2019 Annual Monitoring Data Report
Queen City Farms
Maple Valley, Washington

October 14, 2020

Prepared for

The Boeing Company
Seattle, Washington

LANDAU ASSOCIATES

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LIST OF ABBREVIATIONS AND ACRONYMS

BE ..... barometric efficiency
Boeing ..... The Boeing Company
BRF ..... barometric response function
cDCE cis-1,2-dichloroethene
CHRL ..... Cedar Hills Regional Landfill
CPOC ..... conditional point of compliance
CSM ..... conceptual site model
DO ..... dissolved oxygen
Ecology ..... Washington State Department of Ecology
EPA ..... US Environmental Protection Agency
FCC ..... final containment cell
FSP ..... field sampling plan
ft ..... feet/foot
FYR ..... 5-Year Review
g ..... grams
gpd ..... gallons per day
GETS ..... groundwater extraction and treatment system
gpm ..... gallons per minute
LAI ..... Landau Associates, Inc.
lb(s) ..... pound(s)
LLI ..... Eurofins Lancaster Laboratories Environmental, Inc.
µg/L ..... micrograms per liter
µg/L/m^3 ..... micrograms per cubic meter
Mgal ..... millions of gallons
MGPL ..... Main Gravel Pit Lake
MNA ..... monitored natural attenuation
MPS ..... modified pumping strategy
MSL ..... mean sea level
MV ..... millivolts
NPL ..... National Priorities List
O&M ..... operations and maintenance
OM&M ..... operations, maintenance, and monitoring
ORP ..... oxygen reduction potential
PCE ..... tetrachloroethene
PCB ..... polychlorinated biphenyl
PLC ..... programmable logic controller
QAPP ..... quality assurance project plan

QCF ..... Queen City Farms
RAO ..... remedial action objective
ROD ..... Record of Decision
Site ..... QCF Superfund Site
SL ..... screening level
TCE ..... trichloroethene
VC ..... vinyl chloride
VI ..... vapor intrusion
VOC ..... volatile organic compound

APPENDIX A

Water Elevation Data and Graphs

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Table A-1 2019 Water Level Elevations

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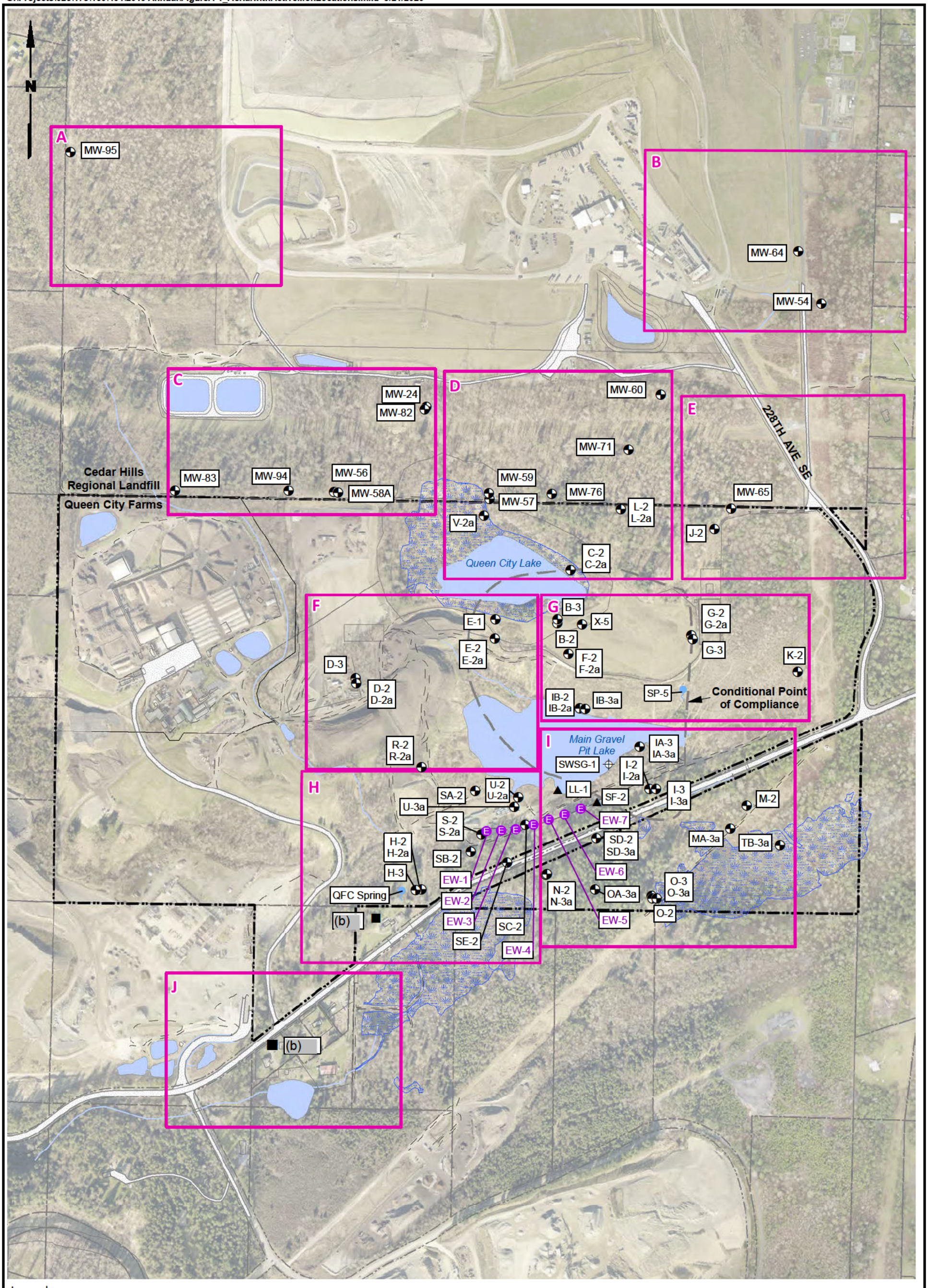

Legend

- Well Location
- Offsite Domestic Supply Well
- Piezometer Locations
- Staff Gauge
- Extraction Well Location
- Springs
- Wetland
- Lake or Pond
- Property Boundary
- Conditional Point of Compliance
- Final Containment Cell

0 600 1,200

Scale in Feet

Data Sources: King County GIS.

Notes

1. Cedar Hills Regional Landfill wells are not sampled as part of the Queen City Farms Field Sampling Plan with the exception of MW-71.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

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Maple Valley, Washington

Active Monitoring Locations

Figure
A-1

Surface Water Elevations
Locations LL-1, SWSG-1

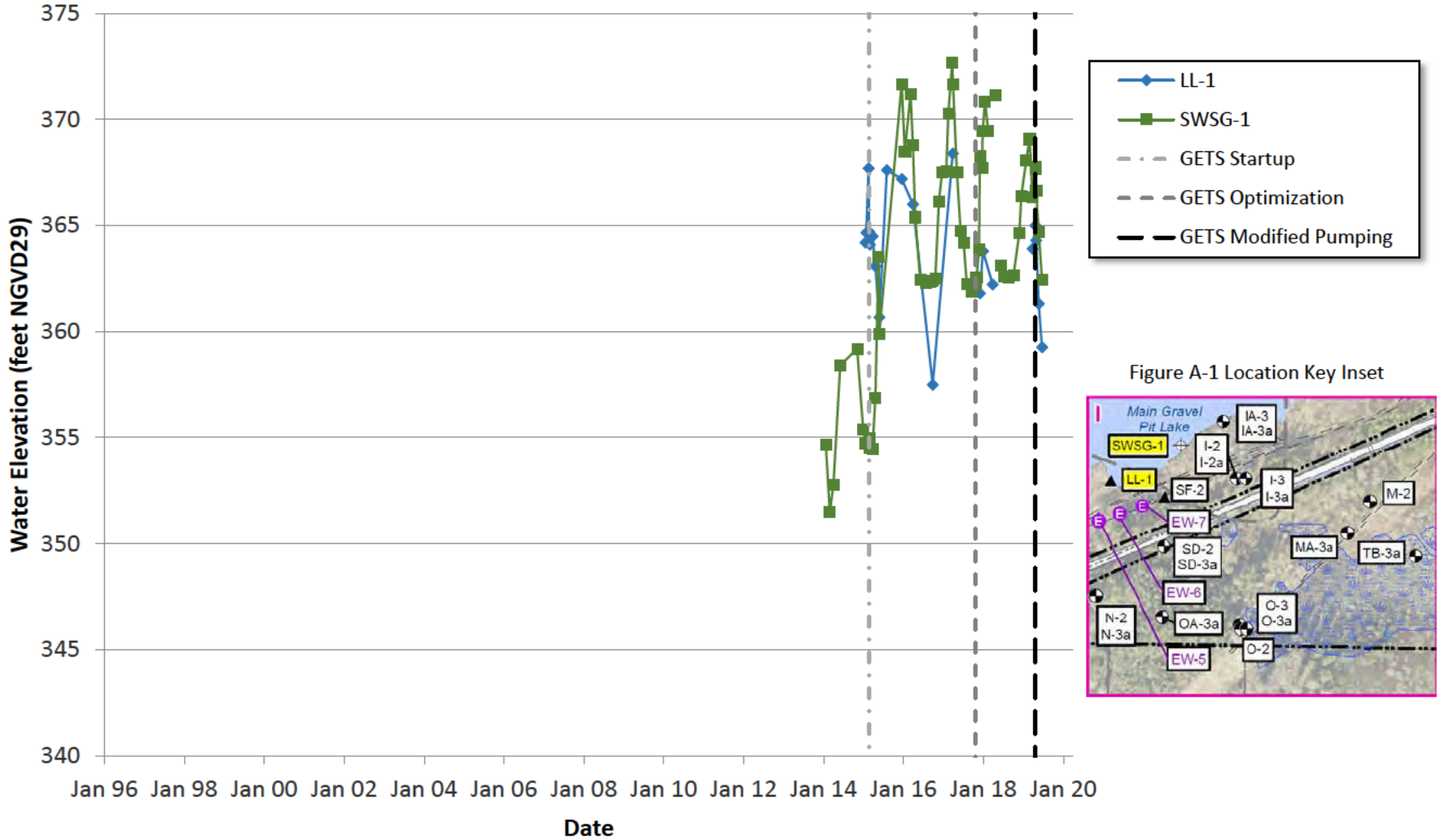

Figure A-1 Location Key Inset

Queen City Farms Maple Valley, WA	**Hydrographs – LL-1, SWSG-1**	Figure A-2

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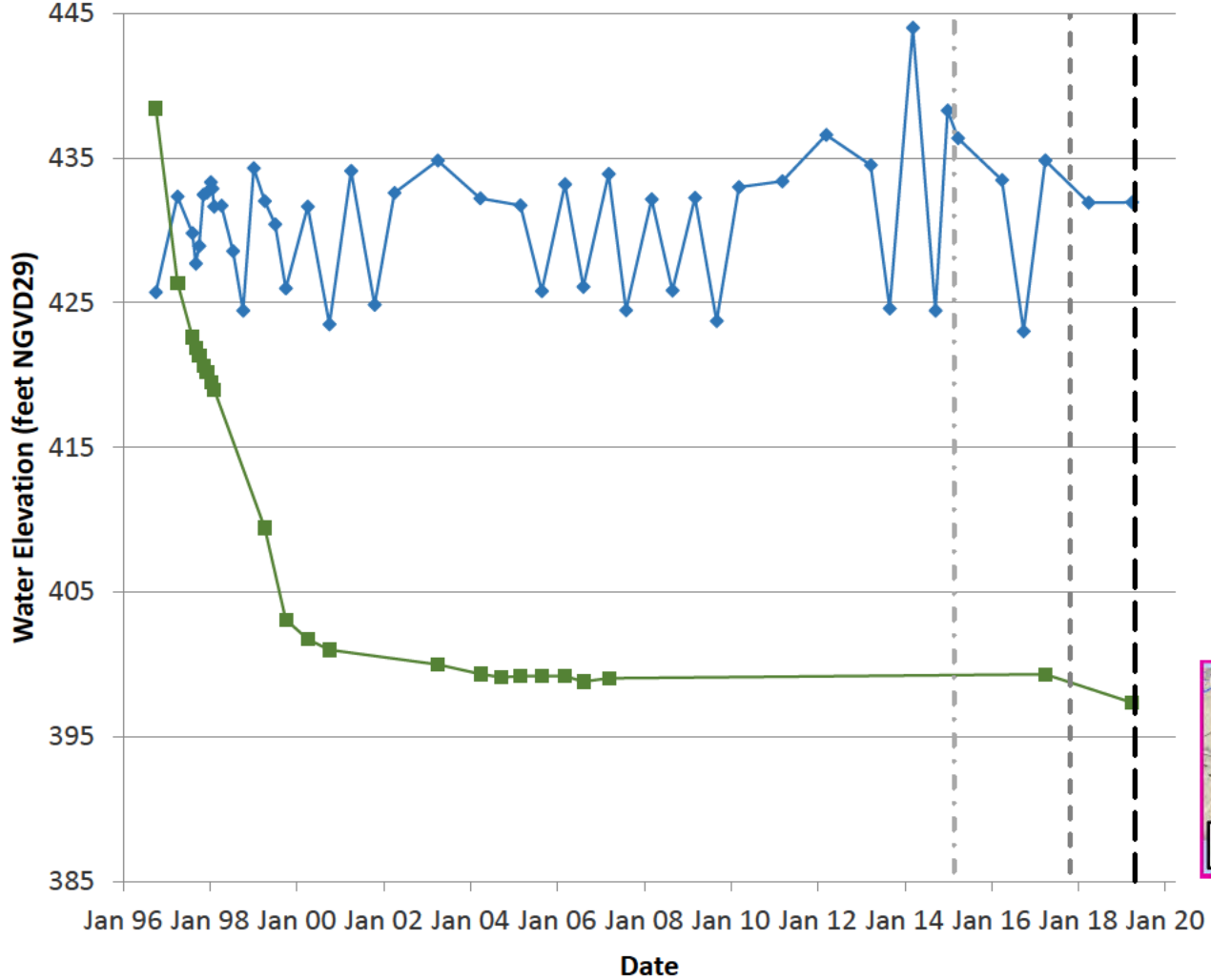
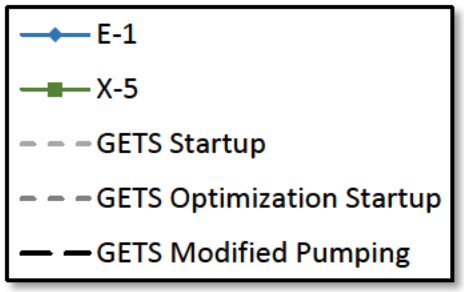
Aquifer 1 Groundwater Elevations
Locations E-1, X-5





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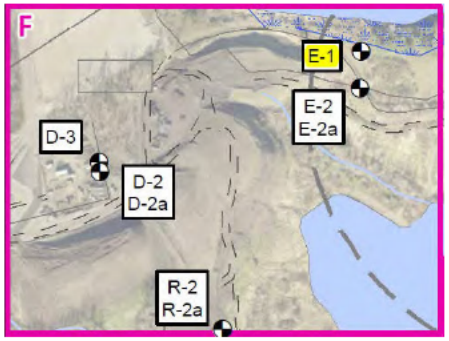

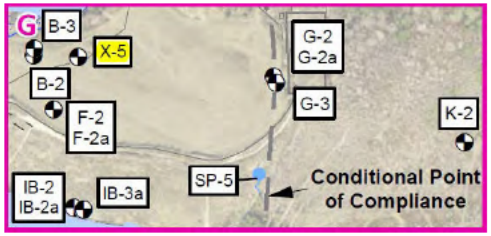

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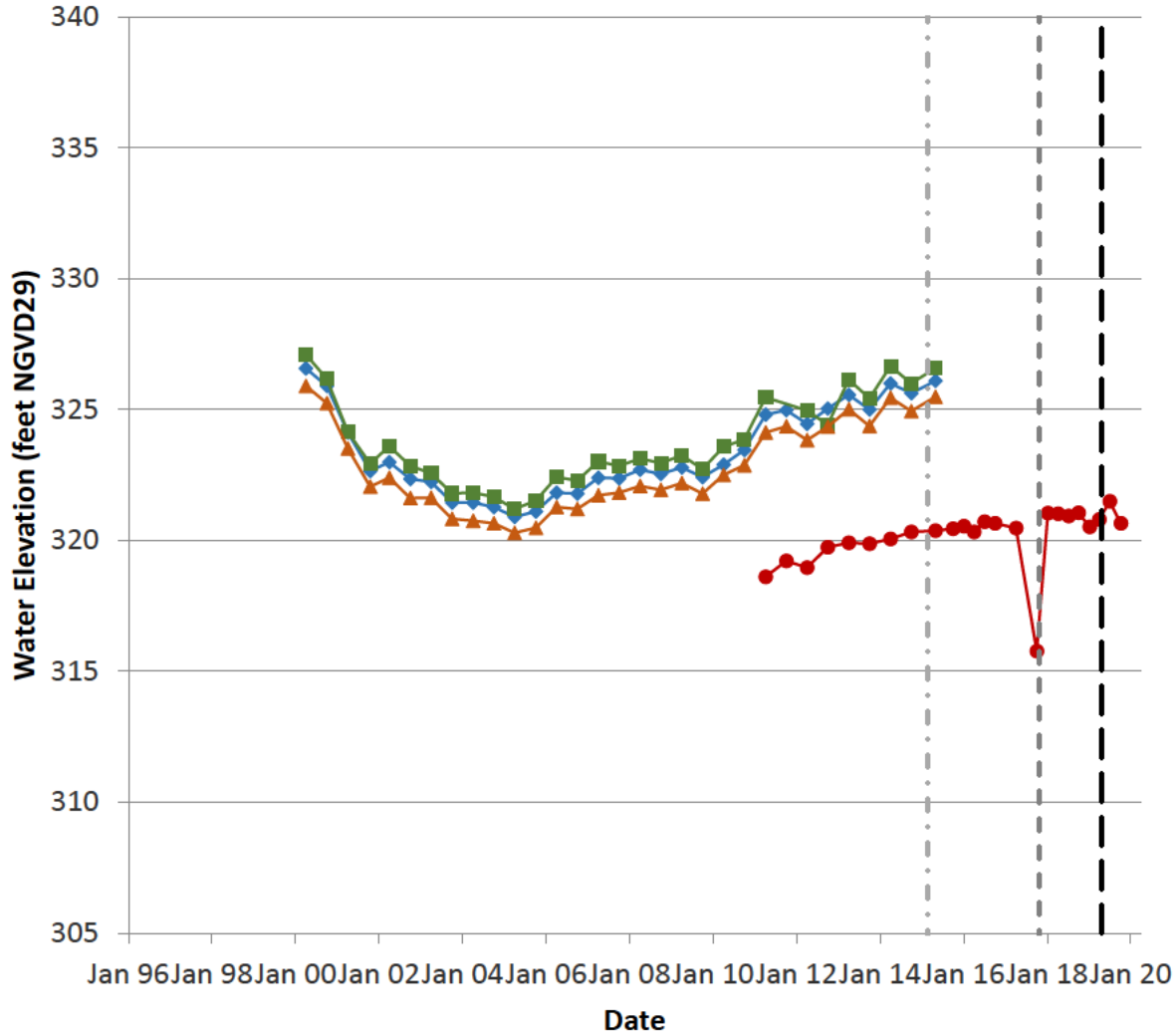
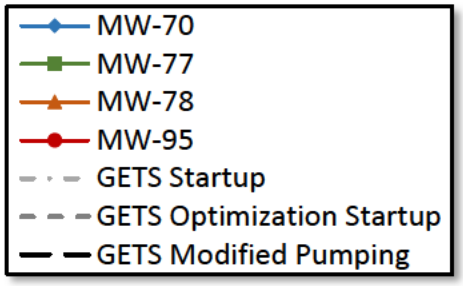
Queen City Farms Maple Valley, WA	**Hydrographs – E-1, X-5**	Figure A-3

Aquifer 2a Groundwater Elevations
Locations MW-70, MW-77, MW-78, MW-95





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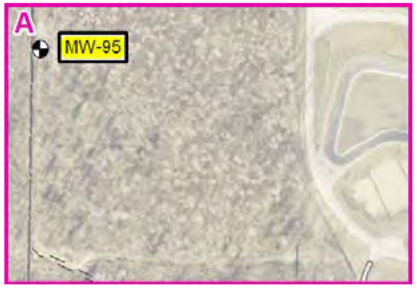
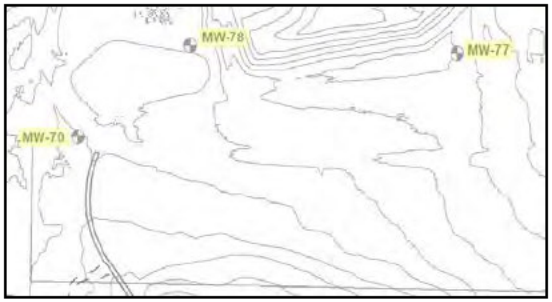


Figure 4-2 Cedar Hills Regional Landfill Abandoned Wells Location Inset



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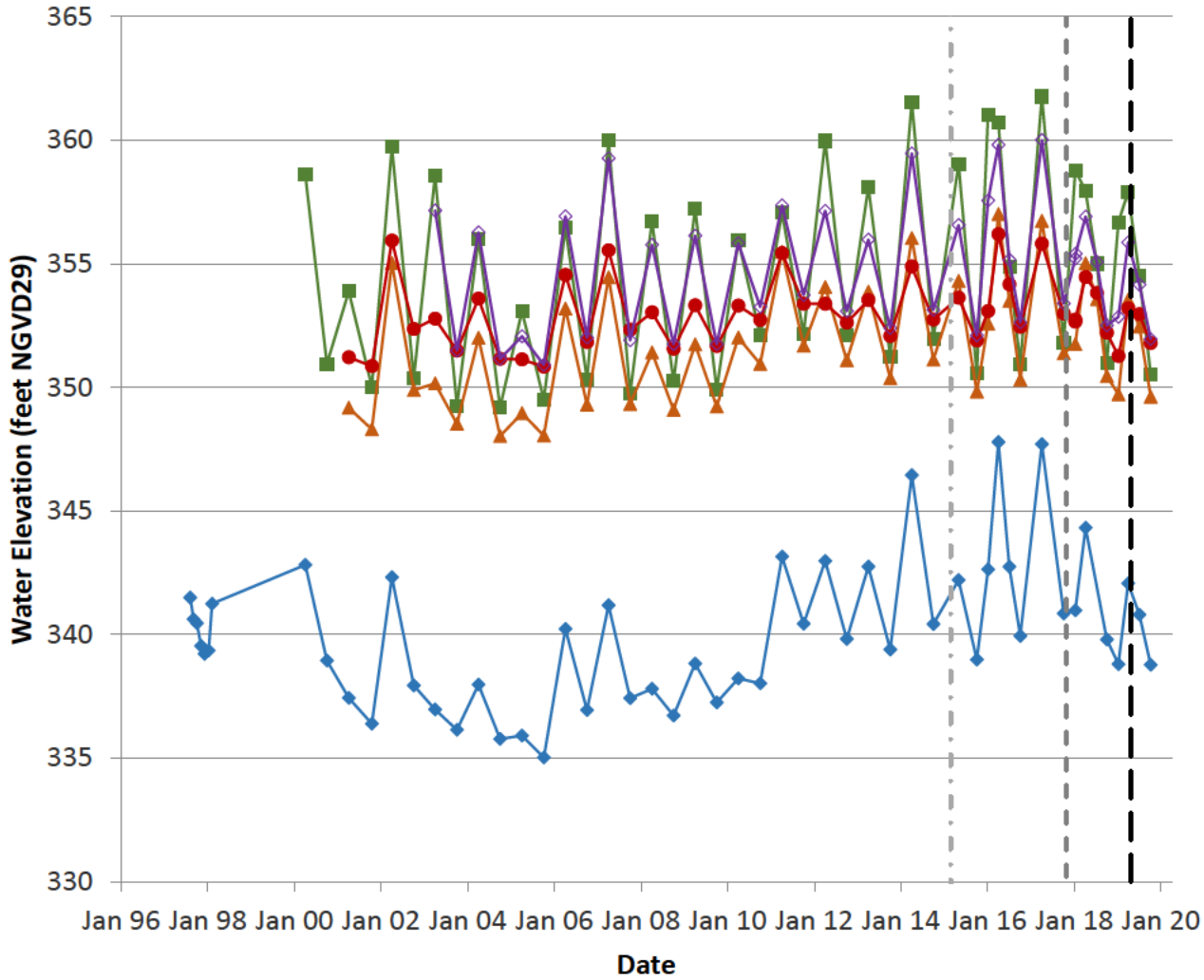
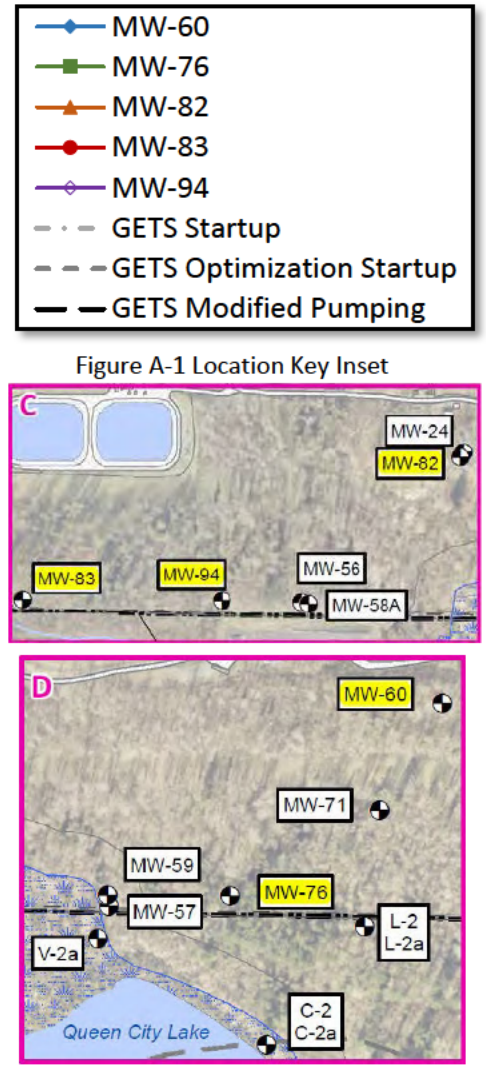
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2a**	Figure A-4

Aquifer 2a Groundwater Elevations
Locations MW-60, MW-76, MW-82, MW-83, MW-94





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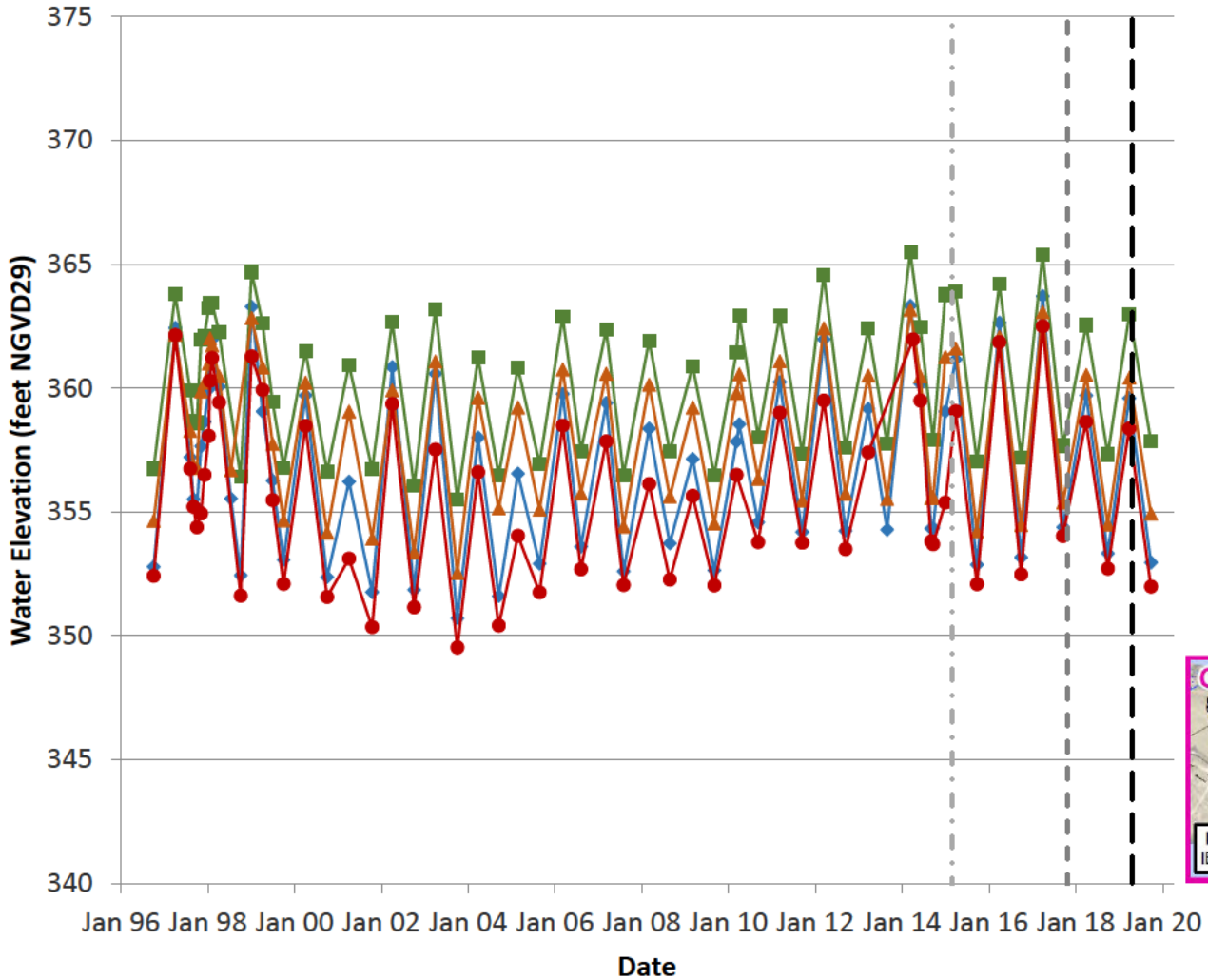
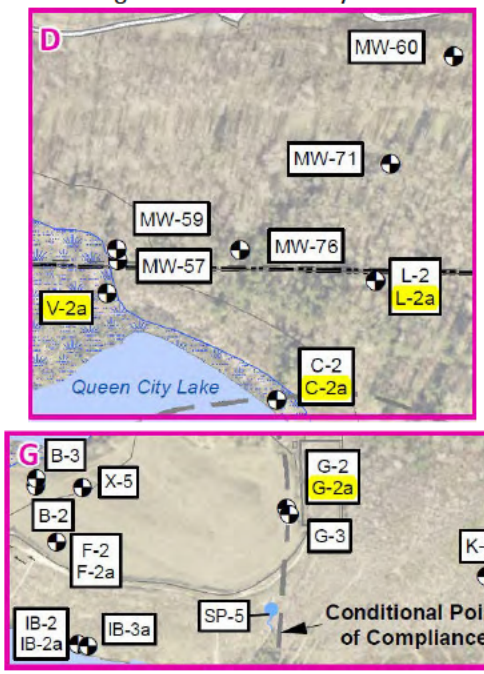
Aquifer 2a Groundwater Elevations
Locations C-2a, G-2a, L-2a, V-2a



- C-2a
- G-2a
- L-2a
- V-2a
- GETS Startup
- GETS Optimization Startup
- GETS Modified Pumping

