

Groundwater Sample Results, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG SC39093

Naval Station Newport Newport, Rhode Island

August 2019

```
"1715547-BLK1","EPA 300.0","RES","1715547-BLK1","ESAI","14797-55-8","Nitrate as N","0.100","mg/l","U","0.007","MDL",,"TARGET",,,"0.100","RDL","YES","-99",,"5","5","0.100", "1715547-BLK1","EPA 300.0","RES","1715547-BLK1","ESAI","14808-79-8","Sulfate as
SO4","1.00","mg/l","U","0.798","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"5","5","1.00",
"1715547-BLK1","EPA 300.0","RES","1715547-BLK1","ESAI","16887-00-6","Chloride","0.100","mg/l","U","0.0994","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"5","5","0.100",
"1715547-BS1","EPA 300.0","RES","1715547-BS1","ESAI","14797-55-8","Nitrate as N","1.93","mg/l",,"0.007","MDL",,"TARGET","97",,"0.100","RDL","YES","2.00",,"5","5","0.100",
"1715547-BS1","EPA 300.0","RES","1715547-BS1","ESAI","14808-79-8","Sulfate as SO4","19.7","mg/l",,"0.798","MDL",,"TARGET","98",,"1.00","RDL","YES","20.0",,"5","5","1.00",
"1715547-BS1", "EPA 300.0", "RES", "1715547-BS1", "ESAI", "16887-00-
6","Chloride","19.1","mg/I",,"0.0994","MDL",,"TARGET","95",,"1.00","RDL","YES","20.0",,"5","5","0.100",
"1715547-SRM1", "EPA 300.0", "RES", "1715547-SRM1", "ESAI", "14797-55-8", "Nitrate as
N","2.43","mg/I",,"0.007","MDL",,"TARGET","97",,"0.100","RDL","YES","2.50",,"5","5","0.100",
"1715547-SRM1","EPA 300.0","RES","1715547-SRM1","ESAI","14808-79-8","Sulfate as SO4","24.6","mg/l",,"0.798","MDL",,"TARGET","98",,"1.00","RDL","YES","25.0",,"5","5","1.00",
"1715547-SRM1","EPA 300.0","RES","1715547-SRM1","ESAI","16887-00-6","Chloride","23.4","mg/I",,"0.0994","MDL",,"TARGET","94",,"1.00","RDL","YES","25.0",,"5","5","0.100",
"1715712-BLK1", "SM18-22 5210B", "RES", "1715712-BLK1", "ESAI", "NA", "Biochemical Oxygen Demand (5-day)", "2.97", "mg/l", "BOD1, B", "2.74", "MDL", "TARGET", ,, "3.00", "RDL", "YES", "-99", , "300", "300", "2.97",
"1715712-BLK2", "SM18-22 5210B", "RES", "1715712-BLK2", "ESAI", "NA", "Biochemical Oxygen Demand (5-day)", "2.97", "mg/l", "BOD1, B", "2.74", "MDL", "TARGET", , , "3.00", "RDL", "YES", "-99", , "300", "300", "2.97",
"1715712-BS1", "SM18-22 5210B", "RES", "1715712-BS1", "ESAI", "NA", "Biochemical Oxygen Demand (5-
day)","174","mg/l",,"2.74","MDL",,"TARGET","88",,"100","RDL","YES","198",,"300","300","2.97",
"1715712-SRM1", "SM18-22 5210B", "RES", "1715712-SRM1", "ESAI", "NA", "Biochemical Oxygen Demand (5-day)", "44.0", "mg/l", "2.74", "MDL", "TARGET", "96", "20.0", "RDL", "YES", "45.6", "300", "300", "2.97", "1715712-SRM2", "SM18-22 5210B", "RES", "1715712-SRM2", "ESAI", "NA", "Biochemical Oxygen Demand (5-
day)","45.0","mg/l",,"2.74","MDL",,"TARGET","99",,"20.0","RDL","YES","45.6",,"300","300","2.97",
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "100-41-4", "Ethylbenzene", "0.5", "�g/I", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","100-42-5","Styrene","1.0","�g/I","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","10061-01-5","cis-1,3-
Dichloropropene","0.5","�g/I","U","0.4","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","10061-02-6","trans-1,3-
Dichloropropene","0.5","

g/I","U","0.3","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5",

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","106-46-7","1,4-
Dichlorobenzene","0.5","

g/I","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","106-93-4","1,2-Dibromoethane
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "106-93-4", "1,2-Dibromoethane" (EDB)", "0.5", "$\oldsymbol{q}\left|", "U", "0.2", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "5", "0.5", "1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "107-06-2", "1,2-Dichloroethane", "1.0", "$\oldsymbol{q}\left|", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "1.0", "1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "108-87-2", "Methylcyclohexane", "2.0", $\oldsymbol{q}\left|", "U", "0.7", "MDL", "TARGET", "5.0", "RDL", "YES", "-99", "5", "5", "5", "2.0", "1715747-BLK1", "ESAI", "108-87-2", "Methylcyclohexane", "2.0", $\oldsymbol{q}\left|", "U", "0.7", "MDL", "TARGET", "5.0", "RDL", "YES", "-99", "5", "5", "2.0", "1715747-BLK1", "ESAI", "108-88.
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "108-88-
3","Toluene","1.0","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","108-90-
7","Chlorobenzene","0.5","�g/l","U","0.2","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","110-82-
7","Cyclohexane","2.0","�g/l","U","0.8","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","120-82-1","1,2,4-
Trichlorobenzene","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "124-48-
```

```
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","127-18-4","Tetrachloroethene","1.0","�g/l","U","0.6","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","156-59-2","cis-1,2-Dichloroethene","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","156-60-5","trans-1,2-Dichloroethene","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","1634-04-4","Methyl tert-butyl ether" "0.5" "�g/l" "II" "0.2" "MDI" "TARGET" "1.0" "RDI" "YES" "-99" "5" "5" "0.5"
Xylene","1.0","�g/I","U","0.4","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","1.0", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","1868-53-
7","Dibromofluoromethane","50.1","�g/l",,"-99","NA",,"SUR","100",,"-99","NA","YES","50.0",,"5","5","-99", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","2037-26-5","Toluene-
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "460-00-4", "4-
Bromofluorobenzene","49.6","49.6","99","NA",,"SUR","99",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","462-06-6","Fluorobenzene","50.0","�g/l",,"-99","NA",,"ISTD","103",,"-99","NA","YES","50.0",,"5","5","-99","1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","541-73-1","1,3-
Dichlorobenzene","0.5","

g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","56-23-5","Carbon

tetrachloride","1.0","

g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","591-78-6","2-Hexanone

(MBK)","2.0","

g/l","U","0.5","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","2.0",
"1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "75-34-3", "1,1-
```

```
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","75-71-8","Dichlorodifluoromethane (Freon12)","2.0","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","76-13-1","1,1,2-Trichlorotrifluoroethane (Freon 113)","1.0","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","76-13-1","1,1,2-Trichlorotrifluoroethane (Freon 113)","1.0","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","78-87-5","1,2-Dichloropropane","1.0","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","78-93-3","2-Butanone (MEK)","2.0","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","79-00-5","1,1,2-Trichloroethane","0.5","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","79-00-5","1,1,2-Trichloroethane","0.5","

"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","79-01-
  "1715747-BLK1", "SW846 8260C", "RES", "1715747-BLK1", "ESAI", "79-01-
  6","Trichloroethene","1.0","�g/l","U","0.5","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","79-20-9","Methyl
acetate","2.0","�g/l","U","0.6","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","79-34-5","1,1,2,2-
  Tetrachloroethane","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5", "1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","87-61-6","1,2,3-
 Trichlorobenzene","1.0","�g/I","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","95-47-6","o-
Xylene","1.0","�g/I","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
Xylene","1.0","��g/l","U","0.3","MDL","TARGET",,"1.0","RDL","YES","-99",,"5","5","1.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","95-50-1","1,2-
Dichlorobenzene","0.5", ��g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","96-12-8","1,2-Dibromo-3-
chloropropane","2.0", ��g/l","U","0.9","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","2.0",
"1715747-BLK1","SW846 8260C","RES","1715747-BLK1","ESAI","98-82-
8","Isopropylbenzene","1.0", ��g/l","U","0.4","MDL",,"TARGET",,"1.0","RDL","YES","-99",,"5","5","5","1.0",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","100-41-
4","Ethylbenzene","21.2", ��g/l",,"-99","NA",,"TARGET","106","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-01-5","cis-1,3-
Dichloropropene","19.0", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-01-6","trans-1,3-
Dichloropropene","18.7", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-02-6","trans-1,3-
Dichloropropene","18.7", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-02-6","trans-1,3-
Dichloropropene","18.7", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-02-6","trans-1,3-
Dichlorobenzene","18.7", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","10061-02-6","trans-1,3-
Dichlorobenzene","18.7", ��g/l",,"-99","NA",,"TARGET","99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","106-46-7","1,4-
Dichlorobenzene","10.0", ��g/l",,"-99","NA",,"TARGET","100",,"-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","106-
 3","Toluene","19.8","�g/I",,"-99","NA",,"TARGET","99",,"-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","108-90-
  7","Chlorobenzene","20.7","�g/l",,"-99","NA",,"TARGÉT","103",,"-99","NA","YES","20.0",,"5","5","-99",
  "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","110-82-7","Cyclohexane","20.0","�g/l",,"-99","NA",,"TARGET","100",,"-99","NA","YES","20.0",,"5","5","-99","1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","120-82-1","1,2,4-
```

```
"1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "124-48-
    "1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "127-18-4", "Tetrachloroethene", "19.4", "\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymb
   d5","50.0","�g/l",,"-99","NA",,"ISTD","105",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","3855-82-1","1,4-Dichlorobenzene-
  d4","50.0","�g/l",,"-99","NA",,"ISTD","105",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","460-00-4","4-
Bromofluorobenzene","49.4","�g/l",,"-99","NA",,"SUR","99",,"-99","NA","YES","50.0",,"5","5","-99",
  "1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "462-06-6", "Fluorobenzene", "50.0", "$\phigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigographigograph
   tetrachloride","19.5","�g/l",,"-99","NA",,"TARGET","97",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","591-78-6","2-Hexanone
   9","Bromomethane","18.4","�g/I",,"-99","NA",,"TARGET","92",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","74-87-
    3, Chloromethane, 21.9, �g/l,, -99, NA,, TARGET, 110,, -99, NA, YES, 20.0,, 5, 5, -99, "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","74-97-
5","Bromochloromethane","19.0","�g/l",,"-99","NA",,"TARGET","95",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-00-
3","Chloroethane","19.5","�g/l",,"-99","NA",,"TARGET","97",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-01-4","Vinyl chloride","20.5","�g/l",,"-99","NA",,"TARGET","102",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-09-2","Methylene chloride","18.6","$\langle 0, \langle 0, \la
   chloride","18.6","�g/l",,"-99","NA",,"TARGET","93",,"-99","NA","YES","20.0",,"5","5","-99", "1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-15-0","Carbon
  disulfide","19.0","�g/l",,"-99","NA",,"TARGET","95",,"-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-25-
   2","Bromoform","20.7","�g/l",,"-99","NA",,"TARGET","104",,"-99","NA","YES","20.0",,"5","5","-99",
```

```
"1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "75-27-
  4","Bromodichloromethane","20.9","�g/l",,"-99","NA",,"TARGET","104",,"-99","NA","YES","20.0",,"5","5","-9
9",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-34-3","1,1-
Dichloroethane","21.1","
g/l","-99","NA","TARGET","106",,"-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-35-4","1,1-
Dichloroethene","19.6","
g/l","-99","NA","TARGET","98","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-69-4","Trichlorofluoromethane (Freon 11)","20.7","
g/l","-99","NA","TARGET","103","-99","NA","YES","20.0","5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","75-71-8","Dichlorodifluoromethane (Freon 113)","19.1","
g/l","-99","NA","TARGET","96","-99","NA","YES","20.0","5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","76-13-1","1,1,2-Trichlorotrifluoroethane (Freon 113)","19.3","
g/l","-99","NA","TARGET","96","-99","NA","YES","20.0","5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","78-87-5","1,2-
Dichloropropane","20.2","
g/l","-99","NA","TARGET","101","-99","NA","YES","20.0","5","5","-99",
"1715747-BS1","SW846 8260C","RES","1715747-BS1","ESAI","78-93-3","2-Butanone (MEK)","19.1","
g/l","-99","NA","TARGET","96","-99","NA","YES","20.0","5","5","-99",
 Xylene","21.4","�g/l",,"-99","NA",,"TARGET","107",,"-99","NA","YES","20.0",,"5","5","-99",
 "1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "95-50-1", "1,2-Dichlorobenzene", "20.4", "\oldots g/l", "-99", "NA", "TARGET", "102", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "96-12-8", "1,2-Dibromo-3-chloropropane", "18.1", "\oldots g/l", "-99", "NA", "TARGET", "90", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BS1", "SW846 8260C", "RES", "1715747-BS1", "ESAI", "98-82-8", "Isopropylbenzene", "20.7", "\oldots g/l", "-99", "NA", "TARGET", "104", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747, PSD1", "SW846 8260C", "BES", "1715747, PSD1", "ESAI", "100, 41
"1715747-BSD1", "SW846 8260C", "RÉS", "1715747-BSD1", "ESAI", "108-10-1", "4-Methyl-2-pentanone
 "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","108-10-1","4-Methyl-2-pentanone (MIBK)","17.5","

(MIBK)","18.6","

(MIBK)","

(MIRK)","

(MIRK)","

(MIRK)","

(MIRK)","

(MIRK)","

  7","Chlorobenzene","19.9","

g/I",,"-99","NA",,"TARGET","100","4","-99","NA","YES","20.0",,"5","5","-99",
```

```
"1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "110-82-
 1","Dibromochloromethane","19.2","�g/l",,"-99","NA",,"TARGET","96","0.2","-99","NA","YES","20.0",,"5","5",
  "-99",
 "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","127-18-4","Tetrachloroethene","18.6","�g/l",,"-99","NA",,"TARGET","93","4","-99","NA","YES","20.0",,"5","5","-99","1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","156-59-2","cis-1,2-
 7","Dibromofluoromethane","48.4","�g/l",,"-99","NA",,"SUR","97",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","2037-26-5","Toluene-
d8","47.3","�g/l",,"-99","NA",,"SUR","95",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","3114-55-4","Chlorobenzene-
d5","50.0","�g/l",,"-99","NA",,"ISTD","105",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","3855-82-1","1,4-Dichlorobenzene-
d4" "50.0" "�g/l","-99" "NA", "ISTD" "102" "-00" "NA" "VES" "50.0","5" "5"," "90"
 d4","50.0","�g/l",,"-99","NA",,"ISTD","102",,"-99","NA","YES","50.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","460-00-4","4-
 Bromofluorobenzene","49.8","49.8","-99","NA",,"SUR","100",,"-99","NA","YES","50.0",,"5","5","-99",
Bromofluorobenzene", "49.8", " 9, ","-99", "NA", "SUR", "100", "-99", "NA", "YES", "50.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "462-06-6", "Fluorobenzene", "50.0", "9, "NA", "ISTD", "109", "-99", "NA", "YES", "50.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "541-73-1", "1, 3-Dichlorobenzene", "20.4", "9, ","-99", "NA", "TARGET", "102", "5", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "56-23-5", "Carbon tetrachloride", "17.7", "9, "," "1715747-BSD1", "ESAI", "591-78-6", "2-Hexanone (MBK)", "19.3", "9, "NA", "TARGET", "97", "6", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "67-64-1", "Acetone", "18.8", "9, "," "9, "NA", "TARGET", "94", "3", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "67-66-3", "Chloroform", "19.3", "99", "NA", "TARGET", "96", "2", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "67-66-3", "Chloroform", "19.3", "99", "NA", "TARGET", "96", "2", "-99", "NA", "YES", "20.0", "5", "5", "-99", "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "67-66-3", "Chloroform", "19.3", "99", "NA", "TARGET", "96", "2", "-99", "NA", "YES", "20.0", "5", "5", "5", "-99", "NA", "TARGET", "96", "2", "-99", "NA", "YES", "20.0", "5", "5", "5", "99", "1715747-BSD1", "50, "1715747-BSD1", 
 3","Chloroform","19.3","�g/l",,"-99","NA",,"TARGET","96","2","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","71-43-
2","Benzene","18.9","�g/l",,"-99","NA",,"TARGET","95","6","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","71-55-6","1,1,1-
5","Bromochloromethane","17.8","�g/l",,"-99","NA",,"TARGET","89","6","-99","NA","YES","20.0",,"5","5","-9
 "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","75-00-3","Chloroethane","19.1","�ɡ/l",,"-99","NA",,"TARGET","95","2","-99","NA","YES","20.0",,"5","5","-99",
 "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","75-01-4","Vinyl
 chloride","19.7","

g/I",,"-99","NA",,"TARGET","98","4","-99","NA","YES","20.0",,"5","5","-99",
 "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "75-09-2", "Methylene
```

```
"1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "75-27-
 4","Bromodichloromethane","19.7","�g/l",,"-99","NA",,"TARGET","99","6","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","75-34-3","1,1-Dichloroethane","19.7","�g/l",,"-99","NA",,"TARGET","99","7","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","75-35-4","1,1-
 "1715747-BSD1", "SW846 8260C", "RES", "1715747-BSD1", "ESAI", "75-69-4", "Trichlorofluoromethane (Freor 11)", "18.6", "\dots, 
 6","Trichloroethene","18.2","�g/l",,"-99","NA",,"TARGET","91","11","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","79-20-9","Methyl
"1715747-BSD1","$W846 8260C","RES","1715747-BSD1","ESAI","79-20-9","Methyl acetate","17.5","$\displays","NA","TARGET","88","7","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","79-34-5","1,1,2,2-
Tetrachloroethane","19.9","$\displays","-99","NA",,"TARGET","99","2","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","87-61-6","1,2,3-
Trichlorobenzene","18.7","$\displays","-99","NA",,"TARGET","93","0.8","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","95-47-6","0-
Xylene","20.5","$\displays","-99","NA",,"TARGET","103","4","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","95-50-1","1,2-
Dichlorobenzene","20.9","$\displays","-99","NA","TARGET","105","2","-99","NA","YES","20.0",,"5","5","-99", "1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","96-12-8","1,2-Dibromo-3-chloropropage","19.6","$\displays","-99","NA","TARGET","88","8","-99","NA","YES","20.0","5","5","-99","Chloropropage","19.6","$\displays","-99","NA","TARGET","98","8","-99","NA","YES","20.0","5","5","-99","
 chloropropane","19.6","♦g/I",,"-99","NA",,"TARGET","98","8","-99","NA","YES","20.0",,"5","5","-99",
"1715747-BSD1","SW846 8260C","RES","1715747-BSD1","ESAI","98-82-
8","Isopropylbenzene","19.9","

9/|","-99","NA","TARGET","100","

1715/47-B3D1 , E3A1 , 96-62-

8","Isopropylbenzene","19.9","

9/|","-99","NA","TARGET","100","

1715864-BLK1","Mod EPA 3C/SOP RSK-175","RES","1715864-BLK1","ESAI","74-82-

8","Methane","2.20","

9/|","U","2.16","MDL","TARGET",,,"2.20","RDL","YES","-99",,"10","10","2.20",

1715864-BLK1","Mod EPA 3C/SOP RSK-175","RES","1715864-BLK1","ESAI","74-84-

0","Ethane","5.00","

9/|","U","3.48","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"10","10","5.00",
 "1715864-BS1","Mod EPA 3C/SOP RSK-175","RES","1715864-BS1","ESAI","74-82-
 8","Methane","453","mg/I",,"-99","NA",,"TARGET", 91",,"-99","NA","YES", 500",,"10","10","-99",
 "1715864-BS1", "Mod EPA 3C/SOP RSK-175", "RES", "1715864-BS1", "ESAI", "74-84-
 0","Ethane","517","mg/l",,"-99","NA",,"TARGET","103",,"-99","NA","YES","500",,"10","10","-99", "1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","1146-65-2","Naphthalene-
 d8","40.0","�g/ml",,"-99","NA",,"ISTD","118",,"-99","NA","YES","40.0",,"980","1","-99",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","120-12-
7","Anthracene","1.02","�g/l","U","0.620","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","129-00-
0","Pyrene","1.02","

"9/","U","0.622","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02",

"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","15067-26-2","Acenaphthene-
d10","40.0","

"9/ml","-99","NA","ISTD","116",,"-99","NA","YES","40.0","980","1","-99",

"1715919-BLK1","101616, 007000","BT50","116",,"-99","NA","YES","40.0","980","1","-99",
 "1715919-BLK1", "SW846 8270D", "RES", "1715919-BLK1", "ESAI", "1517-22-2", "Phenanthrene-
```

```
d10","40.0","

g/ml",,"-99","NA",,"ISTD","115",,"-99","NA","YES","40.0",,"980","1","-99",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","1520-96-3","Perylene-
d12","40.0","

g/ml",,"-99","NA",,"ISTD","115",,"-99","NA","YES","40.0",,"980","1","-99",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","1718-51-0","Terphenyl-
dl4","39.9"," g/l",,"-99","NA",,"SUR","78",,"-99","NA","YES","51.0",,"980","1","-99",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","1719-03-5","Chrysene-d12","40.0"," g/ml",,"-99","NA",,"ISTD","118",,"-99","NA","YES","40.0",,"980","1","-99",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","191-24-2","Benzo (g,h,i)
perylene","1.02"," g/l","U","0.541","MDL","TARGET",,,"5.10","RDL","YES","-99","980","1","1.02",
"1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","193-39-5","Indeno (1,2,3-cd)
fluoranthene","1.02","�g/l","U","0.490","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02", "1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","208-96-
8","Acenaphthylene","1.02","�g/l","U","0.697","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02
"1715919-BLK1", "SW846 8270D", "RES", "1715919-BLK1", "ESAI", "218-01-
9","Chrysene","1.02","�g/l","U","0.543","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02", "1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","321-60-8","2-
Fluorobiphenyl", "33.2", "�g/l",,"-99", "NA",,"SUR", "65",,"-99", "NA", "YES", "51.0",, "980", "1", "-99",
"1715919-BLK1", "SW846 8270D", "RES", "1715919-BLK1", "ESAI", "4165-60-0", "Nitrobenzene-
7","Fluorene","1.02","�g/l","U","0.624","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02", "1715919-BLK1","SW846 8270D","RES","1715919-BLK1","ESAI","90-12-0","1-
Methylnaphthalene","1.02","

g/l","U","0.748","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02"
"1715919-BLK1", "SW846 8270D", "RES", "1715919-BLK1", "ESAI", "91-20-3", "Naphthalene", "1.02", "�g/l", "U", "0.699", "MDL", "TARGET", ", "5.10", "RDL", "YES", "-99", "980", "1", "1715919-BLK1", "SW846 8270D", "RES", "1715919-BLK1", "ESAI", "91-57-6", "2-
Methylnaphthalene","1.02","

g/l","U","0.586","MDL",,"TARGET",,,"5.10","RDL","YES","-99",,"980","1","1.02"
7","Anthracene","34.8","�g/l",,"0.614","MDL",,"TARGET","69",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","129-00-
0","Pyrene","33.5","�g/l",,"0.616","MDL",,"TARGET","66",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","15067-26-2","Acenaphthene-
d10","40.0","�g/ml","-99","NA",,"ISTD","127",,"-99","NA","YES","40.0","990","1","-99",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","1517-22-2","Phenanthrene-
d10","40.0","�g/ml","-99","NA","ISTD","121","90","NA","YES","40.0","900","1","90"
d10","40.0","

g/ml",,"-99","NA",,"ISTD","121",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "1520-96-3", "Perylene-
```

```
d12","40.0","�g/ml",,"-99","NA",,"ISTD","128",,"-99","NA","YES","40.0",,"990","1","-99", "1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","1718-51-0","Terphenyl-
dl4","37.8"," g/l",,"-99","NA",,"SUR","75",,"-99","NA","YES","50.5",,"990","1","-99",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","1719-03-5","Chrysene-
d12","40.0"," g/ml",,"-99","NA",,"ISTD","130",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","191-24-2","Benzo (g,h,i)
"1715919-BS1","SW846 82/0D","RES","1/15919-BS1","ESAI","191-24-2","Benzo (g,n,i) perylene","33.3","  g/l",,"0.535","MDL",,"TARGET","66",,"5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","193-39-5","Indeno (1,2,3-cd) pyrene","36.0","  g/l",,"0.586","MDL",,"TARGET","71",,"5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","205-99-2","Benzo (b) fluoranthene","36.8","  g/l",,"0.441","MDL",,"TARGET","73",,"5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","206-44-0","Fluoranthene","35.9","  g/l",,"0.644","MDL",,"TARGET","71",,"5.05","RDL","YES","50.5",,"990","1","1.01"
.
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","207-08-9","Benzo (k)
fluoranthene","33.0","

g/l",,"0.485","MDL",,"TARGET","65",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","208-96-
01",
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "218-01-
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "50-32-8", "Benzo (a) pyrene", "35.4", "�g/l", "0.568", "MDL", "TARGET", "70", "5.05", "RDL", "YES", "50.5", "990", "1", "1715919-BS1", "ESAI", "53-70-3", "Dibenzo (a,h)
anthracene","36.9","

g/I",,"0.455","MDL",,"TARGET","73",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","56-55-3","Benzo (a)
anthracene","34.1","�g/l",,"0.541","MDL",,"TARGET","68",,"5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","83-32-
9","Acenaphthene","30.6","

g/I",,"0.698","MDL",,"TARGET","61",,"5.05","RDL","YES","50.5",,"990","1","1.01
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","85-01-
8","Phenanthrene","33.3","�g/l",,"0.592","MDL",,"TARGET","66",,"5.05","RDL","YES","50.5",,"990","1","1.01
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "86-73-
7","Fluorene","31.5","�g/l",,"0.618","MDL",,"TARGET","62",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "90-12-0", "1-
1",
"1715919-BS1","SW846 8270D","RES","1715919-BS1","ESAI","91-20-
3","Naphthalene","28.8","�g/l",,"0.692","MDL",,"TARGET","57",,"5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BS1", "SW846 8270D", "RES", "1715919-BS1", "ESAI", "91-57-6", "2-
1",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "1146-65-2", "Naphthalened8", "40.0", "�g/ml", "-99", "NA", "ISTD", "118", "-99", "NA", "YES", "40.0", "990", "1", "-99",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "120-12-
7","Anthracene","32.1","�g/I",,"0.614","MDL",,"TARGET","64","8","5.05","RDL","YES","50.5",,"990","1","1.01
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","129-00-0","Pyrene","31.4","�g/l",,"0.616","MDL",,"TARGET","62","6","5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "15067-26-2", "Acenaphthene-
d10","40.0","

g/ml",,"-99","NA",,"ISTD","118",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "1517-22-2", "Phenanthrene-
```

```
d10","40.0","

g/ml",,"-99","NA",,"ISTD","113",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","1520-96-3","Perylene-
d12","40.0","

g/ml",,"-99","NA",,"ISTD","119",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","1718-51-0","Terphenyl-
"1715919-BSD1","$W846 8270D","RES","1715919-BSD1","ESAI","1719-03-5","Chrysene-d12","40.0","$g/ml",,"-99","NA",,"ISTD","121",,"-99","NA","YES","40.0",,"990","1","-99",
"1715919-BSD1","$W846 8270D","RES","1715919-BSD1","ESAI","191-24-2","Benzo (g,h,i)
perylene","30.9","$g/l",,"0.535","MDL",,"TARGET","61","7","5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BSD1","$W846 8270D","RES","1715919-BSD1","ESAI","193-39-5","Indeno (1,2,3-cd)
pyrene","33.0","

g/l",,"0.586","MDL",,"TARGET","65","8","5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","205-99-2","Benzo (b)
.
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","206-44-
0","Fluoranthene","33.5","�g/l",,"0.644","MDL",,"TARGET","66","7","5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "207-08-9", "Benzo (k)
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "208-96-
8","Acenaphthylene","28.7","

g/l",,"0.690","MDL",,"TARGET","57","5","5.05","RDL","YES","50.5",,"990","1",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "218-01-
9","Chrysene","32.0","�g/l",,"0.537","MDL",,"TARGET","63","5","5.05","RDL","YES","50.5",,"990","1","1.01",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "321-60-8", "2-
Fluorobiphenyl","29.6","�g/l",,"-99","NA",,"SUR","59",,"-99","NA","YES","50.5",,"990","1","-99",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "4165-60-0", "Nitrobenzene-
d5","29.2","�g/l",,"-99","NA",,"SUR","58",,"-99","NA","YES","50.5",,"990","1","-99",
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "50-32-8", "Benzo (a)
pyrene","33.9","�g/l",,"0.568","MDL",,"TARGET","67","4","5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","53-70-3","Dibenzo (a,h)
"1715919-BŚD1","ŚW846 8270D","RES","1715919-BŚD1","ESÁI","83-32-
9","Acenaphthene","29.1","�g/l",,"0.698","MDL",,"TARGET","58","5","5.05","RDL","YES","50.5",,"990","1","1
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "85-01-
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "86-73-
7","Fluorene","29.7","�g/l",,"0.618","MDL",,"TARGET","59","6","5.05","RDL","YES","50.5",,"990","1","1.01", "1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","90-12-0","1-
"1715919-BSD1","SW846 8270D","RES","1715919-BSD1","ESAI","91-20-
3","Naphthalene","26.7","�g/l",,"0.692","MDL",,"TARGET","53","7","5.05","RDL","YES","50.5",,"990","1","1.0
"1715919-BSD1", "SW846 8270D", "RES", "1715919-BSD1", "ESAI", "91-57-6", "2-
"1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "1024-57-3", "Heptachlor epoxide", "0.021", "�g/l", "U", "0.016", "MDL", "TARGET", "0.021", "RDL", "YES", "-99", "970", "10", "0.021",
"1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "1024-57-3", "Heptachlor epoxide"
[2C]","0.021","

g/I","U","0.015","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021",

"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","1031-07-8","Endosulfan
```

```
sulfate","0.021","�g/l","U","0.020","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021",
"1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","1031-07-8","Endosulfan sulfate
[2C]","0.021","�g/l","U","0.017","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021",
"1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr)","0.218", �g/l",,"-99","NA",,"SUR","106",,"-99","NA","YES","0.206",,"970","10","-99",
"1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr) [2C]","0.231", �g/l",,"-99","NA",,"SUR","112",,"-99","NA","YES","0.206",,"970","10","-99",
"1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","15972-60-
8" "Alachlor" "0.021" "♠g/l" "IJ" "0.019" "MDJ" "TARGET" "0.021" "PDJ" "VES" "-00" "970" "10" "0.021"
|ZC[],"0.021","$\gli,"\U","0.016","MDL","TARGET",,"0.041", RDL , TES , -99 ,, 970 , 10 , 0.021 ,
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","50-29-3","4,4'-DDT (p,p')","0.031", $\phi_g\lambda,"\","VI","0.018","MDL","TARGET",,"0.041","RDL","YES","-99","970","10","0.031",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","50-29-3","4,4'-DDT (p,p')
[2C]","0.031","$\phi_g\lambda,","U","0.022","MDL",,"TARGET",,"0.041","RDL","YES","-99","970","10","0.031",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","5103-71-9", "alpha-Chlordane","0.021","$\phi_g\lambda,"\text{W846},"MDL","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","5103-71-9", "alpha-Chlordane
[2C]","0.021","$\phi_g\lambda,"\text{W1","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","5103-74-2","Chlordane (gamma)
(trans)","0.021","$\phi_g\lambda,"\text{"U","0.017","MDL","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","5103-74-2","Chlordane (gamma)
(trans)","0.021","$\phi_g\lambda,"\text{"U","0.015","MDL","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","53494-70-5","Endrin
ketone","0.021","$\phi_g\lambda,"\text{"U","0.018","MDL","TARGET",,"0.041","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","53494-70-5","Endrin ketone
[2C]","0.021","$\phi_g\lambda,"\text{"U","0.018","MDL","TARGET",,"0.041","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","58-89-9","gamma-BHC
(Lindane),"0.021","$\phi_g\lambda,"\text{"U","0.018","MDL","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","58-89-9","gamma-BHC
(Lindane),"0.021","$\phi_g\lambda,"\text{"U","0.018","MDL","TARGET",,"0.021","RDL","YES","-99","970","10","0.021",
"1715920-BLK1","SW846 
           1", "Dieldrin", "0.021", "�g/l", "U", "0.018", "MDL", "TARGET", "0.021", "RDL", "YES", "-99", "970", "10", "0.021", "RDL", "YES", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970", "970
```

```
"1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "60-57-1", "Dieldrin
   [2C]","0.021","

g/I","U","0.019","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021",

"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","72-20-
  8","Endrin","0.021","

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9","

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9","

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9","

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9",""

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9","

9
     5","Methoxychlor","0.021","�g/l","U","0.019","MDL",,"TARGET",,,,"0.041","RDL","YES","-99",,"970","10","0.021",
   "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "72-43-5", "Methoxychlor [2C]", "0.021", "�g/l", "U", "0.019", "MDL", "TARGET", "0.041", "RDL", "YES", "-99", "970", "10", "0.021", "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "72-54-8", "4,4'-DDD (p,p')", "0.021", "�g/l", "U", "0.019", "MDL", "TARGET", "0.041", "RDL", "YES", "-99", "970", "10", "0.021", "1715920-BLK1", "$1715920-BLK1", "$1715920-BL
   "1715920-BLK1", "$W846 8081B", "RES", "1715920-BLK1", "ESAI", "72-54-8", "4,4'-DDD (p,p')
[2C]", "0.021", "�g/l", "U", "0.018", "MDL", "TARGET",,, "0.041", "RDL", "YES", "-99", "970", "10", "0.021", "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "72-55-9", "4,4'-DDE
 "1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","72-55-9","4,4'-DDE (p,p')","0.021","$\phig|\text{I","U","0.018","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$W846 8081B","RES","1715920-BLK1","ESAI","72-55-9","4,4'-DDE (p,p') [2C]","0.021","$\phig|\text{I","U","0.018","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.020","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.028","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.018","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.018","MDL",,"TARGET",,,"0.041","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.020","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.020","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021", "1715920-BLK1","$\phig|\text{I","U","0.020","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021","0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021","0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021",""0.021","0.021",""0.021","0.021",""0.021","0.021","0.021","0.021","0.021","0.021","0.021","0.021","0.021"
   "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "76-44-8", "Heptachlor [2C]", "0.021", "�g/l", "U", "0.020", "MDL", "TARGET", "0.021", "RDL", "YES", "-99", "970", "10", "0.021", "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene (IS)", "0.020", "�g/ml", "-99", "NA", "ISTD", "81", "-99", "NA", "YES", "10.0", "970", "10", "-99", "1715920-BLK1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene (IS) "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene (IS) "1715920-BLK1", "BRITTETT", "188", "199", "NA", "YES", "10.0", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "10", "0.70", "0.70", "10", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0.70", "0
      [2C]","0.020","

g/ml",,"-99","NA",,"ISTD","88",,"-99","NA","YES","10.0",,"970","10","-99",
   "1715920-BLK1", "SW846 8081B", "RES", "1715920-BLK1", "ESAI", "959-98-8", "Endosulfan I", "0.021", "�g/I", "U", "0.017", "MDL", "TARGET", "0.021", "RDL", "YES", "-99", "970", "10", "0.021", "4710", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "10", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.021", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "0.02", "
I","0.021","�g/l","U","0.017","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021",
"1715920-BLK1","SW846 8081B","RES","1715920-BLK1","ESAI","959-98-8","Endosulfan I
[2C]","0.021","�g/l","U","0.016","MDL",,"TARGET",,,"0.021","RDL","YES","-99",,"970","10","0.021",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","1024-57-3","Heptachlor
epoxide","0.402",*�g/l",,"0.016","MDL",,"TARGET","79",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","1024-57-3","Heptachlor epoxide
[2C]","0.403","�g/l",,"0.015","MDL",,"TARGET","79",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","1031-07-8","Endosulfan
sulfate","0.418",*�g/l",,"0.020","MDL",,"TARGET","82",,"0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","1031-07-8","Endosulfan sulfate
[2C]","0.489","�g/l",,"0.017","MDL",,"TARGET","96",,"0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr)","0.197","�g/l",,"-99","NA",,"SUR","97",,"-99","NA","YES","0.204",,"980","10","-99".
     (Sr)","0.197","

g/I",,"-99","NA",,"SUR","97",,"-99","NA","YES","0.204",,"980","10","-99",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl (Sr)
     [2C]","0.204","

g/I",,"-99","NA",,"SUR","100",,"-99","NA","YES","0.204",,"980","10","-99",

"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","15972-60-
     8","Alachlor","0.453","

g/I",,"0.019","MDL",,"TARGET","89",,"0.020","RDL","YES","0.510",,"980","10","0.020
   "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "15972-60-8", "Alachlor [2C]", "0.453", " g/l", "0.018", "MDL", "TARGET", "89", "0.020", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "2051-24-3", "Decachlorobiphenyl (Sr)", "0.183", " g/l", "-99", "NA", "SUR", "90", "-99", "NA", "YES", "0.204", "980", "10", "-99", "1715920-BS1", "ESAI", "2051-24-3", "Decachlorobiphenyl (Sr) "1715920-BS1", "ESAI", "2051-24-3", "Decachlorobiphenyl "1715", "1715920-BS1", "1
   [2C]","0.147","

g/I",,"-99","NA",,"SUR","72",,"-99","NA","YES","0.204",,"980","10","-99",
```

```
"1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "309-00-2", "Aldrin", "0.402", *\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsym
     "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "309-00-
 "1/15920-BS1","SW846 8081B","RES","1/15920-BS1","ESAI","33213-65-9","Endosulfan
II","0.410","

g/l",,"0.020","MDL",,"TARGET","80",,"0.041","RDL","YES","0.510",,"980","10","0.020",

"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","33213-65-9","Endosulfan II

[2C]","0.489","

g/l",,"0.016","MDL",,"TARGET","96",,"0.041","RDL","YES","0.510",,"980","10","0.020",

"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.273","

g/l",,"0.018","MDL",,"TARGET","54",,"0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","50-29-3","4,4'-DDT (p,p')

[2C]","0.397","

g/l",,"0.022","MDL",,"TARGET","78",,"0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","5103-71-9","alpha-
Chlordago","0.417","Ac/ll","0.016","MDL","TARGET","82","0.020","PDL","YES","0.510","980","10","0.031",
 "1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","5103-71-9","alpha-Chlordane","0.417","  

g/l",,"0.016","MDL",,"TARGET","82",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","5103-71-9","alpha-Chlordane
[2C]","0.421","  

g/l",,"0.017","MDL",,"TARGET","83",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","5103-74-2","Chlordane (gamma)
(trans)","0.431","  

g/l",,"0.016","MDL",,"TARGET","85",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","5103-74-2","Chlordane (gamma)(trans)
[2C]","0.418","  

g/l",,"0.014","MDL",,"TARGET","82",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","53494-70-5","Endrin
ketone","0.347","  

g/l",,"0.018","MDL",,"TARGET","68",,"0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","53494-70-5","Endrin ketone
[2C]","0.423","  

g/l",,"0.018","MDL",,"TARGET","83",,"0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","58-89-9","gamma-BHC
(Lindane)","0.393","  

G/l",,"0.018","MDL",,"TARGET","77",,"0.020","RDL","YES","0.510",,"980","10","0.020",
   (Lindane)","0.393","

(Lindane)","0.393","

(Lindane)","0.393","

(Lindane)","0.393","

(Lindane)","0.393","

(Lindane)","0.393","

(Lindane)","0.018","MDL","TARGET","58-89-9","gamma-BHC (Lindane)

(Lindane)","0.415","

(Lindane)","0.415","

(Lindane)","0.018","MDL","TARGET","81","0.020","RDL","YES","0.510","980","10","0.020","1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","60-57-

1","Dieldrin","0.399","

(Lindane)","0.399","

(Lindane)","0.020","RDL","YES","0.510","980","10","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","RDL","YES","0.510","980","10","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020","0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.020",0.02
  "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "60-57-1", "Dieldrin [2C]", "0.390", " g/l", "0.019", "MDL", "TARGET", "76", "0.020", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "72-20-8", "Endrin", "0.485", " g/l", "0.020", "MDL", "TARGET", "95", "0.041", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "72-20-8", "Endrin [2C]", "0.497", " g/l", "0.020", "MDL", "TARGET", "98", "0.041", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "72-43-
    0.020",
   "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "72-43-5", "Methoxychlor [2C]", "0.438", "  g/l", "0.019", "MDL", "TARGET", "86", "0.041", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "72-54-8", "4,4'-DDD
   (p,p')","0.410","�g/l",,"0.019","MDL",,"TARGET","80",,"0.041","RDL","YES","0.510",,"980","10","0.020", "1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","72-54-8","4,4'-DDD (p,p')
```

```
[2C]","0.474","�g/l",,"0.018","MDL",,"TARGET","93",,"0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","72-55-9","4,4'-DDE
(p,p')","0.389","�g/l",,"0.018","MDL",,"TARGET","76",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","72-55-9","4,4'-DDE (p,p')
[2C]","0.386","�g/l",,"0.018","MDL",,"TARGET","76",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","7421-93-4","Endrin
aldehyde","0.437","�g/l",,"0.020","MDL",,"TARGET","86",,"0.041","RDL","YES","0.510",,"980","10","0.020", "1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","7421-93-4","Endrin aldehyde [2C]","0.503","�g/l",,"0.018","MDL",,"TARGET","99",,"0.041","RDL","YES","0.510",,"980","10","0.020", "1715920-BS1","ESAI","76-44-
8","Heptachlor","0.407","

g/I",,"0.020","MDL",,"TARGET","80",,"0.020","RDL","YES","0.510",,"980","10","0.
020",
"1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "76-44-8", "Heptachlor [2C]", "0.460", "�g/l", "0.020", "MDL", "TARGET", "90", "0.020", "RDL", "YES", "0.510", "980", "10", "0.020", "1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene
(IS)","0.020","  g/ml",,"-99","NA",,"ISTD","93",,"-99","NA","YES","10.0",,"980","10","-99",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","877-09-8","2,4,5,6-TC-M-Xylene (IS)
[2C]","0.020","  g/ml",,"-99","NA",,"ISTD","101",,"-99","NA","YES","10.0",,"980","10","-99",
"1715920-BS1","SW846 8081B","RES","1715920-BS1","ESAI","959-98-8","Endosulfan
I","0.412","  g/l",,"0.017","MDL",,"TARGET","81",,"0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BS1", "SW846 8081B", "RES", "1715920-BS1", "ESAI", "959-98-8", "Endosulfan I [2C]", "0.447", "�g/I", "0.016", "MDL", "TARGET", "88", "0.020", "RDL", "YES", "0.510", "980", "10", "0.020",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "1024-57-3", "Heptachlor epoxide", "0.384", "�g/l", "0.016", "MDL", "TARGET", "75", "5", "0.020", "RDL", "YES", "0.510", "980", "10", "0.020"
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","1024-57-3","Heptachlor epoxide [2C]","0.395","

g/l",,"0.015","MDL",,"TARGET","77","2","0.020","RDL","YES","0.510",,"980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","1031-07-8","Endosulfan sulfate","0.402","

g/l",,"0.020","MDL",,"TARGET","79","4","0.041","RDL","YES","0.510","980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","1031-07-8","Endosulfan sulfate
[2C]","0.493"," g/l",,"0.017","MDL",,"TARGET","97","0.8","0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr)","0.191"," g/l",,"-99","NA",,"SUR","94",,"-99","NA","YES","0.204",,"980","10","-99",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr) [2C]","0.207", g/l",,"-99","NA",,"SUR","101",,"-99","NA","YES","0.204",,"980","10","-99",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","15972-60-
8","Alachlor","0.414","�g/l",,"0.019","MDL",,"TARGET","81","9","0.020","RDL","YES","0.510",,"980","10","0.
 020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","15972-60-8","Alachlor
[2C]","0.482","
g/l",,"0.018","MDL",,"TARGET","94","6","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","2051-24-3","Decachlorobiphenyl
(Sr)","0.212","
g/l",,"-99","NA",,"SUR","104",,"-99","NA","YES","0.204",,"980","10","-99",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","2051-24-3","Decachlorobiphenyl (Sr)
[2C]","0.150","
g/l",,"-99","NA",,"SUR","73",,"-99","NA","YES","0.204",,"980","10","-99",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","309-00-
 2","Aldrin","0.381","�g/l",,"0.016","MDL",,"TARGET","75","5","0.020","RDL","YES","0.510",,"980","10","0.02
 0",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","309-00-2","Aldrin [2C]","0.383","�g/l",,"0.019","MDL",,"TARGET","75","2","0.020","RDL","YES","0.510",,"980","10","0.020",
 "1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "319-84-6", "alpha-
BHC","0.378","  g/l",,"0.012","MDL",,"TARGET","74","6","0.020","RDL","YES","0.510",,"980","10","0.020", "1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","319-84-6","alpha-BHC
[2C]","0.393"," og/l",,"0.018","MDL",,"TARGET","77","4","0.020","RDL","YES","0.510",,"980","10","0.020", "1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","319-85-7","beta-
BHC","0.390","  g/l",,"0.015","MDL",,"TARGET","76","9","0.020","RDL","YES","0.510",,"980","10","0.020", "1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","319-85-7","beta-BHC
```

```
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "319-86-8", "delta-
BHC","0.369","�g/l",,"0.016","MDL",,"TARGET","72","13","0.020","RDL","YES","0.510",,"980","10","0.020", "1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","319-86-8","delta-BHC
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","319-86-8","delta-BHC
[2C]","0.406","

g/l",,"0.020","MDL",,"TARGET","80","6","0.020","RDL","YES","0.510",,"980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","33213-65-9","Endosulfan

II","0.413","

g/l",,"0.020","MDL",,"TARGET","81","0.7","0.041","RDL","YES","0.510",,"980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","33213-65-9","Endosulfan II
[2C]","0.469","

g/l",,"0.016","MDL",,"TARGET","92","4","0.041","RDL","YES","0.510",,"980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.266","

g/l",,"0.018","MDL",,"TARGET","52","3","0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.266","

g/l",,"0.018","MDL",,"TARGET","52","3","0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.266","

g/l",,"0.018","MDL",,"TARGET","52","3","0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.266","

g/l",,"0.018","MDL",,"TARGET","52","3","0.041","RDL","YES","0.510",,"980","10","0.031",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","50-29-3","4,4'-DDT

(p,p')","0.018","MDL","TARGET","52","3","0.041","RDL","YES","0.510","980","10","0.031",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "50-29-3", "4,4'-DDT (p,p')
[2C]","0.345","�g/l",,"0.022","MDL",,"TARGET","68","14","0.041","RDL","YES","0.510",,"980","10","0.031",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","5103-71-9","alpha-
Chlordane","0.397","

g/I",,"0.016","MDL",,"TARGET","78","5","0.020","RDL","YES","0.510",,"980","10","0.02
0",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "5103-71-9", "alpha-Chlordane
[2C]","0.417","�g/l",,"0.017","MDL",,"TARGET","82","1","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","5103-74-2","Chlordane (gamma)
(trans)","0.417","�g/l",,"0.016","MDL",,"TARGET","82","3","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","5103-74-2","Chlordane (gamma)(trans)
(Lindane)","0.368","

g/I",,"0.018","MDL",,"TARGET","72","7","0.020","RDL","YES","0.510",,"980","10","0.02
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "58-89-9", "gamma-BHC (Lindane)
[2C]","0.402","

g/l",,"0.018","MDL",,"TARGET","79","3","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","60-57-
1","Dieldrin","0.387","�g/l",,"0.017","MDL",,"TARGET","76","3","0.020","RDL","YES","0.510",,"980","10","0.020","20",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "60-57-1", "Dieldrin
[2C]","0.385","�g/I",,"0.019","MDL",,"TARGET","75","1","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1", "SW846 8081B", "RÉS", "1715920-BSD1", "ESAI", "72-20-
8","Endrin","0.470","�g/l",,"0.020","MDL",,"TARGET","92","3","0.041","RDL","YES","0.510",,"980","10","0.02
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "72-20-8", "Endrin
[2C]","0.475","�g/I",,"0.020","MDL",,"TARGET","93","5","0.041","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","72-43-
5","Methoxychlor","0.375","�g/l",,"0.019","MDL",,"TARGET","73","4","0.041","RDL","YES","0.510",,"980","10
","0.020",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "72-43-5", "Methoxychlor
[2C]","0.387","�g/l",,"0.019","MDL",,"TARGET","76","12","0.041","RDL","YES","0.510",,"980","10","0.020",
[2C]","0.371"," og/l",,"0.018","MDL",,"TARGET","73","4","0.020","RDL","YES","0.510",,"980","10","0.020",
"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","7421-93-4","Endrin
aldehyde","0.425","

g/l",,"0.020","MDL",,"TARGET","83","3","0.041","RDL","YES","0.510",,"980","10","0.02
0",
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "7421-93-4", "Endrin aldehyde
```

```
[2C]","0.489","�g/I",,"0.018","MDL",,"TARGET","96","3","0.041","RDL","YES","0.510",,"980","10","0.020",
 "1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "76-44-
8","Heptachlor","0.380","�g/l",,"0.020","MDL",,"TARGET","75","7","0.020","RDL","YES","0.510",,"980","10","
 0.020"
"1715920-BSD1", "SW846 8081B", "RES", "1715920-BSD1", "ESAI", "76-44-8", "Heptachlor
"1/15920-BSD1","SW846 8081B","RES","1/15920-BSD1","ESAI","/6-44-8","Heptachlor
[2C]","0.451","

g/l",,"0.020","MDL",,"TARGET","88","2","0.020","RDL","YES","0.510",,"980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","877-09-8","2,4,5,6-TC-M-Xylene
(IS)","0.020","

g/ml",,"-99","NA",,"ISTD","89",,"-99","NA","YES","10.0",,"980","10","-99",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","877-09-8","2,4,5,6-TC-M-Xylene (IS)
[2C]","0.020","

g/ml",,"-99","NA",,"ISTD","93",,"-99","NA","YES","10.0",,"980","10","-99",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","959-98-8","Endosulfan

I","0.396","

g/l","0.017","MDL","TARGET","78","4","0.020","RDL","YES","0.510","980","10","0.020",

"1715920-BSD1","SW846 8081B","RES","1715920-BSD1","ESAI","959-98-8","Endosulfan I

[2C]" "0.432" "Ag/l" "0.016" "MDI" "TARGET" "85" "4" "0.020" "PDI" "VES" "0.510" "980" "10" "0.020"
"1715978-BLK2", "SM2320B (97, 11)", "RES", "1715978-BLK2", "ESAI", "NA", "Total Alkalinity", "3.00", "mg/l CaCO3", "U", "1.05", "MDL", "TARGET", ,, "4.00", "RDL", "YES", "-99", , "50", "50", "3.00",
"1715978-BLK3", "SM2320B (97, 11)", "RES", "1715978-BLK3", "ESAI", "NA", "Total Alkalinity", "3.00", "mg/l CaCO3", "U", "1.05", "MDL", "TARGET", ,, "4.00", "RDL", "YES", "-99", , "50", "50", "3.00",
"1715978-BLK4", "SM2320B (97, 11)", "RES", "1715978-BLK4", "ESAI", "NA", "Total Alkalinity", "3.00", "mg/l CaCO3", "U", "1.05", "MDL", "TARGET", ,, "4.00", "RDL", "YES", "-99", , "50", "50", "3.00",
"1715978-BS1", "SM2320B (97, 11)", "RES", "1715978-BS1", "ESAI", "NA", "Total Alkalinity", "52.4", "mg/l
CaCO3",,"1.05","MDL",,"TARGET","105",,"4.00","RDL","YES","50.0",,"50","50","3.00",
 "1715978-BS2", "SM2320B (97, 11)", "RES", "1715978-BS2", "ESAI", "NA", "Total Alkalinity", "51.7", "mg/l
CaCO3",,"1.05","MDL",,"TARGET","103",,"4.00","RDL","YES","50.0",,"50","50","3.00",
"1715978-BS3", "SM2320B (97, 11)", "RES", "1715978-BS3", "ESAI", "NA", "Total Alkalinity", "51.5", "mg/l
CaCO3",,"1.05","MDL",,"TARGET","103",,"4.00","RDL","YES","50.0",,"50","50","3.00",
"1715978-BS4","SM2320B (97, 11)","RES","1715978-BS4","ESAI","NA","Total Alkalinity","51.7","mg/l
CaCO3",,"1.05","MDL",,"TARGET","103",,"4.00","RDL","YES","50.0",,"50","50","3.00",
"1715978-SRM1", "SM2320B (97, 11)", "RES", "1715978-SRM1", "ESAI", "NA", "Total Alkalinity", "131", "mg/I
CaCO3",,"3.50","MDL",,"TARGET","105",,"13.3","RDL","YES","124",,"15","50","10.0",
"1716147-BLK1", "SM5310B (00, 11)", "RES", "1716147-BLK1", "ESAI", "NA", "Total Organic Carbon", "0.500", "mg/l", "U", "0.238", "MDL", "TARGET", ,, "1.00", "RDL", "YES", "-99", , "40", "40", "0.500",
"1716147-BS1", "SM5310B (00, 11)", "RES", "1716147-BS1", "ESAI", "NA", "Total Organic
Carbon","13.2","mg/l",,"0.238","MDL",,"TARGET","88",,"1.00","RDL","YES","15.0",,"40","40","0.500", "1716147-CCB1","SM5310B (00, 11)","RES","1716147-CCB1","ESAI","NA","Total Organic Carbon","0.148","mg/l",,"-99","NA","TARGET",,,"-99","NA","YES","-99",,"40","40","-99", "1716147-CCB2","SM5310B (00, 11)","RES","1716147-CCB2","ESAI","NA","Total Organic Carbon","0.129","mg/l",,"-99","NA",,"TARGET",,,"-99","NA","YES","-99",,"40","40","-99",
"1716147-CCB3", "SM5310B (00, 11)", "RES", "1716147-CCB3", "ESAI", "NA", "Total Organic Carbon", "0.121", "mg/l",,"-99", "NA", "TARGET",,,"-99", "NA", "YES", "-99", "40", "40", "-99",
"1716147-CCV1", "SM5310B (00, 11)", "RES", "1716147-CCV1", "ESAI", "NA", "Total Organic Carbon", "13.4", "mg/l", "0.238", "MDL", "TARGET", "89", "1.00", "RDL", "YES", "15.0", "40", "40", "0.500",
"1716147-CCV2", "SM5310B (00, 11)", "RES", "1716147-CCV2", "ESAI", "NA", "Total Organic
Carbon","13.5","mg/l",,"0.238","MDL",,"TARGET","90",,"1.00","RDL","YES","15.0",,"40","40","0.500",
"1716147-CCV3", "SM5310B (00, 11)", "RES", "1716147-CCV3", "ESAI", "NA", "Total Organic Carbon", "13.5", "mg/l", "0.238", "MDL", "TARGET", "90", "1.00", "RDL", "YES", "15.0", "40", "40", "0.500", "1716147-SRM1", "SM5310B (00, 11)", "RES", "1716147-SRM1", "ESAI", "NA", "Total Organic Carbon", "13.4", "mg/l", "0.238", "MDL", "TARGET", "92", "1.00", "RDL", "YES", "14.6", "40", "40", "0.500", "1716147-SRM1", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4", "18.4"
"1716277-BLK1", "SW846 6010C", "RES", "1716277-BLK1", "ESAI", "7429-90-
5","Aluminum","0.0500","mg/l","U","0.0206","MDL",,"TARGET",,,"0.0500","RDL","YES","-99",,"50","50","0.05
 00"
 "1716277-BLK1", "SW846 6010C", "RES", "1716277-BLK1", "ESAI", "7439-89-
6","Iron","0.0300","mg/I","U","0.0089","MDL",,"TARGET",,,"0.0800","RDL","YES","-99",,"50","50","0.0300",
"1716277-BLK1", "SW846 6010C", "RES", "1716277-BLK1", "ESAI", "7439-95-
4","Magnesium","0.0100","mg/l","U","0.0088","MDL",,"TARGET",,,"0.0200","RDL","YES","-99",,"50","50","0.0
```

```
100",
"1716277-BLK1", "SW846 6010C", "RES", "1716277-BLK1", "ESAI", "7440-23-
5","Sodium","0.164","mg/l","J","0.0785","MDL",,"TARGET",,,"0.500","RDL","YES","-99",,"50","50","0.250",
"1716277-BLK1", "SW846 6010C", "RES", "1716277-BLK1", "ESAI", "7440-70-
2","Calcium","0.0178","mg/l","J","0.0142","MDL",,"TARGET",,,"0.200","RDL","YES","-99",,"50","50","0.0500",
"1716277-BS1", "SW846 6010C", "RES", "1716277-BS1", "ESAI", "7429-90-
5","Aluminum","2.54","mg/l",,"0.0206","MDL",,"TARGET","102",,"0.0500","RDL","YES","2.50",,"50","50","0.0
500",
"1716277-BS1","SW846 6010C","RES","1716277-BS1","ESAI","7439-89-6","Iron","2.59","mg/I",,"0.0089","MDL",,"TARGET","104",,"0.0800","RDL","YES","2.50",,"50","50","0.0300",
"1716277-BS1", "SW846 6010C", "RES", "1716277-BS1", "ESAI", "7439-95-
4","Magnesium","2.42","mg/l",,"0.0088","MDL",,"TARGET","97",,"0.0200","RDL","YES","2.50",,"50","50","0.0
100",
"1716277-BS1", "SW846 6010C", "RES", "1716277-BS1", "ESAI", "7440-23-
5","Sodium","11.7","mg/l",,"0.0785","MDL",,"TARGET","94",,"0.500","RDL","YES","12.5",,"50","50","0.250",
"1716277-BS1", "SW846 6010C", "RES", "1716277-BS1", "ESAI", "7440-70-
2","Calcium","12.2","mg/l",,"0.0142","MDL",,"TARGET","97",,"0.200","RDL","YES","12.5",,"50","50","0.0500",
"1716277-BSD1", "SW846 6010C", "RES", "1716277-BSD1", "ESAI", "7429-90-
5","Aluminum","2.54","mg/l",,"0.0206","MDL",,"TARGET","102","0.2","0.0500","RDL","YES","2.50",,"50","50",
"0.0500",
"1716277-BSD1", "SW846 6010C", "RES", "1716277-BSD1", "ESAI", "7439-89-
6","Iron","2.63","mg/l",,"0.0089","MDL",,"TARGET","105","1","0.0800","RDL","YES","2.50",,"50","50","0.0300
"1716277-BSD1", "SW846 6010C", "RES", "1716277-BSD1", "ESAI", "7439-95-
4","Magnesium","2.43","mg/l",,"0.0088","MDL",,"TARGET","97","0.5","0.0200","RDL","YES","2.50",,"50","50",
"0.0100"
"1716277-BSD1", "SW846 6010C", "RES", "1716277-BSD1", "ESAI", "7440-23-
5","Sodium","11.7","mg/l",,"0.0785","MDL",,"TARGET","93","0.3","0.500","RDL","YES","12.5",,"50","50","0.2
50",
"1716277-BSD1", "SW846 6010C", "RES", "1716277-BSD1", "ESAI", "7440-70-
2","Calcium","12.2","mg/l",,"0.0142","MDL",,"TARGET","98","0.2","0.200","RDL","YES","12.5",,"50","50","0.0
500",
"1716279-BLK1", "EPA 245.1/7470A", "RES", "1716279-BLK1", "ESAI", "7439-97-
6","Mercury","0.00020","mg/I","U","0.00013","MDL",,"TARGET",,,"0.00020","RDL","YES","-99",,"20","20","0.0
0020",
"1716279-BS1", "EPA 245.1/7470A", "RES", "1716279-BS1", "ESAI", "7439-97-
6","Mercury","0.00480","mg/I",,"0.00013","MDL",,"TARGET","96",,"0.00020","RDL","YES","0.00500",,"20","20
"."0.00020"
"1716530-BLK1", "SW846 6010C", "RES", "1716530-BLK1", "ESAI", "7440-09-
7","Potassium","0.351","mg/l","J","0.120","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"50","50","0.250",
"1716530-BS1", "SW846 6010C", "RES", "1716530-BS1", "ESAI", "7440-09-
7","Potassium","24.2","mg/l",,"0.120","MDL",,"TARGET","97",,"1.00","RDL","YES","25.0",,"50","50","0.250",
"1716530-BSD1", "SW846 6010C", "RES", "1716530-BSD1", "ESAI", "7440-09-
7","Potassium","23.2","mg/l",,"0.120","MDL",,"TARGET","93","4","1.00","RDL","YES","25.0",,"50","50","0.250
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "1763-23-1", "Perfluoro-octanesulfonate", "0", "ng/l", "2", "MDL", "TARGET", "6", "RDL", "YES", "-99", ", "-99", "<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","1763-23-1L","13C8-PFOS","35","ng/l",,"-99","NA",,"SUR","74",,"-99","NA","YES","48",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "2058-94-8", "Perfluoroundecanoic
acid","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "2058-94-8L", "13C7-PFUnDA", "32", "ng/I", "-99", "NA", "SUR", "64", "-99", "NA", "YES", "50", , , , "-99", "TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "2706-90-3", "Perfluoropentanoic
Acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","2706-90-3L","13C5-
PFPeA","38","ng/I",,"-99","NA",,"SUR","76",,"-99","NA","YES","50",,,,"-99",
```

```
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "307-24-4", "Perfluorohexanoic
acid","0","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "307-24-4L", "13C5-PFHxA", "44", "ng/l", , "-99", "NA", "SUR", "89", , "-99", "NA", "YES", "50", , , , "-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "307-55-1", "Perfluorododecanoic acid", "0", "ng/l", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", "-99", "-99", "<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "307-55-1L", "13C2-PFD0DA", "29", "ng/l", "-99", "NA", "SUR", "59", "-99", "NA", "YES", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50", ", "50"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "335-67-1", "Perfluorooctanoic acid", "0", "ng/l", "0.6", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "335-67-1L", "13C8-
PFOA", "37", "ng/l", ,"-99", "NA", ,"SUR", "74", ,"-99", "NA", "YES", "50", , , ,
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "335-76-2", "Perfluorodecanoic
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",","-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","335-76-2L","13C6-PFDA","38","ng/l",,"-99","NA",,"SUR","76",,"-99","NA","YES","50",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "335-77-
3","Perfluorodecanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","355-46-4","Perfluorohexanesulfonate","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","355-46-4L","13C3-PFHxS","40","ng/I",,"-99","NA",,"SUR","85",,"-99","NA","YES","47",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "375-22-4", "Perfluorobutanoic
Acid","0","ng/l",,"3","MDL",,"TARGET",,,"10","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","375-22-4L","13C4-
PFBA","38","ng/l",,"-99","NA",,"SUR","76",,"-99","NA","YES","50",,,,
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "375-73-
5","Perfluorobutanesulfonate","0","ng/l",,"0.8","MDL",,"TARGET",,,
                                                                                                                          ,,<sup>"</sup>3","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","375-73-5L","13C3-PFBS","40","ng/I",,"-99","NA",,"SUR","85",,"-99","NA","YES","46",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "375-85-9", "Perfluoroheptanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","375-85-9L","13C4-PFHpA","41","ng/I",,"-99","NA",,"SUR","82",,"-99","NA","YES","50",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "375-92-
8","Perfluoroheptanesulfonate","0","ng/I",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "375-95-1", "Perfluorononanoic
acid","0","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","375-95-1L","13C9-
PFNA","33","ng/l",,"-99","NA",,"SUR","66",,"-99","NA","YES","50",,,,
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "376-06-7", "Perfluorotetradecanoic
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","376-06-7L","13C2-PFTeDA","30","ng/I",,"-99","NA",,"SUR","61",,"-99","NA","YES","50",,,,"-99",
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "72629-94-8", "Perfluorotridecanoic
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117", "EPA 537 Modified", "RES", "SC39093-04", "ESAI", "754-91-
6","PFOSA","0","ng/l",,"3","MDL",,"TARGET",,,"9","RDL","YES","-99",,,,"-99","<"
"TF1-FRB-091117","EPA 537 Modified","RES","SC39093-04","ESAI","754-91-6L","13C8-
PFOSA", "7", "ng/l", ,"-99", "NA", ,"SUR", "13", ,"-99", "NA", "YES", "50", ,, ,"-99",
"TF1-GT-119-091117", "EPA 200/6000 methods", "RES", "SC39093-
02", "ESAI", "NA", "Preservation", "0", "N/A", ,"-99", "NA", ,"TARGET", ,, "-99", "NA", "YES", "-99", "1", "1", "1", "-99", "Field
Preserved; pH<2 confirmed"
"TF1-GT-119-091117", "EPA 245.1/7470A", "RES", "SC39093-02", "ESAI", "7439-97-
6","Mercury","0.00020","mg/I","U","0.00013","MDL",,"TARGET",,,"0.00020","RDL","YES","-99",,"20","20","0.0
0020",
"TF1-GT-119-091117", "EPA 300.0", "RES", "SC39093-02", "ESAI", "14797-55-8", "Nitrate as
```

```
N","0.011","mg/l","J","0.007","MDL",,"TARGET",,,"0.100","RDL","YES","-99",,"5","5","0.100",
"TF1-GT-119-091117", "EPA 300.0", "RES", "SC39093-02", "ESAI", "14808-79-8", "Sulfate as
SO4","45.2","mg/l",,"0.798","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"5","5","1.00",
"TF1-GT-119-091117", "EPA 300.0", "RES", "SC39093-02", "ESAI", "16887-00-6", "Chloride", "5.98", "mg/l", "0.0994", "MDL", "TARGET", "1.00", "RDL", "YES", "-99", "5", "5", "0.100",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "1763-23-1", "Perfluoro-octanesulfonate", "0", "ng/l", "2", "MDL", "TARGET", "6", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "1763-23-1L", "13C8-
PFOS","32","ng/l",,"-99","NA",,"SUR","66",,"-99","NA","YES","48",,,,"-99",
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","2058-94-8","Perfluoroundecanoic acid","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "2058-94-8L", "13C7-PFUnDA", "31", "ng/I", "-99", "NA", "SUR", "62", "-99", "NA", "YES", "50", , , , "-99", "-99", "NA", "YES", "50", , , , , "50", , , , , "50", , , , , , "50", , , , , , , , ] "TENTALLY "SUR", "50", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "2706-90-3", "Perfluoropentanoic Acid", "0", "ng/l", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "2706-90-3L", "13C5-
PFPeA","37","ng/l",,"-99","NA",,"SUR","75",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "307-24-4", "Perfluorohexanoic acid", "0", "ng/l", "0.6", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "307-24-4L", "13C5-
PFHxA", "38", "ng/I",, "-99", "NA",, "SUR", "76",, "-99", "NA", "YES", "50",,,, "-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "307-55-1", "Perfluorododecanoic acid", "0", "ng/l", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","307-55-1L","13C2-PFDoDA","28","ng/l",,"-99","NA",,"SUR","55",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "335-67-1", "Perfluorooctanoic
acid","0","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","335-67-1L","13C8-PFOA","33","ng/l",,"-99","NA",,"SUR","65",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "335-76-2", "Perfluorodecanoic
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","335-76-2L","13C6-
PFDA","31","ng/l",,"-99","NA",,"SUR","62",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","335-77-
3","Perfluorodecanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,"6","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","355-46-4","Perfluorohexanesulfonate","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "355-46-4L", "13C3-
PFHxS", "37", "ng/l", ,"-99", "NA", ,"SUR", "78", ,"-99", "NA", "YES", "47", ,, ,"-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "375-22-4", "Perfluorobutanoic
Acid","0","ng/l",,"3","MDL",,"TARGET",,,"10","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","375-22-4L","13C4-PFBA","33","ng/I",,"-99","NA",,"SUR","66",,"-99","NA","YES","50",,,,"-99","TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","375-73-
5","Perfluorobutanesulfonate","0","ng/l",,"0.8","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","375-73-5L","13C3-PFBS","40","ng/l",,"-99","NA",,"SUR","85",,"-99","NA","YES","46",,,,"-99",
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "375-85-9", "Perfluoroheptanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", "-99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "375-85-9L", "13C4-
PFHpA", "34", "ng/l", ,"-99", "NA", ,"SUR", "69", ,"-99", "NA", "YES", "50", ,,, "-99"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "375-92-
8","Perfluoroheptanesulfonate","0","ng/I",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "375-95-1", "Perfluorononanoic
acid","0","ng/I",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","EPA 537 Modified","RES","SC39093-02","ESAI","375-95-1L","13C9-
PFNA", "32", "ng/l",,"-99", "NA",,"SUR", "64",,"-99", "NA", "YES", "50",,,,"-99",
```

```
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "376-06-7", "Perfluorotetradecanoic
acid", "0", "ng/I", , "0.5", "MDL", , "TARGET", , , "2", "RDL", "YES", "-99", , , , "<" \\
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "376-06-7L", "13C2-
PFTeDA","28","ng/I",,"-99","NA",,"SUR","55",,"-99","NA","YES","50",,,,
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "72629-94-8", "Perfluorotridecanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "754-91-6", "PFOSA", "0", "ng/l",, "3", "MDL",, "TARGET",,, "9", "RDL", "YES", "-99",,,, "-99", "<"
"TF1-GT-119-091117", "EPA 537 Modified", "RES", "SC39093-02", "ESAI", "754-91-6L", "13C8-
PFOSA", "8", "ng/l",,"-99", "NA",,"SUR","17",,"-99", "NA","YES", "50",,,,"-99"
"TF1-GT-119-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-02", "ESAI", "74-82-8", "Methane", "2.20", "\overline{\sigma} (I", "U", "2.16", "MDL", "TARGET", "2.20", "RDL", "YES", "-99", "10", "10", "2.20", "TF1-GT-119-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-02", "ESAI", "74-84-0", "Ethane", "5.00", "\overline{\sigma} (I", "U", "3.48", "MDL", "TARGET", "5.00", "RDL", "YES", "-99", "10", "10", "5.00", "TF1-GT-112-091117", "Scale (I", "10", "10", "10", "5.00", "BT1-GT-112-091117", "Scale (I", "10", "10", "10", "5.00", "BT1-GT-112-091117", "Scale (I", "10", "10", "10", "5.00", "BT1-GT-112-091117", "Scale (I", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10", "10
"TF1-GT-119-091117", "SM18-22 5210B", "RES", "SC39093-02", "ESAI", "NA", "Biochemical Oxygen Demand (5-
day)","6.00","mg/l","BOD4","2.74","MDL",,"TARGET",,,"3.00","RDL","YES","-99",,"300","300","2.97",
"TF1-GT-119-091117", "SM2320B (97, 11)", "RES", "SC39093-02", "ESAI", "NA", "Total Alkalinity", "18.2", "mg/l CaCO3",, "0.524", "MDL",, "TARGET",,, "2.00", "RDL", "YES", "-99",, "100", "50", "1.50",
"TF1-GT-119-091117", "SM5310B (00, 11)", "RES", "SC39093-02", "ESAI", "NA", "Total Organic Carbon", "2.62", "mg/l", "0.238", "MDL", "TARGET", "1.00", "RDL", "YES", "-99", "40", "40", "0.500",
"TF1-GT-119-091117", "SW846 6010C", "RES", "SC39093-02", "ESAI", "7429-90-5", "Aluminum", "0.0509", "mg/I", "0.0206", "MDL", "TARGET", , , "0.0500", "RDL", "YES", "-99", , "50", "50", "0.0500"
"TF1-GT-119-091117","SW846 6010C","RES","SC39093-02","ESAI","7439-89-6","Iron","12.9","mg/l","R06","0.0089","MDL",,"TARGET",,,"0.0800","RDL","YES","-99",,"50","50","0.0300",
"TF1-GT-119-091117", "SW846 6010C", "RES", "SC39093-02", "ESAI", "7439-95-
4","Magnesium","2.36","mg/l",,"0.0088","MDL",,"TARGET",,,"0.0200","RDL","YES","-99",,"50","50","0.0100",
"TF1-GT-119-091117", "SW846 6010C", "RES", "SC39093-02", "ESAI", "7440-09-7", "Potassium", "2.43", "mg/l", "0.120", "MDL", "TARGET", ,, "1.00", "RDL", "YES", "-99", ,"50", "50", "0.250", "TF1-GT-119-091117", "SW846 6010C", "RES", "SC39093-02", "ESAI", "7440-23-
5","Sodium","4.64","mg/l",,"0.0785","MDL",,"TARGET",,,"0.500","RDL","YES","-99",,"50","50","0.250",
"TF1-GT-119-091117", "SW846 6010C", "RES", "SC39093-02", "ESAI", "7440-70-2", "Calcium", "20.1", "mg/l", "0.0142", "MDL", "TARGET", "0.200", "RDL", "YES", "-99", "50", "50", "0.0500",
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7439-92-1", "Lead", "0", "mg/l", , "0.00011", "MDL", , "TARGET", , , "0.0020", "RDL", "YES", "-99", , , , "<"
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7439-96-5", "Manganese", "3.19", "mg/l", "0.00090", "MDL", "TARGET", , "0.0040", "RDL", "YES", "-99", , , , "-99",
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7439-98-7", "Molybdenum", "0", "mg/l", , "0.00025", "MDL", , "TARGET", , , "0.0010", "RDL", "YES", "-99", , , , "<"
"TF1-GŤ-119-091117","SW-846 6020A","RES","SC39093-02","ESAI","7440-02-
0","Nickel","0.0177","mg/l",,"0.0010","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-119-091117","SW-846 6020A","RES","SC39093-02","ESAI","7440-22-
4","Silver","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","SW-846 6020A","RES","SC39093-02","ESAI","7440-28-
0","Thallium","0","mg/l",,"0.00012","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-36-
0","Antimony","0","mg/l",,"0.00045","MDL",,"TARGET",,,"0.0020","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117","SW-846 6020A","RES","SC39093-02","ESAI","7440-38-2","Arsenic","0.0069","mg/l",,"0.00072","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-39-
3","Barium","0.0306","mg/l",,"0.00072","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-41-7", "Beryllium", "0", "mg/l", "0.000071", "MDL", "TARGET", "0.0010", "RDL", "YES", "-99", ", " "TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-43-
9","Cadmium","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-47-
3","Chromium","0","mg/I",,"0.00087","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
```

```
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-48-
4","Cobalt","0.0665","mg/l",,"0.00016","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99", "TF1-GT-119-091117","SW-846 6020A","RES","SC39093-02","ESAI","7440-50-8","Copper","0.0069","mg/l",,"0.00054","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-62-
2","Vanadium","0","mg/l",,"0.00021","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7440-66-
6","Zinc","0","mg/I",,"0.0039","MDL",,"TARGET",,,"0.0300","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "SW-846 6020A", "RES", "SC39093-02", "ESAI", "7782-49-
2","Selenium","0","mg/l",,"0.00050","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
"TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "108-90-
 7","Chlorobenzene","0.011","mg/l",,"-99","NA",,"SUR","94",,"-99","NA","YES","0.012",,,,"-99",
"TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "84-15-1", "Orthoterphenyl", "0.011", "mg/l", "-99", "NA", "SUR", "93", "-99", "NA", "YES", "0.012", ", "-99", "TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "PHCC8C44", "C8-C44", "0.25", "mg/l", "0.050", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99", "TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "PHCE", "Total TPH", "0.25", "mg/l", "0.050", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99", "TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "PHCE", "Total TPH", "0.25", "mg/l", "0.050", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99", "TF1-GT-119-091117", "SW-846 8015B", "RES", "SC39093-02", "ESAI", "Hortochlor
"TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "1024-57-3", "Heptachlor epoxide", "0.019", "�g/l", "U", "0.015", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1030", "10", "0.019", "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "1031-07-8", "Endosulfan
sulfate","0.019"," g/l","U","0.019","MDL","TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.019",
"TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr)","0.141"," g/l",,"-99","NA",,"SUR","73",,"-99","NA","YES","0.194",,"1030","10","-99",
"TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","15972-60-
BHC","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.019", "TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","33213-65-9","Endosulfan II","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.019", "TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","50-29-3","4,4'-DDT
(p,p')","0.029","�g/l","U","0.017","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.029",
"TF1-GT-119-091117","$W846 8081B","RES","SC39093-02","ESAI","5103-71-9","alpha-
Chlordane","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.019",
"TF1-GT-119-091117","$W846 8081B","RES","SC39093-02","ESAI","5103-74-2","Chlordane (gamma)
(trans)","0.019","�g/l","U","0.016","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.019",
 "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "53494-70-5", "Endrin
ketone","0.019","�g/l","U","0.017","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.019",
 "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "57-74-
"TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "58-89-9", "gamma-BHC
"TF1-GT-119-091117", "$W846 8081B", "RES", "$C39093-02", "ESAI", "58-89-9", "gamma-BHC (Lindane)", "0.019", "♠g/l", "U", "0.017", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1030", "10", "0.019", "TF1-GT-119-091117", "$W846 8081B", "RES", "$C39093-02", "ESAI", "60-57-1", "Dieldrin", "0.019", "♠g/l", "U", "0.017", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1030", "10", "0.019", "TF1-GT-119-091117", "$W846 8081B", "RES", "$C39093-02", "ESAI", "72-20-8", "Endrin", "0.019", "♠g/l", "U", "0.019", "MDL", "TARGET", "0.039", "RDL", "YES", "-99", "1030", "10", "0.019", "TF1-GT-119-091117", "$W846 8081B", "RES", "$C39093-02", "ESAI", "72-43-
5","Methoxychlor","0.019","

g/l","U","0.018","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.
```

```
019",
 "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "72-54-8", "4,4'-DDD
(p,p')","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1030","10","0.019", "TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","72-55-9","4,4'-DDE (p,p')","0.019","�g/l","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.019",
"TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "7421-93-4", "Endrin aldehyde", "0.019", "�g/l", "U", "0.019", "MDL", "TARGET", "0.039", "RDL", "YES", "-99", "1030", "10", "0.019", "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "76-44-
 8","Heptachlor","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.01
 "TF1-GT-119-091117", "SW846 8081B", "RES", "SC39093-02", "ESAI", "8001-35-
 2","Toxaphene","0.485","�g/I","U","0.318","MDL",,"TARGET",,,"0.485","RDL","YES","-99",,"1030","10","0.48
"TF1-GT-119-091117","SW846 8081B","RES","SC39093-02","ESAI","877-09-8","2,4,5,6-TC-M-Xylene (IS)","0.020","�g/ml",,"-99","NA",,"ISTD","98",,"-99","NA",,"YES","10.0",,"1030","10","-99",
 "TF1-GT-119-091117", SW846 8081B", "RÉS", "SC39093-02", "ESAI", "959-98-8", "Éndosulfan
I","0.019","

g/I","U","0.016","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1030","10","0.019",

"TF1-GT-119-091117","SW846 8260C","RES","SC39093-02","ESAI","100-41-

4","Ethylbenzene","0.5","

g/I","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",

"TF1-GT-119-091117","SW846 8260C","RES","SC39093-02","ESAI","100-42-
d4","49.8","�g/l",,"-99","NA",,"SUR","100",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-GT-119-091117","SW846 8260C","RES","SC39093-02","ESAI","179601-23-1","m,p-
Xylene","1.0","

g/I","U","0.4","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","1.0",
```

```
"TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "1868-53-7", "Dibromofluoromethane", "55.8", "$\infty g/l", "-99", "NA", "SUR", "112", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "2037-26-5", "Toluened8", "50.3", $\infty g/l", "-99", "NA", "SUR", "101", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "3114-55-4", "Chlorobenzened5", "50.0", $\infty g/l", "-99", "NA", "ISTD", "100", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "3855-82-1", "1,4-Dichlorobenzened4", "50.0", $\infty g/l", "-99", "NA", "YES", "S0.3093-02", "ESAI", "460-00-4", "4-Bromofluorobenzene", "49.0", $\infty g/l", "-99", "NA", "SUR", "98", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "462-06-6", "Fluorobenzene", "50.0", $\infty g/l", "-99", "NA", "ISTD", "102", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "462-06-6", "Fluorobenzene", "50.0", $\infty g/l", "-99", "NA", "ISTD", "102", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "541-73-1", "1,3-Dichlorobenzene", "0.5", $\infty g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "541-73-1", "1,3-Dichlorobenzene", "0.5", $\infty g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "56-23-5", "Carbon tetrachloride", "1.0", "$\infty g/l", "U", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "591-78-6", "2-Hexanone (MBK), ", "2.0", "\infty g/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "5", "2.0", "TF1-GT-
           "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "1868-53-
       "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "67-64-1", "Acetone", "2.0", $\displays g/l", "U", "0.8", "MDL", "TARGET", "10.0", "RDL", "YES", "-99", "5", "5", "2.0", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "67-66-3", "Chloroform", "1.0", $\displays g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "71-43-2", "Benzene", "0.5", "$\displays g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "71-55-6", "1,1,1-Trichloroethane", "1.0", $\displays g/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-119-091117", "SW846 8260C", "RES", "SC39093-02", "ESAI", "74-83-9", "Bromomethane", "2.0", "$\displays g/l", "U", "0.9", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "$\displays g/l", "U", "0.9", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0", "3.0",
```

```
(MEK)","2.0","�g/l","U","1.1","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","2.0",
"TF1-GT-119-091117","SW846 8260C","RES","SC39093-02","ESAI","79-00-5","1,1,2-
Trichloroethane","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GT-119-091117","SW846 8260C","RES","SC39093-02","ESAI","79-01-
6","Trichloroethene","1.0","�g/l","U","0.5","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
d12","40.0","

g/ml",,"-99","NA",,"ISTD","112",,"-99","NA","YES","40.0",,"1000","1","-99",

"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","1718-51-0","Terphenyl-
dl4","36.3","

g/l",,"-99","NA",,"SUR","73",,"-99","NA","YES","50.0",,"1000","1","-99",

"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","1719-03-5","Chrysene-
d12","40.0","

g/ml",,"-99","NA",,"ISTD","114",,"-99","NA","YES","40.0",,"1000","1","-99",

"TF1-GT-110-091117","SW846 8270D","PFS","SC39093-02","FSAI","1000","1000","1","-99",

"TF1-GT-110-091117","SW846 8270D","PFS","SC39093-02","FSAI","101-24-2","Popto (g.b.i)
d12","40.0"," g/mi",,"-99","NA",,"ISTD","114",,"-99","NA","YES","40.0",,"1000","1","-99",
"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","191-24-2","Benzo (g,h,i)
perylene","1.00"," g/l","U","0.530","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",
"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","193-39-5","Indeno (1,2,3-cd)
pyrene","1.00"," g/l","U","0.580","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",
"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","205-99-2","Benzo (b)
fluoranthene","1.00"," g/l","U","0.437","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",
"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","206-44-
0","Fluoranthene","1.00","

g/l","U","0.638","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",

"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","207-08-9","Benzo (k)

fluoranthene","1.00","

g/l","U","0.480","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",

"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","208-96-

8","Acenaphthylene","1.00","

g/l","U","0.683","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.0
 0".
 "TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "218-01-9", "Chrysene", "1.00", "�g/I", "U", "0.532", "MDL", "TARGET", "5.00", "RDL", "YES", "-99", "1000", "1", "1.00", "TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "321-60-8", "2-
 pyrene","1.00","

g/I","U","0.562","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00",
  "TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "53-70-3", "Dibenzo (a,h)
```

```
anthracene","1.00","�g/l","U","0.450","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00", "TF1-GT-119-091117","SW846 8270D", "RES","SC39093-02","ESAI","56-55-3","Benzo (a) anthracene","1.00", ₱g/l","U","0.536","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00", "TF1-GT-119-091117","SW846 8270D", "RES","SC39093-02","ESAI","83-32-
9","Acenaphthene","1.00","

g/I","U","0.691","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00"
"TF1-GT-119-091117","SW846 8270D","RES","SC39093-02","ESAI","85-01-
8","Phenanthrene","1.00","�g/l","U","0.586","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00"
"TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "86-73-7", "Fluorene", "1.00", "$\phig| fl", "U", "0.612", "MDL", "TARGET", "5.00", "RDL", "YES", "-99", "1000", "1", "1.00", "TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "90-12-0", "1-
Methylnaphthalene","1.00","�g/l","U","0.733","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00
"TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "91-20-
"TF1-GT-119-091117", "SW846 8270D", "RES", "SC39093-02", "ESAI", "91-57-6", "2-
Methylnaphthalene","1.00","�g/l","U","0.574","MDL",,"TARGET",,,"5.00","RDL","YES","-99",,"1000","1","1.00
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "1024-57-3", "Heptachlor
epoxide","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "1024-57-3", "Heptachlor epoxide"
[2C]","0.019","�g/I","U","0.014","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "1031-07-8", "Endosulfan sulfate", "0.019", "�g/I", "U", "0.019", "MDL", "TARGET", "0.038", "RDL", "YES", "-99", "TF1-GT-119-091117", "1040", "10", "0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "1031-07-8", "Endosulfan sulfate
[2C]","0.019","

g/I","U","0.016","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "10386-84-2", "4,4-DB-
091117","1040","10","-99",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "10386-84-2", "4,4-DB-
Octafluorobiphenyl (Sr) [2C]","0.152","

g/I",,"-99","NA",,"SUR","79",,"-99","NA","YES","0.192","TF1-GT-
119-091117","1040","10","-99".
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "15972-60-
8","Alachlor","0.019","

g/I","U","0.018","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "15972-60-8", "Alachlor
[2C]","0.019","�g/l","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "2051-24-3", "Decachlorobiphenyl
(Sr)","0.190","�g/l",,"-99","NA",,"SUR","99",,"-99","NA","YES","0.192","TF1-GT-119-091117","1040","10","-99",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "2051-24-3", "Decachlorobiphenyl
(Sr) [2C]","0.146","♦g/l",,"-99","NA",,"SUR","76",,"-99","NA","YES","0.192","TF1-GT-119-
(Si) [2C] , 0.1<del>1</del>0 , v9/i ,,
091117","1040","10","-99",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "309-00-
2","Aldrin","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "309-00-2", "Aldrin
[2C]","0.019","

g/I","U","0.018","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP","SW846 8081B","RES","1715920-DUP1","ESAI","319-84-6","alpha-
```

```
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "319-84-6", "alpha-BHC
[2C]","0.019","�g/l","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "319-85-7", "beta-
BHC","0.019","

g/I","U","0.014","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "319-85-7", "beta-BHC
[2C]","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "319-86-8", "delta-
BHC","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "319-86-8", "delta-BHC
[2C]","0.019","  g/l","U","0.019","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "33213-65-9", "Endosulfan II", "0.019", "�g/I", "U", "0.019", "MDL", "TARGET", "0.038", "RDL", "YES", "-99", "TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "33213-65-9", "Endosulfan II
[2C]","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "50-29-3", "4,4'-DDT
(p,p')","0.029","

g/I","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.029"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "50-29-3", "4,4'-DDT (p,p')
[2C]","0.029","

g/I","U","0.021","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "5103-71-9", "alpha-
Chlordane","0.019","

g/I","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "5103-71-9", "alpha-Chlordane"
[2C]","0.019","og/l","U","0.016","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "5103-74-2", "Chlordane (gamma)
(trans)","0.019","�g/l","U<sup>'</sup>","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "5103-74-2", "Chlordane (gamma)
(trans) [2C]","0.019","�g/I","U","0.014","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "53494-70-5", "Endrin ketone", "0.019", "�g/I", "U", "0.017", "MDL", "TARGET", "0.038", "RDL", "YES", "-99", "TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "53494-70-5", "Endrin ketone
[2C]","0.019","og/l","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP","SW846 8081B","RES","1715920-DUP1","ESAI","57-74-9","Chlordane","0.063","�g/l","U","0.049","MDL",,"TARGET",,,"0.063","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.063",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "57-74-9", "Chlordane
[2C]","0.063","

g/I","U","0.059","MDL",,"TARGET",,,"0.063","RDL","YES","-99","TF1-GT-119-
091117", "1040", "10", "0.063",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "58-89-9", "gamma-BHC
(Lindane)","0.019","

g/I","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "58-89-9", "gamma-BHC (Lindane)
```

