844562$ 

Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

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	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	1.51	200.855	9109.702	0.276	0.3	1.6	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	1.52	411.571	8940.615	0.575	0.5	-6.9	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	1.51	913.939	9244.819	1.236	0.9	-6.8	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	1.52	1922.570	9637.834	2.494	1.8	-9.0	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	1.52	5080.765	9386.572	6.766	4.8	-3.3	NO	0.999	NO	bb
6	6 171227M2_7	Standard	10.000	1.52	10629.204	9079.917	14.633	10.4	3.9	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	1.52	52212.934	9406.534	69.384	49.0	-1.9	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	1.52	99463.430	9055.936	137.290	97.0	-3.0	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	1.52	256225.172	8899.062	359.905	254.1	1.6	NO	0.999	NO	bb

**Compound name: PFPeA**Correlation coefficient:  $r = 0.999071$ ,  $r^2 = 0.998143$ Calibration curve:  $1.17898 * x + -0.0138581$ 

Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	2.47	226.939	10138.515	0.280	0.2	-0.4	NO	0.998	NO	bb
2	2 171227M2_3	Standard	0.500	2.47	441.227	10123.872	0.545	0.5	-5.2	NO	0.998	NO	bb
3	3 171227M2_4	Standard	1.000	2.47	890.896	9829.790	1.133	1.0	-2.7	NO	0.998	NO	bb
4	4 171227M2_5	Standard	2.000	2.47	1807.953	10132.158	2.230	1.9	-4.8	NO	0.998	NO	bd
5	5 171227M2_6	Standard	5.000	2.47	5259.210	10246.948	6.416	5.5	9.1	NO	0.998	NO	bb
6	6 171227M2_7	Standard	10.000	2.47	9010.288	9841.680	11.444	9.7	-2.8	NO	0.998	NO	bb
7	7 171227M2_8	Standard	50.000	2.48	49878.492	9541.606	65.343	55.4	10.9	NO	0.998	NO	bb
8	8 171227M2_9	Standard	100.000	2.47	90618.992	9903.929	114.373	97.0	-3.0	NO	0.998	NO	bb
9	9 171227M2_10	Standard	250.000	2.48	226345.406	9695.774	291.809	247.5	-1.0	NO	0.998	NO	bb



Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFBS**

Correlation coefficient:  $r = 0.996361$ ,  $r^2 = 0.992735$

Calibration curve:  $2.42453 * x + -0.525381$

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	2.74	59.858	1310.046	0.571	0.5	80.9	NO	0.993	NO	MMX
2	2 171227M2_3	Standard	0.500	2.74	106.140	1399.401	0.948	0.6	21.5	NO	0.993	NO	bb
3	3 171227M2_4	Standard	1.000	2.74	174.071	1499.687	1.451	0.8	-18.5	NO	0.993	NO	bb
4	4 171227M2_5	Standard	2.000	2.74	439.490	1333.655	4.119	1.9	-4.2	NO	0.993	NO	bb
5	5 171227M2_6	Standard	5.000	2.74	1121.018	1292.882	10.838	4.7	-6.3	NO	0.993	NO	bb
6	6 171227M2_7	Standard	10.000	2.74	2532.465	1368.757	23.127	9.8	-2.4	NO	0.993	NO	bd
7	7 171227M2_8	Standard	50.000	2.75	13093.902	1339.128	122.224	50.6	1.3	NO	0.993	NO	bb
8	8 171227M2_9	Standard	100.000	2.74	25473.293	1151.352	276.558	114.3	14.3	NO	0.993	NO	bd
9	9 171227M2_10	Standard	250.000	2.74	65284.344	1428.674	571.197	235.8	-5.7	NO	0.993	NO	bb

**Compound name: PFHxA**

Coefficient of Determination:  $R^2 = 0.994958$

Calibration curve:  $-0.00634236 * x^2 + 2.1363 * x + -0.390389$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	3.24	232.680	3269.867	0.356	0.3	39.9	NO	0.995	NO	bbX
2	2 171227M2_3	Standard	0.500	3.23	504.518	3115.723	0.810	0.6	12.5	NO	0.995	NO	bb
3	3 171227M2_4	Standard	1.000	3.23	855.336	3457.569	1.237	0.8	-23.7	NO	0.995	NO	bb
4	4 171227M2_5	Standard	2.000	3.23	2097.619	3128.971	3.352	1.8	-12.0	NO	0.995	NO	bb
5	5 171227M2_6	Standard	5.000	3.23	5625.306	3174.698	8.860	4.4	-12.3	NO	0.995	NO	bd
6	6 171227M2_7	Standard	10.000	3.23	12275.598	3240.993	18.938	9.3	-7.0	NO	0.995	NO	bd
7	7 171227M2_8	Standard	50.000	3.23	60930.879	3133.422	97.227	54.5	9.0	NO	0.995	NO	bb
8	8 171227M2_9	Standard	100.000	3.23	99186.602	3380.480	146.705	96.5	-3.5	NO	0.995	NO	bd
9	9 171227M2_10	Standard	250.000	3.23	300766.344	2893.191	519.783			NO	0.995	YES	MMXI

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFHpA**

Correlation coefficient:  $r = 0.999445$ ,  $r^2 = 0.998890$

Calibration curve:  $1.64689 * x + -0.0913929$

Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	3.84	283.627	8496.508	0.417	0.3	23.5	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	3.83	599.143	9226.614	0.812	0.5	9.7	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	3.84	1030.449	8782.837	1.467	0.9	-5.4	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	3.84	1995.367	9480.081	2.631	1.7	-17.3	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	3.84	5509.665	8254.716	8.343	5.1	2.4	NO	0.999	NO	bd
6	6 171227M2_7	Standard	10.000	3.84	10947.364	9052.288	15.117	9.2	-7.7	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	3.84	58088.418	9428.651	77.011	46.8	-6.4	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	3.84	119483.109	9154.792	163.143	99.1	-0.9	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	3.84	297770.719	8864.943	419.871	255.0	2.0	NO	0.999	NO	bb

**Compound name: L-PFHxS**

Correlation coefficient:  $r = 0.999319$ ,  $r^2 = 0.998639$

Calibration curve:  $2.13865 * x + -0.0855212$

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	3.98	54.171	1383.153	0.490	0.3	7.6	NO	0.999	NO	MM
2	2 171227M2_3	Standard	0.500	3.98	66.982	1262.645	0.663	0.4	-30.0	NO	0.999	NO	MM
3	3 171227M2_4	Standard	1.000	3.98	205.763	1275.236	2.017	1.0	-1.7	NO	0.999	NO	MM
4	4 171227M2_5	Standard	2.000	3.98	421.746	1046.561	5.037	2.4	19.8	NO	0.999	NO	MM
5	5 171227M2_6	Standard	5.000	3.98	1131.681	1328.807	10.646	5.0	0.4	NO	0.999	NO	MM
6	6 171227M2_7	Standard	10.000	3.98	2300.463	1249.226	23.019	10.8	8.0	NO	0.999	NO	MM
7	7 171227M2_8	Standard	50.000	3.98	10048.782	1181.561	106.308	49.7	-0.5	NO	0.999	NO	MM
8	8 171227M2_9	Standard	100.000	3.98	20539.982	1268.674	202.376	94.7	-5.3	NO	0.999	NO	MM
9	9 171227M2_10	Standard	250.000	3.98	53125.645	1220.190	544.235	254.5	1.8	NO	0.999	NO	MM

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 6:2 FTS**

Coefficient of Determination:  $R^2 = 0.998918$

Calibration curve:  $8.87912e-005 * x^2 + 0.22705 * x + 0.0173879$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.29	89.897	13163.429	0.085	0.3	19.7	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	4.28	146.298	14294.111	0.128	0.5	-2.6	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	4.29	219.027	13555.376	0.202	0.8	-18.7	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	4.28	489.448	14219.026	0.430	1.8	-9.1	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	4.28	1302.923	15102.760	1.078	4.7	-6.7	NO	0.999	NO	bb
6	6 171227M2_7	Standard	10.000	4.29	3011.673	13826.356	2.723	11.9	18.6	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	4.29	12740.854	13611.259	11.701	50.5	0.9	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	4.29	25105.082	13623.771	23.034	97.6	-2.4	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	4.28	63740.547	12743.418	62.523	250.7	0.3	NO	0.999	NO	bb

**Compound name: L-PFOA**

Correlation coefficient:  $r = 0.998602$ ,  $r^2 = 0.997206$

Calibration curve:  $1.24231 * x + 0.274251$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.34	681.019	13163.429	0.647	0.3	19.9	NO	0.997	NO	bb
2	2 171227M2_3	Standard	0.500	4.33	1055.797	14294.111	0.923	0.5	4.5	NO	0.997	NO	bb
3	3 171227M2_4	Standard	1.000	4.34	1446.105	13555.376	1.334	0.9	-14.7	NO	0.997	NO	bb
4	4 171227M2_5	Standard	2.000	4.34	2767.211	14219.026	2.433	1.7	-13.1	NO	0.997	NO	bb
5	5 171227M2_6	Standard	5.000	4.34	7742.191	15102.760	6.408	4.9	-1.3	NO	0.997	NO	bb
6	6 171227M2_7	Standard	10.000	4.34	15377.668	13826.356	13.902	11.0	9.7	NO	0.997	NO	bb
7	7 171227M2_8	Standard	50.000	4.34	68270.938	13611.259	62.697	50.2	0.5	NO	0.997	NO	bb
8	8 171227M2_9	Standard	100.000	4.34	124057.992	13623.771	113.825	91.4	-8.6	NO	0.997	NO	bb
9	9 171227M2_10	Standard	250.000	4.34	326759.563	12743.418	320.518	257.8	3.1	NO	0.997	NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFHpS**

Coefficient of Determination:  $R^2 = 0.999640$

Calibration curve:  $-8.23107e-005 * x^2 + 0.300027 * x + -0.0487822$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.44	48.204	13163.429	0.046	0.3	26.1	NO	1.000	NO	MM
2	2 171227M2_3	Standard	0.500	4.44	122.189	14294.111	0.107	0.5	3.8	NO	1.000	NO	bb
3	3 171227M2_4	Standard	1.000	4.44	211.832	13555.376	0.195	0.8	-18.6	NO	1.000	NO	bb
4	4 171227M2_5	Standard	2.000	4.44	546.853	14219.026	0.481	1.8	-11.7	NO	1.000	NO	bb
5	5 171227M2_6	Standard	5.000	4.44	1683.078	15102.760	1.393	4.8	-3.8	NO	1.000	NO	bb
6	6 171227M2_7	Standard	10.000	4.44	3355.859	13826.356	3.034	10.3	3.0	NO	1.000	NO	bb
7	7 171227M2_8	Standard	50.000	4.44	16420.051	13611.259	15.079	51.1	2.3	NO	1.000	NO	bb
8	8 171227M2_9	Standard	100.000	4.44	31390.182	13623.771	28.801	98.8	-1.2	NO	1.000	NO	bb
9	9 171227M2_10	Standard	250.000	4.44	71238.086	12743.418	69.877	250.2	0.1	NO	1.000	NO	bb

**Compound name: PFNA**

Coefficient of Determination:  $R^2 = 0.999012$

Calibration curve:  $0.000248018 * x^2 + 1.53471 * x + -0.0129473$

Response type: Internal Std ( Ref 39 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.76	318.003	9859.559	0.403	0.3	8.4	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	4.76	551.765	8777.721	0.786	0.5	4.1	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	4.76	1311.051	11751.393	1.395	0.9	-8.3	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	4.76	2012.020	10893.109	2.309	1.5	-24.4	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	4.76	7032.202	9332.128	9.419	6.1	22.8	NO	0.999	NO	bb
6	6 171227M2_7	Standard	10.000	4.76	12528.771	10484.868	14.937	9.7	-2.7	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	4.76	59371.309	9467.145	78.391	50.7	1.3	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	4.76	117937.258	9591.712	153.697	98.6	-1.4	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	4.76	327242.750	10230.392	399.841	250.4	0.2	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFOSA**

Correlation coefficient:  $r = 0.999701$ ,  $r^2 = 0.999402$

Calibration curve:  $1.2583 * x + -0.0765078$

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.83	58.116	2569.672	0.283	0.3	14.2	NO	0.999	NO	MM
2	2 171227M2_3	Standard	0.500	4.83	120.281	2700.973	0.557	0.5	0.6	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	4.83	238.391	2843.462	1.048	0.9	-10.6	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	4.83	440.340	2542.202	2.165	1.8	-10.9	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	4.83	1349.713	2613.613	6.455	5.2	3.8	NO	0.999	NO	bb
6	6 171227M2_7	Standard	10.000	4.83	2753.695	2651.221	12.983	10.4	3.8	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	4.83	13685.002	2819.033	60.681	48.3	-3.4	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	4.83	23358.801	2247.480	129.917	103.3	3.3	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	4.83	56545.727	2264.458	312.137	248.1	-0.8	NO	0.999	NO	bd

**Compound name: L-PFOS**

Coefficient of Determination:  $R^2 = 0.996007$

Calibration curve:  $0.000300694 * x^2 + 1.23969 * x + -0.0317851$

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	4.84	70.847	2886.512	0.307	0.3	9.2	NO	0.996	NO	MM
2	2 171227M2_3	Standard	0.500	4.84	150.287	3604.530	0.521	0.4	-10.8	NO	0.996	NO	MM
3	3 171227M2_4	Standard	1.000	4.84	311.359	3164.295	1.230	1.0	1.8	NO	0.996	NO	MM
4	4 171227M2_5	Standard	2.000	4.83	564.189	3039.063	2.321	1.9	-5.2	NO	0.996	NO	MM
5	5 171227M2_6	Standard	5.000	4.84	1372.968	3003.427	5.714	4.6	-7.4	NO	0.996	NO	MM
6	6 171227M2_7	Standard	10.000	4.84	3319.461	3098.998	13.389	10.8	8.0	NO	0.996	NO	MM
7	7 171227M2_8	Standard	50.000	4.84	15166.981	3495.231	54.242	43.3	-13.4	NO	0.996	NO	MM
8	8 171227M2_9	Standard	100.000	4.84	33462.152	3039.179	137.628	108.2	8.2	NO	0.996	NO	MM
9	9 171227M2_10	Standard	250.000	4.84	79229.375	3037.251	326.074	248.1	-0.8	NO	0.996	NO	MM

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFDA**

Coefficient of Determination:  $R^2 = 0.997832$

Calibration curve:  $-0.0050479 * x^2 + 1.55973 * x + -0.0842373$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev.	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.12	343.974	9518.367	0.452	0.3	37.6	NO	0.998	NO	MMX
2	2 171227M2_3	Standard	0.500	5.12	609.614	10515.332	0.725	0.5	3.9	NO	0.998	NO	bb
3	3 171227M2_4	Standard	1.000	5.12	1101.790	9300.638	1.481	1.0	0.7	NO	0.998	NO	bb
4	4 171227M2_5	Standard	2.000	5.12	2121.444	10007.011	2.650	1.8	-11.8	NO	0.998	NO	bb
5	5 171227M2_6	Standard	5.000	5.12	6452.377	9589.339	8.411	5.5	10.9	NO	0.998	NO	bd
6	6 171227M2_7	Standard	10.000	5.12	11038.605	9535.366	14.471	9.6	-3.7	NO	0.998	NO	bb
7	7 171227M2_8	Standard	50.000	5.12	64673.234	12375.918	65.322	50.0	0.1	NO	0.998	NO	bb
8	8 171227M2_9	Standard	100.000	5.12	133575.094	9066.912	184.152			NO	0.998	NO	bbXI
9	9 171227M2_10	Standard	250.000	5.12	268778.500	9175.472	366.164			NO	0.998	NO	bdXI

**Compound name: 8:2 FTS**

Coefficient of Determination:  $R^2 = 0.996846$

Calibration curve:  $-0.00223216 * x^2 + 0.362891 * x + -0.0269702$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev.	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.09	49.811	9518.367	0.065	0.3	2.0	NO	0.997	NO	MM
2	2 171227M2_3	Standard	0.500	5.10	98.045	10515.332	0.117	0.4	-20.7	NO	0.997	NO	bb
3	3 171227M2_4	Standard	1.000	5.09	246.138	9300.638	0.331	1.0	-0.8	NO	0.997	NO	bb
4	4 171227M2_5	Standard	2.000	5.09	472.333	10007.011	0.590	1.7	-14.1	NO	0.997	NO	bb
5	5 171227M2_6	Standard	5.000	5.09	1297.019	9589.339	1.691	4.9	-2.4	NO	0.997	NO	bd
6	6 171227M2_7	Standard	10.000	5.10	2740.242	9535.366	3.592	10.7	6.7	NO	0.997	NO	bb
7	7 171227M2_8	Standard	50.000	5.10	12378.889	12375.918	12.503	49.8	-0.5	NO	0.997	NO	bb
8	8 171227M2_9	Standard	100.000	5.09	27738.313	9066.912	38.241			NO	0.997	NO	bbXI
9	9 171227M2_10	Standard	250.000	5.10	64158.574	9175.472	87.405			NO	0.997	NO	bdXI

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: N-MeFOSAA**

Coefficient of Determination:  $R^2 = 0.998037$

Calibration curve:  $-0.00194018 * x^2 + 1.72273 * x + -0.181365$

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.27	82.713	4963.580	0.208	0.2	-9.5	NO	0.998	NO	bb
2	2 171227M2_3	Standard	0.500	5.26	226.672	5539.444	0.511	0.4	-19.5	NO	0.998	NO	bb
3	3 171227M2_4	Standard	1.000	5.27	502.756	5332.894	1.178	0.8	-21.0	NO	0.998	NO	bb
4	4 171227M2_5	Standard	2.000	5.27	1505.595	6130.912	3.070	1.9	-5.4	NO	0.998	NO	bb
5	5 171227M2_6	Standard	5.000	5.26	3821.920	4858.688	9.833	5.9	17.0	NO	0.998	NO	bd
6	6 171227M2_7	Standard	10.000	5.27	6520.119	5008.923	16.271	9.7	-3.4	NO	0.998	NO	bb
7	7 171227M2_8	Standard	50.000	5.27	36506.973	5641.206	80.894	49.9	-0.3	NO	0.998	NO	bb
8	8 171227M2_9	Standard	100.000	5.26	62330.102	5099.348	152.789	100.1	0.1	NO	0.998	NO	bd
9	9 171227M2_10	Standard	250.000	5.27	183947.938	5086.673	452.034			NO	0.998	NO	bbXI

**Compound name: N-EtFOSAA**

Coefficient of Determination:  $R^2 = 0.997029$

Calibration curve:  $1.84032e-005 * x^2 + 1.21223 * x + -0.0878562$

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.42	103.996	5765.227	0.225	0.3	3.4	NO	0.997	NO	bb
2	2 171227M2_3	Standard	0.500	5.42	227.732	5889.360	0.483	0.5	-5.8	NO	0.997	NO	bb
3	3 171227M2_4	Standard	1.000	5.42	497.781	6991.896	0.890	0.8	-19.3	NO	0.997	NO	bb
4	4 171227M2_5	Standard	2.000	5.42	947.947	6313.761	1.877	1.6	-19.0	NO	0.997	NO	bb
5	5 171227M2_6	Standard	5.000	5.42	3101.046	6451.895	6.008	5.0	0.6	NO	0.997	NO	bb
6	6 171227M2_7	Standard	10.000	5.42	6353.150	6152.865	12.907	10.7	7.2	NO	0.997	NO	bd
7	7 171227M2_8	Standard	50.000	5.42	34523.953	6457.469	66.829	55.2	10.3	NO	0.997	NO	bb
8	8 171227M2_9	Standard	100.000	5.42	58484.148	6485.901	112.714	92.9	-7.1	NO	0.997	NO	bb
9	9 171227M2_10	Standard	250.000	5.42	120767.375	4928.821	306.279	251.8	0.7	NO	0.997	NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFUdA**