Figure A-1 Location Key Inset



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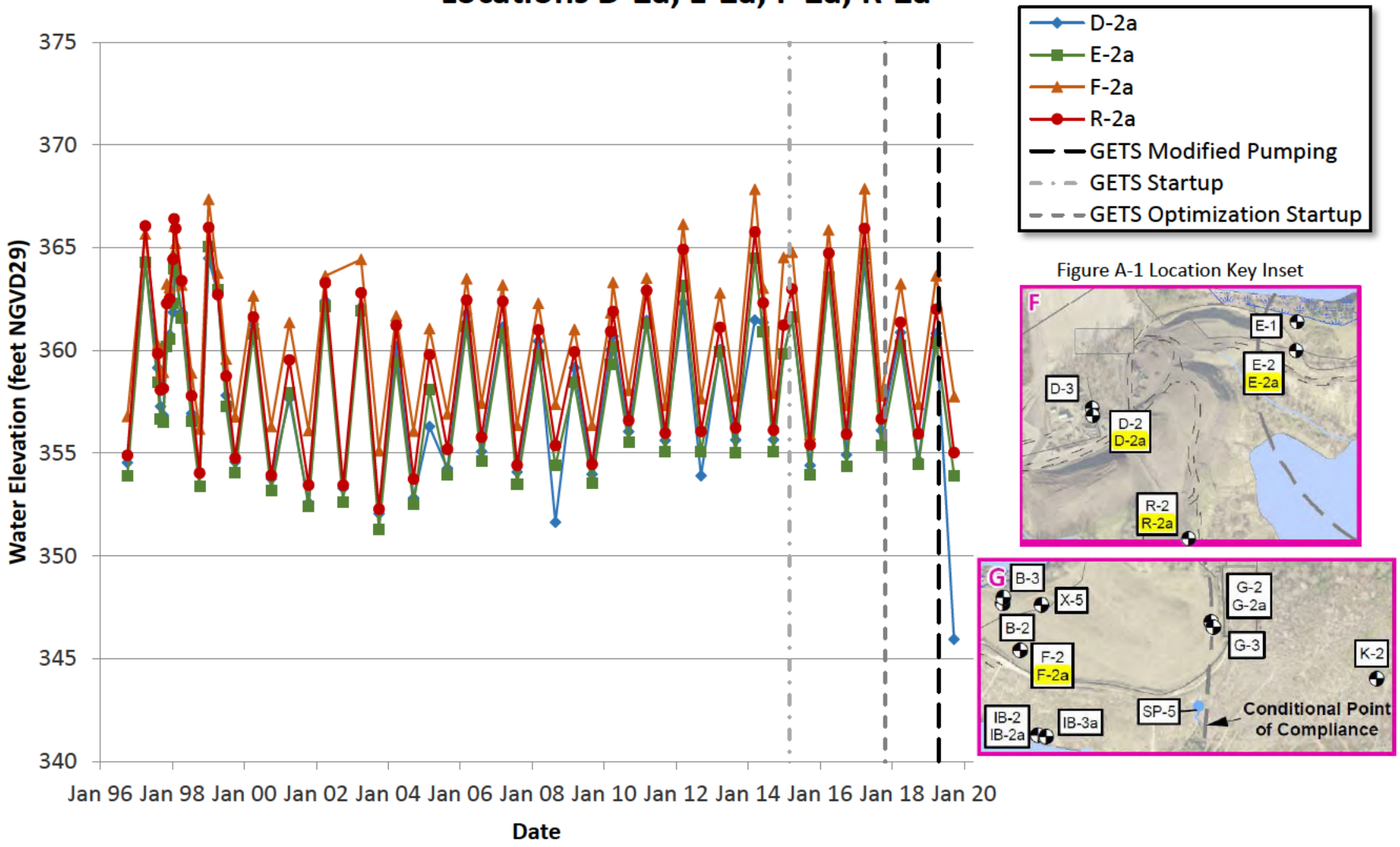
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2a**	Figure A-6

Aquifer 2a Groundwater Elevations
Locations D-2a, E-2a, F-2a, R-2a



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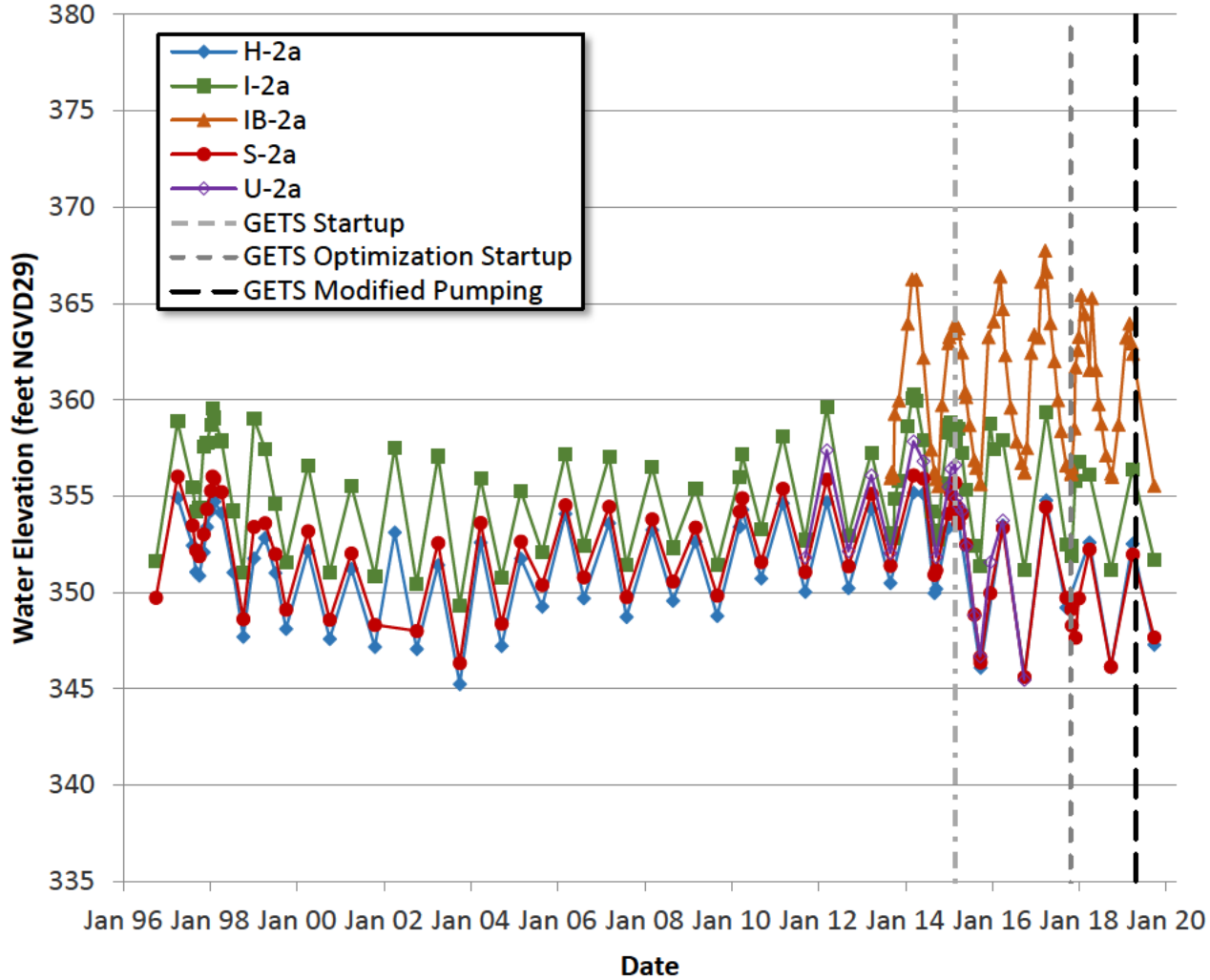
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2a**	Figure A-7

Aquifer 2a Groundwater Elevations
Locations H-2a, I-2a, IB-2a, S-2a, U-2a



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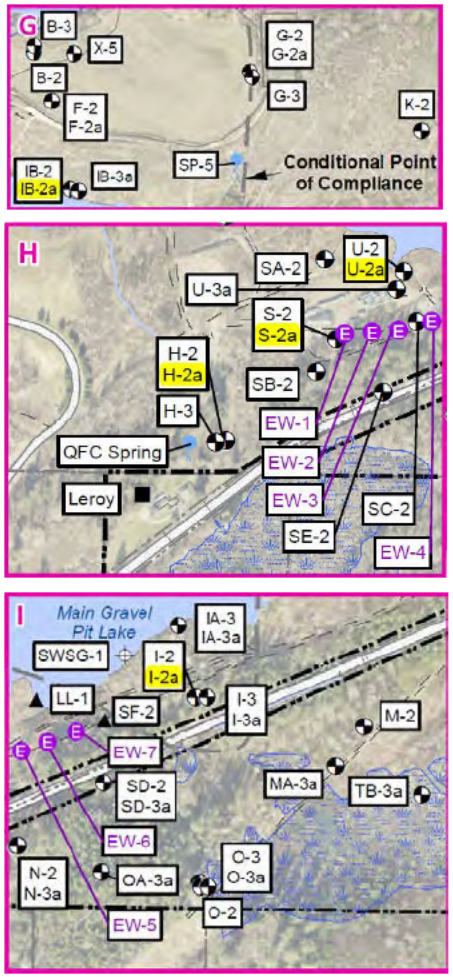

Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2a**	Figure A-8

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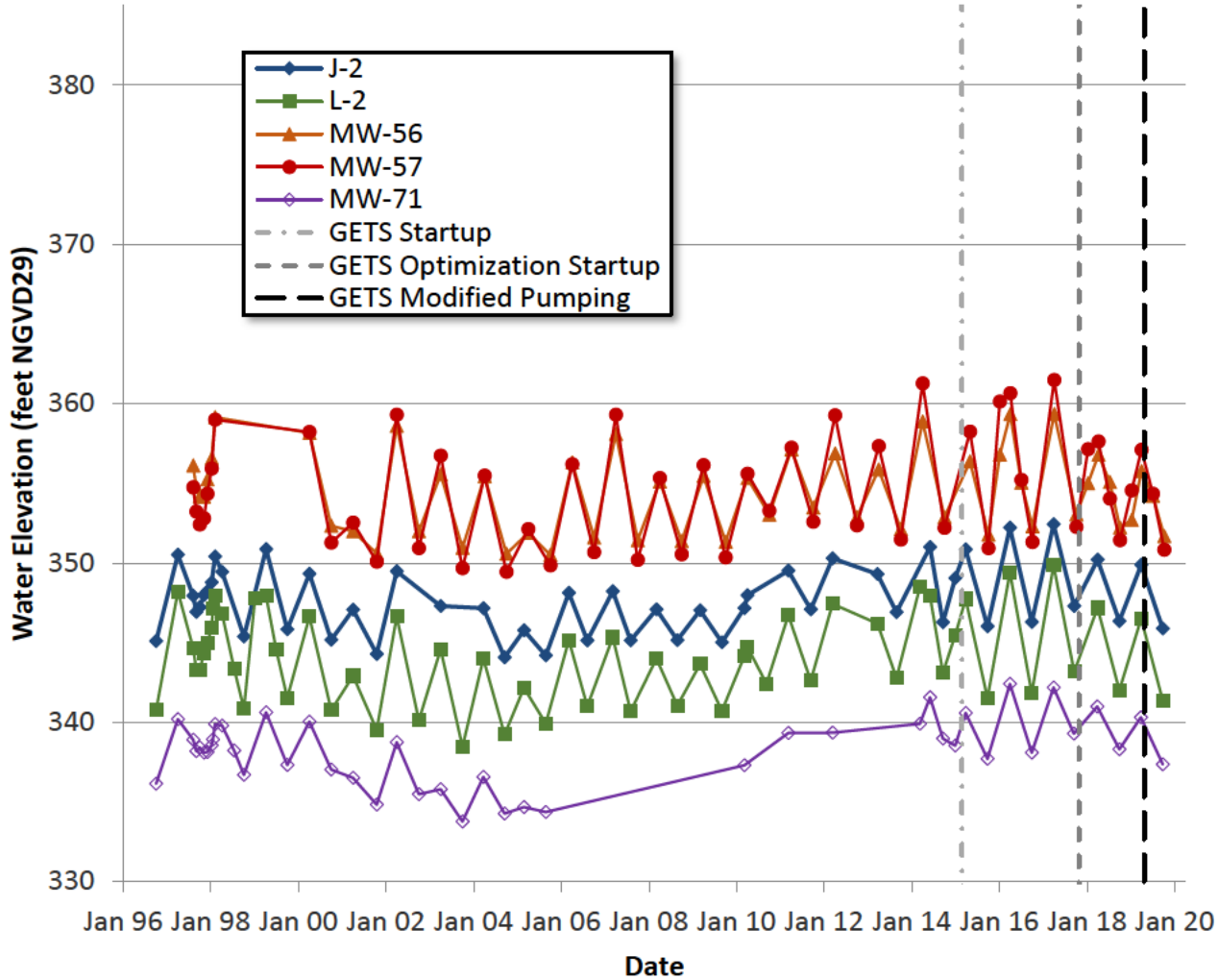
Aquifer 2 Groundwater Elevations
Locations J-2, L-2, MW-56, MW-57, MW-71



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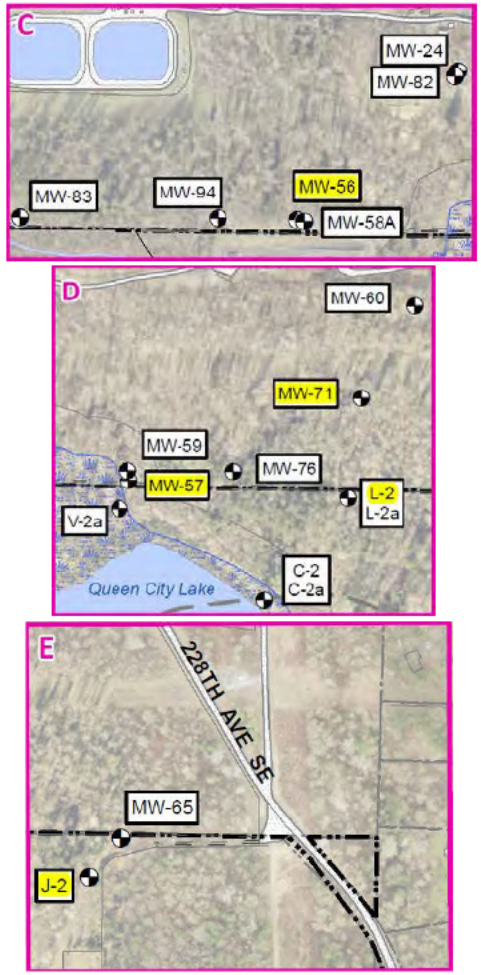

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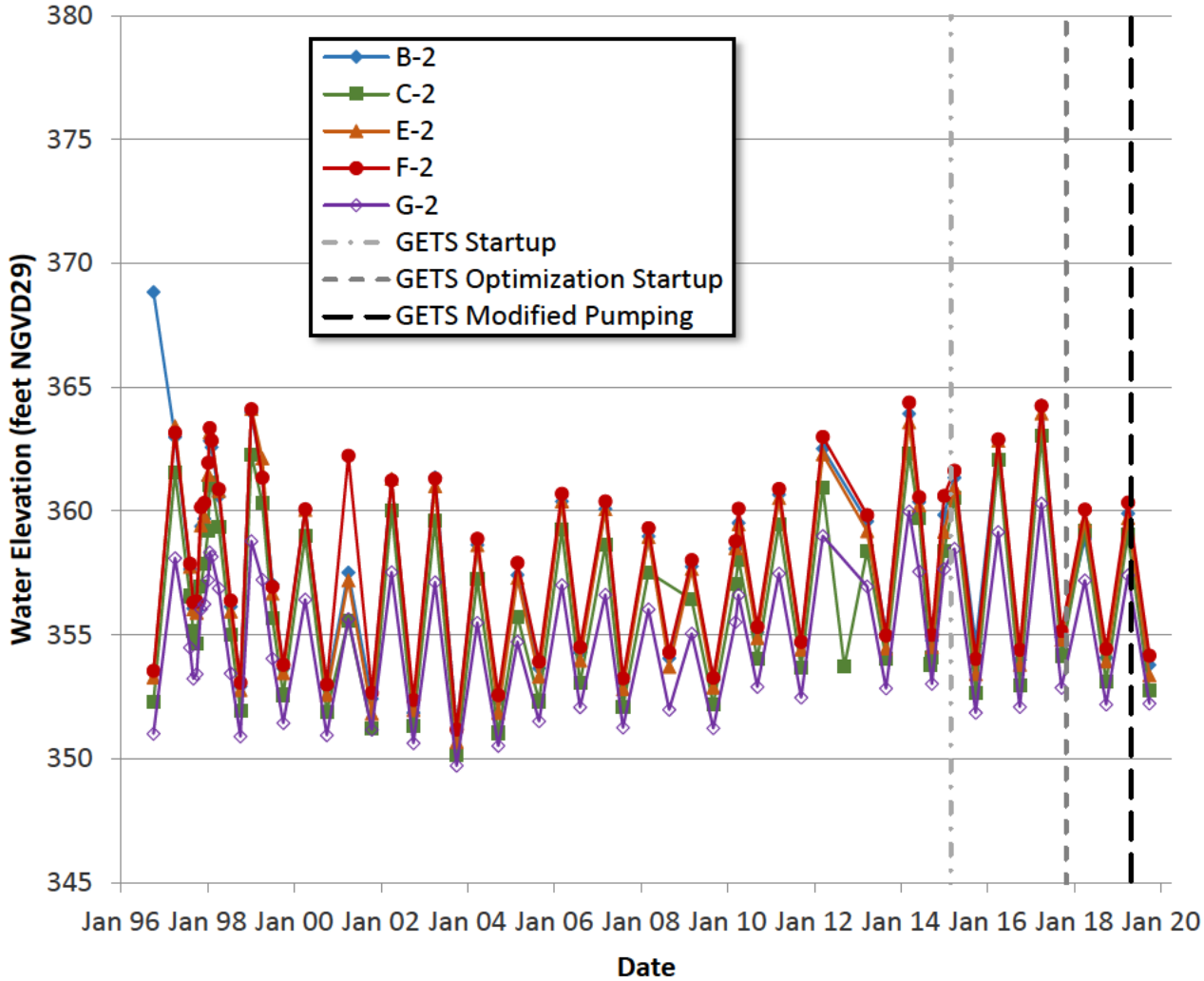
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-9

Aquifer 2 Groundwater Elevations
Locations B-2, C-2, E-2, F-2, G-2



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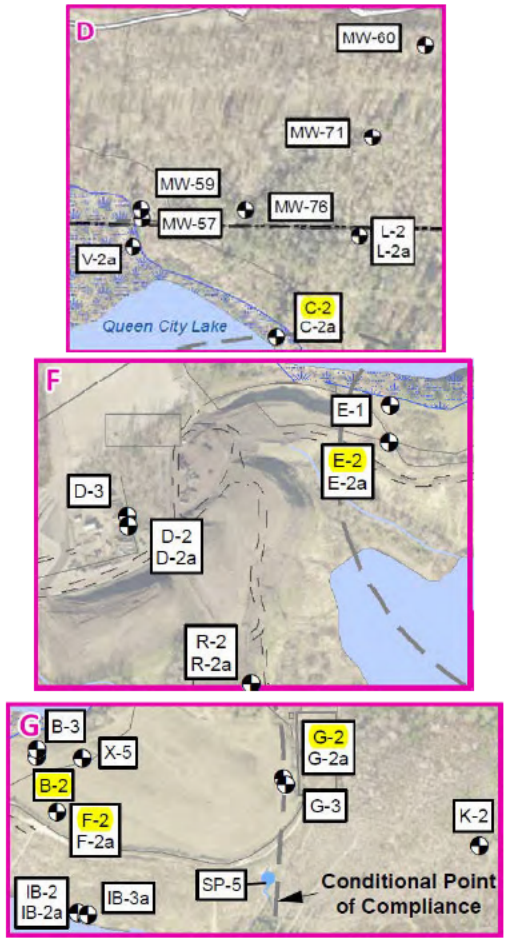

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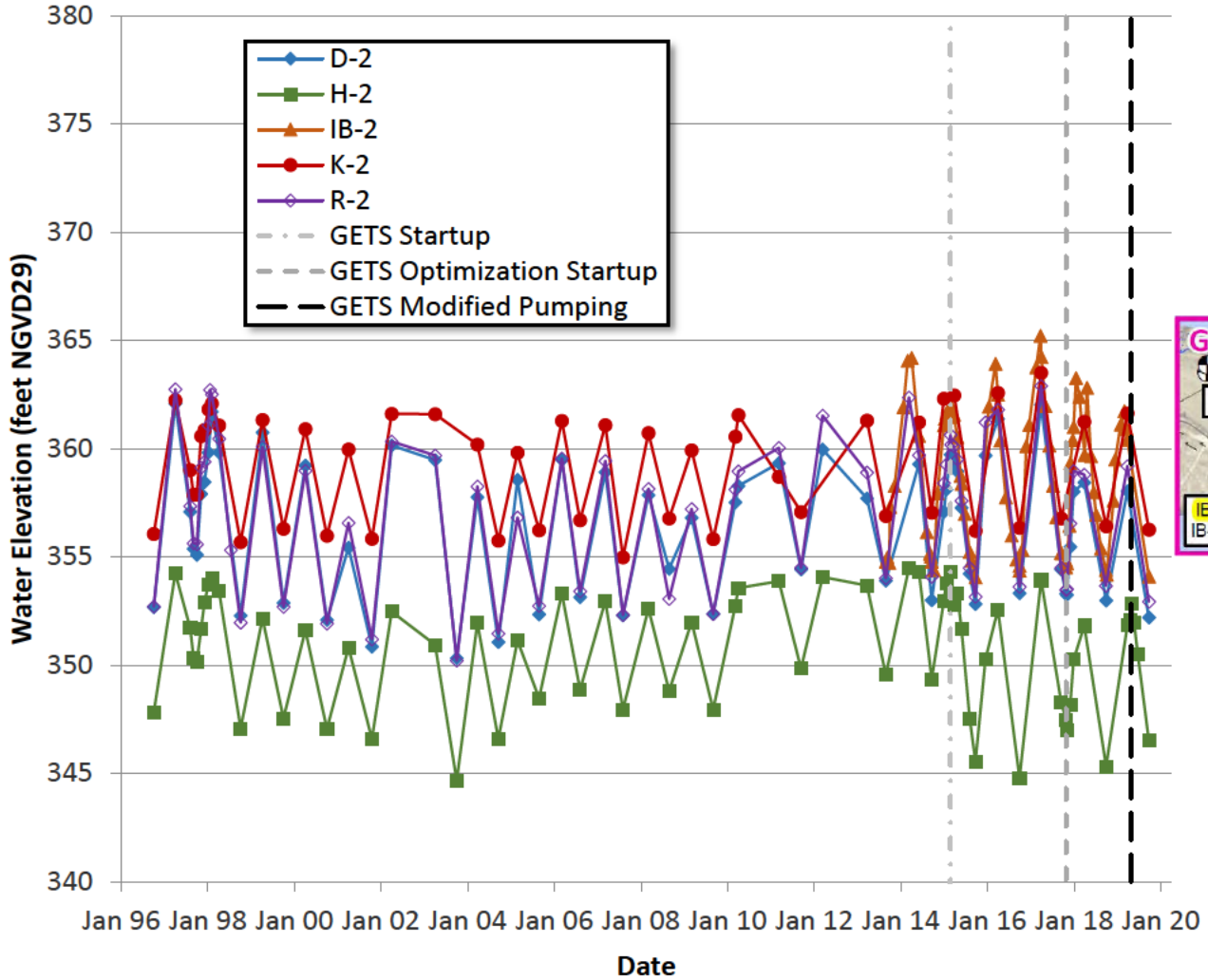
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-10

Aquifer 2 Groundwater Elevations
Locations D-2, H-2, IB-2, K-2, R-2



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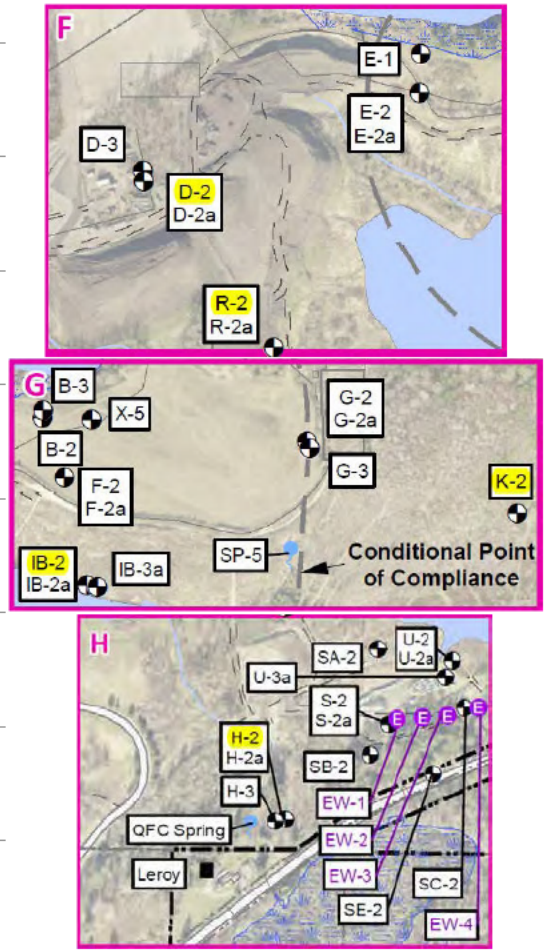

Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-11

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Aquifer 2 Groundwater Elevations
Locations I-2, M-2, N-2, O-2

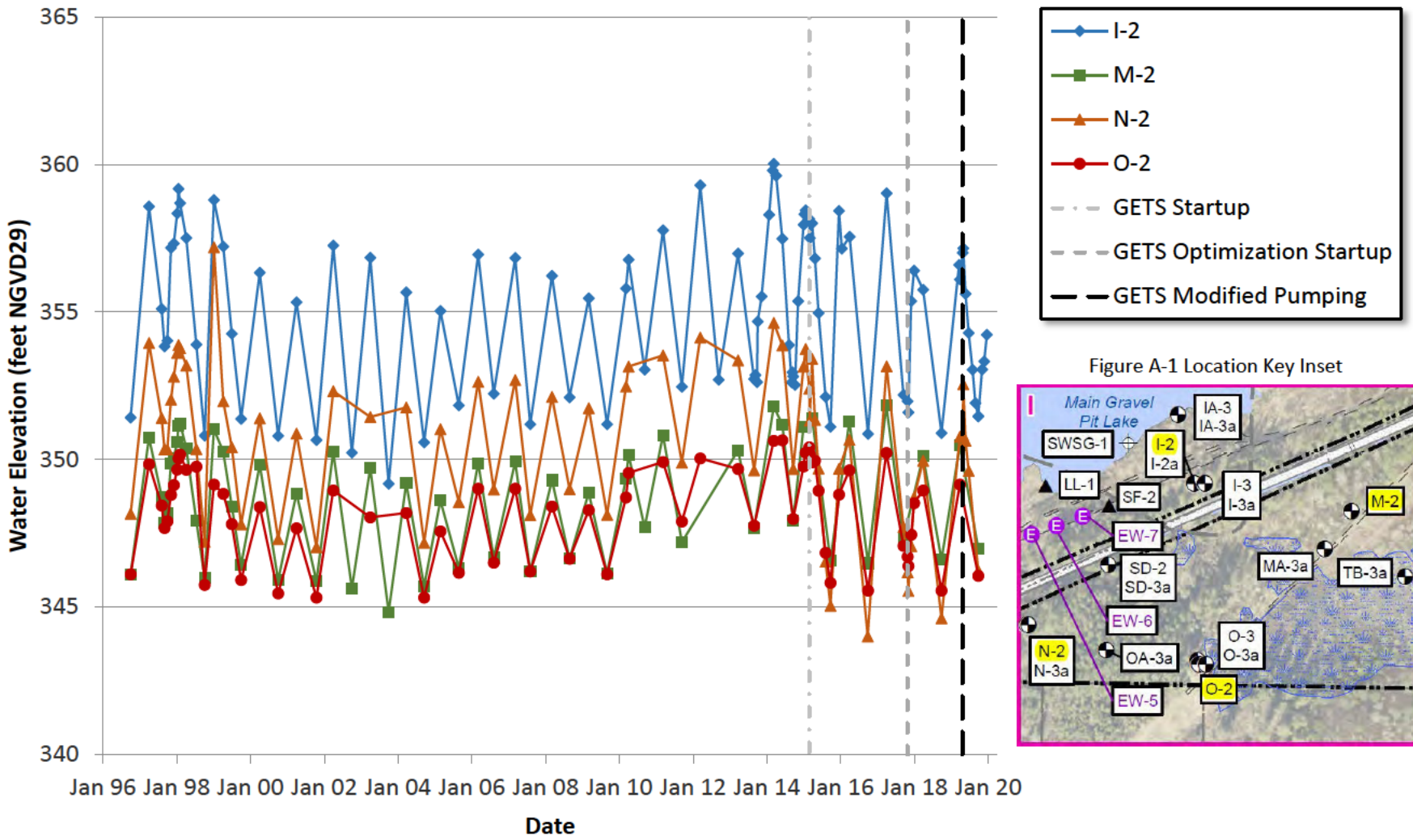

Figure A-1 Location Key Inset

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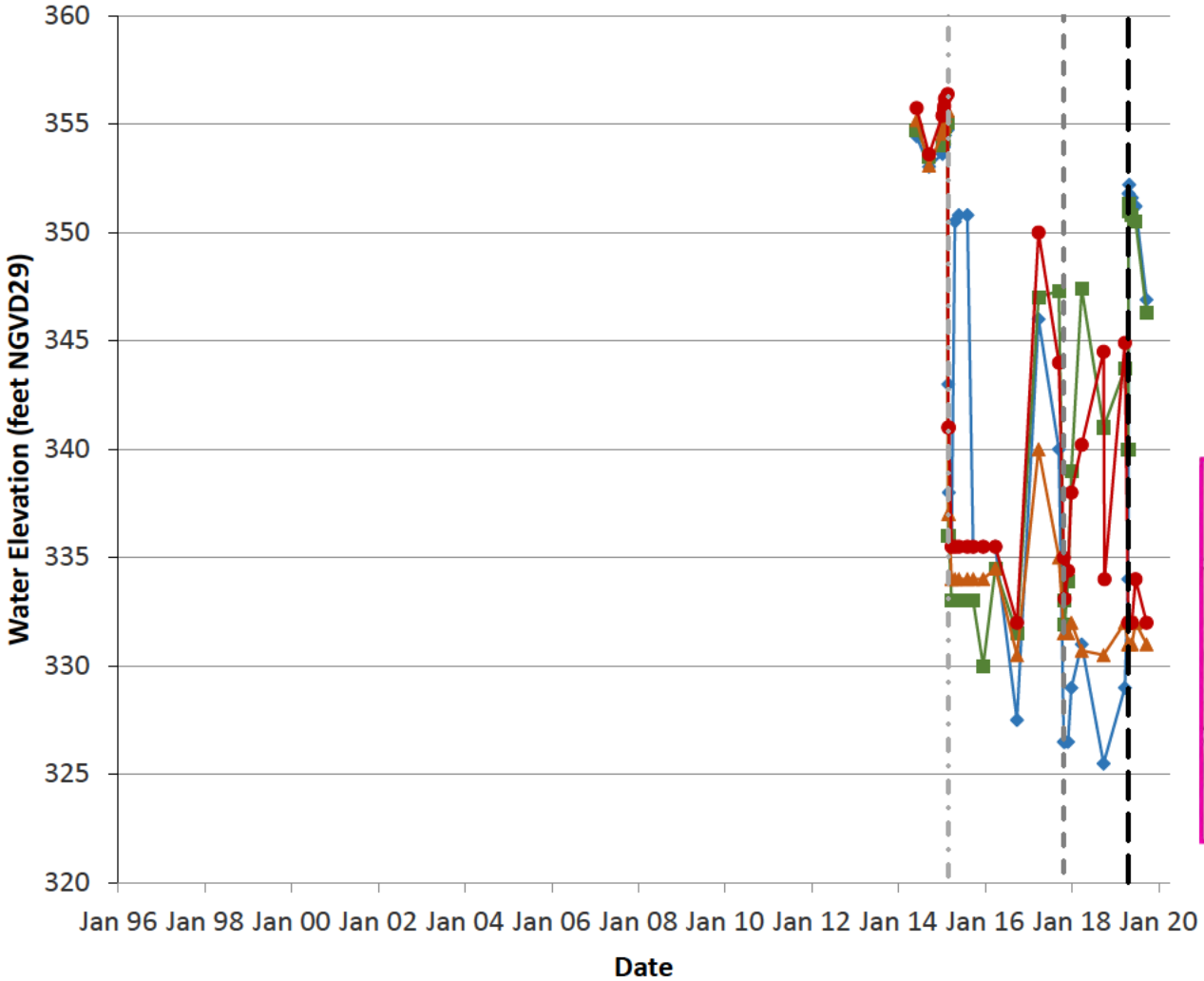
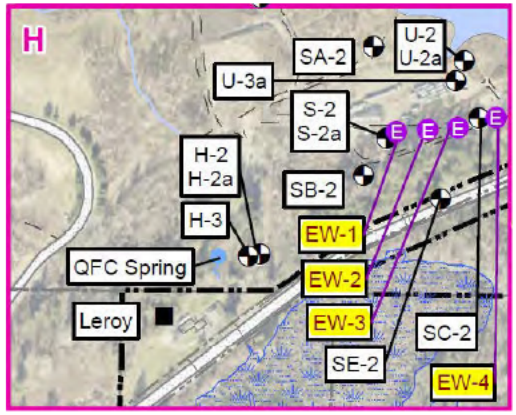
Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-12