[2C]","0.019","

g/I","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-ĞT-119-

```
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "60-57-
1","Dieldrin","0.019","

g/l","U","0.016","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "60-57-1", "Dieldrin
[2C]","0.019","�g/I","U","0.018","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-20-
8","Endrin","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-20-8", "Endrin
[2C]","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-43-
5","Methoxychlor","0.019","

g/I","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-43-5", "Methoxychlor
[2C]","0.019","�g/I","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-54-8", "4,4'-DDD
(p,p')","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-54-8", "4,4'-DDD (p,p')
[2C]","0.019","

g/I","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-55-9", "4,4'-DDE
(p,p')","0.019","  g/I","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "72-55-9", "4,4'-DDE (p,p')
[2C]","0.019","�g/I","U","0.017","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "7421-93-4", "Endrin
aldehyde","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "7421-93-4", "Endrin aldehyde
[2C]","0.019","�g/l","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99","TF1-GT-119-091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "76-44-
8","Heptachlor","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "76-44-8", "Heptachlor
[2C]","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "8001-35-
2","Toxaphene","0.481","�g/l","U","0.315","MDL",,"TARGET",,,"0.481","RDL","YES","-99","TF1-GT-119-
091117", "1040", "10", "0.481"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "8001-35-2", "Toxaphene
[2C]","0.481","�g/l","U","0.276","MDL",,"TARGET",,,"0.481","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.481",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene"
(IS)","0.020","

g/ml",,"-99","NA",,"ISTD","88",,"-99","NA","YES","10.0","TF1-GT-119-
091117","1040","10","-99",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene"
(IS) [2C]","0.020","�g/ml",,"-99","NA",,"ISTD","96",,"-99","NA","YES","10.0","TF1-GT-119-
091117", "1040", "10", "-99"
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "959-98-8", "Endosulfan
I","0.019","

g/I","U","0.016","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
```

```
091117","1040","10","0.019",
"TF1-GT-119-091117DUP", "SW846 8081B", "RES", "1715920-DUP1", "ESAI", "959-98-8", "Endosulfan I
[2C]","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99","TF1-GT-119-
091117","1040","10","0.019",
"TF1-GT-121-091117", "EPA 200/6000 methods", "RES", "SC39093-
01", "ESAI", "NA", "Preservation", "0", "N/A", "-99", "NA", "TARGET", ,, "-99", "NA", "YES", "-99", "1", "1", "1", "-99", "Field
Preserved; pH<2 confirmed"
"TF1-GT-121-091117", "EPA 245.1/7470A", "RES", "SC39093-01", "ESAI", "7439-97-
6","Mercury","0.00020","mg/I","U","0.00013","MDL",,"TARGET",,,"0.00020","RDL","YES","-99",,"20","20","0.0
0020",
"TF1-GT-121-091117", "EPA 300.0", "RES", "SC39093-01", "ESAI", "14797-55-8", "Nitrate as
N","0.100","mg/I","U","0.007","MDL",,"TARGET",,,"0.100","RDL","YES","-99",,"5","5","0.100",
"TF1-GT-121-091117", "EPA 300.0", "RES", "SC39093-01", "ESAI", "14808-79-8", "Sulfate as SO4", "8.13", "mg/l", "0.798", "MDL", "TARGET", ,, "1.00", "RDL", "YES", "-99", "5", "5", "1.00",
"TF1-GT-121-091117", "EPA 300.0", "RES", "SC39093-01", "ESAI", "16887-00-6", "Chloride", "15.6", "mg/l", "0.0994", "MDL", "TARGET", "1.00", "RDL", "YES", "-99", "5", "5", "0.100",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "1763-23-1", "Perfluoro-octanesulfonate", "2", "ng/l", "Ja", "2", "MDL", "TARGET", "6", "RDL", "YES", "-99", "-99", "..."
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "1763-23-1L", "13C8-PFOS", "33", "ng/l", ,"-99", "NA", ,"SUR", "70", ,"-99", "NA", "YES", "48", ,,, "-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "2058-94-8", "Perfluoroundecanoic
acid","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "2058-94-8L", "13C7-
PFUnDA","33","ng/I",,"-99","NA",,"SUR","67",,"-99","NA","YES","50",,,,
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "2706-90-3", "Perfluoropentanoic
Acid","51","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","2706-90-3L","13C5-
PFPeA","37","ng/l",,"-99","NA",,"SUR","74",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","307-24-4","Perfluorohexanoic
acid","48","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "307-24-4L", "13C5-
PFHxA", "36", "ng/l",,"-99", "NA",,"SUR", "73",,"-99", "NA", "YES", "50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "307-55-1", "Perfluorododecanoic acid", "0", "ng/l", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "99", "<"
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "307-55-1L", "13C2-
PFDoDA","30","ng/l",,"-99","NA",,"SUR","61",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","335-67-1","Perfluorooctanoic
acid","15","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","335-67-1L","13C8-
PFOA","34","ng/l",,"-99","NA",,"SUR","67",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "335-76-2", "Perfluorodecanoic
acid","0.9","ng/l","Ja","0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","335-76-2L","13C6-PFDA","35","ng/I",,"-99","NA",,"SUR","71",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "335-77-
3","Perfluorodecanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "355-46-
4","Perfluorohexanesulfonate","13","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","355-46-4L","13C3-
PFHxS", "34", "ng/l",, "-99", "NA",, "SUR", "72",, "-99", "NA", "YES", "47",,,, "-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-22-4", "Perfluorobutanoic
Acid","21","ng/I",,"3","MDL",,"TARGET",,,"10","RDL","YES","-99",,,,"-99"
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","375-22-4L","13C4-PFBA","34","ng/I",,"-99","NA",,"SUR","69",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-73-
5","Perfluorobutanesulfonate","9","ng/l",,"0.8","MDL",,"TARGET",,,"3","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-73-5L", "13C3-
```

```
PFBS","38","ng/l",,"-99","NA",,"SUR","81",,"-99","NA","YES","46",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-85-9", "Perfluoroheptanoic acid", "12", "ng/l", "0.5", "MDL", "TARGET", ", "2", "RDL", "YES", "-99", ", "-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-85-9L", "13C4-PFHpA", "32", "ng/I", "-99", "NA", "SUR", "64", "-99", "NA", "YES", "50", , , , "-99", "
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "375-92-
8","Perfluoroheptanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,"6","RDL","YES","-99",,,"-99","<"
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","375-95-1","Perfluorononanoic acid","0","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","375-95-1L","13C9-PFNA","34","ng/l",,"-99","NA","SUR","68",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "376-06-7", "Perfluorotetradecanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "99", "<"
"TF1-GT-121-091117","EPA 537 Modified","RES","SC39093-01","ESAI","376-06-7L","13C2-PFTeDA","29","ng/l",,"-99","NA",,"SUR","59",,"-99","NA","YES","50",,,,"-99",
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "72629-94-8", "Perfluorotridecanoic
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "754-91-
6","PFOSA","0","ng/I",,"3","MDL",,"TARGET",,,"9","RDL","YES","-99",,,
"TF1-GT-121-091117", "EPA 537 Modified", "RES", "SC39093-01", "ESAI", "754-91-6L", "13C8-
PFOSA", "5", "ng/I", ,"-99", "NA", ,"SUR", "10", ,"-99", "NA", "YES", "50", , , , "-99"
"TF1-GT-121-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-01", "ESAI", "74-82-
"TF1-GT-121-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-01", "ESAI", "74-84-0", "Ethane", "5.00", "�g/l", "U", "3.48", "MDL", "TARGET", ", "5.00", "RDL", "YES", "-99", "10", "10", "5.00",
"TF1-GT-121-091117", "SM18-22 5210B", "RES", "SC39093-01", "ESAI", "NA", "Biochemical Oxygen Demand (5-day)", "6.00", "mg/l", "BOD4", "2.74", "MDL", "TARGET", "3.00", "RDL", "YES", "-99", "300", "300", "2.97", "TF1-GT-121-091117", "SM2320B (97, 11)", "RES", "SC39093-01", "ESAI", "NA", "Total Alkalinity", "61.2", "mg/l CaCO3", "0.524", "MDL", "TARGET", "2.00", "RDL", "YES", "-99", "100", "50", "1.50", "TF1-GT-121-091117", "SM5310B (00, 11)", "RES", "SC39093-01", "ESAI", "NA", "Total Organic Carbon", "1.99", "mg/l", "0.238", "MDL", "TARGET", "1.00", "RDL", "YES", "-99", "40", "40", "0.500", "TF1-GT-121-091117", "SW846 6010C", "RES", "SC39093-01", "ESAI", "7429-90-5", "40", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90", "90"
5","Aluminum","0.0500","mg/I","U","0.0206","MDL",,"TARGET",,,,"0.0500","RDL","YES","-99",,"50","50","0.0500",
"TF1-GT-121-091117", "SW846 6010C", "RES", "SC39093-01", "ESAI", "7439-89-
6","Iron","23.7","mg/l","R06","0.0089","MDL",,"TARGET",,,"0.0800","RDL","YES","-99",,"50","50","0.0300",
"TF1-GT-121-091117","SW846 6010C","RES","SC39093-01","ESAI","7439-95-
4","Magnesium","5.19","mg/l",,"0.0088","MDL",,"TARGET",,,"0.0200","RDL","YES","-99",,"50","50","0.0100",
"TF1-GT-121-091117", "SW846 6010C", "RES", "SC39093-01", "ESAI", "7440-09-7", "Potassium", "1.15", "mg/I", "0.120", "MDL", "TARGET", ", "1.00", "RDL", "YES", "-99", "50", "50", "0.250",
"TF1-GT-121-091117","SW846 6010C","RES","SC39093-01","ESAI","7440-23-5","Sodium","9.05","mg/l",,"0.0785","MDL",,"TARGET",,,"0.500","RDL","YES","-99",,"50","50","0.250",
"TF1-GT-121-091117", "SW846 6010C", "RES", "SC39093-01", "ESAI", "7440-70-2", "Calcium", "14.2", "mg/I", "0.0142", "MDL", "TARGET", , , "0.200", "RDL", "YES", "-99", , "50", "50", "0.0500",
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7439-92-
1","Lead","0","mg/l",,"0.00011","MDL",,"TARGET",,,"0.0020","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7439-96-
5","Manganese","2.32","mg/l",,"0.00090","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117","SW-846 6020A","RES","SC39093-01","ESAI","7439-98-
7","Molybdenum","0","mg/l",,"0.00025","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117","SW-846 6020A","RES","SC39093-01","ESAI","7440-02-
0","Nickel","0.0053","mg/l",,"0.0010","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117","SW-846 6020A","RES","SC39093-01","ESAI","7440-22-4","Silver","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",",,"-99","<"
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-28-
0","Thallium","0","mg/l",,"0.00012","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-36-
```

```
0","Antimony","0","mg/l",,"0.00045","MDL",,"TARGET",,,"0.0020","RDL","YES","-99",,,,"-99","<"
 "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-38-
 2","Arsenic","0.0191","mg/l",,"0.00072","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-39-3", "Barium", "0.0055", "mg/l", "0.00072", "MDL", "TARGET", "0.0040", "RDL", "YES", "-99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "9
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-41-7", "Beryllium", "0", "mg/l", "0.000071", "MDL", "TARGET", "0.0010", "RDL", "YES", "-99", ", " "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-43-
 9","Cadmium","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
 "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-47-
 3","Chromium","0","mg/I",,"0.00087","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
"TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-48-4", "Cobalt", "0.0087", "mg/l", "0.00016", "MDL", "TARGET", "0.00010", "RDL", "YES", "-99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "
 "TF1-GT-121-091117","SW-846 6020A","RES","SC39093-01","ESAI","7440-50-8","Copper","0","mg/I",,"0.00054","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
 "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-62-
 2","Vanadium","0","mg/l",,"0.00021","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
 "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7440-66-
 6", "Zinc", "0", "mg/I", ,"0.0039", "MDL", ,"TARGET", ,,, "0.0300", "RDL", "YES", "-99", ,,, "-99", "< "10.00300", "RDL", "YES", "-99", ", ", "-99", ", ", " | 10.00300", "RDL", "YES", "-99", ", ", " | 10.0030", "RDL", "YES", "-99", ", ", " | 10.0030", "RDL", "YES", "-99", ", ", " | 10.0030", "RDL", "YES", "-99", ", " | 10.0030", "RDL", " | 10.0030", "RDL", "YES", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030", " | 10.0030"
 "TF1-GT-121-091117", "SW-846 6020A", "RES", "SC39093-01", "ESAI", "7782-49-
 2","Selenium","0","mg/I",,"0.00050","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
 "TF1-GT-121-091117","SW-846 8015B","RES","SC39093-01","ESAI","108-90-7","Chlorobenzene","0.011","mg/l",,"-99","NA",,"SUR","91",,"-99","NA","YES","0.012",,,,"-99",
"TF1-GT-121-091117", "SW-846 8015B", "RES", "SC39093-01", "ESAI", "84-15-1", "Orthoterphenyl", "0.012", "mg/l", "-99", "NA", "SUR", "95", "-99", "NA", "YES", "0.012", ", "-99",
"TF1-GT-121-091117", "SW-846 8015B", "RES", "SC39093-01", "ESAI", "PHCC8C44", "C8-C44", "0.40", "mg/I", "0.050", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "..." -99",
"TF1-GT-121-091117", "SW-846 8015B", "RES", "SC39093-01", "ESAI", "PHCE", "Total TPH", "0.40", "mg/l", "0.050", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99",
"TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "1024-57-3", "Heptachlor epoxide", "0.019", "�g/l", "U", "0.015", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "1031-07-8", "Endosulfan
sulfate","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.038","RDL","YES","-99",,"1040","10","0.019",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","10386-84-2","4,4-DB-Octafluorobiphenyl
(Sr)","0.156","�g/l",,"-99","NA",,"SUR","81",,"-99","NA","YES","0.192",,"1040","10","-99",
(Sr)","0.156","♠g/l","-99","NA",,"SUR","81",,"-99","NA","YES","0.192",,"1040","10","-99",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","15972-60-
8","Alachlor","0.019","♠g/l","U","0.018","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1040","10","0.019",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","2051-24-3","Decachlorobiphenyl
(Sr)","0.159","♠g/l","-99","NA",,"SUR","83",,"-99","NA","YES","0.192",,"1040","10","-99",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","309-00-
2","Aldrin","0.019","♠g/l","U","0.015","MDL",,"TARGET",,"0.019","RDL","YES","-99",,"1040","10","0.019",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","319-84-6","alpha-
"TF1-GT-121-091117", "$W846 8081B", "RES", "SC39093-01", "ESAI", "319-86-8", "delta-BHC", "0.019", "$g/I", "U", "0.015", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "33213-65-9", "Endosulfan II", "0.019", "$g/I", "U", "0.019", "MDL", "TARGET", "0.038", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "50-29-3", "4,4'-DDT
 (p,p')","0.029","

g/I","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99",,"1040","10","0.029",
"TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "5103-71-9", "alpha-Chlordane", "0.019", "�g/l", "U", "0.015", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "5103-74-2", "Chlordane (gamma)
 (trans)","0.019","�g/l","U","0.015","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1040","10","0.019",
 "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "53494-70-5", "Endrin
ketone","0.019","

g/I","U","0.017","MDL",,"TARGET",,,"0.038","RDL","YES","-99",,"1040","10","0.019",
```

```
"TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "57-74-
   9","Chlordane","0.063","�g/l","U","0.049","MDL",,"TARGET",,,"0.063","RDL","YES","-99",,"1040","10","0.063
 "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "58-89-9", "gamma-BHC (Lindane)", "0.019", "�g/l", "U", "0.017", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "60-57-1", "Dieldrin", "0.019", "�g/l", "U", "0.016", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "72-20-8", "Endrin", "0.019", "�g/l", "U", "0.018", "MDL", "TARGET", "0.038", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "72-43-
  5","Methoxychlor","0.019","

g/I","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99",,"1040","10","0.
   019",
   "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "72-54-8", "4,4'-DDD
 (p,p')","0.019","�g/l","U","0.018","MDL",,"TARGET",,,"0.038","RDL","YES","-99",,"1040","10","0.019",
"TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","72-55-9","4,4'-DDE
 (p,p')","0.019","

(p,p')","0.018","

(p,p')","0.0
  8","Heptachlor","0.019","�g/l","U","0.019","MDL",,"TARGET",,,"0.019","RDL","YES","-99",,"1040","10","0.01
   "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "8001-35-
   2","Toxaphene","0.481"," •g/l","U","0.315","MDL",,"TARGET",,,"0.481","RDL","YES","-99",,"1040","10","0.48
  "TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "877-09-8", "2,4,5,6-TC-M-Xylene
 (IS)","0.020","  g/ml",,"-99","NA",,"ISTD","85",,"-99","NA","YES","10.0",,"1040","10","-99", "TF1-GT-121-091117","SW846 8081B","RES","SC39093-01","ESAI","959-98-8","Endosulfan
"TF1-GT-121-091117", "SW846 8081B", "RES", "SC39093-01", "ESAI", "959-98-8", "Endosulfan I", "0.019", $\phig/l", "U", "0.016", "MDL", "TARGET", "0.019", "RDL", "YES", "-99", "1040", "10", "0.019", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "100-41-4", "Ethylbenzene", "2.4", $\phig/g/l", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "100-42-5", "Styrene", "1.0", $\phig/g/l", "U", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "10061-01-5", "cis-1,3-Dichloropropene", "0.5", $\phig/g/l", "U", "0.4", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "106-46-7", "1,4-Dichlorobenzene", "0.5", $\phig/g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "106-46-7", "1,4-Dichlorobenzene", "0.5", $\phig/g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "106-93-4", "1,2-Dibromoethane (EDB), "0.5", $\phig/g/l", "U", "0.2", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "107-06-2", "1,2-
 "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "107-06-2", "1,2-Dichloroethane", "1.0", "$\delta g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "108-10-1", "4-Methyl-2-pentanone (MIBK)", "2.0", "$\delta g/l", "U", "0.5", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "5", "2.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "108-87-2", "MASH | "108-87-2", "MASH | "TARGET", "108-87-2", "MASH | "TARGET", "108-87-2", "MASH | "TARGET", "108-87-2", "TARGET", "108-87-2", "TARGET", "108-87-2", "TARGET", "108-87-2", "TARGET", "108-87-2", "TARGET", "TARGET
 2","Methylcyclohexane","1.0","�g/l","J","0.7","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","108-88-
3","Toluene","2.5","�g/l",,"0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","108-90-
 7","Chlorobenzene","0.5","�g/l","U","0.2","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","110-82-
7","Cyclohexane","3.9","�g/l","J","0.8","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","120-82-1","1,2,4-
Trichlorobenzene","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","124-48-
  "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "127-18-
```

```
1","Acetone","2.0","�g/I","U","0.8","MDL",,"TARGET",,,"10.0","RDL","YES","-99",,"5","5","2.0",
1","Acetone","2.0","�g/l","U","0.8","MDL",,"TARGET",,,"10.0","RDL","YES","-99",,"5","5","2.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","67-66-
3","Chloroform","1.0","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","71-43-
2","Benzene","1.3","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","71-55-6","1,1,1-
Trichloroethane","1.0","�g/l","U","0.5","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","74-83-
9","Bromomethane","2.0","�g/l","U","0.9","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","5","2.0",
"TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","74-87-
 "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "74-87-
4","Bromodichloromethane","0.5","�g/I","U","0.4","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5", "TF1-GT-121-091117","SW846 8260C","RES","SC39093-01","ESAI","75-34-3","1,1-
```

```
"TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "75-35-4", "1,1-Dichloroethene", "1.0", "\phightarrowg/l", "U", "0.7", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "75-69-4", "Trichlorofluoromethane (Freon 11)", "1.0", "\phightarrowg/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "75-71-8", "Dichlorodifluoromethane (Freon 12)", "2.0", "\phightarrowg/l", "U", "0.6", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "76-13-1", "1,1,2-Trichlorotrifluoroethane (Freon 113)", "1.0", "\phightarrowg/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "78-87-5", "1,2-Dichloropropane", "1.0", "\phightarrowg/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "78-93-3", "2-Butanone (MEK)", "2.0", "\phightarrowg/l", "U", "1.1", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "79-00-5", "1,1,2-Trichloroethane", "0.5", "\phightarrowg/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "79-01-5", "1,1,2-Trichloroethane", "0.5", "\phightarrowg/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "79-01-5", "1,1,2-Trichloroethane", "0.5", "\phightarrowg/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "5", "5", "0.5", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "79-01-6", "Trichloroethene", "1.0", "\phightarrowg/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99"
"TF1-GT-121-091117", "$W846 8260C", "RES", "SC39093-01", "ESAI", "79-01-6", "Trichloroethene", "1.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "79-20-9", "Methyl acetate", "2.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "79-20-9", "Methyl acetate", "2.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "79-34-5", "1,1,2,2-Tetrachloroethane", "0.5", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "79-34-5", "1,1,2,2-Tetrachloroethane", "0.5", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "79-34-5", "1,1,2,2-Tetrachloroethane", "0.5", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "87-61-6", "1,2,3-Trichlorobenzene", "1.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "87-61-6", "1,2,3-Trichlorobenzene", "1.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "95-47-6", "0-Xylene", "1.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "95-47-6", "0-Xylene", "1.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "95-50-1", "1,2-Dichlorobenzene", "0.5", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "96-12-8", "1,2-Dichlorobenzene", "0.5", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "96-12-8", "1,2-Dichlorobenzene", "2.0", "$\phigoldownoise, "RES", "SC39093-01", "ESAI", "98-82-8", "Isopropylbenzene", "2.1", "$\phigoldownoise, "SC39093-01", "ESAI", "98-82-8", "Isopropylbenzene", "2.1", "$\phigoldownoise, "SC39093-01", "ESAI", "100", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GT-121-091117", "SW846 8260C", "RES", "SC39093-01", "ESAI", "1146-65-2", "Naphthalened8", "40.0", "$\phigoldownoise, "$\phigoldownois
      "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "129-00-
    "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "1517-22-2", "Phenanthrened10", "40.0", "40.0", "40.0", "9g/ml", "-99", "NA", "ISTD", "113", "-99", "NA", "YES", "40.0", "1060", "1", "-99", "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "1520-96-3", "Perylened12", "40.0", "40.0", "40.0", "1060", "1", "-99", "NA", "YES", "40.0", "1060", "1", "-99", "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "1718-51-0", "Terphenyldl4", "31.6", *40.0", "59", "NA", "SUR", "67", "-99", "NA", "YES", "47.2", "1060", "1", "-99", "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "1719-03-5", "Chrysened12", "40.0", "40.0", "40.0", "40.0", "1060", "1", "-99", "NA", "YES", "40.0", "1060", "1", "-99", "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "191-24-2", "Benzo (g,h,i) perylene", "0.943", *40.0", "1060", "1", "0.943", "50.943", *40.0", "1060", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "10.943", "1060", "
      0","Fluoranthene","0.943","�g/l","U","0.602","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.94
       "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "207-08-9", "Benzo (k)
```

```
fluoranthene","0.943","�g/l","U","0.453","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.943", "TF1-GT-121-091117","SW846 8270D","RES","SC39093-01","ESAI","208-96-8","Acenaphthylene","0.943","�g/l","U","0.644","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.
943",
"TF1-GT-121-091117","SW846 8270D","RES","SC39093-01","ESAI","218-01-9","Chrysene","0.943","�g/l","U","0.502","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.943",
"TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "321-60-8", "2-
pyrene","0.943"," g/l","U","0.530","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.943",
"TF1-GT-121-091117","SW846 8270D","RES","SC39093-01","ESAI","53-70-3","Dibenzo (a,h)
anthracene","0.943"," g/l","U","0.425","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.943",
"TF1-GT-121-091117","SW846 8270D","RES","SC39093-01","ESAI","56-55-3","Benzo (a)
anthracene","0.943", g/l","U","0.506","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.943",
"TF1-GT-121-091117","SW846 8270D","RES","SC39093-01","ESAI","83-32-
9","Acenaphthene","0.943","

g/I","U","0.652","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.9
43",
"TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "85-01-
8","Phenanthrene","0.943","�g/I","U","0.553","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.94
"TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "86-73-7", "Fluorene", "0.943", "�g/I", "U", "0.577", "MDL", "TARGET", "4.72", "RDL", "YES", "-99", "1060", "1", "0.943", "TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "90-12-0", "1-
Methylnaphthalene","0.943","♦g/l","U","0.692","MDL",,"TARGET",,,"4.72","RDL","YES","-99",,"1060","1","0.9
43",
"TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "91-20-
"TF1-GT-121-091117", "SW846 8270D", "RES", "SC39093-01", "ESAI", "91-57-6", "2-
"TF1-GT-121-091117DUP", "EPA 245.1/7470A", "RES", "1716279-DUP1", "ESAI", "7439-97-
6","Mercury","0.00020","mg/I","U","0.00013","MDL",,"TARGET",,,"0.00020","RDL","YES","-99","TF1-GT-121-
091117","20","20","0.00020",
"TF1-GT-121-091117MS", "EPA 245.1/7470A", "RES", "1716279-MS1", "ESAI", "7439-97-
6","Mercury","0.00485","mg/I",,"0.00013","MDL",,"SPIKE","97",,"0.00020","RDL","YES","0.00500","TF1-GT-
121-091117","20","20","0.00020",
"TF1-GT-121-091117MSD", "EPA 245.1/7470A", "RES", "1716279-MSD1", "ESAI", "7439-97-
6","Mercury","0.00497","mg/l",,"0.00013","MDL",,"SPIKE","99","3","0.00020","RDL","YES","0.00500","TF1-
GT-121-091117", "20", "20", "0.00020",
"TF1-GT-121-091117PS", "EPA 245.1/7470A", "RES", "1716279-PS1", "ESAI", "7439-97-
6","Mercury","0.00515","mg/l",,"0.00013","MDL",,"SPIKE","103",,"0.00020","RDL","YES","0.00500","TF1-GT-
121-091117","20","20","0.00020",
"TF1-GZ-103-091117", "EPA 200/6000 methods", "RES", "SC39093-
03", "ESAI", "NA", "Preservation", "0", "N/A", ,"-99", "NA", ,"TARGET", ,, "-99", "NA", "YES", "-99", "1", "1", "1", "-99", "Field
Preserved; pH<2 confirmed"
"TF1-GZ-103-091117", "EPA 245.1/7470A", "RES", "SC39093-03", "ESAI", "7439-97-
6","Mercury","0.00020","mg/I","U","0.00013","MDL",,"TARGET",,,"0.00020","RDL","YES","-99",,"20","20","0.0
0020".
"TF1-GZ-103-091117", "EPA 300.0", "RES", "SC39093-03", "ESAI", "14797-55-8", "Nitrate as
N","0.100","mg/I","U","0.007","MDL",,"TARGET",,,,"0.100","RDL","YES","-99",,"5","5","0.100",
"TF1-GZ-103-091117", "EPA 300.0", "RES", "SC39093-03", "ESAI", "14808-79-8", "Sulfate as
SO4","1.00","mg/l","U","0.798","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"5","5","1.00",
"TF1-GZ-103-091117", "EPA 300.0", "RES", "SC39093-03", "ESAI", "16887-00-
6","Chloride","11.2","mg/l",,"0.0994","MDL",,"TARGET",,,"1.00","RDL","YES","-99",,"5","5","0.100",
```

```
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "1763-23-1", "Perfluoro-
octanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "1763-23-1L", "13C8-PFOS", "35", "ng/l", "-99", "NA", "SUR", "74", "-99", "NA", "YES", "48", , , , "-99", "TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "2058-94-8", "Perfluoroundecanoic acid", "0", "ng/l", "1", "MDL", "TARGET", "3", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "2706-90-3", "Perfluoropentanoic Acid", "11", "ng/l", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", "-99", "..."
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "2706-90-3L", "13C5-
PFPeA","41","ng/I",,"-99","NA",,"SUR","83",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "307-24-4", "Perfluorohexanoic acid", "8", "ng/l", , "0.6", "MDL", , "TARGET", , , "2", "RDL", "YES", "-99", , , , "-99", "TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "307-24-4L", "13C5-
PFHxA","41","ng/l",,"-99","NA",,"SUR","81",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "307-55-1", "Perfluorododecanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","307-55-1L","13C2-PFDoDA","27","ng/l",,"-99","NA",,"SUR","54",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "335-67-1", "Perfluorooctanoic
acid","1","ng/l","Ja","0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "335-67-1L", "13C8-
PFOA", "38", "ng/l",,"-99", "NA",,"SUR", "76",,"-99", "NA","YES", "50",,,,"-99", "TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "335-76-2", "Perfluorodecanoic"
acid","0","ng/l",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","335-76-2L","13C6-PFDA","36","ng/l",,"-99","NA",,"SUR","72",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "335-77-3", "Perfluorodecanesulfonate", "0", "ng/l", "2", "MDL", "TARGET", "6", "RDL", "YES", "-99", ", "99", "<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","355-46-4","Perfluorohexanesulfonate","0","ng/l",,"1","MDL",,"TARGET",,,"3","RDL","YES","-99",,
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-22-4", "Perfluorobutanoic
Acid","0","ng/l",,"3","MDL",,"TARGET",,,"10","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","375-22-4L","13C4-PFBA","37","ng/l",,"-99","NA",,"SUR","74",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-73-5", "Perfluorobutanesulfonate", "1", "ng/l", "Ja", "0.8", "MDL", "TARGET", "3", "RDL", "YES", "-99", "-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-73-5L", "13C3-PFBS", "45", "ng/l",,"-99", "NA",, "SUR", "96",,"-99", "NA", "YES", "47",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-85-9", "Perfluoroheptanoic acid", "1", "ng/l", "Ja", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", "-99", "
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-85-9L", "13C4-
PFHpA","40","ng/l",,"-99","NA",,"SUR","80",,"-99","NA","YES","50",,,,"-99"
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "375-92-
8","Perfluoroheptanesulfonate","0","ng/l",,"2","MDL",,"TARGET",,,"6","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","375-95-1","Perfluorononanoic
acid","0","ng/l",,"0.6","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","375-95-1L","13C9-PFNA","35","ng/I",,"-99","NA",,"SUR","70",,"-99","NA","YES","50",,,,"-99",
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "376-06-7", "Perfluorotetradecanoic acid", "0", "ng/I", "0.5", "MDL", "TARGET", "2", "RDL", "YES", "-99", ", "-99", "<"
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "376-06-7L", "13C2-
PFTeDA","29","ng/I",,"-99","NA",,"SUR","57",,"-99","NA","YES","50",,,,
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "72629-94-8", "Perfluorotridecanoic
```

```
acid","0","ng/I",,"0.5","MDL",,"TARGET",,,"2","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","EPA 537 Modified","RES","SC39093-03","ESAI","754-91-6","PFOSA","0","ng/I",,"3","MDL",,"TARGET",,,"9","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117", "EPA 537 Modified", "RES", "SC39093-03", "ESAI", "754-91-6L", "13C8-
PFOSA","4","ng/l",,"-99","NA",,"SUR","8",,"-99","NA","YES","50",,,,"-99"
"TF1-GZ-103-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-03", "ESAI", "74-82-
8","Methane","417","

g/I",,"2.16","MDL",,"TARGET",,,"2.20","RDL","YES","-99",,"10","10","2.20",
"TF1-GZ-103-091117", "Mod EPA 3C/SOP RSK-175", "RES", "SC39093-03", "ESAI", "74-84-0", "Ethane", "5.00", "�g/l", "U", "3.48", "MDL", "TARGET", "5.00", "RDL", "YES", "-99", "10", "10", "5.00", "TF1-GZ-103-091117", "SM18-22 5210B", "RES", "SC39093-03", "ESAI", "NA", "Biochemical Oxygen Demand (5-
day)","6.00","mg/l","BOD4","2.74","MDL",,"TARGET",,,"3.00","RDL","YES","-99",,"300","300","2.97",
"TF1-GZ-103-091117", "SM2320B (97, 11)", "RES", "SC39093-03", "ESAI", "NA", "Total Alkalinity", "105", "mg/I CaCO3", "0.524", "MDL", "TARGET", ,, "2.00", "RDL", "YES", "-99", "100", "50", "1.50",
"TF1-GZ-103-091117", "SM5310B (00, 11)", "RES", "SC39093-03", "ESAI", "NA", "Total Organic Carbon", "4.02", "mg/l", "0.238", "MDL", "TARGET", , "1.00", "RDL", "YES", "-99", "40", "40", "0.500",
"TF1-GZ-103-091117", "SW846 6010C", "RES", "SC39093-03", "ESAI", "7429-90-
5","Aluminum","0.0500","mg/I","U","0.0206","MDL",,"TARGET",,,"0.0500","RDL","YES","-99",,"50","50","0.05
00"
"TF1-GZ-103-091117","SW846 6010C","RES","SC39093-03","ESAI","7439-89-6","Iron","45.9","mg/I","R06","0.0089","MDL",,"TARGET",,,"0.0800","RDL","YES","-99",,"50","50","0.0300",
"TF1-GZ-103-091117", "SW846 6010C", "RES", "SC39093-03", "ESAI", "7439-95-4", "Magnesium", "3.66", "mg/l", "0.0088", "MDL", "TARGET", "0.0200", "RDL", "YES", "-99", "50", "50", "0.0100",
"TF1-GZ-103-091117", "SW846 6010C", "RES", "SC39093-03", "ESAI", "7440-09-7", "Potassium", "3.40", "mg/I", "0.120", "MDL", "TARGET", "1.00", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 6010C", "RES", "SC39093-03", "ESAI", "7440-23-5", "Sodium", "7.14", "mg/I", "0.0785", "MDL", "TARGET", "0.500", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "BUN/ALT (1.00", "RES", "SC39093-03", "ESAI", "7440-23-5", "Sodium", "7.14", "mg/I", "0.0785", "MDL", "TARGET", "0.500", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "BUN/ALT (1.00", "RDL", "TARGET", "0.500", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 (1.00", "RDL", "TARGET", "0.500", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 (1.00", "RDL", "TARGET", "1.00", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 (1.00", "RDL", "TARGET", "1.00", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 (1.00", "RDL", "TARGET", "1.00", "RDL", "YES", "-99", "50", "50", "0.250", "TF1-GZ-103-091117", "SW846 (1.00", "RDL", "TARGET", "1.00", "RDL", "YES", "-99", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "50", "5
"TF1-GZ-103-091117", "SW846 6010C", "RES", "SC39093-03", "ESAI", "7440-70-2", "Calcium", "29.0", "mg/I", "0.0142", "MDL", "TARGET", "0.200", "RDL", "YES", "-99", "50", "50", "0.0500",
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7439-92-1", "Lead", "0", "mg/l", "0.00011", "MDL", "TARGET", "0.0020", "RDL", "YES", "-99", ", "<"
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7439-96-5", "Manganese", "2.10", "mg/l", "0.00090", "MDL", "TARGET", "0.00040", "RDL", "YES", "-99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", "99", 
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7439-98-7","Molybdenum","0","mg/l",,"0.00025","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GŽ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-02-
0","Nickel","0","mg/l",,"0.0010","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7440-22-
4","Silver","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7440-28-
0","Thallium","0","mg/l",,"0.00012","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7440-36-
0","Antimony","0","mg/l",,"0.00045","MDL",,"TARGET",,,"0.0020","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7440-38-2","Arsenic","0.0241","mg/l",,"0.00072","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-39-
3","Barium","0.0115",<sup>"</sup>mg/l",,"0.00072","MDL<sup>"</sup>,,"TARGET",,,"0.0040<sup>"</sup>,"RDL","YES","-99",,,,"-99",
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-41-7", "Beryllium", "0", "mg/l", , "0.000071", "MDL", , "TARGET", , , "0.0010", "RDL", "YES", "-99", , , , "<"
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-43-
9","Cadmium","0","mg/l",,"0.00015","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",","-99","<"
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-47-
3","Chromium","0","mg/I",,"0.00087","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-48-4", "Cobalt", "0", "mg/l",, "0.00016", "MDL", "TARGET",,, "0.00010", "RDL", "YES", "-99", ", " < "
"TF1-GZ-103-091117","SW-846 6020A","RES","SC39093-03","ESAI","7440-50-8","Copper","0.0053","mg/l",,"0.00054","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99",
"TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-62-
```

```
2","Vanadium","0","mg/l",,"0.00021","MDL",,"TARGET",,,"0.0010","RDL","YES","-99",,,,"-99","<"
  "TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7440-66-
  6","Zinc","0","mg/I",,"0.0039","MDL",,"TARGET",,,"0.0300","RDL","YES","-99",",-"-99","<"
  "TF1-GZ-103-091117", "SW-846 6020A", "RES", "SC39093-03", "ESAI", "7782-49-
  2","Selenium","0","mg/l",,"0.00050","MDL",,"TARGET",,,"0.0040","RDL","YES","-99",,,,"-99","<"
  "TF1-GZ-103-091117", "SW-846 8015B", "RES", "SC39093-03", "ESAI", "108-90-
  7", "Chlorobenzene", "0.0091", "mg/l",, "-99", "NA",, "SUR", "75",, "-99", "NA", "YES", "0.012",,,, "-99",
 "TF1-GZ-103-091117", "SW-846 8015B", "RES", "SC39093-03", "ESAI", "84-15-1", "Orthoterphenyl", "0.011", "mg/l", ,"-99", "NA", "SUR", "90", "-99", "NA", "YES", "0.012", ,,,"-99", "TF1-GZ-103-091117", "SW-846 8015B", "RES", "SC39093-03", "ESAI", "PHCC8C44", "C8-C44", "0.37", "mg/l", "0.051", "MDL", "TARGET", ,"0.20", "RDL", "YES", "-99", ,,,"-99", "TF1-GZ-103-091117", "D.051", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99", "TF1-GZ-103-091117", "D.051", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", "-99", "D.051", "D
 "TF1-GZ-103-091117", "SW-846 8015B", "RES", "SC39093-03", "ESAI", "PHCE", "Tota TPH", "0.37", "mg/l", "0.051", "MDL", "TARGET", "0.20", "RDL", "YES", "-99", ", "-99"
 "TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "1024-57-3", "Heptachlor epoxide", "0.020", "�g/I", "U", "0.015", "MDL", "TARGET",,, "0.020", "RDL", "YES", "-99",, "1020", "10", "0.020", "TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "1031-07-8", "Endosulfan
"TF1-GZ-103-091117", "$W846 8081B", "RE$", "SC39093-03", "ESAI", "1031-07-8", "Endosulfan sulfate", "0.020", $\phigs\text{g}/\text{l}", "U", "0.019", "MDL", "TARGET", "0.039", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "SC39093-03", "ESAI", "10386-84-2", "4,4-DB-Octafluorobiphenyl ($r\)", "0.172", $\phigs\text{g}/\text{l}", "SUR", "87", "-99", "NA", "YE$", "0.196", "1020", "10", "-99", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "15972-60-8", "Alachlor", "0.020", $\phigs\text{g}/\text{l}", "U", "0.019", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "2051-24-3", "Decachlorobiphenyl ($r\)", "0.170", $\phigs\text{g}/\text{l}", "99", "NA", "SUR", "87", "-99", "NA", "YE$", "0.196", "1020", "10", "-99", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "309-00-2", "Aldrin", "0.020", $\phigs\text{g}/\text{l}", "U", "0.015", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "319-84-6", "alpha-BHC", "0.020", $\phigs\text{g}/\text{l}", "U", "0.011", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "319-85-7", "beta-BHC", "0.020", $\phigs\text{g}/\text{l}", "U", "0.014", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "319-86-8", "delta-BHC", "0.020", $\phigs\text{g}/\text{l}", "U", "0.015", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TF1-GZ-103-091117", "$W846 8081B", "RE$", "$C39093-03", "ESAI", "319-86-8", "delta-BHC", "0.020", "$\phigs\text{g}/\text{l}", "U", "0.015", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TP1-GZ-103-091117", "0.015", "MDL", "TARGET", "0.020", "RDL", "YE$", "-99", "1020", "10", "0.020", "TP1-GZ-103-091117", "0.015", "MDL", "
 BHC","0.020","�g/l","U","0.015","MDL",,"TARGET",,,"0.020","RDL","YES","-99",,"1020","10","0.020",
"TF1-GZ-103-091117","SW846 8081B","RES","SC39093-03","ESAI","33213-65-9","Endosulfan
II","0.020","�g/l","U","0.020","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1020","10","0.020",
"TF1-GZ-103-091117","SW846 8081B","RES","SC39093-03","ESAI","50-29-3","4,4'-DDT
  (p,p')","0.029","�g/I","U","0.017","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1020","10","0.029",
 "TF1-GZ-103-091117", "SW846 8081B", "RÉS", "SC39093-03", "ESAI", "53494-70-5", "Endrin
  ketone","0.020","

g/I","U","0.017","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1020","10","0.020",
  "TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "57-74-
  9","Chlordane","0.064","

g/I","U","0.050","MDL",,"TARGET",,,"0.064","RDL","YES","-99",,"1020","10","0.064"
  "TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "58-89-9", "gamma-BHC
 5","Methoxychlor","0.020","

g/I","U","0.018","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1020","10","0.
  020",
  "TF1-GZ-103-091117","SW846 8081B","RES","SC39093-03","ESAI","72-54-8","4,4'-DDD
 (p,p')","0.020","�g/l","U","0.018","MDL",,"TARGET",,,"0.039","RDL","YES","-99",,"1020","10","0.020", "TF1-GZ-103-091117","SW846 8081B","RES","SC39093-03","ESAI","72-55-9","4,4'-DDE
 (p,p')","0.020","�g/l","U","0.017","MDL",,"TARGET",,,"0.020","RDL","YES","-99",,"1020","10","0.020",
```

```
"TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "7421-93-4", "Endrin
 "TF1-GZ-103-091117", "SW846 8081B", "RES", "SC39093-03", "ESAI", "8001-35-
  2","Toxaphene","0.490","�g/I","U","0.322","MDL",,"TARGET",,,"0.490","RDL","YES","-99",,"1020","10","0.49
 "TF1-GZ-103-091117","SW846 8081B","RES","SC39093-03","ESAI","877-09-8","2,4,5,6-TC-M-Xylene (IS)","0.020","�g/ml",,"-99","NA",,"ISTD","55",,"-99","NA",,"YES","10.0",,"1020","10","-99",
   TF1-GZ-103-091117", "SW846 8081B", "RÉS", "SC39093-03", "ESAI", "959-98-8", "Endosulfan"
 I","0.020","�g/I","U","0.016","MDL",,"TARGET",,,"0.020","RDL","YES","-99",,"1020","10","0.020",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","100-41-
4","Ethylbenzene","3.2","�g/I",,"0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","100-42-
3","Toluene","3.8","

9g/l",,"0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","108-90-
7","Chlorobenzene","0.5","

9g/l","U","0.2","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
7","Chlorobenzene","0.5","$\text{q}\text{g}\text{j}","U","0.2","MDL","TARGET","1.0","RDL","YES","-99","5","5","0.5",
"TF1-GZ-103-091117","$\text{w}\text{q}\text{j}","U","0.8","MDL","TARGET","5.0","RDL","YES","-99","5","5","2.0",
"TF1-GZ-103-091117","$\text{w}\text{q}\text{j}","U,"0.8","MDL","TARGET","5.0","RDL","YES","-99","5","5","5","2.0",
"TF1-GZ-103-091117","$\text{w}\text{q}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}\text{j}
 "TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "2037-26-5", "Toluened8", "49.5", " g/l", "-99", "NA", "SUR", "99", "-99", "NA", "YES", "50.0", "5", "5", "-99",
  "TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "3114-55-4", "Chlorobenzene-
```

```
d5","50.0","�g/l",,"-99","NA",,"ISTD","106",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","3855-82-1","1,4-Dichlorobenzene-
d4","50.0","�g/l",,"-99","NA",,"ISTD","103",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","460-00-4","4-
Bromofluorobenzene","49.0","�g/l",,"-99","NA",,"SUR","98",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","462-06-
6","Fluorobenzene","50.0","�g/l",,"-99","NA",,"ISTD","107",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","541-73-1","1,3-
Dichlorobenzene","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","56-23-5","Carbon
tetrachloride","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","591-78-6","2-Hexanone
(MBK)","2.0","�g/l","U","0.5","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","5","5","2.0",
"TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","67-64-
   "TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "67-64-
   1","Acetone","2.0","�g/l","U","0.8","MDL",,"TARGET",,,"10.0","RDL","YES","-99",,"5","5","2.0",
  "TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "67-66-3", "Chloroform", "1.0", "\\ g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "71-43-
  2","Benzene","29.6","�g/l",,"0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
"TF1-GZ-103-091117","$W846 8260C","RES","$C39093-03","E$AI","71-55-6","1,1,1-
Trichloroethane","1.0","�g/l","U","0.5","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-GZ-103-091117","$W846 8260C","RES","$C39093-03","E$AI","74-83-
```

```
"TF1-GZ-103-091117", "SW846 8260C", "RES", "SC39093-03", "ESAI", "79-20-9", "Methyl
 acetate","2.0","�g/l","U","0.6","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0", "TF1-GZ-103-091117","SW846 8260C","RES","SC39093-03","ESAI","79-34-5","1,1,2,2-
7","Anthracene","0.962","

g/I","U","0.585","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.962"
 "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "129-00-0", "Pyrene", "0.962", "$\delta g/l", "U", "0.587", "MDL", "TARGET", "4.81", "RDL", "YES", "-99", "1040", "1", "0.962", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "15067-26-2", "Acenaphthened10", "40.0", "$\delta g/ml", "-99", "NA", "ISTD", "116", "-99", "NA", "YES", "40.0", "1040", "1", "-99", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "1517-22-2", "Phenanthrened10", "40.0", "$\delta g/ml", "-99", "NA", "ISTD", "113", "-99", "NA", "YES", "40.0", "1040", "1", "-99", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "1520-96-3", "Perylened13", "40.0", "$\delta g/ml", "90", "NA", "ISTD", "115", "-99", "NA", "YES", "40.0", "1040", "11", "1040", "11", "1040", "1040", "1040", "1040", "1040", 
 d12","40.0","

g/ml",,"-99","NA",,"ISTD","115",,"-99","NA","YES","40.0",,"1040","1","-99",

"TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","1718-51-0","Terphenyl-dl4","32.5","

g/l",,"-99","NA",,"SUR","68",,"-99","NA","YES","48.1",,"1040","1","-99",

"TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","1719-03-5","Chrysene-
 "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "205-99-2", "Benzo (b) fluoranthene", "0.962", "�g/I", "U", "0.420", "MDL", "TARGET", "4.81", "RDL", "YES", "-99", "1040", "1", "0.962", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "206-44-
  0","Fluoranthene","0.962","

g/I","U","0.613","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.96
 "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "207-08-9", "Benzo (k) fluoranthene", "0.962", "�g/l", "U", "0.462", "MDL", "TARGET", "4.81", "RDL", "YES", "-99", "1040", "1", "0.962", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "208-96-
  962",
 "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "218-01-9", "Chrysene", "0.962", "$\oldots g/l", "U", "0.512", "MDL", "TARGET", "4.81", "RDL", "YES", "-99", "1040", "1", "0.962", "TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "321-60-8", "2-
 pyrene","0.962","�g/l","U","0.540","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.962",
"TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","53-70-3","Dibenzo (a,h)
anthracene","0.962","�g/l","U","0.433","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.962",
"TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","56-55-3","Benzo (a)
```

```
"TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "83-32-
9","Acenaphthene","0.962","�g/l","U","0.664","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.9
"TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "85-01-
8","Phenanthrene","0.962","

g/I","U","0.563","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.96
"TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "86-73-
7","Fluorene","0.962","�g/l","U","0.588","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.962",
"TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","90-12-0","1-
Methylnaphthalene","0.904","

g/l","J","0.705","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.9
"TF1-GZ-103-091117", "SW846 8270D", "RES", "SC39093-03", "ESAI", "91-20-
3","Naphthalene","2.24","�g/l","J","0.659","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.962", "TF1-GZ-103-091117","SW846 8270D","RES","SC39093-03","ESAI","91-57-6","2-Methylnaphthalene","0.962","�g/l","U","0.552","MDL",,"TARGET",,,"4.81","RDL","YES","-99",,"1040","1","0.9
62",
"TF1-GZ-103-091117DUP", "SW846 6010C", "RES", "1716277-DUP1", "ESAI", "7429-90-
5","Aluminum","0.0500","mg/l","U","0.0206","MDL",,"TARGET",,,,"0.0500","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.0500"
"TF1-GZ-103-091117DUP", "SW846 6010C", "RES", "1716277-DUP1", "ESAI", "7439-89-
6","Iron","45.5","mg/I","R06","0.0089","MDL",,"TARGET",,"0.9","0.0800","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.0300"
"TF1-GZ-103-091117DUP", "SW846 6010C", "RES", "1716277-DUP1", "ESAI", "7439-95-
4","Magnesium","3.66","mg/l",,"0.0088","MDL",,"TARGET",,"0.08","0.0200","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.0100",
"TF1-GZ-103-091117DUP", "SW846 6010C", "RES", "1716277-DUP1", "ESAI", "7440-23-
5","Sodium","7.12","mg/l",,"0.0785","MDL",,"TARGET",,"0.2","0.500","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.250",
"TF1-GZ-103-091117DUP","SW846 6010C","RES","1716277-DUP1","ESAI","7440-70-2","Calcium","28.8","mg/l",,"0.0142","MDL",,"TARGET",,"0.9","0.200","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.0500",
"TF1-GZ-103-091117DUP", "SW846 6010C", "RES", "1716530-DUP1", "ESAI", "7440-09-
7","Potassium","3.36","mg/l",,"0.120","MDL",,"TARGET",,"0.9","1.00","RDL","YES","-99","TF1-GZ-103-
091117","50","50","0.250"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "1146-65-2", "Naphthalene-
d8","40.0","�g/ml",,"-99","NA",,"ISTD","113",,"-99","NA","YES","40.0","TF1-GZ-103-091117","1060","1","-99",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "120-12-
7","Anthracene","0.943"," og/l","U","0.574","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-
091117", "1060", "1", "0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "129-00-
0","Pyrene","0.943","�g/l","U","0.575","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-
091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "15067-26-2", "Acenaphthene-
d10","40.0","�g/ml",,"-99","NA",,"ISTD","110",,"-99","NA","YES","40.0","TF1-GZ-103-
091117","1060","1","-99",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "1517-22-2", "Phenanthrene-
091117","1060","1","-99",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "1520-96-3", "Perylene-
d12","40.0","

g/ml",,"-99","NA",,"ISTD","109",,"-99","NA","YES","40.0","TF1-GZ-103-
091117","1060","1","-99",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "1718-51-0", "Terphenyl-dl4", "38.2", "�g/l",, "-99", "NA", "SUR", "81", "-99", "NA", "YES", "47.2", "TF1-GZ-103-091117", "1060", "1", "1060", "1", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", "1060", 
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "1719-03-5", "Chrysene-
091117","1060","1","-99",
```

```
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "191-24-2", "Benzo (q,h,i)
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "193-39-5", "Indeno (1,2,3-cd)
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "205-99-2", "Benzo (b)
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "206-44-
091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "207-08-9", "Benzo (k) fluoranthene", "0.943", "�g/l", "U", "0.453", "MDL", "TARGET", "4.72", "RDL", "YES", "-99", "TF1-GZ-103-
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "208-96-
8","Acenaphthylene","0.943","�g/l","U","0.644","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "218-01-
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "321-60-8", "2-
Fluorobiphenyl","31.0","

g/l",,"-99","NA",,"SUR","66",,"-99","NA","YES","47.2","TF1-GZ-103-
091117","1060","1","-99"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "4165-60-0", "Nitrobenzene-
d5","30.2","�g/l",,"-99","NA",,"SUR","64",,"-99","NA","YES","47.2","TF1-GZ-103-091117","1060","1","-99",
"TF1-GZ-103-091117DUP","SW846 8270D","RES","1715919-DUP1","ESAI","50-32-8","Benzo (a)
091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "53-70-3", "Dibenzo (a,h)
anthracene","0.943","�g/l","U","0.425","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "56-55-3", "Benzo (a)
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "83-32-
9","Acenaphthene","0.943","�g/l","U","0.652","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "85-01-
8","Phenanthrene","0.943","�g/l","U","0.553","MDL",,"TARGET",,,"4.72","RDL","YES","-99","TF1-GZ-103-091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "86-73-
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "90-12-0", "1-
Methylnaphthalene","0.991","�g/l","J","0.692","MDL",,"TARGET",,"9","4.72","RDL","YES","-99","TF1-GZ-
103-091117","1060","1","0.943",
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "91-20-
091117","1060","1","0.943"
"TF1-GZ-103-091117DUP", "SW846 8270D", "RES", "1715919-DUP1", "ESAI", "91-57-6", "2-
091117", "1060", "1", "0.943",
"TF1-GZ-103-091117MS", "SW846 6010C", "RES", "1716277-MS1", "ESAI", "7429-90-
5","Aluminum","2.62","mg/l",,"0.0206","MDL",,"SPIKE","105",,"0.0500","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0500"
"TF1-GZ-103-091117MS", "SW846 6010C", "RES", "1716277-MS1", "ESAI", "7439-89-
```

```
6","Iron","48.0","mg/I","QM2","0.0089","MDL",,"SPIKE","83",,"0.0800","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0300",
"TF1-GZ-103-091117MS","SW846 6010C","RES","1716277-MS1","ESAI","7439-95-4","Magnesium","6.18","mg/I",,"0.0088","MDL",,"SPIKE","101",,"0.0200","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0100"
"TF1-GZ-103-091117MS", "SW846 6010C", "RES", "1716277-MS1", "ESAI", "7440-23-
5","Sodium","19.2","mg/l",,"0.0785","MDL",,"SPIKE","97",,"0.500","RDL","YES","12.5","TF1-GZ-103-091117","50","50","0.250",
"TF1-GZ-103-091117MS", "SW846 6010C", "RES", "1716277-MS1", "ESAI", "7440-70-2", "Calcium", "41.0", "mg/l", "0.0142", "MDL", "SPIKE", "95", "0.200", "RDL", "YES", "12.5", "TF1-GZ-103-
091117","50","50","0.0500",
"TF1-GZ-103-091117MS", "SW846 6010C", "RES", "1716530-MS1", "ESAI", "7440-09-
7", "Potassium", "28.0", "mg/l",, "0.120", "MDL",, "SPIKE", "98",, "1.00", "RDL", "YES", "25.0", "TF1-GZ-103-
091117","50","50","0.250"
"TF1-GZ-103-091117MSD","SW846 6010C","RES","1716277-MSD1","ESAI","7429-90-
5","Aluminum","2.61","mg/l",,"0.0206","MDL",,"SPIKE","104","0.2","0.0500","RDL","YES","2.50","TF1-GZ-
103-091117","50","50","0.0500",
"TF1-GZ-103-091117MSD", "SW846 6010C", "RES", "1716277-MSD1", "ESAI", "7439-89-
6","Iron","47.3","mg/l","QM2","0.0089","MDL",,"SPIKE","59","1","0.0800","RDL","YES","2.50","TF1-GZ-103-
091117", "50", "50", "0.0300",
"TF1-GZ-103-091117MSD", "SW846 6010C", "RES", "1716277-MSD1", "ESAI", "7439-95-
4","Magnesium","6.08","mg/l",,"0.0088","MDL",,"SPIKE","97","2","0.0200","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0100",
"TF1-GZ-103-091117MSD", "SW846 6010C", "RES", "1716277-MSD1", "ESAI", "7440-23-5", "Sodium", "19.0", "mg/l", "0.0785", "MDL", "SPIKE", "95", "1", "0.500", "RDL", "YES", "12.5", "TF1-GZ-103-
091117","50","50","0.250"
"TF1-GZ-103-091117MSD","SW846 6010C","RES","1716277-MSD1","ESAI","7440-70-2","Calcium","41.2","mg/l",,"0.0142","MDL",,"SPIKE","98","0.7","0.200","RDL","YES","12.5","TF1-GZ-103-
091117","50","50","0.0500",
"TF1-GZ-103-091117MSD", "SW846 6010C", "RES", "1716530-MSD1", "ESAI", "7440-09-
7","Potassium","28.8","mg/I",,"0.120","MDL",,"SPIKE","101","3","1.00","RDL","YES","25.0","TF1-GZ-103-
091117","50","50","0.250"
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716277-PS1", "ESAI", "7429-90-
5","Aluminum","2.68","mg/l",,"0.0206","MDL",,"SPIKE","107",,"0.0500","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0500",
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716277-PS1", "ESAI", "7439-89-
6","Iron","50.4","mg/l","QM2","0.0089","MDL",,"SPIKE","182",,"0.0800","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0300",
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716277-PS1", "ESAI", "7439-95-
4","Magnesium","6.44","mg/l",,"0.0088","MDL",,"SPIKE","111",,"0.0200","RDL","YES","2.50","TF1-GZ-103-
091117","50","50","0.0100"
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716277-PS1", "ESAI", "7440-23-
5", "Sodium", "19.6", "mg/l", , "0.0785", "MDL", , "SPIKE", "100", , "0.500", "RDL", "YES", "12.5", "TF1-GZ-103-
091117","50","50","0.250"
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716277-PS1", "ESAI", "7440-70-
2","Calcium","43.6","mg/l",,"0.0142","MDL",,"SPIKE","117",,"0.200","RDL","YES","12.5","TF1-GZ-103-
091117","50","50","0.0500"
"TF1-GZ-103-091117PS", "SW846 6010C", "RES", "1716530-PS1", "ESAI", "7440-09-
7","Potassium","28.6","mg/l",,"0.120","MDL",,"SPIKE","101",,"1.00","RDL","YES","25.0","TF1-GZ-103-
091117","50","50","0.250",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "100-41-4", "Ethylbenzene", "0.5", *\oldsymbol{\phi}g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "100-42-5", "Styrene", "1.0", *\oldsymbol{\phi}g/l", "U", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "10061-01-5", "cis-1, 3-Dichloropropene", "0.5", *\oldsymbol{\phi}g/l", "U", "0.4", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "10061-01-5", "cis-1, 3-Dichloropropene", "0.5", *\oldsymbol{\phi}g/l", "U", "0.4", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "10061-01-5", "cis-1, 3-Dichloropropene", "0.5", "\oldsymbol{\oldsymbol{\phi}g/l}g/l", "U", "0.4", "MDL", "TARGET", "0.5", "RDL", "YES", "-99", "5", "5", "0.5", "0.5", "DIchloropropene", "0.5", "\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\oldsymbol{\olds
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "10061-02-6", "trans-1,3-
```

```
Dichloropropene","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5", "TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","106-46-7","1,4-
 (EDB)","0.5","

g/I","U","0.2","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5",
 "TF1-TB-091117", "ŚW846 8260C", "RES", "SC39093-05", "ESAI", "107-06-2", "1,2-
7","Cyclohexane","2.0","�g/l","U","0.8","MDL",,"TARGET",,,"5.0","RDL","YES","-99",,"5","5","2.0",
"TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","120-82-1","1,2,4-
 Trichlorobenzene","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","124-48-
 1","Dibromochloromethane","0.3","�g/l","J","0.3","MDL",,"TARGET",,,"0.5","RDL","YES","-99",,"5","5","0.5",
"TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","127-18-
 4","Tetrachloroethene","1.0","�g/l","U","0.6","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","156-59-2","cis-1,2-
Dichloroethene","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
 "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "156-60-5", "trans-1,2-Dichloroethene", "1.0", " g/l", "U", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "1634-04-4", "Methyl tert-butyl
 ether","0.5","

g/I","U","0.2","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",

"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "17060-07-0", "1,2-Dichloroethane-
 d4","48.3","�g/l",,"-99","NA",,"SUR","97",,"-99","NA","YES","50.0",,"5","5","-99",
"TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","179601-23-1","m,p-
TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "179601-23-1", "m,p-Xylene", "1.0", " g/l", "U", "0.4", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "5", "1.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "1868-53-7", "Dibromofluoromethane", "48.8", " g/l", "-99", "NA", "SUR", "98", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "2037-26-5", "Toluene-d8", "48.0", " g/l", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "3114-55-4", "Chlorobenzene-d5", "50.0", " g/l", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-TB-091117", "SW846 8260C", "PES", "SC39093-05", "ESAI", "3855-82-1", "1.4-Dichlorobenzene-d5", "50.0", "5", "5", "-99", "SC39093-05", "ESAI", "3855-82-1", "1.4-Dichlorobenzene-
 "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "3855-82-1", "1,4-Dichlorobenzene-d4", "50.0", og/l",,"-99", "NA",,"ISTD", "98",,"-99", "NA", "YES", "50.0",,"5", "5","-99", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "460-00-4", "4-
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "460-00-4", "4-Bromofluorobenzene", "48.8", " g/l", "-99", "NA", "SUR", "98", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "462-06-6", "Fluorobenzene", "50.0", g/l", "-99", "NA", "ISTD", "108", "-99", "NA", "YES", "50.0", "5", "5", "-99", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "541-73-1", "1,3-Dichlorobenzene", "0.5", "g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "56-23-5", "Carbon tetrachloride", "1.0", "g/l", "U", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "591-78-6", "2-Hexanone (MRK)" "2.0" "PDL" "YES" "-90" "5" "5" "5" "2.0"
 (MBK)","2.0","�g/l","U","0.5","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","2.0",
 "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "67-64-1", "Acetone", "2.0", "�g/l", "U", "0.8", "MDL", "TARGET", "10.0", "RDL", "YES", "-99", "5", "5", "2.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "67-66-
 3","Chloroform","1.0","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","71-43-2","Benzene","0.5","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5",
```

```
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "71-55-6", "1,1,1-
Trichloroethane", "1.0", "\oldsymbol{\textit{\textit{9}}, "1.0", "\oldsymbol{\textit{9}}, "1.0", "\oldsymbol{\textit{9}}, "1.0", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "74-83-
9", "Bromomethane", "1.0", \oldsymbol{\textit{9}}, "10", "0.9", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "2.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "74-87-
3", "Chloromethane", "1.0", \oldsymbol{\textit{9}}, "10", "0.4", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "74-87-
5", "Bromochloromethane", "1.0", \oldsymbol{\textit{9}}, "10", "0.4", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "75-00-
3", "Chloroethane", "2.0", \oldsymbol{\textit{9}}, "10", "0.6", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "75-01-4", "Vinyl, chloride", "1.0", \oldsymbol{\textit{9}}, "10", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "75-01-4", "Vinyl, enhoride", "1.0", \oldsymbol{\textit{9}}, "1.0", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0",
"TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "75-09-2", "Methylene chloride", "1.0", \oldsymbol{\textit{9}}, "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1.0", "1
      "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "71-55-6", "1,1,1-
    "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "78-93-3", "2-Butanone (MEK)", "2.0", "$\deltag| g/l", "U", "1.1", "MDL", "TARGET", "2.0", "RDL", "YES", "-99", "5", "5", "2.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "79-00-5", "1,1,2-Trichloroethane", "0.5", "$\deltag| g/l", "U", "0.3", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "0.5", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "79-01-6", "Trichloroethene", "1.0", "$\deltag| g/l", "U", "0.5", "MDL", "TARGET", "1.0", "RDL", "YES", "-99", "5", "5", "1.0", "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "79-20-9", "Methyl acetate", "2.0", "$\deltag| g/l", "U", "0.6", "MDL", "TARGET", "5.0", "RDL", "YES", "-99", "5", "5", "2.0", "TF1-TB-091117", "SW846 8260C", "PES", "SC39093-05", "ESAI", "79-34-5", "1.1-2-2", "TF1-TB-091117", "TARGET", "79-34-5", "1.1-2-2", "TF1-TB-091117", "TARGET", "79-34-5", "1.1-2-2", "TT1-TB-091117", "TARGET", "79-34-5", "1.1-2-2", "TT1-TB-091117", "TARGET", "79-34-5", "1.1-2-2", "TT1-TB-091117", "TARGET", "79-34-5", "1.1-2-2", "TT1-TB-09117", "TARGET", "79-01-20", "TT1-TB-09117", "TT1-TB-09117", "TT1-TB-09117", "TT1-TB-09117", "TT1-TB-0917", "TT1-TB-0917", "TT1-TB-0917", 
    "TF1-TB-091117", "SW846 8260C", "RES", "SC39093-05", "ESAI", "95-47-6", "o-
    Xylene","1.0","�g/l","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0", "TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","95-50-1","1,2-
    Dichlorobenzene","0.5","�g/I","U","0.3","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","0.5", "TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","96-12-8","1,2-Dibromo-3-
    chloropropane","2.0","�g/l","U","0.9","MDL",,"TARGET",,,"2.0","RDL","YES","-99",,"5","5","2.0",
"TF1-TB-091117","SW846 8260C","RES","SC39093-05","ESAI","98-82-
8","Isopropylbenzene","1.0","�g/l","U","0.4","MDL",,"TARGET",,,"1.0","RDL","YES","-99",,"5","5","1.0",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715547-BLK1",,"Aqueous","1715547-
BLK1","Method Bla",,"-99","EPA 300.0","Gen Prep","RES","09/12/2017 10:05","09/12/2017
     19:26","ESAI","COA","NA","T","1","NA",,,"100","1715547","1715547","1715547","1715547","SC39093","09/1
     2/2017 17:25", "10/13/2017 16:37",
      "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715547-BS1",,"Aqueous","1715547-
```

```
BS1", "LCS", , "-99", "EPA 300.0", "Gen Prep", "RES", "09/12/2017 10:05", "09/12/2017
19:42", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1715547", "1715547", "1715547", "1715547", "1715547", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715547-SRM1", , "Aqueous", "1715547-
SRM1", "Reference", ,"-99", "EPA 300.0", "Gen Prep", "RES", "09/12/2017 10:05", "09/12/2017
19:58","ESAI","COA","NA","T","1","NA",,,"100","1715547","1715547","1715547","1715547","8C39093","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715712-BLK1",,"Aqueous","1715712-BLK1","Method Bla",,"-99","SM18-22 5210B","Gen Prep","RES","09/13/2017 12:30","09/18/2017 10:45","ESAI","COA","NA","T","1","NA",,,"100","1715712","1715712","1715712","1715712","SC39093","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715712-BLK2", "Aqueous", "1715712-BLK2", "Method Bla", ,"-99", "SM18-22 5210B", "Gen Prep", "RES", "09/13/2017 12:30", "09/18/2017
10:45", "ESAI", "COA", "NA", "T", "1", "NA", , , "100", "1715712", "1715712", "1715712", "1715712", "SC39093", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715712-BS1", , "Aqueous", "1715712-
BS1","LCS",,"-99","SM18-22 5210B","Gen Prep","RES","09/13/2017 12:30","09/18/2017
10:45", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715712", "1715712", "1715712", "1715712", "1715712", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715712-SRM1", "Aqueous", "1715712-SRM1", "Reference", "-99", "SM18-22 5210B", "Gen Prep", "RES", "09/13/2017 12:30", "09/18/2017
10:45", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715712", "1715712", "1715712", "1715712", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715712-SRM2", "Aqueous", "1715712-SRM2", "Reference", "-99", "SM18-22 5210B", "Gen Prep", "RES", "09/13/2017 12:30", "09/18/2017
10:45", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715712", "1715712", "1715712", "1715712", "SC39093", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715747-BLK1", "Aqueous", "1715747-BLK1", "Method Bla", "-99", "SW846 8260C", "SW846 5030 Water MS", "RES", "09/14/2017 06:00", "09/14/2017 11:51", "ESAI", "COA", "NA", "NA", "1", "NA", ", "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/
12/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715747-BS1", , "Aqueous", "1715747-
BS1","LCS",,"-99","SW846 8260C","SW846 5030 Water MS","RES","09/14/2017 06:00","09/14/2017
12:48", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ,, "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715747-BSD1", , "Aqueous", "1715747-
BSD1","LCS Dup",,"-99","SW846 8260C","SW846 5030 Water MS","RES","09/14/2017 06:00","09/14/2017
13:17", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ,,, "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715864-BLK1", , "Aqueous", "1715864-
BLK1","Method Bla",,"-99","Mod EPA 3C/SOP RSK-175","Gen Prep","RES","09/15/2017 06:00","09/15/2017
10:02", "ESAI", "COA", "NA", "NA", "1", "NA", ,,, "100", "1715864", "1715864", "1715864", "1715864", "SC39093", "09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715864-BS1", , "Aqueous", "1715864-
BS1", "LCS", , "-99", "Mod EPA 3C/SOP RSK-175", "Gen Prep", "RES", "09/15/2017 06:00", "09/15/2017
09:24", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ,, "100", "1715864", "1715864", "1715864", "1715864", "SC39093", "09/
12/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715919-BLK1", "Aqueous", "1715919-BLK1", "Method Bla", ,"-99", "SW846 8270D", "SW846 3510C", "RES", "09/18/2017 08:00", "09/20/2017
21:01", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ,, , "100", "1715919", "1715919", "1715919", "1715919", "1715919", "SC39093", "09/
12/2017 17:25", "10/13/2017 16:37",
```