Coefficient of Determination:  $R^2 = 0.997047$

Calibration curve:  $0.00147838 * x^2 + 1.00891 * x + 0.082257$

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.43	290.951	11874.624	0.306	0.2	-11.2	NO	0.997	NO	bb
2	2 171227M2_3	Standard	0.500	5.43	450.827	11943.025	0.472	0.4	-22.8	NO	0.997	NO	bb
3	3 171227M2_4	Standard	1.000	5.43	899.385	12096.048	0.929	0.8	-16.1	NO	0.997	NO	bb
4	4 171227M2_5	Standard	2.000	5.43	2015.876	11576.810	2.177	2.1	3.5	NO	0.997	NO	bb
5	5 171227M2_6	Standard	5.000	5.43	6349.792	12204.513	6.504	6.3	26.1	NO	0.997	NO	bd
6	6 171227M2_7	Standard	10.000	5.43	11864.395	11786.622	12.582	12.2	21.7	NO	0.997	NO	bb
7	7 171227M2_8	Standard	50.000	5.44	56536.574	12370.035	57.131	52.5	5.0	NO	0.997	NO	bb
8	8 171227M2_9	Standard	100.000	5.43	109716.914	12881.869	106.464	92.8	-7.2	NO	0.997	NO	bb
9	9 171227M2_10	Standard	250.000	5.43	311114.344	11183.854	347.727	251.7	0.7	NO	0.997	NO	bb

**Compound name: PFDS**

Coefficient of Determination:  $R^2 = 0.995097$

Calibration curve:  $0.000194307 * x^2 + 0.317229 * x + -0.0197315$

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.48	55.818	11874.624	0.059	0.2	-1.0	NO	0.995	NO	MM
2	2 171227M2_3	Standard	0.500	5.47	151.670	11943.025	0.159	0.6	12.5	NO	0.995	NO	bb
3	3 171227M2_4	Standard	1.000	5.48	270.753	12096.048	0.280	0.9	-5.6	NO	0.995	NO	bb
4	4 171227M2_5	Standard	2.000	5.47	482.954	11576.810	0.521	1.7	-14.8	NO	0.995	NO	bb
5	5 171227M2_6	Standard	5.000	5.48	1744.112	12204.513	1.786	5.7	13.5	NO	0.995	NO	bb
6	6 171227M2_7	Standard	10.000	5.48	2629.248	11786.622	2.788	8.8	-12.0	NO	0.995	NO	bb
7	7 171227M2_8	Standard	50.000	5.48	18683.514	12370.035	18.880	57.5	15.1	NO	0.995	NO	bb
8	8 171227M2_9	Standard	100.000	5.48	31595.900	12881.869	30.659	91.6	-8.4	NO	0.995	NO	bb
9	9 171227M2_10	Standard	250.000	5.48	82427.578	11183.854	92.128	251.7	0.7	NO	0.995	NO	bb



Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFDoA**

Coefficient of Determination:  $R^2 = 0.999022$

Calibration curve:  $0.00126025 * x^2 + 1.75677 * x + -0.0893572$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.71	281.413	8054.505	0.437	0.3	19.8	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	5.71	459.677	8743.186	0.657	0.4	-15.0	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	5.71	1187.869	8431.139	1.761	1.1	5.3	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	5.71	1932.598	9103.854	2.654	1.6	-22.0	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	5.71	5590.929	8413.934	8.306	4.8	-4.7	NO	0.999	NO	bd
6	6 171227M2_7	Standard	10.000	5.70	13316.887	7956.292	20.922	11.9	18.6	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	5.71	63050.801	8744.809	90.126	49.6	-0.8	NO	0.999	NO	bd
8	8 171227M2_9	Standard	100.000	5.71	117327.805	7893.276	185.803	98.8	-1.2	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	5.71	289757.656	6980.643	518.859	250.4	0.2	NO	0.999	NO	bb

**Compound name: N-MeFOSA**

Correlation coefficient:  $r = 0.998604$ ,  $r^2 = 0.997211$

Calibration curve:  $1.13158 * x + -0.0254576$

Response type: Internal Std ( Ref 48 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	1.250	5.86	167.310	17951.223	1.398	1.3	0.6	NO	0.997	NO	bb
2	2 171227M2_3	Standard	2.500	5.86	302.246	16653.398	2.722	2.4	-2.9	NO	0.997	NO	bb
3	3 171227M2_4	Standard	5.000	5.86	569.019	16891.504	5.053	4.5	-10.2	NO	0.997	NO	bb
4	4 171227M2_5	Standard	10.000	5.86	1194.250	17379.400	10.307	9.1	-8.7	NO	0.997	NO	bb
5	5 171227M2_6	Standard	25.000	5.86	3483.596	18111.424	28.851	25.5	2.1	NO	0.997	NO	bb
6	6 171227M2_7	Standard	50.000	5.86	7164.417	17693.111	60.739	53.7	7.4	NO	0.997	NO	bb
7	7 171227M2_8	Standard	250.000	5.86	34627.773	16898.027	307.383	271.7	8.7	NO	0.997	NO	bb
8	8 171227M2_9	Standard	500.000	5.86	66696.031	16794.846	595.683	526.4	5.3	NO	0.997	NO	bb
9	9 171227M2_10	Standard	1250.000	5.86	154509.922	17080.729	1356.879	1199.1	-4.1	NO	0.997	NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFTTrDA**

Correlation coefficient:  $r = 0.996052$ ,  $r^2 = 0.992119$

Calibration curve:  $1.68443 * x + -0.444294$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	5.94	372.353	8054.505	0.578	0.6	142.7	NO	0.992	NO	bbX
2	2 171227M2_3	Standard	0.500	5.94	419.267	8743.186	0.599	0.6	23.9	NO	0.992	NO	bb
3	3 171227M2_4	Standard	1.000	5.94	1076.364	8431.139	1.596	1.2	21.1	NO	0.992	NO	bb
4	4 171227M2_5	Standard	2.000	5.95	1691.315	9103.854	2.322	1.6	-17.9	NO	0.992	NO	bb
5	5 171227M2_6	Standard	5.000	5.95	5638.848	8413.934	8.377	5.2	4.7	NO	0.992	NO	bb
6	6 171227M2_7	Standard	10.000	5.94	8845.055	7956.292	13.896	8.5	-14.9	NO	0.992	NO	bd
7	7 171227M2_8	Standard	50.000	5.95	47442.535	8744.809	67.815	40.5	-19.0	NO	0.992	NO	bb
8	8 171227M2_9	Standard	100.000	5.94	101851.219	7893.276	161.294	96.0	-4.0	NO	0.992	NO	bb
9	9 171227M2_10	Standard	250.000	5.94	248778.781	6980.643	445.480	264.7	5.9	NO	0.992	NO	bb

**Compound name: PFTeDA**

Coefficient of Determination:  $R^2 = 0.996372$

Calibration curve:  $-0.0148538 * x^2 + 2.8497 * x + 0.0369329$

Response type: Internal Std ( Ref 49 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	6.16	127.963	2234.556	0.716	0.2	-4.6	NO	0.996	NO	bb
2	2 171227M2_3	Standard	0.500	6.15	194.907	2124.994	1.147	0.4	-22.0	NO	0.996	NO	bb
3	3 171227M2_4	Standard	1.000	6.16	574.462	2146.656	3.345	1.2	16.8	NO	0.996	NO	bb
4	4 171227M2_5	Standard	2.000	6.16	916.039	1846.036	6.203	2.2	9.4	NO	0.996	NO	bb
5	5 171227M2_6	Standard	5.000	6.16	2650.909	2216.522	14.950	5.4	7.7	NO	0.996	NO	bb
6	6 171227M2_7	Standard	10.000	6.16	4695.736	2338.622	25.099	9.2	-7.6	NO	0.996	NO	bb
7	7 171227M2_8	Standard	50.000	6.16	22797.658	2697.390	105.647	50.2	0.4	NO	0.996	NO	bb
8	8 171227M2_9	Standard	100.000	6.16	51095.570	2097.857	304.451			NO	0.996	YES	bbXI
9	9 171227M2_10	Standard	250.000	6.16	141048.547	2847.631	619.149			NO	0.996	YES	dbXI

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: N-EtFOSA**

Coefficient of Determination:  $R^2 = 0.999673$

Calibration curve:  $-2.63342e-005 * x^2 + 1.06304 * x + -0.300904$

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	1.250	6.22	203.185	26271.311	1.160	1.4	10.0	NO	1.000	NO	bb
2	2 171227M2_3	Standard	2.500	6.23	420.743	25612.781	2.464	2.6	4.0	NO	1.000	NO	bb
3	3 171227M2_4	Standard	5.000	6.22	817.192	27238.842	4.500	4.5	-9.7	NO	1.000	NO	bb
4	4 171227M2_5	Standard	10.000	6.22	1673.314	26307.252	9.541	9.3	-7.4	NO	1.000	NO	bb
5	5 171227M2_6	Standard	25.000	6.23	4856.281	27591.568	26.401	25.1	0.5	NO	1.000	NO	bb
6	6 171227M2_7	Standard	50.000	6.22	9341.880	26260.840	53.360	50.5	1.1	NO	1.000	NO	bb
7	7 171227M2_8	Standard	250.000	6.23	48911.148	26899.170	272.747	258.5	3.4	NO	1.000	NO	bb
8	8 171227M2_9	Standard	500.000	6.22	91253.445	26665.355	513.326	489.1	-2.2	NO	1.000	NO	bb
9	9 171227M2_10	Standard	1250.000	6.23	206874.781	24053.830	1290.074	1252.7	0.2	NO	1.000	NO	bb

**Compound name: PFHxDA**

Coefficient of Determination:  $R^2 = 0.998631$

Calibration curve:  $-0.000996916 * x^2 + 0.929338 * x + -0.12247$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	6.48	77.953	2174.156	0.179	0.3	29.9	NO	0.999	NO	bb
2	2 171227M2_3	Standard	0.500	6.47	164.604	2237.443	0.368	0.5	5.6	NO	0.999	NO	bb
3	3 171227M2_4	Standard	1.000	6.47	279.220	2126.996	0.656	0.8	-16.1	NO	0.999	NO	bb
4	4 171227M2_5	Standard	2.000	6.47	609.740	2023.093	1.507	1.8	-12.2	NO	0.999	NO	bb
5	5 171227M2_6	Standard	5.000	6.47	1814.293	2095.904	4.328	4.8	-3.7	NO	0.999	NO	bb
6	6 171227M2_7	Standard	10.000	6.47	3322.816	1887.999	8.800	9.7	-3.0	NO	0.999	NO	bb
7	7 171227M2_8	Standard	50.000	6.47	16787.875	2006.273	41.838	47.6	-4.8	NO	0.999	NO	bb
8	8 171227M2_9	Standard	100.000	6.47	35592.371	2052.555	86.703	105.3	5.3	NO	0.999	NO	bb
9	9 171227M2_10	Standard	250.000	6.47	85349.086	2528.415	168.780	247.4	-1.0	NO	0.999	NO	bd

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: PFODA**

Coefficient of Determination:  $R^2 = 0.994872$

Calibration curve:  $-0.00177409 * x^2 + 1.42876 * x + -0.0978488$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	0.250	6.69	136.954	2174.156	0.315	0.3	15.6	NO	0.995	NO	bb
2	2 171227M2_3	Standard	0.500	6.69	235.605	2237.443	0.527	0.4	-12.6	NO	0.995	NO	bb
3	3 171227M2_4	Standard	1.000	6.69	562.518	2126.996	1.322	1.0	-0.5	NO	0.995	NO	bb
4	4 171227M2_5	Standard	2.000	6.69	830.344	2023.093	2.052	1.5	-24.6	NO	0.995	NO	bb
5	5 171227M2_6	Standard	5.000	6.69	2947.758	2095.904	7.032	5.0	0.4	NO	0.995	NO	bd
6	6 171227M2_7	Standard	10.000	6.69	5127.245	1887.999	13.579	9.7	-3.1	NO	0.995	NO	bb
7	7 171227M2_8	Standard	50.000	6.70	24005.162	2006.273	59.825	44.4	-11.2	NO	0.995	NO	bb
8	8 171227M2_9	Standard	100.000	6.69	55972.047	2052.555	136.347	110.7	10.7	NO	0.995	NO	bb
9	9 171227M2_10	Standard	250.000	6.70	122945.156	2528.415	243.127	244.4	-2.2	NO	0.995	NO	bd

**Compound name: N-MeFOSE**

Correlation coefficient:  $r = 0.999225$ ,  $r^2 = 0.998451$

Calibration curve:  $1.22136 * x + -0.531738$

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	1.250	6.32	205.606	23424.840	1.317	1.5	21.1	NO	0.998	NO	bb
2	2 171227M2_3	Standard	2.500	6.32	453.707	21551.338	3.158	3.0	20.8	NO	0.998	NO	bb
3	3 171227M2_4	Standard	5.000	6.32	765.497	21977.563	5.225	4.7	-5.7	NO	0.998	NO	bb
4	4 171227M2_5	Standard	10.000	6.32	1496.693	23542.486	9.536	8.2	-17.6	NO	0.998	NO	bb
5	5 171227M2_6	Standard	25.000	6.32	4314.532	24058.156	26.901	22.5	-10.2	NO	0.998	NO	bb
6	6 171227M2_7	Standard	50.000	6.32	8735.879	22955.393	57.084	47.2	-5.7	NO	0.998	NO	bb
7	7 171227M2_8	Standard	250.000	6.32	42795.691	22730.518	282.411	231.7	-7.3	NO	0.998	NO	bb
8	8 171227M2_9	Standard	500.000	6.32	94872.117	22370.564	636.140	521.3	4.3	NO	0.998	NO	bd
9	9 171227M2_10	Standard	1250.000	6.32	245576.656	24065.676	1530.665	1253.7	0.3	NO	0.998	NO	bd

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: N-EtFOSE**Correlation coefficient:  $r = 0.996730$ ,  $r^2 = 0.993471$ Calibration curve:  $1.33127 * x + -0.306208$ 

Response type: Internal Std ( Ref 53 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	1.250	6.47	243.128	23821.568	1.531	1.4	10.4	NO	0.993	NO	bb
2	2 171227M2_3	Standard	2.500	6.47	365.379	22501.572	2.436	2.1	-17.6	NO	0.993	NO	bb
3	3 171227M2_4	Standard	5.000	6.47	1079.125	23379.631	6.923	5.4	8.6	NO	0.993	NO	bb
4	4 171227M2_5	Standard	10.000	6.47	2111.330	26375.297	12.007	9.2	-7.5	NO	0.993	NO	bb
5	5 171227M2_6	Standard	25.000	6.46	5614.565	28445.939	29.607	22.5	-10.1	NO	0.993	NO	bb
6	6 171227M2_7	Standard	50.000	6.47	10684.882	22042.639	72.711	54.8	9.7	NO	0.993	NO	bb
7	7 171227M2_8	Standard	250.000	6.47	56215.973	25817.605	326.614	245.6	-1.8	NO	0.993	NO	bb
8	8 171227M2_9	Standard	500.000	6.46	96747.531	19219.795	755.062	567.4	13.5	NO	0.993	NO	bd
9	9 171227M2_10	Standard	1250.000	6.47	249659.031	23736.309	1577.703	1185.3	-5.2	NO	0.993	NO	bd

**Compound name: 13C3-PFBA**

Response Factor: 0.771377

RRF SD: 0.0287392, Relative SD: 3.7257

Response type: Internal Std ( Ref 54 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	1.51	9109.702	11266.789	10.107	13.1	4.8	NO		NO	bb
2	2 171227M2_3	Standard	12.500	1.52	8940.615	11474.547	9.740	12.6	1.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	1.52	9244.819	11800.232	9.793	12.7	1.6	NO		NO	bb
4	4 171227M2_5	Standard	12.500	1.52	9637.834	11773.504	10.233	13.3	6.1	NO		NO	bb
5	5 171227M2_6	Standard	12.500	1.52	9386.572	12782.838	9.179	11.9	-4.8	NO		NO	bb
6	6 171227M2_7	Standard	12.500	1.52	9079.917	12197.028	9.305	12.1	-3.5	NO		NO	bb
7	7 171227M2_8	Standard	12.500	1.52	9406.534	12250.466	9.598	12.4	-0.5	NO		NO	bb
8	8 171227M2_9	Standard	12.500	1.52	9055.936	12006.595	9.428	12.2	-2.2	NO		NO	bb
9	9 171227M2_10	Standard	12.500	1.52	8899.062	11837.236	9.397	12.2	-2.5	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C3-PFPeA**

Response Factor: 0.747447

RRF SD: 0.0494811, Relative SD: 6.62002

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	2.47	10138.515	13336.426	9.503	12.7	1.7	NO		NO	bb
2	2 171227M2_3	Standard	12.500	2.47	10123.872	13355.194	9.476	12.7	1.4	NO		NO	bb
3	3 171227M2_4	Standard	12.500	2.47	9829.790	14296.511	8.595	11.5	-8.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	2.47	10132.158	12722.052	9.955	13.3	6.6	NO		NO	bb
5	5 171227M2_6	Standard	12.500	2.47	10246.948	15057.541	8.506	11.4	-9.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	2.47	9841.680	14190.524	8.669	11.6	-7.2	NO		NO	bd
7	7 171227M2_8	Standard	12.500	2.47	9541.606	12244.098	9.741	13.0	4.3	NO		NO	bb
8	8 171227M2_9	Standard	12.500	2.47	9903.929	13133.470	9.426	12.6	0.9	NO		NO	bb
9	9 171227M2_10	Standard	12.500	2.47	9695.774	11862.702	10.217	13.7	9.3	NO		NO	bb

**Compound name: 13C3-PFBS**

Response Factor: 0.101392

RRF SD: 0.0107575, Relative SD: 10.6098

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	2.74	1310.046	13336.426	1.228	12.1	-3.1	NO		NO	bb
2	2 171227M2_3	Standard	12.500	2.74	1399.401	13355.194	1.310	12.9	3.3	NO		NO	bd
3	3 171227M2_4	Standard	12.500	2.74	1499.687	14296.511	1.311	12.9	3.5	NO		NO	bb
4	4 171227M2_5	Standard	12.500	2.74	1333.655	12722.052	1.310	12.9	3.4	NO		NO	bb
5	5 171227M2_6	Standard	12.500	2.74	1292.882	15057.541	1.073	10.6	-15.3	NO		NO	bb
6	6 171227M2_7	Standard	12.500	2.74	1368.757	14190.524	1.206	11.9	-4.9	NO		NO	bb
7	7 171227M2_8	Standard	12.500	2.74	1339.128	12244.098	1.367	13.5	7.9	NO		NO	bb
8	8 171227M2_9	Standard	12.500	2.74	1151.352	13133.470	1.096	10.8	-13.5	NO		NO	bb
9	9 171227M2_10	Standard	12.500	2.74	1428.674	11862.702	1.505	14.8	18.8	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C2-PFHxA**