Aquifer 2 Extraction Well Groundwater Elevations
Locations EW-1, EW-2, EW-3, EW-4



EW-1
EW-2
EW-3
EW-4
GETS Startup
GETS Optimization Startup
GETS Modified Pumping

Figure A-1 Location Key Inset



Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2 Extraction Wells**	Figure A-13

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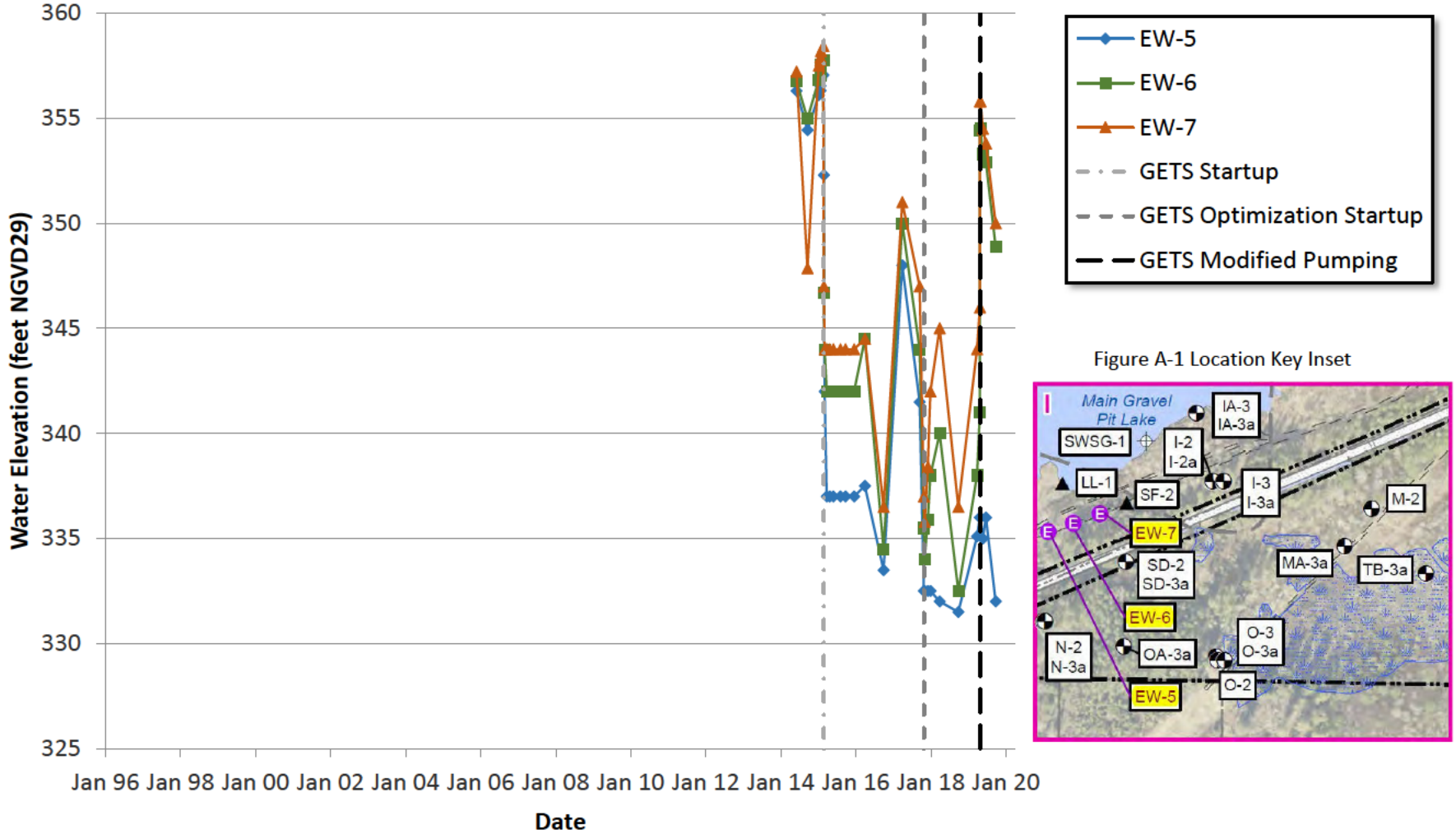
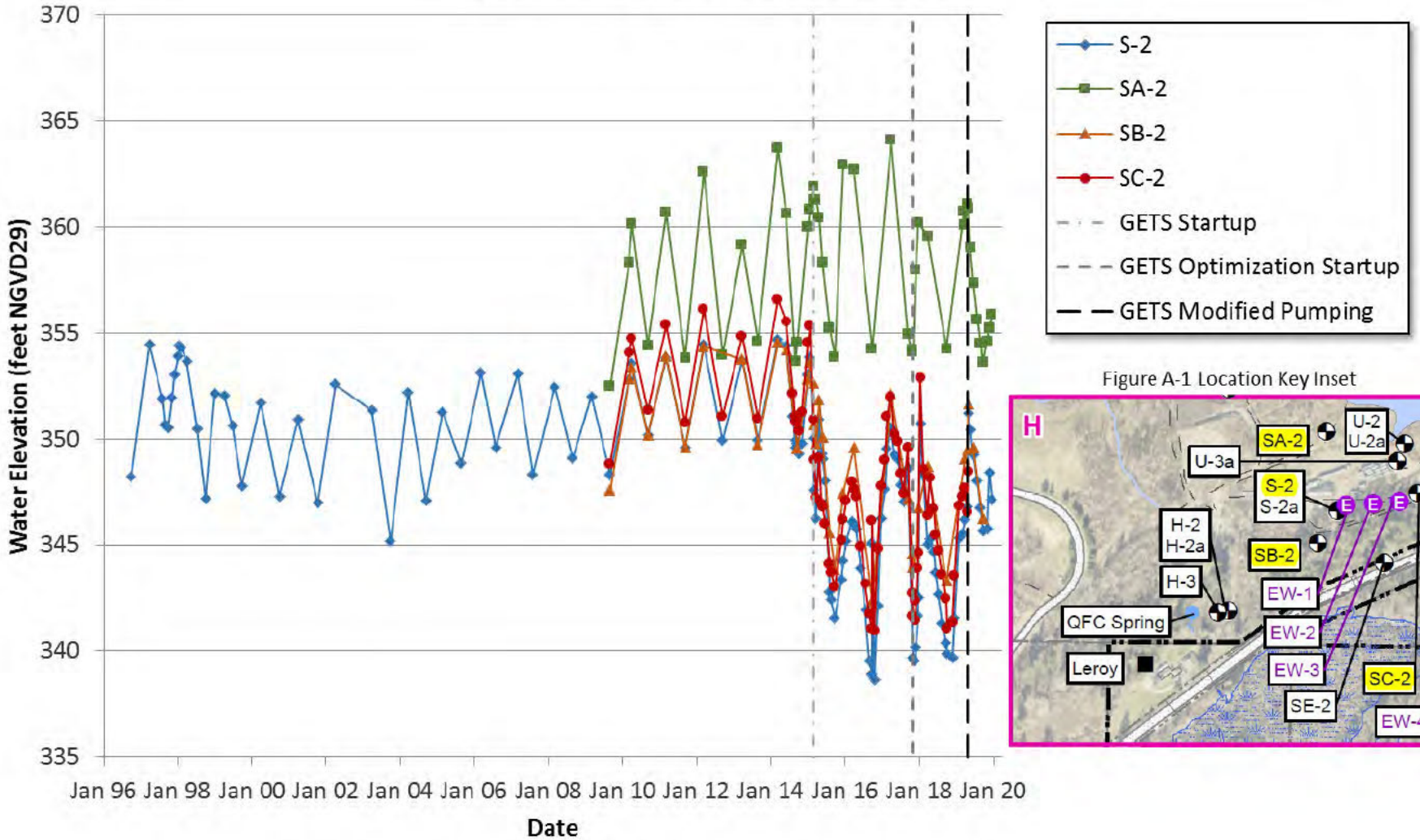
Aquifer 2 Extraction Well Groundwater Elevations
Locations EW-5, EW-6, EW-7



LANDAU ASSOCIATES	Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2 Extraction Wells**

Figure
A-14

Aquifer 2 Groundwater Elevations
Locations S-2, SA-2, SB-2, SC-2



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Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-15

Aquifer 2 Groundwater Elevations
Locations SD-2, SE-2, SF-2, U-2

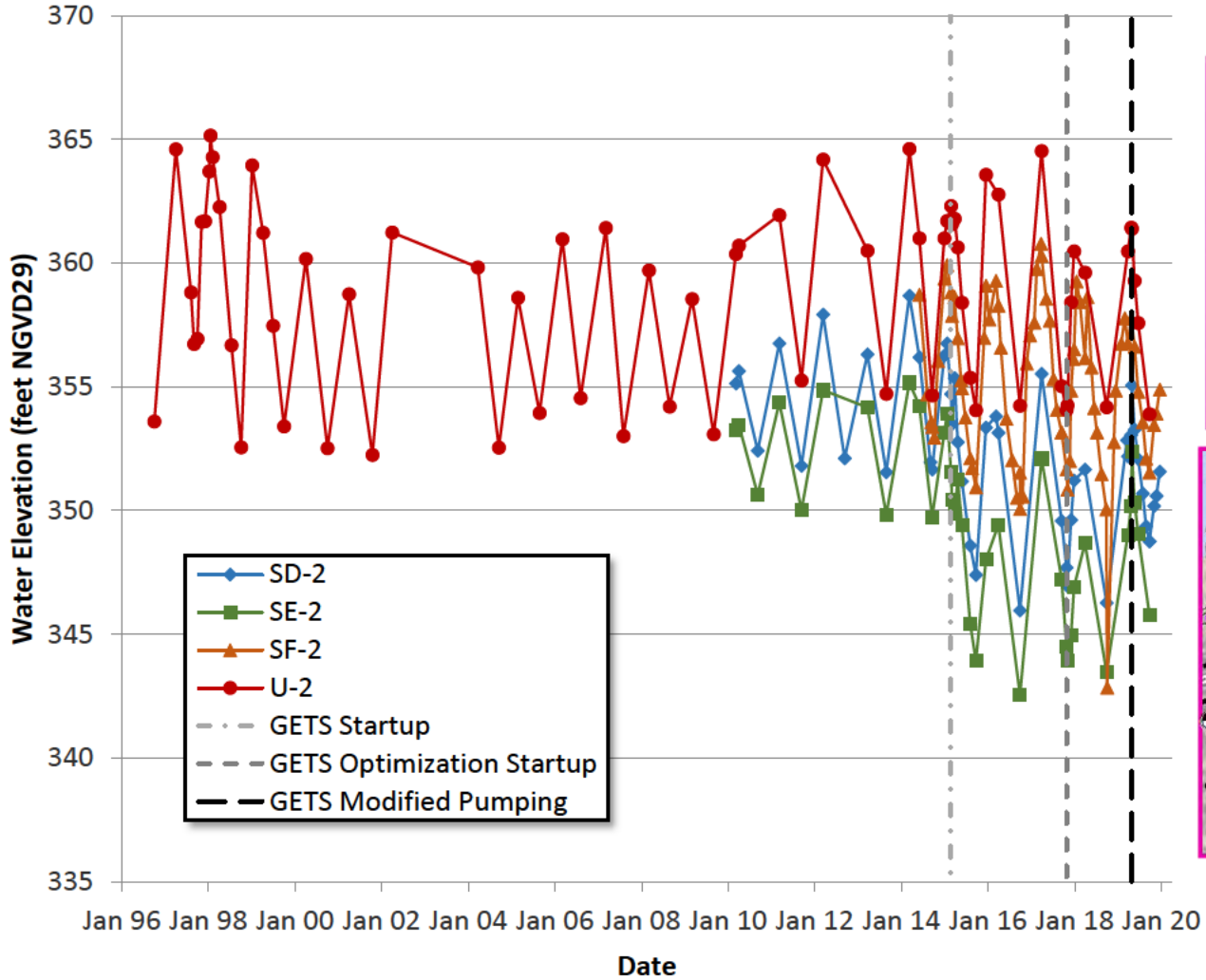
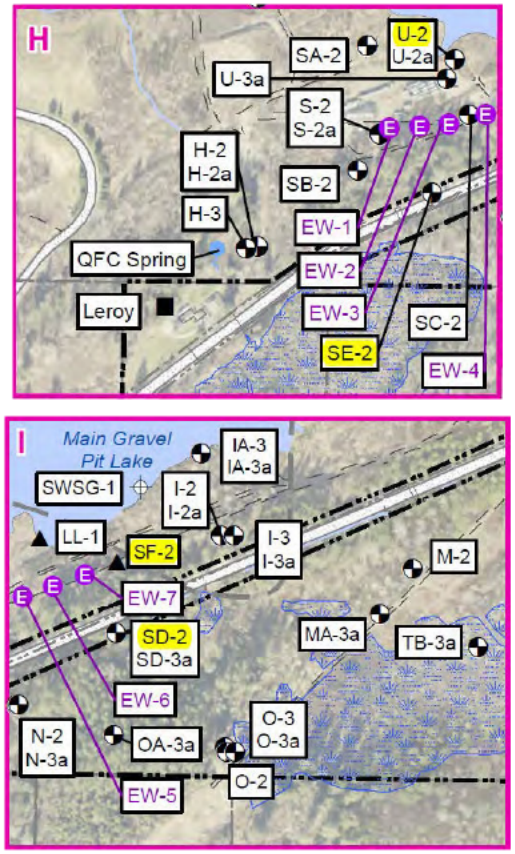


Figure A-1 Location Key Inset



Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 2**	Figure A-16

LANDAU ASSOCIATES

Aquifer 3a Groundwater Elevations
Locations I-3a, IA-3a, IB-3a, MW-64, U-3a

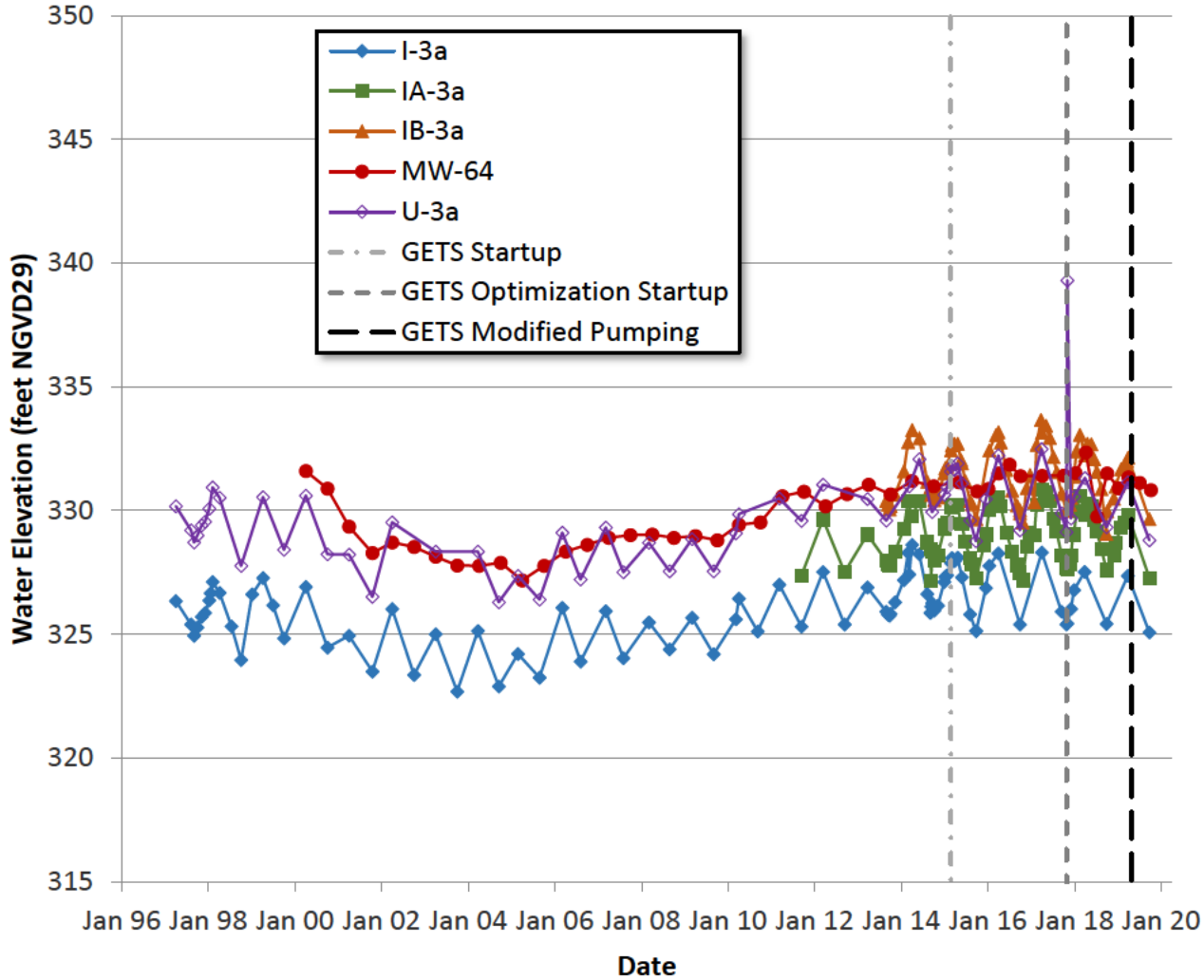
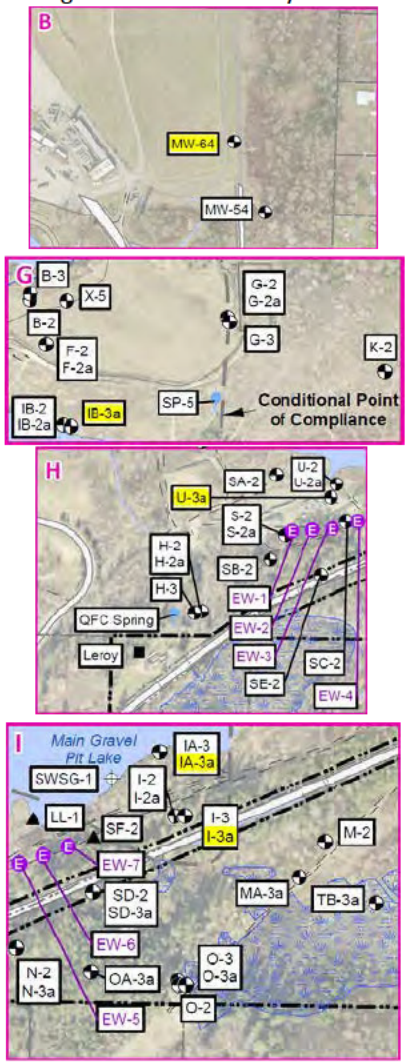


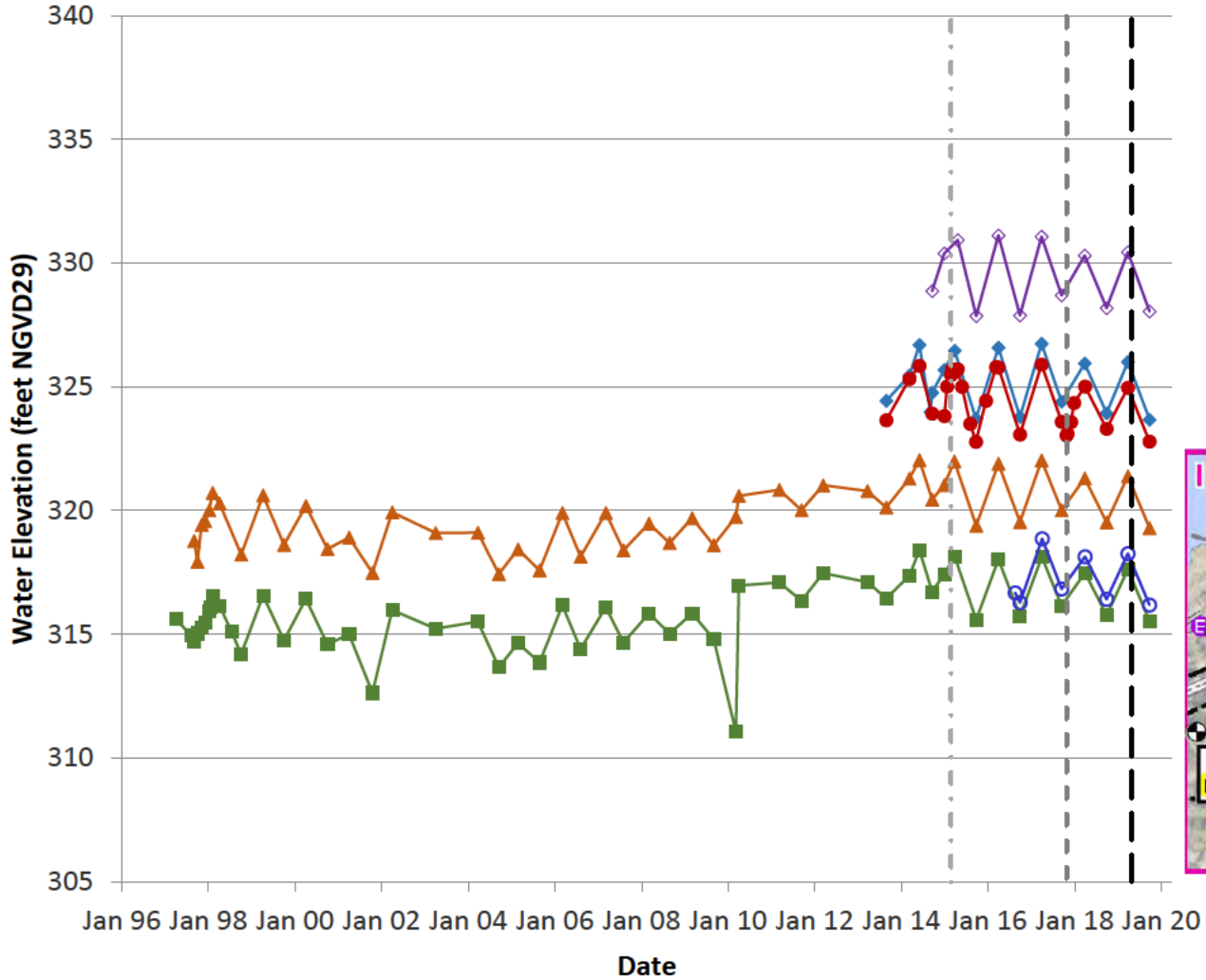
Figure A-1 Location Key Inset



Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 3a**	Figure A-17

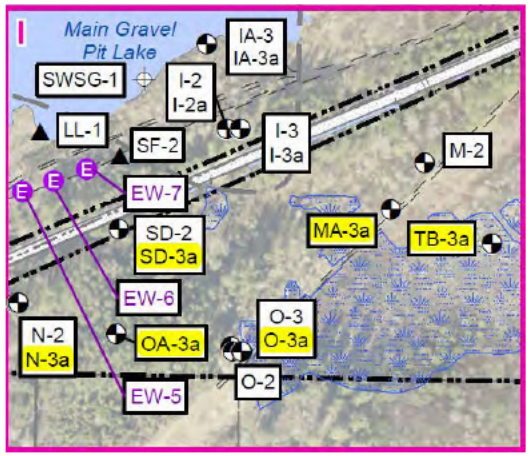
LANDAU ASSOCIATES

Aquifer 3a Groundwater Elevations
Locations MA-3a, N-3a, OA-3a, O-3a, SD-3a, TB-3a



- MA-3a
- N-3a
- OA-3a
- O-3a
- SD-3a
- TB-3a
- GETS Startup
- GETS Optimization Startup
- GETS Modified Pumping

Figure A-1 Location Key Inset



LANDAU ASSOCIATES

Queen City Farms
Maple Valley, WA

Hydrographs – Aquifer 3a

Figure
A-18

Aquifer 3 Groundwater Elevations
Locations MW-24, MW-58A, MW-59, MW-65

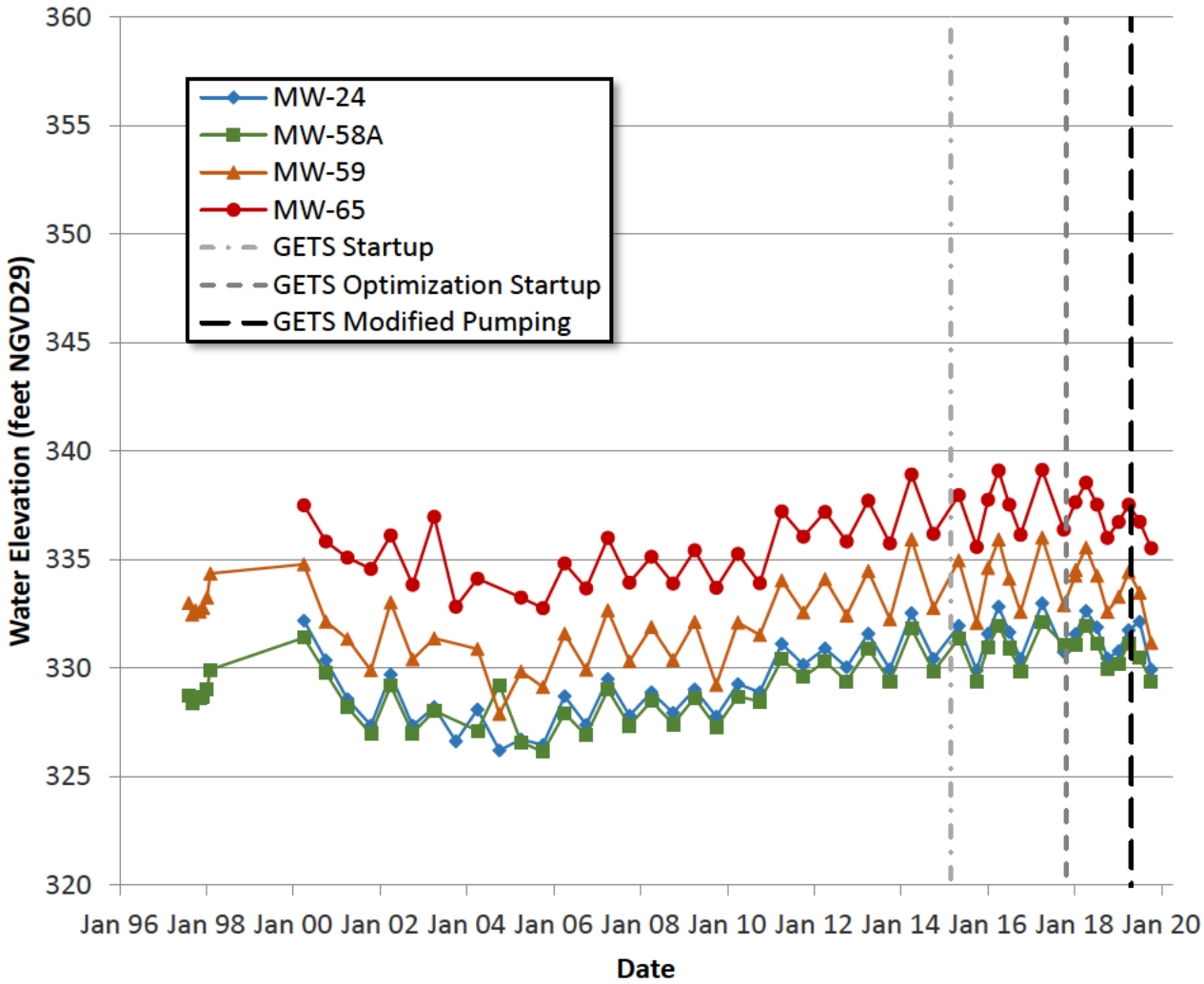
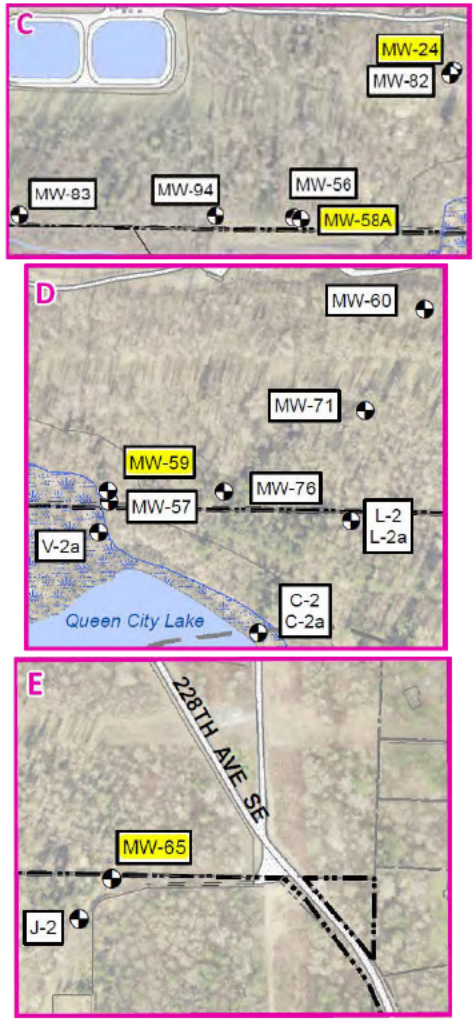


Figure A-1 Location Key Inset



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Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 3**	Figure A-19