BS1","LCS",,"-99","SW846 8270D","SW846 3510C","RES","09/18/2017 08:00","09/20/2017 21:32","ESAI","COA","NA","NA","NA",","100","1715919","1715919","1715919","1715919","1715919","09/

"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715919-BS1", , "Aqueous", "1715919-

"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715919-BSD1", "Aqueous", "1715919-BSD1", "LCS Dup", "-99", "SW846 8270D", "SW846 3510C", "RES", "09/18/2017 08:00", "09/20/2017

12/2017 17:25","10/13/2017 16:37"

```
22:04", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "100", "1715919", "1715919", "1715919", "1715919", "SC39093", "09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715920-BLK1", "Aqueous", "1715920-BLK1", "Method Bla", "-99", "SW846 8081B", "SW846 3510C", "RES", "09/18/2017 08:00", "09/27/2017 19:29", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", "1715920", "1715920", "1715920", "1715920", "SC39093", "09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715920-BS1", , "Aqueous", "1715920-
BS1","LCS",,"-99","SW846 8081B","SW846 3510C","RES","09/18/2017 08:00","09/27/2017
19:48","ESAI","COA","NA","NA","NA","1","NA",,,"100","1715920","1715920","1715920","1715920","1715920","SC39093","09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715920-BSD1", , "Aqueous", "1715920-
BSD1","LCS Dup",,"-99","SW846 8081B","SW846 3510C","RES","09/18/2017 08:00","09/27/2017 20:07","ESAI","COA","NA","NA","NA",","100","1715920","1715920","1715920","1715920","SC39093","09/
12/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715978-BLK1",,"Aqueous","1715978-BLK1","Method Bla",,"-99","SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017
12:30", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BLK2", "Aqueous", "1715978-BLK2", "Method Bla", "-99", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19", "09/19/2017
13:19", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BLK3", , "Aqueous", "1715978-
BLK3","Method Bla",,"-99","SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017 14:23","ESAI","COA","NA","T","1","NA",,,"100","1715978","1715978","1715978","1715978","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BLK4", "Aqueous", "1715978-BLK4", "Method Bla", ,"-99", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19", "09/19/2017
15:14", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715978", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988", "1715988",
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BS1", , "Aqueous", "1715978-
BS1","LCS",,"-99","SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017
12:32", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715978-BS2",,"Aqueous","1715978-
BS2","LCS",,"-99","SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017 13:21","ESAI","COA","NA","T","1","NA",,,"100","1715978","1715978","1715978","1715978","1715978","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BS3", "Aqueous", "1715978-
BS3", "LCS", ,"-99", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19", "09/19/2017
14:24", "ESAI", "COA", "NA", "T", "1", "NA",,,,"100", "1715978", "1715978", "1715978", "1715978", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1715978-BS4", , "Aqueous", "1715978-
BS4", "LCS", ,"-99", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19", "09/19/2017
15:15","ESÄI","COA","NA","T","1","ŃA",,,,"100","1715978","1715978","1715978","1715978","1715978","SC39093","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1715978-SRM1",,"Aqueous","1715978-
SRM1", "Reference", "-99", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19", "09/19/2017 12:37", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-BLK1", "Aqueous", "1716147-BLK1", "Method Bla", ,"-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
17:11", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147",
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-BS1", "Aqueous", "1716147-
BS1","LCS",,"-99","SM5310B (00, 11)","Gen Prep","RES","09/20/2017 16:09","09/20/2017
```

17:25", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147",

```
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-CCB1", "Aqueous", "1716147-CCB1", "Calibratio", "-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
16:56", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147", "1716147", "1716147", "1716147", "SC39093", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-CCB2", , "Aqueous", "1716147-
CCB2", "Calibratio", ,"-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
20:36", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716147", "1716147", "1716147", "1716147", "1716147", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-CCB3", , "Aqueous", "1716147-
CCB3", "Calibratio", ,"-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
22:43", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147", "1716147", "1716147", "1716147", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-CCV1", "Aqueous", "1716147-CCV1", "Calibratio", "-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
16:40", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147", "1716147", "1716147", "1716147", "1716147", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1716147-CCV2",,"Aqueous","1716147-
CCV2","Calibratio",,"-99","SM5310B (00, 11)","Gen Prep","RES","09/20/2017 16:09","09/20/2017 20:20","ESAI","COA","NA","T","1","NA",,,"100","1716147","1716147","1716147","1716147","8C39093","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716147-CCV3", "Aqueous", "1716147-CCV3", "Calibratio", "-99", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09", "09/20/2017
22:26", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716147", "1716147", "1716147", "1716147", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1716147-SRM1",,"Aqueous","1716147-SRM1","Reference",,"-99","SM5310B (00, 11)","Gen Prep","RES","09/20/2017 16:09","09/20/2017
17:41", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", "1716147", 
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716277-BLK1", , "Aqueous", "1716277-
BLK1","Method Bla",,"-99","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/26/2017 15:21","ESAI","COA","NA","T","1","NA",,,"100","1716277","1716277","1716277","1716277","1716277","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716277-BS1", , "Aqueous", "1716277-
BS1", "LCS", ,"-99", "SW846 6010C", "SW846 3005A", "RES", "09/22/2017 17:15", "09/26/2017
15:26", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "1716277", "171627", "171677", "171677", "171627", "17167", "17167", "17167", "17167", "17167", "17167", "1716
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1716277-BSD1",,"Aqueous","1716277-
BSD1","LCS Dup",,"-99","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/26/2017 15:31","ESAI","COA","NA","T","1","NA",,,"100","1716277","1716277","1716277","1716277","1716277","09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716279-BLK1", , "Aqueous", "1716279-
BLK1", "Method Bla", ,"-99", "EPA 245.1/7470A", "EPA200/SW7000 Series", "RES", "09/22/2017
17:15","09/25/2017
15:22", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716279", "1716279", "1716279", "1716279", "SC39093", "09/1
2/2017 17:25", "10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1716279-BS1",,"Aqueous","1716279-
BS1","LCS",,"-99","EPA 245.1/7470A","EPA200/SW7000 Series","RES","09/22/2017 17:15","09/25/2017
15:24", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716279", "1716279", "1716279", "1716279", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716530-BLK1", "Aqueous", "1716530-BLK1", "Method Bla", "-99", "SW846 6010C", "SW846 3005A", "RES", "09/22/2017 17:15", "09/29/2017
15:15", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1716530", "1716530", "1716530", "1716530", "SC39093", "09/1
2/2017 17:25","10/13/2017 16:37",
```

15:20", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716530", "1716530", "1716530", "1716530", "SC39093", "09/1

"112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "1716530-BS1", , "Aqueous", "1716530-

BS1","LCS",,"-99","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/29/2017

```
2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","1716530-BSD1",,"Aqueous","1716530-BSD1","LCS Dup",,"-99","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/29/2017 15:25","ESAI","COA","NA","T","1","NA",,,"100","1716530","1716530","1716530","1716530","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
"112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-FRB-091117","09/11/2017 12:35","H2O","SC39093-04","NM","SC39093","1.7","EPA 537 Modified","METHOD","RES","09/19/2017 09:05","09/22/2017 04:47","ESAI","COA","NA","NA","1","NA",,,"-99","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001","17262001",
```

- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7","EPA 200/6000 methods","Gen Prep","RES","09/16/2017 09:15","09/16/2017 16:22","ESAI","COA","NA","T","1","NA",,,"100","1715937","1715937","1715937","1715937","1715937","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GT-119-091117","09/11/2017 13:35","Aqueous","SC39093-02","NM","SC39093","1.7","EPA 245.1/7470A","EPA200/SW7000 Series","RES","09/22/2017 17:15","09/25/2017
- 15:36","ESAI","COA","NA","T","1","NA",,,"100","1716279","1716279","1716279","1716279","1716279","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GT-119-091117","09/11/2017 13:35","Aqueous","SC39093-02","NM","SC39093","1.7","EPA 300.0","Gen Prep","RES","09/12/2017 10:05","09/12/2017
- 21:02","ESAI","COA","NA","T","1","NA",,,"100","1715547","1715547","1715547","1715547","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GT-119-091117","09/11/2017 13:35","Aqueous","SC39093-02","NM","SC39093","1.7","Mod EPA 3C/SOP RSK-175","Gen Prep","RES","09/15/2017 06:00","09/15/2017
- 10:56","ESAI","COA","NA","NA","1","NA",,,"100","1715864","1715864","1715864","1715864","SC39093","09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7¹","SM18-22 5210B","Gen Prep","RES","09/13/2017 12:30","09/18/2017
- 10:45","ESAI","COA","NA","T","1","NA",,,"100","1715712","1715712","1715712","1715712","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7^h,"SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017
- 13:33", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7^h,"SM5310B (00, 11)","Gen Prep","RES","09/20/2017 16:09","09/20/2017
- 18:46","ESAI","COA","NA","T","1","NA",,,"100","1716147","1716147","1716147","1716147","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7[†],"SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/26/2017
- 15:41","ESAI","COA","NA","T","1","NA",,,"100","1716277","1716277","1716277","1716277","1716277","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","Aqueous","SC39093-02","NM","SC39093","1.7["],"SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/29/2017
- 15:35","ESAI","COA","NA","T","1","NA",,,"100","1716530","1716530","1716530","1716530","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35", "Aqueous", "SC39093-02", "NM", "SC39093", "1.7", "SW846 8081B", "SW846 3510C", "RES", "09/18/2017

```
08:00","09/27/2017
```

- 22:16", "ESAI", "COA", "NA", "NA", "1", "NA", ,,, "100", "1715920", "1715920", "1715920", "1715920", "SC39093", "09/ 12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35", "Aqueous", "SC39093-02", "NM", "SC39093", "1.7", "SW846 8260C", "SW846 5030 Water MS", "RES", "09/14/2017 09:41", "09/14/2017
- 20:01", "ESAI", "COA", "NA", "NA", "1", "NA", ,,, "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/ 12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GT-119-091117","09/11/2017
- 13:35", "Aqueous", "SC39093-02", "NM", "SC39093", "1.7", "SW846 8270D", "SW846 3510C", "RES", "09/18/2017 08:00","09/20/2017
- 23:07", "ESAI", "COA", "NA", "NA", "1", "NA", ,,, "100", "1715919", "1715919", "1715919", "1715919", "SC39093", "09/ 12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","H2O","SC39093-02","NM","SC39093","1.7","EPA 537 Modified","METHOD","RES","09/19/2017 09:05","09/22/2017
- 04:06","ESAI","COA","NA","NA","NA","1","NA",,,"-99","17262001","17262000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","1726000","17260000","1726000","","17260000",","1726000","","17260000","","17260 "09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","H2O","SC39093-02","NM","SC39093","1.7","SW-846 6020A","SW-846 3020A","RES","10/08/2017 21:45","10/11/2017
- 21:34", "ESAI", "COA", "NA", "NA", "1", "NA", ,,, "-99", "172771063902", "172771063902", "172771063902", "172771 063902", "SC39093", "09/12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117", "09/11/2017
- 13:35","H2O","SC39093-02","NM","SC39093","1.7","SW-846 8015B","SW-846 3510C","RES","09/15/2017 10:00","09/18/2017
- 15:42", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "-99", "172570043A", "172570043A", "172570043A", "172570043A", " SC39093", "09/12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-119-091117DUP", "09/11/2017
- 13:35", "Aqueous", "1715920-DUP1", "Duplicate", "SC39093", "1.7", "SW846 8081B", "SW846
- 3510C","RES","09/18/2017 08:00","09/27/2017 20:25","ESAI","COA","NA","NA","1","NA",","100","1715920","1715920","1715920","1715920","1715920","3715920","1715 12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "EPA 200/6000 methods", "Gen
- Prep", "RES", "09/16/2017 09:15", "09/16/2017 16:22", "ESAI", "COA", "NA", "T", "1", "NA", ", "1715937", "1715957", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "171597", "17159 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "EPA 245.1/7470A", "EPA200/SW7000
- Series","RES","09/22/2017 17:15","09/25/2017 15:26","ESAI","COA","NA","T","1","NA",,,"100","1716279","1716279","1716279","1716279","SC39093","09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "EPA 300.0", "Gen Prep", "RES", "09/12/2017 10:05", "09/12/2017
- 20:46", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715547", "1715547", "1715547", "1715547", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35","Aqueous","SC39093-01","NM","SC39093","1.7","Mod EPA 3C/SOP RSK-175","Gen Prep","RES","09/15/2017 06:00","09/15/2017
- 10:24", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "100", "1715864", "1715864", "1715864", "1715864", "SC39093", "09/ 12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SM18-22 5210B", "Gen Prep", "RES", "09/13/2017 12:30","09/18/2017
- 10:45", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1715712", "1715712", "1715712", "1715712", "SC39093", "09/1

- 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SM2320B (97, 11)", "Gen Prep", "RES", "09/18/2017 10:19","09/19/2017
- 13:28", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SM5310B (00, 11)", "Gen Prep", "RES", "09/20/2017 16:09","09/20/2017
- 18:30","ESAI","COA","NA","T","1","NA",,,"100","1716147","1716147","1716147","1716147","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SW846 6010C", "SW846 3005A", "RES", "09/22/2017
- 17:15","09/26/2017 15:36","ESAI","COA","NA","T","1","NA",,,"100","1716277","1716277","1716277","1716277","1716277","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35","Aqueous","SC39093-01","NM","SC39093","1.7","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/29/2017
- 15:30", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716530", "1716530", "1716530", "1716530", "SC39093", "09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SW846 8081B", "SW846 3510C", "RES", "09/18/2017 08:00","09/27/2017
- 21:58","ESAI","COA","NA","NA","1","NA",,,"100","1715920","1715920","1715920","1715920","SC39093","09/ 12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SW846 8260C", "SW846 5030 Water MS", "RES", "09/14/2017 09:41", "09/14/2017
- 19:32", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/ 12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35", "Aqueous", "SC39093-01", "NM", "SC39093", "1.7", "SW846 8270D", "SW846 3510C", "RES", "09/18/2017 08:00", "09/20/2017
- 22:35","ESAI","COA","NA","NA","1","NA",,,"100","1715919","1715919","1715919","1715919","SC39093","09/ 12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35","H2O","SC39093-01","NM","SC39093","1.7","EPA 537 Modified","METHOD","RES","09/19/2017 09:05","09/22/2017
- 03:46", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ", "-99", "17262001", "17262000", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "172600", "09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35","H2O","SC39093-01","NM","SC39093","1.7","SW-846 6020A","SW-846 3020A","RES","10/08/2017 21:45","10/11/2017
- 21:31", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "-99", "172771063902", "172771063902", "172771063902", "172771 063902", "SC39093", "09/12/2017 17:25", "10/13/2017 16:37"
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117", "09/11/2017
- 12:35","H2O","SC39093-01","NM","SC39093","1.7","SW-846 8015B","SW-846 3510C","RES","09/15/2017 10:00","09/18/2017
- 15:20","ESAI","COA","NA","NA","1","NA",,,"-99","172570043A","172570043A","172570043A","172570043A"," SC39093", "09/12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117DUP", "09/11/2017
- 12:35", "Aqueous", "1716279-DUP1", "Duplicate", "SC39093", "1.7", "EPA 245.1/7470A", "EPA200/SW7000 Series", "RES", "09/22/2017 17:15", "09/25/2017
- 15:28", "ESAI", "COA", "NA", "T", "1", "NA", , , "100", "1716279", "1716279", "1716279", "1716279", "1716279", "09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GT-121-091117MS","09/11/2017

```
12:35","Aqueous","1716279-MS1","MS","SC39093","1.7","EPA 245.1/7470A","EPA200/SW7000 Series","RES","09/22/2017 17:15","09/25/2017
```

- 15:30","ESAI","COA","NA","T","1","NA",,,"100","1716279","1716279","1716279","1716279","1716279","1716279","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117MSD", "09/11/2017 12:35", "Aqueous", "1716279-MSD1", "MSD", "SC39093", "1.7", "EPA 245.1/7470A", "EPA200/SW7000 Sorios", "DES", "09/23/2017, 17:15", "09/25/2017
- Series","RES","09/22/2017 17:15","09/25/2017 15:32","ESAI","COA","NA","T","1","NA",,,"100","1716279","1716279","1716279","1716279","1716279","1716279","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GT-121-091117PS", "09/11/2017
- 12:35","Aqueous","1716279-PS1","Post Spike","SC39093","1.7","EPA 245.1/7470A","EPA200/SW7000 Series","RES","09/22/2017 17:15","09/25/2017
- 15:34","ESAI","COA","NA","T","1","NA",,,"100","1716279","1716279","1716279","1716279","1716279","1716279","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GZ-103-091117","09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","EPA 200/6000 methods","Gen
- Prep", "RES", "09/16/2017 09:15", "09/16/2017
- 16:22","ESAI","COA","NA","T","1","NA",,,"100","1715937","1715937","1715937","1715937","1715937","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7¹","EPA 245.1/7470A","EPA200/SW7000
- Series", "RES", "09/22/2017 17:15", "09/25/2017
- 15:39", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716279", "1716279", "1716279", "1716279", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","EPA 300.0","Gen Prep","RES","09/12/2017 10:05","09/12/2017
- 21:18", "ESAI", "COA", "NA", "T", "1", "NA", ,,, "100", "1715547", "1715547", "1715547", "1715547", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","Mod EPA 3C/SOP RSK-175","Gen Prep","RES","09/15/2017 06:00","09/15/2017
- 11:18","ESAI","COA","NA","NA","1","NA",,,"100","1715864","1715864","1715864","1715864","SC39093","09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SM18-22 5210B","Gen Prep","RES","09/13/2017 12:30","09/18/2017
- 10:45", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1715712", "1715712", "1715712", "1715712", "1715712", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SM2320B (97, 11)","Gen Prep","RES","09/18/2017 10:19","09/19/2017
- 13:36", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1715978", "1715978", "1715978", "1715978", "1715978", "2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SM5310B (00, 11)","Gen Prep","RES","09/20/2017 16:09","09/20/2017
- 19:03","ESAI","COA","NA","T","1","NA",,,"100","1716147","1716147","1716147","1716147","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7["],"SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/26/2017
- 15:51", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716277", "1716277", "1716277", "1716277", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GZ-103-091117","09/11/2017
- 15:50", "Aqueous", "SC39093-03", "NM", "SC39093", "1.7", "SW846 6010C", "SW846 3005A", "RES", "09/22/2017 17:15", "09/29/2017

```
15:45","ESAI","COA","NA","T","1","NA",,,"100","1716530","1716530","1716530","1716530","SC39093","09/1
2/2017 17:25","10/13/2017 16:37",
```

- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SW846 8081B","SW846 3510C","RES","09/18/2017 08:00","09/27/2017
- 23:31","ESAI","COA","NA","NA","1","NA",,,"100","1715920","1715920","1715920","1715920","1715920","SC39093","09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SW846 8260C","SW846 5030 Water MS","RES","09/14/2017 09:41","09/14/2017
- MS , RES , 09/14/2017 09:41 , 09/14/2017 20:30", "ESAI", "COA", "NA", "NA", "NA", "100", "1715747", "1715747", "1715747", "1715747", "SC39093", "09/12/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","Aqueous","SC39093-03","NM","SC39093","1.7","SW846 8270D","SW846 3510C","RES","09/18/2017 08:00","09/20/2017
- 23:39", "ESAI", "COA", "NA", "NA", "NA", "1", "NA", ", "100", "1715919", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","H2O","SC39093-03","NM","SC39093","1.7","EPA 537 Modified","METHOD","RES","09/19/2017 09:05","09/22/2017
- 04:27", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "-99", "17262001", "17262000", "1726200", "1726200", "1726200", "1726200", "1726200", "1726200", "1726200", "1726200", "1726200", "1726200", "172600", "172600", "172600", "1
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","H2O","SC39093-03","NM","SC39093","1.7","SW-846 6020A","SW-846 3020A","RES","10/08/2017 21:45","10/11/2017
- 21:37", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "-99", "172771063902", "1727710639000", "17277106000", "172771000", "172771000", "172771000", "17277100", "17277700", "1727700", "1727700", "1727700", "17277
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117", "09/11/2017
- 15:50","H2O","SC39093-03","NM","SC39093","1.7","SW-846 8015B","SW-846 3510C","RES","09/15/2017 10:00","09/18/2017
- 16:03","ESAI","COA","NA","NA","1","NA",,,"-99","172570043A","172570043A","172570043A","172570043A","SC39093","09/12/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117DUP", "09/11/2017
- 15:50","Aqueous","1715919-DUP1","Duplicate","SC39093","1.7","SW846 8270D","SW846
- 3510C", "RES", "09/18/2017 08:00", "09/21/2017
- 00:10", "ESAI", "COA", "NA", "NA", "1", "NA", ,, "100", "1715919", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "171599", "17159
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117DUP", "09/11/2017
- 15:50", "Aqueous", "1716277-DUP1", "Duplicate", "SC39093", "1.7", "SW846 6010C", "SW846
- 3005A", "RES", "09/22/2017 17:15", "09/26/2017
- 15:56", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716277", "1716277", "1716277", "1716277", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117DUP", "09/11/2017
- 15:50", "Aqueous", "1716530-DUP1", "Duplicate", "SC39093", "1.7", "SW846 6010C", "SW846
- 3005A", "RES", "09/22/2017 17:15", "09/29/2017
- 15:50", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716530", "1716530", "1716530", "1716530", "1716530", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117MS", "09/11/2017
- 15:50","Aqueous","1716277-MS1","MS","SC39093","1.7","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/26/2017
- 16:01", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716277", "1716277", "1716277", "1716277", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117MS", "09/11/2017
- 15:50","Aqueous","1716530-MS1","MS","SC39093","1.7","SW846 6010C","SW846 3005A","RES","09/22/2017 17:15","09/29/2017
- 15:55", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716530", "1716530", "1716530", "1716530", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",

- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-GZ-103-091117MSD","09/11/2017 15:50","Aqueous","1716277-MSD1","MSD","SC39093","1.7","SW846 6010C","SW846
- 3005A", "RES", "09/22/2017 17:15", "09/26/2017
- 16:06", "ESAI", "COA", "NA", "T", "1", "NA", ,, "100", "1716277", "1716277", "1716277", "1716277", "1716277", "SC39093", "09/1 2/2017 17:25", "10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117MSD", "09/11/2017
- 15:50", "Aqueous", "1716530-MSD1", "MSD", "SC39093", "1.7", "SW846 6010C", "SW846
- 3005A", "RES", "09/22/2017 17:15", "09/29/2017
- 16:00","ESAI","COA","NA","T","1","NA",,,"100","1716530","1716530","1716530","1716530","1716530","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117PS", "09/11/2017
- 15:50", "Aqueous", "1716277-PS1", "Post Spike", "SC39093", "1.7", "SW846 6010C", "SW846
- 3005A", "RES", "09/22/2017 17:15", "09/26/2017
- 16:21","ESAI","COA","NA","T","1","NA",,,"100","1716277","1716277","1716277","1716277","1716277","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15", "WE15 Tank Farm 1 NAVSTA Newport", "TF1-GZ-103-091117PS", "09/11/2017
- 15:50", "Aqueous", "1716530-PS1", "Post Spike", "SC39093", "1.7", "SW846 6010C", "SW846
- 3005A","RES","09/22/2017 17:15","09/29/2017
- 16:15","ESAI","COA","NA","T","1","NA",,,"100","1716530","1716530","1716530","1716530","SC39093","09/1 2/2017 17:25","10/13/2017 16:37",
- "112608005-WE15","WE15 Tank Farm 1 NAVSTA Newport","TF1-TB-091117","09/11/2017
- 08:30","Aqueous","\$C39093-05","NM","\$C39093","1.7","\$W846 8260C","\$W846 5030 Water
- MS","RES","09/14/2017 09:41","09/14/2017
- 20:59","ESAI","COA","NA","NA","1","NA",,,"100","1715747","1715747","1715747","1715747","SC39093","09/12/2017 17:25","10/13/2017 16:37",



INTERNAL CORRESPONDENCE

TO: S. PARKER DATE: JANUARY 4, 2018

FROM: TERRI L. SOLOMON COPIES: DV FILE

SUBJECT: ORGANIC & INORGANIC DATA VALIDATION - VOC/ PAH/ PESTICIDE/ OVG/ TPH/

PFAS/ METALS/ MISCELLANEOUS

NAVAL STATION (NAVSTA) NEWPORT, PORTSMOUTH, RHODE ISLAND

WE15 TANK FARM 1

SAMPLE DELIVERY GROUP (SDG) SC39093

SAMPLES: 3/Aqueous/

VOC, PAH, Pesticide, OVG, TPH, PFAS, Metals, Miscellaneous

TF1-GT-119-091117 TF1-GT-121-091117

TF1-GZ-103-091117

1/Trip Blank/

VOC

TF1-TB-091117

1/Field Reagent Blank (FRB)

PFAS

TF1-FRB-091117

Overview

The sample set for NAVSTA Newport, SDG SC39093 consisted of three (3) aqueous environmental samples, one (1) trip blank and one (1) FRB sample. Three (3) aqueous environmental samples were analyzed for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), pesticides, organic volatile gasses (OVG) including ethane and methane, total petroleum hydrocarbons (TPH), perfluorinated alkyl acids (PFAS), target analyte list (TAL) metals, and miscellaneous parameters (alkalinity, chloride, sulfate, nitrate, total organic carbon (TOC) and biological oxygen demand (BOD)). The trip blank was analyzed for VOCs only. The FRB sample was analyzed for PFAS only. No field duplicate pairs were included in this SDG.

The samples were collected by Tetra Tech, Inc. on September 11, 2017 and analyzed by Eurofins – Spectrum Analytical. All analyses were conducted in accordance with SW846 methods 8260C, 8270D, 8015B, 8081B, 6010C, 6020A, 7470A, EPA methods RSK-175, 300.0, 537 modified and Standard Methods 5310B, 5210B and 2320B analytical and reporting protocols.

An EPA level 2A validation was performed. The data was evaluated with regard to the following parameters:

- Data Completeness
- Holding Times/Sample Preservation
 - Laboratory Method/Preparation and Trip Blank Results
- ICP Interference Recoveries
 - Surrogate Spike Recoveries
- Laboratory Control Sample/Laboratory Control Sample Duplicate Results
- Standard Reference Material Results

TO: S. PARKER PAGE 2 SDG: SC39093

- Matrix Spike/Matrix Spike Duplicate Results
- * Laboratory Duplicate Precision
 - ICP Serial Dilution Results
- * Internal Standard Areas
- Detection Limits

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A, results as reported by the laboratory are presented in Appendix B, and documentation supporting these findings is presented in Appendix C. The text of this report has been formulated to address only those areas affecting data quality.

SURROGATE SPIKE RECOVERIES

In the PFAS fraction, the %R for surrogate 13C8-PFOSA was below the quality control limit in all samples. The non-detected results reported for perfluorooctane sulfonamide were qualified as estimated (UJ).

NOTES

Trip blank sample TF1-TB-091117 contained chlorodibromomethane at a concentration of 0.3 ug/L. No validation actions were required as all sample results for chlorodibromomethane were nondetects.

The following analytes were detected in the laboratory method blanks at the following maximum concentrations:

	Maximum	Reporting Limit
<u>Analyte</u>	Concentration	(RL) > or <
Calcium	0.0178 mg/L	< RL
Potassium	0.351 mg/L	< RL
Sodium	0.164 mg/L	< RL
Total organic carbon	0.3281 mg/L	< RL

No validation actions were warranted as all sample results were greater than the reporting limit.

No detected results were present the FRB sample.

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

EXECUTIVE SUMMARY

Laboratory Performance: Surrogate recoveries were noncompliant in the PFAS fraction.

Other Factors Affecting Data Quality: Results below the LOQ were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Superfund Methods Data Review" (January 2017), the "National Functional Guidelines for Inorganic Superfund Methods Data Review" (January 2017) and 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). The text of this report has been formulated to address only those areas affecting data quality.

TO: S. PARKER PAGE 3 SDG: SC39093

Tetra Tech, Inc.

Terri L. Solomon **Environmental Chemist**

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.

U	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.
J	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).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	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.
UR	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 x 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

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-0	91117		TF1-GT-121-0	91117		TF1-GZ-103	-091117		TF1-TB-09111	17	
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03			SC39093-05		
FRACTION: OV	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017			9/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/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
1,1,1-TRICHLOROETHANE	Ī	1	U		1	U			1 U		1	U	
1,1,2,2-TETRACHLOROET	HANE	0.5	U		0.5	U		0.	5 U		0.5	U	
1,1,2-TRICHLOROETHANE	Ī	0.5	U		0.5			0.	5 U		0.5	U	
1,1,2-TRICHLOROTRIFLU	OROETHANE	1	U		1	U			1 U		1	U	
1,1-DICHLOROETHANE		1	U		<u> </u>	U			1 U		1	U	
1,1-DICHLOROETHENE		1	U			U			1 U		1	U	
1,2,3-TRICHLOROBENZEN	NE	1	U		+	U			1 U			U	
1,2,4-TRICHLOROBENZEN	ΝE	1	U		1	U			1 U		1	U	
1,2-DIBROMO-3-CHLOROI	PROPANE	2	U			U			2 U		2	U	
1,2-DIBROMOETHANE		0.5	U		0.5	U		0.	5 U		0.5	U	
1,2-DICHLOROBENZENE		0.5	U		0.5			0.	5 U		0.5	U	
1,2-DICHLOROETHANE		1	U		1	U			1 U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U			1 U		1	U	
1,3-DICHLOROBENZENE		0.5	U		0.5	U		0.	5 U		0.5	U	
1,4-DICHLOROBENZENE		0.5	U		0.5			0.	5 U		0.5	U	
2-BUTANONE			U			U			2 U			U	
2-HEXANONE			U		<u> </u>	U			2 U			U	
4-METHYL-2-PENTANONE	<u> </u>		U		<u> </u>	U			2 U			U	
ACETONE			U		2	U			2 U		2	U	
BENZENE		0.5			1.3			29.	6		0.5	U	
BROMOCHLOROMETHAN	IE		U		1	U		_	1 U			U	
BROMODICHLOROMETHA	ANE	0.5			0.5				5 U		0.5	+	
BROMOFORM			U		<u> </u>	U			1 U			U	
BROMOMETHANE			U		+	U			2 U			U	
CARBON DISULFIDE		ļ	U			U			1 U			U	
CARBON TETRACHLORID	ÞΕ	+	U		 	U		+	1 U			U	
CHLOROBENZENE		0.5	U		0.5	U			5 U		0.5	U	
CHLORODIBROMOMETHA	ANE	0.5			0.5				5 U		0.3		Р
CHLOROETHANE		2	U			U			2 U		2	U	
CHLOROFORM			U			U			1 U			U	
CHLOROMETHANE			U		<u> </u>	U			1 U			U	
CIS-1,2-DICHLOROETHEN		0.5			0.5				5 U		0.5		
CIS-1,3-DICHLOROPROPE	ENE	0.5			0.5			+	5 U		0.5		
CYCLOHEXANE			U		3.9		Р	14.	_			U	
DICHLORODIFLUOROME	THANE	2	U		2	U			2 U		2	U	

1 of 2 1/3/2018

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-	091117		TF1-GT-121-0	91117		TF1-GZ-103-0	91117		TF1-TB-09111	7	
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03			SC39093-05		
FRACTION: OV	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017			9/11/2017		
MEDIA: WATER	QC_TYPE	NM						NM			NM		
	UNITS	UG/L	JG/L			UG/L UG/L			UG/L				
I	PCT_SOLIDS	0.0			0.0			0.0			0.0		
I	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHYLBENZENE		0.5	U		2.4			3.2			0.5	U	
ISOPROPYLBENZENE			U		2.1			2.1			1	U	
M+P-XYLENES			U		0.6	J	Р	7.4			1	U	
METHYL ACETATE		2	2 U		2	U		2	U		2	U	
METHYL CYCLOHEXANE		2	2 U		1	J	Р	4.4	J	Р	2	U	
METHYL TERT-BUTYL ET	HER	0.5	U		0.5	U		8			0.5	U	
METHYLENE CHLORIDE		2	2 U		2	U		2	U		2	U	
O-XYLENE			U		1	U		0.6	J	Р	1	U	
STYRENE			U		1	U		1	U		1	U	
TETRACHLOROETHENE			U		1	U		1	U		1	U	
TOLUENE			U		2.5	i		3.8			1	U	
TRANS-1,2-DICHLOROET	HENE		U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPR	OPENE	0.5	U		0.5	U		0.5	U		0.5	U	
TRICHLOROETHENE			U		1	U		1	U		1	U	
TRICHLOROFLUOROMET	HANE		U		1	U		1	U		1	U	
VINYL CHLORIDE	·	,	U		1	U		1	U		1	U	

2 of 2 1/3/2018

PROJ NO: 08005-WE15	NSAMPLE	TF1-GT-119-0	91117		TF1-GT-121-0	91117		TF1-GZ-103-0	91117			
SDG: SC39093	LAB ID	SC39093-02			SC39093-01	• • • • • • • • • • • • • • • • • • • •		SC39093-03				
FRACTION: OS	SAMP DATE	9/11/2017			9/11/2017			9/11/2017				
MEDIA: WATER	QC_TYPE	NM			NM			NM				
	UNITS	UG/L			UG/L			UG/L				
	PCT SOLIDS	0.0			0.0			0.0				
	DUP OF	0.0			0.0			0.0				
PARAMETER	1-00.	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
1-METHYLNAPHTHALENE		1	U		0.943	U		0.904	J	Р		
2-METHYLNAPHTHALENE		1	U		0.943	U		0.962	U			
ACENAPHTHENE		1	U		0.943	U		0.962	U			
ACENAPHTHYLENE		1	U		0.943	U		0.962	U			
ANTHRACENE		1	U		0.943	U		0.962	U			
BENZO(A)ANTHRACENE		1	U		0.943	U		0.962	U			
BENZO(A)PYRENE		1	U		0.943	U		0.962	U			
BENZO(B)FLUORANTHEN	E	1	U		0.943	U		0.962	U			
BENZO(G,H,I)PERYLENE		1	U		0.943	U		0.962	U			
BENZO(K)FLUORANTHEN	E	1	U		0.943	U		0.962	U			
CHRYSENE		1	U		0.943	U		0.962	U			
DIBENZO(A,H)ANTHRACE	NE	1	U		0.943	U		0.962	U			
FLUORANTHENE		1	U		0.943	U		0.962	U			
FLUORENE		1	U		0.943	U		0.962	U			
INDENO(1,2,3-CD)PYRENE		1	U		0.943	U		0.962	U			
NAPHTHALENE		1	U		0.943	U		2.24	J	Р		
PHENANTHRENE		1	U		0.943	U		0.962	U			
PYRENE	·	1	U		0.943	U		0.962	U			

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-09	91117		TF1-GT-121-0	91117		TF1-GZ-103-0	91117	
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03		
FRACTION: PEST	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
4,4'-DDD		0.019	U		0.019	U		0.02	U	
4,4'-DDE		0.019	U		0.019	U		0.02	U	
4,4'-DDT		0.029	U		0.029	U		0.029	U	
ALACHLOR		0.019	U		0.019	U		0.02	U	
ALDRIN		0.019			0.019	U		0.02	U	
ALPHA-BHC		0.019	U		0.019	U		0.02	U	
ALPHA-CHLORDANE		0.019	U		0.019	U		0.02	U	
BETA-BHC		0.019	U		0.019	U		0.02	U	
CHLORDANE		0.063	U		0.063	U		0.064	U	
DELTA-BHC		0.019	U		0.019	U		0.02	U	
DIELDRIN		0.019	U		0.019	U		0.02	U	
ENDOSULFAN I		0.019			0.019			0.02		
ENDOSULFAN II		0.019	U		0.019	U		0.02	U	
ENDOSULFAN SULFATE		0.019	U		0.019	U		0.02	U	
ENDRIN		0.019	U		0.019	U		0.02	U	
ENDRIN ALDEHYDE		0.019	-		0.019	U		0.02	U	
ENDRIN KETONE		0.019	U		0.019	U		0.02	U	
GAMMA-BHC (LINDANE)		0.019			0.019	-		0.02		
GAMMA-CHLORDANE		0.019	U		0.019	U		0.02	U	
HEPTACHLOR		0.019	U		0.019	U		0.02	U	
HEPTACHLOR EPOXIDE		0.019	U		0.019	U		0.02		
METHOXYCHLOR		0.019	U		0.019			0.02	U	
TOXAPHENE		0.485	U		0.481	U		0.49	U	

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-09	91117		TF1-GT-121-0	91117		TF1-GZ-103-0	TF1-GZ-103-091117			
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03				
FRACTION: OVG	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017				
MEDIA: WATER	QC_TYPE	NM			NM			NM				
	UNITS	UG/L			UG/L			UG/L				
	PCT_SOLIDS	0.0			0.0			0.0				
	DUP_OF											
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD		
ETHANE		5	U		5	U		5	U			
METHANE		2.2	U		38			417				

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-0	91117		TF1-GT-121-0	91117		TF1-GZ-103-091117			
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03			
FRACTION: PET	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017			
MEDIA: WATER	QC_TYPE	NM			NM			NM			
	UNITS	MG/L			MG/L			MG/L			
	PCT_SOLIDS	0.0			0.0			0.0			
	DUP_OF										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
TPH (C08-C44)		0.25			0.4			0.37			

PROJ_NO: 08005-WE15	NSAMPLE	TF1-FRB-0911	17		TF1-GT-119-	091117		TF1-GT-12	1-091117		TF1-GZ-103-0	91117	
SDG: SC39093	LAB_ID	SC39093-04			SC39093-02			SC39093-0)1		SC39093-03		
FRACTION: PFAS	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017			9/11/2017		
MEDIA: WATER	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
PENTADECAFLUOROOCT	TANOIC ACID	2	U		2	2 U			15		1	J	Р
PERFLUOROBUTANESUL	FONIC ACID	3	U			3 U			9		1	J	Р
PERFLUOROBUTANOIC A	CID	10	U		10	U			21		10	U	
PERFLUORODECANE SUI	LFONIC ACID	6	U		+	S U			6 U			U	
PERFLUORODECANOIC A	ACID	2	U		+	2 U			0.9 J	Р		U	
PERFLUORODODECANOI	IC ACID	<u> </u>	U		+	2 U			2 U			U	
PERFLUOROHEPTANESU	ILFONIC ACID	6	U			S U			6 U		6	U	
PERFLUOROHEPTANOIC	ACID	2	U			2 U			12		1	J	Р
PERFLUOROHEXANESUL	FONIC ACID	3	U		3	3 U			13		3	U	
PERFLUOROHEXANOIC A	CID	2	U		2	2 U			48		8		
PERFLUORONONANOIC A			U			2 U			2 U		+	U	
PERFLUOROOCTANE SUI	LFONAMIDE	9	UJ	R		UJ	R		9 UJ	R		UJ	R
PERFLUOROOCTANE SUI	LFONIC ACID	6	U			S U			2 J	Р	6	U	
PERFLUOROPENTANOIC	ACID		U			2 U			51		11	+	
PERFLUOROTETRADECA	NOIC ACID	<u> </u>	U		1	2 U			2 U			U	
PERFLUOROTRIDECANO			U			2 U			2 U			U	
PERFLUOROUNDECANOI	C ACID	3	U			3 U			3 U		3	U	

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-0	91117					TF1-GT-119	-091117-	RE	TF1-GT-121-0	91117	
SDG: SC39093	LAB_ID	SC39093-02						SC39093-02	2		SC39093-01		
FRACTION: M	SAMP_DATE	9/11/2017						9/11/2017			9/11/2017		
MEDIA: WATER	QC_TYPE	NM						NM			NM		
	UNITS	MG/L						MG/L			MG/L		
	PCT_SOLIDS	0.0			199.0			199.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALUMINUM		0.0509									0.05	U	
ANTIMONY					0.001	U							
ARSENIC					0.0069								
BARIUM					0.0306								
BERYLLIUM					0.00025	U							
CADMIUM								0.000)5 U				
CALCIUM		20.1									14.2		
CHROMIUM					0.002	U							
COBALT					0.0665								
COPPER					0.0069								
IRON		12.9									23.7		
LEAD					0.00024	J	Р						
MAGNESIUM		2.36									5.19		
MANGANESE					3.19								
MERCURY		0.0002	U								0.0002	U	
MOLYBDENUM					0.0005	U							
NICKEL					0.0177								
POTASSIUM		2.43									1.15		
SELENIUM					0.001								
SILVER					0.00025	U							
SODIUM		4.64									9.05		
THALLIUM					0.00025	U							
VANADIUM					0.0005	U							
ZINC					0.0071	J	Р						

1 of 2 1/4/2018

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-121-0	91117		TF1-GZ-103-0	91117							
SDG: SC39093	LAB_ID	SC39093-01			SC39093-03								
FRACTION: M	SAMP_DATE	9/11/2017			9/11/2017								
MEDIA: WATER	QC_TYPE	NM			NM								
	UNITS	MG/L			MG/L								
	PCT_SOLIDS	199.0			0.0			199.0					
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD			
ALUMINUM					0.05	U							
ANTIMONY		0.001	U					0.001	U				
ARSENIC		0.0191						0.0241					
BARIUM		0.0055						0.0115					
BERYLLIUM		0.00025	U					0.00025	U				
CADMIUM		0.0005	U					0.0005	U				
CALCIUM					29								
CHROMIUM		0.002	U					0.002	U				
COBALT		0.0087						0.00054	J	Р			
COPPER		0.001	U					0.0053					
IRON					45.9								
LEAD		0.00043	J	Р				0.00082	J	Р			
MAGNESIUM					3.66								
MANGANESE		2.32						2.1					
MERCURY					0.0002	U							
MOLYBDENUM		0.0005	U					0.00028	J	Р			
NICKEL		0.0053						0.002	U				
POTASSIUM					3.4								
SELENIUM		0.001	U					0.001	U				
SILVER		0.00025	U					0.00025	U				
SODIUM					7.14								
THALLIUM		0.00025						0.00025	U				
VANADIUM		0.0005	U					0.0005	U				
ZINC		0.0075	U					0.0075	U				

2 of 2 1/4/2018

PROJ_NO: 08005-WE15	NSAMPLE	TF1-GT-119-0	91117		TF1-GT-121-0	91117		TF1-GZ-103-091117			
SDG: SC39093	LAB_ID	SC39093-02			SC39093-01			SC39093-03			
FRACTION: MISC	SAMP_DATE	9/11/2017			9/11/2017			9/11/2017			
MEDIA: WATER	QC_TYPE	NM			NM			NM			
	UNITS	MG/L			MG/L			MG/L			
	PCT_SOLIDS	0.0			0.0			0.0			
	DUP_OF										
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
ALKALINITY		18.2			61.2			105			
BIOCHEMICAL OXYGEN D	EMAND	6			6			6			
CHLORIDE		5.98			15.6			11.2			
NITRATE-N		0.011	0.011 J F		0.1	U		0.1	U		
SULFATE		45.2			8.13			1	U		
TOTAL ORGANIC CARBOI	V	2.62			1.99			4.02			

Appendix B

Results as Reported by the Laboratory

TF1-GT-121-091117

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-01</u> File ID: <u>3909301.D</u>