Response Factor: 0.60075

RRF SD: 0.036076, Relative SD: 6.00516

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	5.000	3.23	3269.867	13336.426	3.065	5.1	2.0	NO		NO	bb
2	2 171227M2_3	Standard	5.000	3.23	3115.723	13355.194	2.916	4.9	-2.9	NO		NO	bb
3	3 171227M2_4	Standard	5.000	3.23	3457.569	14296.511	3.023	5.0	0.6	NO		NO	bb
4	4 171227M2_5	Standard	5.000	3.23	3128.971	12722.052	3.074	5.1	2.4	NO		NO	bb
5	5 171227M2_6	Standard	5.000	3.23	3174.698	15057.541	2.635	4.4	-12.3	NO		NO	bb
6	6 171227M2_7	Standard	5.000	3.23	3240.993	14190.524	2.855	4.8	-5.0	NO		NO	bb
7	7 171227M2_8	Standard	5.000	3.23	3133.422	12244.098	3.199	5.3	6.5	NO		NO	bb
8	8 171227M2_9	Standard	5.000	3.23	3380.480	13133.470	3.217	5.4	7.1	NO		NO	bd
9	9 171227M2_10	Standard	5.000	3.23	2893.191	11862.702	3.049	5.1	1.5	NO		NO	bb

**Compound name: 13C4-PFHpA**

Response Factor: 0.676443

RRF SD: 0.0728646, Relative SD: 10.7717

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	3.84	8496.508	13336.426	7.964	11.8	-5.8	NO		NO	bb
2	2 171227M2_3	Standard	12.500	3.83	9226.614	13355.194	8.636	12.8	2.1	NO		NO	bb
3	3 171227M2_4	Standard	12.500	3.84	8782.837	14296.511	7.679	11.4	-9.2	NO		NO	bb
4	4 171227M2_5	Standard	12.500	3.83	9480.081	12722.052	9.315	13.8	10.2	NO		NO	bb
5	5 171227M2_6	Standard	12.500	3.83	8254.716	15057.541	6.853	10.1	-19.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	3.84	9052.288	14190.524	7.974	11.8	-5.7	NO		NO	bb
7	7 171227M2_8	Standard	12.500	3.84	9428.651	12244.098	9.626	14.2	13.8	NO		NO	bb
8	8 171227M2_9	Standard	12.500	3.83	9154.792	13133.470	8.713	12.9	3.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	3.84	8864.943	11862.702	9.341	13.8	10.5	NO		NO	bb

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 18O2-PFHxS**

Response Factor: 0.346518

RRF SD: 0.0364423, Relative SD: 10.5167

Response type: Internal Std ( Ref 56 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	3.98	1383.153	3915.972	4.415	12.7	1.9	NO		NO	bb
2	2 171227M2_3	Standard	12.500	3.98	1262.645	3250.903	4.855	14.0	12.1	NO		NO	bb
3	3 171227M2_4	Standard	12.500	3.98	1275.236	4190.863	3.804	11.0	-12.2	NO		NO	bb
4	4 171227M2_5	Standard	12.500	3.98	1046.561	3669.464	3.565	10.3	-17.7	NO		NO	bd
5	5 171227M2_6	Standard	12.500	3.98	1328.807	3437.959	4.831	13.9	11.5	NO		NO	bb
6	6 171227M2_7	Standard	12.500	3.98	1249.226	3707.999	4.211	12.2	-2.8	NO		NO	MM
7	7 171227M2_8	Standard	12.500	3.98	1181.561	3628.547	4.070	11.7	-6.0	NO		NO	MM
8	8 171227M2_9	Standard	12.500	3.98	1268.674	3364.836	4.713	13.6	8.8	NO		NO	MM
9	9 171227M2_10	Standard	12.500	3.98	1220.190	3375.579	4.518	13.0	4.3	NO		NO	MM

**Compound name: 13C2-6:2 FTS**

Response Factor: 0.209824

RRF SD: 0.0313478, Relative SD: 14.94

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.29	2466.189	15017.985	2.053	9.8	-21.7	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.28	3151.372	13305.198	2.961	14.1	12.9	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.29	2625.291	13841.206	2.371	11.3	-9.6	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.28	3236.319	14312.646	2.826	13.5	7.8	NO		NO	bd
5	5 171227M2_6	Standard	12.500	4.29	2851.812	15421.653	2.312	11.0	-11.9	NO		NO	bd
6	6 171227M2_7	Standard	12.500	4.28	3126.507	12414.578	3.148	15.0	20.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.29	3154.304	14661.149	2.689	12.8	2.5	NO		NO	bd
8	8 171227M2_9	Standard	12.500	4.29	4196.086	13534.527	3.875	18.5	47.8	NO		NO	bdX
9	9 171227M2_10	Standard	12.500	4.29	6163.296	13276.432	5.803	27.7	121.2	NO		NO	bbX



Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C2-PFOA**

Response Factor: 0.990169

RRF SD: 0.0711655, Relative SD: 7.18721

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.34	13163.429	15017.985	10.956	11.1	-11.5	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.34	14294.111	13305.198	13.429	13.6	8.5	NO		NO	bd
3	3 171227M2_4	Standard	12.500	4.34	13555.376	13841.206	12.242	12.4	-1.1	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.34	14219.026	14312.646	12.418	12.5	0.3	NO		NO	bd
5	5 171227M2_6	Standard	12.500	4.33	15102.760	15421.653	12.242	12.4	-1.1	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.34	13826.356	12414.578	13.921	14.1	12.5	NO		NO	bd
7	7 171227M2_8	Standard	12.500	4.34	13611.259	14661.149	11.605	11.7	-6.2	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.34	13623.771	13534.527	12.582	12.7	1.7	NO		NO	bb
9	9 171227M2_10	Standard	12.500	4.34	12743.418	13276.432	11.998	12.1	-3.1	NO		NO	bb

**Compound name: 13C5-PFNA**

Response Factor: 0.844932

RRF SD: 0.0800463, Relative SD: 9.4737

Response type: Internal Std ( Ref 58 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.76	9859.559	11712.082	10.523	12.5	-0.4	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.76	8777.721	12763.171	8.597	10.2	-18.6	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.76	11751.393	14679.309	10.007	11.8	-5.3	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.76	10893.109	12778.089	10.656	12.6	0.9	NO		NO	bb
5	5 171227M2_6	Standard	12.500	4.76	9332.128	11391.607	10.240	12.1	-3.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.76	10484.868	12021.911	10.902	12.9	3.2	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.76	9467.145	11376.679	10.402	12.3	-1.5	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.76	9591.712	10376.387	11.555	13.7	9.4	NO		NO	bd
9	9 171227M2_10	Standard	12.500	4.76	10230.392	10504.468	12.174	14.4	15.3	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C8-PFOSA**

Response Factor: 0.199498

RRF SD: 0.0262345, Relative SD: 13.1503

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.83	2569.672	10522.952	3.052	15.3	22.4	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.83	2700.973	13625.164	2.478	12.4	-0.6	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.83	2843.462	14650.646	2.426	12.2	-2.7	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.83	2542.202	15544.572	2.044	10.2	-18.0	NO		NO	bd
5	5 171227M2_6	Standard	12.500	4.83	2613.613	14786.616	2.209	11.1	-11.4	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.83	2651.221	13063.165	2.537	12.7	1.7	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.83	2819.033	12088.432	2.915	14.6	16.9	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.83	2247.480	12668.264	2.218	11.1	-11.1	NO		NO	bb
9	9 171227M2_10	Standard	12.500	4.83	2264.458	11040.664	2.564	12.9	2.8	NO		NO	bb

**Compound name: 13C8-PFOS**

Response Factor: 0.865254

RRF SD: 0.127819, Relative SD: 14.7724

Response type: Internal Std ( Ref 59 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.84	2886.512	3416.256	10.562	12.2	-2.3	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.83	3604.530	3020.019	14.919	17.2	37.9	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.84	3164.295	3631.896	10.891	12.6	0.7	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.83	3039.063	3899.005	9.743	11.3	-9.9	NO		NO	bb
5	5 171227M2_6	Standard	12.500	4.83	3003.427	3700.067	10.147	11.7	-6.2	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.84	3098.998	3942.271	9.826	11.4	-9.1	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.84	3495.231	4023.819	10.858	12.5	0.4	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.83	3039.179	3621.847	10.489	12.1	-3.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	4.84	3037.251	3832.320	9.907	11.4	-8.4	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C2-PFDA**

Response Factor: 0.886126

RRF SD: 0.0956847, Relative SD: 10.7981

Response type: Internal Std ( Ref 60 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.12	9518.367	9868.478	12.057	13.6	8.8	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.12	10515.332	11925.573	11.022	12.4	-0.5	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.12	9300.638	12082.603	9.622	10.9	-13.1	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.12	10007.011	12878.628	9.713	11.0	-12.3	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.12	9589.339	11278.664	10.628	12.0	-4.1	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.12	9535.366	10129.650	11.767	13.3	6.2	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.12	12375.918	12265.921	12.612	14.2	13.9	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.12	9066.912	11542.679	9.819	11.1	-11.4	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.12	9175.472	9211.848	12.451	14.1	12.4	NO		NO	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.435805

RRF SD: 0.0328957, Relative SD: 24.2227

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

*Not used.*

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.09	1526.711	13336.426	1.431	10.5	-15.7	NO		NO	bd
2	2 171227M2_3	Standard	12.500	5.09	2048.786	13355.194	1.918	14.1	13.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.09	1697.438	14296.511	1.484	10.9	-12.6	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.09	1669.713	12722.052	1.641	12.1	-3.4	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.09	1694.837	15057.541	1.407	10.4	-17.1	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.10	1337.944	14190.524	1.179	8.7	-30.6	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.09	2328.025	12244.098	2.377	17.5	40.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.09	2253.783	13133.470	2.145	15.8	26.4	NO		NO	bd
9	9 171227M2_10	Standard	12.500	5.09	3634.338	11862.702	3.830	28.2	125.6	NO		NO	bdX

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: d3-N-MeFOSAA**

Response Factor: 0.408733

RRF SD: 0.0491611, Relative SD: 12.0277

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.26	4963.580	10522.952	5.896	14.4	15.4	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.26	5539.444	13625.164	5.082	12.4	-0.5	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.26	5332.894	14650.646	4.550	11.1	-10.9	NO		NO	bd
4	4 171227M2_5	Standard	12.500	5.26	6130.912	15544.572	4.930	12.1	-3.5	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.26	4858.688	14786.616	4.107	10.0	-19.6	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.26	5008.923	13063.165	4.793	11.7	-6.2	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.26	5641.206	12088.432	5.833	14.3	14.2	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.26	5099.348	12668.264	5.032	12.3	-1.5	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.26	5086.673	11040.664	5.759	14.1	12.7	NO		NO	bb

**Compound name: d5-N-EtFOSAA**

Response Factor: 0.473718

RRF SD: 0.0488163, Relative SD: 10.3049

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.41	5765.227	10522.952	6.848	14.5	15.7	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.41	5889.360	13625.164	5.403	11.4	-8.8	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.41	6991.896	14650.646	5.966	12.6	0.7	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.41	6313.761	15544.572	5.077	10.7	-14.3	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.41	6451.895	14786.616	5.454	11.5	-7.9	NO		NO	bd
6	6 171227M2_7	Standard	12.500	5.41	6152.865	13063.165	5.888	12.4	-0.6	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.41	6457.469	12088.432	6.677	14.1	12.8	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.41	6485.901	12668.264	6.400	13.5	8.1	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.41	4928.821	11040.664	5.580	11.8	-5.8	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C2-PFUDa**

Response Factor: 0.928462

RRF SD: 0.123631, Relative SD: 13.3157

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.43	11874.624	10522.952	14.106	15.2	21.5	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.43	11943.025	13625.164	10.957	11.8	-5.6	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.43	12096.048	14650.646	10.320	11.1	-11.1	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.43	11576.810	15544.572	9.309	10.0	-19.8	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.43	12204.513	14786.616	10.317	11.1	-11.1	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.43	11786.622	13063.165	11.278	12.1	-2.8	NO		NO	bd
7	7 171227M2_8	Standard	12.500	5.44	12370.035	12088.432	12.791	13.8	10.2	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.43	12881.869	12668.264	12.711	13.7	9.5	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.44	11183.854	11040.664	12.662	13.6	9.1	NO		NO	bb

**Compound name: 13C2-PFDoA**

Response Factor: 0.636121

RRF SD: 0.0670923, Relative SD: 10.5471

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.71	8054.505	10522.952	9.568	15.0	20.3	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.70	8743.186	13625.164	8.021	12.6	0.9	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.70	8431.139	14650.646	7.193	11.3	-9.5	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.70	9103.854	15544.572	7.321	11.5	-7.9	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.70	8413.934	14786.616	7.113	11.2	-10.5	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.70	7956.292	13063.165	7.613	12.0	-4.3	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.70	8744.809	12088.432	9.043	14.2	13.7	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.70	7893.276	12668.264	7.788	12.2	-2.1	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.71	6980.643	11040.664	7.903	12.4	-0.6	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: d3-N-MeFOSA**

Response Factor: 0.111566

RRF SD: 0.015918, Relative SD: 14.2678

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	150.000	5.88	17951.223	10522.952	21.324	191.1	27.4	NO		NO	bb
2	2 171227M2_3	Standard	150.000	5.88	16653.398	13625.164	15.278	136.9	-8.7	NO		NO	bb
3	3 171227M2_4	Standard	150.000	5.88	16891.504	14650.646	14.412	129.2	-13.9	NO		NO	bb
4	4 171227M2_5	Standard	150.000	5.88	17379.400	15544.572	13.975	125.3	-16.5	NO		NO	bb
5	5 171227M2_6	Standard	150.000	5.88	18111.424	14786.616	15.311	137.2	-8.5	NO		NO	bb
6	6 171227M2_7	Standard	150.000	5.88	17693.111	13063.165	16.930	151.8	1.2	NO		NO	bd
7	7 171227M2_8	Standard	150.000	5.88	16898.027	12088.432	17.473	156.6	4.4	NO		NO	bb
8	8 171227M2_9	Standard	150.000	5.88	16794.846	12668.264	16.572	148.5	-1.0	NO		NO	bb
9	9 171227M2_10	Standard	150.000	5.88	17080.729	11040.664	19.338	173.3	15.6	NO		NO	bb

**Compound name: 13C2-PFTeDA**

Response Factor: 0.162701

RRF SD: 0.0324795, Relative SD: 19.9628

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	6.16	2234.556	10522.952	2.654	16.3	30.5	NO		NO	MMX
2	2 171227M2_3	Standard	12.500	6.16	2124.994	13625.164	1.950	12.0	-4.1	NO		NO	bb
3	3 171227M2_4	Standard	12.500	6.16	2146.656	14650.646	1.832	11.3	-9.9	NO		NO	bb
4	4 171227M2_5	Standard	12.500	6.16	1846.036	15544.572	1.484	9.1	-27.0	NO		NO	MM
5	5 171227M2_6	Standard	12.500	6.16	2216.522	14786.616	1.874	11.5	-7.9	NO		NO	bb
6	6 171227M2_7	Standard	12.500	6.15	2338.622	13063.165	2.238	13.8	10.0	NO		NO	MM
7	7 171227M2_8	Standard	12.500	6.16	2697.390	12088.432	2.789	17.1	37.1	NO		NO	MM
8	8 171227M2_9	Standard	12.500	6.15	2097.857	12668.264	2.070	12.7	1.8	NO		NO	bb
9	9 171227M2_10	Standard	12.500	6.16	2847.631	11040.664	3.224	19.8	58.5	NO		NO	bbX

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: d5-N-ETFOSA**

Response Factor: 0.169565

RRF SD: 0.0203335, Relative SD: 11.9916

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	150.000	6.24	26271.311	10522.952	31.207	184.0	22.7	NO		NO	bb
2	2 171227M2_3	Standard	150.000	6.24	25612.781	13625.164	23.498	138.6	-7.6	NO		NO	bb
3	3 171227M2_4	Standard	150.000	6.24	27238.842	14650.646	23.240	137.1	-8.6	NO		NO	bb
4	4 171227M2_5	Standard	150.000	6.23	26307.252	15544.572	21.155	124.8	-16.8	NO		NO	bb
5	5 171227M2_6	Standard	150.000	6.24	27591.568	14786.616	23.325	137.6	-8.3	NO		NO	bb
6	6 171227M2_7	Standard	150.000	6.24	26260.840	13063.165	25.129	148.2	-1.2	NO		NO	bb
7	7 171227M2_8	Standard	150.000	6.24	26899.170	12088.432	27.815	164.0	9.4	NO		NO	bb
8	8 171227M2_9	Standard	150.000	6.23	26665.355	12668.264	26.311	155.2	3.4	NO		NO	bb
9	9 171227M2_10	Standard	150.000	6.24	24053.830	11040.664	27.233	160.6	7.1	NO		NO	bb

**Compound name: 13C2-PFHxDA**

Response Factor: 0.39388

RRF SD: 0.0587481, Relative SD: 14.9152

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	5.000	6.47	2174.156	10522.952	2.583	6.6	31.1	NO		NO	bb
2	2 171227M2_3	Standard	5.000	6.47	2237.443	13625.164	2.053	5.2	4.2	NO		NO	bb
3	3 171227M2_4	Standard	5.000	6.47	2126.996	14650.646	1.815	4.6	-7.9	NO		NO	bb
4	4 171227M2_5	Standard	5.000	6.47	2023.093	15544.572	1.627	4.1	-17.4	NO		NO	bb
5	5 171227M2_6	Standard	5.000	6.47	2095.904	14786.616	1.772	4.5	-10.0	NO		NO	bb
6	6 171227M2_7	Standard	5.000	6.47	1887.999	13063.165	1.807	4.6	-8.3	NO		NO	bb
7	7 171227M2_8	Standard	5.000	6.47	2006.273	12088.432	2.075	5.3	5.3	NO		NO	bb
8	8 171227M2_9	Standard	5.000	6.47	2052.555	12668.264	2.025	5.1	2.8	NO		NO	bb
9	9 171227M2_10	Standard	5.000	6.47	2528.415	11040.664	2.863	7.3	45.4	NO		NO	bbX

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: d7-N-MeFOSE**

Response Factor: 0.148451

RRF SD: 0.0224588, Relative SD: 15.1288

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	150.000	6.31	23424.840	10522.952	27.826	187.4	25.0	NO		NO	bd
2	2 171227M2_3	Standard	150.000	6.31	21551.338	13625.164	19.772	133.2	-11.2	NO		NO	bd
3	3 171227M2_4	Standard	150.000	6.31	21977.563	14650.646	18.751	126.3	-15.8	NO		NO	bd
4	4 171227M2_5	Standard	150.000	6.31	23542.486	15544.572	18.931	127.5	-15.0	NO		NO	bb
5	5 171227M2_6	Standard	150.000	6.31	24058.156	14786.616	20.338	137.0	-8.7	NO		NO	bb
6	6 171227M2_7	Standard	150.000	6.31	22955.393	13063.165	21.966	148.0	-1.4	NO		NO	bb
7	7 171227M2_8	Standard	150.000	6.31	22730.518	12088.432	23.504	158.3	5.6	NO		NO	bb
8	8 171227M2_9	Standard	150.000	6.31	22370.564	12668.264	22.073	148.7	-0.9	NO		NO	bb
9	9 171227M2_10	Standard	150.000	6.31	24065.676	11040.664	27.247	183.5	22.4	NO		NO	bb