Aquifer 3 and 4 Groundwater Elevations
Locations B-3, D-3, G-3

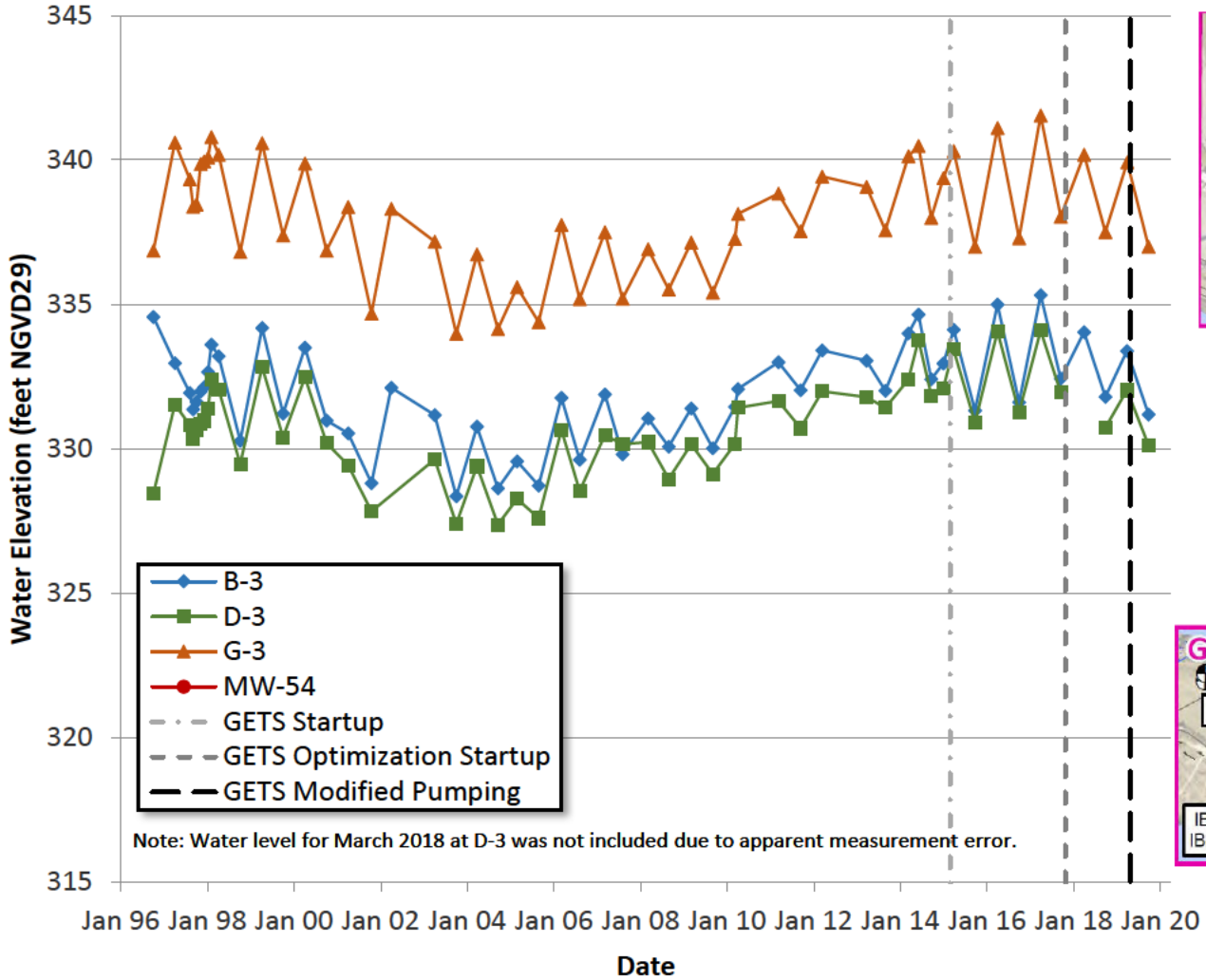
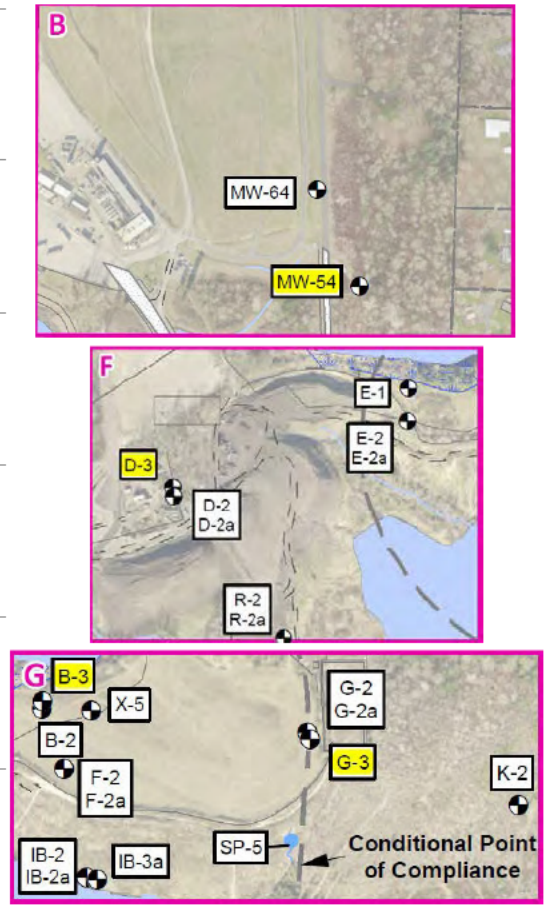


Figure A-1 Location Key Inset



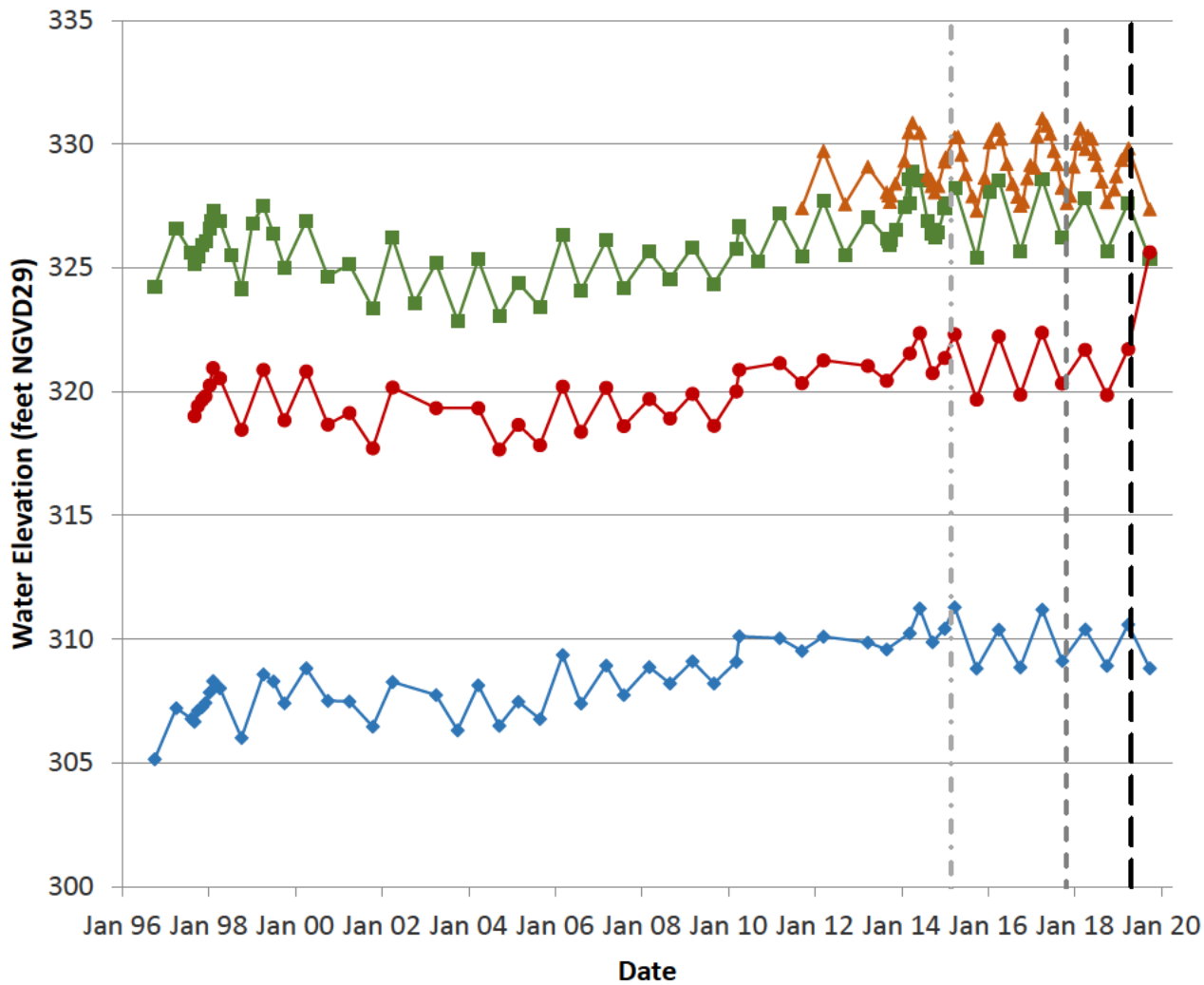
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, WA

Hydrographs – Aquifer 3, 4

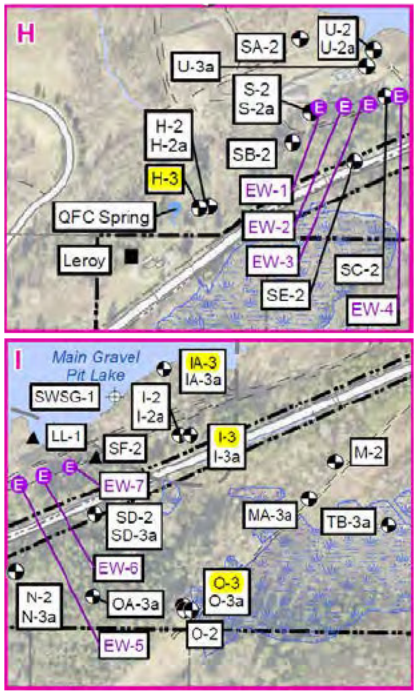
Figure
A-20

Aquifer 3 Groundwater Elevations
Locations H-3, I-3, IA-3, O-3



- H-3
- I-3
- IA-3
- O-3
- GETS Startup
- GETS Optimization Startup
- GETS Modified Pumping

Figure A-1 Location Key Inset



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Queen City Farms Maple Valley, WA	**Hydrographs – Aquifer 3**	Figure A-21

GETS Groundwater Elevations
East and West Locations H-2, I-2, S-2, SB-2

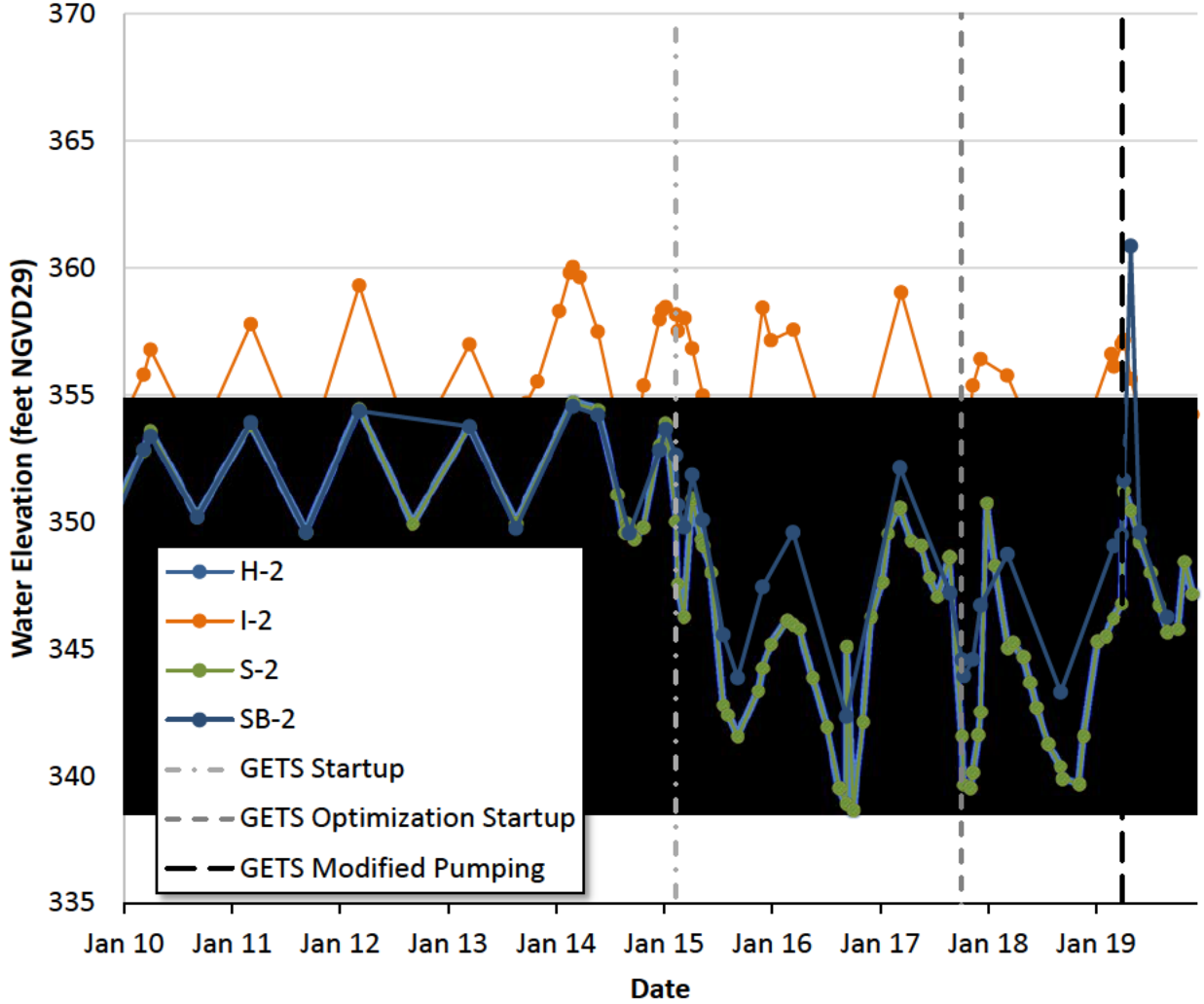
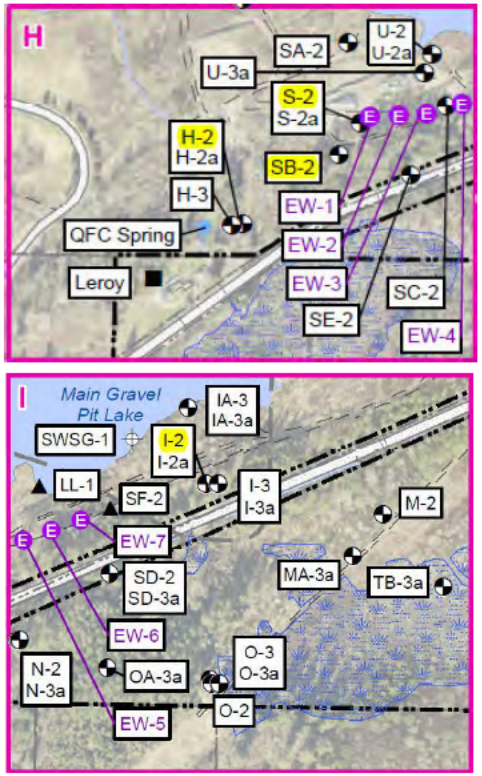


Figure A-1 Location Key Inset



Queen City Farms Maple Valley, WA	**Hydrographs – GETS East and West**	Figure A-22

LANDAU ASSOCIATES

GETS Groundwater Elevations
South Locations SD-2, SE-2, N-2

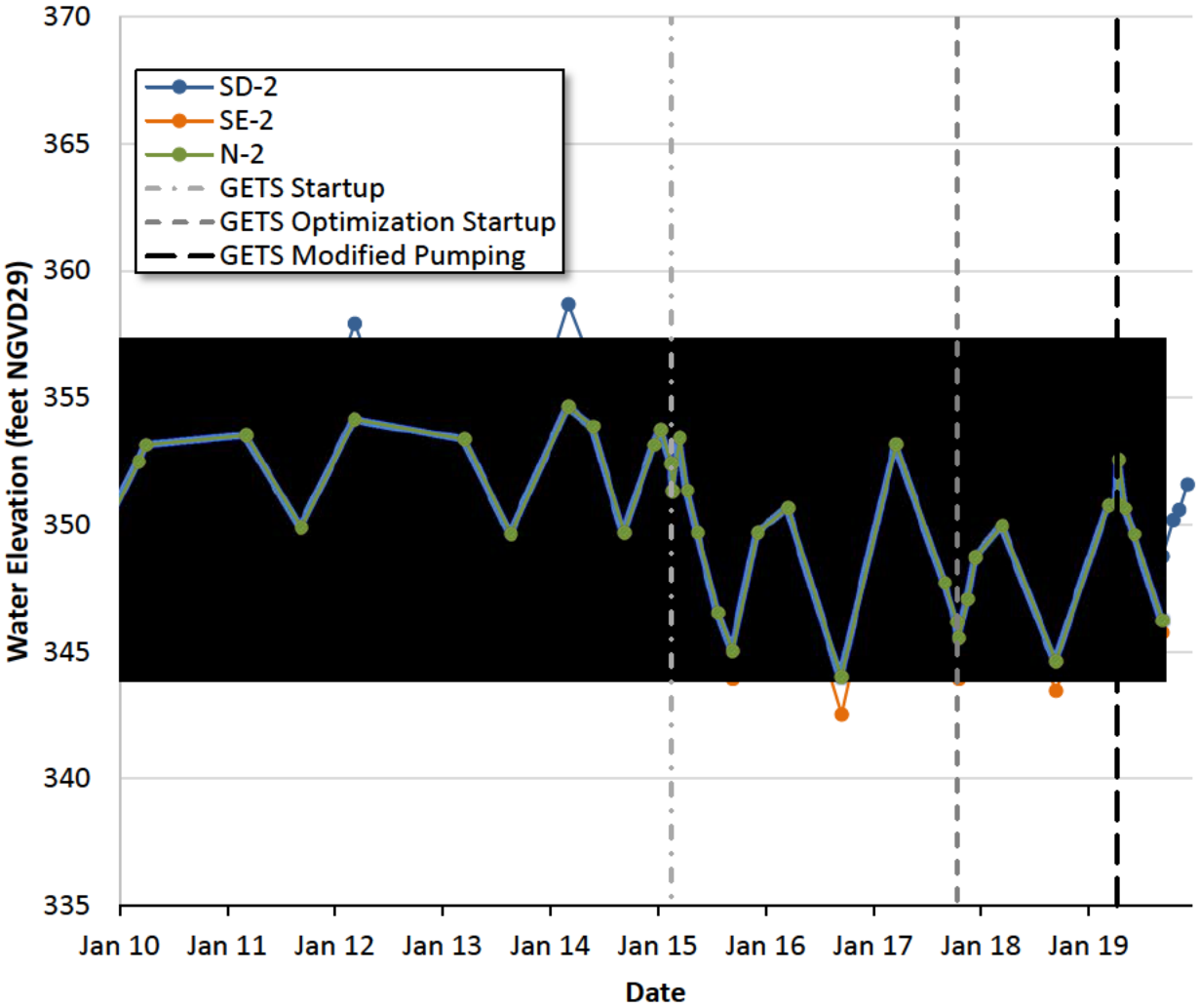
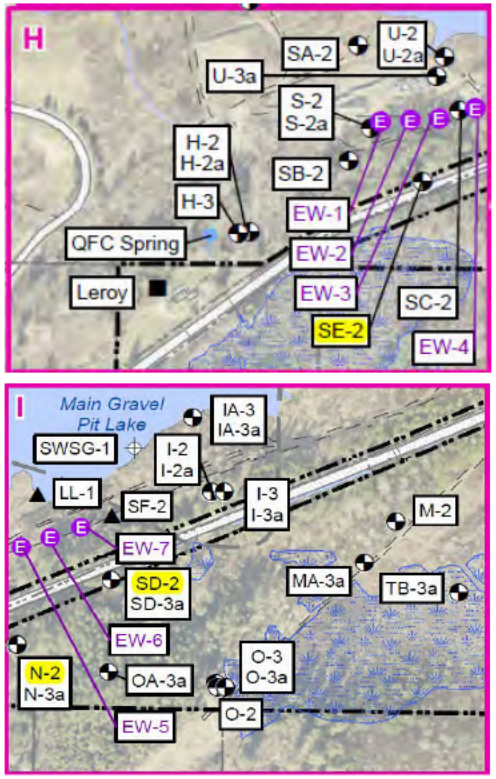


Figure A-1 Location Key Inset



Queen City Farms Maple Valley, WA	**Hydrographs – GETS South**	Figure A-23

LANDAU ASSOCIATES

GETS Groundwater Elevations
North Locations SA-2, SC-2, U-2

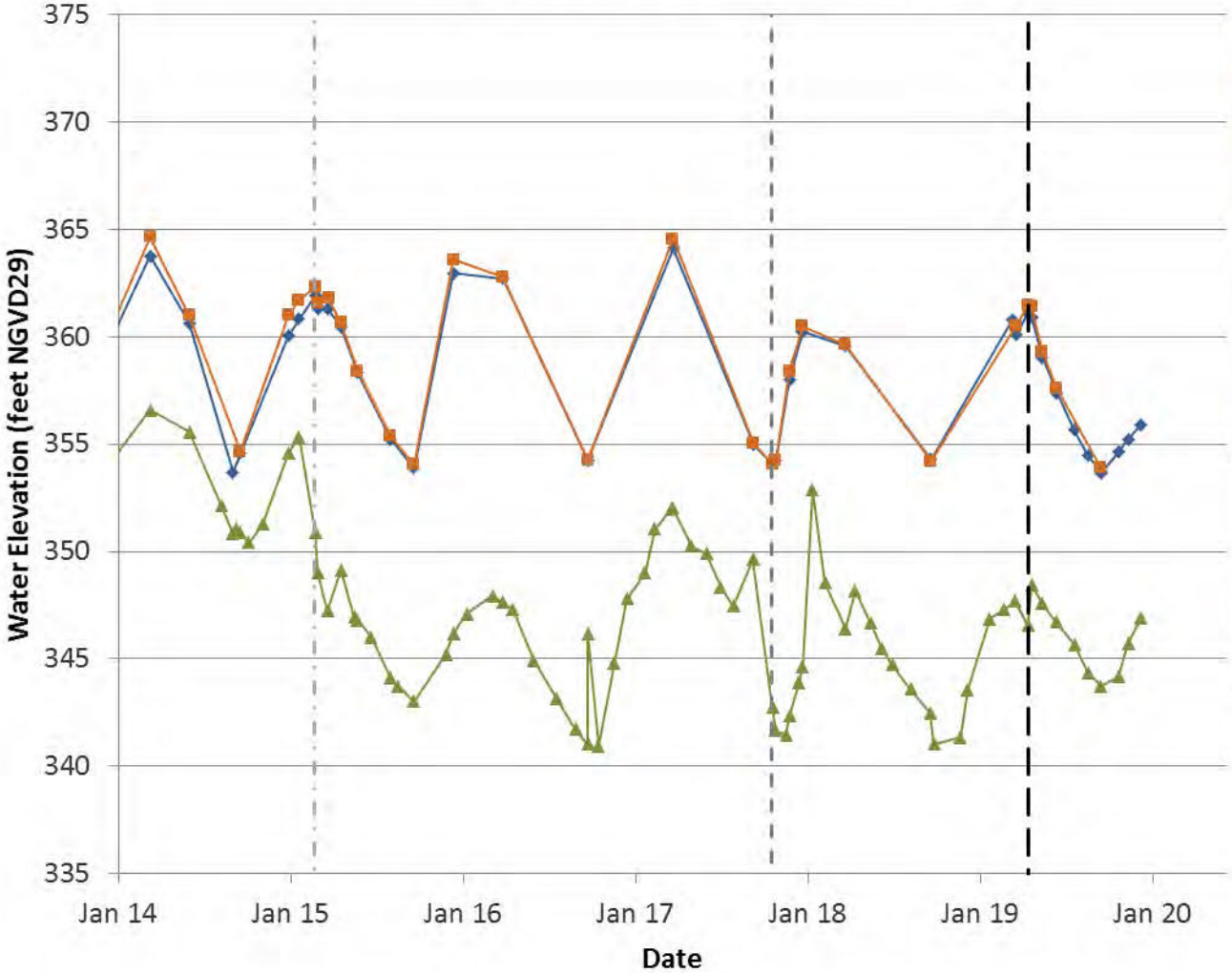
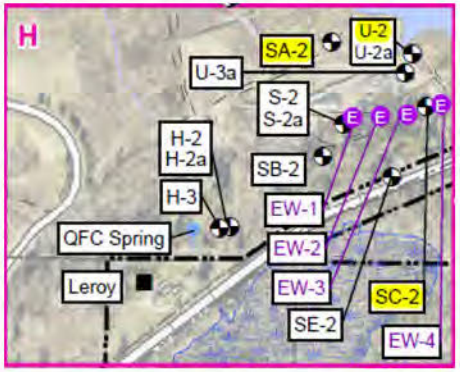


Figure A-1 Location Key Inset



- SA-2
- SC-2
- U-2
- GETS Startup
- GETS Optimization Startup
- GETS Modified Pumping

LANDAU ASSOCIATES

Queen City Farms Maple Valley, WA	**Hydrographs – GETS North**	Figure A-24

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
Queen City Farms				
Aquifer 1				
E-1	1	3/28/2019	28.02	431.95
X-5	1	3/28/2019	77.84	397.36
Aquifer 2a				
IB-2a	2a	1/29/2019	12.47	363.24
		2/28/2019	11.75	363.96
		3/18/2019	12.78	362.93
		3/27/2019	13.31	362.40
		9/23/2019	20.16	355.55
D-2a	2ae	3/26/2019	104.53	360.83
		9/23/2019	111.42	345.94
F-2a	2ae	3/28/2019	113.92	363.64
		9/25/2019	119.80	357.76
G-2a	2ae	3/28/2019	144.01	362.99
		9/25/2019	149.14	357.86
H-2a	2ae	3/25/2019	37.69	352.53
		9/23/2019	42.93	347.29
		3/29/2019	172.72	360.42
L-2a	2ae	9/25/2019	178.22	354.92
		3/26/2019	35.48	362.00
R-2a	2ae	9/23/2019	42.45	355.03
		3/28/2019	37.43	351.98
S-2a	2ae	9/24/2019	41.75	347.66
		3/27/2019	99.14	359.59
C-2a	2af	9/25/2019	105.78	352.95
		3/28/2019	104.87	360.37
E-2a	2af	9/25/2019	111.35	353.89
		3/26/2019	15.97	356.40
I-2a	2af	9/24/2019	20.68	351.69
		3/26/2019	32.49	352.40
U-2a	2af	9/24/2019	37.30	347.59
		3/27/2019	96.44	358.36
V-2a	2af	9/25/2019	102.81	351.99
Aquifer 2				
		3/29/2019	115.79	359.90
B-2	2	9/25/2019	121.90	353.79
		3/27/2019	99.76	359.05
C-2	2	9/25/2019	106.07	352.74
		3/26/2019	106.92	358.05
D-2	2	9/23/2019	112.77	352.20
		3/28/2019	106.13	359.72
E-2	2	9/25/2019	112.48	353.37
		3/28/2019	117.04	360.35
F-2	2	9/25/2019	123.22	354.17
		3/28/2019	150.41	357.41
G-2	2	9/25/2019	155.59	352.23

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
H-2	2	3/25/2019	37.89	351.84
		4/22/2019	37.64	352.09
		4/29/2019	36.89	352.84
		5/22/2019	37.78	351.95
		6/21/2019	39.21	350.52
		9/23/2019	43.21	346.52
I-2	2	3/18/2019	15.48	356.60
		3/26/2019	15.97	356.11
		4/22/2019	15.07	357.01
		4/29/2019	14.92	357.16
		5/22/2019	16.46	355.62
		6/21/2019	17.79	354.29
		7/29/2019	19.03	353.05
		8/27/2019	20.16	351.92
		9/24/2019	20.61	351.47
		10/31/2019	19.02	353.06
		11/21/2019	18.75	353.33
		12/19/2019	17.85	354.23
IB-2	2	1/29/2019	14.44	361.12
		2/28/2019	13.82	361.74
		3/18/2019	14.66	360.90
		3/27/2019	15.15	360.41
		9/23/2019	21.46	354.10
J-2	2	3/28/2019	191.89	349.88
		9/24/2019	195.89	345.88
K-2	2	3/26/2019	61.52	361.64
		9/24/2019	66.90	356.26
L-2	2	3/29/2019	186.48	346.49
		9/25/2019	191.63	341.34
M-2	2	3/27/2019	21.29	350.48
		9/25/2019	24.80	346.97
MW-71	2	3/27/2019	207.17	340.30
		9/25/2019	210.12	337.35
N-2	2	3/25/2019	16.48	350.78
		4/22/2019	16.41	350.85
		4/29/2019	14.70	352.56
		5/22/2019	16.62	350.64
		6/21/2019	17.64	349.62
		9/24/2019	21.03	346.23
O-2	2	3/25/2019	17.49	349.15
		9/25/2019	20.58	346.06
R-2	2	3/26/2019	37.95	359.19
		9/23/2019	44.21	352.93
S-2	2	1/29/2019	44.47	345.30
		2/28/2019	44.27	345.50

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
S-2 (cont.)	2	3/25/2019	43.58	346.19
		4/22/2019	42.98	346.79
		4/29/2019	38.54	351.23
		5/22/2019	39.32	350.45
		6/21/2019	40.54	349.23
		7/29/2019	41.75	348.02
		8/27/2019	43.05	346.72
		9/24/2019	44.11	345.66
		10/31/2019	43.99	345.78
		11/21/2019	41.34	348.43
		12/19/2019	42.61	347.16
SA-2	2	3/18/2019	17.38	360.76
		3/28/2019	18.04	360.10
		4/22/2019	17.07	361.07
		4/29/2019	17.23	360.91
		5/22/2019	19.11	359.03
		6/21/2019	20.77	357.37
		7/29/2019	22.50	355.64
		8/27/2019	23.66	354.48
		9/24/2019	24.50	353.64
		10/31/2019	23.53	354.61
		11/21/2019	22.91	355.23
		12/19/2019	22.24	355.90
SB-2	2	3/26/2019	49.85	349.06
		4/22/2019	49.42	349.49
		4/29/2019	47.27	351.64
		5/22/2019	38.05	360.86
		6/21/2019	49.32	349.59
		9/24/2019	52.66	346.25
SC-2	2	1/29/2019	39.31	346.85
		2/28/2019	38.86	347.30
		3/25/2019	38.47	347.69
		4/22/2019	39.62	346.54
		4/29/2019	37.72	348.44
		5/22/2019	38.59	347.57
		6/21/2019	39.44	346.72
		7/29/2019	40.50	345.66
		8/27/2019	41.80	344.36
		9/24/2019	42.42	343.74
		10/31/2019	42.00	344.16
		11/21/2019	40.44	345.72
		12/19/2019	39.25	346.91

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
SD-2	2	3/18/2019	14.93	352.84
		3/26/2019	15.58	352.19
		4/22/2019	14.71	353.06
		4/29/2019	12.71	355.06
		5/22/2019	14.50	353.27
		6/21/2019	15.69	352.08
		7/29/2019	17.08	350.69
		8/27/2019	18.40	349.37
		9/24/2019	19.01	348.76
		10/31/2019	17.58	350.19
		11/21/2019	17.18	350.59
		12/19/2019	16.19	351.58
SE-2	2	3/26/2019	16.26	349.02
		4/22/2019	15.08	350.20
		4/29/2019	12.92	352.36
		5/22/2019	14.95	350.33
		6/21/2019	16.24	349.04
		9/24/2019	19.51	345.77
SF-2	2	1/29/2019	34.32	356.74
		2/28/2019	33.28	357.78
		3/25/2019	34.30	356.76
		4/22/2019	33.31	357.75
		5/22/2019	34.44	356.62
		6/21/2019	36.26	354.80
		7/29/2019	37.48	353.58
		8/27/2019	38.96	352.10
		9/24/2019	39.52	351.54
		10/31/2019	37.61	353.45
		11/21/2019	37.14	353.92
		12/19/2019	36.17	354.89
U-2	2	3/26/2019	24.02	360.48
		4/22/2019	23.07	361.43
		4/29/2019	23.11	361.39
		5/22/2019	25.22	359.28
		6/21/2019	26.92	357.58
		9/24/2019	30.61	353.89
Aquifer 3a				
I-3a	3a	3/26/2019	44.77	327.36
		9/24/2019	47.05	325.08
IA-3a	3a	1/29/2019	45.58	329.33
		2/28/2019	45.37	329.54
		3/27/2019	45.09	329.82
		9/23/2019	47.62	327.29