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 19:32</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1	1.0	U	0.5	1.0	1.0
67-64-1	Acetone	1	2.0	U	0.8	2.0	10.0
71-43-2	Benzene	1	1.3		0.3	0.5	1.0
74-97-5	Bromochloromethane	1	1.0	U	0.3	1.0	1.0
75-27-4	Bromodichloromethane	1	0.5	U	0.4	0.5	0.5
75-25-2	Bromoform	1	1.0	U	0.4	1.0	1.0
74-83-9	Bromomethane	1	2.0	U	0.9	2.0	2.0
78-93-3	2-Butanone (MEK)	1	2.0	U	1.1	2.0	2.0
75-15-0	Carbon disulfide	1	1.0	U	0.4	1.0	2.0
56-23-5	Carbon tetrachloride	1	1.0	U	0.4	1.0	1.0
108-90-7	Chlorobenzene	1	0.5	U	0.2	0.5	1.0
75-00-3	Chloroethane	1	2.0	U	0.6	2.0	2.0
67-66-3	Chloroform	1	1.0	U	0.3	1.0	1.0
74-87-3	Chloromethane	1	1.0	U	0.4	1.0	2.0
96-12-8	1,2-Dibromo-3-chloropropane	1	2.0	U	0.9	2.0	2.0
124-48-1	Dibromochloromethane	1	0.5	U	0.3	0.5	0.5
106-93-4	1,2-Dibromoethane (EDB)	1	0.5	U	0.2	0.5	0.5
95-50-1	1,2-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
541-73-1	1,3-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
106-46-7	1,4-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
75-71-8	Dichlorodifluoromethane (Freon12)	1	2.0	U	0.6	2.0	2.0
75-34-3	1,1-Dichloroethane	1	1.0	U	0.3	1.0	1.0
107-06-2	1,2-Dichloroethane	1	1.0	U	0.3	1.0	1.0
75-35-4	1,1-Dichloroethene	1	1.0	U	0.7	1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1	0.5	U	0.3	0.5	1.0
156-60-5	trans-1,2-Dichloroethene	1	1.0	U	0.4	1.0	1.0
78-87-5	1,2-Dichloropropane	1	1.0	U	0.3	1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	1	0.5	U	0.4	0.5	0.5
10061-02-6	trans-1,3-Dichloropropene	1	0.5	U	0.3	0.5	0.5
100-41-4	Ethylbenzene	1	2.4		0.3	0.5	1.0
591-78-6	2-Hexanone (MBK)	1	2.0	U	0.5	2.0	2.0
98-82-8	Isopropylbenzene	1	2.1		0.4	1.0	1.0
1634-04-4	Methyl tert-butyl ether	1	0.5	U	0.2	0.5	1.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	2.0	U	0.5	2.0	2.0
75-09-2	Methylene chloride	1	2.0	U	0.7	2.0	2.0
100-42-5	Styrene	1	1.0	U	0.4	1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1	0.5	U	0.3	0.5	0.5
127-18-4	Tetrachloroethene	1	1.0	U	0.6	1.0	1.0
	Toluene 3 Page 19 / 1731	1	2.5		0.3	1.0	1.0

FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-01</u> File ID: <u>3909301.D</u>

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 19:32</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
87-61-6	1,2,3-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
71-55-6	1,1,1-Trichloroethane	1	1.0	U	0.5	1.0	1.0
79-00-5	1,1,2-Trichloroethane	1	0.5	U	0.3	0.5	1.0
79-01-6	Trichloroethene	1	1.0	U	0.5	1.0	1.0
75-69-4	Trichlorofluoromethane (Freon 11)	1	1.0	U	0.5	1.0	1.0
75-01-4	Vinyl chloride	1	1.0	U	0.5	1.0	1.0
179601-23-1	m,p-Xylene	1	0.6	J	0.4	1.0	2.0
95-47-6	o-Xylene	1	1.0	U	0.3	1.0	1.0
110-82-7	Cyclohexane	1	3.9	J	0.8	2.0	5.0
79-20-9	Methyl acetate	1	2.0	U	0.6	2.0	5.0
108-87-2	Methylcyclohexane	1	1.0	J	0.7	2.0	5.0

TF1-GT-119-091117

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID: <u>3909302.D</u>

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:01</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOC
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1	1.0	U	0.5	1.0	1.0
67-64-1	Acetone	1	2.0	U	0.8	2.0	10.0
71-43-2	Benzene	1	0.5	U	0.3	0.5	1.0
74-97-5	Bromochloromethane	1	1.0	U	0.3	1.0	1.0
75-27-4	Bromodichloromethane	1	0.5	U	0.4	0.5	0.5
75-25-2	Bromoform	1	1.0	U	0.4	1.0	1.0
74-83-9	Bromomethane	1	2.0	U	0.9	2.0	2.0
78-93-3	2-Butanone (MEK)	1	2.0	U	1.1	2.0	2.0
75-15-0	Carbon disulfide	1	1.0	U	0.4	1.0	2.0
56-23-5	Carbon tetrachloride	1	1.0	U	0.4	1.0	1.0
108-90-7	Chlorobenzene	1	0.5	U	0.2	0.5	1.0
75-00-3	Chloroethane	1	2.0	U	0.6	2.0	2.0
67-66-3	Chloroform	1	1.0	U	0.3	1.0	1.0
74-87-3	Chloromethane	1	1.0	U	0.4	1.0	2.0
96-12-8	1,2-Dibromo-3-chloropropane	1	2.0	U	0.9	2.0	2.0
124-48-1	Dibromochloromethane	1	0.5	U	0.3	0.5	0.5
106-93-4	1,2-Dibromoethane (EDB)	1	0.5	U	0.2	0.5	0.5
95-50-1	1,2-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
541-73-1	1,3-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
106-46-7	1,4-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
75-71-8	Dichlorodifluoromethane (Freon12)	1	2.0	U	0.6	2.0	2.0
75-34-3	1,1-Dichloroethane	1	1.0	U	0.3	1.0	1.0
107-06-2	1,2-Dichloroethane	1	1.0	U	0.3	1.0	1.0
75-35-4	1,1-Dichloroethene	1	1.0	U	0.7	1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1	0.5	U	0.3	0.5	1.0
156-60-5	trans-1,2-Dichloroethene	1	1.0	U	0.4	1.0	1.0
78-87-5	1,2-Dichloropropane	1	1.0	U	0.3	1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	1	0.5	U	0.4	0.5	0.5
10061-02-6	trans-1,3-Dichloropropene	1	0.5	U	0.3	0.5	0.5
100-41-4	Ethylbenzene	1	0.5	U	0.3	0.5	1.0
591-78-6	2-Hexanone (MBK)	1	2.0	U	0.5	2.0	2.0
98-82-8	Isopropylbenzene	1	1.0	U	0.4	1.0	1.0
1634-04-4	Methyl tert-butyl ether	1	0.5	U	0.2	0.5	1.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	2.0	U	0.5	2.0	2.0
75-09-2	Methylene chloride	1	2.0	U	0.7	2.0	2.0
100-42-5	Styrene	1	1.0	U	0.4	1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1	0.5	U	0.3	0.5	0.5
127-18-4	Tetrachloroethene	1	1.0	U	0.6	1.0	1.0
	Toluene 3 Page 21 / 1731	1	1.0	U	0.3	1.0	1.0

FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID: <u>3909302.D</u>

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:01</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
87-61-6	1,2,3-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
71-55-6	1,1,1-Trichloroethane	1	1.0	U	0.5	1.0	1.0
79-00-5	1,1,2-Trichloroethane	1	0.5	U	0.3	0.5	1.0
79-01-6	Trichloroethene	1	1.0	U	0.5	1.0	1.0
75-69-4	Trichlorofluoromethane (Freon 11)	1	1.0	U	0.5	1.0	1.0
75-01-4	Vinyl chloride	1	1.0	U	0.5	1.0	1.0
179601-23-1	m,p-Xylene	1	1.0	U	0.4	1.0	2.0
95-47-6	o-Xylene	1	1.0	U	0.3	1.0	1.0
110-82-7	Cyclohexane	1	2.0	U	0.8	2.0	5.0
79-20-9	Methyl acetate	1	2.0	U	0.6	2.0	5.0
108-87-2	Methylcyclohexane	1	2.0	U	0.7	2.0	5.0

TF1-GZ-103-091117

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID: <u>3909303.D</u>

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:30</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: 1715747 Sequence: S708173 Calibration: 1709004 Instrument: HPV3

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1	1.0	U	0.5	1.0	1.0
67-64-1	Acetone	1	2.0	U	0.8	2.0	10.0
71-43-2	Benzene	1	29.6		0.3	0.5	1.0
74-97-5	Bromochloromethane	1	1.0	U	0.3	1.0	1.0
75-27-4	Bromodichloromethane	1	0.5	U	0.4	0.5	0.5
75-25-2	Bromoform	1	1.0	U	0.4	1.0	1.0
74-83-9	Bromomethane	1	2.0	U	0.9	2.0	2.0
78-93-3	2-Butanone (MEK)	1	2.0	U	1.1	2.0	2.0
75-15-0	Carbon disulfide	1	1.0	U	0.4	1.0	2.0
56-23-5	Carbon tetrachloride	1	1.0	U	0.4	1.0	1.0
108-90-7	Chlorobenzene	1	0.5	U	0.2	0.5	1.0
75-00-3	Chloroethane	1	2.0	U	0.6	2.0	2.0
67-66-3	Chloroform	1	1.0	U	0.3	1.0	1.0
74-87-3	Chloromethane	1	1.0	U	0.4	1.0	2.0
96-12-8	1,2-Dibromo-3-chloropropane	1	2.0	U	0.9	2.0	2.0
124-48-1	Dibromochloromethane	1	0.5	U	0.3	0.5	0.5
106-93-4	1,2-Dibromoethane (EDB)	1	0.5	U	0.2	0.5	0.5
95-50-1	1,2-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
541-73-1	1,3-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
106-46-7	1,4-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
75-71-8	Dichlorodifluoromethane (Freon12)	1	2.0	U	0.6	2.0	2.0
75-34-3	1,1-Dichloroethane	1	1.0	U	0.3	1.0	1.0
107-06-2	1,2-Dichloroethane	1	1.0	U	0.3	1.0	1.0
75-35-4	1,1-Dichloroethene	1	1.0	U	0.7	1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1	0.5	U	0.3	0.5	1.0
156-60-5	trans-1,2-Dichloroethene	1	1.0	U	0.4	1.0	1.0
78-87-5	1,2-Dichloropropane	1	1.0	U	0.3	1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	1	0.5	U	0.4	0.5	0.5
10061-02-6	trans-1,3-Dichloropropene	1	0.5	U	0.3	0.5	0.5
100-41-4	Ethylbenzene	1	3.2		0.3	0.5	1.0
591-78-6	2-Hexanone (MBK)	1	2.0	U	0.5	2.0	2.0
98-82-8	Isopropylbenzene	1	2.1		0.4	1.0	1.0
1634-04-4	Methyl tert-butyl ether	1	8.0		0.2	0.5	1.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	2.0	U	0.5	2.0	2.0
75-09-2	Methylene chloride	1	2.0	U	0.7	2.0	2.0
100-42-5	Styrene	1	1.0	U	0.4	1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1	0.5	U	0.3	0.5	0.5
127-18-4	Tetrachloroethene	1	1.0	U	0.6	1.0	1.0
	Toluene 3 Page 23 / 1731	1	3.8		0.3	1.0	1.0

FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID: <u>3909303.D</u>

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:30</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
87-61-6	1,2,3-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
71-55-6	1,1,1-Trichloroethane	1	1.0	U	0.5	1.0	1.0
79-00-5	1,1,2-Trichloroethane	1	0.5	U	0.3	0.5	1.0
79-01-6	Trichloroethene	1	1.0	U	0.5	1.0	1.0
75-69-4	Trichlorofluoromethane (Freon 11)	1	1.0	U	0.5	1.0	1.0
75-01-4	Vinyl chloride	1	1.0	U	0.5	1.0	1.0
179601-23-1	m,p-Xylene	1	7.4		0.4	1.0	2.0
95-47-6	o-Xylene	1	0.6	J	0.3	1.0	1.0
110-82-7	Cyclohexane	1	14.1		0.8	2.0	5.0
79-20-9	Methyl acetate	1	2.0	U	0.6	2.0	5.0
108-87-2	Methylcyclohexane	1	4.4	J	0.7	2.0	5.0

TF1-TB-091117

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: QC Laboratory ID: SC39093-05 File ID: 3909305.D

Sampled: <u>09/11/17 08:30</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:59</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: 1715747 Sequence: S708173 Calibration: 1709004 Instrument: HPV3

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1	1.0	U	0.5	1.0	1.0
67-64-1	Acetone	1	2.0	U	0.8	2.0	10.0
71-43-2	Benzene	1	0.5	U	0.3	0.5	1.0
74-97-5	Bromochloromethane	1	1.0	U	0.3	1.0	1.0
75-27-4	Bromodichloromethane	1	0.5	U	0.4	0.5	0.5
75-25-2	Bromoform	1	1.0	U	0.4	1.0	1.0
74-83-9	Bromomethane	1	2.0	U	0.9	2.0	2.0
78-93-3	2-Butanone (MEK)	1	2.0	U	1.1	2.0	2.0
75-15-0	Carbon disulfide	1	1.0	U	0.4	1.0	2.0
56-23-5	Carbon tetrachloride	1	1.0	U	0.4	1.0	1.0
108-90-7	Chlorobenzene	1	0.5	U	0.2	0.5	1.0
75-00-3	Chloroethane	1	2.0	U	0.6	2.0	2.0
67-66-3	Chloroform	1	1.0	U	0.3	1.0	1.0
74-87-3	Chloromethane	1	1.0	U	0.4	1.0	2.0
96-12-8	1,2-Dibromo-3-chloropropane	1	2.0	U	0.9	2.0	2.0
124-48-1	Dibromochloromethane	1	0.3	J	0.3	0.5	0.5
106-93-4	1,2-Dibromoethane (EDB)	1	0.5	U	0.2	0.5	0.5
95-50-1	1,2-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
541-73-1	1,3-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
106-46-7	1,4-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
75-71-8	Dichlorodifluoromethane (Freon12)	1	2.0	U	0.6	2.0	2.0
75-34-3	1,1-Dichloroethane	1	1.0	U	0.3	1.0	1.0
107-06-2	1,2-Dichloroethane	1	1.0	U	0.3	1.0	1.0
75-35-4	1,1-Dichloroethene	1	1.0	U	0.7	1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1	0.5	U	0.3	0.5	1.0
156-60-5	trans-1,2-Dichloroethene	1	1.0	U	0.4	1.0	1.0
78-87-5	1,2-Dichloropropane	1	1.0	U	0.3	1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	1	0.5	U	0.4	0.5	0.5
10061-02-6	trans-1,3-Dichloropropene	1	0.5	U	0.3	0.5	0.5
100-41-4	Ethylbenzene	1	0.5	U	0.3	0.5	1.0
591-78-6	2-Hexanone (MBK)	1	2.0	U	0.5	2.0	2.0
98-82-8	Isopropylbenzene	1	1.0	U	0.4	1.0	1.0
1634-04-4	Methyl tert-butyl ether	1	0.5	U	0.2	0.5	1.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	2.0	U	0.5	2.0	2.0
75-09-2	Methylene chloride	1	2.0	U	0.7	2.0	2.0
100-42-5	Styrene	1	1.0	U	0.4	1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1	0.5	U	0.3	0.5	0.5
127-18-4	Tetrachloroethene	1	1.0	U	0.6	1.0	1.0
	Toluene 3 Page 25 / 1731	1	1.0	U	0.3	1.0	1.0

FORM I - ORGANIC ANALYSIS DATA SHEET

SW846 8260C

TF1-TB-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: QC Laboratory ID: SC39093-05 File ID: 3909305.D

Sampled: <u>09/11/17 08:30</u> Prepared: <u>09/14/17 09:41</u> Analyzed: <u>09/14/17 20:59</u>

% Solids: Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u> Instrument: <u>HPV3</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
87-61-6	1,2,3-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
71-55-6	1,1,1-Trichloroethane	1	1.0	U	0.5	1.0	1.0
79-00-5	1,1,2-Trichloroethane	1	0.5	U	0.3	0.5	1.0
79-01-6	Trichloroethene	1	1.0	U	0.5	1.0	1.0
75-69-4	Trichlorofluoromethane (Freon 11)	1	1.0	U	0.5	1.0	1.0
75-01-4	Vinyl chloride	1	1.0	U	0.5	1.0	1.0
179601-23-1	m,p-Xylene	1	1.0	U	0.4	1.0	2.0
95-47-6	o-Xylene	1	1.0	U	0.3	1.0	1.0
110-82-7	Cyclohexane	1	2.0	U	0.8	2.0	5.0
79-20-9	Methyl acetate	1	2.0	U	0.6	2.0	5.0
108-87-2	Methylcyclohexane	1	2.0	U	0.7	2.0	5.0

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-01</u> File ID: <u>C3909301.D</u>

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/18/17 08:00</u> Analyzed: <u>09/20/17 22:35</u>

% Solids: Preparation: $\underline{SW846\ 3510C}$ Initial/Final: $\underline{1060\ ml\ /\ 1\ ml}$

Batch: <u>1715919</u> Sequence: <u>S708501</u> Calibration: <u>1709033</u> Instrument: <u>HPS5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
83-32-9	Acenaphthene	1	0.943	U	0.652	0.943	4.72
208-96-8	Acenaphthylene	1	0.943	U	0.644	0.943	4.72
120-12-7	Anthracene	1	0.943	U	0.574	0.943	4.72
56-55-3	Benzo (a) anthracene	1	0.943	U	0.506	0.943	4.72
50-32-8	Benzo (a) pyrene	1	0.943	U	0.530	0.943	4.72
205-99-2	Benzo (b) fluoranthene	1	0.943	U	0.412	0.943	4.72
191-24-2	Benzo (g,h,i) perylene	1	0.943	U	0.500	0.943	4.72
207-08-9	Benzo (k) fluoranthene	1	0.943	U	0.453	0.943	4.72
218-01-9	Chrysene	1	0.943	U	0.502	0.943	4.72
53-70-3	Dibenzo (a,h) anthracene	1	0.943	U	0.425	0.943	4.72
206-44-0	Fluoranthene	1	0.943	U	0.602	0.943	4.72
86-73-7	Fluorene	1	0.943	U	0.577	0.943	4.72
193-39-5	Indeno (1,2,3-cd) pyrene	1	0.943	U	0.547	0.943	4.72
90-12-0	1-Methylnaphthalene	1	0.943	U	0.692	0.943	4.72
91-57-6	2-Methylnaphthalene	1	0.943	U	0.542	0.943	4.72
91-20-3	Naphthalene	1	0.943	U	0.646	0.943	4.72
85-01-8	Phenanthrene	1	0.943	U	0.553	0.943	4.72
129-00-0	Pyrene	1	0.943	U	0.575	0.943	4.72

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID: <u>C3909302.D</u>

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/18/17 08:00</u> Analyzed: <u>09/20/17 23:07</u>

% Solids: Preparation: <u>SW846 3510C</u> Initial/Final: <u>1000 ml / 1 ml</u>

Batch: <u>1715919</u> Sequence: <u>S708501</u> Calibration: <u>1709033</u> Instrument: <u>HPS5</u>

					_		
CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
83-32-9	Acenaphthene	1	1.00	U	0.691	1.00	5.00
208-96-8	Acenaphthylene	1	1.00	U	0.683	1.00	5.00
120-12-7	Anthracene	1	1.00	U	0.608	1.00	5.00
56-55-3	Benzo (a) anthracene	1	1.00	U	0.536	1.00	5.00
50-32-8	Benzo (a) pyrene	1	1.00	U	0.562	1.00	5.00
205-99-2	Benzo (b) fluoranthene	1	1.00	U	0.437	1.00	5.00
191-24-2	Benzo (g,h,i) perylene	1	1.00	U	0.530	1.00	5.00
207-08-9	Benzo (k) fluoranthene	1	1.00	U	0.480	1.00	5.00
218-01-9	Chrysene	1	1.00	U	0.532	1.00	5.00
53-70-3	Dibenzo (a,h) anthracene	1	1.00	U	0.450	1.00	5.00
206-44-0	Fluoranthene	1	1.00	U	0.638	1.00	5.00
86-73-7	Fluorene	1	1.00	U	0.612	1.00	5.00
193-39-5	Indeno (1,2,3-cd) pyrene	1	1.00	U	0.580	1.00	5.00
90-12-0	1-Methylnaphthalene	1	1.00	U	0.733	1.00	5.00
91-57-6	2-Methylnaphthalene	1	1.00	U	0.574	1.00	5.00
91-20-3	Naphthalene	1	1.00	U	0.685	1.00	5.00
85-01-8	Phenanthrene	1	1.00	U	0.586	1.00	5.00
129-00-0	Pyrene	1	1.00	U	0.610	1.00	5.00

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID: <u>C3909303.D</u>

Sampled: $09/11/17 \ 15:50$ Prepared: $09/18/17 \ 08:00$ Analyzed: $09/20/17 \ 23:39$

% Solids: Preparation: <u>SW846 3510C</u> Initial/Final: <u>1040 ml / 1 ml</u>

Batch: <u>1715919</u> Sequence: <u>S708501</u> Calibration: <u>1709033</u> Instrument: <u>HPS5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
83-32-9	Acenaphthene	1	0.962	U	0.664	0.962	4.81
208-96-8	Acenaphthylene	1	0.962	U	0.657	0.962	4.81
120-12-7	Anthracene	1	0.962	U	0.585	0.962	4.81
56-55-3	Benzo (a) anthracene	1	0.962	U	0.515	0.962	4.81
50-32-8	Benzo (a) pyrene	1	0.962	U	0.540	0.962	4.81
205-99-2	Benzo (b) fluoranthene	1	0.962	U	0.420	0.962	4.81
191-24-2	Benzo (g,h,i) perylene	1	0.962	U	0.510	0.962	4.81
207-08-9	Benzo (k) fluoranthene	1	0.962	U	0.462	0.962	4.81
218-01-9	Chrysene	1	0.962	U	0.512	0.962	4.81
53-70-3	Dibenzo (a,h) anthracene	1	0.962	U	0.433	0.962	4.81
206-44-0	Fluoranthene	1	0.962	U	0.613	0.962	4.81
86-73-7	Fluorene	1	0.962	U	0.588	0.962	4.81
193-39-5	Indeno (1,2,3-cd) pyrene	1	0.962	U	0.558	0.962	4.81
90-12-0	1-Methylnaphthalene	1	0.904	J	0.705	0.962	4.81
91-57-6	2-Methylnaphthalene	1	0.962	U	0.552	0.962	4.81
91-20-3	Naphthalene	1	2.24	J	0.659	0.962	4.81
85-01-8	Phenanthrene	1	0.962	U	0.563	0.962	4.81
129-00-0	Pyrene	1	0.962	U	0.587	0.962	4.81

FORM I - ANALYSIS DATA SHEET SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Laboratory ID: File ID: Matrix: **Ground Water** SC39093-01 3909301Z.D 09/11/17 12:35 Prepared: 09/18/17 08:00 Sampled: Analyzed: 09/27/17 21:58 % Solids: SW846 3510C Initial/Final: Preparation: 1040 ml / 10 ml

Batch: <u>1715920</u> Sequence: <u>S708605</u> Calibration: <u>1709047</u> Instrument: <u>HPS17</u>

Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
319-84-6	alpha-BHC	1	0.019	U	0.011	0.019	0.019
319-85-7	beta-BHC	1	0.019	U	0.014	0.019	0.019
319-86-8	delta-BHC	1	0.019	U	0.015	0.019	0.019
58-89-9	gamma-BHC (Lindane)	1	0.019	U	0.017	0.019	0.019
76-44-8	Heptachlor	1	0.019	U	0.019	0.019	0.019
309-00-2	Aldrin	1	0.019	U	0.015	0.019	0.019
1024-57-3	Heptachlor epoxide	1	0.019	U	0.015	0.019	0.019
959-98-8	Endosulfan I	1	0.019	U	0.016	0.019	0.019
60-57-1	Dieldrin	1	0.019	U	0.016	0.019	0.019
72-55-9	4,4'-DDE (p,p')	1	0.019	U	0.017	0.019	0.019
72-20-8	Endrin	1	0.019	U	0.018	0.019	0.038
33213-65-9	Endosulfan II	1	0.019	U	0.019	0.019	0.038
72-54-8	4,4'-DDD (p,p')	1	0.019	U	0.018	0.019	0.038
1031-07-8	Endosulfan sulfate	1	0.019	U	0.019	0.019	0.038
50-29-3	4,4'-DDT (p,p')	1	0.029	U	0.017	0.029	0.038
72-43-5	Methoxychlor	1	0.019	U	0.018	0.019	0.038
53494-70-5	Endrin ketone	1	0.019	U	0.017	0.019	0.038
7421-93-4	Endrin aldehyde	1	0.019	U	0.018	0.019	0.038
5103-71-9	alpha-Chlordane	1	0.019	U	0.015	0.019	0.019
5103-74-2	Chlordane (gamma)(trans)	1	0.019	U	0.015	0.019	0.019
8001-35-2	Toxaphene	1	0.481	U	0.315	0.481	0.481
57-74-9	Chlordane	1	0.063	U	0.049	0.063	0.063
15972-60-8	Alachlor	1	0.019	U	0.018	0.019	0.019

FORM I - ANALYSIS DATA SHEET SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Laboratory ID: File ID: Matrix: **Ground Water** SC39093-02 3909302Z.D 09/11/17 13:35 Prepared: 09/18/17 08:00 Sampled: Analyzed: 09/27/17 22:16 % Solids: SW846 3510C Initial/Final: Preparation: 1030 ml / 10 ml

Batch: <u>1715920</u> Sequence: <u>S708605</u> Calibration: <u>1709047</u> Instrument: <u>HPS17</u>

Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
319-84-6	alpha-BHC	1	0.019	U	0.011	0.019	0.019
319-85-7	beta-BHC	1	0.019	U	0.014	0.019	0.019
319-86-8	delta-BHC	1	0.019	U	0.015	0.019	0.019
58-89-9	gamma-BHC (Lindane)	1	0.019	U	0.017	0.019	0.019
76-44-8	Heptachlor	1	0.019	U	0.019	0.019	0.019
309-00-2	Aldrin	1	0.019	U	0.015	0.019	0.019
1024-57-3	Heptachlor epoxide	1	0.019	U	0.015	0.019	0.019
959-98-8	Endosulfan I	1	0.019	U	0.016	0.019	0.019
60-57-1	Dieldrin	1	0.019	U	0.017	0.019	0.019
72-55-9	4,4'-DDE (p,p')	1	0.019	U	0.017	0.019	0.019
72-20-8	Endrin	1	0.019	U	0.019	0.019	0.039
33213-65-9	Endosulfan II	1	0.019	U	0.019	0.019	0.039
72-54-8	4,4'-DDD (p,p')	1	0.019	U	0.018	0.019	0.039
1031-07-8	Endosulfan sulfate	1	0.019	U	0.019	0.019	0.039
50-29-3	4,4'-DDT (p,p')	1	0.029	U	0.017	0.029	0.039
72-43-5	Methoxychlor	1	0.019	U	0.018	0.019	0.039
53494-70-5	Endrin ketone	1	0.019	U	0.017	0.019	0.039
7421-93-4	Endrin aldehyde	1	0.019	U	0.019	0.019	0.039
5103-71-9	alpha-Chlordane	1	0.019	U	0.015	0.019	0.019
5103-74-2	Chlordane (gamma)(trans)	1	0.019	U	0.016	0.019	0.019
8001-35-2	Toxaphene	1	0.485	U	0.318	0.485	0.485
57-74-9	Chlordane	1	0.063	U	0.050	0.063	0.063
15972-60-8	Alachlor	1	0.019	U	0.018	0.019	0.019

FORM I - ANALYSIS DATA SHEET SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Laboratory ID: File ID: Matrix: Ground Water SC39093-03 3909303Z.D 09/11/17 15:50 Prepared: 09/18/17 08:00 09/27/17 23:31 Sampled: Analyzed: % Solids: SW846 3510C Initial/Final: Preparation: 1020 ml / 10 ml

Batch: <u>1715920</u> Sequence: <u>S708605</u> Calibration: <u>1709047</u> Instrument: <u>HPS17</u>

Injection Volume (uL): 2.00

CAS NO.	COMPOUND	DILUTION	CONC. $(\mu g/l)$	Q	MDL	LOD	LOQ
319-84-6	alpha-BHC	1	0.020	U	0.011	0.020	0.020
319-85-7	beta-BHC	1	0.020	U	0.014	0.020	0.020
319-86-8	delta-BHC	1	0.020	U	0.015	0.020	0.020
58-89-9	gamma-BHC (Lindane)	1	0.020	U	0.017	0.020	0.020
76-44-8	Heptachlor	1	0.020	U	0.019	0.020	0.020
309-00-2	Aldrin	1	0.020	U	0.015	0.020	0.020
1024-57-3	Heptachlor epoxide	1	0.020	U	0.015	0.020	0.020
959-98-8	Endosulfan I	1	0.020	U	0.016	0.020	0.020
60-57-1	Dieldrin	1	0.020	U	0.017	0.020	0.020
72-55-9	4,4'-DDE (p,p')	1	0.020	U	0.017	0.020	0.020
72-20-8	Endrin	1	0.020	U	0.019	0.020	0.039
33213-65-9	Endosulfan II	1	0.020	U	0.020	0.020	0.039
72-54-8	4,4'-DDD (p,p')	1	0.020	U	0.018	0.020	0.039
1031-07-8	Endosulfan sulfate	1	0.020	U	0.019	0.020	0.039
50-29-3	4,4'-DDT (p,p')	1	0.029	U	0.017	0.029	0.039
72-43-5	Methoxychlor	1	0.020	U	0.018	0.020	0.039
53494-70-5	Endrin ketone	1	0.020	U	0.017	0.020	0.039
7421-93-4	Endrin aldehyde	1	0.020	U	0.019	0.020	0.039
5103-71-9	alpha-Chlordane	1	0.020	U	0.015	0.020	0.020
5103-74-2	Chlordane (gamma)(trans)	1	0.020	U	0.016	0.020	0.020
8001-35-2	Toxaphene	1	0.490	U	0.322	0.490	0.490
57-74-9	Chlordane	1	0.064	U	0.050	0.064	0.064
15972-60-8	Alachlor	1	0.020	U	0.019	0.020	0.020

FORM I - ORGANIC ANALYSIS DATA SHEET Mod EPA 3C/SOP RSK-175

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-01 File ID: 091517-chanb-004-0

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/15/17 06:00</u> Analyzed: <u>09/15/17 10:24</u>

% Solids: Preparation: <u>General Air Prep</u> Initial/Final: <u>10 μg / 10 μg</u>

Batch: <u>1715864</u> Sequence: <u>S708265</u> Calibration: <u>1707028</u> Instrument: <u>Air5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
74-82-8	Methane	1	38.0		2.16	2.20	2.20
74-84-0	Ethane	1	5.00	U	3.48	5.00	5.00

FORM I - ORGANIC ANALYSIS DATA SHEET Mod EPA 3C/SOP RSK-175

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-02 File ID: 091517-chanb-005-0

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/15/17 06:00</u> Analyzed: <u>09/15/17 10:56</u>

% Solids: Preparation: General Air Prep Initial/Final: $\underline{10 \ \mu g} / 10 \ \mu g$

Batch: <u>1715864</u> Sequence: <u>S708265</u> Calibration: <u>1707028</u> Instrument: <u>Air5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
74-82-8	Methane	1	2.20	U	2.16	2.20	2.20
74-84-0	Ethane	1	5.00	U	3.48	5.00	5.00

FORM I - ORGANIC ANALYSIS DATA SHEET Mod EPA 3C/SOP RSK-175

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-03 File ID: 091517-chanb-006-0

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/15/17 06:00</u> Analyzed: <u>09/15/17 11:18</u>

% Solids: Preparation: General Air Prep Initial/Final: $\underline{10 \ \mu g} / 10 \ \mu g$

Batch: <u>1715864</u> Sequence: <u>S708265</u> Calibration: <u>1707028</u> Instrument: <u>Air5</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
74-82-8	Methane	1	417		2.16	2.20	2.20
74-84-0	Ethane	1	5.00	U	3.48	5.00	5.00

FORM I - INORGANIC ANALYSIS DATA SHEET SW846 6010C

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-01 File ID: 20170926-044

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>SW846 3005A</u> Initial/Final: <u>50 ml / 50 ml</u>

Batch: <u>1716277</u> Sequence: <u>S708828</u> Calibration: <u>1710008</u>

Instrument: <u>ICAP5</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-89-6	Iron	23.7		1	0.0089	0.0300	0.0800
7440-09-7	Potassium	1.15		1	0.120	0.250	1.00
7440-23-5	Sodium	9.05		1	0.0785	0.250	0.500
7429-90-5	Aluminum	0.0500	U	1	0.0206	0.0500	0.0500
7440-70-2	Calcium	14.2		1	0.0142	0.0500	0.200
7439-95-4	Magnesium	5.19		1	0.0088	0.0100	0.0200

FORM I - INORGANIC ANALYSIS DATA SHEET SW846 6010C

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-02 File ID: 20170926-045

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>SW846 3005A</u> Initial/Final: <u>50 ml / 50 ml</u>

Batch: <u>1716277</u> Sequence: <u>S708828</u> Calibration: <u>1710008</u>

Instrument: <u>ICAP5</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-89-6	Iron	12.9		1	0.0089	0.0300	0.0800
7440-09-7	Potassium	2.43		1	0.120	0.250	1.00
7440-23-5	Sodium	4.64		1	0.0785	0.250	0.500
7429-90-5	Aluminum	0.0509		1	0.0206	0.0500	0.0500
7440-70-2	Calcium	20.1		1	0.0142	0.0500	0.200
7439-95-4	Magnesium	2.36		1	0.0088	0.0100	0.0200

FORM I - INORGANIC ANALYSIS DATA SHEET SW846 6010C

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-03 File ID: 20170926-047

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>SW846 3005A</u> Initial/Final: <u>50 ml / 50 ml</u>

Batch: <u>1716277</u> Sequence: <u>S708828</u> Calibration: <u>1710008</u>

Instrument: <u>ICAP5</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-89-6	Iron	45.9		1	0.0089	0.0300	0.0800
7440-09-7	Potassium	3.40		1	0.120	0.250	1.00
7440-23-5	Sodium	7.14		1	0.0785	0.250	0.500
7429-90-5	Aluminum	0.0500	U	1	0.0206	0.0500	0.0500
7440-70-2	Calcium	29.0		1	0.0142	0.0500	0.200
7439-95-4	Magnesium	3.66		1	0.0088	0.0100	0.0200

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 245.1/7470A

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-01 File ID: 092517A-066

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>EPA200/SW7000 Series</u> Initial/Final: <u>20 ml / 20 ml</u>

Batch: <u>1716279</u> Sequence: <u>S710401</u> Calibration: <u>1711054</u>

Instrument: Mercury4

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-97-6	Mercury	0.00020	U	1	0.00013	0.00020	0.00020

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 245.1/7470A

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID: <u>092517A-071</u>

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>EPA200/SW7000 Series</u> Initial/Final: <u>20 ml / 20 ml</u>

Batch: <u>1716279</u> Sequence: <u>S710401</u> Calibration: <u>1711054</u>

Instrument: Mercury4

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-97-6	Mercury	0.00020	U	1	0.00013	0.00020	0.00020

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 245.1/7470A

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID: <u>092517A-072</u>

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/22/17 17:15</u>

% Solids: Preparation: <u>EPA200/SW7000 Series</u> Initial/Final: <u>20 ml / 20 ml</u>

Batch: <u>1716279</u> Sequence: <u>S710401</u> Calibration: <u>1711054</u>

Instrument: Mercury4

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
7439-97-6	Mercury	0.00020	U	1	0.00013	0.00020	0.00020



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax; 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-01 Groundwater

ELLE Sample # WW 9240358 ELLE Group # 1857427

Account # 30891

Project Name: SC39093

Eurofins Spectrum Analytical

11 Almgren Drive

Submitted: 09/30/2017 09:55

Collected: 09/11/2017 12:35

Agawan MA 01001

Reported: 10/12/2017 14:22

TF1-GT-121-091117

09301 SDG#: SAI24-01

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metal	s	SW-846 6020A	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.0010 U	0.00045	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0191	0.00072	0.0020	0.0040	1
06026	Barium	7440-39-3	0.0055	0.00072	0.0020	0.0040	1
06027	Beryllium	7440-41-7	0.00025 U	0.000071	0.00025	0.0010	1
06028	Cadmium	7440-43-9	0.00050 U	0.00015	0.00050	0.0010	1
06031	Chromium	7440-47-3	0.0020 U	0.00087	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0087	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	0.0010 U	0.00054	0.0010	0.0040	1
06035	Lead	7439-92-1	0.00043 J	0.00011	0.00025	0.0020	1
06037	Manganese	7439-96-5	2.32	0.00090	0.0020	0.0040	1
06038	Molybdenum	7439-98-7	0.00050 U	0.00025	0.00050	0.0010	1
06039	Nickel	7440-02-0	0.0053	0.0010	0.0020	0.0040	1
06041	Selenium	7782-49-2	0.0010 U	0.00050	0.0010	0.0040	1
06042	Silver	7440-22-4	0.00025 U	0.00015	0.00025	0.0010	1
06045	Thallium	7440-28-0	0.00025 U	0.00012	0.00025	0.0010	1
06048	Vanadium	7440-62-2	0.00050 U	0.00021	0.00050	0.0010	1
06049	Zinc	7440-66-6	0.0075 U	0.0039	0.0075	0.0300	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution
No.					Date and Ti	me		Factor
06024	Antimony	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06025	Arsenic	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06026	Barium	SW-846 6020A	1	172771063902D	10/12/2017	05:07	Sarah L Burt	1
06027	Beryllium	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06028	Cadmium	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06033	Copper	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06035	Lead	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06037	Manganese	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06038	Molybdenum	SW-846 6020A	1	172771063902C	10/11/2017	21:31	Bradley M Berlot	1
06039	Nickel	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06041	Selenium	SW-846 6020A	1	172771063902B	10/11/2017	21:31	Bradley M Berlot	1
06042	Silver	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06048	Vanadium	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	172771063902A	10/11/2017	21:31	Bradley M Berlot	1
10639	ICPMS - Water, 3020A - U4	SW-846 3020A	1	172771063902	10/08/2017	21:45	Annamaria Kuhns	1



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax; 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-02 Groundwater

ELLE Sample # WW 9240359 ELLE Group # 1857427 Account # 30891

Project Name: SC39093

Eurofins Spectrum Analytical

11 Almgren Drive

Submitted: 09/30/2017 09:55

Collected: 09/11/2017 13:35

Agawan MA 01001

Reported: 10/12/2017 14:22

TF1-GT-119-091117

09302 SDG#: SAI24-02

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals	5	SW-846 6020A	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.0010 U	0.00045	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0069	0.00072	0.0020	0.0040	1
06026	Barium	7440-39-3	0.0306	0.00072	0.0020	0.0040	1
06027	Beryllium	7440-41-7	0.00025 U	0.000071	0.00025	0.0010	1
06028	Cadmium	7440-43-9	0.00050 U	0.00015	0.00050	0.0010	1
06031	Chromium	7440-47-3	0.0020 U	0.00087	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.0665	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	0.0069	0.00054	0.0010	0.0040	1
06035	Lead	7439-92-1	0.00024 J	0.00011	0.00025	0.0020	1
06037	Manganese	7439-96-5	3.19	0.00090	0.0020	0.0040	1
06038	Molybdenum	7439-98-7	0.00050 U	0.00025	0.00050	0.0010	1
06039	Nickel	7440-02-0	0.0177	0.0010	0.0020	0.0040	1
06041	Selenium	7782-49-2	0.0010 U	0.00050	0.0010	0.0040	1
06042	Silver	7440-22-4	0.00025 U	0.00015	0.00025	0.0010	1
06045	Thallium	7440-28-0	0.00025 U	0.00012	0.00025	0.0010	1
06048	Vanadium	7440-62-2	0.00050 U	0.00021	0.00050	0.0010	1
06049	Zinc	7440-66-6	0.0071 J	0.0039	0.0075	0.0300	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution
No.					Date and Ti	me		Factor
06024	Antimony	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06025	Arsenic	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06026	Barium	SW-846 6020A	1	172771063902D	10/12/2017	05:09	Sarah L Burt	1
06027	Beryllium	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06028	Cadmium	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06033	Copper	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06035	Lead	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06037	Manganese	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06038	Molybdenum	SW-846 6020A	1	172771063902C	10/11/2017	21:34	Bradley M Berlot	1
06039	Nickel	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06041	Selenium	SW-846 6020A	1	172771063902B	10/11/2017	21:34	Bradley M Berlot	1
06042	Silver	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06048	Vanadium	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	172771063902A	10/11/2017	21:34	Bradley M Berlot	1
10639	ICPMS - Water, 3020A - U4	SW-846 3020A	1	172771063902	10/08/2017	21:45	Annamaria Kuhns	1



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax; 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-03 Groundwater

ELLE Sample # WW 9240360 ELLE Group # 1857427

Account # 30891

Collected: 09/11/2017 15:50

Project Name: SC39093

Eurofins Spectrum Analytical

11 Almgren Drive

Submitted: 09/30/2017 09:55

Agawan MA 01001

Reported: 10/12/2017 14:22

TF1-GZ-103-091117

09303 SDG#: SAI24-03

CAT No.	Analysis Name	CAS Number	Result	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Metals	5	SW-846 6020A	mg/l	mg/l	mg/l	mg/l	
06024	Antimony	7440-36-0	0.0010 U	0.00045	0.0010	0.0020	1
06025	Arsenic	7440-38-2	0.0241	0.00072	0.0020	0.0040	1
06026	Barium	7440-39-3	0.0115	0.00072	0.0020	0.0040	1
06027	Beryllium	7440-41-7	0.00025 U	0.000071	0.00025	0.0010	1
06028	Cadmium	7440-43-9	0.00050 U	0.00015	0.00050	0.0010	1
06031	Chromium	7440-47-3	0.0020 U	0.00087	0.0020	0.0040	1
06032	Cobalt	7440-48-4	0.00054 J	0.00016	0.00050	0.0010	1
06033	Copper	7440-50-8	0.0053	0.00054	0.0010	0.0040	1
06035	Lead	7439-92-1	0.00082 J	0.00011	0.00025	0.0020	1
06037	Manganese	7439-96-5	2.10	0.00090	0.0020	0.0040	1
06038	Molybdenum	7439-98-7	0.00028 J	0.00025	0.00050	0.0010	1
06039	Nickel	7440-02-0	0.0020 U	0.0010	0.0020	0.0040	1
06041	Selenium	7782-49-2	0.0010 U	0.00050	0.0010	0.0040	1
06042	Silver	7440-22-4	0.00025 U	0.00015	0.00025	0.0010	1
06045	Thallium	7440-28-0	0.00025 U	0.00012	0.00025	0.0010	1
06048	Vanadium	7440-62-2	0.00050 U	0.00021	0.00050	0.0010	1
06049	Zinc	7440-66-6	0.0075 U	0.0039	0.0075	0.0300	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution
No.					Date and Ti	me		Factor
06024	Antimony	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06025	Arsenic	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06026	Barium	SW-846 6020A	1	172771063902D	10/12/2017	05:11	Sarah L Burt	1
06027	Beryllium	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06028	Cadmium	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06031	Chromium	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06032	Cobalt	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06033	Copper	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06035	Lead	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06037	Manganese	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06038	Molybdenum	SW-846 6020A	1	172771063902C	10/11/2017	21:37	Bradley M Berlot	1
06039	Nickel	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06041	Selenium	SW-846 6020A	1	172771063902B	10/11/2017	21:37	Bradley M Berlot	1
06042	Silver	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06045	Thallium	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06048	Vanadium	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
06049	Zinc	SW-846 6020A	1	172771063902A	10/11/2017	21:37	Bradley M Berlot	1
10639	ICPMS - Water, 3020A - U4	SW-846 3020A	1	172771063902	10/08/2017	21:45	Annamaria Kuhns	1

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 300.0

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

 Matrix:
 Ground Water
 Laboratory ID:
 SC39093-01
 File ID:
 091217-038

 Sampled:
 09/11/17 12:35
 Prepared:
 09/12/17 10:05
 Analyzed:
 09/12/17 20:46

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715547</u> Sequence: <u>S709516</u> Calibration: <u>1710011</u>

Instrument: <u>IC3</u>
Reported to: <u>LOD</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
16887-00-6	Chloride	15.6		1	0.0994	0.100	1.00
14808-79-8	Sulfate as SO4	8.13		1	0.798	1.00	1.00
14797-55-8	Nitrate as N	0.100	U	1	0.007	0.100	0.100

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 300.0

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID: <u>091217-039</u>

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/12/17 10:05</u> Analyzed: <u>09/12/17 21:02</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715547</u> Sequence: <u>S709516</u> Calibration: <u>1710011</u>

Instrument: $\underline{IC3}$ Reported to: \underline{LOD}

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
16887-00-6	Chloride	5.98		1	0.0994	0.100	1.00
14808-79-8	Sulfate as SO4	45.2		1	0.798	1.00	1.00
14797-55-8	Nitrate as N	0.011	J	1	0.007	0.100	0.100

FORM I - INORGANIC ANALYSIS DATA SHEET EPA 300.0

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID: <u>091217-040</u>

Sampled: $09/11/17 \ 15:50$ Prepared: $09/12/17 \ 10:05$ Analyzed: $09/12/17 \ 21:18$

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>5 ml / 5 ml</u>

Batch: <u>1715547</u> Sequence: <u>S709516</u> Calibration: <u>1710011</u>

Instrument: $\underline{IC3}$ Reported to: \underline{LOD}

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
16887-00-6	Chloride	11.2		1	0.0994	0.100	1.00
14808-79-8	Sulfate as SO4	1.00	U	1	0.798	1.00	1.00
14797-55-8	Nitrate as N	0.100	U	1	0.007	0.100	0.100

FORM I - INORGANIC ANALYSIS DATA SHEET SM5310B (00, 11)

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-01</u> File ID: <u>1716147-006</u>

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/20/17 16:09</u> Analyzed: <u>09/20/17 18:30</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>40 ml / 40 ml</u>

Batch: <u>1716147</u> Sequence: <u>S708405</u> Calibration: <u>1706085</u>

Instrument: TOC4

Reported to: LOD

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
NA	Total Organic Carbon	1.99		1	0.238	0.500	1.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM5310B (00, 11)

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

 Matrix:
 Ground Water
 Laboratory ID:
 SC39093-02
 File ID:
 1716147-007

 Sampled:
 09/11/17 13:35
 Prepared:
 09/20/17 16:09
 Analyzed:
 09/20/17 18:46

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>40 ml / 40 ml</u>

Batch: <u>1716147</u> Sequence: <u>S708405</u> Calibration: <u>1706085</u>

Instrument: $\underline{TOC4}$ Reported to: \underline{LOD}

Result Dilution CAS NO. Q MDL LOD LOQ Analyte (mg/l)**Factor** NA Total Organic Carbon 2.62 0.238 0.500 1.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM5310B (00, 11)

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

 Matrix:
 Ground Water
 Laboratory ID:
 SC39093-03
 File ID:
 1716147-008

 Sampled:
 09/11/17 15:50
 Prepared:
 09/20/17 16:09
 Analyzed:
 09/20/17 19:03

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>40 ml / 40 ml</u>

Batch: <u>1716147</u> Sequence: <u>S708405</u> Calibration: <u>1706085</u>

Instrument: TOC4

Reported to: LOD

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
NA	Total Organic Carbon	4.02		1	0.238	0.500	1.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM18-22 5210B

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-01</u> File ID:

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/13/17 12:30</u> Analyzed: <u>09/18/17 10:45</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>300 ml / 300 ml</u>

Batch: <u>1715712</u> Sequence: <u>S708258</u> Calibration: <u>UNASSIGNED</u>

Instrument: <u>DO Meter</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
	Biochemical Oxygen Demand (5-day)	6.00		1	2.74	2.97	3.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM18-22 5210B

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-02</u> File ID:

Sampled: 09/11/17 13:35 Prepared: 09/13/17 12:30 Analyzed: 09/18/17 10:45

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>300 ml / 300 ml</u>

Batch: <u>1715712</u> Sequence: <u>S708258</u> Calibration: <u>UNASSIGNED</u>

Instrument: <u>DO Meter</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
	Biochemical Oxygen Demand (5-day)	6.00		1	2.74	2.97	3.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM18-22 5210B

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: <u>Ground Water</u> Laboratory ID: <u>SC39093-03</u> File ID:

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/13/17 12:30</u> Analyzed: <u>09/18/17 10:45</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>300 ml / 300 ml</u>

Batch: <u>1715712</u> Sequence: <u>S708258</u> Calibration: <u>UNASSIGNED</u>

Instrument: <u>DO Meter</u>

CAS NO.	Analyte	Result (mg/l)	Q	Dilution Factor	MDL	LOD	LOQ
	Biochemical Oxygen Demand (5-day)	6.00		1	2.74	2.97	3.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM2320B (97, 11)

TF1-GT-121-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-01 File ID: DTOOL Alk 2017-09-19 1230-014

Sampled: <u>09/11/17 12:35</u> Prepared: <u>09/18/17 10:19</u> Analyzed: <u>09/19/17 13:28</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>100 ml / 50 ml</u>

Batch: 1715978 Sequence: Calibration:

Instrument: <u>Titrator</u>

Reported to: <u>LOD</u>

CAS NO.	Analyte	Result (mg/l CaCO3)	Q	Dilution Factor	MDL	LOD	LOQ
	Total Alkalinity	61.2		1	0.524	1.50	2.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM2320B (97, 11)

TF1-GT-119-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-02 File ID: DTOOL Alk 2017-09-19 1230-015

Sampled: <u>09/11/17 13:35</u> Prepared: <u>09/18/17 10:19</u> Analyzed: <u>09/19/17 13:33</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>100 ml / 50 ml</u>

Batch: 1715978 Sequence: Calibration:

Instrument: <u>Titrator</u>

Reported to: <u>LOD</u>

CAS NO.	Analyte	Result (mg/l CaCO3)	Q	Dilution Factor	MDL	LOD	LOQ
	Total Alkalinity	18.2		1	0.524	1.50	2.00

FORM I - INORGANIC ANALYSIS DATA SHEET SM2320B (97, 11)

TF1-GZ-103-091117

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u> Received: <u>09/12/17 17:25</u>

Matrix: Ground Water Laboratory ID: SC39093-03 File ID: DTOOL Alk 2017-09-19 1230-016

Sampled: <u>09/11/17 15:50</u> Prepared: <u>09/18/17 10:19</u> Analyzed: <u>09/19/17 13:36</u>

% Solids: Preparation: <u>General Preparation</u> Initial/Final: <u>100 ml / 50 ml</u>

Batch: 1715978 Sequence: Calibration:

Instrument: <u>Titrator</u>

Reported to: <u>LOD</u>

CAS NO.	Analyte	Result (mg/l CaCO3)	Q	Dilution Factor	MDL	LOD	LOQ
	Total Alkalinity	105		1	0.524	1.50	2.00



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-01 Grab Water

ELLE Sample # WW 9208998 ELLE Group # 1850474

Project Name: WE15 Tank Farm 1 NAVSTA Newport

Account # 30891

Collected: 09/11/2017 12:35

Eurofins Spectrum Analytical

11 Almgren Drive Agawan MA 01001

Submitted: 09/14/2017 09:35 Reported: 09/28/2017 17:00

TF1-GT-121-091117

39T01 SDG#: THO39-01

CAT No.	Analysis Name		CAS Number	Resul	t	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC Pe	troleum	SW-846	8015B	mg/l		mg/l	mg/l	mg/l	
Hydro	carbons								
02740	C8-C44		n.a.	0.40		0.050	0.10	0.20	1
02740	Total TPH		n.a.	0.40		0.050	0.10	0.20	1
Misc.	Organics	EPA 537	Version	ng/l		ng/l	ng/l	ng/l	
	. .	1.1 Mod							
10954	Perfluorobutanesul	Lfonate	375-73-5	9		0.8	3	3	1
10954	Perfluorobutanoic	Acid	375-22-4	21		3	10	10	1
10954	Perfluorodecanesul	Lfonate	335-77-3	6	U	2	6	6	1
10954	Perfluorodecanoic	acid	335-76-2	0.9	J	0.5	2	2	1
10954	Perfluorododecano	ic acid	307-55-1	2	U	0.5	2	2	1
10954	Perfluoroheptanesu	ılfonate	375-92-8	6	U	2	6	6	1
10954	Perfluoroheptanoio	c acid	375-85-9	12		0.5	2	2	1
10954	Perfluorohexanesul	lfonate	355-46-4	13		1	3	3	1
10954	Perfluorohexanoic	acid	307-24-4	48		0.6	2	2	1
10954	Perfluorononanoic	acid	375-95-1	2	U	0.6	2	2	1
10954	Perfluoro-octanesu	ılfonate	1763-23-1	2	J	2	6	6	1
10954	Perfluorooctanoic	acid	335-67-1	15		0.6	2	2	1
10954	Perfluoropentanoio	c Acid	2706-90-3	51		0.5	2	2	1
10954	Perfluorotetradeca	anoic acid	376-06-7	2	U	0.5	2	2	1
10954	Perfluorotridecand	oic acid	72629-94-8	2	U	0.5	2	2	1
10954	Perfluoroundecano:	ic acid	2058-94-8	3	U	1	3	3	1
10954	PFOSA		754-91-6	9	U	3	9	9	1
	stated QC limits ar				nt data	points			

can be obtained to calculate statistical limits.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02740	Custom TPH with Ranges (Water)	SW-846 8015B	1	172570043A	09/18/2017 15:20	Timothy M Emrick	1
11181	Custom TPH w/ Ranges Water Ext	SW-846 3510C	1	172570043A	09/15/2017 10:00	Bradley W VanLeuven	1
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17262001	09/22/2017 03:46	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17262001	09/19/2017 09:09	Pamela Rothharpt	1

^{*=}This limit was used in the evaluation of the final result



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-02 Grab Water

ELLE Sample # WW 9208999 ELLE Group # 1850474

Account # 30891

Project Name: WE15 Tank Farm 1 NAVSTA Newport

Eurofins Spectrum Analytical

11 Almgren Drive Agawan MA 01001

Submitted: 09/14/2017 09:35 Reported: 09/28/2017 17:00

Collected: 09/11/2017 13:35

TF1-GT-119-091117

39T02 SDG#: THO39-02

CAT No.	Analysis Name		CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC Pe	troleum	SW-846	8015B	mg/l		mg/l	mg/l	mg/l	
Hydro	carbons								
02740	C8-C44		n.a.	0.25		0.050	0.10	0.20	1
02740	Total TPH		n.a.	0.25		0.050	0.10	0.20	1
Misc.	Organics	EPA 537	Version	ng/l		ng/l	ng/l	ng/l	
	_	1.1 Mod	ified						
10954	Perfluorobutanesu	lfonate	375-73-5	3	U	0.8	3	3	1
10954	Perfluorobutanoic	Acid	375-22-4	10	U	3	10	10	1
10954	Perfluorodecanesu	lfonate	335-77-3	6	U	2	6	6	1
10954	Perfluorodecanoic	acid	335-76-2	2	U	0.5	2	2	1
10954	Perfluorododecano	ic acid	307-55-1	2	U	0.5	2	2	1
10954	Perfluoroheptanes	ulfonate	375-92-8	6	U	2	6	6	1
10954	Perfluoroheptanoi	c acid	375-85-9	2	U	0.5	2	2	1
10954	Perfluorohexanesu	lfonate	355-46-4	3	U	1	3	3	1
10954	Perfluorohexanoic	acid	307-24-4	2	U	0.6	2	2	1
10954	Perfluorononanoic	acid	375-95-1	2	U	0.6	2	2	1
10954	Perfluoro-octanes	ulfonate	1763-23-1	6	U	2	6	6	1
10954	Perfluorooctanoic	acid	335-67-1	2	U	0.6	2	2	1
10954	Perfluoropentanoi	c Acid	2706-90-3	2	U	0.5	2	2	1
10954	Perfluorotetradec	anoic acid	376-06-7	2	U	0.5	2	2	1
10954	Perfluorotridecan	oic acid	72629-94-8	2	U	0.5	2	2	1
10954	Perfluoroundecano	ic acid	2058-94-8	3	U	1	3	3	1
10954	PFOSA		754-91-6	9	U	3	9	9	1
	stated QC limits and be obtained to calc				data p	points			

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
02740	Custom TPH with Ranges (Water)	SW-846 8015B	1	172570043A	09/18/2017 15	5:42	Timothy M Emrick	1
11181	Custom TPH w/ Ranges Water Ext	SW-846 3510C	1	172570043A	09/15/2017 10	0:00	Bradley W VanLeuven	1
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17262001	09/22/2017 04	1:06	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17262001	09/19/2017 09	9:05	Pamela Rothharpt	1



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-03 Grab Water

ELLE Sample # WW 9209000 ELLE Group # 1850474

Project Name: WE15 Tank Farm 1 NAVSTA Newport

Account # 30891

Eurofins Spectrum Analytical

Submitted: 09/14/2017 09:35

11 Almgren Drive Agawan MA 01001

Reported: 09/28/2017 17:00

Collected: 09/11/2017 15:50

39T03 SDG#: THO39-03 TF1-GZ-103-091117

CAT No.	Analysis Name		CAS Number	Result	:	Detection Limit*	Limit of Detection	Limit of Quantitation	DF
GC Pe	troleum	SW-846	8015B	mg/l		mg/l	mg/l	mg/l	
Hydro	carbons								
02740	C8-C44		n.a.	0.37		0.051	0.10	0.20	1
02740	Total TPH		n.a.	0.37		0.051	0.10	0.20	1
Misc.	Organics	EPA 537	Version	ng/l		ng/l	ng/l	ng/l	
	•	1.1 Mod	lified						
10954	Perfluorobutanesu	lfonate	375-73-5	1	J	0.8	3	3	1
10954	Perfluorobutanoic	Acid	375-22-4	10	U	3	10	10	1
10954	Perfluorodecanesu:	lfonate	335-77-3	6	U	2	6	6	1
10954	Perfluorodecanoic	acid	335-76-2	2	U	0.5	2	2	1
10954	Perfluorododecano	ic acid	307-55-1	2	U	0.5	2	2	1
10954	Perfluoroheptanes	ulfonate	375-92-8	6	U	2	6	6	1
10954	Perfluoroheptanoi	c acid	375-85-9	1	J	0.5	2	2	1
10954	Perfluorohexanesu:	lfonate	355-46-4	3	U	1	3	3	1
10954	Perfluorohexanoic	acid	307-24-4	8		0.6	2	2	1
10954	Perfluorononanoic	acid	375-95-1	2	U	0.6	2	2	1
10954	Perfluoro-octanes	ulfonate	1763-23-1	6	U	2	6	6	1
10954	Perfluorooctanoic	acid	335-67-1	1	J	0.6	2	2	1
10954	Perfluoropentanoi	c Acid	2706-90-3	11		0.5	2	2	1
10954	Perfluorotetradeca	anoic acid	376-06-7	2	U	0.5	2	2	1
10954	Perfluorotridecan	oic acid	72629-94-8	2	U	0.5	2	2	1
10954	Perfluoroundecano	ic acid	2058-94-8	3	U	1	3	3	1
10954	PFOSA		754-91-6	9	U	3	9	9	1
The	stated QC limits ar	e advisory	only until su	fficien	t data j	points			

can be obtained to calculate statistical limits.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02740	Custom TPH with Ranges (Water)	SW-846 8015B	1	172570043A	09/18/2017 16:0	Timothy M Emrick	1
11181	Custom TPH w/ Ranges Water Ext	SW-846 3510C	1	172570043A	09/15/2017 10:0	Bradley W VanLeuven	1
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17262001	09/22/2017 04:2	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	17262001	09/19/2017 09:0	Pamela Rothharpt	1

^{*=}This limit was used in the evaluation of the final result



Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: SC39093-04 Grab Water

ELLE Sample # WW 9209001 ELLE Group # 1850474

Account # 30891

Project Name: WE15 Tank Farm 1 NAVSTA Newport

Eurofins Spectrum Analytical

11 Almgren Drive Agawan MA 01001

Submitted: 09/14/2017 09:35 Reported: 09/28/2017 17:00

TF1-FRB-091117

39T04 SDG#: THO39-04

Collected: 09/11/2017 12:35

CAT No.	Analysis Name	CAS Number	Result		Detection Limit*	Limit of Detection	Limit of Quantitation	DF
Misc.	Organics EPA 537	Version	ng/l		ng/l	ng/l	ng/l	
	1.1 Mod:	fied						
10954	Perfluorobutanesulfonate	375-73-5	3	U	0.8	3	3	1
10954	Perfluorobutanoic Acid	375-22-4	10	U	3	10	10	1
10954	Perfluorodecanesulfonate	335-77-3	6	U	2	6	6	1
10954	Perfluorodecanoic acid	335-76-2	2	U	0.5	2	2	1
10954	Perfluorododecanoic acid	307-55-1	2	U	0.5	2	2	1
10954	Perfluoroheptanesulfonate	375-92-8	6	U	2	6	6	1
10954	Perfluoroheptanoic acid	375-85-9	2	U	0.5	2	2	1
10954	Perfluorohexanesulfonate	355-46-4	3	U	1	3	3	1
10954	Perfluorohexanoic acid	307-24-4	2	U	0.6	2	2	1
10954	Perfluorononanoic acid	375-95-1	2	U	0.6	2	2	1
10954	Perfluoro-octanesulfonate	1763-23-1	6	U	2	6	6	1
10954	Perfluorooctanoic acid	335-67-1	2	U	0.6	2	2	1
10954	Perfluoropentanoic Acid	2706-90-3	2	U	0.5	2	2	1
10954	Perfluorotetradecanoic acid	376-06-7	2	U	0.5	2	2	1
10954	Perfluorotridecanoic acid	72629-94-8	2	U	0.5	2	2	1
10954	Perfluoroundecanoic acid	2058-94-8	3	U	1	3	3	1
10954	PFOSA	754-91-6	9	U	3	9	9	1
The	stated QC limits are advisory	only until su	fficient	data p	oints			
can :	be obtained to calculate stati	stical limits						

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10954	PFAS in Water by LC/MS/MS	EPA 537 Version 1.1 Modified	1	17262001	09/22/2017 04:47	Jason W Knight	1
14091	PFAS Water Prep	EPA 537 Version	1	17262001	09/19/2017 09:05	Pamela Rothharpt	1

Appendix C

Support Documentation

			- B	
	ell	rn	tı	nc
00	CO		2 2	112

CHAIN OF CUSTODY RECORD

Spectrum Analytical

Page 1 of 2

1	5/29.92 R	
V.	201013	7
1 5		

15-1	Special Handling:	
X	Standard TAT - 7 to 10 business days	

	Ruch	TAT		Date	Needed	
-	Kusii	IAI	_	Date	Meeded	

All TATs subject to laboratory approval Min. 24-hr notification needed for rushes

		***************************************											-,				Sample	es dispo	sed a	inter 30 days unless oth	erwise instructed.
Report To: TETR			And the second s	Invoice To	: MI	KE I	DREY	DEA	ں					Project	t No:	112	608	005	L	NE15	
	DUSTRIAL WAY						TOXI						Site Name: TANK FARM 1, NAUSTA NEWPORT					EWPORT			
SALE	M NH, 03079		Biograph and Assistant to Assistant to		LAG VEGAS NV 89123																
Telephone #:	603-328-1469				LA	5 VE	545	NU	87	123				Location	on:	POIS D. i	JSM	EN	1+	w. PRYOR,	State: 132
	STEVE PARKER			P.O No				(Quote #:					Sumple						GNE	V. 4.1. 71.
F=Field Filtered	1=Na ₂ S2O ₃ 2=HCl 3=	=H ₂ SO ₄	4=HNO ₃	5=NaOH 6	=Ascor	bic Acie	i						ict Pro	correti	ive Cod	la halc	ODU •			0.1/0CP	
7= CH3OH 8= Nal	HSO ₄ 9=Deionized Water 10	$=H_3PO_4$	11	[=	12=	-			-						1			T	$\ \cdot \ $	QA/QC Repo	
						C	ontain	are.	ð		4	2	alysis	10				MA DEP MCP CAM R	. Пv. П		
DW =Drinking Wate	er GW=Groundwater S	SW=Surfac	ce Water	WW=Waste Wa	ter				T	15			10	N Ana	23		T	Т		MA DEP MCP CAM R CT DPH RCP Report?	Yes \(\Bar{\Bar{\Bar{\Bar{\Bar{\Bar{\Bar{
O=Oil SO=Soil	l SL=Sludge A=Indoor	:/Ambient	Air SG=S	Soil Gas				100					Ŕ		33%		20	3	orinated	Standard	€No QC
• X1=	Q C X2=_		X	3=			Vials	Glas	lass		16	12 C	35	13	3元	108	3/6	Med	lorim	DQA*	ASP B*
G	⊊= Grab		C=Comps	site	43] ×	V AC	nber	ear G	astic	R	Cs/PAH3	200	36	S S	3	SE EE	(537)	if ch	NJ Reduced*	NJ Full* Tier IV*
Lab ID:	Sample ID:		Date:	Time:	Type	Matrix	of VOA	# of Amber Glass	of Clear Glass	# of Plastic	7711 (30x5D	SVOCS	123	17	536	72	0880	F. 5.	Check if ch	Other: CER	CLA
100					10	-	#	6	#				K	R	33	1	0	D-	С	State-specific repo	orting standards:
	TF1-GT-121-09111		7/11/17	1235	G	1	7			5	1		V	V	V	V	V	V			
	TF1-GT-119-09111			1335	G	GW	7	6		5	~	1	1	1	1	1	/	V			
- 03	TF1-62-103-0911	117		1550	G	GW	7	6		5	V	1	5	1	1	1	1	1	Ш		
. 64	TF1-FRB-091117	7		1235	G	141				2				T AM				1			
105	TF1-TB-091117		V	0830	G	181	1							V							*1
							8														
															1						
							A :										- 19				
							5														
Relin	quished by:		Receiv	ved by:			Date:			Time:		emp °C	V	EDD f	Formati	L					
			10 36°0								Obs	rved					-		,		
Donal Whelen A Della Dec						7-	12-1	17	111	07		tt cction Factor		E-Illali	10.	ste	phen	-par	-ke	r@tetratech	com
antio Der						a	112	(7)	7.	225	18388	Oction Factor	1	20	bul	12				MANAGEMENT OF THE PROPERTY OF	
300000			•	Mari					1		Con	ected for	Cond	ition ur	on rece	eipt:	Custor	ly Seals		☐ Present ☐ In	act Broken
				J		-	0 15		-		IR I	0#		0-4							
						1						cy		Ambien	t X Io	ced	☐ Re	frigerate	ed	☐ DI VOA Frozen	☐ Soil Jar Froz

SC39093 Ry

			-	
	PI	Iro	TI	ns
-			8 8	

CHAIN OF CUSTODY RECORD

Spectrum Analytical

Page 2 of 2

Special Handling:	8 0
Standard TAT - 7 to 10 business days	
Rush TAT - Date Needed:	3. n. '

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

			T	112	40 000	024-		. 1						after 30 days unless otherwise instructed.
Report To: TETRA TECH			Invoice To: MIKE DREYDEN								Project No:	12608005		
5 INDUSTREAL WAY			EARTH TOXICS INC. 8275 6 EASTERN AVE								Site Name: 7.	ANK FARM 1	, NAVSTA NEWPORT	
SUITE 2B										2	-	200	22 4400 1711	Pr
SALEM NH 03079			,		13 VE	GAS	NU	1 89	123		-	Location:	KISMOUTH	State: RI
Telephone #: 603-328-1467 Project Mgr: STEVE PARKER			P.O No.: Quote #:									LAMON TAG		
				-				Zuote #.						
F=Field Filtered 1=Na ₂ S2O ₃ 2=HCl 7=CH3OH 8=NaHSO ₄ 9=Deionized Water		24	5=NaOH 6 =								L	ist Preservative Code b	elow:	QA/QC Reporting Notes: * additional charges may appply
DW =Drinking Water GW =Groundwater	SW=Surface	Water V	VW=Waste Wat	er		4	C	ontaine	ers			Analysis		MA DEP MCP CAM Report? Yes N
			:1 C		1			b 2			3			CT DPH RCP Report? Yes N
O=Oil SO=Soil SL=Sludge A=In			27				SS				\$08.2A		Check if chlorinated	Standard No QC DQA*
X1= QC	2=	X3	NAME AND ADDRESS OF THE PARTY O			ials	Glas	lass		200	00		lori	ASP A* ASP B*
G= Grab		C=Compsi	#a		1 .	V V	ıber	ar G	stic	100	der		if children	NJ Reduced* NJ Full*
G= Grab		C-Compsi	le .	Туре	Matrix	# of VOA Vials	# of Amber Glass	of Clear Glass	of Plastic	Proticions (BOSIR)	PCBS (Aredons,		eck	Tier II* Tier IV*
Lab ID: Sample ID:		Date:	Time:		Σ	0 #	0#	# 0	# 0	00	50		5	State-specific reporting standards:
390930 TF1-GT-121-00	1117 9	111/17	1235	G	GW	7	6		5	V				
27F1-GT-119-09	1117	1	1335	G	GW	7	6		5	1				经总汇票 为有 量。
03TF1-GZ-103-0			1550	G	GW	7	6		5	V				
04TF1-FFB-09111	7		1235	6	18				2					
N 05 TF1- TB-09111			0830	G	X(1								4
		W 16			<u> </u>									
*														
-							TH				-			
				-										
* Relinquished by:		Receive	ed by:			Date:			Time:	Ten	np °C	EDD format:		
Donald while Daried			Da		9-	121	7	11	:07	100000000000000	7	E-mail to:	stephen.par	ker etetratech.com
Davis Dec			Sen		91	121	()	1	725		on Factor			
TWOW YOU			()			- 0 (, , ,	Corrected		Condition upon receipt	: Custody Seals:	☐ Present ☐ Intact ☐ Broken
										IR ID#	Delice Control			
					14 15					C	1	Ambient Iced	☐ Refrigerated	☐ DI VOA Frozen ☐ Soil Jar Froze

SDGSC39093

SC39093 General Narrative

Eurofins Spectrum Analytical, Inc. submits the enclosed data package for the site characterization of WE15 Tank Farm 1 NAVSTA Newport. Samples submitted for analysis by Tetra Tech, Inc. - Salem, NH. Under this deliverable, analysis results are presented for two QC samples and three Ground Water samples submitted on September 12th, 2017.