**Compound name: d9-N-EtFOSE**

Response Factor: 0.153905

RRF SD: 0.0230653, Relative SD: 14.9867

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	150.000	6.46	23821.568	10522.952	28.297	183.9	22.6	NO		NO	bb
2	2 171227M2_3	Standard	150.000	6.46	22501.572	13625.164	20.643	134.1	-10.6	NO		NO	bd
3	3 171227M2_4	Standard	150.000	6.46	23379.631	14650.646	19.948	129.6	-13.6	NO		NO	bb
4	4 171227M2_5	Standard	150.000	6.46	26375.297	15544.572	21.209	137.8	-8.1	NO		NO	bb
5	5 171227M2_6	Standard	150.000	6.46	28445.939	14786.616	24.047	156.2	4.2	NO		NO	bd
6	6 171227M2_7	Standard	150.000	6.46	22042.639	13063.165	21.092	137.0	-8.6	NO		NO	bb
7	7 171227M2_8	Standard	150.000	6.46	25817.605	12088.432	26.697	173.5	15.6	NO		NO	bd
8	8 171227M2_9	Standard	150.000	6.46	19219.795	12668.264	18.965	123.2	-17.9	NO		NO	bb
9	9 171227M2_10	Standard	150.000	6.46	23736.309	11040.664	26.874	174.6	16.4	NO		NO	bd



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Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

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**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 54 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	1.51	11266.789	11266.789	12.500	12.5	0.0	NO		NO	bb
2	2 171227M2_3	Standard	12.500	1.52	11474.547	11474.547	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	1.52	11800.232	11800.232	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	1.52	11773.504	11773.504	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	1.52	12782.838	12782.838	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	1.52	12197.028	12197.028	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	1.52	12250.466	12250.466	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	1.52	12006.595	12006.595	12.500	12.5	0.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	1.52	11837.236	11837.236	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	3.23	13336.426	13336.426	12.500	12.5	0.0	NO		NO	bb
2	2 171227M2_3	Standard	12.500	3.23	13355.194	13355.194	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	3.23	14296.511	14296.511	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	3.23	12722.052	12722.052	12.500	12.5	0.0	NO		NO	bd
5	5 171227M2_6	Standard	12.500	3.23	15057.541	15057.541	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	3.23	14190.524	14190.524	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	3.23	12244.098	12244.098	12.500	12.5	0.0	NO		NO	bd
8	8 171227M2_9	Standard	12.500	3.23	13133.470	13133.470	12.500	12.5	0.0	NO		NO	bd
9	9 171227M2_10	Standard	12.500	3.23	11862.702	11862.702	12.500	12.5	0.0	NO		NO	bd

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

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**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 56 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	3.98	3915.972	3915.972	12.500	12.5	0.0	NO		NO	bd
2	2 171227M2_3	Standard	12.500	3.98	3250.903	3250.903	12.500	12.5	0.0	NO		NO	bd
3	3 171227M2_4	Standard	12.500	3.98	4190.863	4190.863	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	3.98	3669.464	3669.464	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	3.98	3437.959	3437.959	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	3.98	3707.999	3707.999	12.500	12.5	0.0	NO		NO	bd
7	7 171227M2_8	Standard	12.500	3.98	3628.547	3628.547	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	3.98	3364.836	3364.836	12.500	12.5	0.0	NO		NO	bd
9	9 171227M2_10	Standard	12.500	3.98	3375.579	3375.579	12.500	12.5	0.0	NO		NO	bd

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.34	15017.985	15017.985	12.500	12.5	0.0	NO		NO	bd
2	2 171227M2_3	Standard	12.500	4.33	13305.198	13305.198	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.34	13841.206	13841.206	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.34	14312.646	14312.646	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	4.33	15421.653	15421.653	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.34	12414.578	12414.578	12.500	12.5	0.0	NO		NO	bd
7	7 171227M2_8	Standard	12.500	4.34	14661.149	14661.149	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.33	13534.527	13534.527	12.500	12.5	0.0	NO		NO	bd
9	9 171227M2_10	Standard	12.500	4.34	13276.432	13276.432	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 58 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.76	11712.082	11712.082	12.500	12.5	0.0	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.76	12763.171	12763.171	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.76	14679.309	14679.309	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.76	12778.089	12778.089	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	4.76	11391.607	11391.607	12.500	12.5	0.0	NO		NO	bd
6	6 171227M2_7	Standard	12.500	4.76	12021.911	12021.911	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.76	11376.679	11376.679	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.76	10376.387	10376.387	12.500	12.5	0.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	4.76	10504.468	10504.468	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 59 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	4.84	3416.256	3416.256	12.500	12.5	0.0	NO		NO	bb
2	2 171227M2_3	Standard	12.500	4.83	3020.019	3020.019	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	4.84	3631.896	3631.896	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	4.83	3899.005	3899.005	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	4.83	3700.067	3700.067	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	4.84	3942.271	3942.271	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	4.84	4023.819	4023.819	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	4.83	3621.847	3621.847	12.500	12.5	0.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	4.84	3832.320	3832.320	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 60 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.12	9868.478	9868.478	12.500	12.5	0.0	NO		NO	bb
2	2 171227M2_3	Standard	12.500	5.12	11925.573	11925.573	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.12	12082.603	12082.603	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.12	12878.628	12878.628	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.12	11278.664	11278.664	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.12	10129.650	10129.650	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.12	12265.921	12265.921	12.500	12.5	0.0	NO		NO	bb
8	8 171227M2_9	Standard	12.500	5.12	11542.679	11542.679	12.500	12.5	0.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.12	9211.848	9211.848	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C7-PFUdA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171227M2_2	Standard	12.500	5.43	10522.952	10522.952	12.500	12.5	0.0	NO		NO	bd
2	2 171227M2_3	Standard	12.500	5.43	13625.164	13625.164	12.500	12.5	0.0	NO		NO	bb
3	3 171227M2_4	Standard	12.500	5.43	14650.646	14650.646	12.500	12.5	0.0	NO		NO	bb
4	4 171227M2_5	Standard	12.500	5.43	15544.572	15544.572	12.500	12.5	0.0	NO		NO	bb
5	5 171227M2_6	Standard	12.500	5.43	14786.616	14786.616	12.500	12.5	0.0	NO		NO	bb
6	6 171227M2_7	Standard	12.500	5.43	13063.165	13063.165	12.500	12.5	0.0	NO		NO	bb
7	7 171227M2_8	Standard	12.500	5.43	12088.432	12088.432	12.500	12.5	0.0	NO		NO	bd
8	8 171227M2_9	Standard	12.500	5.43	12668.264	12668.264	12.500	12.5	0.0	NO		NO	bb
9	9 171227M2_10	Standard	12.500	5.43	11040.664	11040.664	12.500	12.5	0.0	NO		NO	bd

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122317.mdb 28 Dec 2017 08:41:53

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Name: 171227M2\_2, Date: 27-Dec-2017, Time: 17:36:41, ID: ST171227M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

#	Name	CoD	CoD Flag	%RSD
1	1 PFBA	0.9994	NO	
2	2 PFPeA	0.9981	NO	
3	3 PFBS	0.9927	NO	
4	4 PFHxA	0.9950	NO	
5	5 PFHpA	0.9989	NO	
6	6 L-PFHxS	0.9986	NO	
7	8 6:2 FTS	0.9989	NO	
8	9 L-PFOA	0.9972	NO	
9	11 PFHpS	0.9996	NO	
10	12 PFNA	0.9990	NO	
11	13 PFOSA	0.9994	NO	
12	14 L-PFOS	0.9960	NO	
13	16 PFDA	0.9978	NO	
14	17 8:2 FTS	0.9968	NO	
15	18 N-MeFOSAA	0.9980	NO	
16	19 N-EtFOSAA	0.9970	NO	
17	20 PFUdA	0.9970	NO	
18	21 PFDS	0.9951	NO	
19	22 PFDoA	0.9990	NO	
20	23 N-MeFOSA	0.9972	NO	
21	24 PFTrDA	0.9921	NO	
22	25 PFTeDA	0.9964	NO	
23	26 N-EtFOSA	0.9997	NO	
24	27 PFHxDA	0.9986	NO	
25	28 PFODA	0.9949	NO	
26	29 N-MeFOSE	0.9985	NO	
27	30 N-EtFOSE	0.9935	NO	
28	31 13C3-PFBA		NO	3.726
29	32 13C3-PFPeA		NO	6.620
30	33 13C3-PFBS		NO	10.610
31	34 13C2-PFHxA		NO	6.005

Dataset: U:\Q4.PRO\results\171227M2\171227M2-CRV.qld

Last Altered: Thursday, December 28, 2017 10:26:33 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:25:22 Pacific Standard Time

Name: 171227M2\_2, Date: 27-Dec-2017, Time: 17:36:41, ID: ST171227M2-1 PFC CS-2 17L2606, Description: PFC CS-2 17L2606

#	Name	CoD	CoD Flag	%RSD
32	35 13C4-PFHpA		NO	10.772
33	36 18O2-PFHxS		NO	10.517
34	37 13C2-6:2 FTS		NO	14.940
35	38 13C2-PFOA		NO	7.187
36	39 13C5-PFNA		NO	9.474
37	40 13C8-PFOSA		NO	13.150
38	41 13C8-PFOS		NO	14.772
39	42 13C2-PFDA		NO	10.798
40	43 13C2-8:2 FTS		NO	24.223
41	44 d3-N-MeFOSAA		NO	12.028
42	45 d5-N-EtFOSAA		NO	10.305
43	46 13C2-PFUdA		NO	13.316
44	47 13C2-PFDoA		NO	10.547
45	48 d3-N-MeFOSA		NO	14.268
46	49 13C2-PFTeDA		NO	19.963
47	50 d5-N-ETFOSA		NO	11.992
48	51 13C2-PFHxDA		NO	14.915
49	52 d7-N-MeFOSE		NO	15.129
50	53 d9-N-EtFOSE		NO	14.987
51	54 13C4-PFBA		NO	0.000
52	55 13C5-PFHxA		NO	0.000
53	56 13C3-PFHxS		NO	0.000
54	57 13C8-PFOA		NO	0.000
55	58 13C9-PFNA		NO	0.000
56	59 13C4-PFOS		NO	0.000
57	60 13C6-PFDA		NO	0.000
58	61 13C7-PFUdA		NO	0.000

not used. AC 12/28/17

Dataset:        Untitled

Last Altered:    Thursday, December 28, 2017 11:32:53 Pacific Standard Time

Printed:        Thursday, December 28, 2017 11:34:14 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:09:15  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Compound name: PFBA

	Name	ID	Acq Date	Acq Time
1	171227M2_1	IPA	27-Dec-17	17:25:22
2	171227M2_2	ST171227M2-1 PFC CS-2 17L2606	27-Dec-17	17:36:41
3	171227M2_3	ST171227M2-2 PFC CS-1 17L2607	27-Dec-17	17:47:52
4	171227M2_4	ST171227M2-3 PFC CS0 17L2608	27-Dec-17	17:59:02
5	171227M2_5	ST171227M2-4 PFC CS1 17L2609	27-Dec-17	18:10:13
6	171227M2_6	ST171227M2-5 PFC CS2 17L2610	27-Dec-17	18:21:24
7	171227M2_7	ST171227M2-6 PFC CS3 17L2611	27-Dec-17	18:32:34
8	171227M2_8	ST171227M2-7 PFC CS4 17L2612	27-Dec-17	18:43:45
9	171227M2_9	ST171227M2-8 PFC CS5 17L2613	27-Dec-17	18:54:55
10	171227M2_10	ST171227M2-9 PFC CS6 17L2710	27-Dec-17	19:06:06
11	171227M2_11	ST171227M2-10 PFC CS7 17L1804	27-Dec-17	19:17:17
12	171227M2_12	IPA	27-Dec-17	19:28:28
13	171227M2_13	ICV171227M2-1 PFC ICV 17L2605	27-Dec-17	19:39:38
14	171227M2_14	IPA	27-Dec-17	19:50:49

Dataset: U:\Q4.PRO\results\171227M2\171227M2-13.qld

Last Altered: Thursday, December 28, 2017 11:56:02 Pacific Standard Time  
Printed: Thursday, December 28, 2017 11:57:15 Pacific Standard Time

(A) No second source available.

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12/28/2017

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 28 Dec 2017 11:43:33

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-27-17\_FULL.cdb 28 Dec 2017 10:26:33

Name: 171227M2\_13, Date: 27-Dec-2017, Time: 19:39:38, ID: ICV171227M2-1 PFC ICV 17L2605, Description: PFC ICV 17L2605

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	9.33e3	9.01e3	1.0000		1.47	1.52	12.9	9.194	91.9
2	2 PFPeA	263.1 > 218.9	9.10e3	1.06e4	1.0000		2.44	2.47	10.7	9.121	91.2
3	3 PFBS	299.0 > 79.7	2.10e3	1.19e3	1.0000		2.70	2.74	22.1	9.312	93.1
4	4 PFHxA	313.2 > 268.9	1.10e4	3.18e3	1.0000		3.20	3.24	17.3	8.479	84.8
5	5 PFHpA	363.0 > 318.9	1.20e4	8.98e3	1.0000		3.80	3.84	16.7	10.209	102.1
6	6 L-PFHxS	398.9 > 79.6	1.68e3	1.33e3	1.0000		3.95	3.98	15.8	7.419	74.2
7	8 6:2 FTS	427.1 > 407	2.32e3	1.42e4	1.0000		4.26	4.29	2.04	8.866	88.7
8	9 L-PFOA	413 > 368.7	1.12e4	1.42e4	1.0000		4.32	4.34	9.82	7.681	76.8
9	11 PFHpS	449 > 80.0	2.70e3	1.42e4	1.0000		4.43	4.44	2.37	8.076	80.8
10	12 PFNA	463.0 > 418.8	1.12e4	9.67e3	1.0000		4.75	4.76	14.5	9.411	94.1
11	13 PFOSA	498.1 > 77.8	2.14e3	2.75e3	1.0000		4.81	4.83	9.72	7.788	77.9
12	14 L-PFOS	499 > 79.9	2.16e3	2.90e3	1.0000		4.83	4.84	9.31	7.524	75.2
13	16 PFDA	513 > 468.8	1.24e4	1.04e4	1.0000		5.11	5.12	15.0	9.985	99.8
14	17 8:2 FTS	527 > 506.9	2.66e3	1.04e4	1.0000		5.09	5.10	3.21	9.477	94.8
15	18 N-MeFOSAA	570.1 > 419	7.25e3	5.23e3	1.0000		5.26	5.27	17.3	10.286	102.9
16	19 N-EtFOSAA	584.2 > 419	5.51e3	6.22e3	1.0000		5.42	5.42	11.1	9.207	92.1
17	20 PFUDa	563.0 > 518.9	1.07e4	1.26e4	1.0000		5.43	5.44	10.6	10.287	102.9
18	21 PFDS	598.8 > 80	3.07e3	1.26e4	1.0000		5.50	5.48	3.05	9.635	96.4
19	22 PFDoA	612.9 > 569.0	1.26e4	8.51e3	1.0000		5.70	5.71	18.5	10.514	105.1
20	23 N-MeFOSA	512.1 > 168.9		1.69e4	1.0000		5.77				(A)
21	24 PFTrDA	662.9 > 618.9	1.06e4	8.51e3	1.0000		5.95	5.95	15.5	9.485	94.8
22	25 PFTeDA	712.9 > 668.8	7.53e3	3.02e3	1.0000		6.16	6.16	31.1	11.619	116.2
23	26 N-EtFOSA	526.1 > 168.9		2.69e4	1.0000		6.15				(A)
24	27 PFHxDA	813.1 > 768.6		2.60e3	1.0000		6.48				
25	28 PFODA	913.1 > 868.8		2.60e3	1.0000		6.70				
26	29 N-MeFOSE	616.1 > 58.9		2.20e4	1.0000		6.30				
27	30 N-EtFOSE	630.1 > 58.9		2.63e4	1.0000		6.42				
28	31 13C4-PFBA	216.1 > 171.8	9.01e3	1.19e4	1.0000	1.000	1.47	1.52	9.43	9.432	75.5
29	32 13C3-PFPeA	266. > 221.8	1.06e4	1.40e4	1.0000	0.747	2.44	2.47	9.49	12.699	101.6
30	33 13C3-PFBS	302. > 98.8	1.19e3	1.40e4	1.0000	0.101	2.70	2.74	1.07	10.516	84.1
31	34 13C2-PFHxA	315 > 269.8	3.18e3	1.40e4	1.0000	0.601	3.20	3.23	2.84	4.735	94.7

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Dataset: U:\Q4.PRO\results\171227M2\171227M2-13.qld

Last Altered: Thursday, December 28, 2017 11:56:02 Pacific Standard Time

Printed: Thursday, December 28, 2017 11:57:15 Pacific Standard Time

Name: 171227M2\_13, Date: 27-Dec-2017, Time: 19:39:38, ID: ICV171227M2-1 PFC ICV 17L2605, Description: PFC ICV 17L2605

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35 13C4-PFHpA	367.2 > 321.8	8.98e3	1.40e4	1.0000	0.676	3.80	3.84	8.05	11.896	95.2
33	36 18O2-PFHxS	403.0 > 102.6	1.33e3	4.14e3	1.0000	0.347	3.95	3.98	4.03	11.640	93.1
34	37 13C2-6:2 FTS	429.1 > 408.9	3.29e3	1.30e4	1.0000	0.210	4.26	4.29	3.18	15.140	121.1
35	38 13C2-PFOA	414.9 > 369.7	1.42e4	1.30e4	1.0000	0.990	4.32	4.34	13.7	13.869	111.0
36	39 13C5-PFNA	468.2 > 422.9	9.67e3	1.20e4	1.0000	0.845	4.75	4.76	10.1	11.901	95.2
37	40 13C8-PFOSA	506.1 > 77.7	2.75e3	1.64e4	1.0000	0.199	4.81	4.83	2.10	10.528	84.2
38	41 13C8-PFOS	507.0 > 79.9	2.90e3	3.86e3	1.0000	0.865	4.83	4.84	9.39	10.850	86.8
39	42 13C2-PFDA	515.1 > 469.9	1.04e4	1.17e4	1.0000	0.886	5.11	5.12	11.1	12.512	100.1
40	43 13C2-8:2 FTS	529.1 > 508.7	1.40e3	1.40e4	1.0000	0.136	5.09	5.10	1.26	9.258	74.1
41	44 d3-N-MeFOSAA	573.3 > 419	5.23e3	1.64e4	1.0000	0.409	5.26	5.27	3.99	9.769	78.2
42	45 d5-N-EtFOSAA	589.3 > 419	6.22e3	1.64e4	1.0000	0.474	5.42	5.41	4.75	10.023	80.2
43	46 13C2-PFUdA	565 > 519.8	1.26e4	1.64e4	1.0000	0.928	5.43	5.44	9.60	10.336	82.7
44	47 13C2-PFDoA	615.0 > 569.7	8.51e3	1.64e4	1.0000	0.636	5.70	5.71	6.50	10.212	81.7
45	48 d3-N-MeFOSA	515.2 > 168.9	1.69e4	1.64e4	1.0000	0.112	5.80	5.89	12.9	115.661	77.1
46	49 13C2-PFTeDA	714.8 > 669.6	3.02e3	1.64e4	1.0000	0.163	6.16	6.16	2.31	14.176	113.4
47	50 d5-N-ETFOSA	531.1 > 168.9	2.69e4	1.64e4	1.0000	0.170	6.16	6.24	20.5	120.914	80.6
48	51 13C2-PFHxDA	815 > 769.7	2.60e3	1.64e4	1.0000	0.394	6.48	6.47	1.98	5.037	100.7
49	52 d7-N-MeFOSE	623.1 > 58.9	2.20e4	1.64e4	1.0000	0.148	6.30	6.31	16.8	112.925	75.3
50	53 d9-N-EtFOSE	639.2 > 58.8	2.63e4	1.64e4	1.0000	0.154	6.42	6.46	20.0	130.264	86.8
51	54 13C3-PFBA	217. > 171.8	1.19e4	1.19e4	1.0000		1.47	1.52	12.5		
52	55 13C5-PFHxA	318 > 272.9	1.40e4	1.40e4	1.0000	1.000	3.20	3.23	12.5	12.500	100.0
53	56 13C3-PFHxS	401.9 > 79.9	4.14e3	4.14e3	1.0000	1.000	3.95	3.98	12.5	12.500	100.0
54	57 13C8-PFOA	421.3 > 376	1.30e4	1.30e4	1.0000	1.000	4.32	4.34	12.5	12.500	100.0
55	58 13C9-PFNA	472.2 > 426.9	1.20e4	1.20e4	1.0000	1.000	4.75	4.76	12.5	12.500	100.0
56	59 13C4-PFOS	503 > 79.9	3.86e3	3.86e3	1.0000	1.000	4.83	4.84	12.5	12.500	100.0
57	60 13C6-PFDA	519.1 > 473.7	1.17e4	1.17e4	1.0000	1.000	5.11	5.12	12.5	12.500	100.0
58	61 13C7-PFUdA	570.1 > 524.8	1.64e4	1.64e4	1.0000	1.000	5.43	5.43	12.5	12.500	100.0