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
IB-3a	3a	1/29/2019	43.76	331.67
		2/28/2019	43.57	331.86
		3/18/2019	43.42	332.01
		3/27/2019	43.29	332.14
		9/23/2019	45.77	329.66
MA-3a	3a	3/27/2019	39.79	326.01
MA-3a	3a	9/25/2019	42.12	323.68
N-3a	3a	3/25/2019	48.37	317.62
		9/24/2019	50.44	315.55
O-3a	3a	3/25/2019	45.41	321.39
		9/25/2019	47.51	319.29
OA-3a	3a	3/25/2019	58.03	318.26
		9/24/2019	60.10	316.19
SD-3a	3a	3/26/2019	42.54	324.96
		9/24/2019	44.71	322.79
TB-3a	3a	3/27/2019	35.44	330.44
		9/25/2019	37.84	328.04
U-3a	3a	3/26/2019	53.85	331.15
		9/24/2019	56.20	328.80
Aquifer 3				
B-3	3	3/27/2019	140.57	333.39
		9/25/2019	142.77	331.19
D-3	3	3/26/2019	131.82	332.03
		9/23/2019	133.72	330.13
H-3	3	3/25/2019	79.29	310.60
		9/23/2019	81.06	308.83
I-3	3	3/26/2019	44.60	327.63
		9/24/2019	46.87	325.36
IA-3	3	1/29/2019	44.94	329.37
		2/28/2019	44.76	329.55
		3/27/2019	44.48	329.83
		9/23/2019	46.93	327.38
O-3	3	3/25/2019	45.52	321.72
		9/25/2019	41.61	325.63
Aquifer 4 (b)				
G-3	4	3/28/2019	166.06	339.92
		9/25/2019	168.98	337.00
Groundwater Extraction and Treatment System				
EW-1 (a)	2	3/25/2019	53.06	329.00
		4/22/2019	48.06	334.00
		4/23/2019	30.26	351.80
		4/29/2019	29.86	352.20
		5/22/2019	30.46	351.60
		6/21/2019	30.86	351.20
		9/23/2019	35.16	346.90

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
EW-2 (a)	2	3/25/2019	37.66	343.70
		4/22/2019	41.36	340.00
		4/23/2019	30.36	351.00
		4/29/2019	30.06	351.30
		5/22/2019	30.56	350.80
		6/21/2019	30.86	350.50
		9/23/2019	35.06	346.30
EW-3 (a)	2	3/25/2019	48.96	332.00
		4/22/2019	49.96	331.00
		4/23/2019	49.96	331.00
		4/29/2019	49.96	331.00
EW-3 (a)	2	5/22/2019	49.96	331.00
		6/21/2019	48.96	332.00
		9/23/2019	49.96	331.00
EW-4 (a)	2	3/25/2019	36.81	344.90
		4/22/2019	49.71	332.00
		4/23/2019	49.71	332.00
		4/29/2019	49.71	332.00
		5/22/2019	49.71	332.00
		6/21/2019	47.71	334.00
		9/23/2019	49.71	332.00
EW-5 (a)	2	3/25/2019	49.19	335.10
		4/22/2019	48.29	336.00
		4/23/2019	48.29	336.00
		4/29/2019	48.29	336.00
		5/22/2019	49.29	335.00
		6/21/2019	48.29	336.00
		9/23/2019	52.29	332.00
EW-6 (a)	2	3/25/2019	45.62	338.00
		4/22/2019	42.62	341.00
		4/23/2019	29.22	354.40
		4/29/2019	29.12	354.50
		5/22/2019	30.32	353.30
		6/21/2019	30.72	352.90
		9/23/2019	34.72	348.90
EW-7 (a)	2	3/25/2019	39.42	344.00
		4/22/2019	37.42	346.00
		4/23/2019	27.62	355.80
		4/29/2019	27.62	355.80
		5/22/2019	28.92	354.50
		6/21/2019	29.62	353.80
		9/23/2019	33.42	350.00

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
Surface Water				
LL-1 (a)	N/A	3/25/2019	9.12	363.90
		4/22/2019	8.02	365.00
		4/23/2019	8.02	365.00
		4/29/2019	8.72	364.30
		5/22/2019	11.71	361.31
		6/21/2019	13.76	359.26
		9/23/2019	Dry	Dry
SWSG-1	N/A	1/29/2019	-6.58	368.06
		2/28/2019	-7.60	369.08
		3/27/2019	-4.86	366.34
		4/22/2019	-6.30	367.78
		4/23/2019	-6.20	367.68
		4/29/2019	-5.15	366.63
		5/22/2019	-3.22	364.70
		6/21/2019	-0.99	362.47
		7/29/2019	-0.36	361.84
		8/27/2019	-0.40	361.88
		9/24/2019	-0.46	361.94
		10/31/2019	-1.24	362.72
		11/21/2019	-2.50	363.98
		12/19/2019	-1.90	363.38
Cedar Hills Regional Landfill				
Aquifer 2a				
MW-83	2ae	1/7/2019	145.54	351.27
		4/1/2019	143.61	353.20
		7/3/2019	143.85	352.96
		10/7/2019	145.02	351.79
MW-94	2ae	1/7/2019	142.66	352.85
		4/1/2019	139.65	355.86
		7/3/2019	141.36	354.15
		10/7/2019	143.56	351.95
MW-60	2af	1/7/2019	228.35	338.80
		4/1/2019	225.08	342.07
		7/3/2019	226.35	340.80
		10/7/2019	228.37	338.78
MW-76	2af	1/7/2019	135.02	356.69
		4/1/2019	133.81	357.90
		7/3/2019	137.20	354.51
		10/7/2019	141.19	350.52
MW-82	2af	1/7/2019	125.13	349.72
		4/1/2019	121.31	353.54
		7/3/2019	122.39	352.46
		10/7/2019	125.23	349.62
MW-95	2af	1/7/2019	251.02	320.52
		4/1/2019	250.74	320.80
		7/3/2019	250.05	321.49
		10/7/2019	250.88	320.66

Table A-1
2019 Water Level Elevations
Queen City Farms - 2019 Annual Report
Maple Valley, Washington

Well Identification	Aquifer	Date	Depth to Water (ft bgs)	Water Elevation (ft)
Aquifer 2				
MW-56	2	1/7/2019	127.63	352.70
		4/1/2019	124.56	355.77
		7/3/2019	126.14	354.19
		10/7/2019	128.65	351.68
MW-57	2	1/7/2019	102.10	354.54
		4/1/2019	99.55	357.09
		7/3/2019	102.31	354.33
		10/7/2019	105.82	350.82
Aquifer 3a				
MW-64	3a	1/7/2019	265.65	330.90
		4/1/2019	265.21	331.34
		7/3/2019	265.43	331.12
		10/7/2019	265.73	330.82
Aquifer 3				
MW-24	3	1/7/2019	145.20	330.79
		4/1/2019	144.24	331.75
		7/3/2019	143.85	332.14
		10/7/2019	146.05	329.94
MW-58A	3	1/7/2019	149.08	330.19
		4/1/2019	148.15	331.12
		7/3/2019	148.79	330.48
		10/7/2019	149.88	329.39
MW-59	3	1/7/2019	123.85	333.28
MW-59	3	4/1/2019	122.70	334.43
		7/3/2019	123.65	333.48
		10/7/2019	125.96	331.17
MW-65	3	1/7/2019	209.10	336.73
		4/1/2019	208.29	337.54
		7/3/2019	209.08	336.75
		10/7/2019	210.30	335.53
MW-54	4	1/7/2019	278.28	302.15
		4/1/2019	277.78	302.65
		7/3/2019	277.20	303.23
		10/7/2019	278.58	301.85

Notes:

1. Vertical Datum: NGVD29, US ft, MSL; Horizontal Datum: NAD 83(91) US ft.
2. Coordinates originally referenced to any other datum have been converted for inclusion in this dataset.

(a) Depth to water is difference between PLC groundwater water elevation and measuring point elevation.
(b) Aquifer 4 is also referred to as the Deep Water Bearing Zone.

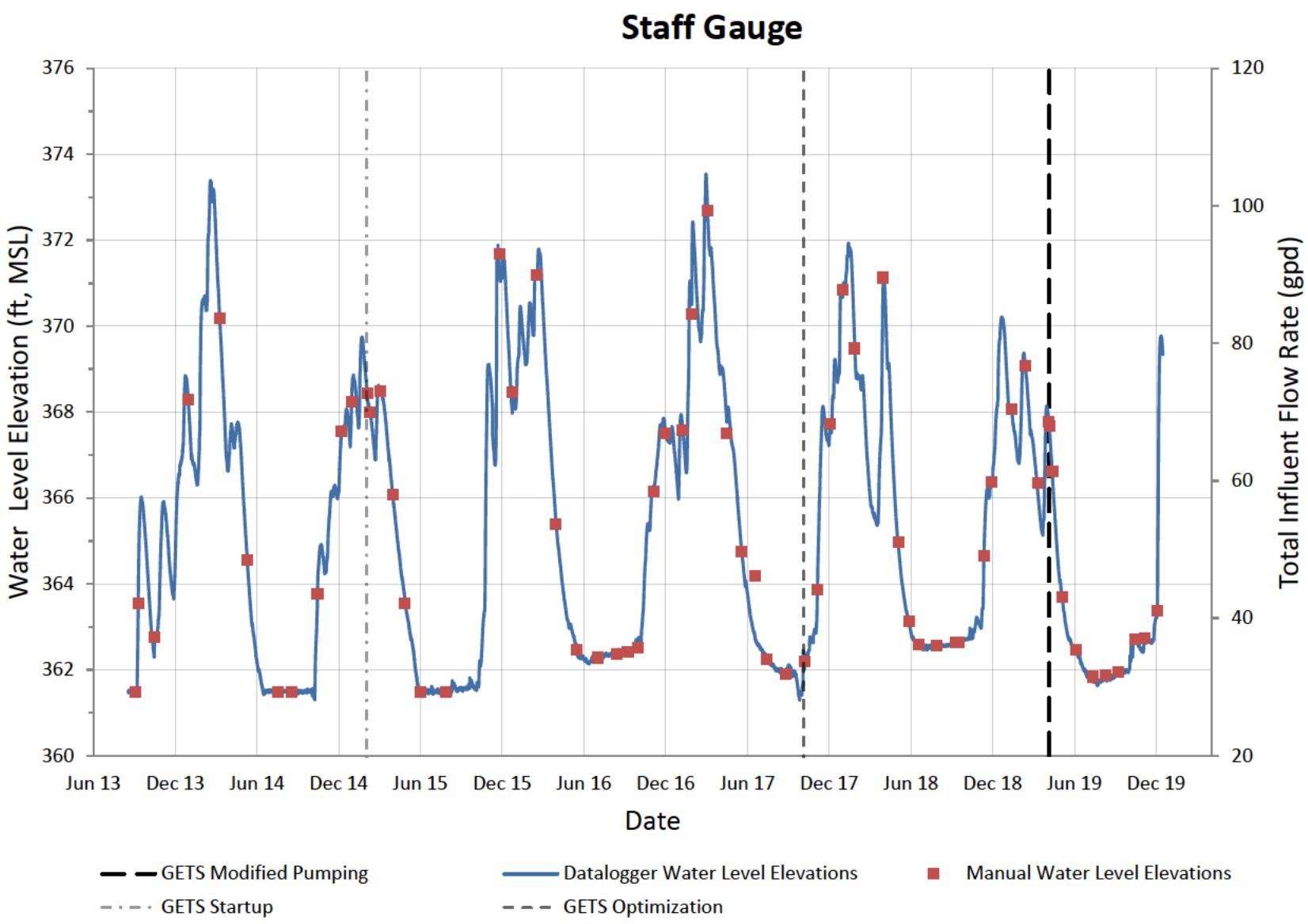
Abbreviations/Acronyms:

-- = not measureed
bgs = below ground surface
ft = feet
GETS = groundwater extraction and treatment system
MSL = mean sea level
N/A = not applicable
NAD 83 (91) = North American Vertical Datum of 1983 (1991)
NGVD29 = National Geodetic Vertical Datum of 1929
PLC = programmable logic controller
SWSG = surface water staff gauge

APPENDIX B

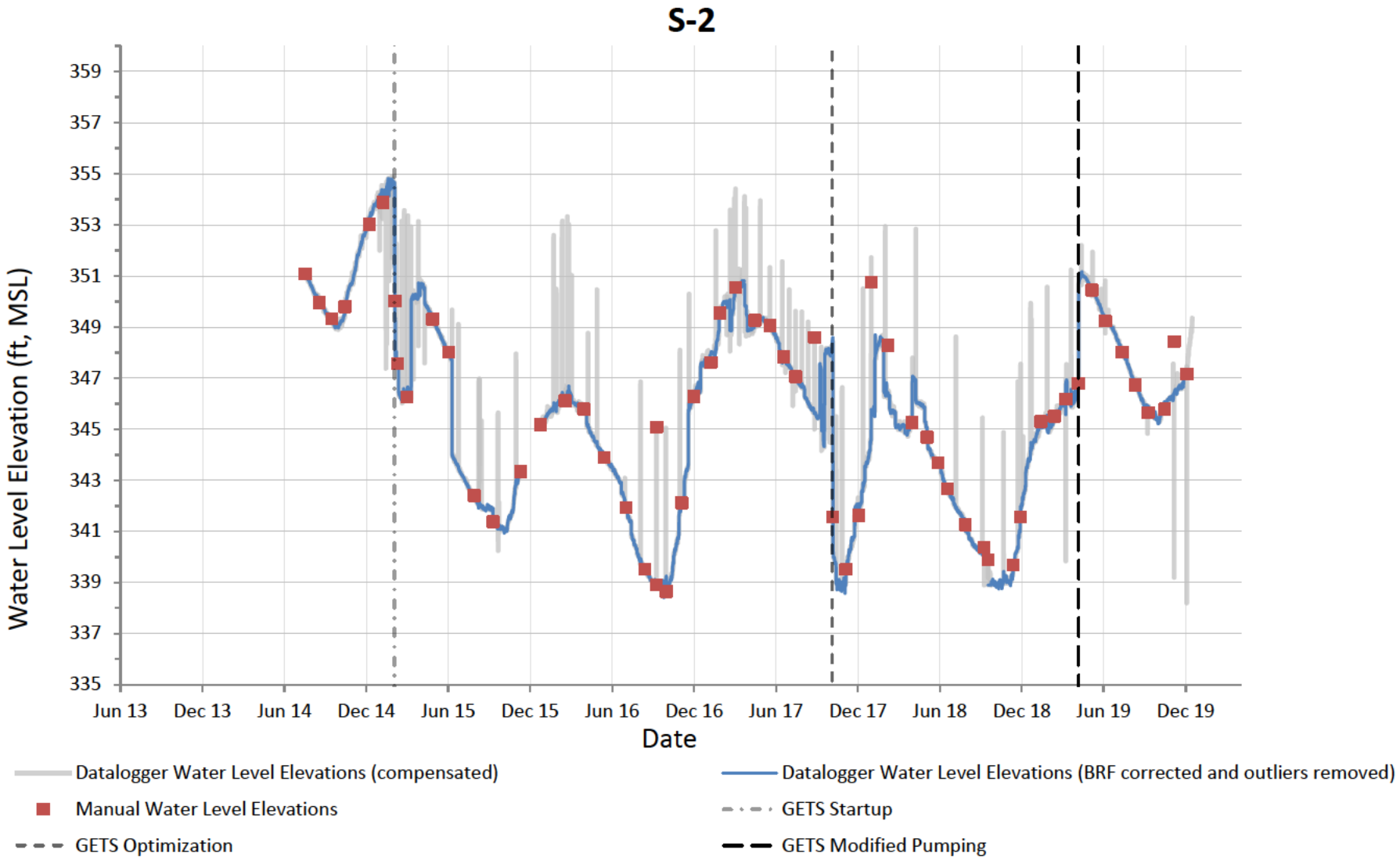
Hourly Water Level Elevation Plots at Select Wells

Figure B-1 Hourly Water Level Elevations – SWSG-1
Figure B-2 Hourly Water Level Elevations – S-2
Figure B-3 Hourly Water Level Elevations – SC-2
Figure B-4 Hourly Water Level Elevations – SF-2
Figure B-5 Hourly Water Level Elevations – I-2
Figure B-6 Hourly Water Level Elevations – SA-2
Figure B-7 Hourly Water Level Elevations – SD-2



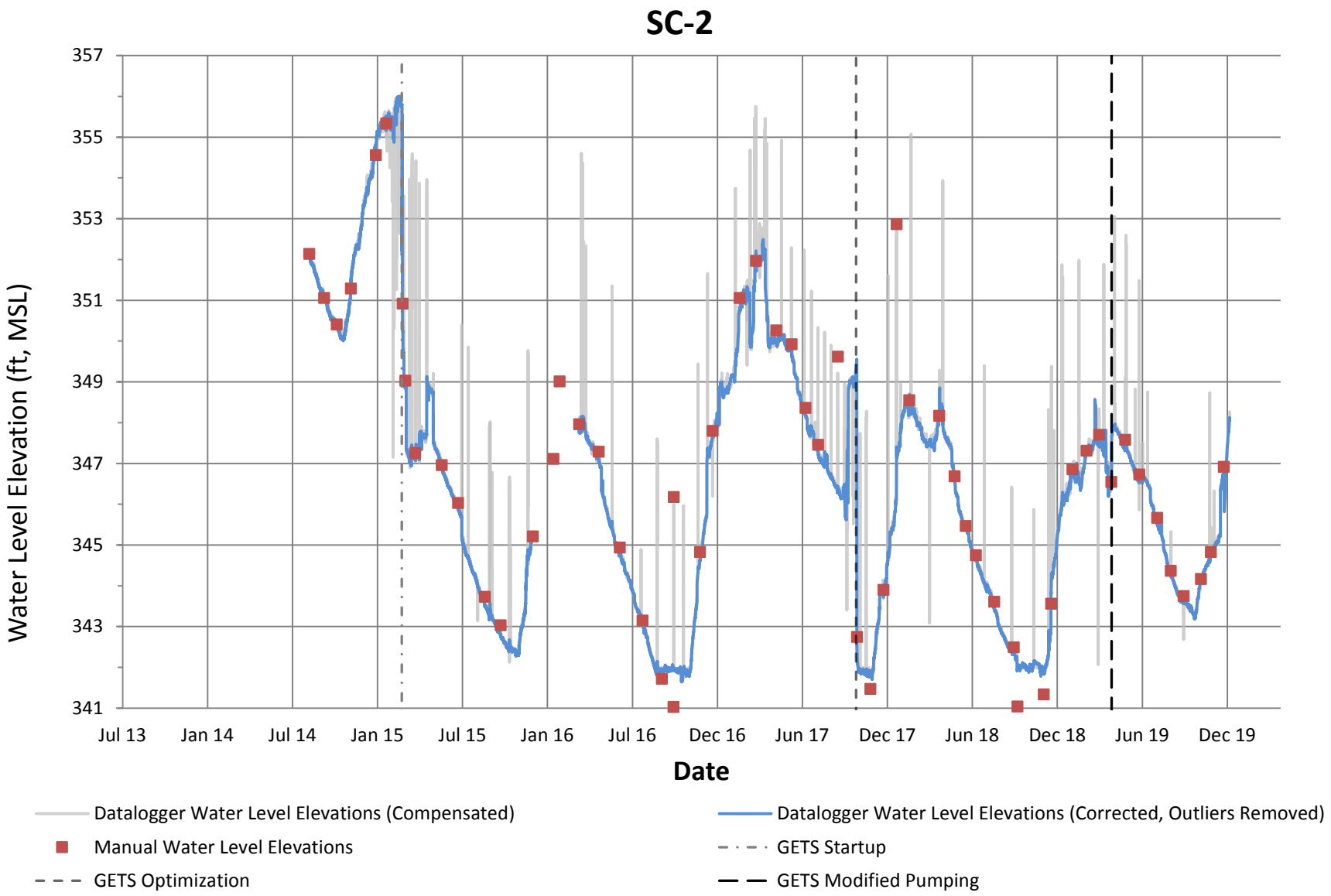
LANDAU ASSOCIATES

Queen City Farms Maple Valley, WA	**Hourly Water Level Elevations – SWSG-1**	Figure B-1



LANDAU ASSOCIATES

Queen City Farms Maple Valley, WA	**Hourly Water Level Elevations – S-2**	Figure B-2

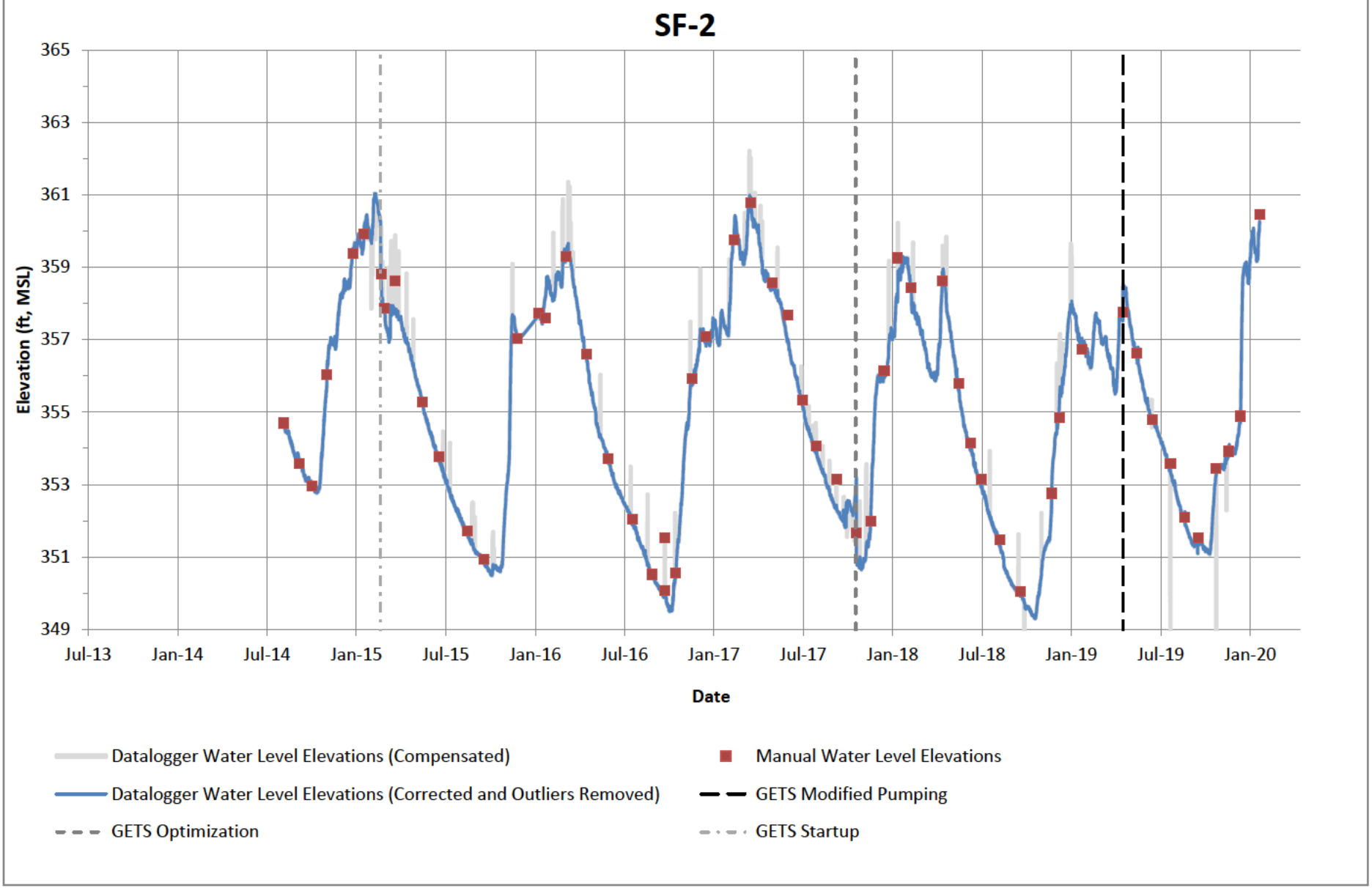


LANDAU ASSOCIATES

Queen City Farms
Maple Valley, WA

Hourly Water Level Elevations – SC-2

Figure
B-3

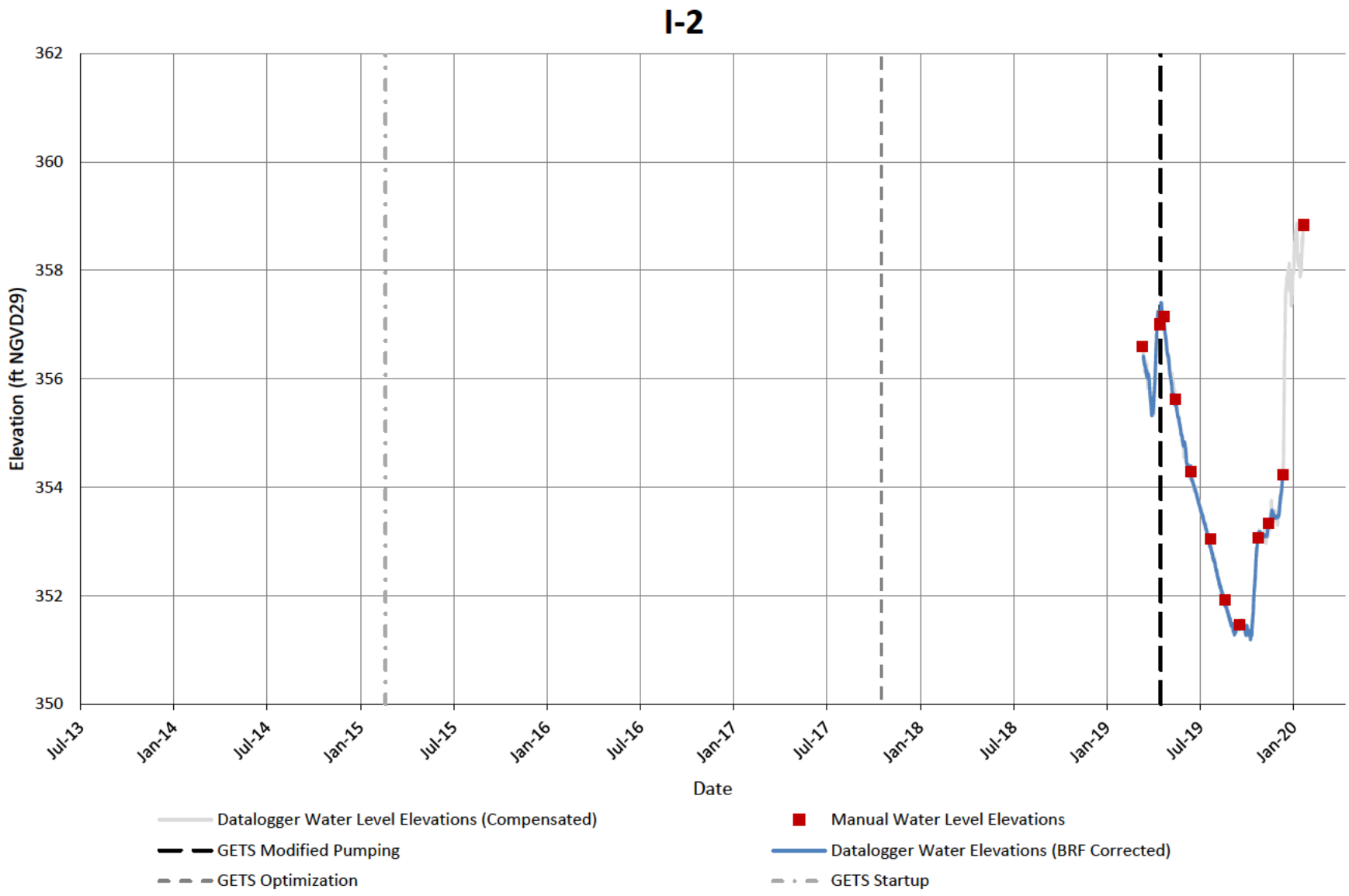


LANDAU ASSOCIATES

Queen City Farms
Maple Valley, WA

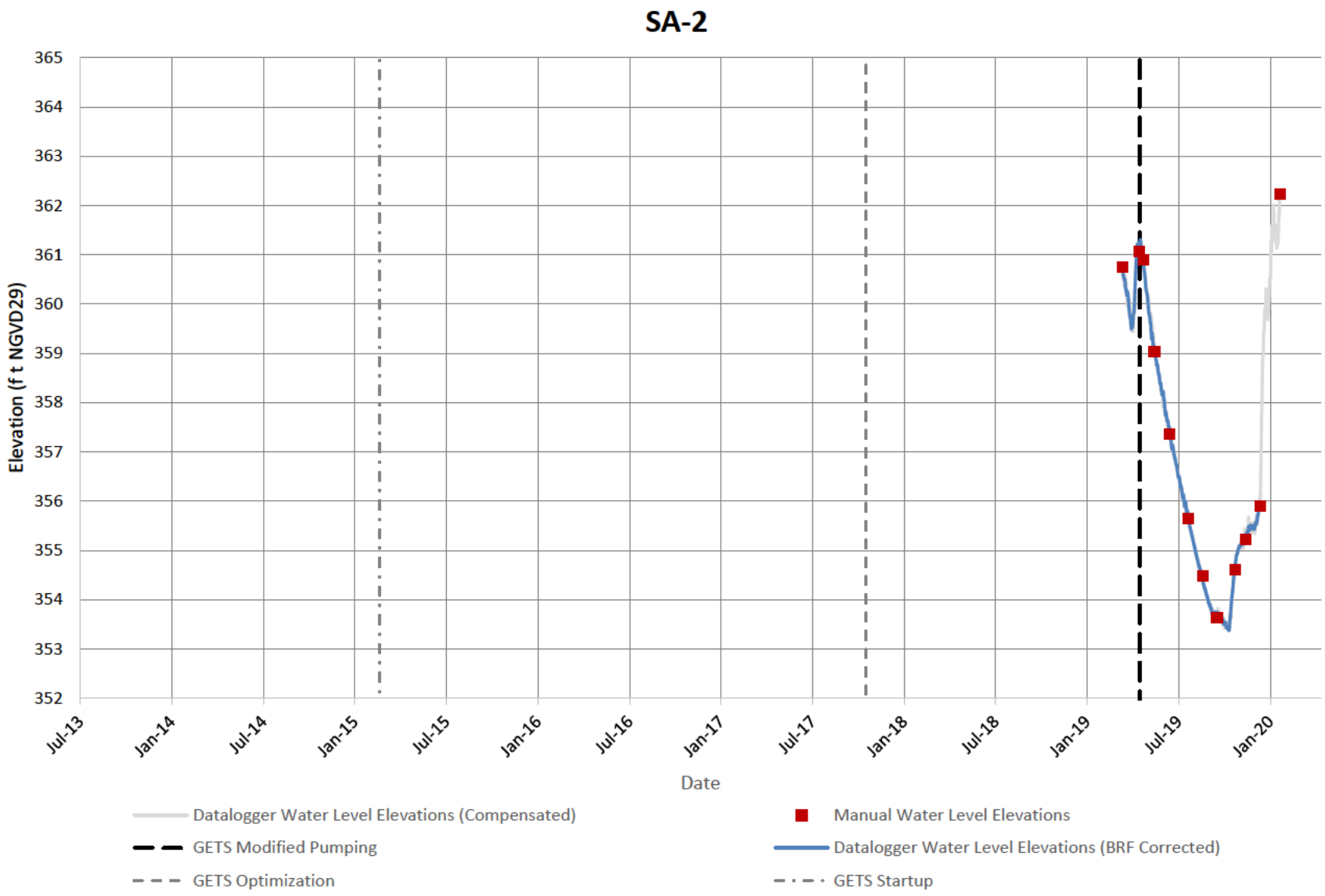
Hourly Water Level Elevations – SF-2

Figure
B-4



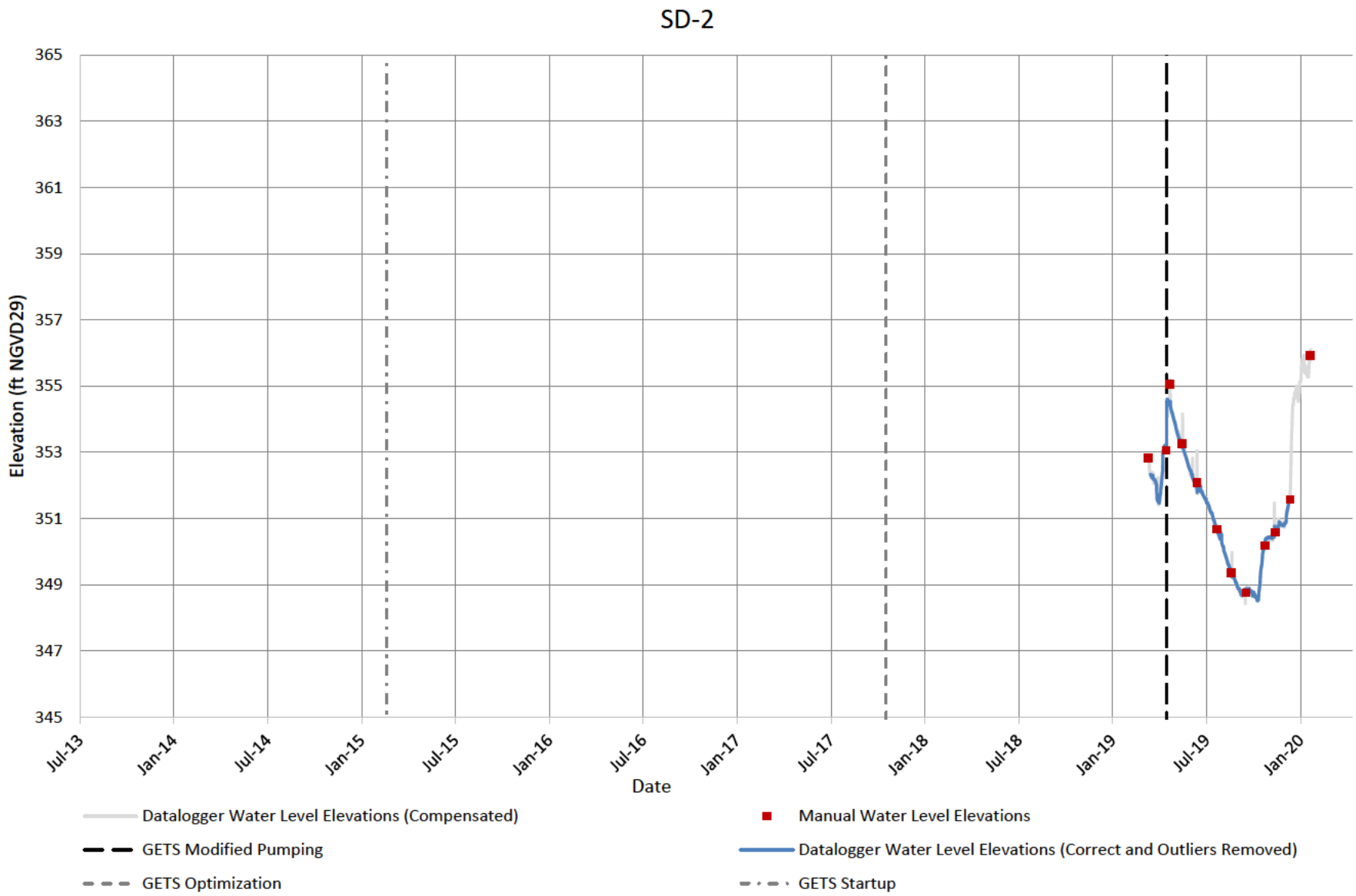
LANDAU ASSOCIATES

Queen City Farms Maple Valley, WA	**Hourly Water Level Elevations – I-2**	Figure B-5