The analyses were performed according to USEPA SW846 method analytical guidelines and other methods. In addition the analyses were performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and in accordance with project contract requirements and chain of custody forms.

Observations and/or deviations observed for specific analyses can be found in the analysis narrative:

1. Overall Observations:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual Integrations are coded to provide the data reviewer justification for such action. The codes are labeled on corresponding raw data for GC/MS and GC analysis as follows:

- M1 peak tailing or fronting
- · M2 peak co-elution
- · M3 rising or failing baseline
- · M4 retention time shift
- · M5 miscellaneous under this category, the justification is explained
- M6 software did not integrate peak
- · M7 partial peak integration

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Scanned copies of logbook pages are included, with the originals are archived within the laboratory.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this electronic data package, has been authorized by the laboratory director as verified by the following signature.

Date:

12/06/2017

Christina A. White

Austina a. White

Laboratory Director

SDG SC39093 Page 2 / 1731

Notes and Definitions

BOD1 The oxygen uptake for the dilution water blank exceeded the allowable limits of 0.20 mg/L. As a result, the result for this sample

may be biased high.

BOD4 Any difference greater than 30% between the high and low dilutions may indicate the presence of a toxic substance. For this

sample, one or more of the dilutions is out of acceptance range and cannot be used to determine the % difference.

CRL3 Low level calibration check failed, reporting limit has been elevated.

QM2 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte

inherent in the sample.

R06 MRL raised to correlate to batch QC reporting limits.

Z-2 QC recovery was outside of acceptance range however it was re-run before samples were run and was within the control limits.

BRL Below the reporting limit and also indicates there are no detections between the MDL and LOQ.

LOD Limit of Detection

LOQ Limit of Quantitation

RPD is calculated based on final result.

Form I 'Q' column

B The analyte was found in the associated blank as well as the sample.

D All identified compounds in the analysis are at a secondary dilution factor.

E The identified compound's concentration exceeds the calibration range of the instrument for this specific analysis.

F The parameter was positively identified but the associated numerical value is below the LOQ.

J Compound detected but below the LOQ and above the minimum detection limit (MDL); therefore, the result is an estimated

concentration.

N Included for TIC that indicates presumptive evidence of a compound.

P Used for a Dual Column target analyte when the concentration difference between the two GC columns is greater than 40%.

U Compound was analyzed for but not detected. Samples were reported to the LOD.

Form IIa 'Method' column

This column refers to the instrument used for analysis:

IR Iris ICP

MS Thermo ICP/MS

AV Mercury analyzer

Form VI 'Q' column

* indicates that:

Mean RF is above the value in the LIMIT column, or Linear COD is below the value in the LIMIT column, or Quad COD is below the value in the LIMIT column

Form VII 'Type' column

A Average of response factor

L Linear regression

Q Quadratic equation

Form VIII 'Q' column for Inorganics The dilution analysis is not within a control limit of 10%, therefore a chemical or physical interference effect must be suspected. \mathbf{E}



Project Name: WE15 Tank Farm 1 NAVSTA Newport LL Group #: 1850474

General Comments:

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

For dual column analyses, the surrogate (for multi-surrogate tests, at least one surrogate) must be within the acceptance limits on at least one of the two columns.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

EPA 537 Version 1.1 Modified, Misc. Organics

Sample #s: 9208998, 9208999, 9209000, 9209001

The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

Batch #: 17262001 (Sample number(s): 9208998-9209001 UNSPK: 9208998)

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9208998, 9208999, 9209000, 9209001, Blank, LCS, LCSD, MS

CROSS REFERENCE TABLE

SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

 TF1-TB-091117
 SC39093-05

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 8260C.

IV. PREPARATION

Aqueous samples were prepared according to SW846 5030 Water MS.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 8260C:

HPV3 details: GC/MS EST Centurion Autosampler EST Evolution Sample Concentrator Supelco vocarb 3000 (K) trap and conditions used Agilent 7890A series Gas Chromatograph Agilent 5975C Mass Selective Detector Column - DB-VRX, 20 meters, 0.18mm diameter, 1.0um film

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria with the following exceptions:

In calibration 1709004:

Analyte quantified by quadratic type calibration: 1,2,3-Trichlorobenzene, 2-Hexanone (MBK), Bromoform, cis-1,3-Dichloropropene, Dibromochloromethane, trans-1,3-Dichloropropene

This affected the following samples:

TF1-TB-091117, TF1-GZ-103-091117, TF1-GT-121-091117, TF1-GT-119-091117, S708173-CCV2, S708173-CCV1, S707839-ICV1, 1715747-BSD1, 1715747-BS1, 1715747-BLK1

<u>In sample S708173-CCV1:</u>

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Methyl acetate (-22.5%)

This affected the following samples:

1715747-BLK1, 1715747-BS1, 1715747-BSD1, TF1-GT-119-091117, TF1-GT-121-091117, TF1-GZ-103-091117, TF1-TB-091117

B. Blanks:

All blanks were within the acceptance criteria.

C. Surrogates:

All method criteria were met.

D. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

E. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

F. Internal Standards:

Internal standards were within the acceptance criteria.

G. Samples:

All method criteria were met.

FORM II - SURROGATE STANDARD RECOVERY SUMMARY

SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Client ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	Total Out
Blank (1715747-BLK1)	100	99	100	97			0
LCS (1715747-BS1)	99	99	98	98			0
LCS Dup (1715747-BSD1)	97	100	97	95			0
TF1-GT-121-091117 (SC39093-01)	98	98	98	98			0
TF1-GT-119-091117 (SC39093-02)	100	98	112	101			0
TF1-GZ-103-091117 (SC39093-03)	98	98	99	99			0
TF1-TB-091117 (SC39093-05)	97	98	98	96			0

Control Limits

S1 = 1,2-Dichloroethane-d4 81 - 118 S2 = 4-Bromofluorobenzene 85 - 114 S3 = Dibromofluoromethane 80 - 119S4 = Toluene 89 - 112

[#] Column to be used to flag recovery values

^{*} Values outside of QC limits

SW846 8260C

SDG: SC39093 Laboratory: Eurofins Spectrum Analytical, Inc. - MA

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPV3

SW846 5030 Water MS

Preparation:

Batch: <u>1715747</u> Laboratory ID: 1715747-BS1

Analyzed: 09/14/17 12:48 Spike ID: 17I0350

> File ID: LCS0914A.D

<u>5 ml / 5 ml</u>

Initial/Final:

COMPOUND	SPIKE ADDED (μg/l)	LCS CONCENTRATION (µg/l)	LCS % REC.#	QC LIMITS REC.
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	19.3	96	70 - 136
Acetone	20.0	18.4	92	39 - 160
Benzene	20.0	20.1	100	79 - 120
Bromochloromethane	20.0	19.0	95	78 - 123
Bromodichloromethane	20.0	20.9	104	79 - 125
Bromoform	20.0	20.7	104	66 - 130
Bromomethane	20.0	18.4	92	53 - 141
2-Butanone (MEK)	20.0	19.1	96	56 - 143
Carbon disulfide	20.0	19.0	95	64 - 133
Carbon tetrachloride	20.0	19.5	97	72 - 136
Chlorobenzene	20.0	20.7	103	82 - 118
Chloroethane	20.0	19.5	97	60 - 138
Chloroform	20.0	19.7	99	79 - 124
Chloromethane	20.0	21.9	110	50 - 139
1,2-Dibromo-3-chloropropane	20.0	18.1	90	62 - 128
Dibromochloromethane	20.0	19.1	96	74 - 126
1,2-Dibromoethane (EDB)	20.0	19.6	98	77 - 121
1,2-Dichlorobenzene	20.0	20.4	102	80 - 119
1,3-Dichlorobenzene	20.0	21.5	107	80 - 119
1,4-Dichlorobenzene	20.0	20.0	100	79 - 118
Dichlorodifluoromethane (Freon12)	20.0	19.1	96	32 - 152
1,1-Dichloroethane	20.0	21.1	106	77 - 125
1,2-Dichloroethane	20.0	19.1	95	73 - 128
1,1-Dichloroethene	20.0	19.6	98	71 - 131
cis-1,2-Dichloroethene	20.0	19.6	98	78 - 123
trans-1,2-Dichloroethene	20.0	19.0	95	75 - 124
1,2-Dichloropropane	20.0	20.2	101	78 - 128
cis-1,3-Dichloropropene	20.0	19.0	95	75 - 124
trans-1,3-Dichloropropene	20.0	18.7	93	73 - 127
Ethylbenzene SDG SC39093 Page 60 / 1731	20.0	21.2	106	79 - 121

SW846 8260C

SDG: SC39093 Laboratory: Eurofins Spectrum Analytical, Inc. - MA

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

HPV3 Matrix: Aqueous Instrument:

SW846 5030 Water MS

Preparation:

Batch: <u>1715747</u> Laboratory ID: 1715747-BS1

Analyzed: 09/14/17 12:48 Spike ID: 17I0350

> File ID: LCS0914A.D

<u>5 ml / 5 ml</u>

Initial/Final:

COMPOUND	SPIKE ADDED (µg/l)	LCS CONCENTRATION (µg/l)	LCS % REC.#	QC LIMITS REC.
2-Hexanone (MBK)	20.0	18.1	91	57 - 139
Isopropylbenzene	20.0	20.7	104	72 - 131
Methyl tert-butyl ether	20.0	19.2	96	71 - 124
4-Methyl-2-pentanone (MIBK)	20.0	17.1	86	67 - 130
Methylene chloride	20.0	18.6	93	74 - 124
Styrene	20.0	21.4	107	78 - 123
1,1,2,2-Tetrachloroethane	20.0	19.5	97	71 - 121
Tetrachloroethene	20.0	19.4	97	74 - 129
Toluene	20.0	19.8	99	80 - 121
1,2,3-Trichlorobenzene	20.0	18.6	93	69 - 129
1,2,4-Trichlorobenzene	20.0	18.8	94	69 - 130
1,1,1-Trichloroethane	20.0	20.4	102	74 - 131
1,1,2-Trichloroethane	20.0	19.5	98	80 - 119
Trichloroethene	20.0	20.2	101	79 - 123
Trichlorofluoromethane (Freon 11)	20.0	20.7	103	64 - 141
Vinyl chloride	20.0	20.5	102	58 - 137
m,p-Xylene	20.0	22.3	111	80 - 121
o-Xylene	20.0	21.4	107	78 - 122
Cyclohexane	20.0	20.0	100	71 - 130
Methyl acetate	20.0	16.4	82	56 - 136
Methylcyclohexane	20.0	19.8	99	72 - 132

File ID: LCS0914B.D

	SPIKE ADDED	LCSD CONCENTRATION	LCSD %	%	QC	LIMITS
COMPOUND	ADDED (μg/l)	CONCENTRATION (μg/l)	76 REC. #	RPD#	RPD	REC.
1,1,2-Trichlorotrifluoroethane (Freon	20.0	18.2	91	5	25	70 - 136
Acetone	20.0	18.8	94	3	50	39 - 160
Benzene	20.0	18.9	95	6	25	79 - 120
Bromochloromethane	20.0	17.8	89	6	25	78 - 123
Bromodichloromethane SDG SC39093 Page 61 / 173	20.0	19.7	99	6	25	79 - 125

SDG SC39093 Page 61 / 1/31

SW846 8260C

SDG: SC39093 Laboratory: Eurofins Spectrum Analytical, Inc. - MA

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument: Matrix: Aqueous HPV3

SW846 5030 Water MS

Preparation:

1715747-BSD1 Batch: <u>1715747</u> Laboratory ID:

Analyzed: 09/14/17 13:17 Spike ID: 17I0350

> File ID: LCS0914B.D

<u>5 ml / 5 ml</u>

Initial/Final:

	SPIKE	LCSD	LCSD		QC LIMITS			
COMPOUND	ADDED (μg/l)	CONCENTRATION (µg/l)	% REC. #	% RPD #	RPD	REC.		
Bromoform	20.0	19.8	99	4	25	66 - 130		
Bromomethane	20.0	18.0	90	2	50	53 - 141		
2-Butanone (MEK)	20.0	21.5	108	12	50	56 - 143		
Carbon disulfide	20.0	17.8	89	6	25	64 - 133		
Carbon tetrachloride	20.0	17.7	88	10	25	72 - 136		
Chlorobenzene	20.0	19.9	100	4	25	82 - 118		
Chloroethane	20.0	19.1	95	2	50	60 - 138		
Chloroform	20.0	19.3	96	2	25	79 - 124		
Chloromethane	20.0	20.7	104	6	25	50 - 139		
1,2-Dibromo-3-chloropropane	20.0	19.6	98	8	25	62 - 128		
Dibromochloromethane	20.0	19.2	96	0.2	50	74 - 126		
1,2-Dibromoethane (EDB)	20.0	19.1	96	3	25	77 - 121		
1,2-Dichlorobenzene	20.0	20.9	105	2	25	80 - 119		
1,3-Dichlorobenzene	20.0	20.4	102	5	25	80 - 119		
1,4-Dichlorobenzene	20.0	20.1	100	0.5	25	79 - 118		
Dichlorodifluoromethane (Freon12)	20.0	17.5	87	9	50	32 - 152		
1,1-Dichloroethane	20.0	19.7	99	7	25	77 - 125		
1,2-Dichloroethane	20.0	18.8	94	2	25	73 - 128		
1,1-Dichloroethene	20.0	17.7	88	10	25	71 - 131		
cis-1,2-Dichloroethene	20.0	18.4	92	6	25	78 - 123		
trans-1,2-Dichloroethene	20.0	18.5	92	3	25	75 - 124		
1,2-Dichloropropane	20.0	18.6	93	8	25	78 - 128		
cis-1,3-Dichloropropene	20.0	18.4	92	3	25	75 - 124		
trans-1,3-Dichloropropene	20.0	18.6	93	0.6	25	73 - 127		
Ethylbenzene	20.0	20.7	104	2	25	79 - 121		
2-Hexanone (MBK)	20.0	19.3	97	6	25	57 - 139		
Isopropylbenzene	20.0	19.9	100	4	25	72 - 131		
Methyl tert-butyl ether	20.0	18.6	93	3	25	71 - 124		
4-Methyl-2-pentanone (MIBK)	20.0	17.5	87	2	50	67 - 130		
Methylene chloride	20.0	18.3	92	1	25	74 - 124		

SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPV3

Batch: <u>1715747</u> Laboratory ID: <u>1715747-BSD1</u>

 Preparation:
 SW846 5030 Water MS
 Initial/Final:
 5 ml / 5 ml

 Analyzed:
 09/14/17 13:17
 Spike ID:
 1710350

File ID: <u>LCS0914B.D</u>

	SPIKE	LCSD	LCSD		QC	LIMITS
COMPOUND	ADDED (μg/l)	CONCENTRATION (µg/l)	% REC. #	% RPD #	RPD	REC.
Styrene	20.0	20.6	103	4	25	78 - 123
1,1,2,2-Tetrachloroethane	20.0	19.9	99	2	25	71 - 121
Tetrachloroethene	20.0	18.6	93	4	25	74 - 129
Toluene	20.0	18.7	93	6	25	80 - 121
1,2,3-Trichlorobenzene	20.0	18.7	93	0.8	25	69 - 129
1,2,4-Trichlorobenzene	20.0	18.5	92	2	25	69 - 130
1,1,1-Trichloroethane	20.0	19.0	95	7	25	74 - 131
1,1,2-Trichloroethane	20.0	19.4	97	0.9	25	80 - 119
Trichloroethene	20.0	18.2	91	11	25	79 - 123
Trichlorofluoromethane (Freon 11)	20.0	18.6	93	11	50	64 - 141
Vinyl chloride	20.0	19.7	98	4	25	58 - 137
m,p-Xylene	20.0	20.5	102	8	25	80 - 121
o-Xylene	20.0	20.5	103	4	25	78 - 122
Cyclohexane	20.0	18.8	94	6	30	71 - 130
Methyl acetate	20.0	17.5	88	7	30	56 - 136
Methylcyclohexane	20.0	18.6	93	7	30	72 - 132

[#] Column to be used to flag recovery and RPD values with an asterisk

Individual peaks for multi-component analytes are indicated by a number in parentheses

^{*} Values outside of QC limits

FORM IV - METHOD BLANK SUMMARY SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: <u>Tetra Tech, Inc. - Salem, NH</u> Project: <u>WE15 Tank Farm 1 NAVSTA Newport</u>

Matrix: Aqueous Laboratory ID: <u>1715747-BLK1</u> File ID: <u>BK30914A.D</u>

Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Analyzed: <u>09/14/17 11:51</u> Instrument: <u>HPV3</u>

Batch: <u>1715747</u> Sequence: <u>\$708173</u> Calibration: <u>1709004</u>

This method blank applies to the following sample analyses:

SAMPLE NO.	LAB SAMPLE ID	FILE ID	DATE ANALYZED	TIME ANALYZED
LCS	1715747-BS1	LCS0914A.D	09/14/17	12:48
LCS Dup	1715747-BSD1	LCS0914B.D	09/14/17	13:17
TF1-GT-121-091117	SC39093-01	3909301.D	09/14/17	19:32
TF1-GT-119-091117	SC39093-02	3909302.D	09/14/17	20:01
TF1-GZ-103-091117	SC39093-03	3909303.D	09/14/17	20:30
TF1-TB-091117	SC39093-05	3909305.D	09/14/17	20:59

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: <u>Tetra Tech, Inc. - Salem, NH</u> Project: <u>WE15 Tank Farm 1 NAVSTA Newport</u>

Matrix: <u>Aqueous</u> Laboratory ID: <u>1715747-BLK1</u> File ID: <u>BK30914A.D</u>

Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Analyzed: <u>09/14/17 11:51</u> Instrument: <u>HPV3</u>

Batch: 1715747 Sequence: <u>\$708173</u> Calibration: <u>1709004</u>

Batch:	<u>1715747</u> Sequence:	<u>\$708173</u>	Calib	<u>1709004</u>			
CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	1	1.0	U	0.5	1.0	1.0
67-64-1	Acetone	1	2.0	U	0.8	2.0	10.0
71-43-2	Benzene	1	0.5	U	0.3	0.5	1.0
74-97-5	Bromochloromethane	1	1.0	U	0.3	1.0	1.0
75-27-4	Bromodichloromethane	1	0.5	U	0.4	0.5	0.5
75-25-2	Bromoform	1	1.0	U	0.4	1.0	1.0
74-83-9	Bromomethane	1	2.0	U	0.9	2.0	2.0
78-93-3	2-Butanone (MEK)	1	2.0	U	1.1	2.0	2.0
75-15-0	Carbon disulfide	1	1.0	U	0.4	1.0	2.0
56-23-5	Carbon tetrachloride	1	1.0	U	0.4	1.0	1.0
108-90-7	Chlorobenzene	1	0.5	U	0.2	0.5	1.0
75-00-3	Chloroethane	1	2.0	U	0.6	2.0	2.0
67-66-3	Chloroform	1	1.0	U	0.3	1.0	1.0
74-87-3	Chloromethane	1	1.0	U	0.4	1.0	2.0
96-12-8	1,2-Dibromo-3-chloropropane	1	2.0	U	0.9	2.0	2.0
124-48-1	Dibromochloromethane	1	0.5	U	0.3	0.5	0.5
106-93-4	1,2-Dibromoethane (EDB)	1	0.5	U	0.2	0.5	0.5
95-50-1	1,2-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
541-73-1	1,3-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
106-46-7	1,4-Dichlorobenzene	1	0.5	U	0.3	0.5	1.0
75-71-8	Dichlorodifluoromethane (Freon12)	1	2.0	U	0.6	2.0	2.0
75-34-3	1,1-Dichloroethane	1	1.0	U	0.3	1.0	1.0
107-06-2	1,2-Dichloroethane	1	1.0	U	0.3	1.0	1.0
75-35-4	1,1-Dichloroethene	1	1.0	U	0.7	1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1	0.5	U	0.3	0.5	1.0
156-60-5	trans-1,2-Dichloroethene	1	1.0	U	0.4	1.0	1.0
78-87-5	1,2-Dichloropropane	1	1.0	U	0.3	1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	1	0.5	U	0.4	0.5	0.5
10061-02-6	trans-1,3-Dichloropropene	1	0.5	U	0.3	0.5	0.5
100-41-4	Ethylbenzene	1	0.5	U	0.3	0.5	1.0
591-78-6	2-Hexanone (MBK)	1	2.0	U	0.5	2.0	2.0
98-82-8	Isopropylbenzene	1	1.0	U	0.4	1.0	1.0

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: <u>1715747-BLK1</u> File ID: <u>BK30914A.D</u>

Preparation: <u>SW846 5030 Water MS</u> Initial/Final: <u>5 ml / 5 ml</u>

Analyzed: <u>09/14/17 11:51</u> Instrument: <u>HPV3</u>

Batch: <u>1715747</u> Sequence: <u>S708173</u> Calibration: <u>1709004</u>

Daten.	<u>1713741</u> Sequence	. <u>5700173</u>	eanoration.		1707004		
CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
1634-04-4	Methyl tert-butyl ether	1	0.5	U	0.2	0.5	1.0
108-10-1	4-Methyl-2-pentanone (MIBK)	1	2.0	U	0.5	2.0	2.0
75-09-2	Methylene chloride	1	2.0	U	0.7	2.0	2.0
100-42-5	Styrene	1	1.0	U	0.4	1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1	0.5	U	0.3	0.5	0.5
127-18-4	Tetrachloroethene	1	1.0	U	0.6	1.0	1.0
108-88-3	Toluene	1	1.0	U	0.3	1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
120-82-1	1,2,4-Trichlorobenzene	1	1.0	U	0.4	1.0	1.0
71-55-6	1,1,1-Trichloroethane	1	1.0	U	0.5	1.0	1.0
79-00-5	1,1,2-Trichloroethane	1	0.5	U	0.3	0.5	1.0
79-01-6	Trichloroethene	1	1.0	U	0.5	1.0	1.0
75-69-4	Trichlorofluoromethane (Freon 11)	1	1.0	U	0.5	1.0	1.0
75-01-4	Vinyl chloride	1	1.0	U	0.5	1.0	1.0
179601-23-1	m,p-Xylene	1	1.0	U	0.4	1.0	2.0
95-47-6	o-Xylene	1	1.0	U	0.3	1.0	1.0
110-82-7	Cyclohexane	1	2.0	U	0.8	2.0	5.0
79-20-9	Methyl acetate	1	2.0	U	0.6	2.0	5.0
108-87-2	Methylcyclohexane	1	2.0	U	0.7	2.0	5.0

FORM VIIIa - INTERNAL STANDARD AREA AND RT SUMMARY

SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence:S708173Instrument:HPV3Matrix:AqueousCalibration:1709004

Analyzed: 09/14/17 12:19 File ID: CCV0914A.D

	IS1 Area #	RT#	IS2 Area #	RT#	IS3 Area #	RT#	IS4 Area #	RT #	IS5 Area #	RT #	IS6 Area #	RT#
12-Hour Standard	426789	11.15	438231	8.80	1001814	5.48						
Upper Limit	853578	11.65	876462	9.30	2003628	5.98						
Lower Limit	213395	10.65	219116	8.30	500907	4.98						
Sample ID												
Calibration Check (S708173-CCV2)	425057	11.146	447918	8.799	1032480	5.477						
Blank (1715747-BLK1)	397730	11.146	421911	8.799	1010552	5.481						
LCS (1715747-BS1)	447194	11.146	460454	8.803	1074269	5.481						
LCS Dup (1715747-BSD1)	437217	11.146	462035	8.799	1095562	5.481						
TF1-GT-121-091117 (SC39093-01)	415248	11.146	444236	8.799	1037857	5.481						
TF1-GT-119-091117 (SC39093-02)	411980	11.146	436342	8.799	1019568	5.481						
TF1-GZ-103-091117 (SC39093-03)	438461	11.146	464731	8.803	1072908	5.481						
TF1-TB-091117 (SC39093-05)	418596	11.146	448768	8.799	1081248	5.481						

IS1 = 1,4-Dichlorobenzene-d4

IS2 = Chlorobenzene-d5

IS3 = Fluorobenzene

Column to be used to flag internal standard area values

* Values outside of QC limits

Area Upper Limit = 200% of internal standard area Area Lower Limit = 50% of internal standard area RT Limit = \pm 1-0.50

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 8260C

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
1,1,2-Trichlorotrifluoroethane (Freon 11	0.5	1.0	μg/l
Acetone	0.8	10.0	μg/l
Benzene	0.3	1.0	μg/l
Bromochloromethane	0.3	1.0	μg/l
Bromodichloromethane	0.4	0.5	μg/l
Bromoform	0.4	1.0	μg/l
Bromomethane	0.9	2.0	μg/l
2-Butanone (MEK)	1.1	2.0	μg/l
Carbon disulfide	0.4	2.0	μg/l
Carbon tetrachloride	0.4	1.0	μg/l
Chlorobenzene	0.2	1.0	μg/l
Chloroethane	0.6	2.0	μg/l
Chloroform	0.3	1.0	μg/l
Chloromethane	0.4	2.0	μg/l
1,2-Dibromo-3-chloropropane	0.9	2.0	μg/l
Dibromochloromethane	0.3	0.5	μg/l
1,2-Dibromoethane (EDB)	0.2	0.5	μg/l
1,2-Dichlorobenzene	0.3	1.0	μg/l
1,3-Dichlorobenzene	0.3	1.0	μg/l
1,4-Dichlorobenzene	0.3	1.0	μg/l
Dichlorodifluoromethane (Freon12)	0.6	2.0	μg/l
1,1-Dichloroethane	0.3	1.0	μg/l
1,2-Dichloroethane	0.3	1.0	μg/l
1,1-Dichloroethene	0.7	1.0	μg/l
cis-1,2-Dichloroethene	0.3	1.0	μg/l
trans-1,2-Dichloroethene	0.4	1.0	μg/l
1,2-Dichloropropane	0.3	1.0	μg/l
cis-1,3-Dichloropropene	0.4	0.5	μg/l
trans-1,3-Dichloropropene	0.3	0.5	μg/l
Ethylbenzene	0.3	1.0	μg/l
2-Hexanone (MBK)	0.5	2.0	μg/l
Isopropylbenzene	0.4	1.0	μg/l
Methyl tert-butyl ether	0.2	1.0	μg/l
4-Methyl-2-pentanone (MIBK)	0.5	2.0	μg/l
Methylene chloride	0.7	2.0	$\mu g/l$
Styrene	0.4	1.0	μg/l
1,1,2,2-Tetrachloroethane	0.3	0.5	μg/l
Tetrachloroethene	0.6	1.0	μg/l
Toluene	0.3	1.0	μg/l

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 8260C

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
1,2,3-Trichlorobenzene	0.4	1.0	μg/l
1,2,4-Trichlorobenzene	0.4	1.0	μg/l
1,1,1-Trichloroethane	0.5	1.0	μg/l
1,1,2-Trichloroethane	0.3	1.0	μg/l
Trichloroethene	0.5	1.0	μg/l
Trichlorofluoromethane (Freon 11)	0.5	1.0	μg/l
Vinyl chloride	0.5	1.0	μg/l
m,p-Xylene	0.4	2.0	μg/l
o-Xylene	0.3	1.0	μg/l
Cyclohexane	0.8	5.0	μg/l
Methyl acetate	0.6	5.0	μg/l
Methylcyclohexane	0.7	5.0	μg/l

PREPARATION BENCH SHEET

1	\neg	15		1	\neg
	-	1	. /	/1	1

Method No.: USO 87114 DOC	Sequence No.: 5708133
---------------------------	-----------------------

Matrix: Aqueous Prepared using: VOC - SW846 5030 Water MS

(No Surrogate)

Matrix. Aqueou	-			ттерат	cu usiii	g. VOC -	3 11 040 3030	water wis		(No Surr	ogate
Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Collection Date	Sample Comments	RE
1715747-BLK1	Blank		QC	5	5				14-Sep-17 06:00		1
1715747-BS1	LCS		QC	5	5	1710350			14-Sep-17 06:00		
1715747-BSD1	LCS Dup		QC	5	5	1710350			14-Sep-17 06:00		
1715747-MS1	Matrix Spike		QC	0.25	5	17I0212	SC38931-03		06-Sep-17 11:45		
1715747-MSD1	Matrix Spike Dup		QC	0.25	5	17I0212	SC38931-03		06-Sep-17 11:45		
SC38931-01	1347170906-01	A	624 Volatiles	5	5			18-Sep-17 16:00	06-Sep-17 11:30	UTC/report one analyte per method	
SC38931-01	1347170906-01	A	8260 CAM-NH	5	5			18-Sep-17 16:00	06-Sep-17 11:30	UTC/report one analyte per method; rr- qcs failed for UTC	
SC38931-02	1347170906-02	В	624 Volatiles	5	5			18-Sep-17 16:00	06-Sep-17 12:05	UTC/report one analyte per method	
SC38931-02	1347170906-02	В	8260 CAM-NH	5	5			18-Sep-17 16:00	06-Sep-17 12:05	UTC/report one analyte per method; rr- qcs failed for UTC	
SC38931-03	1347170906-03	В	524 Full list	5	5				06-Sep-17 11:45	BatchQC	
SC38931-03	1347170906-03	В	624 Volatiles	5	5			18-Sep-17 16:00	06-Sep-17 11:45	UTC/report one analyte per method	
SC38931-03	1347170906-03	В	8260 CAM-NH	5	5			18-Sep-17 16:00	06-Sep-17 11:45	UTC/report one analyte per method; rr 1:20 qc failed for UTC	
SC38931-03	1347170906-03	В	8260 DoD Full	5	5				06-Sep-17 11:45	BatchQC	
SC39024-01	INF	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 11:20	DoD /costum project	
SC39024-02	GAC INF	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 11:15	DoD /costum project	
SC39024-03	GAC MID	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 11:10	DoD /costum project	
SC39024-04	GAC EFF	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 11:05	DoD /costum project	
SC39024-05	EFF	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 11:00	DoD /costum project	
SC39024-06	Trip Blank	A	8260 DoD Full	5	5			20-Sep-17 16:00	11-Sep-17 08:00	DoD /costum project	
SC39093-01	TF1-GT-121-091117	A	8260 DoD Full	5	5			21-Sep-17 16:00	11-Sep-17 12:35	DoD Level IV / @VTCL NJ Compounds,	
SC39093-02	TF1-GT-119-091117	A	8260 DoD Full	5 A	5			21-Sep-17 16:00	11-Sep-17 13:35	DoD Level IV / @VTCL NJ Compøynds.	

Analyst Reviewed
Printed: 9/15/2017 12:35:02PM

Ianager Reviewed Date

Sequence Reviewed B

Page 1 of 2

PREPARATION BENCH SHEET

1	71	57	17
- 1	/ 1	1	/ /

Sequence No.: <u>590813</u> 3 Method No.: W3114000

Matrix: Aqueous

Prepared using: VOC - SW846 5030 Water MS

(No Surrogate)

		T-						7		(-8
Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Collection Date	Sample Comments	RE
SC39093-03	TF1-GZ-103-091117	A	8260 DoD Full	5	5			21-Sep-17 16:00	11-Sep-17 15:50	DoD Level IV / @VTCL NJ Compounds.	
SC39093-05	TF1-TB-091117	A	8260 DoD Full	5	5			21-Sep-17 16:00	11-Sep-17 08:30	DoD Level IV / @VTCL NJ Compounds.	
SC39101-04	1370810	A	8260 CAM-NH	5	5			18-Sep-17 15:00	11-Sep-17 08:25	RCP/UTC/RES DEC/RES VC/GWPC/SWPC	
SC39111-01	1370806	A	8260 CAM-NH	5	5			18-Sep-17 15:00	12-Sep-17 09:02	RCP/UTC/RES DEC/RES VC/GWPC/SWPC	
SC39164-01	Influent	A	524 Full list	5	5			15-Sep-17 14:00	13-Sep-17 00:00	See attached for limits & compounds	
SC39164-01	Influent	A	624 Volatiles	5	5			15-Sep-17 14:00	13-Sep-17 00:00	See attached for limits & compounds	1
SC39164-02	Effluent	A	524 Full list	5	5			15-Sep-17 14:00	13-Sep-17 00:00	See attached for limits & compounds	
SC39164-02	Effluent	A	624 Volatiles	5	5			15-Sep-17 14:00	13-Sep-17 00:00	See attached for limits & compounds	

HPV3 9/14/17A

Analyst Reviewed

Date

Manager Reviewed

Page 2 of 2

Printed: 9/15/2017 12:35:02PM

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S707839}$ Instrument: $\underline{HPV3}$

Calibration: <u>1709004</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
MS Tune	S707839-TUN1	VCAL000.D	08/31/17 11:41
Cal Standard	S707839-CAL1	DAPRTMTH-001	08/31/17 11:41
Low Cal Check	S707839-LCV1	VCAL000.D	08/31/17 11:41
Cal Standard	S707839-CAL2	DAPRTMTH-002	08/31/17 12:10
Low Cal Check	S707839-LCV2	VCAL001.D	08/31/17 12:10
Cal Standard	S707839-CAL3	DAPRTMTH-003	08/31/17 12:39
Cal Standard	S707839-CAL4	DAPRTMTH-004	08/31/17 13:08
Cal Standard	S707839-CAL5	DAPRTMTH-005	08/31/17 13:37
Cal Standard	S707839-CAL6	DAPRTMTH-006	08/31/17 14:06
Cal Standard	S707839-CAL7	DAPRTMTH-007	08/31/17 14:34
Cal Standard	S707839-CAL8	DAPRTMTH-008	08/31/17 15:03
Cal Standard	S707839-CAL9	DAPRTMTH-009	08/31/17 15:32
Cal Standard	S707839-CALA	DAPRTMTH-010	08/31/17 16:01
Cal Standard	S707839-CALB	DAPRTMTH-011	08/31/17 16:58
Initial Cal Check	S707839-ICV1	ICV0831A.D	08/31/17 17:56

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8260C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S708173}$ Instrument: $\underline{HPV3}$

Calibration: <u>1709004</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
MS Tune	S708173-TUN1	BK30914A.D	09/14/17 11:51
Blank	1715747-BLK1	BK30914A.D	09/14/17 11:51
Calibration Check	S708173-CCV1	CCV0914A.D	09/14/17 12:19
LCS	1715747-BS1	LCS0914A.D	09/14/17 12:48
LCS Dup	1715747-BSD1	LCS0914B.D	09/14/17 13:17
TF1-GT-121-091117	SC39093-01	3909301.D	09/14/17 19:32
TF1-GT-119-091117	SC39093-02	3909302.D	09/14/17 20:01
TF1-GZ-103-091117	SC39093-03	3909303.D	09/14/17 20:30
TF1-TB-091117	SC39093-05	3909305.D	09/14/17 20:59
Calibration Check	S708173-CCV2	CCC0914B.D	09/14/17 23:23

\$2017\$ Aug 31 0833 Sequence Log Starting sequence Thu Aug 31 08:33:53 2017

Instrument Name: HP-3
 Sequence File: C:\msdchem\1\sequence\083117.s

Comment:
Operator: GMA
Data Path: G:\AUG2017\HPV3\0831\
Method Path: C:\MSDCHEM\1\METHODS\

Li ne Type	Vi al	DataFile	Method	Sample Name
1) Sample	1	BK30831A BK30831B CCV0831A LCS0831A LCS0831B BR0M01		
2) Sample	1	BK30831B	V3030217	-BLK1 @ System Blank / bfb tune
3) Sample	2	CCV0831A	V3030217	SEQ-CCV1 @ 20PPB CCV
4) Sample	3	LCS0831A	V3030217	-BS1 @ Prepared VOC QC- 20ppb
5) Sample	3	LCS0831B	V3030217	-BSD1 @ Prepared VOC QC- 20ppb
6) Sample	4	BROMO1	V3030217	BROMOFORM STD
7) Sample	5	VCAL000	V3030217	SEQ-CAL1 @ O.5 PPB
8) Sample	6	VCAL001	V3030217	SEQ-CAL2 @ 1 PPB
9) Sample	7	VCAL002	V3030217	SEQ-CAL3 @ 2 PPB
10) Sample	8	VCAL005	V3030217	SEQ-CAL4 @ 5 PPB
11) Sample	9	VCAL010	V3030217	SEQ-CAL5 @ 10 PPB
12) Sample 13) Sample	10	VCAL015	V3030217	SEQ-CAL6 @ 15 PPB
13) Sample	11	VCAL020	V3030217	SEQ-CAL7 @ 20 PPB
14) Sample	12	VCAL025	V3030217	SEQ-CAL8 @ 25 PPB
15) Sample	13	VCAL040	V3030217	SEQ-CAL9 @ 40 PPB
16) Sample	14	VCAL050	V3030217	SEQ-CALA @ 50 PPB
17) Sample	15	BLK102	V3030217	BLANK
18) Sample	16	VCAL100	V3030217	SEQ-CALB @ 100 PPB
19) Sample	17	BLK103	V3030217	BLANK
20) Sample	18	I CV0831A	V3030217	SEQ-ICV1 @ 20 PPB
21) Sample	19	BLK104	V3030217	BLANK

Sequence completed Thu Aug 31 18:43:22 2017

G: \AUG2017\HPV3\0831\2017 Aug 31 0833 Quality Log. LOG G: \AUG2017\HPV3\0831\2017 Aug 31 0833 Sequence Log . LOG

		10				
М	e	·h	0	Ы		

V3083117DOD.M

Calibration:

Run Method:

1709004

Internal Standard ID:

17H0825

V3030217

Batch:

1715747

Sequence: \$708173 (HPV3)

Matrix:

Aqueous

Analyst Initials:

9/14/2017 **GMA**

Cont. from pg. #:

Syringes:

Date:

10uL = SN16548, 25uL = SN16533, 50uL = SN16521, 500uL = SN16535, 1mL = SN16795

Positio 1	Lab ID	Client ID	DF	Analysis	Vial (g)	Vial + Soil (g)		pH/KI (check box if pH<2)	Standard ID & Comments
1	BK30914A	S708173-TUN1 @ System Blank / bfb tune							
2	CCC0914A	S708173-CCV1 @ Prepared VOC QC- 20ppb	1				* 10		1710350
3	LCS0914A	1715747-BS1 @ Prepared VOC QC- 20ppb							1710350
3	LCS0914B	1715747-BSD1 @ Prepared VOC QC- 20ppb							1710350
4	SC38931-03M	1715747-MS1 @ 1347170906-03	20						1710212
5	SC38931-03R	1715747-MSD1 @ 1347170906-03	20						17/0212
6	BROM01	BROMOFORM STD							
7	SC38931-01	1347170906-01	R	624 Volatiles				0/-	
8	SC38931-02	1347170906-02	R	624 Volatiles				9 -	
9	SC38931-03	1347170906-03	20	524 Full list				4	
10	SC39024-01	INF	5	624 Volatiles 8260 DoD Full				<u></u>	
11	SC39024-02	GAC INF	R	8260 DoD Full					
12	SC39024-03	GAC MID	R	8260 DoD Full					
13	SC39024-04	GAC EFF	R	8260 DoD Full					
14	SC39024-05	EFF	R	8260 DoD Full					
15	SC39024-06	Trip Blank	R	8260 DoD Full					
16	SC39093-01	TF1-GT-121-091117	R	8260 DoD Full				0	
17	SC39093-02	TF1-GT-119-091117	R	8260 DoD Full				10/	
18	SC39093-03	TF1-GZ-103-091117	R	8260 DoD Full				D /	
19	SC39093-05	TF1-TB-091117	R	8260 DoD Full					
20	SC39101-04	1370810	R	List 8260 CAM-NH					
21	SC39111-01	1370806	^-	8260 CAM-NH					
22	SC39164-01	Influent	R	524 Full list				0/-	
23	SC39164-02	Effluent	R	624 Volatiles 524 Full list				P -	
24	CCC0914B	S708173-CCV2 @ Prepared VOC QC- 20ppb		624 Volatiles					1710350

Signature of Analyst:

Signature of Witness:

Page 6

CROSS REFERENCE TABLE

SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 8270D.

IV. PREPARATION

Aqueous samples were prepared according to SW846 3510C.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 8270D:

HPS5 details: Agilent 6890 with 5973 MS: Agilent HP-5MS (30M, 0.25mm, 0.25um)

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Surrogates:

All method criteria were met.

D. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

E. Duplicates:

A duplicate was analyzed.

In batch 1715919 from source sample TF1-GZ-103-091117 (SC39093-03).

All method criteria were met.

F. Internal Standards:

Internal standards were within the acceptance criteria.

G. Samples:

All method criteria were met.

FORM II - SURROGATE STANDARD RECOVERY SUMMARY

SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Spike ID: <u>17I0218</u>

Client ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	Total Out
Blank (1715919-BLK1)	65	64	78				0
LCS (1715919-BS1)	63	62	75				0
LCS Dup (1715919-BSD1)	59	58	72				0
Duplicate (1715919-DUP1)	66	64	81				0
TF1-GT-121-091117 (SC39093-01)	55	52	67				0
TF1-GT-119-091117 (SC39093-02)	60	59	73				0
TF1-GZ-103-091117 (SC39093-03)	55	54	68				0

Control Limits

S1 = 2-Fluorobiphenyl 44 - 119 S2 = Nitrobenzene-d5 40 - 110 S3 = Terphenyl-dl4 50 - 134

[#] Column to be used to flag recovery values

^{*} Values outside of QC limits

FORM IIIa - LCS / LCS DUPLICATE RECOVERY SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPS5

Batch: <u>1715919</u> Laboratory ID: <u>1715919-BS1</u>

Preparation: SW846 3510C Initial/Final: 990 ml / 1 ml

Analyzed: 09/20/17 21:32 Spike ID: 17H0927

File ID: <u>BS715919.D</u>

COMPOUND	SPIKE ADDED (µg/l)	LCS CONCENTRATION (µg/l)	LCS % REC.#	QC LIMITS REC.
Acenaphthene	50.5	30.6	61	47 - 122
Acenaphthylene	50.5	30.3	60	41 - 130
Anthracene	50.5	34.8	69	57 - 123
Benzo (a) anthracene	50.5	34.1	68	58 - 125
Benzo (a) pyrene	50.5	35.4	70	54 - 128
Benzo (b) fluoranthene	50.5	36.8	73	53 - 131
Benzo (g,h,i) perylene	50.5	33.3	66	50 - 134
Benzo (k) fluoranthene	50.5	33.0	65	57 - 129
Chrysene	50.5	33.5	66	59 - 123
Dibenzo (a,h) anthracene	50.5	36.9	73	51 - 134
Fluoranthene	50.5	35.9	71	57 - 128
Fluorene	50.5	31.5	62	52 - 124
Indeno (1,2,3-cd) pyrene	50.5	36.0	71	52 - 134
1-Methylnaphthalene	50.5	32.7	65	41 - 119
2-Methylnaphthalene	50.5	36.4	72	40 - 121
Naphthalene	50.5	28.8	57	40 - 121
Phenanthrene	50.5	33.3	66	59 - 120
Pyrene	50.5	33.5	66	57 - 126

File ID: BSD15919.D

	SPIKE ADDED	LCSD CONCENTRATION	LCSD %	%	QC	LIMITS
COMPOUND	(μg/l)	(μg/l)	REC. #	RPD#	RPD	REC.
Acenaphthene	50.5 29.1 50.5 28.7		58	5	20	47 - 122
Acenaphthylene 50.5 28.7		28.7	57	5	20	41 - 130
Anthracene	1 50.5 32.1		64	8	20	57 - 123
Benzo (a) anthracene	50.5	32.3	64	5	20	58 - 125
Benzo (a) pyrene	50.5	33.9	67	4	20	54 - 128
Benzo (b) fluoranthene	50.5	32.8	65	11	20	53 - 131
Benzo (g,h,i) perylene	50.5	30.9	61	7	20	50 - 134
Benzo (k) fluoranthene SDG SC39093 Page 528 / 17	50.5	33.0	65	0.2	20	57 - 129

FORM IIIa - LCS / LCS DUPLICATE RECOVERY SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPS5

Batch: <u>1715919</u> Laboratory ID: <u>1715919-BSD1</u>

Preparation: SW846 3510C Initial/Final: 990 ml / 1 ml

Analyzed: <u>09/20/17 22:04</u> Spike ID: 17H0927

File ID: BSD15919.D

	SPIKE	LCSD	LCSD	0/	QC	LIMITS
COMPOUND	ADDED (μg/l)	CONCENTRATION (µg/l)	% REC. #	% RPD#	RPD	REC.
Chrysene	rysene 50.5 32.0		63	5	20	59 - 123
Dibenzo (a,h) anthracene	(a,h) anthracene 50.5 34.1		67	8	20	51 - 134
Fluoranthene			66	7	20	57 - 128
Fluorene			59	6	20	52 - 124
Indeno (1,2,3-cd) pyrene	50.5	33.0	65	8	20	52 - 134
1-Methylnaphthalene	50.5	30.4	60	7	20	41 - 119
2-Methylnaphthalene	50.5	33.3	66	9	20	40 - 121
Naphthalene	50.5	26.7	53	7	20	40 - 121
Phenanthrene 50.5 30.7		30.7	61	8	20	59 - 120
Pyrene	50.5	31.4	62	6	20	57 - 126

[#] Column to be used to flag recovery and RPD values with an asterisk

Individual peaks for multi-component analytes are indicated by a number in parentheses

^{*} Values outside of QC limits

FORM IIIc - DUPLICATES SW846 8270D

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: 1715919-DUP1

Batch: <u>1715919</u> Lab Source ID: <u>SC39093-03</u>

Source Sample Name: TF1-GZ-103-091117 % Solids:

File ID: <u>3909303D.D</u>

Initial/Final: 1060 ml / 1 ml

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (µg/l)	С	DUPLICATE CONCENTRATION (µg/l)	С	RPD %	Q	METHOD
Acenaphthene	20	BRL		BDL				SW846 8270D
Acenaphthylene	20	BRL		BDL				SW846 8270D
Anthracene	20	BRL		BDL				SW846 8270D
Benzo (a) anthracene	20	BRL		BDL				SW846 8270D
Benzo (a) pyrene	20	BRL		BDL				SW846 8270D
Benzo (b) fluoranthene	20	BRL		BDL				SW846 8270D
Benzo (g,h,i) perylene	20	BRL		BDL				SW846 8270D
Benzo (k) fluoranthene	20	BRL		BDL				SW846 8270D
Chrysene	20	BRL		BDL				SW846 8270D
Dibenzo (a,h) anthracene	20	BRL		BDL				SW846 8270D
Fluoranthene	20	BRL		BDL				SW846 8270D
Fluorene	20	BRL		BDL				SW846 8270D
Indeno (1,2,3-cd) pyrene	20	BRL		BDL				SW846 8270D
1-Methylnaphthalene	20	0.904		0.991		9		SW846 8270D
2-Methylnaphthalene	20	BRL		BDL				SW846 8270D
Naphthalene	20	2.24		2.45		9		SW846 8270D
Phenanthrene	20	BRL		BDL				SW846 8270D
Pyrene	20	BRL		BDL				SW846 8270D

^{*} Values outside of QC limits

Preparation: SW846 3510C

Individual peaks for multi-component analytes are indicated by a number in parentheses

FORM IV - METHOD BLANK SUMMARY SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: <u>1715919-BLK1</u> File ID: <u>BK715919.D</u>

Preparation: SW846 3510C Initial/Final: 980 ml / 1 ml

Analyzed: <u>09/20/17 21:01</u> Instrument: <u>HPS5</u>

Batch: <u>1715919</u> Sequence: <u>S708501</u> Calibration: <u>1709033</u>

This method blank applies to the following sample analyses:

SAMPLE NO.	LAB SAMPLE ID	FILE ID	DATE ANALYZED	TIME ANALYZED
LCS	1715919-BS1	BS715919.D	09/20/17	21:32
LCS Dup	1715919-BSD1	BSD15919.D	09/20/17	22:04
TF1-GT-121-091117	SC39093-01	C3909301.D	09/20/17	22:35
TF1-GT-119-091117	SC39093-02	C3909302.D	09/20/17	23:07
TF1-GZ-103-091117	SC39093-03	C3909303.D	09/20/17	23:39
Duplicate	1715919-DUP1	3909303D.D	09/21/17	0:10

FORM I - ORGANIC ANALYSIS DATA SHEET SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: <u>1715919-BLK1</u> File ID: <u>BK715919.D</u>

Preparation: SW846 3510C Initial/Final: 980 ml / 1 ml

Analyzed: <u>09/20/17 21:01</u> Instrument: <u>HPS5</u>

Batch: <u>1715919</u> Sequence: <u>S708501</u> Calibration: <u>1709033</u>

Daten.	<u>1713717</u> Bequence.	5700301	_ Canon	ttioii.	1707033		
CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
83-32-9	Acenaphthene	1	1.02	U	0.705	1.02	5.10
208-96-8	Acenaphthylene	1	1.02	U	0.697	1.02	5.10
120-12-7	Anthracene	1	1.02	U	0.620	1.02	5.10
56-55-3	Benzo (a) anthracene	1	1.02	U	0.547	1.02	5.10
50-32-8	Benzo (a) pyrene	1	1.02	U	0.573	1.02	5.10
205-99-2	Benzo (b) fluoranthene	1	1.02	U	0.446	1.02	5.10
191-24-2	Benzo (g,h,i) perylene	1	1.02	U	0.541	1.02	5.10
207-08-9	Benzo (k) fluoranthene	1	1.02	U	0.490	1.02	5.10
218-01-9	Chrysene	1	1.02	U	0.543	1.02	5.10
53-70-3	Dibenzo (a,h) anthracene	1	1.02	U	0.459	1.02	5.10
206-44-0	Fluoranthene	1	1.02	U	0.651	1.02	5.10
86-73-7	Fluorene	1	1.02	U	0.624	1.02	5.10
193-39-5	Indeno (1,2,3-cd) pyrene	1	1.02	U	0.592	1.02	5.10
90-12-0	1-Methylnaphthalene	1	1.02	U	0.748	1.02	5.10
91-57-6	2-Methylnaphthalene	1	1.02	U	0.586	1.02	5.10
91-20-3	Naphthalene	1	1.02	U	0.699	1.02	5.10
85-01-8	Phenanthrene	1	1.02	U	0.598	1.02	5.10
129-00-0	Pyrene	1	1.02	U	0.622	1.02	5.10

FORM VIIIa - INTERNAL STANDARD AREA AND RT SUMMARY

SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S708501}$ Instrument: $\underline{HPS5}$

Matrix: Aqueous Calibration: 1709033

Analyzed: 09/20/17 20:29 File ID: <u>SCG50920.D</u>

	IS1 Area #	RT#	IS2 Area #	RT#	IS3 Area #	RT #	IS4 Area #	RT#	IS5 Area #	RT #	IS6 Area #	RT#
12-Hour Standard	1628869	7.72	3209585	12.95	3112872	5.53	3501548	15.35	3185304	9.49		
Upper Limit	3257738	8.22	6419170	13.45	6225744	6.03	7003096	15.85	6370608	9.99		
Lower Limit	814435	7.22	1604793	12.45	1556436	5.03	1750774	14.85	1592652	8.99		
Sample ID												
Calibration Check (S708501-CCV2)	1750024	7.723	3445530	12.958	3322410	5.535	3739342	15.357	3376585	9.493		
Blank (1715919-BLK1)	1884815	7.717	3773280	12.94	3686193	5.523	4041967	15.34	3649789	9.487		
LCS (1715919-BS1)	2069992	7.729	4172570	12.958	3938619	5.529	4471020	15.357	3839401	9.499		
LCS Dup (1715919-BSD1)	1927401	7.728	3885886	12.952	3667057	5.529	4175626	15.357	3597834	9.493		
Duplicate (1715919-DUP1)	1791900	7.717	3559946	12.94	3502227	5.523	3826071	15.346	3471640	9.487		
TF1-GT-121-091117 (SC39093-01)	1885815	7.717	3829091	12.94	3703943	5.523	4032110	15.346	3596829	9.487		
TF1-GT-119-091117 (SC39093-02)	1827851	7.717	3653261	12.94	3536316	5.523	3928278	15.346	3492580	9.487		
TF1-GZ-103-091117 (SC39093-03)	1882560	7.717	3798703	12.94	3677617	5.523	4011354	15.346	3608273	9.487		

IS1 = Acenaphthene-d10

IS2 = Chrysene-d12

IS3 = Naphthalene-d8

IS4 = Perylene-d12

IS5 = Phenanthrene-d10

Column to be used to flag internal standard area values

* Values outside of QC limits

Area Upper Limit = 200% of internal standard area Area Lower Limit = 50% of internal standard area RT Limit = ± -0.50

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 8270D

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Acenaphthene	0.691	5.00	μg/l
Acenaphthylene	0.683	5.00	μg/l
Anthracene	0.608	5.00	μg/l
Benzo (a) anthracene	0.536	5.00	μg/l
Benzo (a) pyrene	0.562	5.00	μg/l
Benzo (b) fluoranthene	0.437	5.00	μg/l
Benzo (g,h,i) perylene	0.530	5.00	μg/l
Benzo (k) fluoranthene	0.480	5.00	μg/l
Chrysene	0.532	5.00	μg/l
Dibenzo (a,h) anthracene	0.450	5.00	μg/l
Fluoranthene	0.638	5.00	μg/l
Fluorene	0.612	5.00	μg/l
Indeno (1,2,3-cd) pyrene	0.580	5.00	μg/l
1-Methylnaphthalene	0.733	5.00	μg/l
2-Methylnaphthalene	0.574	5.00	μg/l
Naphthalene	0.685	5.00	μg/l
Phenanthrene	0.586	5.00	μg/l
Pyrene	0.610	5.00	μg/l

PREPARATION BENCH SHEET

1715919



* A = Analyst * W = Witness

Eurofins Spectrum Analytical, Inc. - MA

☐ Sodium Chloride (NaCl)	17G0504	☐ Florisil	1710342	☐ Methylene Chloride (CH2Cl2)	1710401	☐ Ethyl Acetate (C4H8O2)	14K0438
☐ Ottawa Sand	17H0732	☐ Silica gel (EPH)	17H0666	☐ Hexane (C6H14)	17I0189	Aqueous Filter Paper	1710351
□ HCL	17H0366	☐ Silica gel (TPH)	17H0665	☐ Acetone (CH3COCH3)	17I0243	☐ Soil Filter Paper	1710209
☐ Copper	1710204	☐ Sulfuric Acid (H2SO4)	17H0891	☐ Methanol (CH3OH)	17E0681		
Sodium Sulfate (Na2SO4)	1710431			☐ Ether (C2H5OC2H5)	17H0567	☐ Gauze Wipe	17A0428
☐ PCB Transformer Oil	10H0132	□ мтве	1610388	☐ Acidified Sodium Sulfate	17G0918	☐ 1:1 HCl Mix	17G0111
1:1 H2SO4 Mix	17G1000	☐ Acidified Methanol	17G0302	Sodium Hydroxide (NaOH)	17G0775	☐ Glass Wool	17H0734
☐ Iso-octane	17B0969	□ 37% KOH	17C0273	☐ Sodium Bicarbonate	14K0424	☐ Cupric Sulfate Pentahydrate	
☐ 1ml Syringe I	15A0480	☐ 1ml Syringe II	15A0481	☐ 1ml Syringe III	15A0482	☐ 500ul Syringe	15C0951
☐ 250ul Syringe	15A0484	☐ 100ul Syringe	15A0485	☐ 25ul Syringe I	15A0486	☐ 25ul Syringe II	15A0487
☐ 25ul Syringe III	15A0488	☐ 25ul Syringe IV	15A0489	☐ 25ul Syringe V	15A0490	□ 10ul Syringe I	15A0491
☐ 1:1 DCM-Acetone	1710246	☐ pH paper	16A0780	☐ Chlorine Chk Strips	17D0909	Balance ID	

Matrix: Aqueous

Prepared using: SVOC - SW846 3510C

Surrogate used: 17I0218

Matrix. Aqueo	45					r repareu i	201116	,		5 11 0 11	0 55 10				Sui	rogate	uscu.	1 / 102	MI U
Lab Number	Client Sample ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	1	W * Init	ul Spike	ul Surr	ul Surr 2	Due	Collected	Prepared	Extraction Comm	ents C	pI BASIC	ACID	pH Init
1715919-BLK1	Blank	QC	980	1			2			1000			18-Sep-17 08:00	18-Sep-17					
1715919-BS1	LCS	QC	990	1	17H0927				1000	1000			18-Sep-17 08:00	18-Sep-17					
1715919-BSD1	LCS Dup	QC	990	1	17H0927				1000	1000			18-Sep-17 08:00	18-Sep-17					
1715919-DUP1	Duplicate	QC	1060	1		SC39093-03				1000			11-Sep-17 15:50	18-Sep-17	Cont. M				
1715919-MS1	Matrix Spike	QC	1080	1	17H0927	SC39129-01			1000	1000			12-Sep-17 09:53	18-Sep-17	Cont. J				
1715919-MSD1	Matrix Spike Dup	QC	1080	1	17H0927	SC39129-01			1000	1000			12-Sep-17 09:53	18-Sep-17	Cont. M				
SC39093-01	TF1-GT-121-091117	8270 PAH DoD	1060	1						1000		21-Sep-17 16	11-Sep-17 12:35	18-Sep-17	DoD Level IV/Extra Liter	K			
SC39093-02	TF1-GT-119-091117	8270 PAH DoD	1000	1						1000		21-Sep-17 16	11-Sep-17 13:35	18-Sep-17	DoD Level IV/Extra Liter	L			
SC39093-03	TF1-GZ-103-091117	8270 PAH DoD	1040	1						1000		21-Sep-17 16	11-Sep-17 15:50	18-Sep-17	DoD Level IV/Extra Liter	L			
SC39129-01	BED-GW-ELM3-09 122017	8270 PAH DoD	1070	1						1000		21-Sep-17 16	12-Sep-17 09:53	18-Sep-17	MS/MSD/DoD Level IV	L			
SC39129-02	BED-GW-IW18-091 22017	8270 PAH DoD	1090	1						1000		21-Sep-17 16	12-Sep-17 10:03	18-Sep-17	Extra liter/DoD Level IV	Е			
SC39129-04	BED-GW-MW805-0 9122017	8270 PAH DoD	1090	1						1000		21-Sep-17 16	12-Sep-17 11:25	18-Sep-17	Extra liter/DoD Level IV	D			
SC39129-05	BED-GW-MW18SR -09122017	8270 PAH DoD	1090	1						1000		21-Sep-17 16	12-Sep-17 12:34	18-Sep-17	Extra liter/DoD Level IV	D			
SC39129-06	BED-GW-MW15SR 09122017	8270 PAH DoD	750	1						1000		21-Sep-17 16	12-Sep-17 12:42	18-Sep-17	DoD Level IV	D			

Extracts Prepared By

Date

Printed: 9/19/2017 6:12:34PM SDG SC39093 Page 746 / 1731

PREPARATION BENCH SHEET

1715919



* A = Analyst * W = Witness

Eurofins Spectrum Analytical, Inc. - MA

Matrix: Aqueous

Prepared using: SVOC - SW846 3510C

Surrogate used: 17I0218

Lab Number	Client Sample ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	A * \Init I	. 1	ul Spike	ul Surr	ul Surr 2	Due	Collected	Prepared	Extraction Comm	ents C	pl basic	H ACID	pH Dit C
SC39129-08	BED-GW-Dup01-09 122017	8270 PAH DoD	1090	1					-	1000		21-Sep-17 16	12-Sep-17 00:00	18-Sep-17	Extra liter/DoD Level IV	D	+		
SC39129-09	BED-GW-Dup02-09 122017	8270 PAH DoD	1080	1						1000		21-Sep-17 16	12-Sep-17 00:00	18-Sep-17	Extra liter/DoD Level IV	D			
SC39129-10	BED-GW-RB01-091 22017	8270 PAH DoD	1080	1						1000		21-Sep-17 16	12-Sep-17 13:30	18-Sep-17	Extra liter/DoD Level IV	Е			
SC39163-01	TF1-GT-130-09121	8270 PAH DoD	940	1						1000		22-Sep-17 16	12-Sep-17 12:15	18-Sep-17	DoD Level IV/Extra Liter	J			
SC39163-02	TF1-GT-115-091217	8270 PAH DoD	1070	1						1000		22-Sep-17 16	12-Sep-17 10:30	18-Sep-17	DoD Level IV/Extra Liter	K			
SC39163-03	TF1-GT-111-091217	8270 PAH DoD	1070	1						1000		22-Sep-17 16	12-Sep-17 14:15	18-Sep-17	DoD Level IV/Extra Liter	L			\Box
SC39163-04	TF1-GT-118-091217	8270 PAH DoD	1020	1						1000		22-Sep-17 16	12-Sep-17 10:20	18-Sep-17	DoD Level IV/Extra Liter	J			\Box
SC39163-05	TF1-DUP-03-09121	8270 PAH DoD	1050	1						1000		22-Sep-17 16	12-Sep-17 12:00	18-Sep-17	DoD Level IV/Extra Liter	J			
SC39163-06	TF1-MW-1004-0912	8270 PAH DoD	1060	1	- 11 -					1000		22-Sep-17 16	12-Sep-17 15:10	18-Sep-17	DoD Level IV/Extra Liter	M			
SC39163-07	TF1-GZ-106-091217	8270 PAH DoD	1060	1					-	1000		22-Sep-17 16	12-Sep-17 08:00	18-Sep-17	DoD Level IV/Extra Liter	J			1

Analyst Reviewed Pate Printed: 9/19/2017 6:12:34PM SDG SC39093 Page 747 / 1731

Manager Reviewed

Patè

Extracts Prepared By

Date

Page 2 of 2

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S708282}$ Instrument: $\underline{HPS5}$

Calibration: <u>1709033</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
MS Tune	S708282-TUN1	DFT50914.D	09/14/17 10:06
Cal Standard	S708282-CAL1	5914CAL1.D	09/14/17 10:37
Low Cal Check	S708282-LCV2	5914CAL1.D	09/14/17 10:37
Cal Standard	S708282-CAL2	5914CAL2.D	09/14/17 11:08
Cal Standard	S708282-CAL3	5914CAL3.D	09/14/17 11:39
Low Cal Check	S708282-LCV1	5914CAL3.D	09/14/17 11:39
Cal Standard	S708282-CAL4	5914CAL4.D	09/14/17 12:10
Cal Standard	S708282-CAL5	5914CAL5.D	09/14/17 12:41
Cal Standard	S708282-CAL6	5914CAL6.D	09/14/17 13:12
Cal Standard	S708282-CAL7	5914CAL7.D	09/14/17 13:44
Cal Standard	S708282-CAL8	5914CAL8.D	09/14/17 14:15
Cal Standard	S708282-CAL9	5914CAL9.D	09/14/17 14:46
Cal Standard	S708282-CALA	5914CAL0.D	09/14/17 15:17
Initial Cal Check	S708282-ICV1	5914ICV.D	09/14/17 16:51

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8270D

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S708501}$ Instrument: $\underline{HPS5}$

Calibration: <u>1709033</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
MS Tune	S708501-TUN1	DFG50920.D	09/20/17 19:58
Calibration Check	S708501-CCV1	SCG50920.D	09/20/17 20:29
Blank	1715919-BLK1	BK715919.D	09/20/17 21:01
LCS	1715919-BS1	BS715919.D	09/20/17 21:32
LCS Dup	1715919-BSD1	BSD15919.D	09/20/17 22:04
TF1-GT-121-091117	SC39093-01	C3909301.D	09/20/17 22:35
TF1-GT-119-091117	SC39093-02	C3909302.D	09/20/17 23:07
TF1-GZ-103-091117	SC39093-03	C3909303.D	09/20/17 23:39
TF1-GZ-103-091117	1715919-DUP1	3909303D.D	09/21/17 00:10
Calibration Check	S708501-CCV2	SCD50920.D	09/21/17 07:34

Sequence Name: C:\msdchem\1\sequence\PAH5091217.S

Comment:

Operator: MSL
Data Path: G:\SEP2017\HPS5\PAH5091417\
Instrument Control Pre-Seq Cmd: Pre-Seq Cmd: Data Analysis

Instrument Control Post-Seq Cmd: Data Analysis Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch (X) Full Method (X) Inject Anyway () Reprocessing Only () Don't Inject

L	ine		Sample	e Name/M	Misc Info
1)	Sample	1	SYT50914		SYT50914
2)	Sample	2	DFT50914	HP4NEW	DFT50914
3)	Sample	3	5914CAL1	HP4NEW	50914CAL1
4)	Sample	4	5914CAL2	HP4NEW	50914CAL2
5)	Sample	5	5914CAL3	HP4NEW	50914CAL3
6)	Sample	6	5914CAL4	HP4NEW	50914CAL4
7)	Sample	7	5914CAL5	HP4NEW	50914CAL5
8)	Sample	8	5914CAL6	HP4NEW	50914CAL6
9)	Sample	9	5914CAL7	HP4NEW	50914CAL7
10)	Sample	10	5914CAL8	HP4NEW	50914CAL8
11)	Sample	11	5914CAL9	HP4NEW	50914CAL9
12)	Sample	12	5914CAL0	HP4NEW	50914CAL0
13)	Sample	13	5914CALA	HP4NEW	50914CALA
14)	Sample	14	5914CALB	HP4NEW	50914CALB
15)	Sample	15	5914ICV	HP4NEW	50914ICV
16)	Sample	16	5914DMF1	HP4NEW	50914DMF1
17)	Sample	17	5914DMF2	HP4NEW	50914DMF2
18)	Sample	18	5914DMF3	HP4NEW	50914DMF3
19)	Sample	19	5914DMF4	HP4NEW	50914DMF4
20)	Sample	20	5914DMF5	HP4NEW	50914DMF5
21)	Sample	21	5914DMF6	HP4NEW	50914DMF6
22)	Sample	22	ICVDMF	HP4NEW	ICVDMF
23)	Sample	23	TST1	HP4NEW	TST1
24)	Sample	24	SCT50914	HP4NEW	SCT50914
25)	Sample	25	BK715334	HP4NEW	1715334-BLK1
26)	Sample	26	BS715334	HP4NEW	1715334-BS1
27)	Sample	27	BSD15334	HP4NEW	1715334-BSD1

Last Modified: Fri Sep 15 08:14:00 2017

```
Operator: MSL
                       Data Path: G:\SEP2017\HPS5\PAH5092017\
Instrument Control Pre-Seq Cmd:
                                                               Pre-Seq Cmd:
Data Analysis
Instrument Control Post-Seq Cmd:
Data Analysis
                                                              Post-Seg Cmd:
              ethod Sections To Run On A Barcode Mismat
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject
         Method Sections To Run
                                                                                                 On A Barcode Mismatch
                                                                                                   (X) Inject Anyway
Line Sample Name/Misc Info

1) Sample 1 SYT50920 HP4NEW SYT50920

2) Sample 2 DFT50920 HP4NEW DFT50920

4) Sample 3 SCT50920 HP4NEW DFT50920

4) Sample 4 3873304M HP4NEW 1715009-M.

5) Sample 5 BK716026 HP4NEW 1716026-B.

6) Sample 6 BS716026 HP4NEW 1716026-B.

7) Sample 7 BSD16026 HP4NEW 1716026-B.

8) Sample 8 C3893301 HP4NEW SC38933-0.

9) Sample 9 C3893302 HP4NEW SC38933-0.

10) Sample 10 C3893303 HP4NEW SC38933-0.

11) Sample 11 C3894601 HP4NEW SC38933-0.

12) Sample 12 SCE50920 HP4NEW SC550920.

13) Sample 12 SCE50920 HP4NEW SC550920.

14) Sample 2 DFG50920 HP4NEW SC550920.

15) Sample 3 SCG50920 HP4NEW SCG50920.

16) Sample 4 BK715919 HP4NEW 1715919-B.

17) Sample 5 BS715919 HP4NEW 1715919-B.

18) Sample 6 BSD15919 HP4NEW 1715919-B.

19) Sample 7 C3909301 HP4NEW SC39093-0.

20) Sample 8 C3909302 HP4NEW SC39093-0.

21) Sample 9 C3909303 HP4NEW SC39093-0.

22) Sample 10 3909303 HP4NEW SC39093-0.

22) Sample 11 C3912901 HP4NEW SC39129-0.

23) Sample 12 C3912901 HP4NEW SC39129-0.

24) Sample 12 C3912901 HP4NEW SC39129-0.

25) Sample 13 3912901S HP4NEW SC39129-0.

26) Sample 14 C3912904 HP4NEW SC39129-0.

27) Sample 15 C3912904 HP4NEW SC39129-0.

28) Sample 16 C3912905 HP4NEW SC39129-0.

30) Sample 17 C3912906 HP4NEW SC39129-0.

31) Sample 18 C3912906 HP4NEW SC39129-0.

32) Sample 19 C3912906 HP4NEW SC39129-0.

33) Sample 20 C3916301 HP4NEW SC39129-0.

34) Sample 21 C3916301 HP4NEW SC39129-0.

35) Sample 22 C3916302 HP4NEW SC39129-0.

36) Sample 23 DFD50920 HP4NEW SC39129-0.

37) Sample 24 SCD50920 HP4NEW SC39129-0.

38) Sample 25 C3916303 HP4NEW SC39129-0.

39) Sample 26 C3916306 HP4NEW SC39163-0.

39) Sample 27 C3916306 HP4NEW SC39163-0.

39) Sample 28 C3916306 HP4NEW SC39163-0.

39) Sample 29 C3916307 HP4NEW SC39163-0.

39) Sample 29 C3916307 HP4NEW SC39163-0.

39) Sample 20 C3916307 HP4NEW SC39163-0.

39) Sample 20 C3916307 HP4NEW SC39163-0.

39) Sample 21 C3916307 HP4NEW SC39163-0.

30) Sample 22 C3916307 HP4NEW SC39163-0.

31) Sample 29 C3916307 HP4NEW SC39163-0.

32) Sample 20 C3916307 HP4NEW SC39163-0
                                                                                         Line
                                                                             Sample Name/Misc Info
                                                                                                                                   1715009-MS1
                                                                                                                                   1716026-BLK1
                                                                                                                                   1716026-BS1
                                                                                                                                   1716026-BSD1
                                                                                                                                  SC38933-01RE1
                                                                                                                                  SC38933-02RE1/07
10)
                                                                                                                                   SC38933-03RE1
11)
                                                                                                                                   SC38946-01
12)
13)
14)
15)
16)
                                                                                                                                   1715919-BLK1
17)
                                                                                                                                   1715919-BS1
                                                                                                                                   1715919-BSD1
18)
                                                                                                                                   SC39093-01
19)
                                                                                                                                   SC39093-02
20)
                                                                                                                                   SC39093-03
21)
                                                                                                                                   1715919-DUP1
22)
23)
                                                                                                                                   SC39129-01
24)
                                                                                                                                   1715919-MS1
                                                                                                                                   1715919-MSD1
25)
                                                                                                                                   SC39129-02
26)
27)
                                                                                                                                   SC39129-04
28)
                                                                                                                                   SC39129-05
                                                                                                                                   SC39129-06
29)
                                                                                                                                   SC39129-08
30)
                                                                                                                                   SC39129-09
31)
                                                                                                                                   SC39129-10
32)
33)
                                                                                                                                   SC39163-01
34)
                                                                                                                                   SC39163-02
35)
36)
                                                                                                                                   SC39163-03
37)
                                                                                                                                   SC39163-04
38)
                                                                                                                                   SC39163-05
39)
                                                                                                                                   SC39163-06
40)
                                                                                                                                   SC39163-07
41)
42)
                                                                                                                                   1715009-MS1
43)
```

Sequence Name: C:\msdchem\1\sequence\PAH5092017.S

Comment:

1/1/1/p

Sequence Name: C:\msdchem\1\sequence\PAH5092017.S

L	ine Type	Vial	DataFile		Sample Name	
44) 45) 46) 47) 48)	Sample Sample Sample Sample Sample	33 C38 34 C38 35 C38	69704 HP4N 69801 HP4N 69802 HP4N 69803 HP4N 50920 HP4N	EW SC386	97-04 98-01 98-02 98-03 9920	

Last Modified: Fri Sep 15 08:14:00 2017

CROSS REFERENCE TABLE

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 8081B.