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122717.mdb 29 Dec 2017 11:28:58  
Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-29-17\_FULL.cdb 29 Dec 2017 16:04:07

**Compound name: PFBA**

Correlation coefficient:  $r = 0.999642$ ,  $r^2 = 0.999283$   
Calibration curve:  $1.37088 * x + -0.0691704$   
Response type: Internal Std ( Ref 31 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

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	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	1.40	203.083	8904.588	0.285	0.3	3.4	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	1.40	379.981	9984.899	0.476	0.4	-20.5	NO	0.999	NO	db
3	3 171229M2_4	Standard	1.000	1.41	955.540	9468.932	1.261	1.0	-2.9	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	1.40	2103.677	10485.881	2.508	1.9	-6.0	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	1.40	5282.352	9617.440	6.866	5.1	1.2	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	1.40	11461.131	10147.202	14.119	10.3	3.5	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	1.40	56432.824	10018.672	70.410	51.4	2.8	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	1.40	101946.633	9449.357	134.859	98.4	-1.6	NO	0.999	NO	bb

**Compound name: PFPeA**

Correlation coefficient:  $r = 0.999696$ ,  $r^2 = 0.999391$   
Calibration curve:  $1.19449 * x + -0.0389932$   
Response type: Internal Std ( Ref 32 ), Area \* ( IS Conc. / IS Area )  
Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	2.35	265.946	10303.608	0.323	0.3	21.1	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	2.35	545.145	11963.811	0.570	0.5	1.9	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	2.36	964.432	11397.529	1.058	0.9	-8.2	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	2.35	2111.940	12774.396	2.067	1.8	-11.9	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	2.36	5688.785	12100.899	5.876	5.0	-1.0	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	2.36	11905.028	12664.979	11.750	9.9	-1.3	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	2.36	58060.059	12439.228	58.344	48.9	-2.2	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	2.35	108102.617	11142.673	121.271	101.6	1.6	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFBS**

Correlation coefficient:  $r = 0.999500$ ,  $r^2 = 0.999001$

Calibration curve:  $2.16257 * x + -0.0590175$

Response type: Internal Std ( Ref 33 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	2.63	62.026	1558.021	0.498	0.3	3.0	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	2.63	152.137	1616.337	1.177	0.6	14.3	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	2.63	252.478	1539.314	2.050	1.0	-2.5	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	2.63	479.775	1659.784	3.613	1.7	-15.1	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	2.63	1383.079	1591.105	10.866	5.1	1.0	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	2.63	2621.392	1504.048	21.786	10.1	1.0	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	2.63	13557.104	1627.218	104.143	48.2	-3.6	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	2.63	27388.484	1553.847	220.328	101.9	1.9	NO	0.999	NO	bb

**Compound name: PFHxA**

Correlation coefficient:  $r = 0.999421$ ,  $r^2 = 0.998842$

Calibration curve:  $1.87128 * x + -0.0343505$

Response type: Internal Std ( Ref 34 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	3.12	350.182	3513.841	0.498	0.3	13.9	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	3.12	675.696	4036.555	0.837	0.5	-6.9	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	3.12	1089.318	3698.728	1.473	0.8	-19.5	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	3.12	2680.715	3464.033	3.869	2.1	4.3	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	3.12	6861.220	3759.616	9.125	4.9	-2.1	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	3.12	15657.951	3763.830	20.801	11.1	11.3	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	3.12	73381.172	3933.006	93.289	49.9	-0.3	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	3.12	137598.078	3706.605	185.612	99.2	-0.8	NO	0.999	NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

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**Compound name: PFHpA**Correlation coefficient:  $r = 0.999428$ ,  $r^2 = 0.998856$ Calibration curve:  $1.58151 * x + -0.0944503$ 

Response type: Internal Std ( Ref 35 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	3.74	202.101	8907.467	0.284	0.2	-4.4	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	3.74	594.596	9815.644	0.757	0.5	7.7	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	3.73	1098.379	8838.820	1.553	1.0	4.2	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	3.74	2238.531	10366.868	2.699	1.8	-11.7	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	3.74	6362.017	9360.222	8.496	5.4	8.6	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	3.74	12309.141	10473.959	14.690	9.3	-6.5	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	3.74	60958.422	9336.860	81.610	51.7	3.3	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	3.74	117741.930	9432.322	156.035	98.7	-1.3	NO	0.999	NO	bb

**Compound name: L-PFHxS**Correlation coefficient:  $r = 0.999540$ ,  $r^2 = 0.999081$ Calibration curve:  $2.12712 * x + -0.0697927$ 

Response type: Internal Std ( Ref 36 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	3.89	47.271	1144.698	0.516	0.3	10.2	NO	0.999	NO	MM
2	2 171229M2_3	Standard	0.500	3.88	108.905	1280.945	1.063	0.5	6.5	NO	0.999	NO	MM
3	3 171229M2_4	Standard	1.000	3.88	168.136	1074.276	1.956	1.0	-4.7	NO	0.999	NO	MM
4	4 171229M2_5	Standard	2.000	3.89	418.823	1469.055	3.564	1.7	-14.6	NO	0.999	NO	MM
5	5 171229M2_6	Standard	5.000	3.88	1102.041	1196.888	11.509	5.4	8.9	NO	0.999	NO	MM
6	6 171229M2_7	Standard	10.000	3.89	2211.804	1407.185	19.647	9.3	-7.3	NO	0.999	NO	MM
7	7 171229M2_8	Standard	50.000	3.88	10720.032	1247.672	107.400	50.5	1.0	NO	0.999	NO	MM
8	8 171229M2_9	Standard	100.000	3.89	19606.227	1152.019	212.738	100.0	0.0	NO	0.999	NO	MM

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 6:2 FTS**

Coefficient of Determination:  $R^2 = 0.995124$

Calibration curve:  $0.000489747 * x^2 + 0.24128 * x + 0.0169506$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.19	75.243	13054.395	0.072	0.2	-8.7	NO	0.995	NO	bb
2	2 171229M2_3	Standard	0.500	4.19	147.079	14310.572	0.128	0.5	-7.6	NO	0.995	NO	bb
3	3 171229M2_4	Standard	1.000	4.19	250.888	12549.276	0.250	1.0	-3.6	NO	0.995	NO	bb
4	4 171229M2_5	Standard	2.000	4.20	547.291	15995.349	0.428	1.7	-15.2	NO	0.995	NO	bb
5	5 171229M2_6	Standard	5.000	4.19	1674.288	13236.790	1.581	6.4	28.0	NO	0.995	NO	bb
6	6 171229M2_7	Standard	10.000	4.19	3311.861	14776.837	2.802	11.3	12.8	NO	0.995	NO	bb
7	7 171229M2_8	Standard	50.000	4.19	14577.188	14864.127	12.259	46.4	-7.3	NO	0.995	NO	bb
8	8 171229M2_9	Standard	100.000	4.19	30013.492	12709.908	29.518	101.4	1.4	NO	0.995	NO	bb

**Compound name: L-PFOA**

Correlation coefficient:  $r = 0.999271$ ,  $r^2 = 0.998543$

Calibration curve:  $1.19548 * x + 0.228921$

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.25	623.100	13054.395	0.597	0.3	23.0	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	4.24	970.341	14310.572	0.848	0.5	3.5	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	4.25	1327.619	12549.276	1.322	0.9	-8.5	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	4.25	2816.831	15995.349	2.201	1.6	-17.5	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	4.25	6294.915	13236.790	5.945	4.8	-4.4	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	4.25	15220.946	14776.837	12.876	10.6	5.8	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	4.25	68644.867	14864.127	57.727	48.1	-3.8	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	4.25	124103.242	12709.908	122.054	101.9	1.9	NO	0.999	NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFHpS**Coefficient of Determination:  $R^2 = 0.996923$ Calibration curve:  $0.000286563 * x^2 + 0.246658 * x + 0.015286$ 

Response type: Internal Std ( Ref 38 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.35	66.782	13054.395	0.064	0.2	-21.1	NO	0.997	NO	bb
2	2 171229M2_3	Standard	0.500	4.36	168.818	14310.572	0.147	0.5	7.1	NO	0.997	NO	bb
3	3 171229M2_4	Standard	1.000	4.36	252.970	12549.276	0.252	1.0	-4.1	NO	0.997	NO	bb
4	4 171229M2_5	Standard	2.000	4.36	607.702	15995.349	0.475	1.9	-7.0	NO	0.997	NO	bb
5	5 171229M2_6	Standard	5.000	4.36	1590.250	13236.790	1.502	6.0	19.7	NO	0.997	NO	bb
6	6 171229M2_7	Standard	10.000	4.36	3274.734	14776.837	2.770	11.0	10.3	NO	0.997	NO	bb
7	7 171229M2_8	Standard	50.000	4.36	14539.520	14864.127	12.227	46.9	-6.1	NO	0.997	NO	bb
8	8 171229M2_9	Standard	100.000	4.36	28397.074	12709.908	27.928	101.3	1.3	NO	0.997	NO	bb

**Compound name: PFNA**Coefficient of Determination:  $R^2 = 0.997989$ Calibration curve:  $-0.00101357 * x^2 + 1.56335 * x + -0.000922713$ 

Response type: Internal Std ( Ref 39 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.68	376.448	9559.854	0.492	0.3	26.2	NO	0.998	NO	bb
2	2 171229M2_3	Standard	0.500	4.68	656.091	11886.128	0.690	0.4	-11.6	NO	0.998	NO	bb
3	3 171229M2_4	Standard	1.000	4.68	1326.133	10985.445	1.509	1.0	-3.4	NO	0.998	NO	bb
4	4 171229M2_5	Standard	2.000	4.68	2590.874	11245.406	2.880	1.8	-7.8	NO	0.998	NO	bb
5	5 171229M2_6	Standard	5.000	4.68	7038.520	10698.335	8.224	5.3	5.6	NO	0.998	NO	bb
6	6 171229M2_7	Standard	10.000	4.68	13863.008	12722.333	13.621	8.8	-12.4	NO	0.998	NO	bb
7	7 171229M2_8	Standard	50.000	4.68	63810.574	10121.980	78.802	52.2	4.3	NO	0.998	NO	bb
8	8 171229M2_9	Standard	100.000	4.68	127829.383	11035.840	144.789	99.0	-1.0	NO	0.998	NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFOSA**Correlation coefficient:  $r = 0.999632$ ,  $r^2 = 0.999264$ Calibration curve:  $1.34133 * x + -0.0872836$ 

Response type: Internal Std ( Ref 40 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.74	49.790	2711.756	0.230	0.2	-5.5	NO	0.999	NO	MM
2	2 171229M2_3	Standard	0.500	4.74	177.518	3102.326	0.715	0.6	19.7	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	4.74	252.066	3049.030	1.033	0.8	-16.5	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	4.74	602.093	3142.559	2.395	1.9	-7.5	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	4.74	1470.173	2594.765	7.082	5.3	6.9	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	4.75	3202.764	2934.554	13.642	10.2	2.4	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	4.74	15490.584	2840.989	68.157	50.9	1.8	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	4.74	30231.414	2854.235	132.397	98.8	-1.2	NO	0.999	NO	bb

**Compound name: L-PFOS**Coefficient of Determination:  $R^2 = 0.990401$ Calibration curve:  $-0.00113144 * x^2 + 1.36155 * x + -0.136077$ 

Response type: Internal Std ( Ref 41 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	4.76	59.486	3197.572	0.233	0.3	8.3	NO	0.990	NO	MM
2	2 171229M2_3	Standard	0.500	4.76	168.210	3759.751	0.559	0.5	2.2	NO	0.990	NO	MM
3	3 171229M2_4	Standard	1.000	4.76	310.262	3437.048	1.128	0.9	-7.1	NO	0.990	NO	MM
4	4 171229M2_5	Standard	2.000	4.76	650.569	3679.354	2.210	1.7	-13.7	NO	0.990	NO	MM
5	5 171229M2_6	Standard	5.000	4.76	1422.476	3383.786	5.255	4.0	-20.6	NO	0.990	NO	MM
6	6 171229M2_7	Standard	10.000	4.76	3144.695	3618.413	10.864	8.1	-18.7	NO	0.990	NO	MM
7	7 171229M2_8	Standard	50.000	4.76	17382.598	2972.808	73.090	56.4	12.9	NO	0.990	NO	MM
8	8 171229M2_9	Standard	100.000	4.76	33925.844	3503.462	121.044	96.8	-3.2	NO	0.990	NO	MM

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFDA**

Coefficient of Determination:  $R^2 = 0.998686$

Calibration curve:  $0.00134624 * x^2 + 1.49368 * x + -0.0435348$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.04	264.860	9787.770	0.338	0.3	2.2	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	5.04	697.920	13313.300	0.655	0.5	-6.5	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	5.05	1510.254	11579.593	1.630	1.1	11.9	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	5.05	2157.441	10793.412	2.499	1.7	-15.0	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	5.05	6589.435	11236.213	7.331	4.9	-1.7	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	5.05	16440.434	12281.298	16.733	11.1	11.2	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	5.04	54934.242	9060.415	75.789	48.6	-2.7	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	5.05	143479.094	10953.324	163.739	100.5	0.5	NO	0.999	NO	bb

**Compound name: 8:2 FTS**

Coefficient of Determination:  $R^2 = 0.998718$

Calibration curve:  $0.00142024 * x^2 + 0.296775 * x + -0.0229517$

Response type: Internal Std ( Ref 42 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.02	57.565	9787.770	0.074	0.3	29.8	NO	0.999	NO	MM
2	2 171229M2_3	Standard	0.500	5.02	123.106	13313.300	0.116	0.5	-6.8	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	5.02	178.003	11579.593	0.192	0.7	-27.8	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	5.02	497.074	10793.412	0.576	2.0	-0.1	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	5.02	1411.300	11236.213	1.570	5.2	4.7	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	5.02	3037.472	12281.298	3.092	10.0	0.1	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	5.02	13307.744	9060.415	18.360	50.0	-0.0	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	5.02	28544.467	10953.324	32.575	79.6	-20.4	NO	0.999	NO	bbX



Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: N-MeFOSAA**

Coefficient of Determination:  $R^2 = 0.998636$

Calibration curve:  $0.000145261 * x^2 + 1.66875 * x + -0.0626511$

Response type: Internal Std ( Ref 44 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.20	144.439	5085.497	0.355	0.3	0.1	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	5.20	346.408	6075.852	0.713	0.5	-7.1	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	5.20	615.319	5465.513	1.407	0.9	-11.9	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	5.20	1596.097	6024.812	3.312	2.0	1.1	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	5.20	3357.144	5469.510	7.672	4.6	-7.3	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	5.20	8000.172	5362.439	18.649	11.2	12.0	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	5.20	37904.684	5797.623	81.725	48.8	-2.4	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	5.20	71340.836	5273.478	169.103	100.5	0.5	NO	0.999	NO	bb

**Compound name: N-EtFOSAA**

Coefficient of Determination:  $R^2 = 0.999635$

Calibration curve:  $-0.000224178 * x^2 + 1.34483 * x + -0.0879337$

Response type: Internal Std ( Ref 45 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.35	100.624	6335.104	0.199	0.2	-14.8	NO	1.000	NO	bb
2	2 171229M2_3	Standard	0.500	5.35	287.867	6832.871	0.527	0.5	-8.6	NO	1.000	NO	bb
3	3 171229M2_4	Standard	1.000	5.35	529.499	6085.677	1.088	0.9	-12.6	NO	1.000	NO	bb
4	4 171229M2_5	Standard	2.000	5.35	1587.899	6995.571	2.837	2.2	8.8	NO	1.000	NO	bb
5	5 171229M2_6	Standard	5.000	5.35	3530.072	6601.813	6.684	5.0	0.8	NO	1.000	NO	bb
6	6 171229M2_7	Standard	10.000	5.35	7551.377	7053.357	13.383	10.0	0.3	NO	1.000	NO	bb
7	7 171229M2_8	Standard	50.000	5.35	32249.033	6062.098	66.497	49.9	-0.1	NO	1.000	NO	bb
8	8 171229M2_9	Standard	100.000	5.35	56977.098	5387.725	132.192	100.0	0.0	NO	1.000	NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFUdA**Coefficient of Determination:  $R^2 = 0.999185$ Calibration curve:  $0.00400691 * x^2 + 1.19417 * x + 0.0119652$ 

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.36	352.251	12200.924	0.361	0.3	16.8	NO	0.999	NO	MM
2	2 171229M2_3	Standard	0.500	5.36	591.197	13014.458	0.568	0.5	-7.0	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	5.37	1014.264	11054.450	1.147	0.9	-5.3	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	5.37	2260.135	13105.806	2.156	1.8	-10.8	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	5.36	6342.362	12129.378	6.536	5.4	7.3	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	5.37	14299.663	14621.663	12.225	9.9	-1.0	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	5.37	68892.594	12349.849	69.730	50.0	-0.0	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	5.37	113701.578	14387.557	98.785	67.4	-32.6	NO	0.999	NO	bbX

**Compound name: PFDS**Coefficient of Determination:  $R^2 = 0.999749$ Calibration curve:  $0.000948867 * x^2 + 0.345044 * x + 0.010668$ 

Response type: Internal Std ( Ref 46 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.41	80.006	12200.924	0.082	0.2	-17.4	NO	1.000	NO	bb
2	2 171229M2_3	Standard	0.500	5.41	211.902	13014.458	0.204	0.6	11.6	NO	1.000	NO	bb
3	3 171229M2_4	Standard	1.000	5.41	329.451	11054.450	0.373	1.0	4.6	NO	1.000	NO	bb
4	4 171229M2_5	Standard	2.000	5.41	756.411	13105.806	0.721	2.0	2.4	NO	1.000	NO	bb
5	5 171229M2_6	Standard	5.000	5.41	1707.430	12129.378	1.760	5.0	-0.0	NO	1.000	NO	bb
6	6 171229M2_7	Standard	10.000	5.41	4105.881	14621.663	3.510	9.9	-1.3	NO	1.000	NO	bb
7	7 171229M2_8	Standard	50.000	5.41	19407.148	12349.849	19.643	50.0	0.0	NO	1.000	NO	bb
8	8 171229M2_9	Standard	100.000	5.42	32172.121	14387.557	27.951	68.2	-31.8	NO	1.000	NO	bbX