LANDAU ASSOCIATES

Queen City Farms Maple Valley, WA	**Hourly Water Level Elevations – SA-2**	Figure B-6



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Queen City Farms
Maple Valley, WA

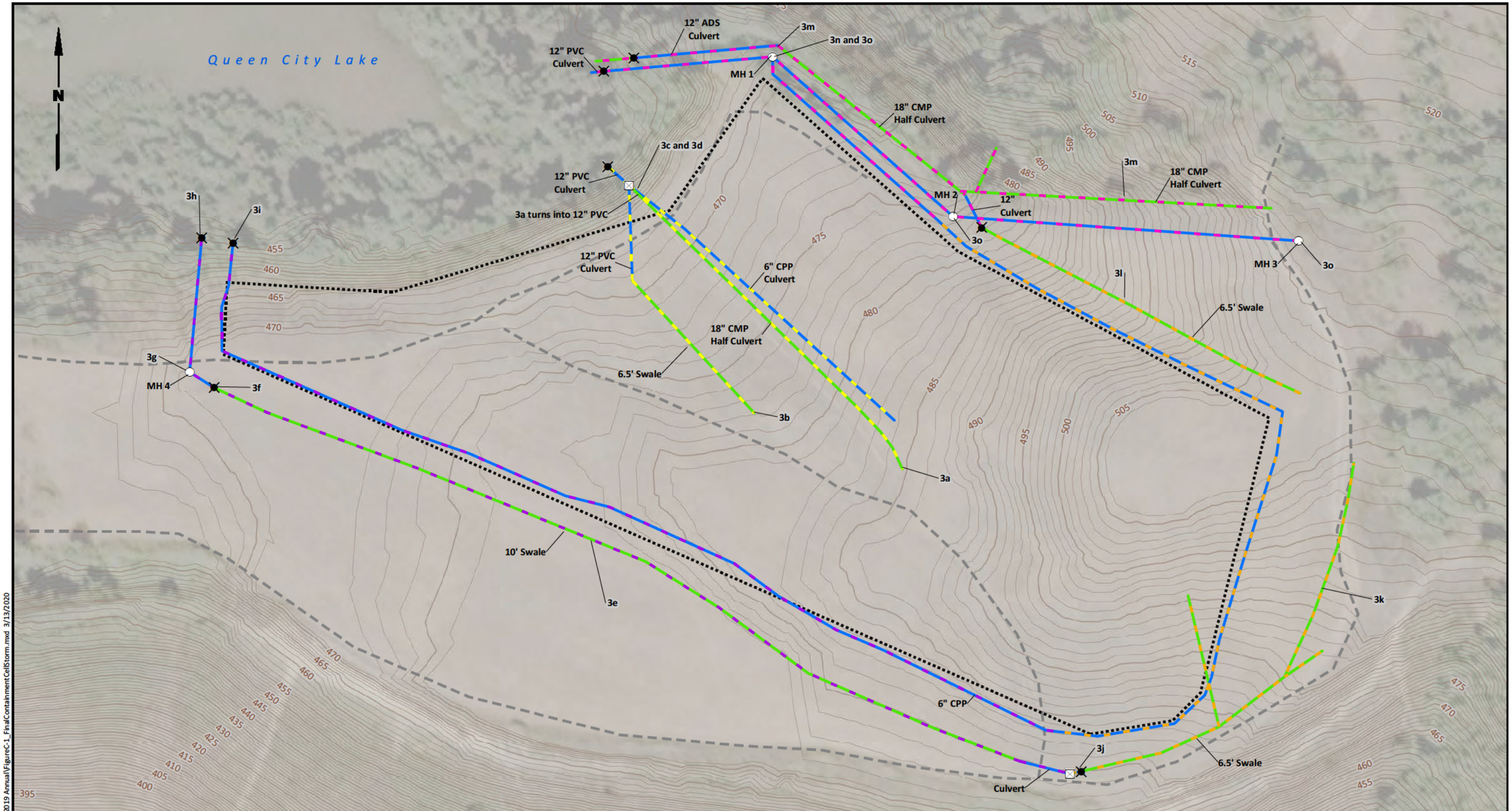
Hourly Water Level Elevations – SD-2

Figure
B-7

SD-2

APPENDIX C

Final Containment Cell Cap Inspection Forms



G:\Projects\025\178\160\404\2019 Annual\FigureC-1_FinalContainmentCellStorm.mxd 3/13/2020

Legend

- Catch Basin
- Energy Dissipator
- Manhole
- Above Surface Storm Line
- Below Surface Storm Line
- Final Containment Cell
- Roads
- 1' Contour
- 5' Contour

Drainage Zones

- Central
- North
- Northeast
- South

0 80 160
Scale in Feet

Data Source: Esri World Imagery.

LANDAU ASSOCIATES

Queen City Farms Maple Valley, Washington	**Final Containment Cell Stormwater System**	Figure C-1

O&M INSPECTION REPORT
QUEEN CITY FARMS
VERTICAL BARRIER WALL SYSTEM OPERATIONS AND MAINTENANCE

Inspection Date: 8/27/2019

Personnel: KAM/KEB/JWW

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
1. SITE CONDITIONS			
Accumulation of water	If present, where?	No accumulation of water observed	
Erosion	If present, where?	No erosion noted	
Subsidence	If present, where?	No subsidence noted	
Fissures	If present, where?	No fissures noted	
Disturbed benchmarks	Which benchmarks are disturbed?	Benchmark locations unknown	
Vegetation overgrowth	If present, where?	Vegetation not overgrown, recently mowed	

O&M INSPECTION REPORT
QUEEN CITY FARMS
VERTICAL BARRIER WALL SYSTEM OPERATIONS AND MAINTENANCE

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
2. SITE SECURITY			
Fences	Location of deterioration or vandalism	Fence appears intact	
Gates	Are gates operable?	Gates are operable	
Locks	Missing or not functioning?	Locks are functional	
Signs	Signs destroyed or vandalized?	Signs are visible and intact	

O&M INSPECTION REPORT
QUEEN CITY FARMS
VERTICAL BARRIER WALL SYSTEM OPERATIONS AND MAINTENANCE

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
3. DRAINAGE SYSTEM			
Central Surface Drainage System			
a) 18" half culvert that runs east-west down the center of the west half of the cover.	Range, area and depth of sediment accumulation.	Minimal to no debris observed	Clear brush around culvert and shovel out sediment
b) 6.5' swale south of the central 18" half culvert that runs parallel and then turns to connect to the half culvert.	Range, area and depth of sediment accumulation.	Vegetation buildup near PVC pipe, not impeding flow	Clear brush around culvert entrance
c) Catch basin at intersection of swale and half culvert near Queen City Lake.	Depth of sediment.	Catch basin is clear on top, minor debris and sediment in catch basin (<1")	
Central Subsurface Drainage System			
d) A 6" perforated corrugated pipe runs approximately the same path as the half culvert and the swale and discharges into same catch basin.	Observe flow at discharge during or following period of ran (wet season only). Is discharge observed (wet season only)?	Dry season – no discharge Discharge pipe clear	
South Surface Drainage System			
e) 10' swale at south side of cover system.	Range, area and depth of sediment accumulation.	Swale clear, no debris	

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
f) Culvert inlet structure from swale.	Depth of sediment at entrance and in pipe.	Mostly clear, flow not impeded	Clear vegetation around inlet structure
g) Observe flow at manhole #4 during or following a period of rain (wet season only).	Is discharge observed (wet season only)?	Dry season – no discharge Rocks in bottom of manhole, not impeding flow, no sediment accumulation, minor water (<1")	
h) Culvert discharge	Sediment depth?	No sediment build up	
South Subsurface Drainage System			
i) Culvert discharge	Sediment depth?	No sediment build up	
North and East Surface Drainage System			
j) Catch basin cover / culvert at southeast corner of cover.	Sediment depth? Verify adjacent culvert is clear.	No sediment build up in catch basin, No debris in culvert	
k) 6.5' swale that wraps around east end of cover system.	Range, area and depth of sediment accumulation.	No debris in swale	
l) 6.5' swale that extends from the northeast corner of the cover to the middle of the north side.	Range, area and depth of sediment accumulation. Check inlet (middle of north side of cover system).	No sediment build up	Clear grass in front of inlet

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
North and East Subsurface Drainage System			
m) 12" half culver that runs along the north side of the cover system and discharges to Queen City Lake	Range, area and depth of sediment accumulation.	Minor debris and vegetation, and trees fallen across culvert, not impeding flow. Outfall to Queen City Lake <1" debris and vegetation	Remove trees, clear vegetation around culvert, clear leaves from culvert in the fall
n) A 6" perforated PE pipe extends from the catch basin at the southeast corner of the cover system around the cover to the north central end of the cover and discharges into manhole #1.	Observe flow at discharge during or following a period of ran (wet season only). Is discharge observed (wet season only)?	Minor discharge observed in dry season.	
o) A 12" PVC pipe runs parallel to the north side of the cover system and discharges into Queen City Lake. Pipe intersects manholes #1, #2, and #3.	Condition of energy dissipater? Sediment depth in manholes?	MH1 – Woody debris inside, not impeding flow MH2 – Minor sediment accumulated (<1") not impeding flow MH3 – Minor sediment accumulated (<1") not impeding flow Energy dissipater by lake - <1" debris, not impeding flow	

O&M INSPECTION REPORT
QUEEN CITY FARMS
VERTICAL BARRIER WALL SYSTEM OPERATIONS AND MAINTENANCE

ITEM	ITEMS TO MEASURE OR NOTE	OBSERVED CONDITIONS/ MEASUREMENT	MAINTENANCE OR CORRECTIVE ACTION REQUIRED
4. COVER SYSTEM			
Settlement	If present, where?	No settlement observed	
Damage caused by burrowing animals	If present, where?	No damage observed	
Fissures	If present, where?	No fissures observed	
Side slopes sliding or sloughing	If present, where?	None observed	
Seismic activity damage	If present, where?	None observed	

Frequency: All items shall be performed monthly for the first 2 years and semiannually thereafter, and after each 25-year, 24—hour storm event (3.6 inches of rainfall).

APPENDIX D

Volatile Organic Compound Data

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																															
			cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane
Queen City Farms																																		
Aquifer 1																																		
E-1	1	3/28/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 2a																																		
IB-2A	2a	3/27/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
D-2A	2ae	3/26/2019	0.5 U	0.5 U	**1.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
F-2A	2ae	3/28/2019	0.5 U	0.5 U	**0.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
G-2A	2ae	3/28/2019	0.5 U	0.5 U	**3.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
H-2A	2ae	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
L-2A	2ae	3/29/2019	0.5 U	0.5 U	**3.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	**3.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
S-2A	2ae	3/28/2019	0.5 U	0.5 U	**3.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	**3.3**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
C-2A	2af	3/29/2019	0.5 U	**0.9**	**14**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
E-2A	2af	3/28/2019	0.5 U	0.5 U	**20**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-2A	2af	3/26/2019	0.5 U	0.5 U	**1.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
V-2A	2af	3/27/2019	**2.8**	0.5 U	**2.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	**0.5**	0.5 U	**19**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 2																																		
C-2	2	3/29/2019	**2.1**	0.5 U	**40**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
E-2	2	3/28/2019	**1.2**	**0.6**	**36**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
F-2	2	3/28/2019	**1.1**	**1.6**	**18**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
G-2	2	3/28/2019	**1.0**	**0.9**	**8.3**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
H-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-2	2	3/26/2019	**13**	0.5 U	**18**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	**12**	0.5 U	**17**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
L-2	2	3/29/2019	0.5 U	0.5 U	**16**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
M-2	2	3/27/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	**0.9**	0.5 U	**0.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
O-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
S-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SA-2	2	3/28/2019	0.5 U	0.5 U	**5.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	**5.3**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SB-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SC-2	2	3/25/2019	0.5 U	0.5 U	**7.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	**5.7**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SD-2	2	3/26/2019	**1.1**	0.5 U	**13**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	**9.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SE-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
U-2	2	3/26/2019	0.5 U	0.5 U	**1.3**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	**1.4**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 3a																																		
I-3A	3a	3/26/2019	**3.4**	**0.9**	**27**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IA-3A	3a	3/27/2019	**18**	0.5 U	**78**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**16**	0.5 U	**75**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IB-3A	3a	3/27/2019	**11**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																															
			cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane
MA-3A	3a	3/27/2019	**3.2**	0.5 U	**27**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	**2.5**	0.5 U	**24**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-3A	3a	3/25/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
O-3A	3a	3/25/2019	**3.8**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
OA-3A	3a	3/25/2019	**4.3**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SD-3A	3a	3/26/2019	**15**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 3																																		
B-3	3	3/29/2019	**10**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-3	3	3/26/2019	**14**	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IA-3	3	3/27/2019	**31**	0.5 U	**9.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.6**	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**32**	0.5 U	**12**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.6**	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
GETS																																		
EGW	N/A	3/25/2019	**0.7**	0.5 U	**1.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/23/2019	0.5 U	0.5 U	**2.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	**1.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	**2.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	**2.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	**1.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IGW	N/A	3/25/2019	**1.2**	0.5 U	**3.4**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/23/2019	**0.9**	0.5 U	**4.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**0.7**	0.5 U	**3.8**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**0.8**	0.5 U	**3.8**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**0.9 J**	0 5 UJ	**4.2 J**	0.5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ
		9/23/2019	**0.9**	0.5 U	**4.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-1	2	3/25/2019	0.5 U	0.5 U	**1.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	**0.8**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-2	2	3/25/2019	**1.1**	0.5 U	**5.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**1**	0.5 U	**4.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**0.6**	0.5 U	**3.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**0.5**	0.5 U	**3.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	**3.2**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-3	2	3/25/2019	**1.0**	0.5 U	**5.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**1.1**	0.5 U	**6.2**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**1.1**	0.5 U	**5.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**1.1**	0.5 U	**4.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**1.0**	0.5 U	**5.2**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-4	2	3/25/2019	**0.6**	0.5 U	**4.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**0.7**	0.5 U	**4.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**0.7**	0.5 U	**4.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**0.7**	0.5 U	**4.4**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**1.0**	0.5 U	**4.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-5	2	3/25/2019	**0.7**	0.5 U	**3.1**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**0.8**	0.5 U	**3.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**0.8**	0.5 U	**3.0**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**0.8**	0.5 U	**2.8**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**0.9**	0.5 U	**2.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-6	2	3/25/2019	**1.7**	0.5 U	**1.2**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**2.0**	0.5 U	**2.7**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**2.0**	0.5 U	**2.5**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**2.0**	0.5 U	**1.4**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**1.8**	0.5 U	**1.2**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-7	2	3/25/2019	**2.6**	0.5 U	**4.6**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	**3.1**	0.5 U	**6.3**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	**3.0**	0.5 U	**5.8**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	**2.8**	0.5 U	**4.9**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	**3.0**	0.5 U	**4.7**	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																														
			cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane
Offsite																																	
(b) LR)	2ae	3/27/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
(b) (LM)	4	3/27/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0 5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cedar Hills Regional Landfill (CHRL)																																	
Aquifer 2a																																	
MW-76	2a	4/10/2019	**0.327**	**0.309**	**6.07**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	**0.195 JT**	**0.401**	**7.89**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2ae																																	
MW-83	2ae	1/9/2019	0.1 U	0.1 U	**1.66**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/12/2019	0.1 U	0.1 U	**1.41**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/12/2019	0.1 U	0.1 U	**2.1**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	0.1 U	0.1 U	**1.87**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-94	2ae	1/9/2019	0.1 U	0.1 U	**2.31**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/10/2019	0.1 U	0.1 U	**2.09**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/12/2019	0.1 U	0.1 U	**1.61**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	0.1 U	0.1 U	**2.27**	0 01 DU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2af																																	
MW-82	2af	4/8/2019	0.1 U	0.1 U	**4.28**	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	0.1 U	0.1 U	**4.59**	0 01 DU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-95	2af	4/8/2019	0.1 U	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	0.1 U	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2																																	
MW-56	2	4/8/2019	**1.48**	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	**1.45**	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 3a																																	
MW-64	3a	4/12/2019	0.1 U	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	0.1 U	0.1 U	0.1 U	0 01 DU	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 3																																	
MW-24	3	4/8/2019	0.1 U	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	**0.107 JT**	0.1 U	0.1 U	**0.0247 D**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-59	3	1/8/2019	**1.25**	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/10/2019	**1.38**	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/8/2019	**1.37**	0.1 U	0.1 U	**0.0103 DJT**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	**1.41**	0.1 U	0.1 U	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	3	4/12/2019	0.1 U	0.1 U	0.1 U	**0.0261**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	0.1 U	0.1 U	0.1 U	**0.0318**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																											
			Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethylene Dibromide	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichlorofluoromethane (CFC 11)
Queen City Farms																														
Aquifer 1																														
E-1	1	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 2a																														
IB-2A	2a	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
D-2A	2ae	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
F-2A	2ae	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
G-2A	2ae	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
H-2A	2ae	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
L-2A	2ae	3/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
S-2A	2ae	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
C-2A	2af	3/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
E-2A	2af	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-2A	2af	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
V-2A	2af	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 2																														
C-2	2	3/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
E-2	2	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
F-2	2	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
G-2	2	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
H-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
L-2	2	3/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
M-2	2	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
O-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
S-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SA-2	2	3/28/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SB-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SC-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SD-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SE-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
U-2	2	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 3a																														
I-3A	3a	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IA-3A	3a	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IB-3A	3a	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																											
			Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethylene Dibromide	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichlorofluoromethane (CFC 11)
MA-3A	3a	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-3A	3a	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
O-3A	3a	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
OA-3A	3a	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
SD-3A	3a	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Aquifer 3																														
B-3	3	3/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
I-3	3	3/26/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IA-3	3	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.5**	0.5 U	0.5 U
GETS																														
EGW	N/A	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
IGW	N/A	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 UJ	0 5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0 5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-1	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-2	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-3	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-4	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-5	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-6	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
EW-7	2	3/25/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		4/29/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		5/22/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		6/21/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/23/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table D-1
2019 Water Quality Volatile Organic Compounds Data
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	Volatile Organic Compounds By EPA 524.2/SW-846 8260C (µg/L)																											
			Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Ethylene Dibromide	Hexachlorobutadiene	Isopropylbenzene	m,p-Xylene	Methylene Chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichlorofluoromethane (CFC 11)
Offsite																														
(b) (LR)	2ae	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
(b) (LM)	4	3/27/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
		9/24/2019	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cedar Hills Regional Landfill (CHRL)																														
Aquifer 2a																														
MW-76	2a	4/10/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2ae																														
MW-83	2ae	1/9/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/12/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/12/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-94	2ae	1/9/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/10/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/12/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2af																														
MW-82	2af	4/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-95	2af	4/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 2																														
MW-56	2	4/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 3a																														
MW-64	3a	4/12/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aquifer 3																														
MW-24	3	4/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/22/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-59	3	1/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		4/10/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		7/8/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/18/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	3	4/12/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		10/11/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

1. All volatile organic compounds in QCF monitoring locations were tested using EPA Method 524.2 (µg/L).
2. Cedar Hills Regional Landfill data are reported as presented in King County's Quarterly Environmental Monitoring Reports.

-- = Not analyzed, or not transcribed from King County's report for Cedar Hills Regional Landfill wells.
Bold font = Detected analyte
D = Laboratory specific qualifier indicating result is from a re-analysis due to dilution.
DU = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
T = Laboratory-specific qualifier indicating an estimated value less than the reporting detection limit but greater than the method.
detection limit.

APPENDIX E

Chemicals of Concern Data and Time Series

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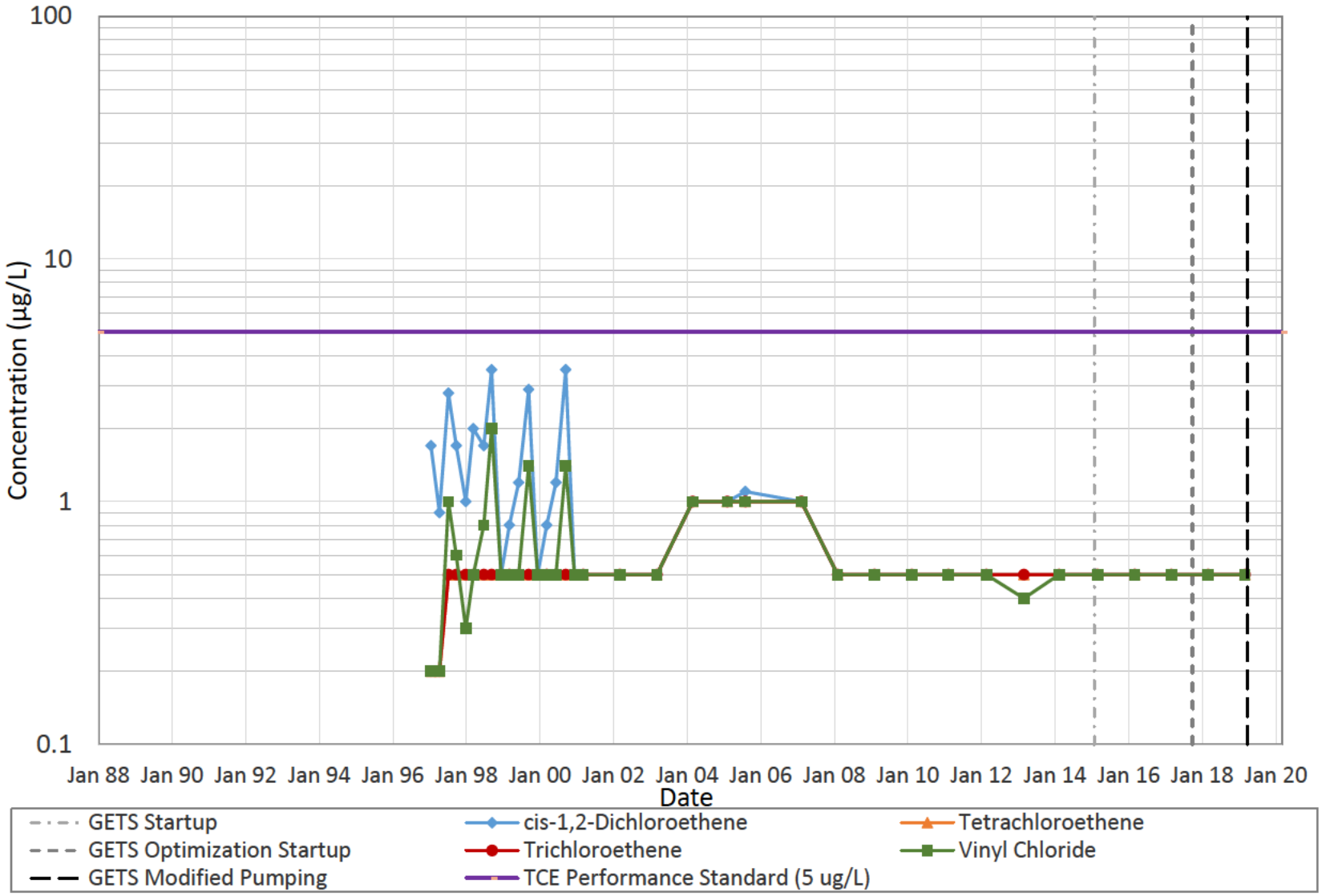

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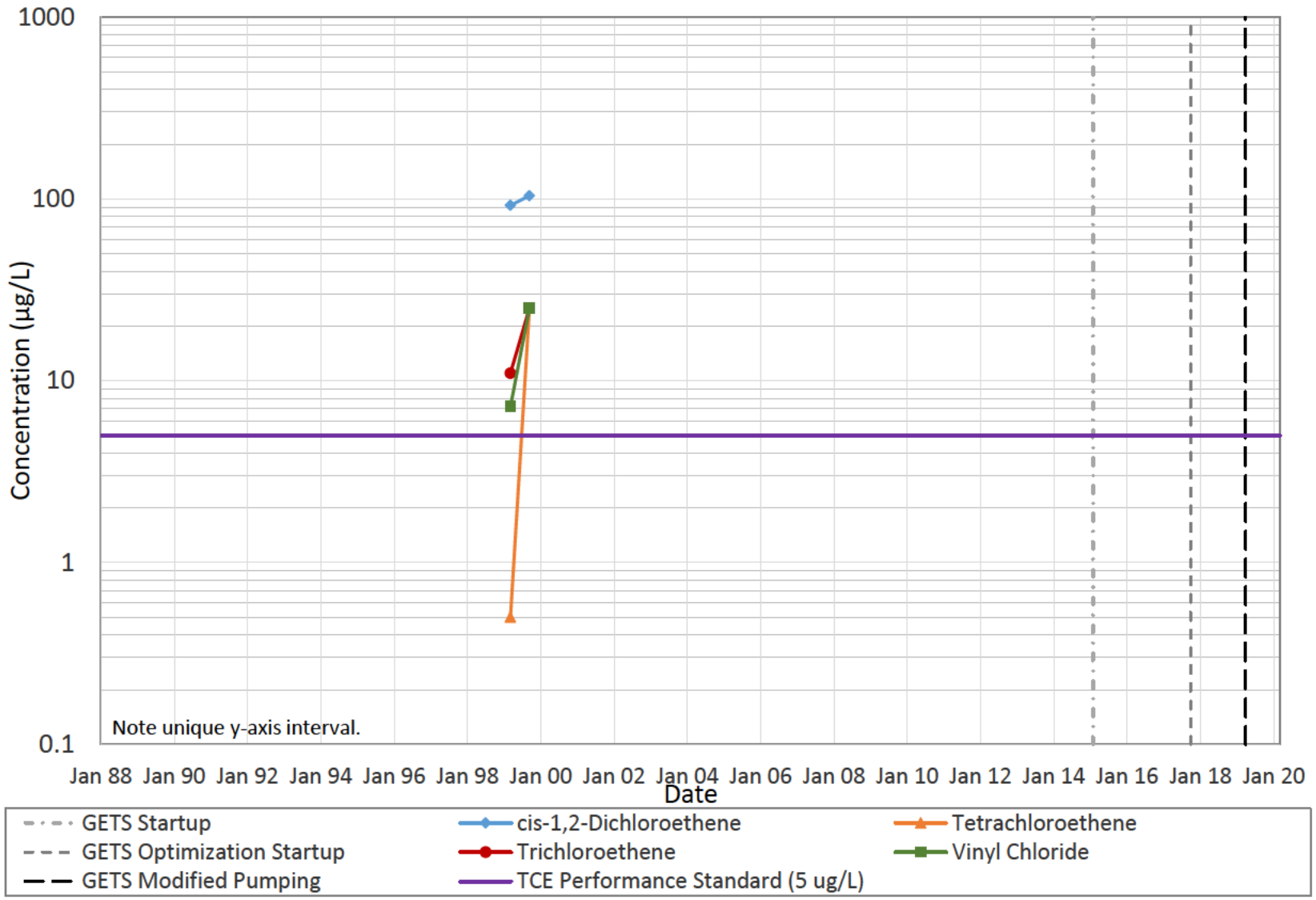
Queen City Farms
Maple Valley, Washington