IV. PREPARATION

Aqueous samples were prepared according to SW846 3510C.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 8081B:

<u>HPS17 details:</u> Agilent 6890 series dual column ECD GC with RTX-CLPesticides (30m, 0.53mmID, 0.5um df) & RTX-CLPesticides2 Column (30m, 0.53mmID, 0.42um df)

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Surrogates:

All method criteria were met.

D. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

E. Duplicates:

A duplicate was analyzed.

In batch 1715920 from source sample TF1-GT-119-091117 (SC39093-02).

All method criteria were met.

F. Internal Standards:

Internal standards were within the acceptance criteria.

G. Samples:

All method criteria were met.

FORM II - SURROGATE STANDARD RECOVERY SUMMARY

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Spike ID: <u>17I0082</u>

Client ID	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	Total Out
Blank (1715920-BLK1)	106	112	99	82			0
LCS (1715920-BS1)	97	100	90	72			0
LCS Dup (1715920-BSD1)	94	101	104	73			0
Duplicate (1715920-DUP1)	73	79	99	76			0
Instrument Blank (S708605-IBL1)	90	93	100	93			0
Instrument Blank (S708605-IBL2)	90	94	94	96			0
Instrument Blank (S708605-IBL3)	90	92	98	100			0
Instrument Blank (S708605-IBL4)	87	93	98	99			0
TF1-GT-121-091117 (SC39093-01)	81	88	83	79			0
TF1-GT-119-091117 (SC39093-02)	73	77	85	82			0
TF1-GZ-103-091117 (SC39093-03)	87	95	87	84			0

Control Limits

S1 = 4,4-DB-Octafluorobiphenyl (Sr) 30 - 150 S2 = 4,4-DB-Octafluorobiphenyl (Sr) [2C] 30 - 150 S3 = Decachlorobiphenyl (Sr) 30 - 135S4 = Decachlorobiphenyl (Sr) [2C] 30 - 135

Column to be used to flag recovery values

^{*} Values outside of QC limits

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPS17

Batch: <u>1715920</u> Laboratory ID: <u>1715920-BS1</u>

Preparation: <u>SW846 3510C</u> <u>Initial/Final</u>: <u>980 ml / 10 ml</u>

Analyzed: 09/27/17 19:48 Spike ID: 17I0075

File ID: <u>L1170927.D</u>

COMPOUND	SPIKE ADDED (μg/l)	LCS CONCENTRATION (μg/l)	LCS % REC.#	QC LIMITS REC.
alpha-BHC	0.510	0.403	79	54 - 138
alpha-BHC [2C]	0.510	0.409	80	54 - 138
beta-BHC	0.510	0.426	83	56 - 136
beta-BHC [2C]	0.510	0.472	93	56 - 136
delta-BHC	0.510	0.420	82	52 - 142
delta-BHC [2C]	0.510	0.432	85	52 - 142
gamma-BHC (Lindane)	0.510	0.393	77	59 - 134
gamma-BHC (Lindane) [2C]	0.510	0.415	81	59 - 134
Heptachlor	0.510	0.407	80	54 - 130
Heptachlor [2C]	0.510	0.460	90	54 - 130
Aldrin	0.510	0.402	79	45 - 134
Aldrin [2C]	0.510	0.393	77	45 - 134
Heptachlor epoxide	0.510	0.402	79	61 - 133
Heptachlor epoxide [2C]	0.510	0.403	79	61 - 133
Endosulfan I	0.510	0.412	81	62 - 126
Endosulfan I [2C]	0.510	0.447	88	62 - 126
Dieldrin	0.510	0.399	78	60 - 136
Dieldrin [2C]	0.510	0.390	76	60 - 136
4,4'-DDE (p,p')	0.510	0.389	76	57 - 135
4,4'-DDE (p,p') [2C]	0.510	0.386	76	57 - 135
Endrin	0.510	0.485	95	60 - 138
Endrin [2C]	0.510	0.497	98	60 - 138
Endosulfan II	0.510	0.410	80	52 - 135
Endosulfan II [2C]	0.510	0.489	96	52 - 135
4,4'-DDD (p,p')	0.510	0.410	80	56 - 143
4,4'-DDD (p,p') [2C]	0.510	0.474	93	56 - 143
Endosulfan sulfate	0.510	0.418	82	62 - 133
Endosulfan sulfate [2C]	0.510	0.489	96	62 - 133
4,4'-DDT (p,p')	0.510	0.273	54	51 - 143
4,4'-DDT (p,p') [2C] SDG SC39093 Page 759 / 1731	0.510	0.397	78	51 - 143

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPS17

Batch: <u>1715920</u> Laboratory ID: <u>1715920-BS1</u>

Preparation: <u>SW846 3510C</u> <u>Initial/Final</u>: <u>980 ml / 10 ml</u>

Analyzed: 09/27/17 19:48 Spike ID: 17I0075

File ID: <u>L1170927.D</u>

COMPOUND	SPIKE ADDED (µg/l)	LCS CONCENTRATION (µg/l)	LCS % REC.#	QC LIMITS REC.
Methoxychlor	0.510	0.392	77	54 - 145
Methoxychlor [2C]	0.510	0.438	86	54 - 145
Endrin ketone	0.510	0.347	68	58 - 134
Endrin ketone [2C]	0.510	0.423	83	58 - 134
Endrin aldehyde	0.510	0.437	86	51 - 132
Endrin aldehyde [2C]	0.510	0.503	99	51 - 132
alpha-Chlordane	0.510	0.417	82	60 - 129
alpha-Chlordane [2C]	0.510	0.421	83	60 - 129
Chlordane (gamma)(trans)	0.510	0.431	85	56 - 136
Chlordane (gamma)(trans) [2C]	0.510	0.418	82	56 - 136
Alachlor	0.510	0.453	89	40 - 140
Alachlor [2C]	0.510	0.453	89	40 - 140

File ID: <u>L2170927.D</u>

	SPIKE	LCSD	LCSD		QC	LIMITS
COMPOUND	ADDED (μg/l)	CONCENTRATION (µg/l)	% REC. #	% RPD #	RPD	REC.
alpha-BHC	0.510	0.378	74	6	20	54 - 138
alpha-BHC [2C]	0.510	0.393	77	4	20	54 - 138
beta-BHC	0.510	0.390	76	9	20	56 - 136
beta-BHC [2C]	0.510	0.446	87	6	20	56 - 136
delta-BHC	0.510	0.369	72	13	20	52 - 142
delta-BHC [2C]	0.510	0.406	80	6	20	52 - 142
gamma-BHC (Lindane)	0.510	0.368	72	7	20	59 - 134
gamma-BHC (Lindane) [2C]	0.510	0.402	79	3	20	59 - 134
Heptachlor	0.510	0.380	75	7	20	54 - 130
Heptachlor [2C]	0.510	0.451	88	2	20	54 - 130
Aldrin	0.510	0.381	75	5	20	45 - 134
Aldrin [2C]	0.510	0.383	75	2	20	45 - 134
Heptachlor epoxide	0.510	0.384	75	5	20	61 - 133
Heptachlor epoxide [2C] SDG SC39093 Page 760 / 1	0.510	0.395	77	2	20	61 - 133

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: HPS17

Batch: <u>1715920</u> Laboratory ID: <u>1715920-BSD1</u>

Preparation: SW846 3510C Initial/Final: 980 ml / 10 ml

Analyzed: <u>09/27/17 20:07</u> Spike ID: 17I0075

File ID: <u>L2170927.D</u>

Endosulfan I [2C] 0.510 0.432 85 4 20 62-126 Dieldrin 0.510 0.387 76 3 20 60-136 Dieldrin [2C] 0.510 0.385 75 1 20 60-136 A,4'-DDE (p,p') 0.510 0.380 74 2 20 57-135 A,4'-DDE (p,p') [2C] 0.510 0.371 73 4 20 57-135 Endrin 0.510 0.470 92 3 20 60-138 Endrin [2C] 0.510 0.475 93 5 20 60-138 Endosulfan II [2C] 0.510 0.413 81 0.7 20 52-135 Endosulfan II [2C] 0.510 0.443 81 0.7 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan II [2C] 0.510 0.460 80 0.9 20 56-143 A,4'-DDD (p,p') [2C] 0.510 0.480 94 1 20 56-143 Endosulfan sulfate 0.510 0.402 79 4 20 62-133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62-133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 52-135 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 52-144 A,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51-143 Methoxychlor 0.510 0.375 73 4 20 51-143 Methoxychlor 0.510 0.338 66 3 20 51-143 Methoxychlor [2C] 0.510 0.338 66 3 20 51-143 Endrin ketone 0.510 0.338 66 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.417 82 1 20 60-129 Endrin aldehyde [2C] 0.510 0.417 82 1 20 60-129 Endrin aldehyde [2C] 0.510 0.417 82 1 20 60-129 Endrin aldehyde [2C] 0.510 0.417 82 3 20 56-136 Endronance (gamma) (trans) [2C] 0.510 0.411 81 2 20 56-136 Endronance (gamma) (trans) [2C] 0.510 0.411 81 2 20 56-136 Endronance (gamma) (trans) [2C] 0.510 0.411 81 2 20 56-136		SPIKE	LCSD	LCSD		QC	LIMITS
Endosulfan I	COMPOUND					RPD	REC.
Dieldrin Dieldrin	Endosulfan I			78	4	20	62 - 126
Dieldrin [2C] 0.510 0.385 75 1 20 60-136 4.4'-DDE (p,p') 0.510 0.380 74 2 20 57-135 4.4'-DDE (p,p') [2C] 0.510 0.371 73 4 20 57-135 Endrin 0.510 0.470 92 3 20 60-138 Endrin [2C] 0.510 0.475 93 5 20 60-138 Endosulfan II 0.510 0.413 81 0.7 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan Sulfate 0.510 0.406 80 0.9 20 56-143 Endosulfan sulfate 0.510 0.480 94 1 20 56-143 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62-133 Endosulfan sulfate	Endosulfan I [2C]	0.510	0.432	85	4	20	62 - 126
4.4'-DDE (p,p')	Dieldrin	0.510	0.387	76	3	20	60 - 136
4.4*-DDE (p,p) [2C]	Dieldrin [2C]	0.510	0.385	75	1	20	60 - 136
Endrin 0.510 0.470 92 3 20 60-138 Endrin [2C] 0.510 0.475 93 5 20 60-138 Endosulfan II 0.510 0.413 81 0.7 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan II [2C] 0.510 0.469 92 4 20 52-135 Endosulfan II [2C] 0.510 0.406 80 0.9 20 56-143 4.4'-DDD (p,p') (2C] 0.510 0.480 94 1 20 56-143 Endosulfan sulfate 0.510 0.402 79 4 20 62-133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62-133 4.4'-DDT (p,p') (2C] 0.510 0.266 52 3 20 51-143 4.4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51-143 Methoxychlor 0.510 0.375 73 4 20 54-145 Methoxychlor 0.510 0.387 76 12 20 54-145 Endrin ketone 0.510 0.338 66 3 20 58-134 Endrin ketone [2C] 0.510 0.405 79 4 20 58-134 Endrin ketone [2C] 0.510 0.405 79 4 20 58-134 Endrin ladehyde 0.510 0.405 79 4 20 58-134 Endrin aldehyde [2C] 0.510 0.425 83 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51-132 Endrin aldehyde [2C] 0.510 0.417 82 1 20 60-129 Endrid (gamma)(trans) 0.510 0.417 82 3 20 56-136 Chlordane (gamma)(trans) 0.510 0.411 81 2 20 56-136 Alachlor 0.510 0.510 0.414 81 9 20 40-140	4,4'-DDE (p,p')	0.510	0.380	74	2	20	57 - 135
Endrin [2C] 0.510 0.475 93 5 20 60 - 138 Endosulfan II 0.510 0.413 81 0.7 20 52 - 135 Endosulfan II [2C] 0.510 0.469 92 4 20 52 - 135 4,4'-DDD (p,p') 0.510 0.406 80 0.9 20 56 - 143 4,4'-DDD (p,p') [2C] 0.510 0.480 94 1 20 56 - 143 Endosulfan sulfate 0.510 0.402 79 4 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Endrin ketone 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin ladehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde 0.510 0.498 96 3 20 51 - 132 Endrin aldehyde 0.510 0.397 78 5 20 60 - 129 Endrin aldehyde 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	4,4'-DDE (p,p') [2C]	0.510	0.371	73	4	20	57 - 135
Endosulfan II 0.510 0.413 81 0.7 20 52 - 135 Endosulfan II [2C] 0.510 0.469 92 4 20 52 - 135 4,4'-DDD (p,p') 0.510 0.406 80 0.9 20 56 - 143 4,4'-DDD (p,p') [2C] 0.510 0.480 94 1 20 56 - 143 Endosulfan sulfate 0.510 0.402 79 4 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor (p,p') [2C] 0.510 0.387 76 12 20	Endrin	0.510	0.470	92	3	20	60 - 138
Endosulfan II [2C] 0.510 0.469 92 4 20 52 - 135 4.4'-DDD (p,p') 0.510 0.406 80 0.9 20 56 - 143 4.4'-DDD (p,p') [2C] 0.510 0.480 94 1 20 56 - 143 Endosulfan sulfate 0.510 0.402 79 4 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 4.4'-DDT (p,p') 0.510 0.266 52 3 20 51 - 143 Methoxychlor (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor (p,p') [2C] 0.510 0.375 73 4 20 54 - 145 Methoxychlor (p,p') [2C] 0.510 0.387 76 12 20 54 - 145 Methoxychlor (p,p') [2C] 0.510 0.387 76 12 20<	Endrin [2C]	0.510	0.475	93	5	20	60 - 138
4,4'-DDD (p,p') 0.510 0.406 80 0.9 20 56 - 143 4,4'-DDD (p,p') [2C] 0.510 0.480 94 1 20 56 - 143 Endosulfan sulfate 0.510 0.402 79 4 20 62 - 133 Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 4,4'-DDT (p,p') 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 <t< td=""><td>Endosulfan II</td><td>0.510</td><td>0.413</td><td>81</td><td>0.7</td><td>20</td><td>52 - 135</td></t<>	Endosulfan II	0.510	0.413	81	0.7	20	52 - 135
4,4'-DDD (p,p') [2C]	Endosulfan II [2C]	0.510	0.469	92	4	20	52 - 135
Endosulfan sulfate 0.510 0.402 79 4 20 62 - 133 Endosulfan sulfate 2C 0.510 0.493 97 0.8 20 62 - 133 4,4'-DDT (p,p') 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') 2C 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor 2C 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone 2C 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde 2C 0.510 0.489 96 3 20 51 - 132 Endrin aldehyde 2C 0.510 0.397 78 5 20 60 - 129 Endrin aldehyde 2C 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) 2C 0.510 0.411 81 2 20 56 - 136 Chlordane (gamma)(trans) 0.510 0.414 81 9 20 40 - 140 Endrin dalchlor 0.510 0.414 81 9 20 40 - 140	4,4'-DDD (p,p')	0.510	0.406	80	0.9	20	56 - 143
Endosulfan sulfate [2C] 0.510 0.493 97 0.8 20 62 - 133 4,4'-DDT (p,p') 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.510 0.414 81 9 20 40 - 140	4,4'-DDD (p,p') [2C]	0.510	0.480	94	1	20	56 - 143
4,4'-DDT (p,p') 0.510 0.266 52 3 20 51 - 143 4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 </td <td>Endosulfan sulfate</td> <td>0.510</td> <td>0.402</td> <td>79</td> <td>4</td> <td>20</td> <td>62 - 133</td>	Endosulfan sulfate	0.510	0.402	79	4	20	62 - 133
4,4'-DDT (p,p') [2C] 0.510 0.345 68 14 20 51 - 143 Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 <	Endosulfan sulfate [2C]	0.510	0.493	97	0.8	20	62 - 133
Methoxychlor 0.510 0.375 73 4 20 54 - 145 Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140 <td>4,4'-DDT (p,p')</td> <td>0.510</td> <td>0.266</td> <td>52</td> <td>3</td> <td>20</td> <td>51 - 143</td>	4,4'-DDT (p,p')	0.510	0.266	52	3	20	51 - 143
Methoxychlor [2C] 0.510 0.387 76 12 20 54 - 145 Endrin ketone 0.510 0.338 66 3 20 58 - 134 Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	4,4'-DDT (p,p') [2C]	0.510	0.345	68	14	20	51 - 143
Endrin ketone	Methoxychlor	0.510	0.375	73	4	20	54 - 145
Endrin ketone [2C] 0.510 0.405 79 4 20 58 - 134 Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	Methoxychlor [2C]	0.510	0.387	76	12	20	54 - 145
Endrin aldehyde 0.510 0.425 83 3 20 51 - 132 Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	Endrin ketone	0.510	0.338	66	3	20	58 - 134
Endrin aldehyde [2C] 0.510 0.489 96 3 20 51 - 132 alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	Endrin ketone [2C]	0.510	0.405	79	4	20	58 - 134
alpha-Chlordane 0.510 0.397 78 5 20 60 - 129 alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	Endrin aldehyde	0.510	0.425	83	3	20	51 - 132
alpha-Chlordane [2C] 0.510 0.417 82 1 20 60 - 129 Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	Endrin aldehyde [2C]	0.510	0.489	96	3	20	51 - 132
Chlordane (gamma)(trans) 0.510 0.417 82 3 20 56 - 136 Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	alpha-Chlordane	0.510	0.397	78	5	20	60 - 129
Chlordane (gamma)(trans) [2C] 0.510 0.411 81 2 20 56 - 136 Alachlor 0.510 0.414 81 9 20 40 - 140	alpha-Chlordane [2C]	0.510	0.417	82	1	20	60 - 129
Alachlor 0.510 0.414 81 9 20 40 - 140	Chlordane (gamma)(trans)	0.510	0.417	82	3	20	56 - 136
	Chlordane (gamma)(trans) [2C]	0.510	0.411	81	2	20	56 - 136
Alachlor [2C] 0.510 0.482 94 6 20 40 - 140	Alachlor	0.510	0.414	81	9	20	40 - 140
	Alachlor [2C]	0.510	0.482	94	6	20	40 - 140

FORM IIIc - DUPLICATES

SW846 8081B

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Matrix:
 Aqueous
 Laboratory ID:
 1715920-DUP1

 Batch:
 1715920
 Lab Source ID:
 SC39093-02

Preparation: <u>SW846 3510C</u> Initial/Final: <u>1040 ml / 10 ml</u>

Source Sample Name: TF1-GT-119-091117 % Solids:

File ID: <u>D1170927.D</u>

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (µg/l)	С	DUPLICATE CONCENTRATION (µg/l)	С	RPD %	Q	METHOD
alpha-BHC	30	BRL		BDL				SW846 8081B
alpha-BHC [2C]	30			BDL				SW846 8081B
beta-BHC	30	BRL		BDL				SW846 8081B
beta-BHC [2C]	30			BDL				SW846 8081B
delta-BHC	30	BRL		BDL				SW846 8081B
delta-BHC [2C]	30			BDL				SW846 8081B
gamma-BHC (Lindane)	30	BRL		BDL				SW846 8081B
gamma-BHC (Lindane) [2C]	30			BDL				SW846 8081B
Heptachlor	30	BRL		BDL				SW846 8081B
Heptachlor [2C]	30			BDL				SW846 8081B
Aldrin	30	BRL		BDL				SW846 8081B
Aldrin [2C]	30			BDL				SW846 8081B
Heptachlor epoxide	30	BRL		BDL				SW846 8081B
Heptachlor epoxide [2C]	30			BDL				SW846 8081B
Endosulfan I	30	BRL		BDL				SW846 8081B
Endosulfan I [2C]	30			BDL				SW846 8081B
Dieldrin	30	BRL		BDL				SW846 8081B
Dieldrin [2C]	30			BDL				SW846 8081B
4,4'-DDE (p,p')	30	BRL		BDL				SW846 8081B
4,4'-DDE (p,p') [2C]	30			BDL				SW846 8081B
Endrin	30	BRL		BDL				SW846 8081B
Endrin [2C]	30			BDL				SW846 8081B
Endosulfan II	30	BRL		BDL				SW846 8081B
Endosulfan II [2C]	30			BDL				SW846 8081B
4,4'-DDD (p,p')	30	BRL		BDL				SW846 8081B
4,4'-DDD (p,p') [2C]	30			BDL				SW846 8081B
Endosulfan sulfate	30	BRL		BDL				SW846 8081B
Endosulfan sulfate [2C]	30			BDL				SW846 8081B
4,4'-DDT (p,p') SDG SC39093 Page 762	30	BRL		BDL				SW846 8081B

FORM IIIc - DUPLICATES

SW846 8081B

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Matrix:
 Aqueous
 Laboratory ID:
 1715920-DUP1

 Batch:
 1715920
 Lab Source ID:
 SC39093-02

Preparation: <u>SW846 3510C</u> Initial/Final: <u>1040 ml / 10 ml</u>

Source Sample Name: TF1-GT-119-091117 % Solids:

File ID: <u>D1170927.D</u>

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (µg/l)	С	DUPLICATE CONCENTRATION (µg/l)	С	RPD %	Q	METHOD
4,4'-DDT (p,p') [2C]	30			BDL				SW846 8081B
Methoxychlor	30	BRL		BDL				SW846 8081B
Methoxychlor [2C]	30			BDL				SW846 8081B
Endrin ketone	30	BRL		BDL				SW846 8081B
Endrin ketone [2C]	30			BDL				SW846 8081B
Endrin aldehyde	30	BRL		BDL				SW846 8081B
Endrin aldehyde [2C]	30			BDL				SW846 8081B
alpha-Chlordane	30	BRL		BDL				SW846 8081B
alpha-Chlordane [2C]	30			BDL				SW846 8081B
Chlordane (gamma)(trans)	30	BRL		BDL				SW846 8081B
Chlordane (gamma)(trans) [2C]	30			BDL				SW846 8081B
Toxaphene	30	BRL		BDL				SW846 8081B
Toxaphene [2C]	30			BDL				SW846 8081B
Chlordane	30	BRL		BDL				SW846 8081B
Chlordane [2C]	30			BDL				SW846 8081B
Alachlor	30	BRL		BDL				SW846 8081B
Alachlor [2C]	30			BDL				SW846 8081B

^{*} Values outside of QC limits

Individual peaks for multi-component analytes are indicated by a number in parentheses

FORM IV - METHOD BLANK SUMMARY SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: <u>1715920-BLK1</u> File ID: <u>B1170927.D</u>

Preparation: SW846 3510C Initial/Final: 970 ml / 10 ml

Analyzed: 09/27/17 19:29 Instrument: HPS17

Batch: <u>1715920</u> Sequence: <u>S708605</u> Calibration: <u>1709047</u>

This method blank applies to the following sample analyses:

SAMPLE NO.	LAB SAMPLE ID	FILE ID	DATE ANALYZED	TIME ANALYZED
LCS	1715920-BS1	L1170927.D	09/27/17	19:48
LCS Dup	1715920-BSD1	L2170927.D	09/27/17	20:07
Duplicate	1715920-DUP1	D1170927.D	09/27/17	20:25
TF1-GT-121-091117	SC39093-01	3909301Z.D	09/27/17	21:58
TF1-GT-119-091117	SC39093-02	3909302Z.D	09/27/17	22:16
TF1-GZ-103-091117	SC39093-03	3909303Z.D	09/27/17	23:31

FORM I - ANALYSIS DATA SHEET SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: <u>Tetra Tech, Inc. - Salem, NH</u> Project: <u>WE15 Tank Farm 1 NAVSTA Newport</u>

Matrix: Aqueous Laboratory ID: <u>1715920-BLK1</u> File ID: <u>B1170927.D</u>

Preparation: SW846 3510C Initial/Final: 970 ml / 10 ml

Analyzed: <u>09/27/17 19:29</u> Instrument: <u>HPS17</u>

Batch: 1715920 Sequence: S708605 Calibration: 1709047

Batch:	<u>1715920</u> Sequen	ce: <u>S7086</u>	605	Calibration:	<u>1709047</u>		
CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
319-84-6	alpha-BHC	1	0.021	U	0.012	0.021	0.021
319-84-6	alpha-BHC [2C]	1	0.021	U	0.018	0.021	0.021
319-85-7	beta-BHC	1	0.021	U	0.015	0.021	0.021
319-85-7	beta-BHC [2C]	1	0.021	U	0.020	0.021	0.021
319-86-8	delta-BHC	1	0.021	U	0.016	0.021	0.021
319-86-8	delta-BHC [2C]	1	0.021	U	0.020	0.021	0.021
58-89-9	gamma-BHC (Lindane)	1	0.021	U	0.018	0.021	0.021
58-89-9	gamma-BHC (Lindane) [2C]	1	0.021	U	0.018	0.021	0.021
76-44-8	Heptachlor	1	0.021	U	0.020	0.021	0.021
76-44-8	Heptachlor [2C]	1	0.021	U	0.020	0.021	0.021
309-00-2	Aldrin	1	0.021	U	0.016	0.021	0.021
309-00-2	Aldrin [2C]	1	0.021	U	0.019	0.021	0.021
1024-57-3	Heptachlor epoxide	1	0.021	U	0.016	0.021	0.021
1024-57-3	Heptachlor epoxide [2C]	1	0.021	U	0.015	0.021	0.021
959-98-8	Endosulfan I	1	0.021	U	0.017	0.021	0.021
959-98-8	Endosulfan I [2C]	1	0.021	U	0.016	0.021	0.021
60-57-1	Dieldrin	1	0.021	U	0.018	0.021	0.021
60-57-1	Dieldrin [2C]	1	0.021	U	0.019	0.021	0.021
72-55-9	4,4'-DDE (p,p')	1	0.021	U	0.018	0.021	0.021
72-55-9	4,4'-DDE (p,p') [2C]	1	0.021	U	0.018	0.021	0.021
72-20-8	Endrin	1	0.021	U	0.020	0.021	0.041
72-20-8	Endrin [2C]	1	0.021	U	0.020	0.021	0.041
33213-65-9	Endosulfan II	1	0.021	U	0.021	0.021	0.041
33213-65-9	Endosulfan II [2C]	1	0.021	U	0.016	0.021	0.041
72-54-8	4,4'-DDD (p,p')	1	0.021	U	0.019	0.021	0.041
72-54-8	4,4'-DDD (p,p') [2C]	1	0.021	U	0.018	0.021	0.041
1031-07-8	Endosulfan sulfate	1	0.021	U	0.020	0.021	0.041
1031-07-8	Endosulfan sulfate [2C]	1	0.021	U	0.017	0.021	0.041
50-29-3	4,4'-DDT (p,p')	1	0.031	U	0.018	0.031	0.041
50-29-3	4,4'-DDT (p,p') [2C]	1	0.031	U	0.022	0.031	0.041
72-43-5	Methoxychlor	1	0.021	U	0.019	0.021	0.041
72-43-5	Methoxychlor [2C]	1	0.021	U	0.019	0.021	0.041

SDG SC39093 Page 1070 / 1731

1715920-BLK1

FORM I - ANALYSIS DATA SHEET SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: <u>1715920-BLK1</u> File ID: <u>B1170927.D</u>

Preparation: SW846 3510C Initial/Final: 970 ml / 10 ml

Analyzed: <u>09/27/17 19:29</u> Instrument: <u>HPS17</u>

Batch: <u>1715920</u> Sequence: <u>S708605</u> Calibration: <u>1709047</u>

CAS NO.	COMPOUND	DILUTION	CONC. (µg/l)	Q	MDL	LOD	LOQ
53494-70-5	Endrin ketone	1	0.021	U	0.018	0.021	0.041
53494-70-5	Endrin ketone [2C]	1	0.021	U	0.019	0.021	0.041
7421-93-4	Endrin aldehyde	1	0.021	U	0.020	0.021	0.041
7421-93-4	Endrin aldehyde [2C]	1	0.021	U	0.018	0.021	0.041
5103-71-9	alpha-Chlordane	1	0.021	U	0.016	0.021	0.021
5103-71-9	alpha-Chlordane [2C]	1	0.021	U	0.018	0.021	0.021
5103-74-2	Chlordane (gamma)(trans)	1	0.021	U	0.017	0.021	0.021
5103-74-2	Chlordane (gamma)(trans) [2C]	1	0.021	U	0.015	0.021	0.021
15972-60-8	Alachlor	1	0.021	U	0.019	0.021	0.021
15972-60-8	Alachlor [2C]	1	0.021	U	0.018	0.021	0.021

FORM VIIIa - INTERNAL STANDARD AREA AND RT SUMMARY

SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Sequence:
 \$\frac{\text{S708605}}{\text{s05}}\$
 Instrument:
 \$\frac{\text{HPS17}}{\text{PPS17}}\$

 Matrix:
 \$\frac{\text{Aqueous}}{\text{collibration:}}\$
 \$\frac{\text{Calibration:}}{\text{collibration:}}\$
 \$\frac{\text{1709047}}{\text{collibration:}}\$

 Analyzed:
 \$\frac{09/27/17 \text{ 18:15}}{\text{collibration:}}\$
 \$\text{File ID:}
 \$\text{C1170927.D}

	IS1 Area #	RT#	IS2 Area #	RT#	IS3 Area #	RT#	IS4 Area #	RT#	IS5 Area #	RT#	IS6 Area #	RT#
12-Hour Standard	16792740	3.15	28827860	2.85								
Upper Limit	33585480	3.65	57655720	3.35								
Lower Limit	8396370	2.65	14413930	2.35								
Sample ID												
Calibration Check (S708605-CCV2)	16137720	3.15	27865700	2.85								
Calibration Check (S708605-CCV3)	16260210	3.15	26757370	2.86								
Calibration Check (S708605-CCV4)	26618120	3.15	45403790	2.85								
Calibration Check (S708605-CCV5)	18738820	3.15	33455530	2.85								
Calibration Check (S708605-CCV6)	18907300	3.15	34465360	2.85								
Calibration Check (S708605-CCV7)	19012080	3.11	30408840	2.82								
Calibration Check (S708605-CCV8)	17794030	3.11	26298860	2.82								
Blank (1715920-BLK1)	13224070	3.15	23649140	2.85								
LCS (1715920-BS1)	15053420	3.15	26976430	2.85								
LCS Dup (1715920-BSD1)	14466870	3.15	24752160	2.86								
Duplicate (1715920-DUP1)	14251480	3.15	25769440	2.86								
Instrument Blank (S708605-IBL1)	18564200	3.15	32010740	2.85								
Instrument Blank (S708605-IBL2)	18647850	3.15	31099660	2.85								
Instrument Blank (S708605-IBL3)	23378750	3.15	41137110	2.85								
Instrument Blank (S708605-IBL4)	16109810	3.15	27763930	2.85								
Performance Mix (S708605-PEM1)	32163570	3.15	54004890	2.85								
Performance Mix (S708605-PEM2)	15462740	3.12	25750680	2.83								
Performance Mix (S708605-PEM3)	15808020	3.11	26992710	2.83								
Performance Mix (S708605-PEM4)	15919540	3.11	27845220	2.83								
TF1-GT-121-091117 (SC39093-01)	13870290	3.15	22817480	2.85								
TF1-GT-119-091117 (SC39093-02)	15919900	3.15	24904590	2.84								
TF1-GZ-103-091117 (SC39093-03)	14615350	3.15	23581020	2.85								

IS1 = 2,4,5,6-TC-M-Xylene (IS)

IS2 = 2,4,5,6-TC-M-Xylene (IS) [2C]

Column to be used to flag internal standard area values

* Values outside of QC limits

Area Upper Limit = 200% of internal standard area Area Lower Limit = 50% of internal standard area RT Limit = +/-0.50

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 8081B

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
alpha-BHC	0.012	0.020	μg/l
alpha-BHC [2C]	0.012	0.020	μg/l
beta-BHC	0.015	0.020	μg/l
beta-BHC [2C]	0.019	0.020	μg/l
delta-BHC	0.015	0.020	μg/l
delta-BHC [2C]	0.019	0.020	μg/l
gamma-BHC (Lindane)	0.017	0.020	μg/l
gamma-BHC (Lindane) [2C]	0.018	0.020	μg/l
Heptachlor	0.020	0.020	μg/l
Heptachlor [2C]	0.020	0.020	μg/l
Aldrin	0.016	0.020	μg/l
Aldrin [2C]	0.019	0.020	μg/l
Heptachlor epoxide	0.015	0.020	μg/l
Heptachlor epoxide [2C]	0.015	0.020	μg/l
Endosulfan I	0.016	0.020	μg/l
Endosulfan I [2C]	0.016	0.020	μg/l
Dieldrin	0.017	0.020	μg/l
Dieldrin [2C]	0.019	0.020	μg/l
4,4'-DDE (p,p')	0.018	0.020	μg/l
4,4'-DDE (p,p') [2C]	0.018	0.020	μg/l
Endrin	0.019	0.040	μg/l
Endrin [2C]	0.019	0.040	μg/l
Endosulfan II	0.020	0.040	μg/l
Endosulfan II [2C]	0.016	0.040	μg/l
4,4'-DDD (p,p')	0.019	0.040	μg/l
4,4'-DDD (p,p') [2C]	0.017	0.040	μg/l
Endosulfan sulfate	0.020	0.040	μg/l
Endosulfan sulfate [2C]	0.017	0.040	μg/l
4,4'-DDT (p,p')	0.018	0.040	μg/l
4,4'-DDT (p,p') [2C]	0.022	0.040	μg/l
Methoxychlor	0.018	0.040	μg/l
Methoxychlor [2C]	0.018	0.040	μg/l
Endrin ketone	0.017	0.040	μg/l
Endrin ketone [2C]	0.018	0.040	μg/l
Endrin aldehyde	0.019	0.040	μg/l
Endrin aldehyde [2C]	0.018	0.040	μg/l
alpha-Chlordane	0.015	0.020	μg/l
alpha-Chlordane [2C]	0.017	0.020	μg/l
Chlordane (gamma)(trans)	0.016	0.020	μg/l

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 8081B

Laboratory:Eurofins Spectrum Analytical, Inc. - MASDG:SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Chlordane (gamma)(trans) [2C]	0.014	0.020	μg/l
Toxaphene	0.328	0.500	μg/l
Toxaphene [2C]	0.287	0.500	μg/l
Toxaphene (1)	0.328	0.500	μg/l
Toxaphene (1) [2C]	0.287	0.500	μg/l
Toxaphene (2)	0.328	0.500	μg/l
Toxaphene (2) [2C]	0.287	0.500	μg/l
Toxaphene (3)	0.328	0.500	μg/l
Toxaphene (3) [2C]	0.287	0.500	μg/l
Toxaphene (4)	0.328	0.500	μg/l
Toxaphene (4) [2C]	0.287	0.500	μg/l
Toxaphene (5)	0.328	0.500	μg/l
Toxaphene (5) [2C]	0.287	0.500	μg/l
Chlordane	0.051	0.065	μg/l
Chlordane [2C]	0.061	0.065	μg/l
Chlordane (1)	0.051	0.065	μg/l
Chlordane (1) [2C]	0.061	0.065	μg/l
Chlordane (2)	0.051	0.065	μg/l
Chlordane (2) [2C]	0.061	0.065	μg/l
Chlordane (3)	0.051	0.065	μg/l
Chlordane (3) [2C]	0.061	0.065	μg/l
Chlordane (4)	0.051	0.065	μg/l
Chlordane (4) [2C]	0.061	0.065	μg/l
Chlordane (5)	0.051	0.065	μg/l
Chlordane (5) [2C]	0.061	0.065	μg/l
Alachlor	0.019	0.020	μg/l
Alachlor [2C]	0.018	0.020	μg/l

PREPARATION BENCH SHEET

1715920

Eurofins Spectrum Analytical, Inc. - MA

FIN	AL	CO	PY
-----	----	----	----

	1700504	Florisil	1710342	Methylene Chloride (CH2Cl2)	1710401	☐ Ethyl Acetate (C4H8O2)	14170420
☐ Sodium Chloride (NaCl)	17G0504		1710342			_ , , , , ,	14K0438
☐ Ottawa Sand	17F1043	☐ Silica gel (EPH)		Hexane (C6H14)	1710189	☐ Aqueous Filter Paper	
☐ HCL	1710035	☐ Silica gel (TPH)	17H0665	☐ Acetone (CH3COCH3)	17I0243	☐ Soil Filter Paper	
□ Copper	17A0800	☐ Sulfuric Acid (H2SO4)	17H0891	☐ Methanol (CH3OH)	17E0681		
Sodium Sulfate (Na2SO4)	1710431			☐ Ether (C2H5OC2H5)	17H0567	☐ Gauze Wipe	17A0428
☐ PCB Transformer Oil	10H0132	□ MTBE		Acidified Sodium Sulfate	17H0033	☐ 1:1 HCl Mix	17G0111
☐ 1:1 H2SO4 Mix	17G1000	☐ Acidified Methanol	17G0302	☐ Sodium Hydroxide (NaOH)	17G0775	☐ Glass Wool	17G0179
☐ Iso-octane	17B0969	□ 37% KOH	17C0273	☐ Sodium Bicarbonate	14K0424	☐ Cupric Sulfate Pentahydrate	
☐ 1ml Syringe I	15Λ0480	☐ 1ml Syringe II	15A0481	☐ 1ml Syringe III	15A0482	☐ 500ul Syringe	15C0951
☐ 250ul Syringe	15A0484	□ 100ul Syringe	15A0485	☐ 25ul Syringe I	15A0486	☐ 25ul Syringe II	15A0487
☐ 25ul Syringe III	15A0488	☐ 25ul Syringe IV	15A0489	☐ 25ul Syringe V	15A0490	□ 10ul Syringe I	15A0491
☐ 1:1 DCM-Acetone		☐ pH paper	16A0780	☐ Chlorine Chk Strips	17D0909	Balance ID	

Prepared using: SVOC - SW846 3510C Matrix: Aqueous

Surrogate used: 17I0082

Tati ix. Aqueot	-																useu.	
Lab Number	Client Sample ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	1	W * Init	ul Spike	ul Surr	ul Surr 2	Due	Collected	Prepared	Extraction Comm	ents C	pI- BASIC	pH Init C
1715920-BLK1	Blank	QC	970	10						1000			18-Sep-17 08:00	18-Sep-17				
1715920-BS1	LCS	QC	980	10	1710075				1000	1000			18-Sep-17 08:00	18-Sep-17				
1715920-BSD1	LCS Dup	QC	980	10	1710075				1000	1000			18-Sep-17 08:00	18-Sep-17				
1715920-DUP1	Duplicate	QC	1040	10		SC39093-02				1000			11-Sep-17 13:35	18-Sep-17	Clear yellow Cont:M			
1715920-MS1	Matrix Spike	QC	990	10	1710075	SC39266-01			1000	1000			14-Sep-17 10:20	18-Sep-17	Cont. AK			
1715920-MS2	Matrix Spike	QC	920	10	1710075	SC39221-06			1000	1000			13-Sep-17 11:20	18-Sep-17	Clear yellow Cont:AI			
1715920-MSD1	Matrix Spike Dup	QC	1030	10	1710075	SC39266-01			1000	1000			14-Sep-17 10:20	18-Sep-17	Cont. AJ			
1715920-MSD2	Matrix Spike Dup	QC	950	10	1710075	SC39221-06			1000	1000			13-Sep-17 11:20	18-Sep-17	Clear yellow Cont:AM			
SC39093-01	TF1-GT-121-091117	8081 Pesticides DoD	1040	10						1000		21-Sep-17 16	11-Sep-17 12:35	18-Sep-17	DoD Level IV/Extra Liter yellow	Clear J		
SC39093-02	TF1-GT-119-091117	8081 Pesticides DoD	1030	10						1000		21-Sep-17 16	11-Sep-17 13:35	18-Sep-17	DoD Level IV/Extra Liter yellow	Clear K		
SC39093-03	TF1-GZ-103-091117	8081 Pesticides DoD	1020	10						1000		21-Sep-17 16	11-Sep-17 15:50	18-Sep-17	DoD Level IV/Extra Liter orange	Cloudy J		
SC39163-01	TF1-GT-130-09121	8081 Pesticides DoD	940	10						1000		22-Sep-17 16	12-Sep-17 12:15	18-Sep-17	DoD Level IV/Extra Liter orange	Clear K		
SC39163-02	TF1-GT-115-091217	8081 Pesticides DoD	1040	10						1000		22-Sep-17 16	12-Sep-17 10:30	18-Sep-17	DoD Level IV/Extra Liter orange	Clear L		
SC39163-03	TF1-GT-111-091217	8081 Pesticides DoD	1030	10						1000		22-Sep-17 16	12-Sep-17 14:15	18-Sep-17	DoD Level IV/Extra Liter	K		

PREPARATION BENCH SHEET

1715920

Eurofins Spectrum Analytical, Inc. - MA

Matrix: Aqueous

Prepared using: SVOC - SW846 3510C

Surrogate used: 1710082

	Client		Initial	Final				W *		ul	ul	_						Н	рН
Lab Number	Sample ID	Analysis	(ml)	(ml)	Spike ID	Source ID	Init	Init	Spike	Surr	Surr 2	Due	Collected	Prepared	Extraction Comm	ents	C BASIC	ACID	Init
SC39163-04	TF1-GT-118-091217	8081 Pesticides DoD	1000	10						1000		22-Sep-17 16	12-Sep-17 10:20	18-Sep-17	DoD Level IV/Extra Liter yellow	Clear	L		
SC39163-05	TF1-DUP-03-09121	8081 Pesticides DoD	1020	10						1000		22-Sep-17 16	12-Sep-17 12:00	18-Sep-17	DoD Level IV/Extra Liter orange	Clear	L		
SC39163-06	TF1-MW-1004-0912	8081 Pesticides DoD	1040	10						1000		22-Sep-17 16	12-Sep-17 15:10	18-Sep-17	DoD Level IV/Extra Liter		L		
SC39221-01	TF1-GZ-106-091317	8081 Pesticides DoD	1040	10						1000		25-Sep-17 16	13-Sep-17 08:25	18-Sep-17	DoD Level IV/Extra Liter		A		
SC39221-02	TF1-GT-117-091317	8081 Pesticides DoD	1000	10						1000		25-Sep-17 16	13-Sep-17 09:50	18-Sep-17	DoD Level IV/Extra Liter orange	Clear	L		
SC39221-03	TF1-GT-108-09131	8081 Pesticides DoD	1010	10						1000		25-Sep-17 16	13-Sep-17 14:30	18-Sep-17	DoD Level IV/Extra Liter		J		
SC39221-04	TF1-MW-1008-0913	8081 Pesticides DoD	1040	10						1000		25-Sep-17 16	13-Sep-17 13:20	18-Sep-17	DoD Level IV/Extra Liter yellow	Clear	L		
SC39221-05	TF1-DUP-04-09131	8081 Pesticides DoD	1040	10						1000		25-Sep-17 16	13-Sep-17 14:30	18-Sep-17	DoD Level IV/Extra Liter yellow	Clear	K		
SC39221-06	TF1-MW-7-091317	8081 Pesticides DoD	960	10						1000		25-Sep-17 16	13-Sep-17 11:20	18-Sep-17	Run MS/MSD/DoD Level IV/Extra Liter Clear yellov	ν Δ	ĸ		
SC39266-01	TF1-GT-136B-0914	8081 Pesticides DoD	1060	10						1000		26-Sep-17 16	14-Sep-17 10:20	18-Sep-17	Run MS/MSD/DoD Level IV/Extra Liter	Α	.c		
SC39266-02	Grab-WILLH-09141	8081 Pesticides DoD	950	10						1000		26-Sep-17 16	14-Sep-17 15:10	18-Sep-17	DoD Level IV/Extra Liter		L		

Sr Maleac Analyst Reviewed 9/26/17 Date Manager Reviewed

Orthony Felon (Extracts Prepared B)

Date

Printed: 10/30/2017 4:19:58PM

SDG SC39093 Page 1098 / 1731

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708093</u> Instrument: <u>HPS17</u>

Calibration: <u>1709047</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Cal Standard	S708093-CAL1	AA170924.D	09/24/17 12:10
Cal Standard	S708093-CAL2	AB170924.D	09/24/17 12:29
Cal Standard	S708093-CAL3	AC170924.D	09/24/17 12:48
Cal Standard	S708093-CAL4	AD170924.D	09/24/17 13:06
Cal Standard	S708093-CAL5	AE170924.D	09/24/17 13:25
Initial Cal Check	S708093-ICV1	AF170924.D	09/24/17 13:43
Low Cal Check	S708093-LCV1	AG170924.D	09/24/17 14:02
Cal Standard	S708093-CAL6	AH170924.D	09/24/17 14:20
Cal Standard	S708093-CAL7	AI170924.D	09/24/17 14:39
Cal Standard	S708093-CAL8	AJ170924.D	09/24/17 14:57
Cal Standard	S708093-CAL9	AK170924.D	09/24/17 15:16
Cal Standard	S708093-CALA	AL170924.D	09/24/17 15:34
Initial Cal Check	S708093-ICV2	AM170924.D	09/24/17 15:53
Low Cal Check	S708093-LCV2	AN170924.D	09/24/17 16:11
Cal Standard	S708093-CALB	AP170924.D	09/24/17 16:30
Cal Standard	S708093-CALC	AQ170924.D	09/24/17 16:48
Cal Standard	S708093-CALD	AR170924.D	09/24/17 17:07
Cal Standard	S708093-CALE	AS170924.D	09/24/17 17:26
Cal Standard	S708093-CALF	AT170924.D	09/24/17 17:44
Initial Cal Check	S708093-ICV3	AU170924.D	09/24/17 18:03
Low Cal Check	S708093-LCV3	AV170924.D	09/24/17 18:21

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SW846 8081B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708605</u> Instrument: <u>HPS17</u>

Calibration: <u>1709047</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Performance Mix	S708605-PEM1	G1170927.D	09/27/17 17:57
Calibration Check	S708605-CCV1	C1170927.D	09/27/17 18:15
Calibration Check	S708605-CCV2	Y1170927.D	09/27/17 18:34
Calibration Check	S708605-CCV3	T1170927.D	09/27/17 18:52
Instrument Blank	S708605-IBL1	I1170927.D	09/27/17 19:11
Blank	1715920-BLK1	B1170927.D	09/27/17 19:29
LCS	1715920-BS1	L1170927.D	09/27/17 19:48
LCS Dup	1715920-BSD1	L2170927.D	09/27/17 20:07
TF1-GT-119-091117	1715920-DUP1	D1170927.D	09/27/17 20:25
TF1-GT-121-091117	SC39093-01	3909301Z.D	09/27/17 21:58
TF1-GT-119-091117	SC39093-02	3909302Z.D	09/27/17 22:16
Performance Mix	S708605-PEM2	G2170927.D	09/27/17 22:35
Calibration Check	S708605-CCV4	C2170927.D	09/27/17 22:53
Instrument Blank	S708605-IBL2	I2170926.D	09/27/17 23:12
TF1-GZ-103-091117	SC39093-03	3909303Z.D	09/27/17 23:31
Performance Mix	S708605-PEM3	G3170927.D	09/28/17 02:36
Calibration Check	S708605-CCV7	C3170927.D	09/28/17 02:55
Calibration Check	S708605-CCV5	Y3170927.D	09/28/17 03:14
Calibration Check	S708605-CCV6	T3170927.D	09/28/17 03:32
Instrument Blank	S708605-IBL3	I3170927.D	09/28/17 03:51
Performance Mix	S708605-PEM4	G4170927.D	09/28/17 05:42
Calibration Check	S708605-CCV8	C4170927.D	09/28/17 06:01
Instrument Blank	S708605-IBL4	I4170927.D	09/28/17 06:57

Sequence Name: G:\Sep2017\HPS17\SEQUENCE\PS17092417.S

Comment:
Operator: sm

Data Path: G:\SEP2017\HPS17\DATA\PEST170924\

Instrument Control Pre-Seq Cmd: Data Analysis Pre-Seq Cmd:

Method Sections To Run Or (X) Full Method () Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway

() Don't Inject

91 9.24-17

Page: 1

```
Line Sample Name/Misc Info

1) Sample 1 H1170924 PS170731 HEXANE BLANL
2) Sample 2 P1170924 PS170731 PESTICIDE PRIMER
3) Sample 3 E1170924 PS170731 PEM#1
4) Sample 4 G0170924 PS170731 DEGRADATION CHECK
5) Sample 5 AA170924 PS170731 S708093-CAL2 @10NG/ML PESTICIDE
6) Sample 6 AB170924 PS170731 S708093-CAL2 @10NG/ML PESTICIDE
8) Sample 7 AC170924 PS170731 S708093-CAL3 @ 50 NG/ML PESTIC
9) Sample 8 AD170924 PS170731 S708093-CAL3 @ 50 NG/ML PESTIC
9) Sample 9 AE170924 PS170731 S708093-CAL5 @250NG/ML PESTIC
10) Sample 10 AF170924 PS170731 S708093-CAL5 @250NG/ML PESTIC
11) Sample 11 AG170924 PS170731 S708093-ICV1 @ 50NG/ML PESTIC
12) Sample 12 AH170924 PS170731 S708093-ICV1 @ 50NG/ML PESTIC
13) Sample 13 A1170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
14) Sample 14 AJ170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
15) Sample 15 AK170924 PS170731 S708093-CAL6 @ 0.1UG/ML CHLOR
16) Sample 16 AL170924 PS170731 S708093-CAL8 @ 0.5U/ML CHLOR
17) Sample 17 AM170924 PS170731 S708093-CAL6 @ 0.5UG/ML CHLOR
18) Sample 18 AN170924 PS170731 S708093-CAL6 @ 0.5UG/ML CHLOR
19) Sample 19 AP170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
19) Sample 10 AP170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
19) Sample 11 AN170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
19) Sample 12 AN170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
19) Sample 19 AP170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
19) Sample 20 AQ170924 PS170731 S708093-CAL6 @ 0.02UG/ML CHLOR
20) Sample 21 AR170924 PS170731 S708093-CAL6 @ 0.02UG/ML TOXAP
21) Sample 22 AS170924 PS170731 S708093-CAL6 @ 0.0UG/ML TOXAP
22) Sample 23 AT170924 PS170731 S708093-CAL6 @ 0.0UG/ML TOXAP
23) Sample 24 AU170924 PS170731 S708093-CAL6 @ 0.0UG/ML TOXAP
24) Sample 25 AV170924 PS170731 S708093-CAL6 @ 0.0UG/ML TOXAP
25) Sample 26 SAMPOPP 27 SAMPOPP 28 SAMPOPP 28 SAMPOPP 28 SAMPOPP 29 S
                                 Line
                                                                                                                                                                                                                                                                                                             Sample Name/Misc Info
10)
11)
12)
13)
14)
15)
16)
17)
18)
19)
20)
21)
22)
23)
24)
25)
26)
27)
28)
29)
30)
31)
32)
33)
```

Last Modified: Sun Sep 24 10:41:35 2017

Sequence Name: G:\Sep2017\HPS17\SEQUENCE\PS17092717.S

Comment: Operator: sm

Data Path: G:\SEP2017\HPS17\DATA\PEST170927\

Instrument Control Pre-Seq Cmd: Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd: Post-Seq Cmd: Data Analysis

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway () Reprocessing Only () Don't Inject

Line Sample 1 H2170927 PS170731 PESTICIDE PRIMER
3) Sample 3 E2170927 PS170731 PESTICIDE PRIMER
4) Sample 4 G1170927 PS170731 PESTICIDE PRIMER
5) Sample 5 C1170927 PS170731 DEGRADATION CHECK DEGI
6) Sample 6 Y1170927 PS170731 DSUG/ML PESTICIDE CCV1
7) Sample 7 T1170927 PS170731 D.SUG/ML CHLORDANE CCV1
8) Sample 8 I1170927 PS170731 D.SUG/ML CHLORDANE CCV1
8) Sample 9 B1170927 PS170731 INSTRUMENT BLANK IBK1
9) Sample 10 L1170927 PS170731 INSTRUMENT BLANK IBK1
10 Sample 11 L2170927 PS170731 1715920-BBS1 @ SC03903-02 Dup
13) Sample 11 L2170927 PS170731 1715920-BBS1 @ SC03903-02 Dup
13) Sample 12 D1170927 PS170731 1715920-BBS1 @ SC03903-02 Dup
13) Sample 13 M1170927 PS170731 1715920-BBS1 @ SC03903-02 Dup
13) Sample 14 M2170927 PS170731 1715920-MSD1 @ SC03903-02 Dup
13) Sample 15 M3170927 PS170731 1715920-MSD1 @ SC03906-01 Matr
14) Sample 16 M4170927 PS170731 1715920-MSD1 @ SC039266-01 Matr
15) Sample 17 M9170927 PS170731 1715920-MSD2 @ SC039221-06 Matr
16) Sample 18 M3093012 PS170731 SC03903-01 @ TF1-GT-121-09111
18) Sample 19 G2170927 PS170731 SC03903-01 @ TF1-GT-121-09111
18) Sample 19 G2170927 PS170731 SC03903-01 @ TF1-GT-119-09111
18) Sample 19 G2170927 PS170731 SC03903-02 @ TF1-GT-119-09111
20) Sample 20 C2170927 PS170731 SC03903-02 @ TF1-GT-119-09111
21) Sample 21 S170026 PS170731 SC03903-03 @ TF1-GT-119-09111
22) Sample 21 S170026 PS170731 SC03903-03 @ TF1-GT-119-09111
23) Sample 23 39163012 PS170731 SC3903-03 @ TF1-GT-130-09121
24) Sample 25 39163022 PS170731 SC3903-03 @ TF1-GT-110-09121
25) Sample 26 39163022 PS170731 SC3903-01 @ TF1-GT-110-09121
26) Sample 27 39163022 PS170731 SC3903-01 @ TF1-GT-110-09121
27) Sample 28 39163022 PS170731 SC3903-01 @ TF1-GT-110-09121
28) Sample 29 39221012 PS170731 SC3903-01 @ TF1-GT-110-09121
29 Sample 20 SC39221-01 @ TF1-GT-110-09131
30) Sample 30 3916302 PS170731 SC39021-01 @ TF1-GT-106-09131
31) Sample 31 3922102 PS170731 SC39021-01 @ TF1-GT-110-09121
32 Sample 33 916302 PS170731 SC39021-01 @ TF1-GT-110-09131
33) Sample 34 3916302 PS170731 SC39221-01 @ TF1-GT-1106-09131 ______ Sample Name/Misc Info

Last Modified: Wed Sep 27 14:02:38 2017

Page: 1

]	Line Type	Vi	al Data	File Met	hod Sar	mple Name		
44)	Sample	44	Y4170927	PS170731	0.5UG/ML	CHLORDANE	CCV4	
45)	Sample					TOXAPHENE		
46)	Sample					T BLANK I		
47)	Sample	47	B3170927	PS170731	1716032-E	BLK1 @ Sol	vent Blank	
48)	Sample						/ml pest B	
49)	Sample					BSD1 @ 50ng		
50)	Sample						9204-06 Dup	
51)	Sample						204-07 Matr	
52)	Sample	52	M8170927	PS170731	1716032-N	MSD1 @ SC3	9204-07 Mat	
53)	Sample	53	3920406Z	PS170731	SC39204-0	06 @ PE-RD	-G5-NW-0913	
54)	Sample	54	3920407Z	PS170731	SC39204-0	7 @ PE-RD	3-N14-WW-09	
55)	Sample	55	3920407R	PS170731	SC39204-0	7RE1 @ PE-	-RD3-N14-WW	
56)	Sample	56	3920408Z	PS170731	SC39204-0	08 @ PE-RD3	3-014-WW-09	
57)	Sample						-RD3-014-WW	
58)	Sample	58	I5170927	PS170731	INSTRUMEN	T BLANK I	3K5	
59)	Sample					ON CHECK I		
60)	Sample					PESTICIDE (

Last Modified: Wed Sep 27 14:02:38 2017

CROSS REFERENCE TABLE

Mod EPA 3C/SOP RSK-175

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to Mod EPA 3C/SOP RSK-175.

IV. PREPARATION

Aqueous samples were prepared according to General Air Prep.

V. INSTRUMENTATION

The following equipment was used to analyze Mod EPA 3C/SOP RSK-175:

Air5 details: Perkin-Elmer / Arnel Clarus 500 GC TCD detector 7' HayeSep N 60/80, 1/8" SF column 9' Molecular Sieve 13x45/60, 1/8" SF column

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

D. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

E. Samples:

All method criteria were met.