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFDaA**

Coefficient of Determination:  $R^2 = 0.999669$

Calibration curve:  $0.00495795 * x^2 + 2.08516 * x + -0.00338272$

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.65	370.890	8043.755	0.576	0.3	11.1	NO	1.000	NO	bb
2	2 171229M2_3	Standard	0.500	5.65	729.228	9002.822	1.012	0.5	-2.7	NO	1.000	NO	bb
3	3 171229M2_4	Standard	1.000	5.65	1390.614	9574.130	1.816	0.9	-12.9	NO	1.000	NO	bb
4	4 171229M2_5	Standard	2.000	5.65	3035.353	8821.307	4.301	2.1	2.7	NO	1.000	NO	bb
5	5 171229M2_6	Standard	5.000	5.65	7252.884	8400.495	10.792	5.1	2.3	NO	1.000	NO	bb
6	6 171229M2_7	Standard	10.000	5.65	16908.895	9958.397	21.224	9.9	-0.5	NO	1.000	NO	bb
7	7 171229M2_8	Standard	50.000	5.65	82767.836	8869.276	116.650	50.0	0.0	NO	1.000	NO	bb
8	8 171229M2_9	Standard	100.000	5.65	133277.297	7321.213	227.553	89.9	-10.1	NO	1.000	NO	bbX

**Compound name: N-MeFOSA**

Correlation coefficient:  $r = 0.999575$ ,  $r^2 = 0.999151$

Calibration curve:  $1.1137 * x + -0.0420228$

Response type: Internal Std ( Ref 48 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Include, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	1.250	5.79	139.498	15269.275	1.370	1.3	1.5	NO	0.999	NO	bb
2	2 171229M2_3	Standard	2.500	5.79	272.447	16568.037	2.467	2.3	-9.9	NO	0.999	NO	bb
3	3 171229M2_4	Standard	5.000	5.79	611.306	16161.567	5.674	5.1	2.6	NO	0.999	NO	bb
4	4 171229M2_5	Standard	10.000	5.79	1167.968	17375.629	10.083	9.1	-9.1	NO	0.999	NO	bb
5	5 171229M2_6	Standard	25.000	5.79	3164.595	16523.939	28.727	25.8	3.3	NO	0.999	NO	bb
6	6 171229M2_7	Standard	50.000	5.79	6869.791	17052.381	60.430	54.3	8.6	NO	0.999	NO	bb
7	7 171229M2_8	Standard	250.000	5.79	33022.855	17525.244	282.645	253.8	1.5	NO	0.999	NO	bb
8	8 171229M2_9	Standard	500.000	5.79	60258.223	16495.586	547.949	492.0	-1.6	NO	0.999	NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFTTrDA**Correlation coefficient:  $r = 0.997052$ ,  $r^2 = 0.994114$ Calibration curve:  $1.7339 * x + 0.0945455$ 

Response type: Internal Std ( Ref 47 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	5.89	282.867	8043.755	0.440	0.2	-20.4	NO	0.994	NO	bb
2	2 171229M2_3	Standard	0.500	5.89	729.105	9002.822	1.012	0.5	5.9	NO	0.994	NO	bb
3	3 171229M2_4	Standard	1.000	5.89	1436.530	9574.130	1.876	1.0	2.7	NO	0.994	NO	bb
4	4 171229M2_5	Standard	2.000	5.89	2986.740	8821.307	4.232	2.4	19.3	NO	0.994	NO	bb
5	5 171229M2_6	Standard	5.000	5.89	6268.928	8400.495	9.328	5.3	6.5	NO	0.994	NO	bb
6	6 171229M2_7	Standard	10.000	5.89	11719.059	9958.397	14.710	8.4	-15.7	NO	0.994	NO	bb
7	7 171229M2_8	Standard	50.000	5.89	62631.121	8869.276	88.270	50.9	1.7	NO	0.994	NO	bb
8	8 171229M2_9	Standard	100.000	5.89	139096.016	7321.213	237.488	136.9	36.9	NO	0.994	NO	bbX

**Compound name: PFTeDA**Coefficient of Determination:  $R^2 = 0.992136$ Calibration curve:  $-0.0140955 * x^2 + 3.56538 * x + -0.690853$ 

Response type: Internal Std ( Ref 49 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	6.11	244.810	2829.090	1.082	0.5	99.3	NO	0.992	NO	bbX
2	2 171229M2_3	Standard	0.500	6.11	367.674	2958.684	1.553	0.6	26.2	NO	0.992	NO	bb
3	3 171229M2_4	Standard	1.000	6.11	509.214	2615.306	2.434	0.9	-12.1	NO	0.992	NO	bb
4	4 171229M2_5	Standard	2.000	6.11	1326.894	3232.627	5.131	1.6	-17.8	NO	0.992	NO	bb
5	5 171229M2_6	Standard	5.000	6.11	3081.166	2664.266	14.456	4.3	-13.6	NO	0.992	NO	bb
6	6 171229M2_7	Standard	10.000	6.11	7154.924	2219.846	40.290	12.1	20.7	NO	0.992	NO	bb
7	7 171229M2_8	Standard	50.000	6.11	29792.066	2718.020	137.012	47.6	-4.9	NO	0.992	NO	bb
8	8 171229M2_9	Standard	100.000	6.11	54455.273	3136.443	217.026	103.0	3.0	NO	0.992	NO	db

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: N-EtFOSA**

Coefficient of Determination:  $R^2 = 0.999388$

Calibration curve:  $7.91091e-005 * x^2 + 0.999512 * x + -0.30824$

Response type: Internal Std ( Ref 50 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	1.250	6.18	164.125	23839.549	1.033	1.3	7.3	NO	0.999	NO	bb
2	2 171229M2_3	Standard	2.500	6.18	385.344	26388.232	2.190	2.5	-0.0	NO	0.999	NO	bb
3	3 171229M2_4	Standard	5.000	6.18	692.366	24893.941	4.172	4.5	-10.4	NO	0.999	NO	bb
4	4 171229M2_5	Standard	10.000	6.18	1595.581	26004.342	9.204	9.5	-4.9	NO	0.999	NO	bb
5	5 171229M2_6	Standard	25.000	6.18	4264.833	25204.795	25.381	25.6	2.6	NO	0.999	NO	bb
6	6 171229M2_7	Standard	50.000	6.18	9001.179	25237.131	53.500	53.6	7.2	NO	0.999	NO	bb
7	7 171229M2_8	Standard	250.000	6.18	42323.582	25543.053	248.543	244.3	-2.3	NO	0.999	NO	bb
8	8 171229M2_9	Standard	500.000	6.18	80006.500	22997.896	521.829	502.4	0.5	NO	0.999	NO	bb

**Compound name: PFHxDA**

Coefficient of Determination:  $R^2 = 0.998957$

Calibration curve:  $-0.00263936 * x^2 + 0.996705 * x + 0.0130421$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	6.44	152.043	2686.105	0.283	0.3	8.4	NO	0.999	NO	bb
2	2 171229M2_3	Standard	0.500	6.44	227.073	2563.167	0.443	0.4	-13.6	NO	0.999	NO	bb
3	3 171229M2_4	Standard	1.000	6.44	480.162	2352.455	1.021	1.0	1.4	NO	0.999	NO	bb
4	4 171229M2_5	Standard	2.000	6.44	1022.876	2540.338	2.013	2.0	0.9	NO	0.999	NO	bb
5	5 171229M2_6	Standard	5.000	6.44	2409.130	2528.023	4.765	4.8	-3.4	NO	0.999	NO	bb
6	6 171229M2_7	Standard	10.000	6.44	4359.802	2073.382	10.514	10.8	8.5	NO	0.999	NO	bb
7	7 171229M2_8	Standard	50.000	6.44	23275.369	2760.265	42.161	48.5	-3.0	NO	0.999	NO	bb
8	8 171229M2_9	Standard	100.000	6.44	33664.332	2281.944	73.762	101.0	1.0	NO	0.999	NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: PFODA**

Coefficient of Determination:  $R^2 = 0.995499$

Calibration curve:  $0.0585969 * x^2 + 0.831628 * x + 0.090875$

Response type: Internal Std ( Ref 51 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	0.250	6.67	146.344	2686.105	0.272	0.2	-14.0	NO	0.995	NO	bb
2	2 171229M2_3	Standard	0.500	6.67	288.885	2563.167	0.564	0.5	9.4	NO	0.995	NO	bb
3	3 171229M2_4	Standard	1.000	6.67	543.023	2352.455	1.154	1.2	18.0	NO	0.995	NO	bb
4	4 171229M2_5	Standard	2.000	6.67	829.352	2540.338	1.632	1.7	-17.0	NO	0.995	NO	bb
5	5 171229M2_6	Standard	5.000	6.67	3008.684	2528.023	5.951	5.2	3.3	NO	0.995	NO	bb
6	6 171229M2_7	Standard	10.000	6.67	5888.835	2073.382	14.201	10.0	-0.3	NO	0.995	NO	bb
7	7 171229M2_8	Standard	50.000	6.67	26019.475	2760.265	47.132	22.1	-55.8	NO	0.995	NO	bbX
8	8 171229M2_9	Standard	100.000	6.67	49081.063	2281.944	107.542	36.3	-63.7	NO	0.995	NO	bbX

**Compound name: N-MeFOSE**

Coefficient of Determination:  $R^2 = 0.997660$

Calibration curve:  $0.000615894 * x^2 + 1.25794 * x + -0.447176$

Response type: Internal Std ( Ref 52 ), Area \* ( IS Conc. / IS Area )

Curve type: 2nd Order, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	1.250	6.32	190.467	20735.168	1.378	1.4	16.0	NO	0.998	NO	bb
2	2 171229M2_3	Standard	2.500	6.31	334.189	17093.148	2.933	2.7	7.3	NO	0.998	NO	bb
3	3 171229M2_4	Standard	5.000	6.31	700.139	18824.010	5.579	4.8	-4.4	NO	0.998	NO	bb
4	4 171229M2_5	Standard	10.000	6.31	1444.433	22545.748	9.610	8.0	-20.4	NO	0.998	NO	bb
5	5 171229M2_6	Standard	25.000	6.31	3471.863	17676.176	29.462	23.5	-6.0	NO	0.998	NO	bb
6	6 171229M2_7	Standard	50.000	6.32	7659.868	16652.568	68.997	53.8	7.6	NO	0.998	NO	bb
7	7 171229M2_8	Standard	250.000	6.31	35312.465	15055.310	351.827	249.6	-0.2	NO	0.998	NO	bd
8	8 171229M2_9	Standard	500.000	6.31	68630.867	19010.402	541.526	365.5	-26.9	NO	0.998	NO	bbX

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: N-EtFOSE**

Correlation coefficient:  $r = 0.998071$ ,  $r^2 = 0.996146$

Calibration curve:  $1.22487 * x + 0.0980341$

Response type: Internal Std ( Ref 53 ), Area \* ( IS Conc. / IS Area )

Curve type: Linear, Origin: Exclude, Weighting: 1/x, Axis trans: None

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	1.250	6.46	162.695	17500.215	1.395	1.1	-15.3	NO	0.996	NO	bb
2	2 171229M2_3	Standard	2.500	6.46	450.188	20684.432	3.265	2.6	3.4	NO	0.996	NO	bb
3	3 171229M2_4	Standard	5.000	6.46	767.502	19115.492	6.023	4.8	-3.3	NO	0.996	NO	bb
4	4 171229M2_5	Standard	10.000	6.46	1577.034	19684.930	12.017	9.7	-2.7	NO	0.996	NO	bb
5	5 171229M2_6	Standard	25.000	6.46	4054.844	19050.596	31.927	26.0	3.9	NO	0.996	NO	bb
6	6 171229M2_7	Standard	50.000	6.46	8714.649	19081.916	68.505	55.8	11.7	NO	0.996	NO	bb
7	7 171229M2_8	Standard	250.000	6.46	45602.363	20876.885	327.652	267.4	7.0	NO	0.996	NO	bb
8	8 171229M2_9	Standard	500.000	6.46	85404.250	21955.451	583.483	476.3	-4.7	NO	0.996	NO	bb

**Compound name: 13C3-PFBA**

Response Factor: 0.783363

RRF SD: 0.0236111, Relative SD: 3.01407

Response type: Internal Std ( Ref 54 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	1.40	8904.588	11498.604	9.680	12.4	-1.1	NO		NO	bb
2	2 171229M2_3	Standard	12.500	1.40	9984.899	12720.032	9.812	12.5	0.2	NO		NO	bb
3	3 171229M2_4	Standard	12.500	1.40	9468.932	12042.461	9.829	12.5	0.4	NO		NO	bb
4	4 171229M2_5	Standard	12.500	1.40	10485.881	13073.530	10.026	12.8	2.4	NO		NO	bb
5	5 171229M2_6	Standard	12.500	1.40	9617.440	12883.391	9.331	11.9	-4.7	NO		NO	bb
6	6 171229M2_7	Standard	12.500	1.40	10147.202	12893.346	9.838	12.6	0.5	NO		NO	bb
7	7 171229M2_8	Standard	12.500	1.40	10018.672	13149.171	9.524	12.2	-2.7	NO		NO	bb
8	8 171229M2_9	Standard	12.500	1.40	9449.357	11471.483	10.297	13.1	5.2	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C3-PFPeA**

Response Factor: 0.806685

RRF SD: 0.0738036, Relative SD: 9.149

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	2.35	10303.608	13026.970	9.887	12.3	-2.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	2.35	11963.811	14686.001	10.183	12.6	1.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	2.35	11397.529	13082.247	10.890	13.5	8.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	2.35	12774.396	13423.668	11.895	14.7	18.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	2.36	12100.899	15886.118	9.522	11.8	-5.6	NO		NO	bb
6	6 171229M2_7	Standard	12.500	2.35	12664.979	16032.948	9.874	12.2	-2.1	NO		NO	bb
7	7 171229M2_8	Standard	12.500	2.35	12439.228	16516.043	9.415	11.7	-6.6	NO		NO	bb
8	8 171229M2_9	Standard	12.500	2.36	11142.673	15471.245	9.003	11.2	-10.7	NO		NO	bb

**Compound name: 13C3-PFBS**

Response Factor: 0.107987

RRF SD: 0.0112562, Relative SD: 10.4236

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	2.63	1558.021	13026.970	1.495	13.8	10.8	NO		NO	bb
2	2 171229M2_3	Standard	12.500	2.63	1616.337	14686.001	1.376	12.7	1.9	NO		NO	bb
3	3 171229M2_4	Standard	12.500	2.63	1539.314	13082.247	1.471	13.6	9.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	2.63	1659.784	13423.668	1.546	14.3	14.5	NO		NO	bb
5	5 171229M2_6	Standard	12.500	2.63	1591.105	15886.118	1.252	11.6	-7.3	NO		NO	bb
6	6 171229M2_7	Standard	12.500	2.63	1504.048	16032.948	1.173	10.9	-13.1	NO		NO	bb
7	7 171229M2_8	Standard	12.500	2.63	1627.218	16516.043	1.232	11.4	-8.8	NO		NO	bb
8	8 171229M2_9	Standard	12.500	2.63	1553.847	15471.245	1.255	11.6	-7.0	NO		NO	bb



Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C2-PFHxA**

Response Factor: 0.635783

RRF SD: 0.0486821, Relative SD: 7.65703

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	5.000	3.12	3513.841	13026.970	3.372	5.3	6.1	NO		NO	bb
2	2 171229M2_3	Standard	5.000	3.12	4036.555	14686.001	3.436	5.4	8.1	NO		NO	bb
3	3 171229M2_4	Standard	5.000	3.12	3698.728	13082.247	3.534	5.6	11.2	NO		NO	bb
4	4 171229M2_5	Standard	5.000	3.12	3464.033	13423.668	3.226	5.1	1.5	NO		NO	bb
5	5 171229M2_6	Standard	5.000	3.12	3759.616	15886.118	2.958	4.7	-6.9	NO		NO	bb
6	6 171229M2_7	Standard	5.000	3.12	3763.830	16032.948	2.934	4.6	-7.7	NO		NO	bb
7	7 171229M2_8	Standard	5.000	3.12	3933.006	16516.043	2.977	4.7	-6.4	NO		NO	bb
8	8 171229M2_9	Standard	5.000	3.12	3706.605	15471.245	2.995	4.7	-5.8	NO		NO	bb

**Compound name: 13C4-PFHpA**

Response Factor: 0.652191

RRF SD: 0.0649762, Relative SD: 9.96276

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	3.73	8907.467	13026.970	8.547	13.1	4.8	NO		NO	bb
2	2 171229M2_3	Standard	12.500	3.73	9815.644	14686.001	8.355	12.8	2.5	NO		NO	bb
3	3 171229M2_4	Standard	12.500	3.73	8838.820	13082.247	8.445	12.9	3.6	NO		NO	bb
4	4 171229M2_5	Standard	12.500	3.74	10366.868	13423.668	9.654	14.8	18.4	NO		NO	bb
5	5 171229M2_6	Standard	12.500	3.74	9360.222	15886.118	7.365	11.3	-9.7	NO		NO	bb
6	6 171229M2_7	Standard	12.500	3.74	10473.959	16032.948	8.166	12.5	0.2	NO		NO	bb
7	7 171229M2_8	Standard	12.500	3.74	9336.860	16516.043	7.067	10.8	-13.3	NO		NO	bb
8	8 171229M2_9	Standard	12.500	3.74	9432.322	15471.245	7.621	11.7	-6.5	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 18O2-PFHxS**

Response Factor: 0.320683

RRF SD: 0.0244918, Relative SD: 7.6374

Response type: Internal Std ( Ref 56 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	3.88	1144.698	3848.441	3.718	11.6	-7.2	NO		NO	bb
2	2 171229M2_3	Standard	12.500	3.88	1280.945	4238.235	3.778	11.8	-5.8	NO		NO	bb
3	3 171229M2_4	Standard	12.500	3.88	1074.276	3181.425	4.221	13.2	5.3	NO		NO	bb
4	4 171229M2_5	Standard	12.500	3.89	1469.055	4267.268	4.303	13.4	7.4	NO		NO	bb
5	5 171229M2_6	Standard	12.500	3.88	1196.888	4034.508	3.708	11.6	-7.5	NO		NO	bb
6	6 171229M2_7	Standard	12.500	3.88	1407.185	3881.957	4.531	14.1	13.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	3.88	1247.672	4023.275	3.876	12.1	-3.3	NO		NO	bb
8	8 171229M2_9	Standard	12.500	3.88	1152.019	3662.087	3.932	12.3	-1.9	NO		NO	bb

**Compound name: 13C2-6:2 FTS**

Response Factor: 0.192047

RRF SD: 0.0252793, Relative SD: 13.1631

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.19	2316.373	15049.458	1.924	10.0	-19.9	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.19	2801.986	14379.889	2.436	12.7	1.5	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.19	2589.695	13387.784	2.418	12.6	0.7	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.19	2823.740	16520.527	2.137	11.1	-11.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.19	2811.475	15029.971	2.338	12.2	-2.6	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.19	3213.473	14938.239	2.689	14.0	12.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.19	3501.672	15289.608	2.863	14.9	19.3	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.19	4072.249	13438.497	3.788	19.7	57.8	NO		NO	bbX