Aquifer 1 E-1 Time Series

Figure
E-1



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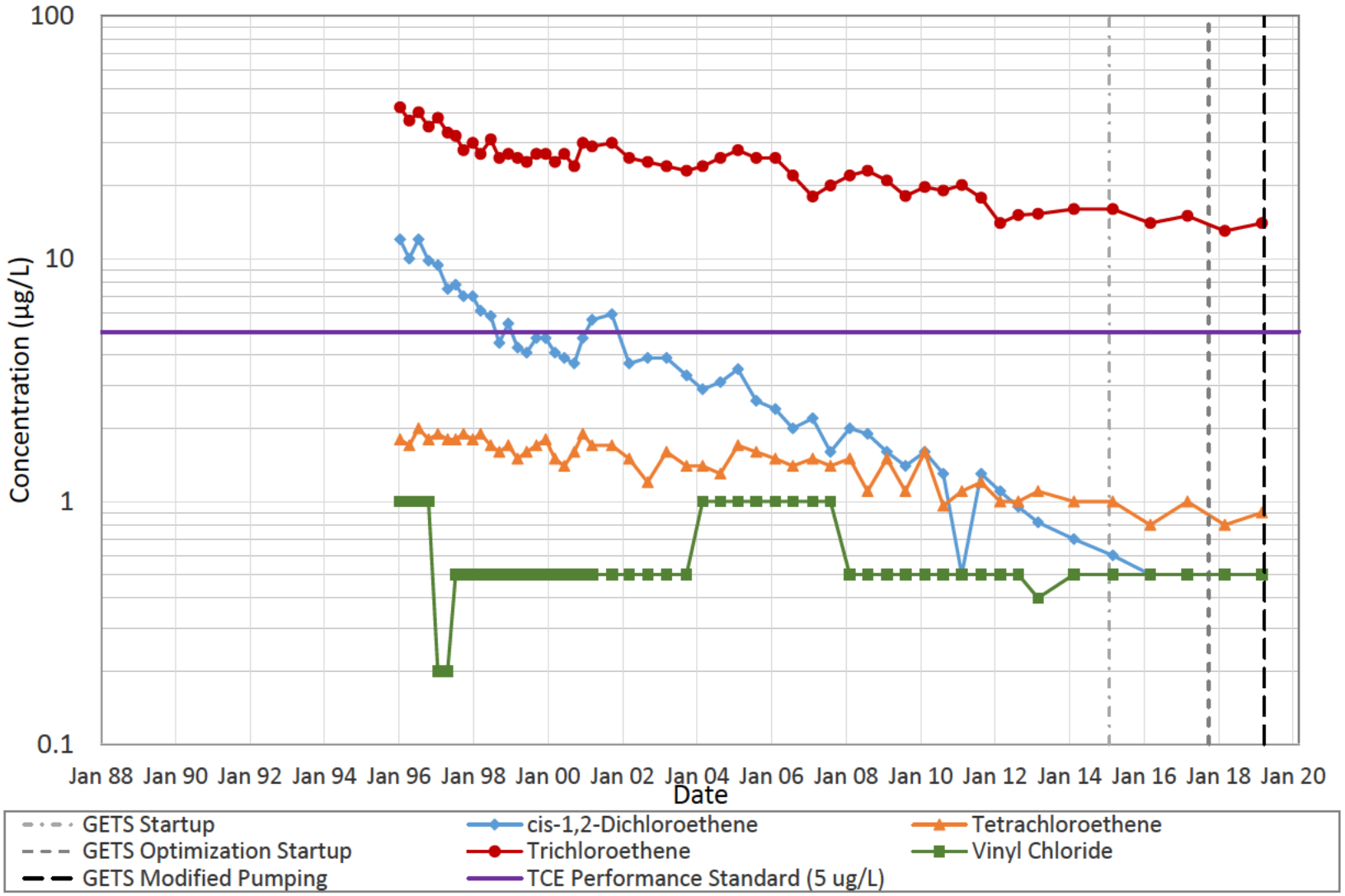
Maple Valley, Washington

Aquifer 1 X-5 Time Series

Figure
E-2

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2a-COCPlots,Data_AppE_3-15



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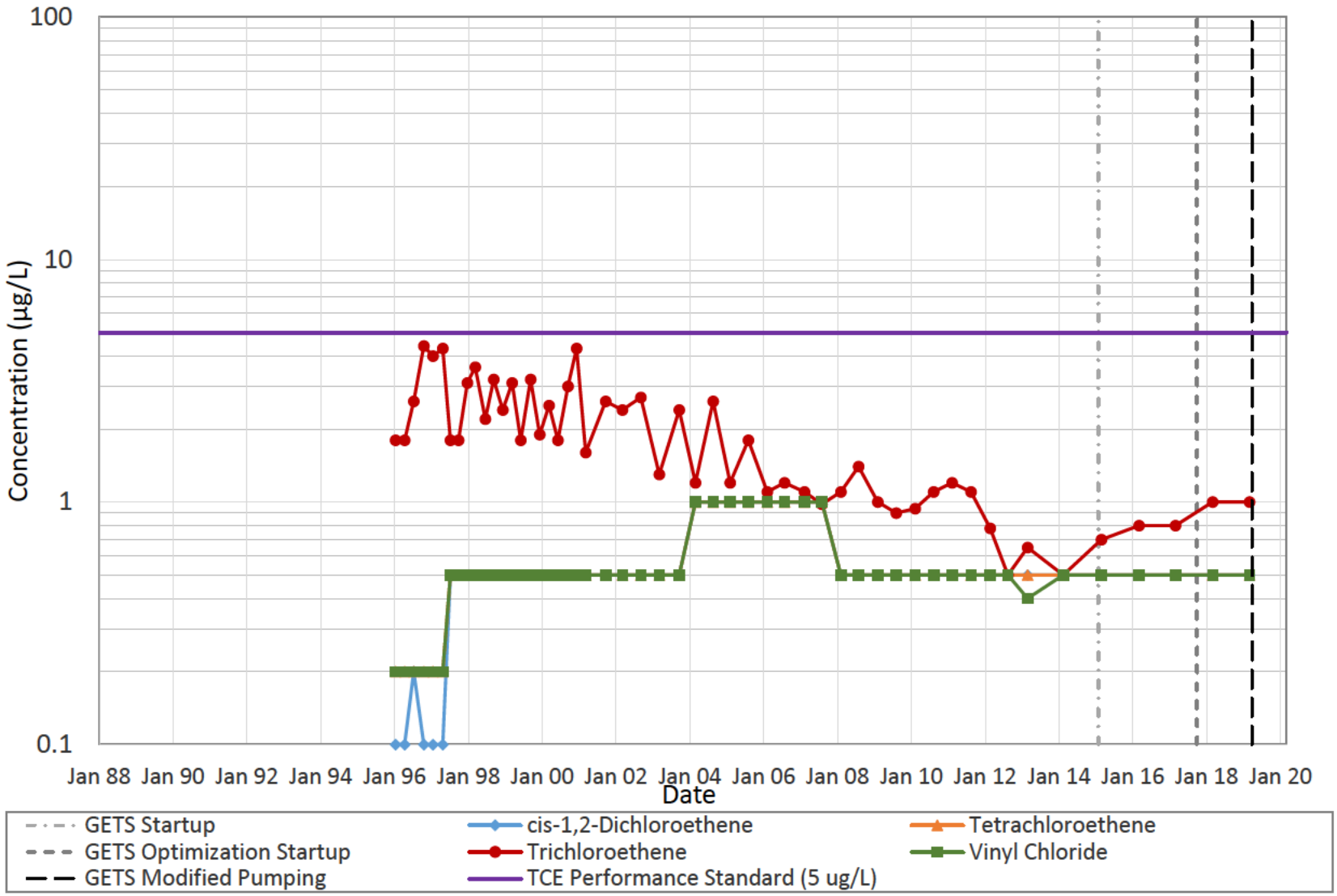
Maple Valley, Washington

Aquifer 2a C-2a Time Series

Figure
E-3

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2a-COCPlots,Data_AppE_3-15



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Maple Valley, Washington

Aquifer 2a D-2a Time Series

Figure
E-4

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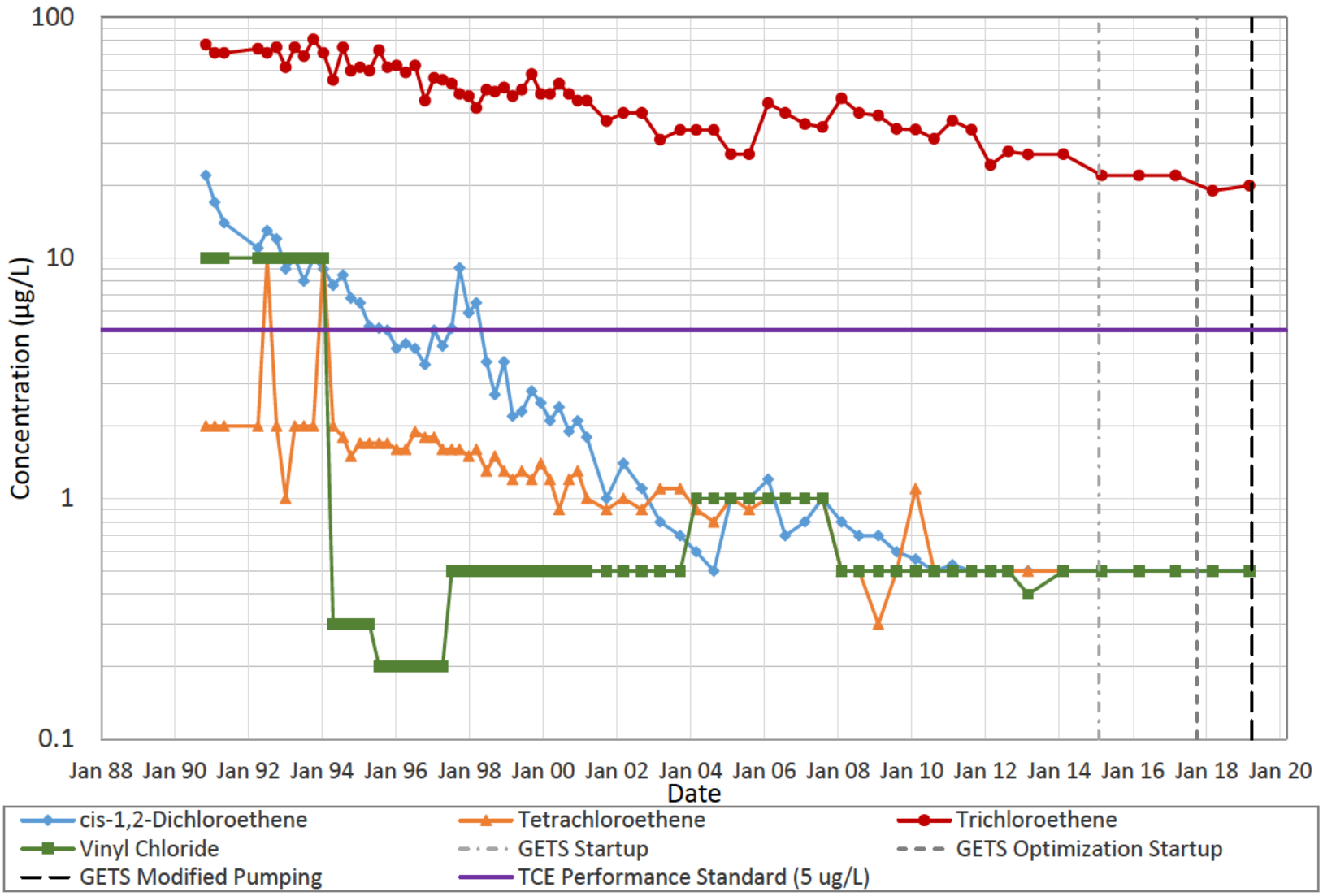

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Aquifer 2a E-2a Time Series

Figure
E-5

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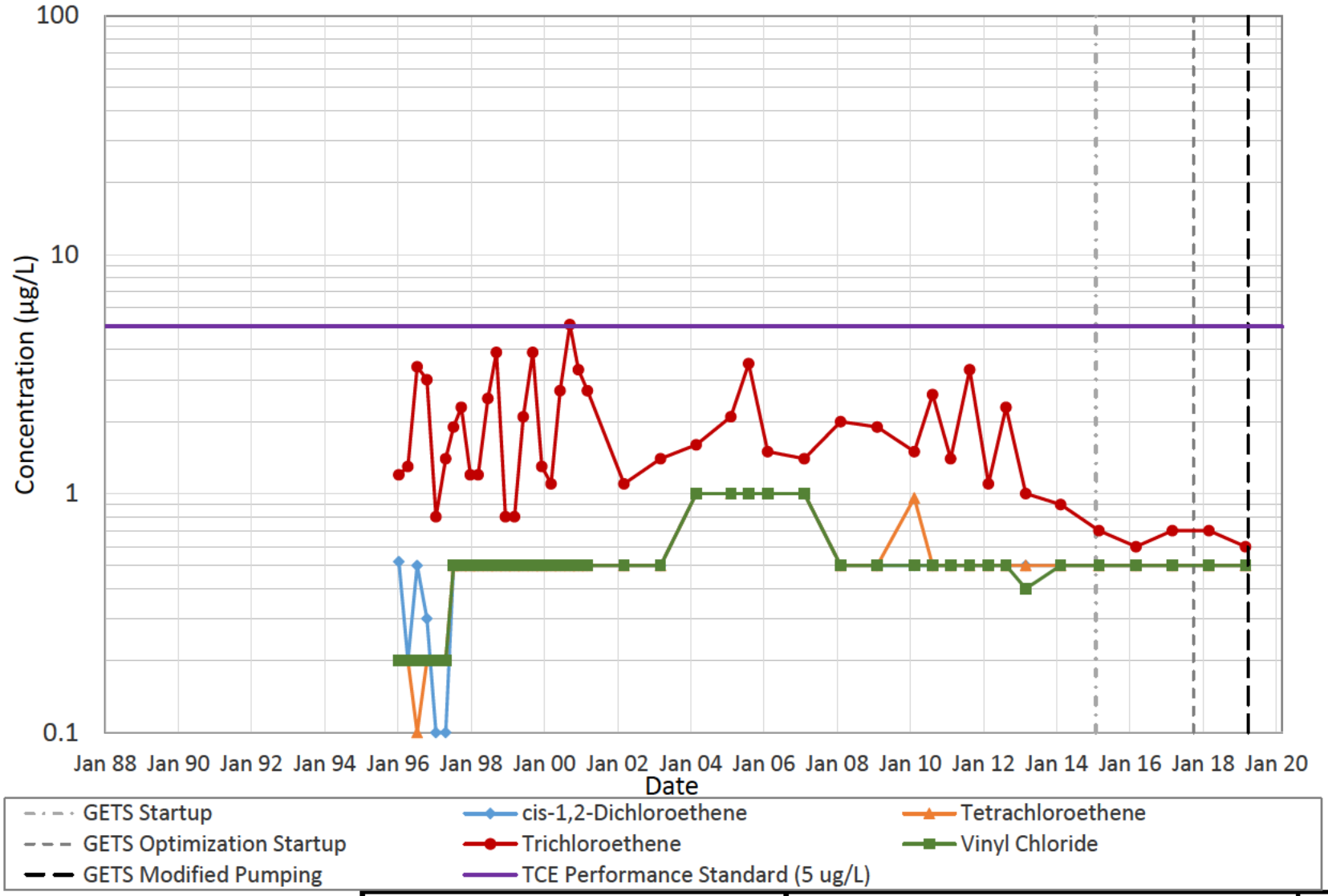

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Aquifer 2a F-2a Time Series

Figure
E-6

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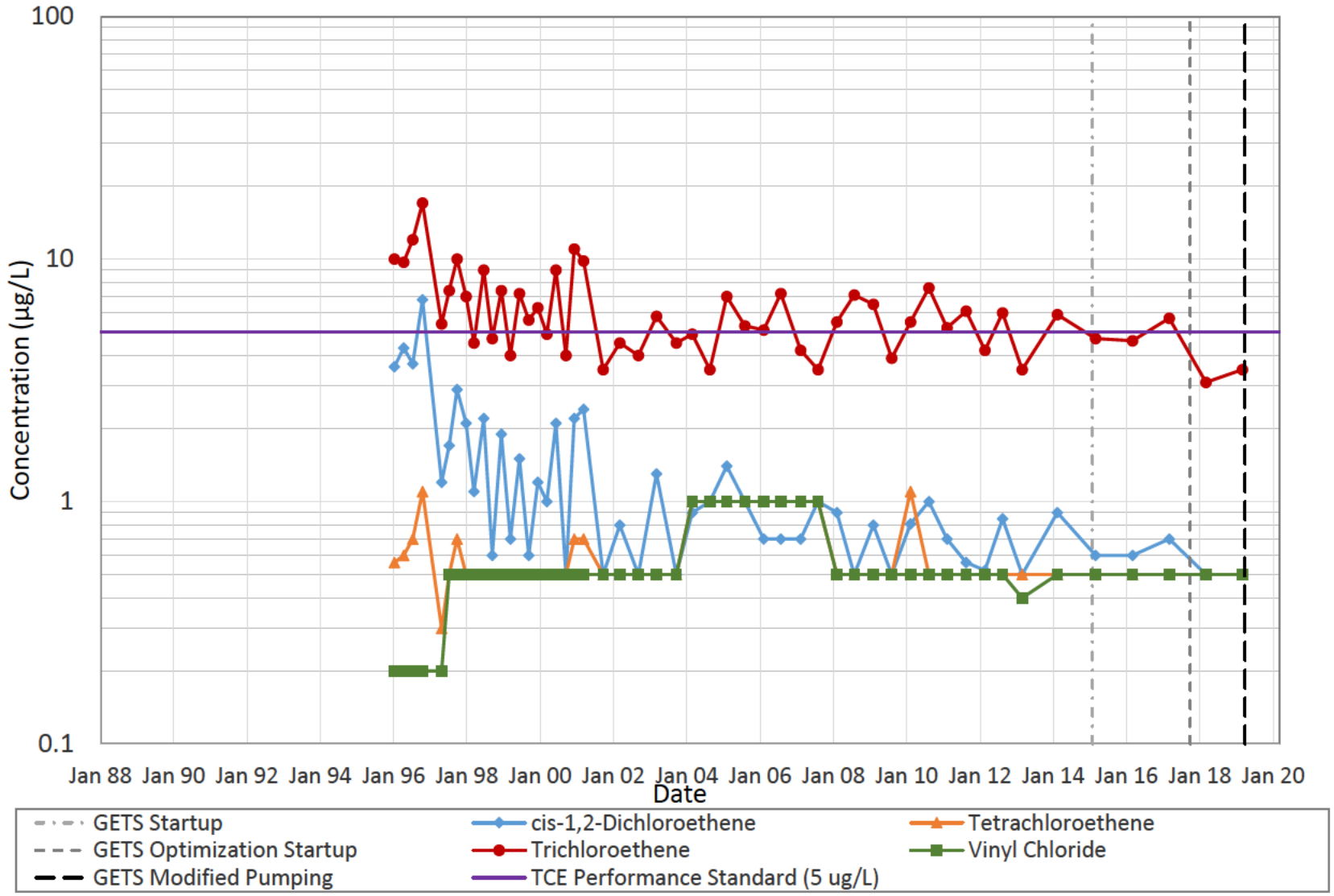

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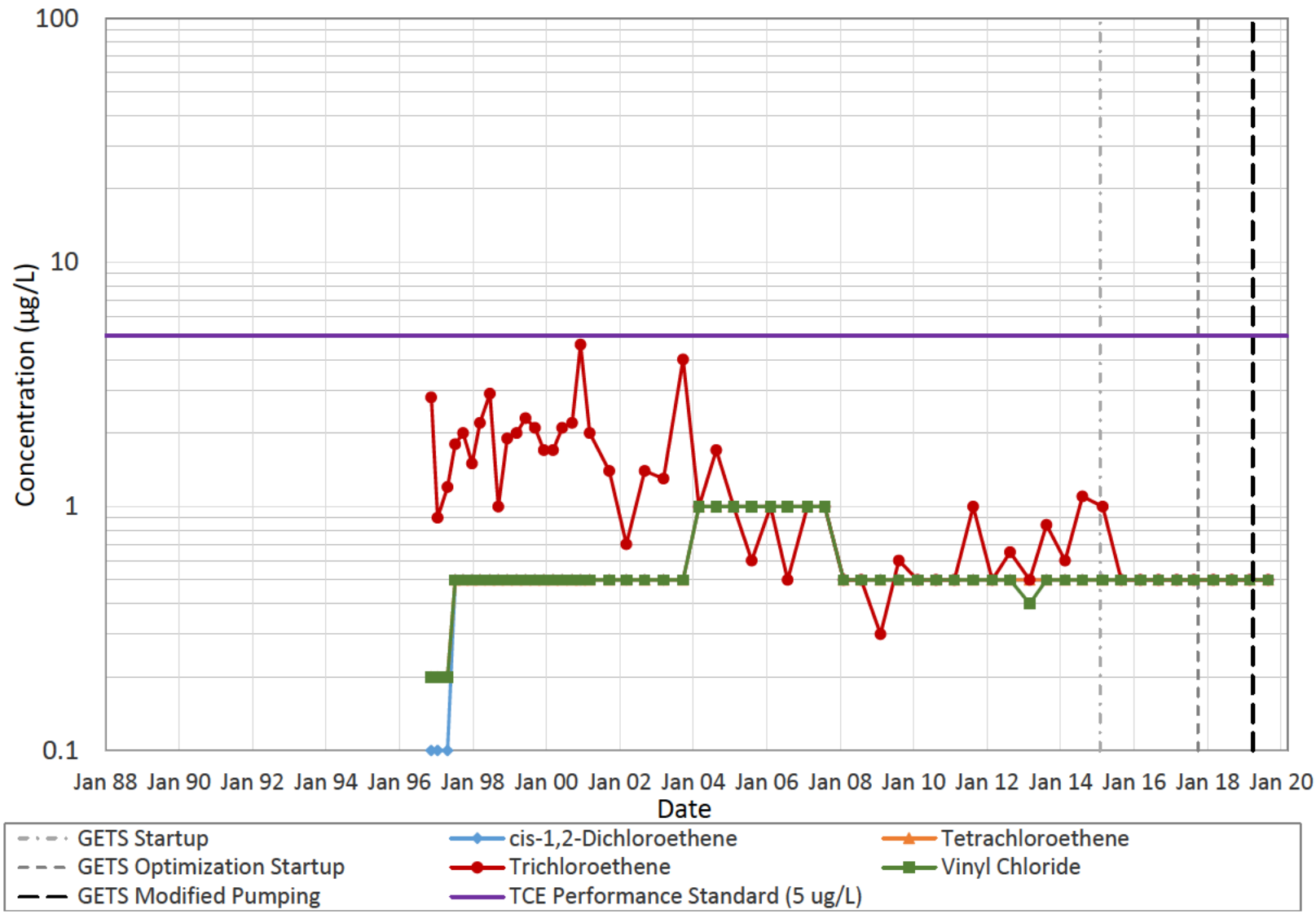
Aquifer 2a G-2a Time Series

Figure
E-7

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2a-COCPlots,Data_AppE_3-15



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Aquifer 2a H-2a Time Series

Figure
E-8

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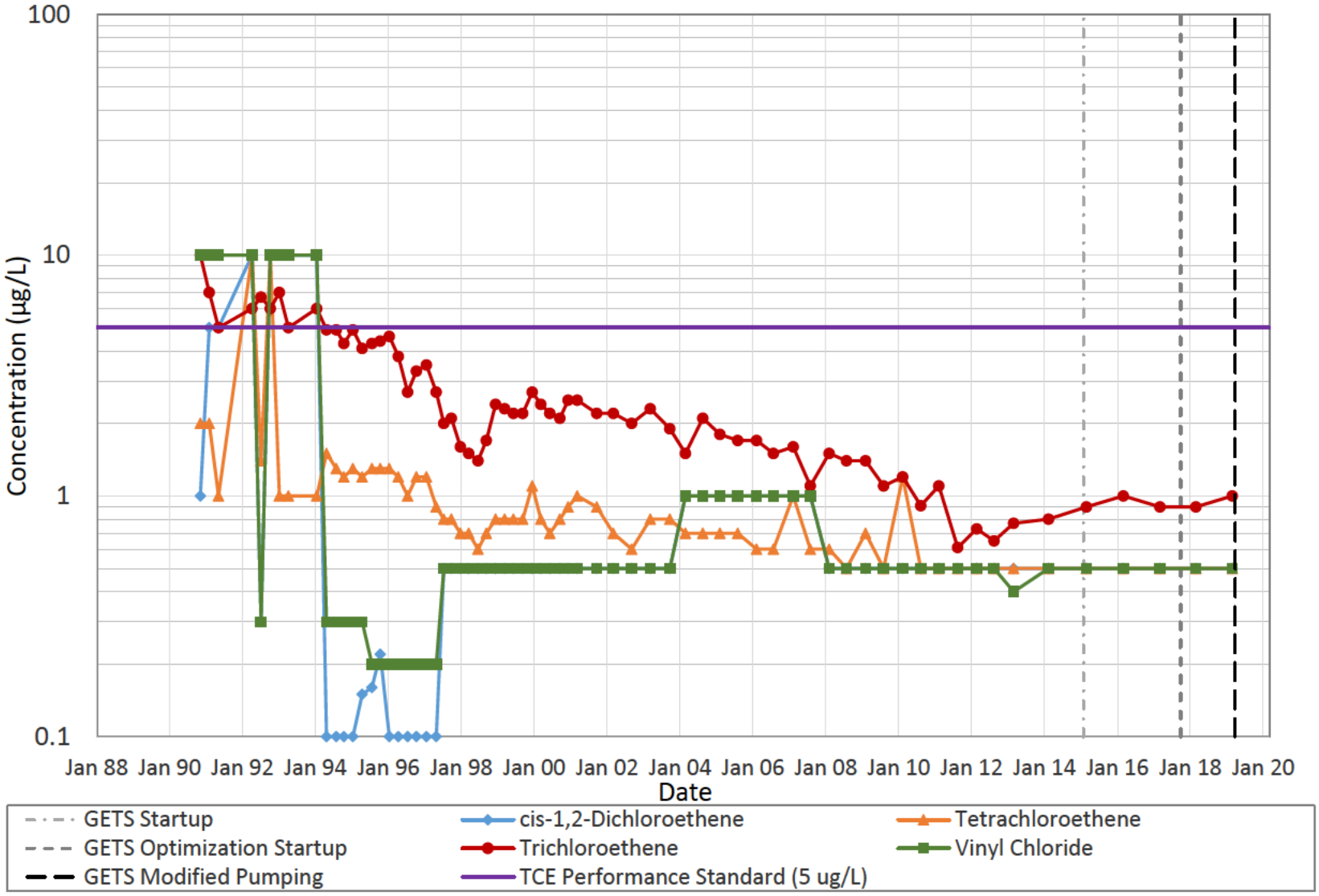

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Queen City Farms
Maple Valley, Washington

Aquifer 2a I-2a Time Series

Figure
E-9

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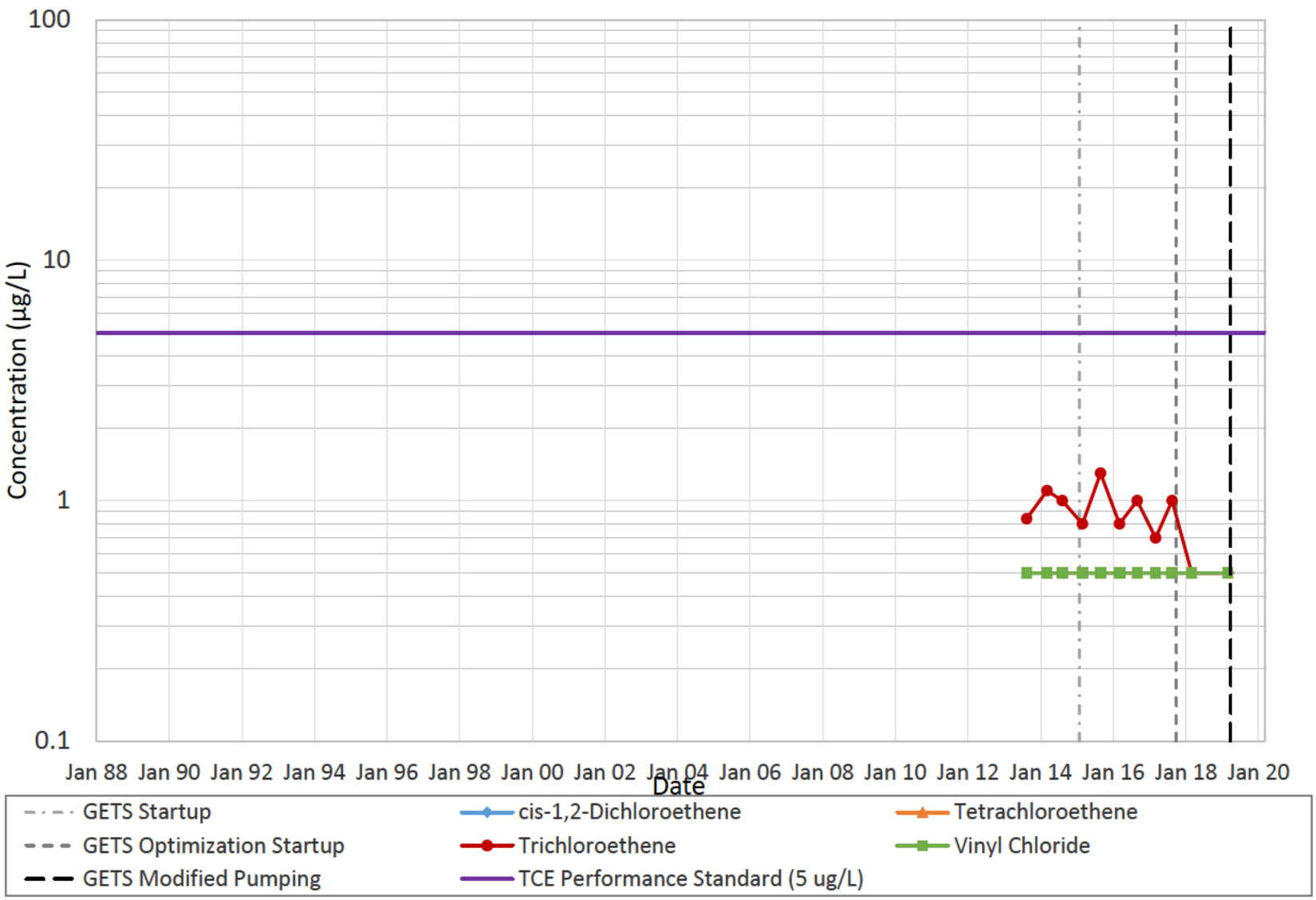

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Aquifer 2a IB-2a Time Series

Figure
E-10

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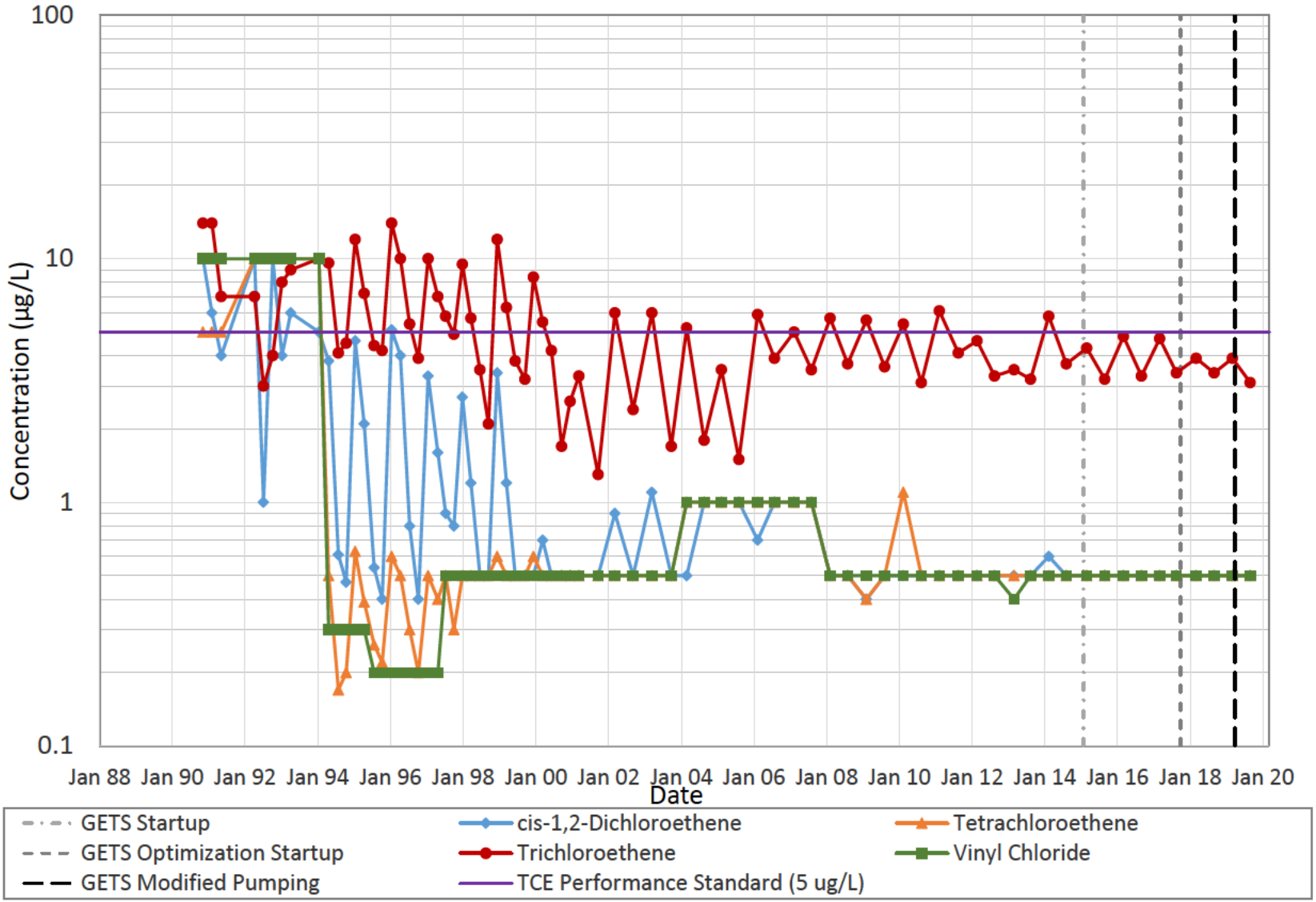