FORM IIIa - LCS / LCS DUPLICATE RECOVERY Mod EPA 3C/SOP RSK-175

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Air5

Batch: <u>1715864</u> Laboratory ID: <u>1715864-BS1</u>

 Preparation:
 General Air Prep
 Initial/Final:
 10 μg / 10 μg

Analyzed: 09/15/17 09:24 Spike ID: 17F0404

File ID: <u>091517-chanb-002-0</u>

COMPOUND	SPIKE ADDED (mg/l)	LCS CONCENTRATION (mg/l)	LCS % REC. #	QC LIMITS REC.
Methane	500	453	91	73 - 125
Ethane	500	517	103	74 - 131

[#] Column to be used to flag recovery and RPD values with an asterisk

Individual peaks for multi-component analytes are indicated by a number in parentheses

^{*} Values outside of QC limits

FORM IV - METHOD BLANK SUMMARY Mod EPA 3C/SOP RSK-175

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: <u>Tetra Tech, Inc. - Salem, NH</u> <u>Project: <u>WE15 Tank Farm 1 NAVSTA Newport</u></u>

Matrix: Aqueous Laboratory ID: <u>1715864-BLK1</u> File ID: <u>091517-chanb-003-0</u>

Preparation: General Air Prep Initial/Final: 10 µg / 10 µg

Analyzed: <u>09/15/17 10:02</u> Instrument: <u>Air5</u>

Batch: <u>1715864</u> Sequence: <u>\$708265</u> Calibration: <u>1707028</u>

This method blank applies to the following sample analyses:

SAMPLE NO.	LAB SAMPLE ID	FILE ID	DATE ANALYZED	TIME ANALYZED
LCS	1715864-BS1	091517-chanb-002-0	09/15/17	9:24
TF1-GT-121-091117	SC39093-01	091517-chanb-004-0	09/15/17	10:24
TF1-GT-119-091117	SC39093-02	091517-chanb-005-0	09/15/17	10:56
TF1-GZ-103-091117	SC39093-03	091517-chanb-006-0	09/15/17	11:18

1715864-BLK1

FORM I - AIR ANALYSIS DATA SHEET Mod EPA 3C/SOP RSK-175

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: <u>Tetra Tech, Inc. - Salem, NH</u> <u>Project: <u>WE15 Tank Farm 1 NAVSTA Newport</u></u>

Matrix: Aqueous Laboratory ID: <u>1715864-BLK1</u> File ID: <u>091517-chanb-003-0</u>

Preparation: General Air Prep Initial/Final: 10 µg / 10 µg

Analyzed: <u>09/15/17 10:02</u> Instrument: <u>Air5</u>

Batch: <u>1715864</u> Sequence: <u>S708265</u> Calibration: <u>1707028</u>

Units: <u>ug/l</u>

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
74-82-8	Methane	2.20	U	2.16	2.20	2.20
74-84-0	Ethane	5.00	U	3.48	5.00	5.00

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS Mod EPA 3C/SOP RSK-175

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Methane	2.16	2.20	μg/l
Ethane	3.48	5.00	μg/l



Quality Control Reference List EPH/Miscellaneous GC

CLIENT: Eurofins Spectrum Analytical

SDG: THO39

Analysis	Batch Number	Sample Number	Analysis Date
Custom TPH with Ranges (Water)	172570043A	PBLK43257	09/18/2017 14:16:00
		LCS43257	09/18/2017 14:37:00
		LCSD43257	09/18/2017 14:59:00
		9208998	09/18/2017 15:20:00
		9208999	09/18/2017 15:42:00
		9209000	09/18/2017 16:03:00



Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical SDG: THO39

EPH/Miscellaneous GC

Fraction: Custom TPH by GC with Ranges

	Matrix						
Sample #	Client ID	Liquid	Solid	DF	Comments		
9208998	SC39093-01	X		1			
9208999	SC39093-02	X		1			
9209000	SC39093-03	X		1			

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below. See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.



Quality Control Summary Method Blank EPH/Miscellaneous GC

SDG: THO39 Matrix: LIQUID

172570043A / PBLK43257						
Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Total TPH	09/18/17	N.D.	mg/l	0.050	0.10	0.20
C8-C44	09/18/17	N.D.	mg/l	0.050	0.10	0.20



Quality Control Summary Surrogates EPH/Miscellaneous GC

SDG: THO39 Matrix: LIQUID

172570043A	Chloro	benzene	Orthoterphenyl			
	Spike Added	0.0121 mg/l	0121 mg/l Spike Added			
Sample	% Recovery	Limits	% Recovery	Limits		
PBLK43257	54	35 - 135	87	56 - 125		
LCS43257	62	35 - 135	72	56 - 125		
LCSD43257	86	35 - 135	91	56 - 125		
9208998	91	35 - 135	95	56 - 125		
9208999	94	35 - 135	93	56 - 125		
9209000	75	35 - 135	90	56 - 125		



Quality Control Summary Laboratory Control Standard (LCS) Laboratory Control Standard Duplicate(LCSD)

SDG: THO39 Matrix: LIQUID

EPH/Miscellaneous GC

LCS: LCS43257 Batch: 172570043A (Sample number(s): 9208998-9209000)								
LCSD: LCSD43257	Spike LCS LCSD							
	Added Conc Conc LCS LCSD %Rec %RPD							
Analyte	mg/l	mg/l	mg/l	%Rec	%Rec	Limits	%RPD	Limits
Total TPH	0.800	0.487	0.642	61	80	36-132	27	30



LOQ/MDL Summary EPH/Miscellaneous GC

SDG: THO39

02740: Custom TPH with Ranges (Water) Analyte Name	Default DL	Default LOD	Default LOQ	Units
Total TPH	.05	.1	0.20	mg/l
C8-C44	.05	.1	0.20	mg/l

Organic Extraction Batchlog

Assigned to: 9121 Bradley VanLeuven Reviewed by: 581173 Start Date: 91517 Start time: 10:00

172570043A

Tech 1: 1/9/21 Tech 2: _____

Dept: 32	pt: 32 Prep Analysis: 11181 Custom TPH w/ Ranges Water Ext							Custom TPH with Ranges (Water)				
QC	Sample Code	Amt	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	1 ' '	рН	рΗ	вс	Comments	
BLANKA	PBLK43257	1000	SS1724332D	10			(7	7	-	DI HZO	
LCSA	LCS43257	1000	SS1724332D	1	MS1724432A	1,0	1	/		1	1	
LCSDA	LCSD43257	1000	SS1724332D		MS1724432A	1	ī	<u></u>				

Lot No.
6180-05
1757160
17251A

Spike Solutions:

Witness:

NIA

MS1724432A SS1724332D DRO WATER SPIKE

DRO WATER SURROGATE

Sample #		Sample Code	Amt	SS/IS Sol.	Amt (mL)	FV (mL)	рН	рН	вс	Comments	Analyses	List	Due Date	Prio
1 9194291	R	AMP-1	1057	SS1724332D	1.0	ì		17	438	tan cloudy	02740	13583	09/18/2017	N
2 9194292	R	AMP-2	1059	SS1724332D	1	1			43B	\	02740	13583	09/18/2017	N
3 9194293	R	AMP-3	1059	SS1724332D		1			438		02740	13583	09/18/2017	N
4 9194315	R	AMFD2	1060	SS1724332D		ı			43B	1	02740	13583	09/18/2017	N
5 9202720		1300-	1058	SS1724332D		1			43A	: clea	02740	13335	09/22/2017	N
6 9202724		150	1061	SS1724332D		ι	17		43A	tan cloudy	02740	13335	09/22/2017	N
7 9205820		SS-81	1026	SS1724332D		1			АбР	1	02740	4317	09/25/2017	N
8 9205822		SS-77	1041	SS1724332D		٦	11 .		43A		02740	4317	09/25/2017	N
9 9205824		SS-FB	1030	SS1724332D		١			43A	cleer	02740	4317	09/25/2017	N
10 9205826		SS-DP	1024	SS1724332D		1	11		43A		02740	4317	09/25/2017	N
119208998		39T01	997	SS1724332D		ı	1		Z9/A	cleer	02740	24604	09/26/2017	N
12 9208999		39T02	994	SS1724332D		1			29A	1	. 02740	24604	09/26/2017	N
13 9209000		39T03	988	SS1724332D	1	1			29A		02740	24604	09/26/2017	N

Bench#	Bench#	Bench#		
Rack ID:		Work Station	Hz03	Micro Temp
Internal Standard		Balance #	25996	100;

DF = Dilution Factor FV = Final Volume

Page 1 of 1

1	R-VAP ID	С	R-VAP ID	С	R-VAP ID	С	
	S-bath ID 20	88 c	S-bath ID	С	N-Evap	С	ı
Ī				 			

M-vap

172570043A



Quality Control Reference List PFAS Group

CLIENT: Eurofins Spectrum Analytical

SDG: THO39

Fraction: PFAS by LC/MS/MS

Analysis	Batch Number	Sample Number	Analysis Date
PFAS in Water by LC/MS/MS	17262001	BLK262001B	09/22/2017 03:25:00
-		LCS262001Q	09/22/2017 02:03:00
		LCSDAY	09/22/2017 02:23:00
		9208998 MS	09/22/2017 02:44:00
		9208998 UNSPK	09/22/2017 03:46:00
		9208999	09/22/2017 04:06:00
		9209000	09/22/2017 04:27:00
		9209001	09/22/2017 04:47:00



Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical SDG: THO39

PFAS Group

Fraction: PFAS by LC/MS/MS

	Matrix								
Sample #	Client ID	Liquid	Solid	DF	Comments				
9208998	SC39093-01	X		1					
9208999	SC39093-02	X		1					
9209000	SC39093-03	X		1					
9209001	SC39093-04	X		1					

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below. See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

OUALITY CONTROL AND NONCONFORMANCE SUMMARY:

Surrogate

Surrogate recoveries that are noncompliant are confirmed unless attributed to a dilution or otherwise noted.

(Sample number(s): 9208998-9209001: Analysis: 10954)
The stated QC limits are advisory only until sufficient data points can be obtained to calculate statistical limits.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.



Quality Control Summary Method Blank PFAS Group

SDG: THO39 Matrix: LIQUID

Fraction: PFAS by LC/MS/MS

17262001 / BLK262001B						
Analyte	Analysis Date	Blank Results	Units	DL	LOD	LOQ
Perfluorooctanoic acid	09/22/17	N.D.	ng/l	0.6	2	2
Perfluorononanoic acid	09/22/17	N.D.	ng/l	0.6	2	2
Perfluorodecanoic acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluoroundecanoic acid	09/22/17	N.D.	ng/l	1	3	3
Perfluorododecanoic acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluorotridecanoic acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluorotetradecanoic acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluorohexanoic acid	09/22/17	N.D.	ng/l	0.6	2	2
Perfluoroheptanoic acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluorobutanesulfonate	09/22/17	N.D.	ng/l	0.8	3	3
Perfluorohexanesulfonate	09/22/17	N.D.	ng/l	1	3	3
Perfluoro-octanesulfonate	09/22/17	N.D.	ng/l	2	6	6
Perfluorobutanoic Acid	09/22/17	N.D.	ng/l	3	10	10
Perfluoropentanoic Acid	09/22/17	N.D.	ng/l	0.5	2	2
Perfluoroheptanesulfonate	09/22/17	N.D.	ng/l	2	6	6
Perfluorodecanesulfonate	09/22/17	N.D.	ng/l	2	6	6
PFOSA	09/22/17	N.D.	ng/l	3	9	9



FORM 02A SURROGATES LC/MS/MS

SDG No.: THO39 Matrix: WATER

1706001			13C2-PFDODA	13C2-PFTEDA	13C3-PFBS	13C3-PFHXS	13C4-PFBA
17262001		Limits	28-127	26-119	26-148	34-126	33-123
LAB SAMPLE ID	DATE/T	IME	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
LCS262001	09/22/1	7 02:03	63	66	69	84	74
LCSDA	09/22/1	7 02:23	67	68	73	78	75
9208998MS	09/22/1	7 02:44	70	64	94	87	73
BLK262001	09/22/1	7 03:25	66	73	78	83	80
9208998	09/22/1	7 03:46	61	59	81	72	69
9208999	09/22/1	7 04:06	55	55	85	78	66
9209000	09/22/1	7 04:27	54	57	96	79	74
9209001	09/22/1	7 04:47	59	61	85	85	76

^{*} Outside QC Limits



FORM 02A SURROGATES LC/MS/MS

SDG No.: THO39 Matrix: WATER

17060001			13C4-PFHPA	13C5-PFHXA	13C5-PFPEA	13C6-PFDA	13C7-PFUNDA
17262001		Limits	35-126	31-128	39-135	40-115	30-128
LAB SAMPLE ID DATE/TIME		IME	% Recovery				
LCS262001	09/22/1	7 02:03	76	80	70	73	70
LCSDA	09/22/1	7 02:23	75	72	66	74	70
9208998MS	09/22/1	7 02:44	73	86	77	70	71
BLK262001	09/22/1	7 03:25	74	87	79	79	73
9208998	09/22/1	7 03:46	64	73	74	71	67
9208999	09/22/1	7 04:06	69	76	75	62	62
9209000	09/22/1	7 04:27	80	81	83	72	59
9209001	09/22/1	7 04:47	82	89	76	76	64

^{*} Outside QC Limits

FORM 02A SURROGATES LC/MS/MS

SDG No.: THO39
Matrix: WATER

17060001			13C8-PFOA	13C8-PFOS	13C8-PFOSA	13C9-PFNA
17262001		Limits	43-112	43-115	70-130	32-134
AB SAMPLE ID DATE/TIME		IME	% Recovery	% Recovery	% Recovery	% Recovery
LCS262001	09/22/1	7 02:03	83	72	17 *	68
LCSDA	09/22/1	7 02:23	64	85	6 *	71
9208998MS	09/22/1	7 02:44	69	77	10 *	71
BLK262001	09/22/1	7 03:25	79	70	18 *	78
9208998	09/22/1	7 03:46	67	70	10 *	68
9208999	09/22/1	7 04:06	65	66	17 *	64
9209000	09/22/1	7 04:27	76	74	8 *	70
9209001	09/22/1	7 04:47	74	74	13 *	66

^{*} Outside QC Limits



Quality Control Summary Matrix Spike/Matrix Spike Duplicate

SDG: THO39 Matrix: LIQUID

PFAS Group

Fraction: PFAS by LC/MS/MS

UNSPK: 9208998	Batch: 17262	001 (Sample n	umber(s): 920	8998-920900	1)				
MS: 9208998	Spike	Unspiked	MS	MSD					
	Added	Conc	Conc	Conc	MS	MSD	%Rec		%RPD
Analyte	ng/l	ng/l	ng/l	ng/l	%Rec	%Rec	Limits	%RPD	Limits
Perfluorooctanoic acid	13.66	14.68	30.47	NA	116	NA	70-130	NA	NA
Perfluorononanoic acid	13.66	N.D.	13.5	NA	99	NA	70-130	NA	NA
Perfluorodecanoic acid	13.66	0.878	14.93	NA	103	NA	70-130	NA	NA
Perfluoroundecanoic acid	13.66	N.D.	14.27	NA	104	NA	70-130	NA	NA
Perfluorododecanoic acid	13.66	N.D.	13.62	NA	100	NA	70-130	NA	NA
Perfluorotridecanoic acid	13.66	N.D.	15.16	NA	111	NA	70-130	NA	NA
Perfluorotetradecanoic acid	13.66	N.D.	14.32	NA	105	NA	70-130	NA	NA
Perfluorohexanoic acid	13.66	48.33	62.53	NA	104	NA	70-130	NA	NA
Perfluoroheptanoic acid	13.66	12.24	26.5	NA	104	NA	70-130	NA	NA
Perfluorobutanesulfonate	12.09	8.54	20.96	NA	103	NA	70-130	NA	NA
Perfluorohexanesulfonate	12.92	12.93	24.54	NA	90	NA	70-130	NA	NA
Perfluoro-octanesulfonate	13.06	2.23	14.55	NA	94	NA	70-130	NA	NA
Perfluorobutanoic Acid	13.66	21.24	34.34	NA	96	NA	70-130	NA	NA
Perfluoropentanoic Acid	13.66	50.94	67.6	NA	122	NA	70-130	NA	NA
Perfluoroheptanesulfonate	12.55	N.D.	12.85	NA	102	NA	70-130	NA	NA
Perfluorodecanesulfonate	13.16	N.D.	11.59	NA	88	NA	70-130	NA	NA
PFOSA	13.66	N.D.	13.11	NA	96	NA	70-130	NA	NA

Comments:

(2) The unspiked sample result is greater than four times the spike added.

Results are being reported on an as received basis.

10/12/2017 11:38:44 AM Page 1 of 1

^{* =} Out of Specification



Quality Control Summary Laboratory Control Standard (LCS) Laboratory Control Standard Duplicate(LCSD)

SDG: THO39 Matrix: LIQUID

PFAS Group

Fraction: PFAS by LC/MS/MS

LCS: LCS262001Q	Batch: 1726200	1 (Sample numb	er(s): 9208998-9	9209001)				
LCSD: LCSDAY	Spike	LCS	LCSD					
	Added	Conc	Conc	LCS	LCSD	%Rec		%RPD
Analyte	ng/l	ng/l	ng/l	%Rec	%Rec	Limits	%RPD	Limits
Perfluorooctanoic acid	13.6	11.83	13.41	87	99	70-130	12	30
Perfluorononanoic acid	13.6	16.14	14.46	119	106	70-130	11	30
Perfluorodecanoic acid	13.6	12.92	11.96	95	88	70-130	8	30
Perfluoroundecanoic acid	13.6	12.29	14.49	90	107	70-130	16	30
Perfluorododecanoic acid	13.6	13.25	13.53	97	99	70-130	2	30
Perfluorotridecanoic acid	13.6	14.18	15.2	104	112	70-130	7	30
Perfluorotetradecanoic acid	13.6	13.61	13.96	100	103	70-130	3	30
Perfluorohexanoic acid	13.6	13.82	13.84	102	102	70-130	0	30
Perfluoroheptanoic acid	13.6	15.25	12.17	112	89	70-130	22	30
Perfluorobutanesulfonate	12.03	11.34	11.27	94	94	70-130	1	30
Perfluorohexanesulfonate	12.86	12.66	13.38	98	104	70-130	6	30
Perfluoro-octanesulfonate	13	11.64	11.18	90	86	70-130	4	30
Perfluorobutanoic Acid	13.6	14.22	13.63	105	100	70-130	4	30
Perfluoropentanoic Acid	13.6	12.74	13.05	94	96	70-130	2	30
Perfluoroheptanesulfonate	12.49	12.81	12.17	103	97	70-130	5	30
Perfluorodecanesulfonate	13.1	11.02	9.92	84	76	70-130	10	30
PFOSA	13.6	12.76	11.7	94	86	70-130	9	30



FORM 08A
INTERNAL STANDARDS
LC/MS/MS

SDG No.: THO39
Matrix: WATER

17262001		13C2-PFDA	13C2-PFOA	13C3-PFBA	13C4-PFOS
		Area	Area	Area	Area
Avera	ge ICAL Response	339765	262013	469829	148338
	UPPER LIMIT	509648	393020	704744	222507
	LOWER LIMIT	169883	131007	234915	74169
LAB SAMPLE ID	DATE ANALYZED				
LCS262001	09/22/17 02:03	433700	306425	658460	187890
LCSDA	09/22/17 02:23	404707	314379	640866	181129
9208998MS	09/22/17 02:44	381493	305678	583247	185365
BLK262001	09/22/17 03:25	369142	306174	580675	182469
9208998	09/22/17 03:46	363618	334218	580899	189968
9208999	09/22/17 04:06	361788	306513	513292	188307
9209000	09/22/17 04:27	351490	320922	503721	176032
9209001	09/22/17 04:47	290876	286529	557271	172301

AREA: Upper limit: 150% of the internal standard area. Lower Limit: 50% of the internal standard area.

^{*} Outside QC Limits



LOQ/MDL Summary PFAS Group

SDG: THO39

Fraction: PFAS by LC/MS/MS

10954: PFAS in Water by LC/MS/MS	Default	Default	Default	
Analyte Name	DL	LOD	LOQ	Units
Perfluorooctanoic acid	.6	2	2	ng/l
Perfluorononanoic acid	.6	2	2	ng/l
Perfluorodecanoic acid	.5	2	2	ng/l
Perfluoroundecanoic acid	1	3	3	ng/l
Perfluorododecanoic acid	.5	2	2	ng/l
Perfluorotridecanoic acid	.5	2	2	ng/l
Perfluorotetradecanoic acid	.5	2	2	ng/l
Perfluorohexanoic acid	.6	2	2	ng/l
Perfluoroheptanoic acid	.5	2	2	ng/l
Perfluorobutanesulfonate	.8	3	3	ng/l
Perfluorohexanesulfonate	1	3	3	ng/l
Perfluoro-octanesulfonate	2	6	6	ng/l
Perfluorobutanoic Acid	3	10	10	ng/l
Perfluoropentanoic Acid	.5	2	2	ng/l
Perfluoroheptanesulfonate	2	6	6	ng/l
Perfluorodecanesulfonate	2	6	6	ng/l
PFOSA	3	9	9	ng/l

Assigned to: 9213 Pamela Rothharpt

Reviewed by: JWK9724 Start Date: 9/19/17 Start time: 9:05

17262001

Tech 1: PJR9213

Tech 2:

Analyses on Batch: PFAS in Water by LC/MS/MS

Dept: 3	3 Prep An	alysis: 14091 PF	AS Wate	er Prep							
Port#	QC	Sample Code	Amt	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (ml)	FV (uL)	IS amt (uL)	вс	Comments
5	9208998MS	39T01MS	99.53	SSMODX1733AH	·05	MSMODXI733X	Ю.	Inl	20	2019	
J	BLANKA	BLK262001	100	SSMODX1733AH	-025	,				7	
2	LCSA	LCS262001	100	SSMODX1733AH	-025	MSMODX1733X	3				
3	LCSDA	LCSD262001	100	SSMODX1733AH	.025	MSMODX1733X	.aJ	V	<u> </u>	L	

Spike Solutions:

Witness:

4012657

Instrument:

LM24960

MSMODX1733X SSMODX1733AH PFAS 537 Native Spike

Sequence: PFAS 537 Modified Extraction/Surrogate Spik-

17SEABMOD-(17 SEAZI) (175EP25)

Sample Amt Amt IS Amt Pul# Due Date Prio SS/IS Sol. BC Comments Analyses Sample # (9) (mL) (uL) (uL) Code 09/26/2017 N SSMODX1733AF 3 Ilml 201a 10954 19208998 100-34 cloudy sediment .075 39T0 10 201a 09/26/2017 N SSMODX1733AF 10954 075 Page 2 9208999 i00.36 39T0; 09/26/2017 N 201a 99.94 SSMODX1733AF 10954 3|9209000 025 1914 brown Sediment 39T0: 7930 201a 09/26/2017 Ν SSMODX1733AH 10954 4 9209001 39T04 100.29 .025 09/27/2017 201a N 100.05 SSMODX1733AH 10954 5 9210929 025 liant brown. Sedimen 0400 09/27/2017 Ν 201a 10954 SSMODX1733AF .025 light brown Seament 鱼 6 9210930 99.68 0400 100.07 SSMODX1733AF 09/27/2017 Ν 201a 7 9210931 10954 025 0400 09/27/2017 Ν 201a 99.104 SSMODX1733AH 10954 12 8 9210932 025 O400 light brownsediment 09/27/2017 Ν 201a 9 92 10 933 SSMODX1733AH 10954 100.49 025 light brown sediment 0400 09/27/2017 Ν 201a SSMODX1733AH 10954 2 10 9210934 99,7 0400 25 09/27/2017 201a N SSMODX1733AF dark brown, Sediment 10954 119210935 025 0400 100.11 09/27/2017 Ν 201a SSMODX1733AH 025 10954 199.64 12 9210936 O400

Balance #	B629764122

9/19/17 DOMOSURY SPE Manifold N-evap 4,7

17262001

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Reagents used During Extraction

Reagent/Material/Equip	Lot No./ID No.	
96% MeOH:H2O		
Acetate Buffer	2707948	·
Acetonitrile		
Auto-pipette (dilutions)		
Auto-pipette (extract vialin-	P1000-3	
Internal Standard	IS1726233A	
Methanol	05096-05	
Milli-Q H2O	2 547809 181333A	MOUSE AZZZ
NH4OH:H2O	25478691817336	2547809181733A
NH4OH:MeOH	W3/40231-023	25478091817338
SPE Cartridge #1		→ U370231-02
SPE Cartridge #2		
Stdium Thiosulfate		
Syringe (IS)	IS!	
Syringe (MS)	PF 10	
gringe (SS)	pras 9	
Lijzma	SLBT 4699	- Franchistory
③ 04 of	PUR9213 9/24	117

CROSS REFERENCE TABLE

SW846 6010C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

 TF1-GZ-103-091117
 SC39093-03RE1

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SW846 6010C.

IV. PREPARATION

Aqueous samples were prepared according to SW846 3005A.

V. INSTRUMENTATION

The following equipment was used to analyze SW846 6010C:

ICAP5 details: Thermo ICAP 6000 series CETAC Autosampler

All sample data within this SDG was generated after ICP-AES interelement corrections and background corrections were applied.

Samples are diluted when concentrations exceed the highest calibration standard in the associated curve, therefore Linear Ranges are not performed.

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria with the following exceptions:

In sample S708796-CRL1:

Low level calibration check failed, reporting limit has been elevated.

Iron

In sample S708828-CRL3:

Low level calibration check failed, reporting limit has been elevated.

Iron

In sample S708828-CRL5:

Low level calibration check failed, reporting limit has been elevated.

Iron

In sample S708796-ICV1:

QC recovery was outside of acceptance range however it was re-run before samples were run and was within the control limits.

Iron

In sample S708796-ICV1:

Analyte percent recovery is outside individual acceptance criteria (90-110).

Iron (111%)

This affected the following samples:

S708796-CCV1

B. Blanks:

All blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

A matrix spike and a matrix spike duplicate were analyzed:

In batch 1716277 from source sample TF1-GZ-103-091117 (SC39093-03).

In batch 1716530 from source sample TF1-GZ-103-091117 (SC39093-03).

All method criteria were met with the following exceptions:

Iron in batch 1716277, lab sample 1716277-MS1 from source sample TF1-GZ-103-091117 (SC39093-03): The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Iron in batch 1716277, lab sample 1716277-MSD1 from source sample TF1-GZ-103-091117 (SC39093-03): The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

3. Post Spike Samples (PS):

A post spike was analyzed.

In batch 1716277 from source sample TF1-GZ-103-091117 (SC39093-03).

In batch 1716530 from source sample TF1-GZ-103-091117 (SC39093-03).

All method criteria were met with the following exceptions:

Iron in batch 1716277, lab sample 1716277-PS1 from source sample TF1-GZ-103-091117 (SC39093-03): The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

D. Duplicates:

A duplicate was analyzed.

In batch 1716277 from source sample TF1-GZ-103-091117 (SC39093-03).

In batch 1716530 from source sample TF1-GZ-103-091117 (SC39093-03).

All method criteria were met with the following exceptions:

Iron in batch 1716277, sample 1716277-DUP1 from source sample TF1-GZ-103-091117 (SC39093-03): MRL raised to correlate to batch QC reporting limits.

E. Serial Dilutions:

All quality control criteria were met.

F. Samples:

All method criteria were met with the following exceptions:

Iron in batch 1716277, samples TF1-GT-119-091117 (SC39093-02), TF1-GT-121-091117 (SC39093-01), TF1-GZ-103-091117 (SC39093-03): MRL raised to correlate to batch QC reporting limits.

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>S708796</u>

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S708796-ICB1	Iron	BRL	0.0800	mg/l	U	SW846 6010C
	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.100	mg/l	U	SW846 6010C
	Calcium	BRL	0.500	mg/l	U	SW846 6010C
	Magnesium	BRL	0.100	mg/l	U	SW846 6010C
S708796-CCB1	Iron	BRL	0.0800	mg/l	U	SW846 6010C
	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.100	mg/l	U	SW846 6010C
	Calcium	BRL	0.500	mg/l	U	SW846 6010C
	Magnesium	BRL	0.100	mg/l	U	SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>S708828</u>

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S708828-CCB1	Iron	0.0179	0.0300	mg/l	J	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB2	Iron	BRL	0.0300	mg/l	U	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
1716277-BLK1	Iron	BRL	0.0800	mg/l	U	SW846 60100
	Sodium	0.164	0.500	mg/l	J	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	0.0178	0.200	mg/l	J	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB3	Iron	BRL	0.0300	mg/l	U	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB4	Iron	0.0161	0.0300	mg/l	J	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB5	Iron	BRL	0.0300	mg/l	U	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB6	Iron	BRL	0.0300	mg/l	U	SW846 60100
	Sodium	BRL	0.500	mg/l	U	SW846 60100
	Aluminum	BRL	0.0500	mg/l	U	SW846 60100
	Calcium	BRL	0.200	mg/l	U	SW846 60100
	Magnesium	BRL	0.0200	mg/l	U	SW846 60100
S708828-CCB7	Sodium	BRL	0.500	mg/l	U	SW846 60100

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>S708828</u>

Lab Sample ID	Analyte	Found	MRL	Units	С	Method
S708828-CCB7	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	BRL	0.200	mg/l	U	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCB8	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	BRL	0.200	mg/l	U	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCB9	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	BRL	0.200	mg/l	U	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCBA	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	BRL	0.200	mg/l	U	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCBB	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	0.0161	0.200	mg/l	J	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCBC	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	BRL	0.200	mg/l	U	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C
S708828-CCBD	Sodium	BRL	0.500	mg/l	U	SW846 6010C
	Aluminum	BRL	0.0500	mg/l	U	SW846 6010C
	Calcium	0.025	0.200	mg/l	J	SW846 6010C
	Magnesium	BRL	0.0200	mg/l	U	SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1711058</u>

Sequence: <u>S710437</u>

Lab Sample ID	Analyte	Found	MRL	Units	С	Method
S710437-ICB1	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710437-CCB1	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1711058</u>

Sequence: <u>S710438</u>

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S710438-CCB1	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
1716530-BLK1	Potassium	0.351	1.00	mg/l	J	SW846 6010C
S710438-CCB2	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB3	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB4	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB5	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB6	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB7	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C
S710438-CCB8	Iron	BRL	0.0300	mg/l	U	SW846 6010C
	Potassium	BRL	1.00	mg/l	U	SW846 6010C

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>\$708828</u> Units: <u>mg/l</u>

		1	1 1	
Lab Sample ID	Analyte	True	Found	%R
S708828-IFA1	Iron	100	102.60000	103
	Magnesium	250	237.10000	95
	Iron	100	102.60000	103
	Sodium		0.05760	
	Aluminum	250	246.20000	98
	Aluminum	250	246.20000	98
	Calcium	250	254.40000	102
	Calcium	250	254.40000	102
	Magnesium	250	237.10000	95
S708828-IFB1	Iron	100	99.02000	99
	Magnesium	250	227.70000	91
	Iron	100	99.02000	99
	Sodium		0.05600	
	Aluminum	250	235.80000	94
	Aluminum	250	235.80000	94
	Calcium	250	246.10000	98
	Calcium	250	246.10000	98
	Magnesium	250	227.70000	91
S708828-IFA2	Iron	100	103.70000	104
	Magnesium	250	241.10000	96
	Iron	100	103.70000	104
	Sodium		0.03970	
	Aluminum	250	248.80000	100
	Aluminum	250	248.80000	100
	Calcium	250	256.80000	103
	Calcium	250	256.80000	103
	Magnesium	250	241.10000	96
S708828-IFB2	Iron	100	100.30000	100
	Magnesium	250	231.90000	93
	Iron	100	100.30000	100

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>\$708828</u> Units: <u>mg/l</u>

Lab Sample ID	Analyte	True	Found	%R
S708828-IFB2	Sodium		0.04180	
	Aluminum	250	239.50000	96
	Aluminum	250	239.50000	96
	Calcium	250	248.30000	99
	Calcium	250	248.30000	99
	Magnesium	250	231.90000	93
S708828-IFA3	Iron	100	99.17000	99
	Magnesium	250	225.40000	90
	Iron	100	99.17000	99
	Sodium		0.01980	
	Aluminum	250	230.00000	92
	Aluminum	250	230.00000	92
	Calcium	250	249.50000	100
	Calcium	250	249.50000	100
	Magnesium	250	225.40000	90
S708828-IFB3	Iron	100	99.13000	99
	Magnesium	250	224.90000	90
	Iron	100	99.13000	99
	Sodium		0.02490	
	Aluminum	250	229.00000	92
	Aluminum	250	229.00000	92
	Calcium	250	247.80000	99
	Calcium	250	247.80000	99
	Magnesium	250	224.90000	90
S708828-IFA4	Iron	100	98.91000	99
	Magnesium	250	226.30000	91
	Sodium		0.05010	
	Aluminum	250	234.20000	94
	Aluminum	250	234.20000	94
	Calcium	250	252.00000	101

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>\$708828</u> Units: <u>mg/l</u>

Lab Sample ID	Analyte	True	Found	%R
S708828-IFA4	Calcium	250	252.00000	101
	Magnesium	250	226.30000	91
S708828-IFB4	Iron	100	101.00000	101
	Magnesium	250	231.50000	93
	Sodium		0.04900	
	Aluminum	250	239.80000	96
	Aluminum	250	239.80000	96
	Calcium	250	253.30000	101
	Calcium	250	253.30000	101
	Magnesium	250	231.50000	93
S708828-IFA5	Iron	100	102.20000	102
	Magnesium	250	237.20000	95
	Sodium		0.04620	
	Aluminum	250	246.40000	99
	Aluminum	250	246.40000	99
	Calcium	250	255.70000	102
	Calcium	250	255.70000	102
	Magnesium	250	237.20000	95
S708828-IFB5	Iron	100	101.30000	101
	Magnesium	250	232.70000	93
	Sodium		0.04520	
	Aluminum	250	240.80000	96
	Aluminum	250	240.80000	96
	Calcium	250	253.60000	101
	Calcium	250	253.60000	101
	Magnesium	250	232.70000	93
S708828-IFA6	Iron	100	99.13000	99
	Magnesium	250	230.60000	92
	Sodium		0.05700	
	Aluminum	250	239.60000	96

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1710008</u>

Sequence: <u>S708828</u> Units: <u>mg/l</u>

Lab Sample ID	Analyte	True	Found	%R
S708828-IFA6	Aluminum	250	239.60000	96
	Calcium	250	248.30000	99
	Calcium	250	248.30000	99
	Magnesium	250	230.60000	92
S708828-IFB6	Iron	100	98.15000	98
	Magnesium	250	223.30000	89
	Sodium		0.05040	
	Aluminum	250	231.10000	92
	Aluminum	250	231.10000	92
	Calcium	250	247.70000	99
	Calcium	250	247.70000	99
	Magnesium	250	223.30000	89
S708828-IFA7	Iron	100	98.92000	99
	Magnesium	250	228.50000	91
	Sodium		0.05280	
	Aluminum	250	238.00000	95
	Aluminum	250	238.00000	95
	Calcium	250	249.70000	100
	Calcium	250	249.70000	100
	Magnesium	250	228.50000	91
S708828-IFB7	Iron	100	99.37000	99
	Magnesium	250	231.00000	92
	Sodium		0.05510	
	Aluminum	250	241.30000	97
	Aluminum	250	241.30000	97
	Calcium	250	248.70000	99
	Calcium	250	248.70000	99
	Magnesium	250	231.00000	92

^{*} Values outside of QC limits (Acceptance Limits: +/- 20% of the true value or +/- 2xMRL)

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1711058</u>

Sequence: <u>S710438</u> Units: <u>mg/l</u>

Lab Sample ID	Analyte	True	Found	%R
_	·			
S710438-IFA1	Iron	100	101.10000	101
	Magnesium	250	233.50000	93
	Iron	100	101.10000	101
	Potassium		-0.04250	
	Aluminum	250	252.80000	101
	Calcium	250	250.30000	100
S710438-IFB1	Iron	100	102.50000	102
	Magnesium	250	231.40000	93
	Iron	100	102.50000	102
	Potassium		-0.04270	
	Aluminum	250	245.20000	98
	Calcium	250	251.90000	101
S710438-IFA2	Iron	100	100.20000	100
	Magnesium	250	229.60000	92
	Iron	100	100.20000	100
	Potassium		-0.03510	
	Aluminum	250	248.20000	99
	Calcium	250	247.70000	99
S710438-IFB2	Iron	100	98.56000	99
	Magnesium	250	227.90000	91
	Iron	100	98.56000	99
	Potassium		-0.03380	
	Aluminum	250	246.90000	99
	Calcium	250	247.00000	99
S710438-IFA3	Iron	100	97.76000	98
	Magnesium	250	226.80000	91
	Iron	100	97.76000	98
	Potassium		-0.05410	
	Aluminum	250	244.90000	98
	Calcium	250	246.20000	98

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>ICAP5</u> Calibration: <u>1711058</u>

Sequence: <u>S710438</u> Units: <u>mg/l</u>

Lab Sample ID	Analyte	True	Found	%R
S710438-IFB3	Iron	100	96.88000	97
	Magnesium	250	227.90000	91
	Iron	100	96.88000	97
	Potassium		-0.03890	
	Aluminum	250	248.70000	99
	Calcium	250	243.80000	98
S710438-IFA4	Iron	100	97.54000	98
	Magnesium	250	231.80000	93
	Iron	100	97.54000	98
	Potassium		-0.06110	
	Aluminum	250	254.70000	102
	Calcium	250	246.60000	99
S710438-IFB4	Iron	100	98.34000	98
	Magnesium	250	226.80000	91
	Iron	100	98.34000	98
	Potassium		-0.06010	
	Aluminum	250	243.20000	97
	Calcium	250	246.80000	99

^{*} Values outside of QC limits (Acceptance Limits: +/- 20% of the true value or +/- 2xMRL)

FORM Vb - POST DIGEST SPIKE SAMPLE RECOVERY

TF1-GZ-103-091117

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Matrix:
 Aqueous
 Laboratory ID:
 1716277-PS1

 Batch:
 1716277
 Lab Source ID:
 SC39093-03

 Preparation:
 SW846 3005A
 Initial/Final:
 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids:

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/l)	Sample Result (SR) (mg/l)	Spike Added (SA) (mg/l)	%R	Method
Iron	80 - 120	50.4	45.9	2.50	182 *	SW846 6010C
Sodium	80 - 120	19.6	7.14	12.5	100	SW846 6010C
Aluminum	80 - 120	2.68	BRL	2.50	107	SW846 6010C
Calcium	80 - 120	43.6	29.0	12.5	117	SW846 6010C
Magnesium	80 - 120	6.44	3.66	2.50	111	SW846 6010C

^{*} Values outside of QC limits

FORM Vb - POST DIGEST SPIKE SAMPLE RECOVERY

SW846 6010C

TF1-GZ-103-091117

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Matrix:
 Aqueous
 Laboratory ID: 1716530-PS1

 Batch:
 1716530
 Lab Source ID: SC39093-03

 Preparation:
 SW846 3005A
 Initial/Final: 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids:

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/l)	Sample Result (SR) (mg/l)	Spike Added (SA) (mg/l)	%R	Method
Potassium	80 - 120	28.6	3.40	25.0	101	SW846 6010C

^{*} Values outside of QC limits

FORM IIIc - DUPLICATES

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: 1716277-DUP1

Batch: <u>1716277</u> Lab Source ID: <u>SC39093-03</u>

Preparation: SW846 3005A Initial/Final: 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids:

File ID: 20170926-048

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/l)	C	DUPLICATE CONCENTRATION (mg/l)	С	RPD %	Q	метнор
Iron	20	45.9		45.5		0.9		SW846 6010C
Sodium	20	7.14		7.12		0.2		SW846 6010C
Aluminum	20	BRL		BDL				SW846 6010C
Calcium	20	29.0		28.8		0.9		SW846 6010C
Magnesium	20	3.66		3.66		0.08		SW846 6010C

^{*} Values outside of QC limits

FORM IIIc - DUPLICATES

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: 1716530-DUP1

Batch: <u>1716530</u> Lab Source ID: <u>SC39093-03</u>

Preparation: SW846 3005A Initial/Final: 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids:

File ID: 20170929-048

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/l)	С	DUPLICATE CONCENTRATION (mg/l)	С	RPD %	Q	метнор	
Potassium	20	3.40		3.36		0.9		SW846 6010C	

^{*} Values outside of QC limits

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 6010C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: ICAP5

Batch: <u>1716277</u> Laboratory ID: <u>1716277-BS1</u>

 Preparation:
 SW846 3005A
 Initial/Final:
 50 ml / 50 ml

Analyzed: <u>09/26/17 15:26</u> Spike ID: 17H1034

File ID: <u>20170926-042</u>

COMPOUND	SPIKE ADDED (mg/l)	LCS CONCENTRATION (mg/l)	LCS % REC.#	QC LIMITS REC.
Iron	2.50	2.59	104	87 - 115
Sodium	12.5	11.7	94	87 - 115
Aluminum	2.50	2.54	102	86 - 115
Calcium	12.5	12.2	97	87 - 113
Magnesium	2.50	2.42	97	85 - 113

File ID: <u>20170926-043</u>

	SPIKE	LCSD	LCSD	24	QC	LIMITS	
COMPOUND	ADDED (mg/l)	CONCENTRATION (mg/l)	% REC. #	% RPD#	RPD	REC.	
Iron	2.50	2.63	105	1	20	87 - 115	
Sodium	12.5	11.7	93	0.3	20	87 - 115	
Aluminum	2.50	2.54	102	0.2	20	86 - 115	
Calcium	12.5	12.2	98	0.2	20	87 - 113	
Magnesium	2.50	2.43	97	0.5	20	85 - 113	

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 6010C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: ICAP5

Batch: <u>1716530</u> Laboratory ID: <u>1716530-BS1</u>

 Preparation:
 SW846 3005A
 Initial/Final:
 50 ml / 50 ml

Analyzed: 09/29/17 15:20 Spike ID: 17H1034

File ID: <u>20170929-042</u>

	SPIKE ADDED	LCS CONCENTRATION	LCS %	QC LIMITS
COMPOUND	(mg/l)	(mg/l)	REC.#	REC.
Potassium	25.0	24.2	97	86 - 114

File ID: <u>20170929-043</u>

	SPIKE	LCSD	LCSD		QC	LIMITS
	ADDED	CONCENTRATION	%	%		
COMPOUND	(mg/l)	(mg/l)	REC. #	RPD#	RPD	REC.
Potassium	25.0	23.2	93	4	20	86 - 114

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM IIIb (Organic) / FORM V (Inorganic) MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

TF1-GZ-103-091117

SW846 6010C

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: ICAP5

 Batch:
 1716277
 Laboratory ID:
 1716277-MS1

 Preparation:
 SW846 3005A
 Initial/Final:
 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids: Sample result greater than 4X spike

Spike ID: added. No qualification.

File ID: <u>20170926-049</u>

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC.#	QC LIMITS REC.
Iron	2.50	45.9	48.0	83 *	87 - 115
Sodium	12.5	7.14	19.2	97	87 - 115
Aluminum	2.50	BRL	2.62	105	86 - 115
Calcium	12.5	29.0	41.0	95	87 - 113
Magnesium	2.50	3.66	6.18	101	85 - 113

File ID: <u>20170926-050</u>

COMPOUND	SPIKE ADDED (mg/l)	MSD CONCENTRATION (mg/l)	MSD % REC. #	% RPD#	QC RPD	LIMITS REC.
Iron	2.50	47.3	59 *	1	20	87 - 115
Sodium	12.5	19.0	95	1	20	87 - 115
Aluminum	2.50	2.61	104	0.2	20	86 - 115
Calcium	12.5	41.2	98	0.7	20	87 - 113
Magnesium	2.50	6.08	97	2	20	85 - 113

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM IIIb (Organic) / FORM V (Inorganic) MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

TF1-GZ-103-091117

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: ICAP5

 Batch:
 1716530
 Laboratory ID:
 1716530-MS1

 Preparation:
 SW846 3005A
 Initial/Final:
 50 ml / 50 ml

Source Sample Name: TF1-GZ-103-091117 % Solids:

Spike ID: 17H1034

File ID: <u>20170929-049</u>

	SPIKE	SAMPLE	MS	MS	QC
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
COMPOUND	(mg/l)	(mg/l)	(mg/l)	REC. #	REC.
Potassium	25.0	3.40	28.0	98	86 - 114

File ID: <u>20170929-050</u>

	SPIKE	MSD	MSD		QC	LIMITS
	ADDED	CONCENTRATION	%	%		
COMPOUND	(mg/l)	(mg/l)	REC. #	RPD#	RPD	REC.
Potassium	25.0	28.8	101	3	20	86 - 114

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

TF1-GZ-103-091117

FORM VIII - SERIAL DILUTION

SW846 6010C

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Laboratory ID: S708828-SRD2

Sequence: <u>S708828</u> Lab Source ID: <u>SC39093-03</u>

Preparation: <u>1716317</u> Initial/Final: <u>50 / 50</u>

Source Sample Name: <u>TF1-GZ-103-091117</u> % Solids:

Units: mg/l

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	Method	QC Limits % Difference
Iron	45.9		48.2		5		SW846 6010C	10
Sodium	7.14		7.24		2		SW846 6010C	10
Aluminum	BRL		BRL				SW846 6010C	10
Calcium	29.0		30.6	·	5		SW846 6010C	10
Magnesium	3.66		3.82		4		SW846 6010C	10

^{*} Values outside of QC limits

FORM VIII - SERIAL DILUTION

SW846 6010C

TF1-GZ-103-091117

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Laboratory ID: S710438-SRD1

Sequence: <u>S710438</u> Lab Source ID: <u>SC39093-03</u>

Preparation: <u>1716544</u> Initial/Final: <u>50 / 50</u>

Source Sample Name: <u>TF1-GZ-103-091117</u> % Solids:

Units: mg/l

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	Method	QC Limits % Difference
Potassium	3.40		3.02				SW846 6010C	10

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SW846 6010C

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Iron	0.0089	0.0300	mg/l
	0.0089	0.0300	mg/l
Magnesium	0.0088	0.0200	mg/l
Potassium	0.120	1.00	mg/l
Sodium	10.8	25.0	mg/kg
	0.0785	0.500	mg/l
Aluminum	1.14	5.00	mg/kg
	0.0206	0.0500	mg/l
	0.0206	0.0500	mg/l
Calcium	5.12	25.0	mg/kg
	0.0142	0.200	mg/l
	0.0142	0.200	mg/l
Iron	2.06	4.00	mg/kg
Magnesium	1.44	5.00	mg/kg
	0.0088	0.0200	mg/l

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708796</u> Instrument: <u>ICAP5</u>

Calibration: <u>1710008</u>

														A	Anal	ytes	S										\Box
Sample Name	Lab ID	D/F	Time	A L	S B	A S	B A	B E	C D	C A	C O	C R	С	F E	- 1	M		H G	N I	K	S E	A G	N A	S U	T L	V	Z N
					ь	3	Α	E	ע	A		K	U	E	ь	G	IN	u	1		Е	G	А	0	L		IN
Cal Standard	S708796-CAL1	1	09/26/17 11:39	X						X				X		X							X				
Cal Standard	S708796-CAL2	1	09/26/17 11:43	X						X				X		X							X				
Cal Standard	S708796-CAL3	1	09/26/17 11:47	X						X				X		X							X				
Cal Standard	S708796-CAL4	1	09/26/17 11:51	X						X				X		X							X				
Cal Standard	S708796-CAL5	1	09/26/17 11:54	X						X				X		X							X				
Cal Standard	S708796-CAL6	1	09/26/17 11:58	X						X				X		X							X				
Cal Standard	S708796-CAL7	1	09/26/17 12:02	X						X				X		X							X				
Cal Standard	S708796-CAL8	1	09/26/17 12:06	X						X				X		X							X				
Cal Standard	S708796-CAL9	1	09/26/17 12:11	X						X				X									X				
Initial Cal Check	S708796-ICV1	1	09/26/17 12:23	X						X				X		X							X				
Initial Cal Blank	S708796-ICB1	1	09/26/17 12:27	X						X				X		X							X				
Instrument RL Check	S708796-CRL1	1	09/26/17 12:33	X						X				X		X							X				
Instrument RL Check	S708796-CRL2	1	09/26/17 12:38	X						X				X		X							X				
Calibration Check	S708796-CCV1	1	09/26/17 12:53	X						X				X		X							X				
Calibration Blank	S708796-CCB1	1	09/26/17 12:58	X						X				X		X							X				
Initial Cal Check	S708796-ICV2	1	09/26/17 13:13											X													

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708828</u> Instrument: <u>ICAP5</u>

Calibration: <u>1710008</u>

														1	Anal	ytes	5								
Sample Name	Lab ID	D/F	Time	A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G		H G	N I	K	S E	A G	N A	Γ	V Z N
Calibration Blank	S708828-CCB6	1	09/26/17 18:49	X						X				X		X							Х	+	
Calibration Check	S708828-CCV7	1	09/26/17 20:34	X						X						X							X		
Calibration Blank	S708828-CCB7	1	09/26/17 20:39	X						X						X							X		
Instrument RL Check	S708828-CRL7	1	09/26/17 21:00	X						X						X							X		
Instrument RL Check	S708828-CRL8	1	09/26/17 21:05	X						X						X							X		
Interference Check A	S708828-IFA4	1	09/26/17 21:10	X						X				Х		X							X		
Interference Check B	S708828-IFB4	1	09/26/17 21:15	X						X				X		X							X		
Calibration Check	S708828-CCV8	1	09/26/17 21:20	X						X						X							X		
Calibration Blank	S708828-CCB8	1	09/26/17 21:25	X						X						X							X		
Calibration Check	S708828-CCV9	1	09/26/17 22:21	X						X						X							X		
Calibration Blank	S708828-CCB9	1	09/26/17 22:26	X						X						X							X		
Instrument RL Check	S708828-CRL9	1	09/26/17 22:52	X						X						X							X		
Instrument RL Check	S708828-CRLA	1	09/26/17 22:57	X						X						X							X		
Interference Check A	S708828-IFA5	1	09/26/17 23:02	X						X				Х		X							X		
Interference Check B	S708828-IFB5	1	09/26/17 23:07	X						X				X		X							X		
Calibration Check	S708828-CCVA	1	09/26/17 23:12	X						X						X							X		
Calibration Blank	S708828-CCBA	1	09/26/17 23:17	X						X						X							X		
Calibration Check	S708828-CCVB	1	09/27/17 00:13	X						X						X							X		
Calibration Blank	S708828-CCBB	1	09/27/17 00:18	X						X						X							X		
Instrument RL Check	S708828-CRLB	1	09/27/17 00:28	X						X						X							X		
Instrument RL Check	S708828-CRLC	1	09/27/17 00:34	X						X						X							X		
Interference Check A	S708828-IFA6	1	09/27/17 00:39	X						X				X		X							X		
Interference Check B	S708828-IFB6	1	09/27/17 00:44	X						X				X		X							X		
Calibration Check	S708828-CCVC	1	09/27/17 00:49	X						X						X							X		
Calibration Blank	S708828-CCBC	1	09/27/17 00:54	X						X						X							X		
Calibration Check	S708828-CCVD	1	09/27/17 01:50	X						X						X							X		
Calibration Blank	S708828-CCBD	1	09/27/17 01:55	X						X						X							X		
Instrument RL Check	S708828-CRLD	1	09/27/17 02:01	X						X						X							X		
Instrument RL Check	S708828-CRLE	1	09/27/17 02:06	X						X						X							X		
Interference Check A	S708828-IFA7	1	09/27/17 02:11	X						X				X		X							X		
Interference Check B	S708828-IFB7	1	09/27/17 02:16	X						X				X		X							X		

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708828</u> Instrument: <u>ICAP5</u>

Calibration: <u>1710008</u>

															Anal	vtes											
Sample Name	Lab ID	D/F	Time	A L	S B	A S	B A	B E	C D	C A	C O	C R	C U		P	M G	_	H G	N I	K	S E	A G	N A	S U	T L	V	Z N
Calibration Check	S708828-CCV1	1	09/26/17 14:20	X						X				X		X							X				
Calibration Blank	S708828-CCB1	1	09/26/17 14:25	X						X				X		X							X				
Instrument RL Check	S708828-CRL1	1	09/26/17 14:50	X						X				X		X							X				
Instrument RL Check	S708828-CRL2	1	09/26/17 14:55	X						X				X		X							X				
Interference Check A	S708828-IFA1	1	09/26/17 15:00	X						X				X		X							X				
Interference Check B	S708828-IFB1	1	09/26/17 15:06	X						X				X		X							X				
Calibration Check	S708828-CCV2	1	09/26/17 15:11	X						X				X		X							X				
Calibration Blank	S708828-CCB2	1	09/26/17 15:16	X						X				X		X							X				
Blank	1716277-BLK1	1	09/26/17 15:21	X						X				X		X							X				
LCS	1716277-BS1	1	09/26/17 15:26	X						X				X		X							X				
LCS Dup	1716277-BSD1	1	09/26/17 15:31	X						X				X		X							X				
TF1-GT-121-091117	SC39093-01	1	09/26/17 15:36	X						X				X		X							X				
TF1-GT-119-091117	SC39093-02	1	09/26/17 15:41	X						X				X		X							X				
TF1-GZ-103-091117	S708828-SRD2	5	09/26/17 15:46	X						X				X		X							X				
TF1-GZ-103-091117	SC39093-03	1	09/26/17 15:51	X						X				X		X							X				
TF1-GZ-103-091117	1716277-DUP1	1	09/26/17 15:56	X						X				X		X							X				
TF1-GZ-103-091117	1716277-MS1	1	09/26/17 16:01	X						X				X		X							X				
TF1-GZ-103-091117	1716277-MSD1	1	09/26/17 16:06	X						X				X		X							X				
Calibration Check	S708828-CCV3	1	09/26/17 16:11	X						X				X		X							X				
Calibration Blank	S708828-CCB3	1	09/26/17 16:16	X						X				X		X							X				
TF1-GZ-103-091117	1716277-PS1	1	09/26/17 16:21	X						X				X		X							X				
Instrument RL Check	S708828-CRL3	1	09/26/17 16:26	X						X				X		X							X				
Instrument RL Check	S708828-CRL4	1	09/26/17 16:32	X						X				X		X							X				
Interference Check A	S708828-IFA2	1	09/26/17 16:37	X						X				X		X							X				
Interference Check B	S708828-IFB2	1	09/26/17 16:42	X						X				X		X							X				
Calibration Check	S708828-CCV4	1	09/26/17 16:47	X						X				X		X							X				
Calibration Blank	S708828-CCB4	1	09/26/17 16:52	X						X				X		X							X				
Calibration Check	S708828-CCV5	1	09/26/17 17:48	X						X				X		X							X				
Calibration Blank	S708828-CCB5	1	09/26/17 17:53	X						X				X		X							X			L	
Instrument RL Check	S708828-CRL5	1	09/26/17 18:24	X						X				X		X							X				
Instrument RL Check	S708828-CRL6	1	09/26/17 18:29	X						X				X		X							X				
Interference Check A	S708828-IFA3	1	09/26/17 18:34	X						X				X		X							X				
Interference Check B	S708828-IFB3	1	09/26/17 18:39	X						X				X		X							X				L
Calibration Check	S708828-CCV6	1	09/26/17 18:44	X						X				X		X							X				

SDG SC39093 Page 1494 / 1731

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S710437</u> Instrument: <u>ICAP5</u>

Calibration: <u>1711058</u>

														1	\ nal	ytes	S										\Box
Sample Name	Lab ID	D/F	Time	A	S	A	В	В	С	C	C	C	С	F			M			K	S	A	N	S	T	V	Z
				L	В	S	A	Е	D	A	О	K	U	E	В	G	N	G	I		Е	G	Α	U	L		N
Cal Standard	S710437-CAL1	1	09/29/17 11:29																	X							
Cal Standard	S710437-CAL2	1	09/29/17 11:33																	X							
Cal Standard	S710437-CAL3	1	09/29/17 11:37											X						X							
Cal Standard	S710437-CAL4	1	09/29/17 11:41											X						X							
Cal Standard	S710437-CAL5	1	09/29/17 11:45											X						X							
Cal Standard	S710437-CAL6	1	09/29/17 11:49											X						X							
Cal Standard	S710437-CAL7	1	09/29/17 11:53											X						X							
Cal Standard	S710437-CAL8	1	09/29/17 11:57											X						X							
Cal Standard	S710437-CAL9	1	09/29/17 12:02																	X							
Cal Standard	S710437-CAL9	1	09/29/17 12:12											X													
Cal Standard	S710437-CAL1	1	09/29/17 12:23											X													
Cal Standard	S710437-CAL2	1	09/29/17 12:36											X													
Initial Cal Check	S710437-ICV1	1	09/29/17 12:44											X						X							
Initial Cal Blank	S710437-ICB1	1	09/29/17 12:49											X						X							
Instrument RL Check	S710437-CRL1	1	09/29/17 12:54											X						X							
Instrument RL Check	S710437-CRL2	1	09/29/17 12:59											X						X							
Calibration Check	S710437-CCV1	1	09/29/17 13:14											X						X							
Calibration Blank	S710437-CCB1	1	09/29/17 13:19											X						X							
Initial Cal Check	S710437-ICV2	1	09/29/17 13:28											X													

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S710438</u> Instrument: <u>ICAP5</u>

Calibration: <u>1711058</u>

														A	\na	lyte	s										П
Sample Name	Lab ID	D/F	Time	A		A		В	_	_				F							S	A	N	S	T	V	Z
				L	В	S	A	Е	D	A	О	R	U	Е	В	G	N	G	Ι		Е	G	A	U	L		N
Calibration Blank	S710438-CCB7	1	09/29/17 20:23											X						X							
Calibration Check	S710438-CCV8	1	09/29/17 21:18											X						X							
Calibration Blank	S710438-CCB8	1	09/29/17 21:23											X						X							
Instrument RL Check	S710438-CRL5	1	09/29/17 21:29											X						X							
Instrument RL Check	S710438-CRL6	1	09/29/17 21:34											X						X							
Interference Check A	S710438-IFA4	1	09/29/17 21:39	X						X				X		X				X							
Interference Check B	S710438-IFB4	1	09/29/17 21:44	X						X				X		X				X							

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S710438</u> Instrument: <u>ICAP5</u>

Calibration: <u>1711058</u>

														A	Anal	ytes	3									
Sample Name	Lab ID	D/F	Time	A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E			M N		K	S E	A G	N A	S U	T L	V	Z N
Calibration Check	S710438-CCV1	1	09/29/17 15:05											X					Х							
Calibration Blank	S710438-CCB1	1	09/29/17 15:10											X					X							
Blank	1716530-BLK1	1	09/29/17 15:15																X							
LCS	1716530-BS1	1	09/29/17 15:20																X							
LCS Dup	1716530-BSD1	1	09/29/17 15:25																X							
TF1-GT-121-091117	SC39093-01	1	09/29/17 15:30																X							
TF1-GT-119-091117	SC39093-02	1	09/29/17 15:35																X							
TF1-GZ-103-091117	S710438-SRD1	5	09/29/17 15:40																X							
TF1-GZ-103-091117	SC39093-03	1	09/29/17 15:45																X							
TF1-GZ-103-091117	1716530-DUP1	1	09/29/17 15:50																X							
TF1-GZ-103-091117	1716530-MS1	1	09/29/17 15:55																X							
TF1-GZ-103-091117	1716530-MSD1	1	09/29/17 16:00																X							
Calibration Check	S710438-CCV2	1	09/29/17 16:05											X					X							
Calibration Blank	S710438-CCB2	1	09/29/17 16:10											X					X							
TF1-GZ-103-091117	1716530-PS1	1	09/29/17 16:15																X							
Instrument RL Check	S710438-CRL1	1	09/29/17 16:20											X					X							
Interference Check A	S710438-IFA1	1	09/29/17 16:25	X						X				X		X			X							
Interference Check B	S710438-IFB1	1	09/29/17 16:31	X						X				X		X			X							
Calibration Check	S710438-CCV3	1	09/29/17 16:36											X					X							
Calibration Blank	S710438-CCB3	1	09/29/17 16:41											X					X							
Calibration Check	S710438-CCV4	1	09/29/17 17:36											X					X							
Calibration Blank	S710438-CCB4	1	09/29/17 17:41											X					X							
Instrument RL Check	S710438-CRL2	1	09/29/17 18:11											X					X							
Interference Check A	S710438-IFA2	1	09/29/17 18:16	X						X				X		X			X							
Interference Check B	S710438-IFB2	1	09/29/17 18:21	X						X				X		X			X							
Calibration Check	S710438-CCV5	1	09/29/17 18:27											X					X							
Calibration Blank	S710438-CCB5	1	09/29/17 18:32											X					X							
Calibration Check	S710438-CCV6	1	09/29/17 19:27											X					X							
Calibration Blank	S710438-CCB6	1	09/29/17 19:32											X					X							
Instrument RL Check	S710438-CRL3	1	09/29/17 19:57											X					X							
Instrument RL Check	S710438-CRL4	1	09/29/17 20:03											X					X							
Interference Check A	S710438-IFA3	1	09/29/17 20:08	X						X				X		X			X							
Interference Check B	S710438-IFB3	1	09/29/17 20:13	X						X				X		X			X							
Calibration Check	S710438-CCV7	1	09/29/17 20:18											X					X							

SDG SC39093 Page 1500 / 1731

CROSS REFERENCE TABLE

EPA 245.1/7470A

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to EPA 245.1/7470A.

IV. PREPARATION

Aqueous samples were prepared according to EPA200/SW7000 Series.

V. INSTRUMENTATION

The following equipment was used to analyze EPA 245.1/7470A:

Mercury4 details: Leeman Labs Hydra IIAA Mercury Analyzer

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

A matrix spike and a matrix spike duplicate were analyzed:

In batch 1716279 from source sample TF1-GT-121-091117 (SC39093-01).

All method criteria were met.

3. Post Spike Samples (PS):

A post spike was analyzed.

In batch 1716279 from source sample TF1-GT-121-091117 (SC39093-01).

All method criteria were met.

D. Duplicates:

A duplicate was analyzed.

In batch 1716279 from source sample TF1-GT-121-091117 (SC39093-01).

All method criteria were met.

E. Samples:

All method criteria were met.

FORM III - BLANKS EPA 245.1/7470A

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: Mercury4 Calibration: 1711054

Sequence: <u>S710400</u>

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S710400-ICB1	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
S710400-CCB1	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A

FORM III - BLANKS EPA 245.1/7470A

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: Mercury4 Calibration: 1711054

Sequence: <u>S710401</u>

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S710401-CCB1	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
S710401-CCB2	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
S710401-CCB3	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
1716279-BLK1	Mercury	BRL	0.00020	mg/l	U	EPA 245.1/7470A
S710401-CCB4	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
S710401-CCB5	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A
S710401-CCB6	Mercury	BRL	0.200	μg/l	U	EPA 245.1/7470A

FORM Vb - POST DIGEST SPIKE SAMPLE RECOVERY

EPA 245.1/7470A

TF1-GT-121-091117

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Matrix:
 Aqueous
 Laboratory ID: 1716279-PS1

 Batch:
 1716279
 Lab Source ID: SC39093-01

 Preparation:
 EPA200/SW7000 Series
 Initial/Final: 20 ml / 20 ml

Source Sample Name: TF1-GT-121-091117 % Solids:

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/l)	Sample Result (SR) (mg/l)	Spike Added (SA) (mg/l)	%R	Method
Mercury	85 - 115	0.00515	BRL	0.00500	103	EPA 245.1/7470A

^{*} Values outside of QC limits

FORM IIIc - DUPLICATES

EPA 245.1/7470A

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Laboratory ID: 1716279-DUP1

Batch: <u>1716279</u> Lab Source ID: <u>SC39093-01</u>

Preparation: <u>EPA200/SW7000 Series</u> Initial/Final: <u>20 ml / 20 ml</u>

Source Sample Name: TF1-GT-121-091117 % Solids:

File ID: <u>092517A-067</u>

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/l)	С	DUPLICATE CONCENTRATION (mg/l)	С	RPD %	Q	метнор
Mercury	20	BRL		BDL				EPA 245.1/7470A

^{*} Values outside of QC limits

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

EPA 245.1/7470A

Laboratory: SDG: SC39093 Eurofins Spectrum Analytical, Inc. - MA

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Mercury4

1716279 Laboratory ID: 1716279-BS1 Batch: EPA200/SW7000 Series

Analyzed: 09/25/17 15:24 Spike ID: 17I0655

> File ID: 092517A-065

20 ml / 20 ml

	SPIKE ADDED	LCS CONCENTRATION	LCS %	QC LIMITS
COMPOUND	(mg/l)	(mg/l)	REC.#	REC.
Mercury	0.00500	0.00480	96	82 - 119

Initial/Final:

Preparation:

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM IIIb (Organic) / FORM V (Inorganic) MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

TF1-GT-121-091117

EPA 245.1/7470A

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Mercury4

Batch: <u>1716279</u> Laboratory ID: <u>1716279-MS1</u>

Preparation: EPA200/SW7000 Series Initial/Final: 20 ml / 20 ml

Source Sample Name: TF1-GT-121-091117 % Solids:

Spike ID: 17I0655

File ID: <u>092517A-068</u>

	SPIKE	SAMPLE	MS	MS	QC
COMPOUND	ADDED	CONCENTRATION	CONCENTRATION	% DEC. //	LIMITS
COMPOUND	(mg/l)	(mg/l)	(mg/l)	REC. #	REC.
Mercury	0.00500	BRL	0.00485	97	82 - 119

File ID: <u>092517A-069</u>

	SPIKE	MSD	MSD		QC	LIMITS
	ADDED	CONCENTRATION	%	%		
COMPOUND	(mg/l)	(mg/l)	REC. #	RPD#	RPD	REC.
Mercury	0.00500	0.00497	99	3	20	82 - 119

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS

EPA 245.1/7470A

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Mercury	0.00013	0.00020	mg/l

METALS ANALYSIS RUN LOG EPA 245.1/7470A

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S710400</u> Instrument: <u>Mercury4</u>

Calibration: <u>1711054</u>

														A	Anal	yte	S										
Sample Name	Lab ID	D/F	Time	A		A	В	В	C	C	C	С	С	F						K			N	S		V	Z
				L	В	S	A	Е	D	A	О	R	U	Е	В	G	N	G	1		Е	G	A	U	L	Ш	N
Cal Standard	S710400-CAL1	1	09/25/17 12:57															X									
Cal Standard	S710400-CAL2	1	09/25/17 12:59															X									
Cal Standard	S710400-CAL3	1	09/25/17 13:01															X									
Cal Standard	S710400-CAL4	1	09/25/17 13:03															X									
Cal Standard	S710400-CAL5	1	09/25/17 13:05															X									
Cal Standard	S710400-CAL6	1	09/25/17 13:07															X									
Cal Standard	S710400-CAL7	1	09/25/17 13:09															X									
Cal Standard	S710400-CAL8	1	09/25/17 13:11															X									
Initial Cal Check	S710400-ICV1	1	09/25/17 13:15															X									
Initial Cal Blank	S710400-ICB1	1	09/25/17 13:17															X									
Instrument RL Check	S710400-CRL1	1	09/25/17 13:20															X									
Calibration Check	S710400-CCV1	1	09/25/17 13:23															X									
Calibration Blank	S710400-CCB1	1	09/25/17 13:25															X									

METALS ANALYSIS RUN LOG EPA 245.1/7470A

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S710401</u> Instrument: <u>Mercury4</u>

Calibration: <u>1711054</u>

Sample Name	Lab ID	D/F	Time	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	S U	T L	V	Z N
Calibration Check	S710401-CCV1	1	09/25/17 14:16			5	71			7.1		1.					11	X	1				7 1				11
Calibration Blank	S710401-CCB1	1	09/25/17 14:18															X									
Instrument RL Check	S710401-CRL1	1	09/25/17 14:20															X									
Calibration Check	S710401-CCV2	1	09/25/17 14:43															X									
Calibration Blank	S710401-CCB2	1	09/25/17 14:45															X									
Instrument RL Check	S710401-CRL2	1	09/25/17 15:01															X									
Calibration Check	S710401-CCV3	1	09/25/17 15:03															X									
Calibration Blank	S710401-CCB3	1	09/25/17 15:05															X									
Instrument RL Check	S710401-CRL3	1	09/25/17 15:14															X									
Blank	1716279-BLK1	1	09/25/17 15:22															X									
LCS	1716279-BS1	1	09/25/17 15:24															X									
TF1-GT-121-091117	SC39093-01	1	09/25/17 15:26															X									
TF1-GT-121-091117	1716279-DUP1	1	09/25/17 15:28															X									
TF1-GT-121-091117	1716279-MS1	1	09/25/17 15:30															X									
TF1-GT-121-091117	1716279-MSD1	1	09/25/17 15:32															X									
TF1-GT-121-091117	1716279-PS1	1	09/25/17 15:34															X									
TF1-GT-119-091117	SC39093-02	1	09/25/17 15:36															X									
TF1-GZ-103-091117	SC39093-03	1	09/25/17 15:39															X									
Instrument RL Check	S710401-CRL4	1	09/25/17 15:41															X									
Calibration Check	S710401-CCV4	1	09/25/17 15:43															X									
Calibration Blank	S710401-CCB4	1	09/25/17 15:45															X									
Calibration Check	S710401-CCV5	1	09/25/17 16:07															X									
Calibration Blank	S710401-CCB5	1	09/25/17 16:09															X									
Instrument RL Check	S710401-CRL5	1	09/25/17 16:17															X									
Calibration Check	S710401-CCV6	1	09/25/17 16:19															X									
Calibration Blank	S710401-CCB6	1	09/25/17 16:21															X									



QUALITY CONTROL REFERENCE LIST

Lab Sample ID

*40345BKG

9240358 9240359

9240360

P27763BB

P27763BQ

SDG No.: SAI24
Matrix: WATER

Analyte Batch Number 172771063902 Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Manganese Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc

LEGEND:

BKG = Background B = Blank

DUP = Duplicate Q = Laboratory Control Sample

 ${
m MS} = {
m Matrix} \ {
m Spike}$ Y = Laboratory Control Sample Duplicate

MSD = Matrix Spike DuplicatSAl24 Page 34 of 155



Case Narrative/Conformance Summary

CLIENT: Eurofins Spectrum Analytical SDG: SAI24

ICP Metals

Fraction: Metals in Liquid

	Matrix						
Sample #	Client ID	Liquid	Solid	DF	Comments		
9240358	SC39093-01	X		1			
9240359	SC39093-02	X		1			
9240360	SC39093-03	X		1			

All analyses have been performed in accordance with DOD QSM Version 5.0 unless otherwise noted below. See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.