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C2-PFOA**

Response Factor: 0.944504

RRF SD: 0.0477452, Relative SD: 5.05505

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.25	13054.395	15049.458	10.843	11.5	-8.2	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.24	14310.572	14379.889	12.440	13.2	5.4	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.25	12549.276	13387.784	11.717	12.4	-0.8	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.25	15995.349	16520.527	12.103	12.8	2.5	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.25	13236.790	15029.971	11.009	11.7	-6.8	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.25	14776.837	14938.239	12.365	13.1	4.7	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.25	14864.127	15289.608	12.152	12.9	2.9	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.25	12709.908	13438.497	11.822	12.5	0.1	NO		NO	bb

**Compound name: 13C5-PFNA**

Response Factor: 0.832052

RRF SD: 0.0583635, Relative SD: 7.0144

Response type: Internal Std ( Ref 58 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.68	9559.854	11482.184	10.407	12.5	0.1	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.68	11886.128	13994.057	10.617	12.8	2.1	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.68	10985.445	13520.063	10.157	12.2	-2.3	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.68	11245.406	11995.365	11.718	14.1	12.7	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.68	10698.335	12349.689	10.829	13.0	4.1	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.68	12722.333	15920.794	9.989	12.0	-4.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.68	10121.980	13803.214	9.166	11.0	-11.9	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.68	11035.840	13364.362	10.322	12.4	-0.8	NO		NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C8-PFOA**

Response Factor: 0.203788

RRF SD: 0.0207952, Relative SD: 10.2043

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.74	2711.756	14815.704	2.288	11.2	-10.2	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.74	3102.326	16960.961	2.286	11.2	-10.2	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.74	3049.030	12370.712	3.081	15.1	20.9	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.74	3142.559	15033.304	2.613	12.8	2.6	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.74	2594.765	12111.065	2.678	13.1	5.1	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.74	2934.554	14405.790	2.546	12.5	-0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.74	2840.989	14131.721	2.513	12.3	-1.4	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.74	2854.235	15033.200	2.373	11.6	-6.8	NO		NO	bb

**Compound name: 13C8-PFOS**

Response Factor: 0.947914

RRF SD: 0.0975277, Relative SD: 10.2887

Response type: Internal Std ( Ref 59 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.76	3197.572	2998.679	13.329	14.1	12.5	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.76	3759.751	4122.135	11.401	12.0	-3.8	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.76	3437.048	3587.060	11.977	12.6	1.1	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.76	3679.354	3787.616	12.143	12.8	2.5	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.76	3383.786	3479.518	12.156	12.8	2.6	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.76	3618.413	3708.112	12.198	12.9	2.9	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.76	2972.808	4065.431	9.141	9.6	-22.9	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.76	3503.462	3518.380	12.447	13.1	5.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C2-PFDA**

Response Factor: 0.986444

RRF SD: 0.1074, Relative SD: 10.8876

Response type: Internal Std ( Ref 60 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	5.05	9787.770	10283.326	11.898	12.1	-3.5	NO		NO	bb
2	2 171229M2_3	Standard	12.500	5.04	13313.300	12978.949	12.822	13.0	4.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	5.04	11579.593	10780.415	13.427	13.6	8.9	NO		NO	bb
4	4 171229M2_5	Standard	12.500	5.05	10793.412	12463.213	10.825	11.0	-12.2	NO		NO	bb
5	5 171229M2_6	Standard	12.500	5.05	11236.213	11862.046	11.841	12.0	-4.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	5.05	12281.298	12524.826	12.257	12.4	-0.6	NO		NO	bb
7	7 171229M2_8	Standard	12.500	5.04	9060.415	10505.381	10.781	10.9	-12.6	NO		NO	bb
8	8 171229M2_9	Standard	12.500	5.04	10953.324	9254.415	14.795	15.0	20.0	NO		NO	bb

**Compound name: 13C2-8:2 FTS**

Response Factor: 0.124479

RRF SD: 0.019342, Relative SD: 15.5383

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	5.02	1831.227	13026.970	1.757	14.1	12.9	NO		NO	bb
2	2 171229M2_3	Standard	12.500	5.02	1424.288	14686.001	1.212	9.7	-22.1	NO		NO	bb
3	3 171229M2_4	Standard	12.500	5.02	2009.474	13082.247	1.920	15.4	23.4	NO		NO	bb
4	4 171229M2_5	Standard	12.500	5.02	1798.888	13423.668	1.675	13.5	7.7	NO		NO	bb
5	5 171229M2_6	Standard	12.500	5.02	1757.374	15886.118	1.383	11.1	-11.1	NO		NO	bb
6	6 171229M2_7	Standard	12.500	5.02	1922.256	16032.948	1.499	12.0	-3.7	NO		NO	bb
7	7 171229M2_8	Standard	12.500	5.02	1910.405	16516.043	1.446	11.6	-7.1	NO		NO	bb
8	8 171229M2_9	Standard	12.500	5.02	3035.175	15471.245	2.452	19.7	57.6	NO		NO	bbX

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: d3-N-MeFOSAA**

Response Factor: 0.391119

RRF SD: 0.0414808, Relative SD: 10.6057

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	171229M2_2	Standard	12.500	5.19	5085.497	14815.704	4.291	11.0	-12.2	NO		NO	bb
2	171229M2_3	Standard	12.500	5.19	6075.852	16960.961	4.478	11.4	-8.4	NO		NO	bb
3	171229M2_4	Standard	12.500	5.19	5465.513	12370.712	5.523	14.1	13.0	NO		NO	bb
4	171229M2_5	Standard	12.500	5.19	6024.812	15033.304	5.010	12.8	2.5	NO		NO	bb
5	171229M2_6	Standard	12.500	5.19	5469.510	12111.065	5.645	14.4	15.5	NO		NO	bb
6	171229M2_7	Standard	12.500	5.20	5362.439	14405.790	4.653	11.9	-4.8	NO		NO	bb
7	171229M2_8	Standard	12.500	5.19	5797.623	14131.721	5.128	13.1	4.9	NO		NO	bb
8	171229M2_9	Standard	12.500	5.20	5273.478	15033.200	4.385	11.2	-10.3	NO		NO	bb

**Compound name: d5-N-EtFOSAA**

Response Factor: 0.451227

RRF SD: 0.0587445, Relative SD: 13.0188

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	171229M2_2	Standard	12.500	5.35	6335.104	14815.704	5.345	11.8	-5.2	NO		NO	bb
2	171229M2_3	Standard	12.500	5.34	6832.871	16960.961	5.036	11.2	-10.7	NO		NO	bb
3	171229M2_4	Standard	12.500	5.35	6085.677	12370.712	6.149	13.6	9.0	NO		NO	bb
4	171229M2_5	Standard	12.500	5.35	6995.571	15033.304	5.817	12.9	3.1	NO		NO	bb
5	171229M2_6	Standard	12.500	5.35	6601.813	12111.065	6.814	15.1	20.8	NO		NO	bb
6	171229M2_7	Standard	12.500	5.35	7053.357	14405.790	6.120	13.6	8.5	NO		NO	bb
7	171229M2_8	Standard	12.500	5.35	6062.098	14131.721	5.362	11.9	-4.9	NO		NO	bb
8	171229M2_9	Standard	12.500	5.35	5387.725	15033.200	4.480	9.9	-20.6	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C2-PFUdA**

Response Factor: 0.900459

RRF SD: 0.0859834, Relative SD: 9.54884

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x-excluded
1	1	171229M2_2	Standard	12.500	5.37	12200.924	14815.704	10.294	11.4	-8.5	NO		NO	bb
2	2	171229M2_3	Standard	12.500	5.36	13014.458	16960.961	9.591	10.7	-14.8	NO		NO	bb
3	3	171229M2_4	Standard	12.500	5.36	11054.450	12370.712	11.170	12.4	-0.8	NO		NO	bb
4	4	171229M2_5	Standard	12.500	5.36	13105.806	15033.304	10.897	12.1	-3.2	NO		NO	bb
5	5	171229M2_6	Standard	12.500	5.36	12129.378	12111.065	12.519	13.9	11.2	NO		NO	bb
6	6	171229M2_7	Standard	12.500	5.37	14621.663	14405.790	12.687	14.1	12.7	NO		NO	bb
7	7	171229M2_8	Standard	12.500	5.36	12349.849	14131.721	10.924	12.1	-2.9	NO		NO	bb
8	8	171229M2_9	Standard	12.500	5.37	14387.557	15033.200	11.963	13.3	6.3	NO		NO	bb

**Compound name: 13C2-PFDoA**

Response Factor: 0.616744

RRF SD: 0.0977312, Relative SD: 15.8463

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x-excluded
1	1	171229M2_2	Standard	12.500	5.64	8043.755	14815.704	6.787	11.0	-12.0	NO		NO	bb
2	2	171229M2_3	Standard	12.500	5.65	9002.822	16960.961	6.635	10.8	-13.9	NO		NO	bb
3	3	171229M2_4	Standard	12.500	5.65	9574.130	12370.712	9.674	15.7	25.5	NO		NO	bb
4	4	171229M2_5	Standard	12.500	5.65	8821.307	15033.304	7.335	11.9	-4.9	NO		NO	bb
5	5	171229M2_6	Standard	12.500	5.65	8400.495	12111.065	8.670	14.1	12.5	NO		NO	bb
6	6	171229M2_7	Standard	12.500	5.65	9958.397	14405.790	8.641	14.0	12.1	NO		NO	bb
7	7	171229M2_8	Standard	12.500	5.65	8869.276	14131.721	7.845	12.7	1.8	NO		NO	bb
8	8	171229M2_9	Standard	12.500	5.65	7321.213	15033.200	6.088	9.9	-21.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: d3-N-MeFOSA**

Response Factor: 0.0974499

RRF SD: 0.0110792, Relative SD: 11.3691

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	150.000	5.81	15269.275	14815.704	12.883	132.2	-11.9	NO		NO	bb
2	2 171229M2_3	Standard	150.000	5.81	16568.037	16960.961	12.210	125.3	-16.5	NO		NO	bb
3	3 171229M2_4	Standard	150.000	5.81	16161.567	12370.712	16.330	167.6	11.7	NO		NO	bb
4	4 171229M2_5	Standard	150.000	5.81	17375.629	15033.304	14.448	148.3	-1.2	NO		NO	bb
5	5 171229M2_6	Standard	150.000	5.81	16523.939	12111.065	17.055	175.0	16.7	NO		NO	bb
6	6 171229M2_7	Standard	150.000	5.81	17052.381	14405.790	14.796	151.8	1.2	NO		NO	bb
7	7 171229M2_8	Standard	150.000	5.81	17525.244	14131.721	15.502	159.1	6.0	NO		NO	bd
8	8 171229M2_9	Standard	150.000	5.81	16495.586	15033.200	13.716	140.7	-6.2	NO		NO	bb

**Compound name: 13C2-PFTeDA**

Response Factor: 0.195861

RRF SD: 0.02266, Relative SD: 11.5694

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

#	Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	6.11	2829.090	14815.704	2.387	12.2	-2.5	NO		NO	bb
2	2 171229M2_3	Standard	12.500	6.11	2958.684	16960.961	2.181	11.1	-10.9	NO		NO	bb
3	3 171229M2_4	Standard	12.500	6.11	2615.306	12370.712	2.643	13.5	7.9	NO		NO	bb
4	4 171229M2_5	Standard	12.500	6.11	3232.627	15033.304	2.688	13.7	9.8	NO		NO	bb
5	5 171229M2_6	Standard	12.500	6.11	2664.266	12111.065	2.750	14.0	12.3	NO		NO	bb
6	6 171229M2_7	Standard	12.500	6.11	2219.846	14405.790	1.926	9.8	-21.3	NO		NO	bb
7	7 171229M2_8	Standard	12.500	6.11	2718.020	14131.721	2.404	12.3	-1.8	NO		NO	bb
8	8 171229M2_9	Standard	12.500	6.11	3136.443	15033.200	2.608	13.3	6.5	NO		NO	bb



Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: d5-N-ETFOSA**

Response Factor: 0.146639

RRF SD: 0.0168881, Relative SD: 11.5168

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	150.000	6.19	23839.549	14815.704	20.113	137.2	-8.6	NO		NO	bb
2	2 171229M2_3	Standard	150.000	6.19	26388.232	16960.961	19.448	132.6	-11.6	NO		NO	bb
3	3 171229M2_4	Standard	150.000	6.20	24893.941	12370.712	25.154	171.5	14.4	NO		NO	bb
4	4 171229M2_5	Standard	150.000	6.20	26004.342	15033.304	21.622	147.5	-1.7	NO		NO	bb
5	5 171229M2_6	Standard	150.000	6.20	25204.795	12111.065	26.014	177.4	18.3	NO		NO	bb
6	6 171229M2_7	Standard	150.000	6.20	25237.131	14405.790	21.898	149.3	-0.4	NO		NO	bb
7	7 171229M2_8	Standard	150.000	6.20	25543.053	14131.721	22.594	154.1	2.7	NO		NO	bb
8	8 171229M2_9	Standard	150.000	6.20	22997.896	15033.200	19.123	130.4	-13.1	NO		NO	bb

**Compound name: 13C2-PFHxDA**

Response Factor: 0.434796

RRF SD: 0.0591757, Relative SD: 13.61

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	5.000	6.44	2686.105	14815.704	2.266	5.2	4.2	NO		NO	bb
2	2 171229M2_3	Standard	5.000	6.44	2563.167	16960.961	1.889	4.3	-13.1	NO		NO	bb
3	3 171229M2_4	Standard	5.000	6.44	2352.455	12370.712	2.377	5.5	9.3	NO		NO	bb
4	4 171229M2_5	Standard	5.000	6.44	2540.338	15033.304	2.112	4.9	-2.8	NO		NO	bb
5	5 171229M2_6	Standard	5.000	6.44	2528.023	12111.065	2.609	6.0	20.0	NO		NO	bb
6	6 171229M2_7	Standard	5.000	6.44	2073.382	14405.790	1.799	4.1	-17.2	NO		NO	bb
7	7 171229M2_8	Standard	5.000	6.44	2760.265	14131.721	2.442	5.6	12.3	NO		NO	bb
8	8 171229M2_9	Standard	5.000	6.44	2281.944	15033.200	1.897	4.4	-12.7	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: d7-N-MeFOSE**

Response Factor: 0.108064

RRF SD: 0.0168658, Relative SD: 15.6073

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	150.000	6.31	20735.168	14815.704	17.494	161.9	7.9	NO		NO	bb
2	2 171229M2_3	Standard	150.000	6.31	17093.148	16960.961	12.597	116.6	-22.3	NO		NO	bd
3	3 171229M2_4	Standard	150.000	6.31	18824.010	12370.712	19.021	176.0	17.3	NO		NO	bb
4	4 171229M2_5	Standard	150.000	6.31	22545.748	15033.304	18.747	173.5	15.7	NO		NO	bb
5	5 171229M2_6	Standard	150.000	6.31	17676.176	12111.065	18.244	168.8	12.6	NO		NO	bb
6	6 171229M2_7	Standard	150.000	6.31	16652.568	14405.790	14.450	133.7	-10.9	NO		NO	bb
7	7 171229M2_8	Standard	150.000	6.31	15055.310	14131.721	13.317	123.2	-17.8	NO		NO	bb
8	8 171229M2_9	Standard	150.000	6.30	19010.402	15033.200	15.807	146.3	-2.5	NO		NO	bb

**Compound name: d9-N-EtFOSE**

Response Factor: 0.115528

RRF SD: 0.0123398, Relative SD: 10.6812

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	150.000	6.46	17500.215	14815.704	14.765	127.8	-14.8	NO		NO	bb
2	2 171229M2_3	Standard	150.000	6.46	20684.432	16960.961	15.244	132.0	-12.0	NO		NO	bb
3	3 171229M2_4	Standard	150.000	6.46	19115.492	12370.712	19.315	167.2	11.5	NO		NO	bb
4	4 171229M2_5	Standard	150.000	6.46	19684.930	15033.304	16.368	141.7	-5.5	NO		NO	bb
5	5 171229M2_6	Standard	150.000	6.46	19050.596	12111.065	19.662	170.2	13.5	NO		NO	bb
6	6 171229M2_7	Standard	150.000	6.46	19081.916	14405.790	16.558	143.3	-4.5	NO		NO	bd
7	7 171229M2_8	Standard	150.000	6.46	20876.885	14131.721	18.466	159.8	6.6	NO		NO	bb
8	8 171229M2_9	Standard	150.000	6.46	21955.451	15033.200	18.256	158.0	5.3	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C4-PFBA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 54 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	1.40	11498.604	11498.604	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	1.40	12720.032	12720.032	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	1.40	12042.461	12042.461	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	1.40	13073.530	13073.530	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	1.40	12883.391	12883.391	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	1.40	12893.346	12893.346	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	1.40	13149.171	13149.171	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	1.40	11471.483	11471.483	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C5-PFHxA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 55 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	3.12	13026.970	13026.970	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	3.12	14686.001	14686.001	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	3.12	13082.247	13082.247	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	3.12	13423.668	13423.668	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	3.12	15886.118	15886.118	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	3.12	16032.948	16032.948	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	3.12	16516.043	16516.043	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	3.12	15471.245	15471.245	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time  
Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C3-PFHxS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 56 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	3.88	3848.441	3848.441	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	3.88	4238.235	4238.235	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	3.88	3181.425	3181.425	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	3.88	4267.268	4267.268	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	3.88	4034.508	4034.508	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	3.88	3881.957	3881.957	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	3.88	4023.275	4023.275	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	3.88	3662.087	3662.087	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C8-PFOA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 57 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.25	15049.458	15049.458	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.25	14379.889	14379.889	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.25	13387.784	13387.784	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.25	16520.527	16520.527	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.25	15029.971	15029.971	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.25	14938.239	14938.239	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.25	15289.608	15289.608	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.25	13438.497	13438.497	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C9-PFNA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 58 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.68	11482.184	11482.184	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.68	13994.057	13994.057	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.68	13520.063	13520.063	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.68	11995.365	11995.365	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.68	12349.689	12349.689	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.68	15920.794	15920.794	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.68	13803.214	13803.214	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.68	13364.362	13364.362	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C4-PFOS**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 59 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	4.76	2998.679	2998.679	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	4.76	4122.135	4122.135	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	4.76	3587.060	3587.060	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	4.76	3787.616	3787.616	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	4.76	3479.518	3479.518	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	4.76	3708.112	3708.112	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	4.76	4065.431	4065.431	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	4.76	3518.380	3518.380	12.500	12.5	0.0	NO		NO	bb

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

**Compound name: 13C6-PFDA**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 60 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	5.04	10283.326	10283.326	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	5.04	12978.949	12978.949	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	5.04	10780.415	10780.415	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	5.05	12463.213	12463.213	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	5.04	11862.046	11862.046	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	5.04	12524.826	12524.826	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	5.04	10505.381	10505.381	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	5.05	9254.415	9254.415	12.500	12.5	0.0	NO		NO	bb

**Compound name: 13C7-PFUDa**

Response Factor: 1

RRF SD: 0, Relative SD: 0

Response type: Internal Std ( Ref 61 ), Area \* ( IS Conc. / IS Area )

Curve type: RF

	# Name	Type	Std. Conc	RT	Area	IS Area	Response	Conc.	%Dev	Conc. Flag	CoD	CoD Flag	x=excluded
1	1 171229M2_2	Standard	12.500	5.37	14815.704	14815.704	12.500	12.5	0.0	NO		NO	bb
2	2 171229M2_3	Standard	12.500	5.37	16960.961	16960.961	12.500	12.5	0.0	NO		NO	bb
3	3 171229M2_4	Standard	12.500	5.37	12370.712	12370.712	12.500	12.5	0.0	NO		NO	bb
4	4 171229M2_5	Standard	12.500	5.37	15033.304	15033.304	12.500	12.5	0.0	NO		NO	bb
5	5 171229M2_6	Standard	12.500	5.37	12111.065	12111.065	12.500	12.5	0.0	NO		NO	bb
6	6 171229M2_7	Standard	12.500	5.37	14405.790	14405.790	12.500	12.5	0.0	NO		NO	bb
7	7 171229M2_8	Standard	12.500	5.37	14131.721	14131.721	12.500	12.5	0.0	NO		NO	bb
8	8 171229M2_9	Standard	12.500	5.37	15033.200	15033.200	12.500	12.5	0.0	NO		NO	bb

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

Name: 171229M2\_9, Date: 29-Dec-2017, Time: 14:49:59, ID: ST171229M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

#	Name	CoD	CoD Flag	%RSD
1	1 PFBA	0.9993	NO	
2	2 PFPeA	0.9994	NO	
3	3 PFBS	0.9990	NO	
4	4 PFHxA	0.9988	NO	
5	5 PFHpA	0.9989	NO	
6	6 L-PFHxS	0.9991	NO	
7	8 6:2 FTS	0.9951	NO	
8	9 L-PFOA	0.9985	NO	
9	11 PFHpS	0.9969	NO	
10	12 PFNA	0.9980	NO	
11	13 PFOSA	0.9993	NO	
12	14 L-PFOS	0.9904	NO	
13	16 PFDA	0.9987	NO	
14	17 8:2 FTS	0.9987	NO	
15	18 N-MeFOSAA	0.9986	NO	
16	19 N-EtFOSAA	0.9996	NO	
17	20 PFUdA	0.9992	NO	
18	21 PFDS	0.9997	NO	
19	22 PFDoA	0.9997	NO	
20	23 N-MeFOSA	0.9992	NO	
21	24 PFTrDA	0.9941	NO	
22	25 PFTeDA	0.9921	NO	
23	26 N-EtFOSA	0.9994	NO	
24	27 PFHxDA	0.9990	NO	
25	28 PFODA	0.9955	NO	
26	29 N-MeFOSE	0.9977	NO	
27	30 N-EtFOSE	0.9961	NO	
28	31 13C3-PFBA		NO	3.014
29	32 13C3-PFPeA		NO	9.149
30	33 13C3-PFBS		NO	10.424
31	34 13C2-PFHxA		NO	7.657
32	35 13C4-PFHpA		NO	9.963
33	36 18O2-PFHxS		NO	7.637
34	37 13C2-6:2 FTS		NO	13.163

Dataset: U:\Q4.PRO\results\171229M2\171229M2-CRV.qld

Last Altered: Friday, December 29, 2017 16:04:07 Pacific Standard Time

Printed: Friday, December 29, 2017 16:06:54 Pacific Standard Time

Name: 171229M2\_9, Date: 29-Dec-2017, Time: 14:49:59, ID: ST171229M2-8 PFC CS5 17L2613, Description: PFC CS5 17L2613

#	Name	CoD	CoD Flag	%RSD
35	38 13C2-PFOA		NO	5.055
36	39 13C5-PFNA		NO	7.014
37	40 13C8-PFOSA		NO	10.204
38	41 13C8-PFOS		NO	10.289
39	42 13C2-PFDA		NO	10.888
40	43 13C2-8:2 FTS		NO	15.538
41	44 d3-N-MeFOSAA		NO	10.606
42	45 d5-N-EtFOSAA		NO	13.019
43	46 13C2-PFUdA		NO	9.549
44	47 13C2-PFDoA		NO	15.846
45	48 d3-N-MeFOSA		NO	11.369
46	49 13C2-PFTeDA		NO	11.569
47	50 d5-N-ETFOSA		NO	11.517
48	51 13C2-PFHxDA		NO	13.610
49	52 d7-N-MeFOSE		NO	15.607
50	53 d9-N-EtFOSE		NO	10.681
51	54 13C4-PFBA		NO	0.000
52	55 13C5-PFHxA		NO	0.000
53	56 13C3-PFHxS		NO	0.000
54	57 13C8-PFOA		NO	0.000
55	58 13C9-PFNA		NO	0.000
56	59 13C4-PFOS		NO	0.000
57	60 13C6-PFDA		NO	0.000
58	61 13C7-PFUdA		NO	0.000



Dataset: Untitled

Last Altered: Friday, December 29, 2017 16:11:21 Pacific Standard Time

Printed: Friday, December 29, 2017 16:14:12 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122917.mdb 29 Dec 2017 15:16:53

Calibration: U:\Q4.PRO\CurveDB\IC18\_VAL-PFAS\_Q4\_12-29-17\_FULL.cdb 29 Dec 2017 16:04:07

Compound name: PFBA

	Name	ID	Acq.Date	Acq.Time
1	171229M2_1	IPA	29-Dec-17	13:20:29
2	171229M2_2	ST171229M2-1 PFC CS-2 17L2606	29-Dec-17	13:31:42
3	171229M2_3	ST171229M2-2 PFC CS-1 17L2607	29-Dec-17	13:42:53
4	171229M2_4	ST171229M2-3 PFC CS0 17L2608	29-Dec-17	13:54:04
5	171229M2_5	ST171229M2-4 PFC CS1 17L2609	29-Dec-17	14:05:15
6	171229M2_6	ST171229M2-5 PFC CS2 17L2610	29-Dec-17	14:16:26
7	171229M2_7	ST171229M2-6 PFC CS3 17L2611	29-Dec-17	14:27:38
8	171229M2_8	ST171229M2-7 PFC CS4 17L2612	29-Dec-17	14:38:48
9	171229M2_9	ST171229M2-8 PFC CS5 17L2613	29-Dec-17	14:49:59
10	171229M2_10	ST171229M2-9 PFC CS6 17L2710	29-Dec-17	15:01:10
11	171229M2_11	ST171229M2-10 PFC CS7 17L1804	29-Dec-17	15:12:20
12	171229M2_12	IPA	29-Dec-17	15:23:31
13	171229M2_13	ICV171229M2-1 PFC ICV 17L2907 (A)	29-Dec-17	15:34:42
14	171229M2_14	ICV171229M2-2 PFC ICV 17L1201	29-Dec-17	15:54:47
15	171229M2_15	IPA		

(A) possible formulation error, used older SS.

AC  
12/29/17

Dataset: U:\Q4.PRO\results\171229M2\171229M2-14.qld

Ⓐ No SS available.

Last Altered: Friday, December 29, 2017 16:10:03 Pacific Standard Time

Printed: Friday, December 29, 2017 16:10:34 Pacific Standard Time

Method: U:\Q4.PRO\MethDB\PFAS\_FULL\_80C\_122917.mdb 29 Dec 2017 15:16:53

Calibration: U:\Q4.PRO\CurveDB\C18\_VAL-PFAS\_Q4\_12-29-17\_FULL.cdb 29 Dec 2017 16:04:07

Name: 171229M2\_14, Date: 29-Dec-2017, Time: 15:54:47, ID: ICV171229M2-2 PFC ICV 17L1201, Description: PFC ICV 17L1201

AC  
12/29/17  
✓ 12/30/2017

	# Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
1	1 PFBA	213.0 > 168.8	1.10e4	1.11e4	1.0000		1.47	1.41	12.4	9.096	91.0
2	2 PFPeA	263.1 > 218.9	1.15e4	1.33e4	1.0000		2.35	2.34	10.7	9.012	90.1
3	3 PFBS	299.0 > 79.7	2.33e3	1.87e3	1.0000		2.70	2.62	15.6	7.234	72.3
4	4 PFHxA	313.2 > 268.9	1.43e4	4.43e3	1.0000		3.12	3.12	16.2	8.656	86.6
5	5 PFHpA	363.0 > 318.9	1.18e4	1.18e4	1.0000		3.75	3.73	12.5	7.948	79.5
6	6 L-PFHxS	398.9 > 79.6	1.76e3	1.34e3	1.0000		3.85	3.88	16.5	7.782	77.8
7	8 6:2 FTS	427.1 > 407	2.92e3	1.55e4	1.0000		4.20	4.19	2.35	9.502	95.0
8	9 L-PFOA	413 > 368.7	1.26e4	1.55e4	1.0000		4.25	4.24	10.2	8.343	83.4
9	11 PFHpS	449 > 80.0	2.75e3	1.55e4	1.0000		4.35	4.35	2.22	8.862	88.6
10	12 PFNA	463.0 > 418.8	1.35e4	1.39e4	1.0000		4.70	4.68	12.2	7.836	78.4
11	13 PFOSA	498.1 > 77.8	3.29e3	3.47e3	1.0000		4.81	4.74	11.9	8.918	89.2
12	14 L-PFOS	499 > 79.9	3.02e3	3.75e3	1.0000		4.75	4.76	10.1	7.552	75.5
13	16 PFDA	513 > 468.8	1.46e4	1.50e4	1.0000		5.05	5.04	12.2	8.126	81.3
14	17 8:2 FTS	527 > 506.9	3.58e3	1.50e4	1.0000		5.02	5.01	2.99	9.704	97.0
15	18 N-MeFOSAA	570.1 > 419	7.78e3	5.75e3	1.0000		5.20	5.19	16.9	10.158	101.6
16	19 N-EtFOSAA	584.2 > 419	6.67e3	7.14e3	1.0000		5.42	5.35	11.7	8.765	87.6
17	20 PFUDa	563.0 > 518.9	1.36e4	1.68e4	1.0000		5.35	5.36	10.1	8.257	82.6
18	21 PFDS	598.8 > 80	3.62e3	1.68e4	1.0000		5.50	5.41	2.69	7.609	76.1
19	22 PFDoA	612.9 > 569.0	1.46e4	1.22e4	1.0000		5.70	5.64	14.9	7.029	70.3
20	23 N-MeFOSA	512.1 > 168.9		1.85e4	1.0000		5.77				Ⓐ 87.7
21	24 PFTrDA	662.9 > 618.9	1.50e4	1.22e4	1.0000		5.95	5.89	15.3	8.772	87.7
22	25 PFTeDA	712.9 > 668.8	9.12e3	4.47e3	1.0000		6.16	6.11	25.5	7.569	75.7
23	26 N-EtFOSA	526.1 > 168.9		2.71e4	1.0000		6.15				Ⓐ
24	27 PFHxDA	813.1 > 768.6		3.00e3	1.0000		6.48				
25	28 PFODA	913.1 > 868.8		3.00e3	1.0000		6.70				
26	29 N-MeFOSE	616.1 > 58.9		2.36e4	1.0000		6.30				
27	30 N-EtFOSE	630.1 > 58.9		2.02e4	1.0000		6.42				
28	31 13C3-PFBA	216.1 > 171.8	1.11e4	1.24e4	1.0000	0.783	1.47	1.41	11.2	14.247	114.0
29	32 13C3-PFPeA	266. > 221.8	1.33e4	1.56e4	1.0000	0.807	2.44	2.34	10.7	13.218	105.7
30	33 13C3-PFBS	302. > 98.8	1.87e3	1.56e4	1.0000	0.108	2.70	2.62	1.49	13.836	110.7
31	34 13C3-PFHxA	315 > 269.8	4.43e3	1.56e4	1.0000	0.636	3.20	3.12	3.54	5.563	111.3

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Dataset: U:\Q4.PRO\results\171229M2\171229M2-14.qld

Last Altered: Friday, December 29, 2017 16:10:03 Pacific Standard Time

Printed: Friday, December 29, 2017 16:10:34 Pacific Standard Time

Name: 171229M2\_14, Date: 29-Dec-2017, Time: 15:54:47, ID: ICV171229M2-2 PFC ICV 17L1201, Description: PFC ICV 17L1201

	#	Name	Trace	Area	IS Area	wt/vol	RRF	Pred.RT	RT	y Axis Resp.	Conc.	%Rec
32	35	13C4-PFHpA	367.2 > 321.8	1.18e4	1.56e4	1.0000	0.652	3.80	3.73	9.45	14.492	115.9
33	36	18O2-PFHxS	403.0 > 102.6	1.34e3	3.38e3	1.0000	0.321	3.95	3.88	4.95	15.442	123.5
34	37	13C2-6:2 FTS	429.1 > 408.9	3.58e3	1.44e4	1.0000	0.192	4.26	4.19	3.10	16.139	129.1
35	38	13C2-PFOA	414.9 > 369.7	1.55e4	1.44e4	1.0000	0.945	4.32	4.24	13.4	14.215	113.7
36	39	13C5-PFNA	468.2 > 422.9	1.39e4	1.26e4	1.0000	0.832	4.75	4.67	13.8	16.588	132.7
37	40	13C8-PFOSA	506.1 > 77.7	3.47e3	1.37e4	1.0000	0.204	4.81	4.74	3.15	15.470	123.8
38	41	13C8-PFOS	507.0 > 79.9	3.75e3	3.55e3	1.0000	0.948	4.83	4.76	13.2	13.934	111.5
39	42	13C2-PFDA	515.1 > 469.9	1.50e4	1.34e4	1.0000	0.986	5.11	5.04	13.9	14.119	112.9
40	43	13C2-8:2 FTS	529.1 > 508.7	2.41e3	1.56e4	1.0000	0.124	5.09	5.01	1.93	15.476	123.8
41	44	d3-N-MeFOSAA	573.3 > 419	5.75e3	1.37e4	1.0000	0.391	5.26	5.19	5.23	13.377	107.0
42	45	d5-N-EtFOSAA	589.3 > 419	7.14e3	1.37e4	1.0000	0.451	5.42	5.34	6.49	14.381	115.0
43	46	13C2-PFUdA	565 > 519.8	1.68e4	1.37e4	1.0000	0.900	5.43	5.36	15.3	16.966	135.7
44	47	13C2-PFDoA	615.0 > 569.7	1.22e4	1.37e4	1.0000	0.617	5.70	5.64	11.1	18.058	144.5
45	48	d3-N-MeFOSA	515.2 > 168.9	1.85e4	1.37e4	1.0000	0.097	5.80	5.81	16.8	172.209	114.8
46	49	13C2-PFTeDA	714.8 > 669.6	4.47e3	1.37e4	1.0000	0.196	6.16	6.11	4.07	20.760	166.1
47	50	d5-N-ETFOSA	531.1 > 168.9	2.71e4	1.37e4	1.0000	0.147	6.16	6.19	24.6	167.987	112.0
48	51	13C2-PFHxDA	815 > 769.7	3.00e3	1.37e4	1.0000	0.435	6.48	6.44	2.73	6.269	125.4
49	52	d7-N-MeFOSE	623.1 > 58.9	2.36e4	1.37e4	1.0000	0.108	6.30	6.31	21.5	198.590	132.4
50	53	d9-N-EtFOSE	639.2 > 58.8	2.02e4	1.37e4	1.0000	0.116	6.42	6.45	18.4	158.938	106.0
51	54	13C4-PFBA	217. > 171.8	1.24e4	1.24e4	1.0000	1.000	1.47	1.41	12.5	12.500	100.0
52	55	13C5-PFHxA	318 > 272.9	1.56e4	1.56e4	1.0000	1.000	3.20	3.12	12.5	12.500	100.0
53	56	13C3-PFHxS	401.9 > 79.9	3.38e3	3.38e3	1.0000	1.000	3.95	3.88	12.5	12.500	100.0
54	57	13C8-PFOA	421.3 > 376	1.44e4	1.44e4	1.0000	1.000	4.32	4.24	12.5	12.500	100.0
55	58	13C9-PFNA	472.2 > 426.9	1.26e4	1.26e4	1.0000	1.000	4.75	4.67	12.5	12.500	100.0
56	59	13C4-PFOS	503 > 79.9	3.55e3	3.55e3	1.0000	1.000	4.83	4.75	12.5	12.500	100.0
57	60	13C6-PFDA	519.1 > 473.7	1.34e4	1.34e4	1.0000	1.000	5.11	5.04	12.5	12.500	100.0
58	61	13C7-PFUdA	570.1 > 524.8	1.37e4	1.37e4	1.0000	1.000	5.43	5.37	12.5	12.500	100.0

Calverton  
SDG 1701829

Sample Identification

FT-MW02S-20171130

Compound

PERFLUORODECANOIC ACID (PFDA)

Sample volume (L)

0.259

Internal standard concentration

12.5

Concentration using quadratic/calibration curve

Area\*(IS concentration/IS area)  
3440\*(12.5/8760)

4.908676

Curve

Calibration curve (y)=-0.0050479\*x^2+1.55973\*x-0.0842373      pg 538 of data package

-0.0050479\*x^2+1.55973\*x-0.0842373=4.908676

-0.0050479\*x^2+1.55973\*x-4.992913=0

a= -0.0050479

b= 1.55973

c= -4.992913

$D=1.55973^2-4*-0.0050479*-4.992913$

2.331943

SQRT D

1.527069995

$x=(-(1.55973+1.527069995))/(2*-0.0050479)$

3.2350091

PFDA result    Conc = x/wt

12.49038

result reported

12.5

DODCMD_ID	INSTALLATION_ID	SDG	SITE_NAME	NORM_SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	CONTRACT_ID	DO_CTO_NUMBER	CONTR_NAME	SAMPLE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DESC	COLLECT_DATE	ANALYTICAL_METHOD	ANALYTICAL_METHOD_GRP_DESC
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW06S	Monitoring well	1315613.359	271535.022	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW06S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW08S	Monitoring well	1316147.19	271617.66	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW08S-20171129	Ground water	Normal (Regular)	29-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW05I	Monitoring well	1316018.856	271580.981	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW05I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW05S	Monitoring well	1316027.917	271583.351	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW05S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829							N6247016D9008	WE05	TETRA TECH, INC.	FT-MW06I-FRB-20171130	Water for QC samples	Field Reagent Blank	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW07S	Monitoring well	1315126.956	271464.289	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW07S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW02S	Monitoring well	1315637.499	271969.471	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW02S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW09I	Monitoring well	1315474.618	271842.264	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW09I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW01I	Monitoring well	1315387.652	272335.079	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW01I-20171130-D	Ground water	Field duplicate	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829							N6247016D9008	WE05	TETRA TECH, INC.	FT-MW08S-FRB-20171129	Water for QC samples	Field Reagent Blank	29-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW02I	Monitoring well	1315647.815	271972.229	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW02I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW08I	Monitoring well	1316151.44	271612.48	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW08I-20171129	Ground water	Normal (Regular)	29-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW10I	Monitoring well	1315789.517	271554.13	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW10I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW03S	Monitoring well	1315113.974	272068.812	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW03S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829							N6247016D9008	WE05	TETRA TECH, INC.	FT-EB01-20171130	Water for QC samples	Equipment blank	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW09I	Monitoring well	1315474.618	271842.264	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW09I-20171130-D	Ground water	Field duplicate	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW01S	Monitoring well	1315397.981	272336.74	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW01S-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW06I	Monitoring well	1315627.018	271532.506	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW06I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW01I	Monitoring well	1315387.652	272335.079	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW01I-20171130	Ground water	Normal (Regular)	30-Nov-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	CALVERTON_NWIRP	1701829	SITE 00002	SITE 00002	FTMW08S	Monitoring well	1316147.19	271617.66	N6247016D9008	WE05	TETRA TECH, INC.	FT-MW08S-20171129-D	Ground water	Field duplicate	29-Nov-17	537	Perfluoroalkyl Compounds