FORM 3 BLANKS

SDG No.: SAI24

Method: MS

Run Name: 1728411E05

Calibration Date(s): 10/11/2017 Preparation Blank Matrix: WATER

		Initial									
		Calibration	Cont	inuing Calil	bra	ation			(Pre	pa	aration)
		Blank (ug/L)		Blank (ug/	L)				Blar	ık	(UG/L)
Analyte	Mass	(1 (2	С	3	С	Mass		С	Batch Number
Antimony	121	0.35	0.35	0.35	U	0.35	U	121	0.450	U	172771063902A
Arsenic	75	0.60	0.60	0.60	U	0.60	U	75	0.720	U	172771063902A
Barium	137	0.43	0.43	0.43	U			137	0.720	U	172771063902A
Beryllium	9	0.054	0.054	0.054	U	0.054	U	9	0.071	U	172771063902A
Cadmium	111	0.15	0.15	0.15	U	0.15	U	111	0.150	U	172771063902A
Chromium	52	0.50	0.50	0.50	U	0.50	U	52	0.870	U	172771063902A
Cobalt	59	0.17	0.17	0.17	U	0.17	U	59	0.160	U	172771063902A
Copper	63	0.400	0.40	0.40	U	0.40	U	63	0.540	U	172771063902A
Lead	208	0.088	0.088	0.088	U	0.088	U	208	0.110	U	172771063902A
Manganese	55	0.90	0.90	0.90	U	0.90	U	55	0.900	U	172771063902A
Molybdenum	98	0.25	0.25	0.25	U	0.25	U	98	0.250	U	172771063902A
Nickel	60	0.61	0.61	0.61	U	0.61	U	60	1.000	U	172771063902A
Selenium	78	0.50	0.50	0.50	U	0.50	U	78	0.500	U	172771063902A
Silver	107	0.12	0.12	0.12	U	0.12	U	107	0.150	U	172771063902A
Thallium	203	0.12	0.12	J 0.12	U	0.12	U	203	0.120	U	172771063902A
Vanadium	51	0.17	0.17	0.17	U	0.17	U	51	0.210	U	172771063902A
Zinc	66	2.6	2.6	2.6	U	2.6	U	66	3.900	U	172771063902A

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

CV = Cold Vapor Atomic Fluorescence

SAI24 Page 41 of 155

CONCENTRATION QUALIFIERS:

U= Below IDL/MDL B= Below LOQ



FORM 3 BLANKS

SDG No.: SAI24

Method: MS

Run Name: 1728503E05

Calibration Date(s): 10/12/2017

		Initial Calibration Blank (ug/L)		nuing Caliba Blank (ug/L)			paration k (UG/L)
Analyte	Mass		1 C			· · · · · · · · · · · · · · · · · · ·	C Batch Number
Antimony							
Arsenic							
Barium	137	0.43U	0.43 U	0.43	0.43U		
Beryllium							
Cadmium							
Chromium							
Cobalt							
Copper							
Lead							
Manganese							
Molybdenum							
Nickel							
Selenium							
Silver							
Thallium							
Vanadium							
Zinc							

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

CV = Cold Vapor Atomic Fluorescence

SAI24 Page 42 of 155

CONCENTRATION QUALIFIERS:

U= Below IDL/MDL

B= Below LOQ



QUALITY ASSURANCE SUMMARY FORM 4B

ICP-MS INTERFERENCE CHECK SAMPLE

SDG No.: SAI24

Instrument ID: 19204
Run Name: 1728411E05
Concentration Units: ug/L

Concentrati			ue		Foi	ınd	
Analyte	Mass	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Aluminum	27	100000	100000	92236	92.2	92596.6	92.6
Antimony	121	0	0	1		1.3	
Arsenic	75	0	100	0		98.6	98.6
Barium	137	0	0	1		1.0	
Beryllium	9	0	0	0		0.0	
Cadmium	111	0	100	0		92.7	92.7
Calcium	44	300000	300000	254787	84.9	257876.9	86.0
Carbon	13	20000	20000	NA		NA	
Chloride	37	100000	100000	NA		NA	
Chromium	52	0	200	1		189.0	94.5
Cobalt	59	0	205	1		188.2	91.8
Copper	63	0	200	1		189.1	94.6
Iron	57	250000	250000	218986	87.6	216631.7	86.7
Lead	208	0	0	0		0.2	
Magnesium	24	100000	100000	91465	91.5	92541.4	92.5
Manganese	55	0	200	3		193.2	96.6
Molybdenum	98	2000	2000	1980	99.0	1940.1	97.0
Nickel	60	0	200	1		187.6	93.8
Phosphorus	31	10000	10000	NA		NA	
Potassium	39	100000	100000	94673	94.7	94710.0	94.7
Selenium	78	0	100	0		92.4	92.4
Silver	107	0	50	0		47.7	95.4
Sodium	23	250000	250000	231932	92.8	234810.0	93.9
Sulfur	34	10000	10000	NA		NA	
Thallium	203	0	0	0		0.1	
Titanium	47	2000	2000	1976	98.8	1987.1	99.4
Vanadium	51	0	200	0		192.9	96.5
Zinc	66	0	100	2		92.0	92.0

Control Limits: All Metals 80%-120%



QUALITY ASSURANCE SUMMARY FORM 4B

ICP-MS INTERFERENCE CHECK SAMPLE

SDG No.: SAI24

Instrument ID: 19204
Run Name: 1728503E05
Concentration Units: ug/L

Concentrati			ue		Fou	ınd	
Analyte	Mass	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Aluminum	27	100000	100000	99008	99.0	97273.3	97.3
Antimony							
Arsenic							
Barium	137	0	0	1		1.1	
Beryllium							
Cadmium							
Calcium	44	300000	300000	298152	99.4	290643.5	96.9
Carbon	13	20000	20000	NA		NA	
Chloride	37	100000	100000	NA		NA	
Chromium							
Cobalt							
Copper							
Iron	57	250000	250000	228727	91.5	225666.5	90.3
Lead							
Magnesium	24	100000	100000	96127	96.1	94889.2	94.9
Manganese							
Molybdenum	98	2000	2000	1911	95.6	1978.2	98.9
Nickel							
Phosphorus	31	10000	10000	NA		NA	
Potassium	39	100000	100000	98618	98.6	96797.3	96.8
Selenium							
Silver							
Sodium	23	250000	250000	240929	96.4	237819.4	95.1
Sulfur	34	10000	10000	NA		NA	
Thallium							
Titanium	47	2000	2000	1984	99.2	1989.3	99.5
Vanadium							
Zinc							

Control Limits: All Metals 80%-120%



FORM 7

LABORATORY CONTROL SAMPLE

SDG No.: SAI24 Matrix: WATER

Analyte	Mass	Batch Number	Units	True	Found	С	Control Limits (%)	%R	М	In Spec
Antimony	121	172771063902	UG/L	6.000	5.634		85 - 117	94	MS	Yes
Arsenic	75	172771063902	UG/L	10.000	10.368		84 - 116	104	MS	Yes
Barium	137	172771063902	UG/L	50.000	49.804		86 - 114	100	MS	Yes
Beryllium	9	172771063902	UG/L	4.000	4.150		83 - 121	104	MS	Yes
Cadmium	111	172771063902	UG/L	5.000	5.149		87 - 115	103	MS	Yes
Chromium	52	172771063902	UG/L	50.000	50.542		85 - 116	101	MS	Yes
Cobalt	59	172771063902	UG/L	250.000	261.907		86 - 115	105	MS	Yes
Copper	63	172771063902	UG/L	50.000	53.752		85 - 118	108	MS	Yes
Lead	208	172771063902	UG/L	15.000	15.364		88 - 115	102	MS	Yes
Manganese	55	172771063902	UG/L	50.000	48.406		87 - 115	97	MS	Yes
Molybdenum	98	172771063902	UG/L	50.000	52.926		83 - 115	106	MS	Yes
Nickel	60	172771063902	UG/L	50.000	52.979		85 - 117	106	MS	Yes
Selenium	78	172771063902	UG/L	10.000	10.334		80 - 120	103	MS	Yes
Silver	107	172771063902	UG/L	50.000	52.532		85 - 116	105	MS	Yes
Thallium	203	172771063902	UG/L	2.000	1.969		82 - 116	98	MS	Yes
Vanadium	51	172771063902	UG/L	50.000	50.399		86 - 115	101	MS	Yes
Zinc	66	172771063902	UG/L	500.000	533.882		83 - 119	107	MS	Yes

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

CONCENTRATION QUALIFIERS:

U= Below MDL

B= Below LOQ

AF = Cold Vapor Atomic Fluorescenc Al24 Page 45 of 155



FORM 9

SERIAL DILUTIONS SDG No.: SAI24

Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: *40345BKG

Batch Number(s): 172771063902
Concentration Units: UG/L

Serial Dilution Lab Sample ID: *40345L

		Initial Sample		Serial Dilution				
Analyte	Mass	Result (I)	С	Result (S)	С	% Diff.	Q	М
Antimony	121	0.4510	U	2.2550	U			MS
Arsenic	75	4.1700		4.3500	В	4		MS
Barium	137	8.9630		8.8850	В	1		MS
Beryllium	9	0.1680	В	0.3565	U	100		MS
Cadmium	111	0.1520	U	0.7600	U			MS
Chromium	52	0.8700	U	4.3500	U			MS
Cobalt	59	94.6980		99.3000		5		MS
Copper	63	0.5360	U	2.6800	U			MS
Lead	208	0.1110	U	0.5550	U			MS
Manganese	55	4338.8950		4270.6300		2		MS
Molybdenum	98	0.2500	U	1.2500	U			MS
Nickel	60	104.0960		112.2050		8		MS
Selenium	78	0.5000	U	2.5000	U			MS
Silver	107	0.1460	U	0.7300	U			MS
Thallium	203	0.1170	U	0.5850	U			MS
Vanadium	51	0.2130	U	1.0650	U			MS
Zinc	66	98.0500		95.1550	В	3		MS

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:

U= Below MDL

B= Below LOQ

FLAGS:

E = Matrix Effects exist as proven by

SAI24 Page 46 of 155 rial Dilution or Spiked Dilution



FORM 10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

SDG No.: SAI24

Method: MS

Instrument ID: 19204

Date: 07/2017

Analyte	MASS (amu)	Background	IDL	(UG/L)
Antimony	121			0.35
Arsenic	75			0.60
Barium	137			0.43
Beryllium	9			0.054
Cadmium	111			0.15
Chromium	52			0.50
Cobalt	59			0.17
Copper	63			0.40
Lead	208			0.088
Manganese	55			0.90
Molybdenum	98			0.25
Nickel	60			0.61
Selenium	78			0.50
Silver	107			0.12
Thallium	203			0.12
Vanadium	51			0.17
Zinc	66			2.6

Comments:		

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

AF = Cold Vapor Atomic Fluorescent Page 47 of 155



FORM 10 MDL

METHOD DETECTION LIMITS (ANNUALLY)

SDG No.: SAI24 Matrix: WATER

Method: MS
Date: 06/2017

Analyte	Mass	Background	LOQ (UG/L)	MDL	(UG/L)
Antimony	121			2.0		0.45
Arsenic	75			4.0		0.72
Barium	137			4.0		0.72
Beryllium	9			1.0		0.071
Cadmium	111			1.0		0.15
Chromium	52			4.0		0.87
Cobalt	59			1.0		0.16
Copper	63			4.0		0.54
Lead	208			2.0		0.11
Manganese	55			4.0		0.90
Molybdenum	98			1.0		0.25
Nickel	60			4.0		1.0
Selenium	78			4.0		0.50
Silver	107			1.0		0.15
Thallium	203			1.0		0.12
Vanadium	51			1.0		0.21
Zinc	66			30.0		3.9

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:			

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

AF = Cold Vapor Atomic Fluorescence



FORM 13

PREPARATION LOG SDG No.: SAI24

Method: MS

Batch Number: 172771063902

Lab Sample ID	Date	Initial Volume(ml)	Final Volume(ml)
9240358	10/08/2017	50.00	50
9240359	10/08/2017	50.00	50
9240360	10/08/2017	50.00	50
*40345BKG	10/08/2017	50.00	50
P27763BB	10/08/2017	50.00	50
P27763BQ	10/08/2017	1.00	1

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

AF = Cold Vapor Atomic Fluorescence

MSD = Matrix Spike

MSD = Matrix Spike Duplicate

B = Blank

Q = Laboratory Control Sample

Y = Laboratory Control Sample Duplicate



FORM 14

ANALYSIS RUN LOG SDG No.: SAI24

Method: MS Run Start Date: 10/11/2017 Instrument ID: 19204 Run End Date: 10/11/2017 Run Name: 1728411E05

Run Name: 1	728411E05																										
																P	Ana	aly	te	S							
Lab Sample				Α		В	С	С	С	С	Р	Μ	М	Ν	S	А			Ζ								
ID	D/F	Time	В	S	А	Ε	D	R	Ο	U	В	N	0	Ι	Ε	G	L		Ν								l
S0	1.00	20:08	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ	Х	Χ	Х	Х								
S	1.00	20:11	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х								
CCS	1.00	20:14	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х	Χ	Х	Х								
CCS	1.00	20:17	Х	Х		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ			Х	Χ	Χ								
ICV	1.00	20:20	Χ							Χ			Х	Х			Х		Χ								
ICB	1.00	20:23	Χ	Х						Χ			Х			Х			Х								
LLC	1.00	20:26	Χ										Х	Χ			Χ										
ICSA	1.00	20:29											Χ	Χ			Х		Х								
ICSAB	1.00	20:32	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Х	Х	Х	Х								
ZZZZZZ	1.00	20:35																								$oxed{oxed}$	
CCV	1.00	20:39		Χ						Χ				Χ			Χ										
ССВ	1.00	20:42	Χ										Χ	Χ			Х		Х								
P27763BB	1.00	20:45	Χ							Χ			Χ	Χ			Χ		_								
P27763BQ	1.00	20:48	Χ	Χ					Х		Χ		Χ	Χ					Х								
*40345BKG	1.00	20:51	Χ	Х		Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Х	Х	Χ	Х								
ZZZZZZ	1.00	20:54																									
ZZZZZZ	1.00	20:57																									1
ZZZZZZ	1.00	21:00																									
ZZZZZZ	1.00	21:03																									1
*40345L	5.00	21:06	Χ	Х		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ								
ZZZZZZ	1.00	21:10																									
ZZZZZZ	1.00	21:13																									
CCV	1.00	21:16	Χ	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ														
CCB	1.00	21:19	Χ	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ	Х								
ZZZZZZ	1.00	21:22																									
ZZZZZZ	1.00	21:25																									
ZZZZZZ	1.00	21:28																									
9240358	1.00	21:31	Χ				Χ						Χ			Χ											
9240359	1.00	21:34	Χ									Χ						Χ									
9240360	1.00	21:37	Χ	Χ		Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Х	Х	Χ	Х								
ZZZZZZ	1.00	21:41																									
ZZZZZZ	1.00	21:44																									
ZZZZZZ	1.00	21:47																									
ZZZZZZ	1.00	21:50																									
CCV	1.00	21:53	Х				Χ																				
ССВ	1.00	21:56	Х	Χ		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Х	Х	Χ	Х	Χ								
			•															•						•	•		

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

AF = Cold Vapor Atomic Fluorescence

LEGEND:

BKG = Background
DUP = Duplicate

MS = Matrix Spike

MSD = Matrix Spike Duplicate

A = Post Digest Spike L = Serial Dilution

B = Blank

Q = Laboratory Control Sample

Y = Laboratory Control Sample Duplicate



FORM 14

ANALYSIS RUN LOG SDG No.: SAI24

Method: MS Run Start Date: 10/12/2017 Instrument ID: 19204 Run End Date: 10/12/2017

											_																
1																		aly		S							
Lab Sample				А				C	C	С	Ρ	М	М	Ν	S			V	Z								
ID	D/F	Time	В	S	А	Ε	D	R)	U :	В	Ν	0	Ι	Ε	G	L		Ν								
S0	1.00	04:17			Χ																						
S	1.00	04:19			Χ																						
CCS	1.00	04:21			Χ																						
CCS	1.00	04:23			Χ																						
ICV	1.00	04:25			Χ																						
ICB	1.00	04:26			Χ																						
LLC	1.00	04:28			Χ																						
ICSA	1.00	04:30			Χ																						
ICSAB	1.00	04:32			Х																						
ZZZZZZ	1.00	04:34																									
CCV	1.00	04:36			Х																						
CCB	1.00	04:37			Χ																						
P27763BQ	1.00	04:39			Χ																						
*40345BKG	1.00	04:41			Χ																						
ZZZZZZ	1.00	04:43																									
ZZZZZZ	1.00	04:45																									
ZZZZZZ	1.00	04:47																									
ZZZZZZ	1.00	04:48																									
*40345L	5.00	04:50			Χ																						
ZZZZZZ	1.00	04:52																									
ZZZZZZ	1.00	04:54																									
ZZZZZZ	1.00	04:56																									
CCV	1.00	04:58			Χ																						
CCB	1.00	05:00			Χ																						
ZZZZZZ	1.00	05:01																									
ZZZZZZ	1.00	05:03																									
ZZZZZZ	5.00	05:05																									
9240358	1.00	05:07			Χ																						
9240359	1.00	05:09			Χ																						
9240360	1.00	05:11			Х																						
ZZZZZZ	1.00	05:12							1																		
ZZZZZZ	1.00	05:14							1																		
ZZZZZZ	1.00	05:16							ı																	T	
ZZZZZZ	1.00	05:18																								T	
CCV	1.00	05:20			Χ																					T	
CCB	1.00	05:22			Χ	T			1															T		T	

METHODS:

P = ICP Atomic Emission Spectrometer

MS = ICP Mass Spectrometry

CV = Cold Vapor

AF = Cold Vapor Atomic Fluorescence

LEGEND:

BKG = Background

DUP = Duplicate

MS = Matrix Spike

MSD = Matrix Spike Duplicate

A = Post Digest Spike

L = Serial Dilution

B = Blank

Q = Laboratory Control Sample

Y = Laboratory Control Sample Duplicate



Lancaster Laboratories
Environmental

Instrument ID: 19204 Start Date: 10/11/2017 Run Name: 1728411E05 End Date: 10/11/2017

Standard	Elements Applies to	Standard	Elements Applies to
BI-2-209	PB,TL	IN-1-115	SE
IN-2-115	AG, AS, BA, CD, CO, CU, MO, NI, SB, ZN	SC-2-45	CR,MN,V
SC-3-45	BE		

Lab						Inter	nal	Standard	ds	%RI For:					
Sample		Element		Element		Element		Element		Element		Element		Element	
ID	Time	SC-2-45	Q	SC-3-45	Q	IN-1-115	Q	IN-2-115	Q	BI-2-209	Q		Q		Q
S0	20:08	100		100		100		100		100					
S	20:11	94		101		97		97		95					
CCS	20:14	94		98		99		94		97					
CCS	20:17	96		97		97		98		98					
ICV	20:20	96		101		98		96		97					
ICB	20:23	95		97		97		96		97					
LLC	20:26	94		98		97		98		97					
ICSA	20:29	87		91		89		86	ı	84					
ICSAB	20:32	88		92		89		89		84					
ZZZZZZ	20:35														
CCV	20:39	94		98		95		91		92					
CCB	20:42	95		97		95		94		92					
P27763BB	20:45	92		97		95		100		94					
P27763BQ	20:48	95		99		97		93		95					
*40345BKG	20:51	89		97		96		94		93					
ZZZZZZ	20:54														
ZZZZZZ	20:57														
ZZZZZZ	21:00														
ZZZZZZ	21:03														
*40345L	21:06	89		94		95		89		92					
ZZZZZZ	21:10														
ZZZZZZ	21:13														
CCV	21:16	91		96		95		93		92					
CCB	21:19	91		96		94		97		94					
ZZZZZZ	21:22														
ZZZZZZ	21:25														
ZZZZZZ	21:28														
9240358	21:31	92	ı	96		94		92		94					
9240359	21:34	90		96		93		92		96					
9240360	21:37	89		96		94		90		92					
ZZZZZZ	21:41														

LEGEND:		INTERNAL STANDARD E	LEMENTS:
BKG = Background	MS = Matrix Spike	BE = Beryllium	LI = Lithium
DUP = Duplicate	MSD = Matrix Spike Duplicate	BI = Bismuth	SC = Scandium
L = Serial Dilution	A = Post Digest Spike	GE = Germanium	TB = Terbium
B = Blank		HO = Holmium	Y = Yttrium
Q = Laboratory Contro	l Sample	IN = Indium	
Y = Laboratory Contro	l Sample Duplicate		
FLAG:			
R = Internal Standard	Relative Intensity OOS		



Environmental SDG No.: SAI24

QUALITY ASSURANCE SUMMARY

Lancaster Laboratories FORM 16
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: 19204 Start Date: 10/11/2017 Run Name: 1728411E05 End Date: 10/11/2017

Standard	Elements Applies to	Standard	Elements Applies to
BI-2-209	PB,TL	IN-1-115	SE
IN-2-115	AG, AS, BA, CD, CO, CU, MO, NI, SB, ZN	SC-2-45	CR,MN,V
SC-3-45	BE		

Lab						Inter	nal	LStandard	ds	%RI For:					
Sample		Element		Element		Element		Element		Element		Element		Element	
ID	Time	SC-2-45	Q	SC-3-45	Q	IN-1-115	Q	IN-2-115	Q	BI-2-209	Q		Q		Q
ZZZZZZ	21:44														
ZZZZZZ	21:47														
ZZZZZZ	21:50														
CCV	21:53	88		94		94		91		94					
ССВ	21:56	88		93		93		89		93					

LEGENI):		INTERNAL STANDARD EI	LEMENTS:
BKG	= Background	MS = Matrix Spike	BE = Beryllium	LI = Lithium
DUP	= Duplicate	MSD = Matrix Spike Duplicate	BI = Bismuth	SC = Scandium
T =	Serial Dilution	A = Post Digest Spike	GE = Germanium	TB = Terbium
B =	Blank		HO = Holmium	Y = Yttrium
Q =	Laboratory Contro	l Sample	IN = Indium	
Y =	Laboratory Contro	l Sample Duplicate		
FLAG:				
R =	Internal Standard	Relative Intensity OOS		



LEGEND:

QUALITY ASSURANCE SUMMARY

Lancaster Laboratories FORM 16
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY Environmental SDG No.: SAI24

Instrument ID: 19204 Start Date: 10/12/2017 Run Name: 1728503E05 End Date: 10/12/2017

Standard	Elements Applies to	Standard	Elements Applies to
IN-1-115	BA		

Lab						Inter	nal	Standard	ds	%RI For:					
Sample		Element		Element		Element		Element		Element		Element		Element	
ID	Time	IN-1-115	Q		Q		Q		Q		Q		Q		Q
S0	04:17	100													
S	04:19	95													
CCS	04:21	99													
CCS	04:23	98													
ICV	04:25	97													
ICB	04:26	98													
LLC	04:28	103													
ICSA	04:30	92													
ICSAB	04:32	90													
ZZZZZZ	04:34														
CCV	04:36	101													
CCB	04:37	102													
P27763BQ	04:39	106													
*40345BKG	04:41	99													
ZZZZZZ	04:43														
ZZZZZZ	04:45														
ZZZZZZ	04:47														
ZZZZZZ	04:48														
*40345L	04:50	108													
ZZZZZZ	04:52														
ZZZZZZ	04:54														
ZZZZZZ	04:56														
CCV	04:58	109													
CCB	05:00	110													
ZZZZZZ	05:01														
ZZZZZZ	05:03														
ZZZZZZ	05:05														
9240358	05:07	111													
9240359	05:09	106													
9240360	05:11	110													
ZZZZZZ	05:12														

BE = Beryllium	LI = Lithium	
BI = Bismuth	SC = Scandium	
GE = Germanium	TB = Terbium	
HO = Holmium	Y = Yttrium	
IN = Indium		
	BI = Bismuth GE = Germanium HO = Holmium	BI = Bismuth SC = Scandium GE = Germanium TB = Terbium HO = Holmium Y = Yttrium

INTERNAL STANDARD ELEMENTS:



Environmental SDG No.: SAI24

QUALITY ASSURANCE SUMMARY

Lancaster Laboratories FORM 16
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Instrument ID: 19204 Start Date: 10/12/2017 Run Name: 1728503E05 End Date: 10/12/2017

Standard	Elements Applies to	Standard	Elements Applies to
IN-1-115	BA		

Lab						Inter	na]	Standard	ds	%RI For:					
Sample		Element		Element		Element		Element		Element		Element		Element	T
ID	Time	IN-1-115	Q		Q		Q		Q		Q		Q		Q
ZZZZZZ	05:14														
ZZZZZZ	05:16														Ī
ZZZZZZ	05:18														T
CCV	05:20	114													T
CCB	05:22	113													

LEGEND:	INTERNAL STANDARD	ELEMENTS:
BKG = Background MS = Matrix Spike	BE = Beryllium	LI = Lithium
DUP = Duplicate MSD = Matrix Spike Duplicate	BI = Bismuth	SC = Scandium
L = Serial Dilution A = Post Digest Spike	GE = Germanium	TB = Terbium
B = Blank	HO = Holmium	Y = Yttrium
Q = Laboratory Control Sample	IN = Indium	
Y = Laboratory Control Sample Duplicate		
FLAG:		
R = Internal Standard Relative Intensity OOS		
04104 D 55	(4 = =	

CROSS REFERENCE TABLE

EPA 300.0

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to EPA 300.0.

IV. PREPARATION

Aqueous samples were prepared according to General Preparation.

V. INSTRUMENTATION

The following equipment was used to analyze EPA 300.0:

IC3 details: Metrohm model 881 Compact Pro Ion Chromatograph

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

3. Reference:

All method criteria were met.

D. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

E. Samples:

All method criteria were met.

FORM III - BLANKS EPA 300.0

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>IC3</u> Calibration: <u>1710011</u>

Sequence: S708848 Matrix: Drinking Water

Lab Sample ID	Analyte	Found	MRL	Units	С	Method
S708848-ICB1	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	BRL	0.010	mg/l	U	EPA 300.0

FORM III - BLANKS EPA 300.0

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

 Instrument ID: <u>IC3</u>
 Calibration: <u>1710011</u>

 Sequence: <u>8709516</u>
 Matrix: Aqueous

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
1715547-CCB1	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	BRL	0.100	mg/l	U	EPA 300.0
1715547-CCB2	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	0.007	0.100	mg/l	J	EPA 300.0
1715547-CCB3	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	BRL	0.100	mg/l	U	EPA 300.0
1715547-BLK1	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	BRL	0.100	mg/l	U	EPA 300.0
1715547-CCB4	Chloride	BRL	1.00	mg/l	U	EPA 300.0
	Sulfate as SO4	BRL	1.00	mg/l	U	EPA 300.0
	Nitrate as N	BRL	0.100	mg/l	U	EPA 300.0

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

EPA 300.0

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: IC3

Batch: <u>1715547</u> Laboratory ID: <u>1715547-BS1</u>

 Preparation:
 General Preparation
 Initial/Final:
 5 ml / 5 ml

 Analyzed:
 09/12/17 19:42
 Spike ID:
 17I0114

File ID: <u>091217-034</u>

COMPOUND	SPIKE ADDED (mg/l)	LCS CONCENTRATION (mg/l)	LCS % REC.#	QC LIMITS REC.
Chloride	20.0	19.1	95	90 - 110
Sulfate as SO4	20.0	19.7	98	90 - 110
Nitrate as N	2.00	1.93	97	90 - 110

[#] Column to be used to flag recovery and RPD values with an asterisk

Individual peaks for multi-component analytes are indicated by a number in parentheses

^{*} Values outside of QC limits

FORM VIIb(Inorganics) - STANDARD REFERENCE MATERIAL RECOVERY

EPA 300.0

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Spike ID: 17I0116

Batch: <u>1715547</u> **Laboratory ID:** <u>1715547-SRM1</u>

Preparation: General Preparation Initial/Final: 5 ml / 5 ml

ANALYTE	TRUE (mg/l)	FOUND (mg/l)	SRM % REC.	QC LIMITS REC.
Chloride	25.0	23.4	94	90 - 110
Sulfate as SO4	25.0	24.6	98	90 - 110
Nitrate as N	2.50	2.43	97	90 - 110

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS EPA 300.0

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Chloride	0.0994	1.00	mg/l
	0.0994	1.00	mg/l
Nitrate as N	0.007	0.010	mg/l
Sulfate as SO4	0.798	1.00	mg/l
	0.798	1.00	mg/l
Nitrate as N	0.007	0.100	mg/l

PREPARATION BENCH SHEET

1715547	
1/1331/	

Balance ID	M	A	
		-	

Иa	trix:	Aqueous	

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Matrix: Aqueou	IS			Prepare	i using:	wet Che	m - General I	тератация		(No Surr
Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
1715547-BLK1	Blank		QC	5	5					
1715547-BS1	LCS		QC	5	5	1710114				
1715547-CCB1	Calibration Blank		QC	5	5					
1715547-CCB2	Calibration Blank		QC	5	5					
1715547-CCB3	Calibration Blank		QC	5	5					
1715547-CCB4	Calibration Blank		QC	5	5					
1715547-CCV1	Calibration Check		QC	5	5	17I0114				
1715547-CCV2	Calibration Check		QC	5	5	17I0114				
1715547-CCV3	Calibration Check		QC	5	5	17I0114				
1715547-CCV4	Calibration Check		QC	5	5	1710114				
1715547-DUP1	Duplicate		QC .	5	5		SC39039-02			
1715547-MS1	Matrix Spike		QC	5	5	17I0115	SC39039-02		TYITCH	
1715547-MSD1	Matrix Spike Dup		QC	5	5	17I0115	SC39039-02		TY/ICH	
1715547-SRM1	Reference		QC	5	5	17I0116				
SC38976-01	RO Brine	В	wc-Sulfate - 30	5	5			18-Sep-17 16:00	TY, ICHI	
SC39026-01	17I0231-01	A	wc-Fluoride-30	5	5			18-Sep-17 15:00	,,,	CT RCP
SC39039-01	Influent	Н	wc-Chloride-30	5	5			13-Sep-17 15:00		See attached for limits & compounds
SC39039-02	Effluent	G	wc-Chloride-30	5	5			13-Sep-17 15:00		See attached for limits & compounds
SC39039-02	Effluent	G	wc-Fluoride-30	5	5					BatchQC
SC39039-02	Effluent	G	wc-Nitrate 300.	5	5					BatchQC
SC39039-02	Effluent	G	wc-Sulfate - 30	5	5					BatchQC
SC39045-04	GES-2D	Н	wc-Sulfate - 30	5	5			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1

Analyst Reviewed

7.14.17 Date Manager Reviewed

9/4/2 Date

Extracts Received By

Date

Printed: 9/14/2017 10:17:53AM

SDG SC39093 Page 1613 / 1731

PREPARATION BENCH SHEET

1715517	
1715547	
1 / 1 .) .) + /	

Balance ID	
------------	--

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

									, ,
	Lab Number Client ID	ID Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
	SC39045-05 GES-4R	G wc-Sulfate - 30	5	5			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
	SC39045-07 MW-1	H wc-Sulfate - 30	5	5			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
7	SC39093-01 TF1-GT-121-09111	N wc-Chloride-30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-01 TF1-GT-121-09111	N wc-Nitrate 300.	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-01 TF1-GT-121-09111	N wc-Sulfate - 30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-02 TF1-GT-119-09111	N wc-Chloride-30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-02 TF1-GT-119-09111	N wc-Nitrate 300.	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-02 TF1-GT-119-09111	N wc-Sulfate - 30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-03 TF1-GZ-103-09111	O wc-Chloride-30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-03 TF1-GZ-103-09111	O wc-Nitrate 300.	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-03 TF1-GZ-103-09111	O wc-Sulfate - 30	5	5			21-Sep-17 16:00		DoD Level IV
7	SC39093-02 TF1-GT-119-09111 SC39093-03 TF1-GZ-103-09111 SC39093-03 TF1-GZ-103-09111	N wc-Sulfate - 30 O wc-Chloride-30 O wc-Nitrate 300.	5 5 5	5 5 5			21-Sep-17 16:00 21-Sep-17 16:00 21-Sep-17 16:00		DoD Level IV DoD Level IV DoD Level IV

9/12/17 AQ ANIONS LNB

Reagents Used:

17A0456 IC3 column

17I0242 IC3 Eluent 090817

Extracts Received By

Date

Printed: 9/14/2017 10:17:53AM

SDG SC39093 Page 1614 / 1731

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY EPA 300.0

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S708848</u> Instrument: <u>IC3</u>

Calibration: <u>1710011</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Cal Standard	S708848-CAL3	081717-012	08/17/17 14:13
Cal Standard	S708848-CAL2	081717-013	08/17/17 14:29
Cal Standard	S708848-CAL4	081717-014	08/17/17 14:45
Cal Standard	S708848-CAL5	081717-015	08/17/17 15:01
Cal Standard	S708848-CAL6	081717-016	08/17/17 15:16
Cal Standard	S708848-CAL7	081717-017	08/17/17 15:32
Cal Standard	S708848-CAL8	081717-018	08/17/17 15:48
Cal Standard	S708848-CAL1	081717-025	08/17/17 17:39
Initial Cal Check	S708848-ICV1	081717-026	08/17/17 17:55
Initial Cal Blank	S708848-ICB1	081717-027	08/17/17 18:11

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY EPA 300.0

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: <u>S709516</u> Instrument: <u>IC3</u>

Calibration: <u>1710011</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Calibration Check	1715547-CCV1	091217-007	09/12/17 12:32
Calibration Blank	1715547-CCB1	091217-008	09/12/17 12:48
Calibration Check	1715547-CCV2	091217-019	09/12/17 15:43
Calibration Blank	1715547-CCB2	091217-020	09/12/17 15:59
Calibration Check	1715547-CCV3	091217-031	09/12/17 18:54
Calibration Blank	1715547-CCB3	091217-032	09/12/17 19:10
Blank	1715547-BLK1	091217-033	09/12/17 19:26
LCS	1715547-BS1	091217-034	09/12/17 19:42
Reference	1715547-SRM1	091217-035	09/12/17 19:58
TF1-GT-121-091117	SC39093-01	091217-038	09/12/17 20:46
TF1-GT-119-091117	SC39093-02	091217-039	09/12/17 21:02
TF1-GZ-103-091117	SC39093-03	091217-040	09/12/17 21:18
Calibration Check	1715547-CCV4	091217-043	09/12/17 22:06
Calibration Blank	1715547-CCB4	091217-044	09/12/17 22:22

CROSS REFERENCE TABLE

SM5310B (00, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No. SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport / 112608005-WE15

SDG #: SC39093

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception or a communication form is included in the addendum with this package.

II. HOLDING TIMES

All samples were prepared and analyzed within the method-specific holding time.

III. METHODS

Analyses were performed according to SM5310B (00, 11).

IV. PREPARATION

Aqueous samples were prepared according to General Preparation.

V. INSTRUMENTATION

The following equipment was used to analyze SM5310B (00, 11):

TOC4 details: Shimadzu TOC-L

VI. ANALYSIS

A. Calibration:

All quality control samples were within the acceptance criteria.

B. Blanks:

All blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Samples (LCS):

All method criteria were met.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No matrix spike or matrix spike duplicates were analyzed.

3. Reference:

All method criteria were met.

D. Duplicates:

No client requested duplicate. However, the method criteria may have been fulfilled with non-SDG source samples.

E. Samples:

All method criteria were met.

FORM III - BLANKS SM5310B (00, 11)

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: TOC4 Calibration: 1706085
Sequence: S705799 Matrix: Aqueous

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S705799-ICB1	Total Organic Carbon	0.3281	1.00	mg/l	J	SM5310B (00, 11)
			/			

FORM III - BLANKS SM5310B (00, 11)

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: TOC4 Calibration: 1706085
Sequence: S708405 Matrix: Aqueous

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
1716147-CCB1	Total Organic Carbon	BRL	1.00	mg/l	U	SM5310B (00, 11)
1716147-BLK1	Total Organic Carbon	BRL	1.00	mg/l	U	SM5310B (00, 11)
1716147-CCB2	Total Organic Carbon	BRL	1.00	mg/l	U	SM5310B (00, 11)
1716147-CCB3	Total Organic Carbon	BRL	1.00	mg/l	U	SM5310B (00, 11)

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SM5310B (00, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: TOC4

Batch: <u>1716147</u> Laboratory ID: <u>1716147-BS1</u>

Preparation: General Preparation Initial/Final: 40 ml / 40 ml

File ID: <u>1716147-004</u>

17H0827

	SPIKE	LCS	LCS	QC
	ADDED	CONCENTRATION	%	LIMITS
COMPOUND	(mg/l)	(mg/l)	REC. #	REC.
Total Organic Carbon	15.0	13.2	88	85 - 115

Spike ID:

09/20/17 17:25

Analyzed:

Individual peaks for multi-component analytes are indicated by a number in parentheses

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM VIIb(Inorganics) - STANDARD REFERENCE MATERIAL RECOVERY

SM5310B (00, 11)

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Spike ID: 17H0608

Batch: <u>1716147</u> **Laboratory ID:** <u>1716147-SRM1</u>

Preparation: General Preparation Initial/Final: 40 ml / 40 ml

ANALYTE	TRUE (mg/l)	FOUND (mg/l)	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	14.6	13.4	92	88 - 112

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SM5310B (00, 11)

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Total Organic Carbon	0.238	1.00	mg/l

1716147

Sequence S708405

Balance ID	M

Matrix:	Aqueous
---------	---------

Prepared using: Wet Chem - General Preparation

- Iqueot				rrepare	a using	: wet Che	em - General	Preparation		(No Surrogate
Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	
1716147-BLK1	Blank		QC	40	40				T spec 1B	Sample Comments
1716147-BS1	LCS		QC	40	40	17H0827				
1716147-CCB1	Calibration Blank		QC	40	40			†		
1716147-CCB2	Calibration Blank	\top	QC	40	40					
1716147-CCB3	Calibration Blank		QC	40	40					
1716147-CCV1	Calibration Check	\vdash	QC	40	40	17H0827				
1716147-CCV2	Calibration Check	T	QC	40	40	17H0827				
1716147-CCV3	Calibration Check		QC	40	40	17H0827				
1716147-DUP1	Duplicate	\vdash	QC	40	40	17110627	SC20162-01			
1716147-MS1	Matrix Spike	-	QC			160051	SC39163-01			
1716147-MSD1	Matrix Spike Dup	\vdash		40	40	16E0251	SC39163-01		ICI	
		_	QC	40	40	16E0251	SC39163-01		ICI	
1716147-SRM1	Reference		QC	40	40	17H0608			Pa	
SC39093-01	TF1-GT-121-091117	F	wc-TOC - water	40	40			21-Sep-17 16:00	1	DoD Level IV
SC39093-02	TF1-GT-119-091117	F	wc-TOC - water	40	40			21-Sep-17 16:00		DoD Level IV
SC39093-03	TF1-GZ-103-091117	F/	wc-TOC - water	40	40			21-Sep-17 16:00		DoD Level IV
SC39163-01	TF1-GT-130-091217	F	wc-TOC - water	40	40			22-Sep-17 16:00		DoD Level IV
SC39163-02	TF1-GT-115-091217 /	F	wc-TOC - water	40	40			22-Sep-17 16:00		DoD Level IV
SC39163-03	TF1-GT-111-091217	F	wc-TOC - water	40	40			22-Sep-17 16:00		DoD Level IV
SC39163-04	TF1-GT-118-091217	F	wc-TOC - water	40	40			22-Sep-17 16:00		DoD Level IV
SC39163-05	TF1-DUP-03-091217	F	wc-TOC - water	40	40			22-Sep-17 16:00		
SC39163-06	TF1-MW-1004-091217	F	wc-TOC - water	40	40			22-Sep-17 16:00		DoD Level IV
SC39163-07	TF1-GZ-106-091217	F	wc-TOC - water	40	40					DoD Level IV
			- I all		70			22-Sep-17 16:00		DoD Level IV
ļ	1	ı	1		1	1				

(M (wel -	9.2212
Analyst Reviewed	Date
Printed: 9/21/2017 6:10:24PM	

Manager Reviewed

Extracts Received By

Date

1716147

Sequence S708405

Balance ID

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number

Client ID

ID Analysis

Initial (ml)

Final (ml) Spike ID Source ID

Due Date

Pipet ID

Sample Comments

toc9/20/17rlt

VIAL LOT 7-080-001

Reagents Used:

17E0315

TOC WATER---1M HCL

Manager Reviewed

Date

Extracts Received By

Date

Printed: 9/21/2017 6:10:24PM

SDG SC39093 Page 1675 / 1731

Page 2 of 2

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SM5310B (00, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S705799}$ Instrument: $\underline{TOC4}$

Calibration: <u>1706085</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Cal Standard	S705799-CAL1	0-100 062217-012	06/21/17 13:22
Cal Standard	S705799-CAL2	0-100 062217-016	06/21/17 13:48
Cal Standard	S705799-CAL3	0-100 062217-020	06/21/17 14:10
Cal Standard	S705799-CAL4	0-100 062217-024	06/21/17 14:33
Cal Standard	S705799-CAL5	0-100 062217-028	06/21/17 14:55
Cal Standard	S705799-CAL6	0-100 062217-032	06/21/17 15:18
Cal Standard	S705799-CAL7	0-100 062217-036	06/21/17 15:41
Cal Standard	S705799-CAL8	0-100 062217-040	06/21/17 16:04
Initial Cal Check	S705799-ICV1	0-100 062217-044	06/21/17 16:26
Initial Cal Blank	S705799-ICB1	0-100 062217-048	06/21/17 16:43

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SM5310B (00, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: $\underline{S708405}$ Instrument: $\underline{TOC4}$

Calibration: <u>1706085</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Calibration Check	1716147-CCV1	1716147-001	09/20/17 16:40
Calibration Blank	1716147-CCB1	1716147-002	09/20/17 16:56
Blank	1716147-BLK1	1716147-003	09/20/17 17:11
LCS	1716147-BS1	1716147-004	09/20/17 17:25
Reference	1716147-SRM1	1716147-005	09/20/17 17:41
TF1-GT-121-091117	SC39093-01	1716147-006	09/20/17 18:30
TF1-GT-119-091117	SC39093-02	1716147-007	09/20/17 18:46
TF1-GZ-103-091117	SC39093-03	1716147-008	09/20/17 19:03
Calibration Check	1716147-CCV2	1716147-013	09/20/17 20:20
Calibration Blank	1716147-CCB2	1716147-014	09/20/17 20:36
Calibration Check	1716147-CCV3	1716147-021	09/20/17 22:26
Calibration Blank	1716147-CCB3	1716147-022	09/20/17 22:43

CROSS REFERENCE TABLE

SM18-22 5210B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

FORM III - BLANKS SM18-22 5210B

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>DO Meter</u> Calibration: <u>UNASSIGNED</u>

Sequence: <u>S708258</u> Matrix: Aqueous

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
1715712-BLK1	Biochemical Oxygen Demand (5-day	BRL	3.00	mg/l	U	SM18-22 5210B
1715712-BLK2	Biochemical Oxygen Demand (5-day	BRL	3.00	mg/l	U	SM18-22 5210B

FORM IIIa - LCS / LCS DUPLICATE RECOVERY SM18-22 5210B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: DO Meter

Batch: <u>1715712</u> Laboratory ID: <u>1715712-BS1</u>

Preparation: General Preparation Initial/Final: 300 ml / 300 ml

Analyzed: 09/18/17 10:45 Spike ID: 17H0348

File ID:

	SPIKE ADDED	LCS CONCENTRATION	LCS %	QC LIMITS
COMPOUND	(mg/l)	(mg/l)	REC. #	REC.
Biochemical Oxygen Demand (5-day)	198	174	88	85 - 115

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM VIIb(Inorganics) - STANDARD REFERENCE MATERIAL RECOVERY

SM18-22 5210B

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Spike ID: 17I0355

Batch: <u>1715712</u> **Laboratory ID:** <u>1715712-SRM1</u>

Preparation: General Preparation Initial/Final: 300 ml / 300 ml

ANALYTE	TRUE (mg/l)	FOUND (mg/l)	SRM % REC.	QC LIMITS REC.
Biochemical Oxygen Demand (5-day)	45.6	44.0	96	67 - 133

^{*} Values outside of QC limits

FORM VIIb(Inorganics) - STANDARD REFERENCE MATERIAL RECOVERY

SM18-22 5210B

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Spike ID: 17I0355

Batch: <u>1715712</u> **Laboratory ID:** <u>1715712-SRM2</u>

Preparation: General Preparation Initial/Final: 300 ml / 300 ml

ANALYTE	TRUE (mg/l)	FOUND (mg/l)	SRM % REC.	QC LIMITS REC.
Biochemical Oxygen Demand (5-day)	45.6	45.0	99	67 - 133

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SM18-22 5210B

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Biochemical Oxygen Demand (5-day)	2.74	3.00	mg/l

FORM VIII(Organics)/FORM XIII(Inorganics) ANALYSIS BATCH (SEQUENCE) SUMMARY SM18-22 5210B

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Sequence: S708258 Instrument: DO Meter

Calibration: <u>UNASSIGNED</u>

Sample Name	Lab Sample ID	Lab File ID	Analyzed
Blank	1715712-BLK1		09/18/17 10:45
LCS	1715712-BS1		09/18/17 10:45
Reference	1715712-SRM1		09/18/17 10:45
TF1-GT-121-091117	SC39093-01		09/18/17 10:45
TF1-GT-119-091117	SC39093-02		09/18/17 10:45
TF1-GZ-103-091117	SC39093-03		09/18/17 10:45
Reference	1715712-SRM2		09/18/17 10:45
Blank	1715712-BLK2		09/18/17 10:45

1715712

Sequence S708258

Balance	ID	NA	

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
1715712-BLK1	Blank		QC	300	300					
1715712-BLK2	Blank		QC	300	300					
1715712-BS1	LCS		QC	300	300	17H0348				
1715712-DUP1	Duplicate		QC	300	300		SC39036-01			
1715712-MS1	Matrix Spike		QC	300	300	17H0348	SC39036-01			
1715712-MSD1	Matrix Spike Dup		QC	300	300	17H0348	SC39036-01			
1715712-SRM1	Reference		QC	300	300	1710355				
1715712-SRM2	Reference		QC	300	300	1710355				
SC39036-01	Influent	A	wc-BOD/5-day	300	300			20-Sep-17 16:00		
SC39036-02	Effluent	A	wc-BOD/5-day	300	300			20-Sep-17 16:00		
SC39093-01	TF1-GT-121-091117	0	wc-BOD/5-day	300	300			21-Sep-17 16:00		DoD Level IV
SC39093-02	TF1-GT-119-091117	0	wc-BOD/5-day	300	300			21-Sep-17 16:00		DoD Level IV
SC39093-03	TF1-GZ-103-091117	0	wc-BOD/5-day	300	300			21-Sep-17 16:00		DoD Level IV
SC39108-03	B091217	A	wc-BOD/5-day	300	300			22-Sep-17 16:00	·	

wc-BOD5 09/13/17

Reagents Used:

Analyst Reviewed Date Manager Reviewed Date Extracts Received By Date

Printed: 9/18/2017 10:49:16AM

SDG SC39093 Page 1701 / 1731

1715712

Work Continued From Page: 76

Reviewed Weekly By: _____

5704258

... Start Date: <u>09|13|17</u>

Analyst:

In Date: 09 [13] 17

Time: \500

Analyst:

Out Date: 01/18/D Date: 11/13/17

Time: 0930
Analyst: \frac{1}{2}

Bottle number	Sample ID	Client ID	chlorine /pH	volume mL	initial DO	final DO	change in DO	seed blank	dilution factor	Deculte werd
763	Blk	Client ID	7011		8.65	8.41	.24	Diank	lactor	Results mg/L
235	Seed 1				8,62	7.62	1.00			
ורר	2				863	7.49	1.14			1.05
355	3				864	7.63	[0]		Jan	
485	BS	1740348		3	8,65	5.81	2.84	V	100	179 \ 174
960			3	3	1865	5.91	2.74		100	169/ @106
460	SRM	17 IO355		15	8.64	5.35	3.29		20	45 440
914.				15	8,65	5.43	3.22		20	43 / 20
976	5C39036.01A	Inquent	7.67	1	8,66	5.83	2.83		300	534
406		0		3	8,65	2.89	5.76		100	471 \ 503@
796			4	5	8.67	.34	-		60	- / 100
817	Dup	SC39036.01		1	8.67	568.	2.99		300	582
245				3	8.67	2.85	5.82		100	477 > 5300
699				5	228	.25	-		60	-/ (100
448	MS			1	8,65	3.64	5.01		300	1188 12150
510		1		1	867	3.48	5.19		300	1242/ 121360
537	MCD			(8.66	-3.73	4.93		300	1164 \ 11940
464)	867	3.54	5.13	grand.	300	1224 / 300
962	\$39036.024	+ Fylment	7.17	10	8,67	7.21	1.46	1	30	
980		v0 -		30	8.75	7.25	1.50	vi vi	W	- BRLa
251	2625			100	8.93	6,94	1.99		3	3
MZA	\$639 093 010	TF1-GT-121-09111	7 6.16	(0	8,67	7.46	1.21		30 .	-
356		¥.		30	8.71	7.20	1.51		ĮÛ	-) 6 (a) 3
73)			• - ,	100	8.91	5.85	3.06		3	6
Ferry many threshold the contract of the contract of										

1715712 B005 5708258 Work Continued From Page: 77

Reviewed Weekly By: MB

Start Date: <u>69 (3 (1)</u>

In Date: 69 (13)

Out Date: 09/18/17 Date: 11/13/17

Time: 1300
Analyst:

Time: 1500
Analyst: w

Time: 6130
Analyst: 77

Bottle number	Sample ID	Client ID	chlorine /pH	volume mL	initial DO	final DO	change in DO	seed blank	dilution factor	Results mg/L
897	1	TF1-GT-119-0911	/	(0	8.67	7.57	1.10		30	-
999	30 10 19.000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7.08	30	8.71	7.30	1.41		V	-) 6@3
385	2.000			(00	8.95	574	3.21		3	6
957	8039 093 03 0	TF1-67-103-09	1117 6.33	(0	865	7,41	124		30	-
534	3,1013.03			30	8.51	7.02	1.49	V*.	10	-) 6(a3
066			1	(00	834	5.18	3.16		3	6
50 5	5039108-034	8091217	7.32	1	865	6.20	2.45		300	420
206		20 11 01		3	867	3.05	5.62		100	457 \4390
592	710	M. K.	11/11/11/21	5	8.66	.023	- 100	*	60	457) 439@100
487	*	ì		10	8,65	00	-		30	
404	SRM.		-	15	865	5.11	3.54		20	50 45 @ 20
350				15	8.65	5.64.	3.01		20	301
376	Blic			2.5	8.63	8.49	2.14		17 (1)	No. 18 Personal Control of the Contr
			*.		1	*	wool	8/17	419	
					1				COLEM	
		,							1	
								70	091(8)	17
		4					7	1		
										4
								**		χ.
	*									
** *				11		- N	*		*	×
Y 44	1		* * .	- 1	9					
				-			753		e ²	

CROSS REFERENCE TABLE

SM2320B (97, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Project Number: <u>112608005-WE15</u>

Client Sample ID: Lab Sample ID:

 TF1-GT-121-091117
 SC39093-01

 TF1-GT-119-091117
 SC39093-02

 TF1-GZ-103-091117
 SC39093-03

FORM III - BLANKS SM2320B (97, 11)

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Instrument ID: <u>Titrator</u> Calibration:

Sequence: Matrix: Aqueous

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
1715978-BLK1	Total Alkalinity	BRL	4.00	mg/l CaCO3	U	SM2320B (97, 11)
1715978-BLK2	Total Alkalinity	BRL	4.00	mg/l CaCO3	U	SM2320B (97, 11)
1715978-BLK3	Total Alkalinity	BRL	4.00	mg/l CaCO3	U	SM2320B (97, 11)
1715978-BLK4	Total Alkalinity	BRL	4.00	mg/l CaCO3	U	SM2320B (97, 11)

SM2320B (97, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Titrator

Batch: <u>1715978</u> Laboratory ID: <u>1715978-BS1</u>

Analyzed: 09/19/17 12:32 Spike ID: 17E0587

File ID: <u>DTOOL Alk 2017-09-19 1230-002</u>

50 ml / 50 ml

COMPOUND	SPIKE	LCS	LCS	QC
	ADDED	CONCENTRATION	%	LIMITS
	(mg/l CaCO3)	(mg/l CaCO3)	REC.#	REC.
Total Alkalinity	50.0	52.4	105	90 - 110

Initial/Final:

General Preparation

Preparation:

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

SM2320B (97, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Titrator

Batch: <u>1715978</u> Laboratory ID: <u>1715978-BS2</u>

Analyzed: 09/19/17 13:21 Spike ID: 17E0587

File ID: <u>DTOOL Alk 2017-09-19 1230-012</u>

50 ml / 50 ml

COMPOUND	SPIKE	LCS	LCS	QC
	ADDED	CONCENTRATION	%	LIMITS
	(mg/l CaCO3)	(mg/l CaCO3)	REC.#	REC.
Total Alkalinity	50.0	51.7	103	90 - 110

Initial/Final:

General Preparation

Preparation:

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

SM2320B (97, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Titrator

Batch: <u>1715978</u> Laboratory ID: <u>1715978-BS3</u>

Analyzed: 09/19/17 14:24 Spike ID: 17E0587

File ID: <u>DTOOL Alk 2017-09-19 1230-024</u>

50 ml / 50 ml

COMPOUND	SPIKE	LCS	LCS	QC
	ADDED	CONCENTRATION	%	LIMITS
	(mg/l CaCO3)	(mg/l CaCO3)	REC.#	REC.
Total Alkalinity	50.0	51.5	103	90 - 110

Initial/Final:

General Preparation

Preparation:

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

SM2320B (97, 11)

Laboratory: <u>Eurofins Spectrum Analytical, Inc. - MA</u> SDG: <u>SC39093</u>

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Instrument: Titrator

Batch: <u>1715978</u> Laboratory ID: <u>1715978-BS4</u>

Analyzed: 09/19/17 15:15 Spike ID: 17E0587

File ID: <u>DTOOL Alk 2017-09-19 1230-032</u>

50 ml / 50 ml

GOV MOVING	SPIKE ADDED	LCS CONCENTRATION	LCS %	QC LIMITS
COMPOUND	(mg/l CaCO3)	(mg/l CaCO3)	REC. #	REC.
Total Alkalinity	50.0	51.7	103	90 - 110

Initial/Final:

General Preparation

Preparation:

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

FORM VIIb(Inorganics) - STANDARD REFERENCE MATERIAL RECOVERY

SM2320B (97, 11)

Laboratory: Eurofins Spectrum Analytical, Inc. - MA SDG: SC39093

Client: Tetra Tech, Inc. - Salem, NH

Project: WE15 Tank Farm 1 NAVSTA Newport

Matrix: Aqueous Spike ID: 17H0359

Batch: <u>1715978</u> Laboratory ID: <u>1715978-SRM1</u>

Preparation: General Preparation Initial/Final: 15 ml / 50 ml

ANALYTE	TRUE (mg/l CaCO3)	FOUND (mg/l CaCO3)	SRM % REC.	QC LIMITS REC.
Total Alkalinity	124	131	105	92 - 111

^{*} Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS SM2320B (97, 11)

 Laboratory:
 Eurofins Spectrum Analytical, Inc. - MA
 SDG:
 SC39093

Client: Tetra Tech, Inc. - Salem, NH Project: WE15 Tank Farm 1 NAVSTA Newport

Analyte	MDL	MRL	Units
Total Alkalinity	1.05	4.00	mg/l CaCO3

1715978

AIK-20170919_ 1230 **Balance ID**

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Tacrix. riqueou		Т		Initial	Final		iii - Gellerar	- reparation		(No Suri
Lab Number	Client ID	ID	Analysis	(ml)	(ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
1715978-BLK1	Blank		QC	50	50					•
1715978-BLK2	Blank		QC	50	50					
1715978-BLK3	Blank		QC	50	50					
1715978-BLK4	Blank		QC	50	50					
1715978-BS1	LCS		QC	50	50	17E0587				
1715978-BS2	LCS		QC	50	50	17E0587				
1715978-BS3	LCS		QC	50	50	17E0587				
1715978-BS4	LCS		QC	50	50	17E0587				
1715978-DUP1	Duplicate		QC	100	50		SC39149-06			
1715978-MS1	Matrix Spike	1	QC	100	50	17E0587	SC39149-06			
1715978-MSD1	Matrix Spike Dup		QC	100	50	17E0587	SC39149-06			
1715978-SRM1	Reference		QC	15	50	17H0359				
SC38858-01	Raw 0917	A	wc-Alkalinity S	50	50			15-Sep-17 16:00		
SC38858-02	Primary 0917	A	wc-Alkalinity S	50	50			15-Sep-17 16:00		
SC38858-03	Final 0917	A	wc-Alkalinity S	50	50			15-Sep-17 16:00		
SC39045-04	GES-2D	Н	wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
SC39045-05	GES-4R	Н	wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
SC39045-07	MW-I	Н	wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
SC39087-01	East Side of Lake	А	wc-Alkalinity S	100	50			21-Sep-17 16:00		
SC39087-02	West Side of Bake	А	wc-Alkalinity S	100	50			21-Sep-17 16:00		
SC39093-01	TF1-GT-121-091117	N	we-Alkalinity S	100	50			21-Sep-17 16:00		DoD Level IV
SC39093-02	TF1-GT-119-091117	0	wc-Alkalinity S	100	50			21-Sep-17 16:00		DoD Level IV

Analyst Reviewed

Date

Manager Reviewed

Extracts Received By

Date

Printed: 9/19/2017 4:36:19PM

SDG SC39093 Page 1724 / 1731

1715978

	1A	
Balance ID _	/ '	

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
SC39093-03	TF1-GZ-103-091117	0	wc-Alkalinity S	100	50			21-Sep-17 16:00		DoD Level IV
SC39149-01	BED-GW-MW24R-09132017	Н	wc-Alkalinity S	100	50			22-Sep-17 16:00		DoD Level IV
SC39149-03	BED-GW-MW8B-09132017	Н	wc-Alkalinity S	100	50			22-Sep-17 16:00		DoD Level IV
SC39149-04	BED-GW-MW84R-09132017	Н	wc-Alkalinity S	100	50			22-Sep-17 16:00		DoD Level IV
SC39149-05	BED-GW-MW85R-09132017	Н	wc-Alkalinity S	100	50			22-Sep-17 16:00		DoD Level IV
SC39149-06	BED-GW-MW23R-09132017	W	wc-Alkalinity S	100	50			22-Sep-17 16:00		Run MS/MSD/DoD Level IV
SC39149-08	BED-GW-DUP03-09132017	Н	wc-Alkalinity S	100	50			22-Sep-17 16:00		DoD Level IV
SC39153-03	MW-23) _F	wc-Alkalinity S	50	50			22-Sep-17 16:00		
SC39153-05	MW-29	F	wc-Alkalinity S	50	50			22-Sep-17 16:00		
SC39153-06	MW-28	F	wc-Alkalinity S	50	50			22-Sep-17 16:00		

9/18/17

Reagents Used:

Analyst Reviewed

Date

Extracts Received By

Date

Printed: 9/19/2017 4:36:19PM

SDG SC39093 Page 1725 / 1731

4	71	100	70
- 1	/	159	/X
- 1	/	01	10

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
715978-BLK1	Blank		QC	50	50	орис по	Bource IB	Due Date	Tipet ID	Sample Comments
715978-BLK2	Blank		QC	50	50					
715978-BS1	LCS		QC	50	50					
715978-DUP1	Duplicate		QC	50	50					
715978-MS1	Matrix Spike		QC	50	50					
715978-MSD1	Matrix Spike Dup		QC	50	50					
715978-SRM1	Reference		QC	50	50					
C38858-01	Raw 0917 50	-	wc-Alkalinity S	50	50			15-Sep-17 16:00		
SC38858-02	Primary 0917 50	-	wc-Alkalinity S	50	50			15-Sep-17 16:00		
C38858-03	Final 0917 50	121	wc-Alkalinity S	50	50			15-Sep-17 16:00		
C39045-04	GES-2D 50		wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
6C39045-05	GES-4R 50	-	wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
SC39045-07	MW-1 50	(2)	wc-Alkalinity S	50	50			20-Sep-17 16:00		Sunoco/Mass DEP Method-1/GW-1
C39087-01	East Side of Lake 00	*:	wc-Alkalinity S	50	50			21-Sep-17 16:00		
C39087-02	West Side of Lake 60		wc-Alkalinity S	50	50			21-Sep-17 16:00		
C39093-01	TF1-GT-121-091117 /00	-	wc-Alkalinity S	50	50			21-Sep-17 16:00		DoD Level IV
C39093-02	TF1-GT-119-091117		wc-Alkalinity S	50	50			21-Sep-17 16:00		DoD Level IV
C39093-03	TF1-GZ-103-091117	١.	wc-Alkalinity S	50	50			21-Sep-17 16:00		DoD Level IV
C39149-01	BED-GW-MW24R-09132017	-	wc-Alkalinity S	50	50			22-Sep-17 16:00		DoD Level IV
C39149-03	BED-GW-MW8B-09132017	-	wc-Alkalinity S	50	50			22-Sep-17 16:00		DoD Level IV
C39149-04	BED-GW-MW84R-09132017	-	wc-Alkalinity S	50	50			22-Sep-17 16:00		DoD Level IV
C39149-05	BED-GW-MW85R-09132017	F	wc-Alkalinity S	50	50			22-Sep-17 16:00		DoD Level IV

Analyst Reviewed

Date

Manager Reviewed

Date

Extracts Received By

Date

Printed: 9/18/2017 10:20:23AM

SDG SC39093 Page 1726 / 1731

1715978

Balance ID	
-------------------	--

Matrix: Aqueous

Prepared using: Wet Chem - General Preparation

(No Surrogate)

Lab Number	Client ID	ID	Analysis	Initial (ml)	Final (ml)	Spike ID	Source ID	Due Date	Pipet ID	Sample Comments
SC39149-06	BED-GW-MW23R-09132017	10	wc-Alkalinity S	50	50			22-Sep-17 16:00		Run MS/MSD/DoD Level IV
SC39149-08	BED-GW-DUP03-09132017	1-0	wc-Alkalinity S	50	50			22-Sep-17 16:00		DoD Level IV
SC39153-03	MW-23 50	-	wc-Alkalinity S	50	50			22-Sep-17 16:00		
SC39153-05	MW-29 SO	181	wc-Alkalinity S	50	50			22-Sep-17 16:00		
SC39153-06	MW-28 56	- 1	wc-Alkalinity S	50	50			22-Sep-17 16:00		

9/18/17

Reagents Used:

Analyst Reviewed Date Manager Reviewed Date Extracts Received By Date

Printed: 9/18/2017 10:20:23AM

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	NEWPORT_NS	SC39093	SITE 00007	SITE 00007	TF1-GT-119	Monitoring well	388655.58	184833.02	N6247016D9008	WE15	TETRA TECH, INC.	TF1-GT-119-091117	Ground water	Normal (Regular)	11-Sep-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	NEWPORT_NS	SC39093	SITE 00007	SITE 00007	TF1-GT-121	Monitoring well	388507.61	184477.26	N6247016D9008	WE15	TETRA TECH, INC.	TF1-GT-121-091117	Ground water	Normal (Regular)	11-Sep-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	NEWPORT_NS	SC39093							N6247016D9008	WE15	TETRA TECH, INC.	TF1-FRB-091117	Water for QC samples	Field Reagent Blank	11-Sep-17	537	Perfluoroalkyl Compounds
MID_ATLANTIC	NEWPORT_NS	SC39093	SITE 00007	SITE 00007	TF1-GZ-103	Monitoring well	388541.52	184852.49	N6247016D9008	WE15	TETRA TECH, INC.	TF1-GZ-103-091117	Ground water	Normal (Regular)	11-Sep-17	537	Perfluoroalkyl Compounds