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Aquifer 2a L-2a Time Series

Figure
E-11

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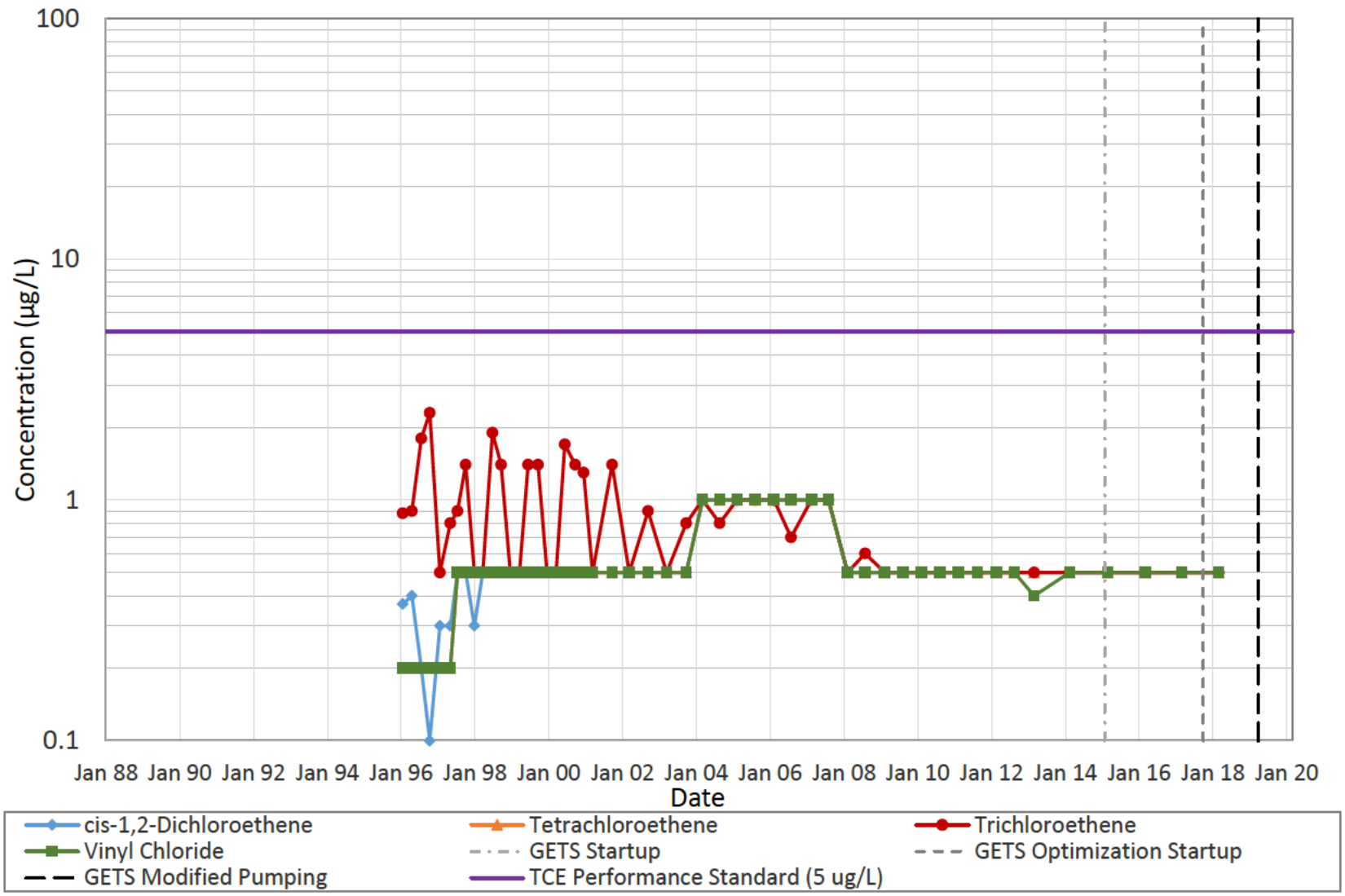

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Aquifer 2a R-2a Time Series

Figure
E-12

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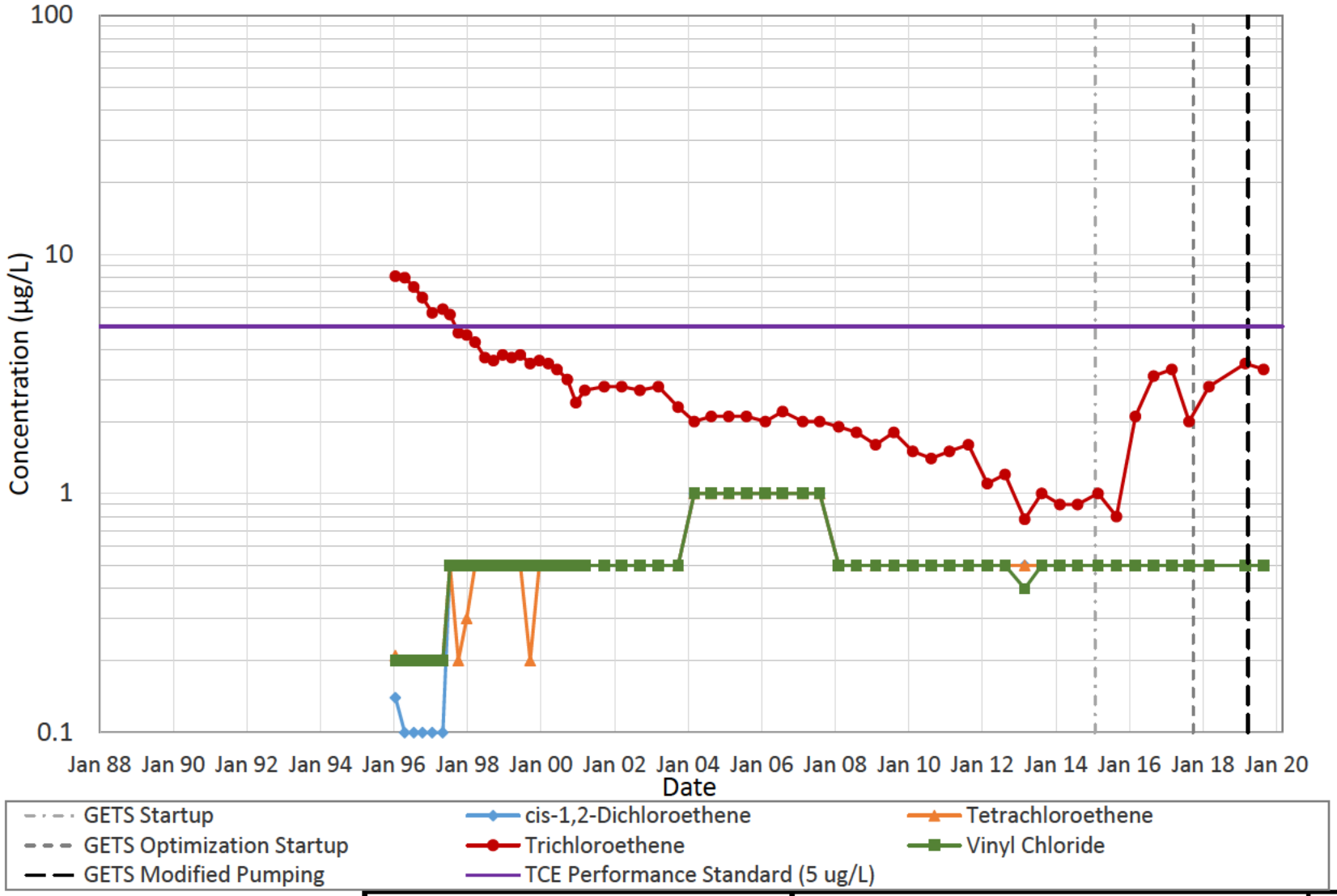

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Aquifer 2a S-2a Time Series

Figure
E-13

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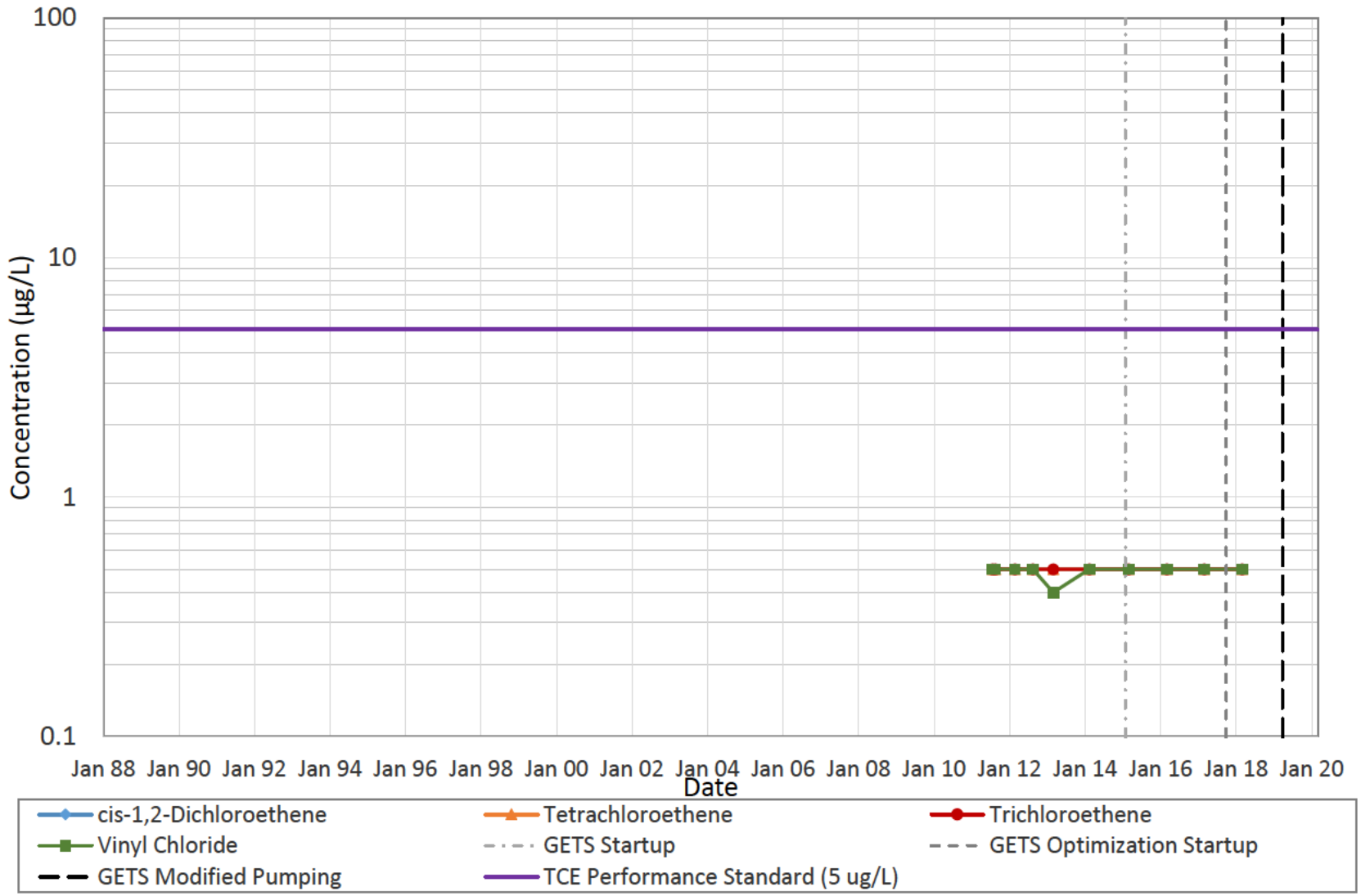

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Aquifer 2a U-2a Time Series

Figure
E-14

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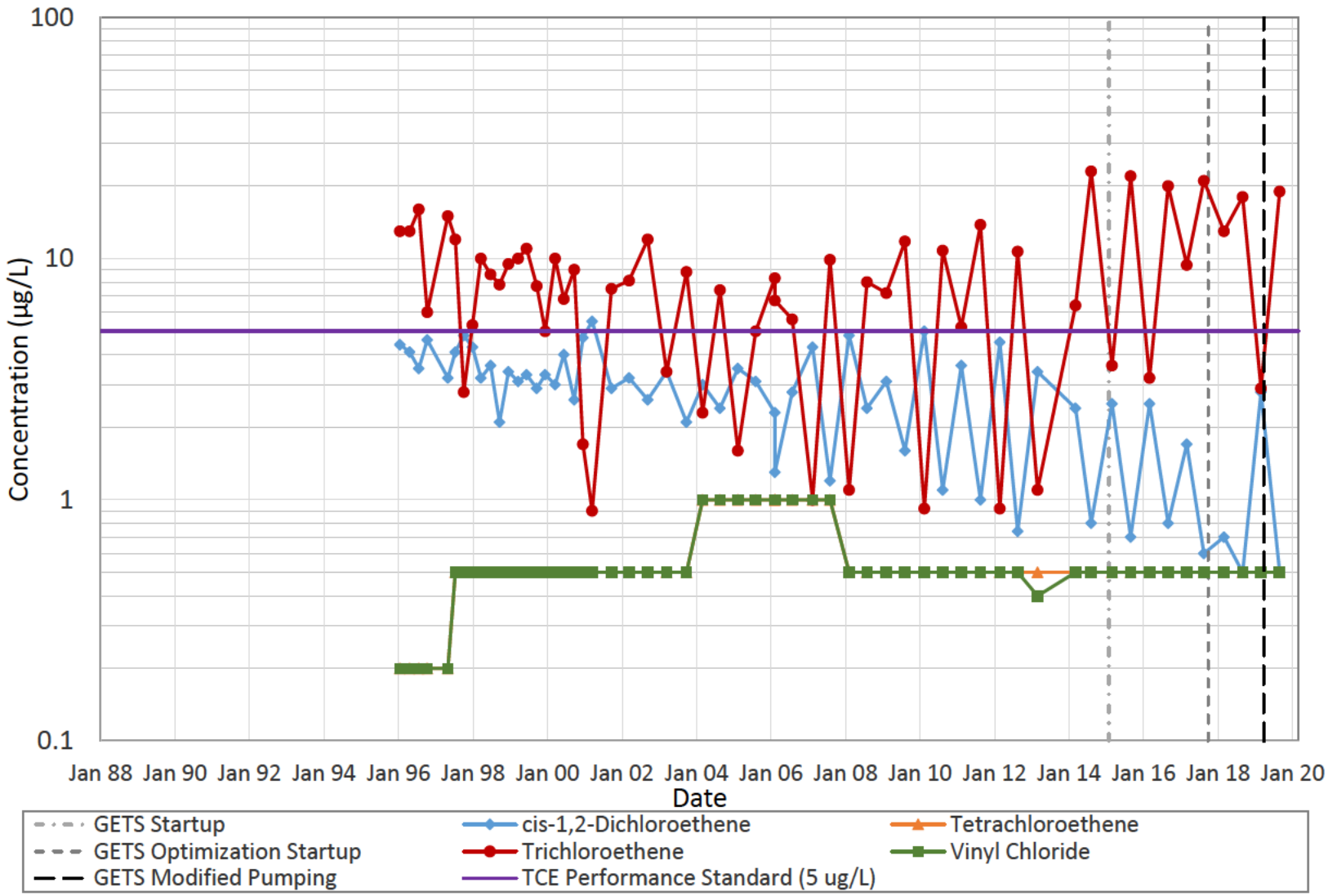

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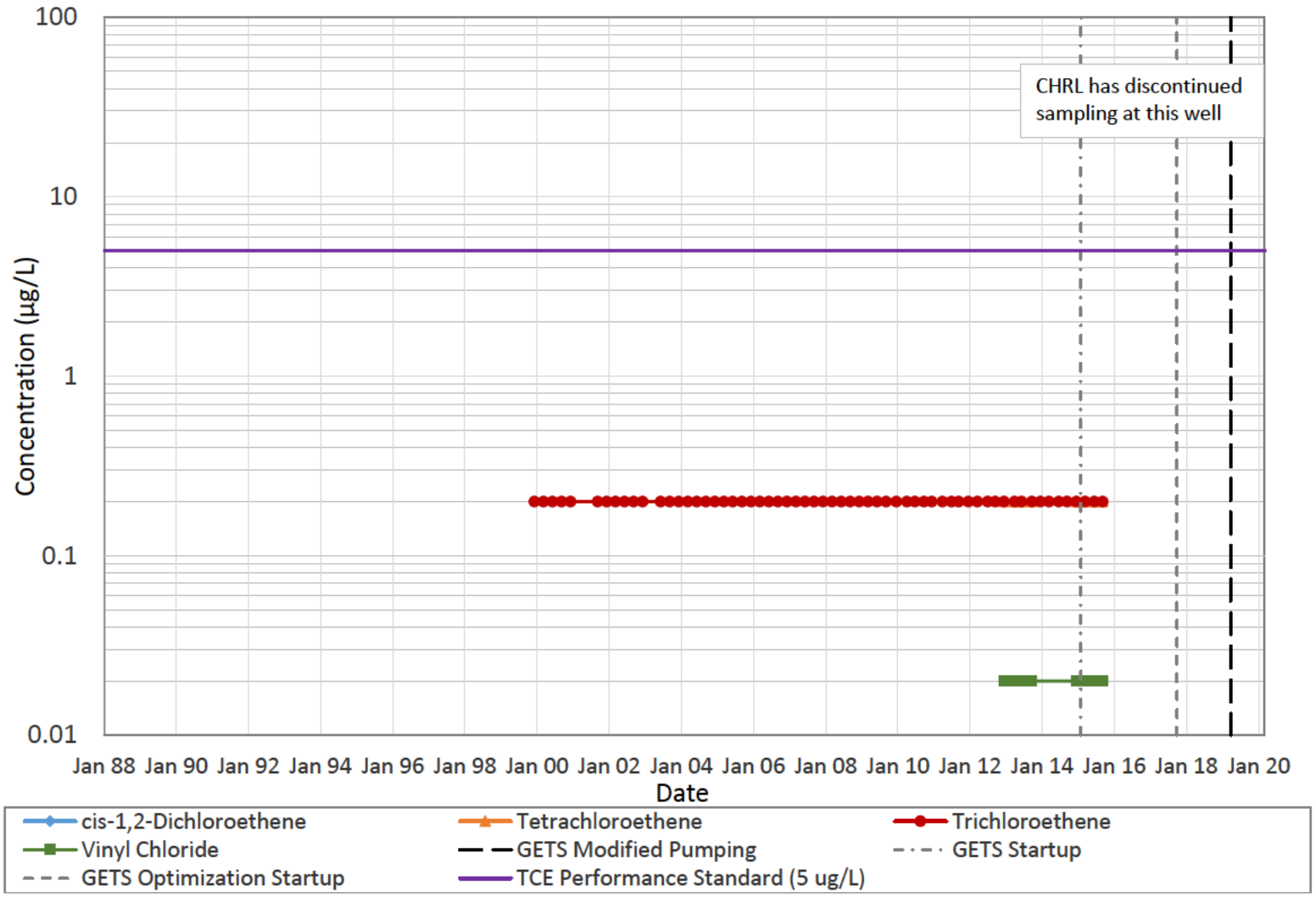
Aquifer 2a V-2a Time Series

Figure
E-15

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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CHRL Aquifer 2a MW-60 Time Series

Figure
E-16

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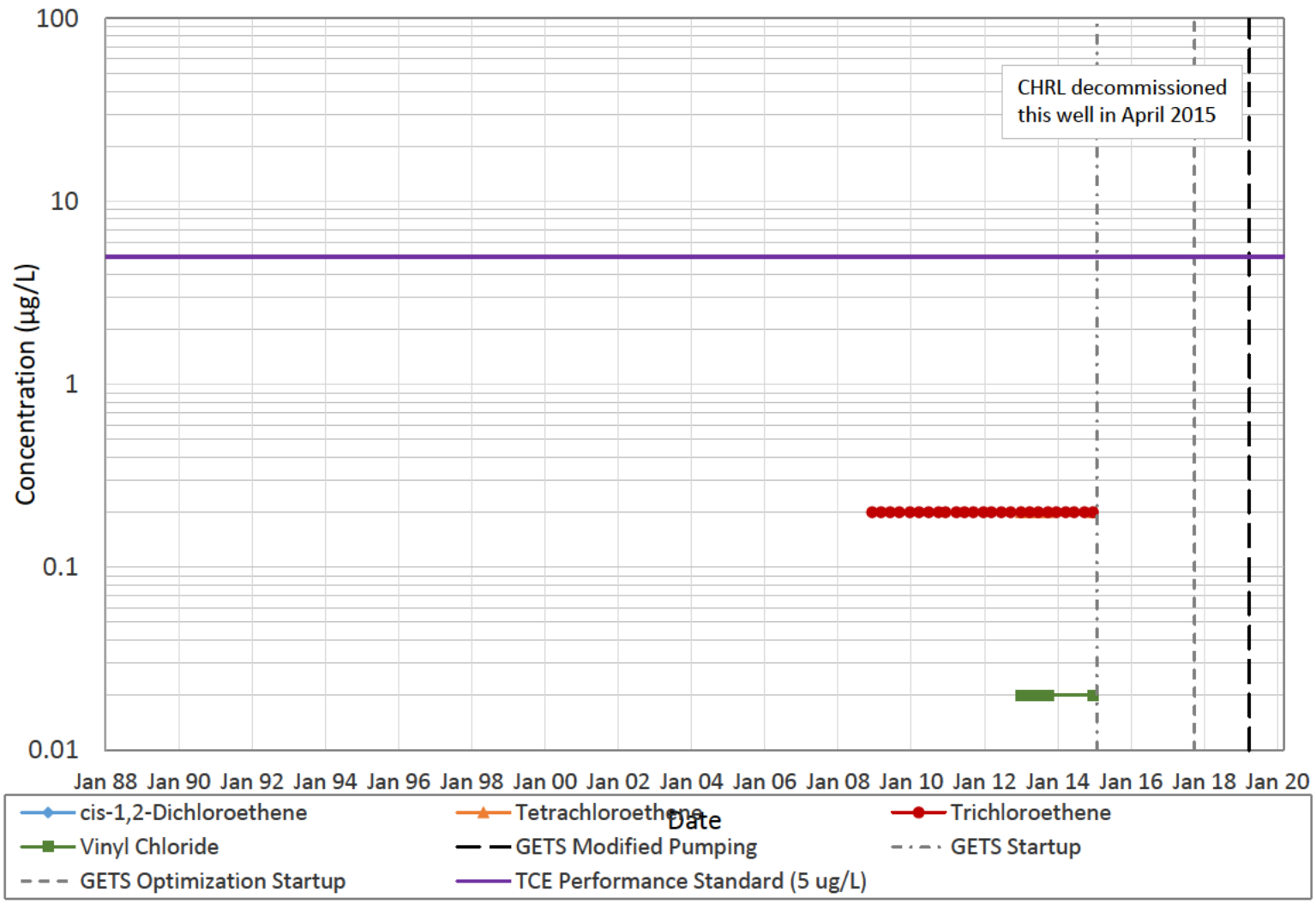

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CHRL Aquifer 2a MW-70 Time Series

Figure
E-17

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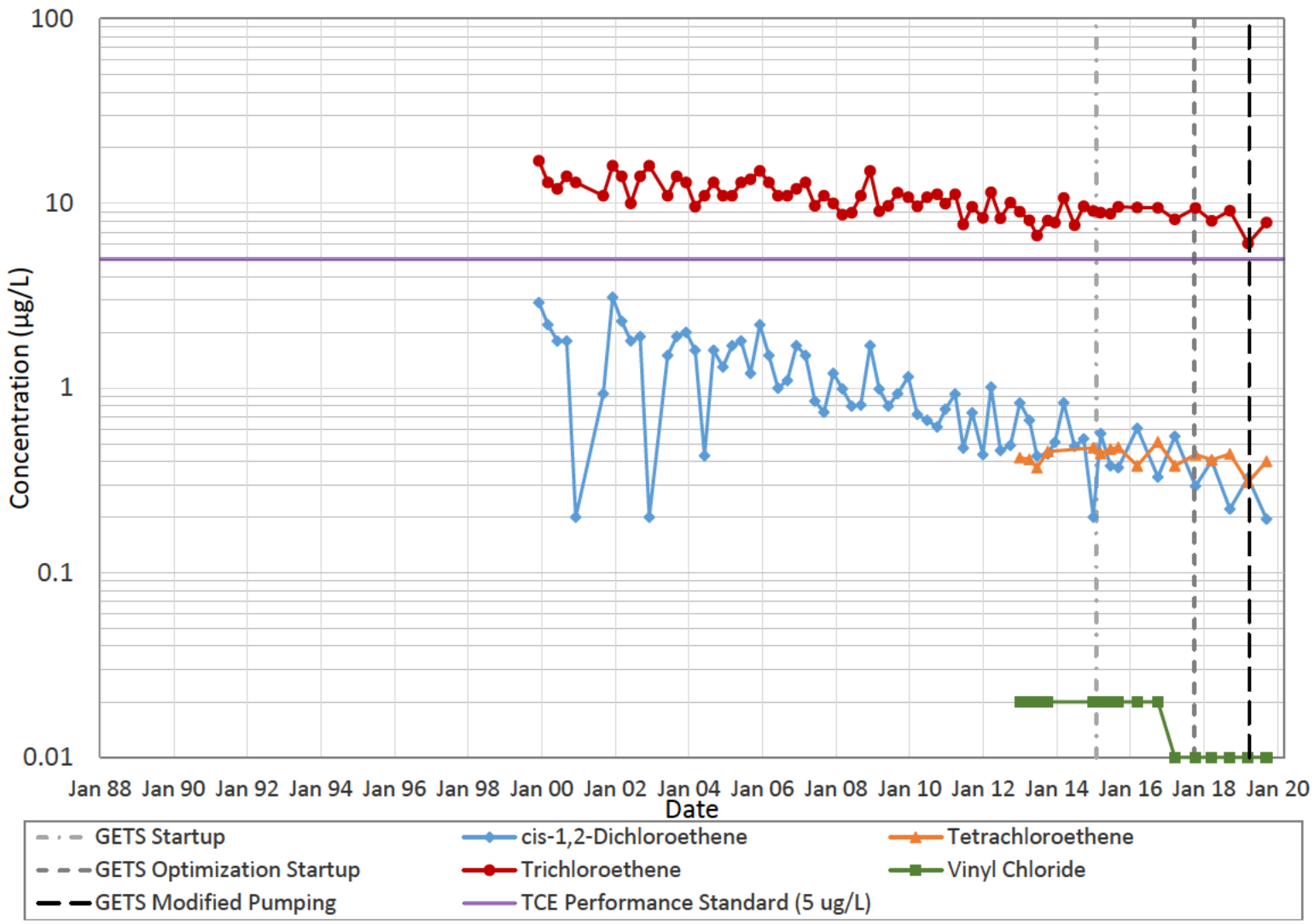

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CHRL Aquifer 2a MW-76 Time Series

Figure
E-18

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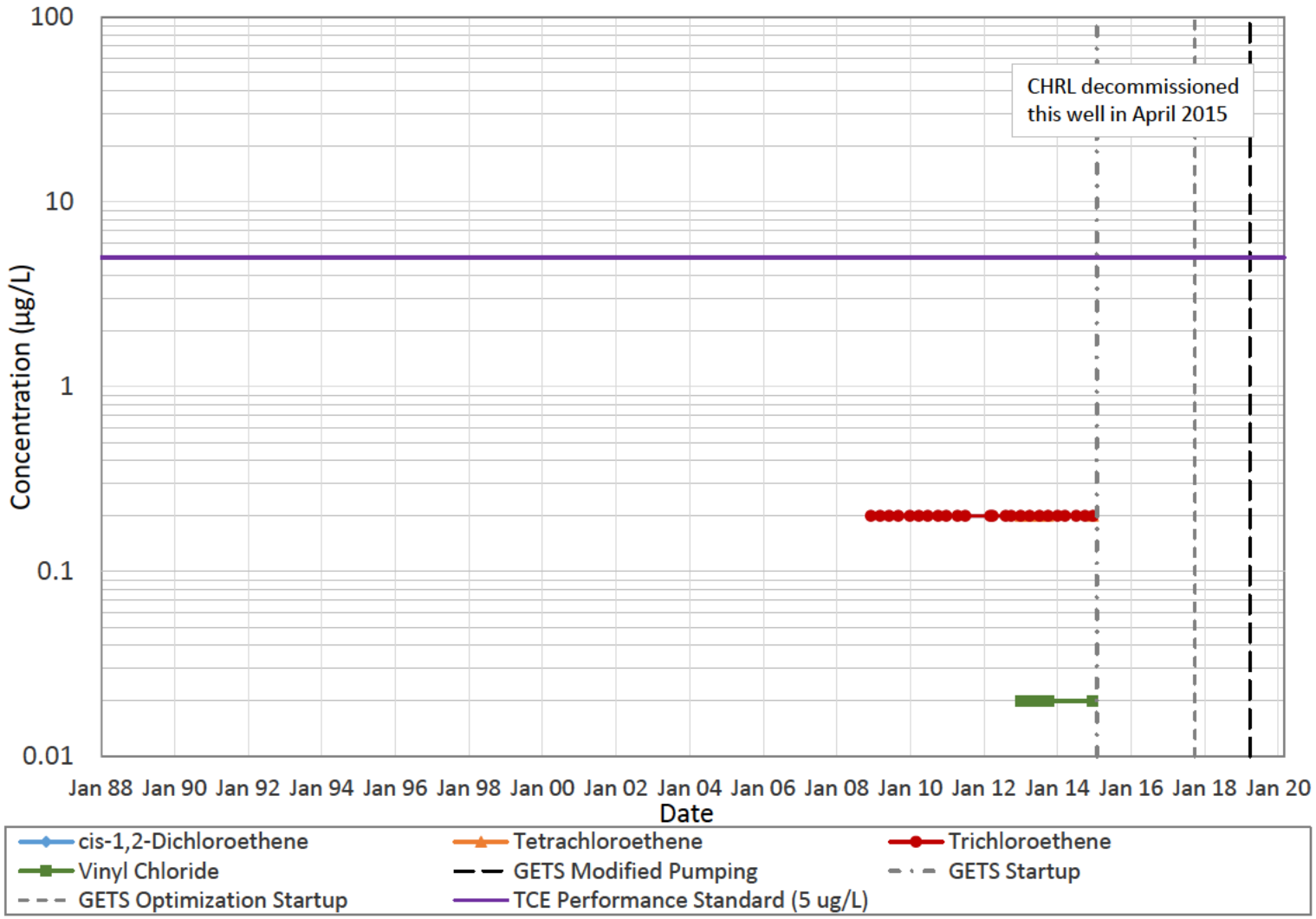

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CHRL Aquifer 2a MW-77 Time Series

Figure
E-19

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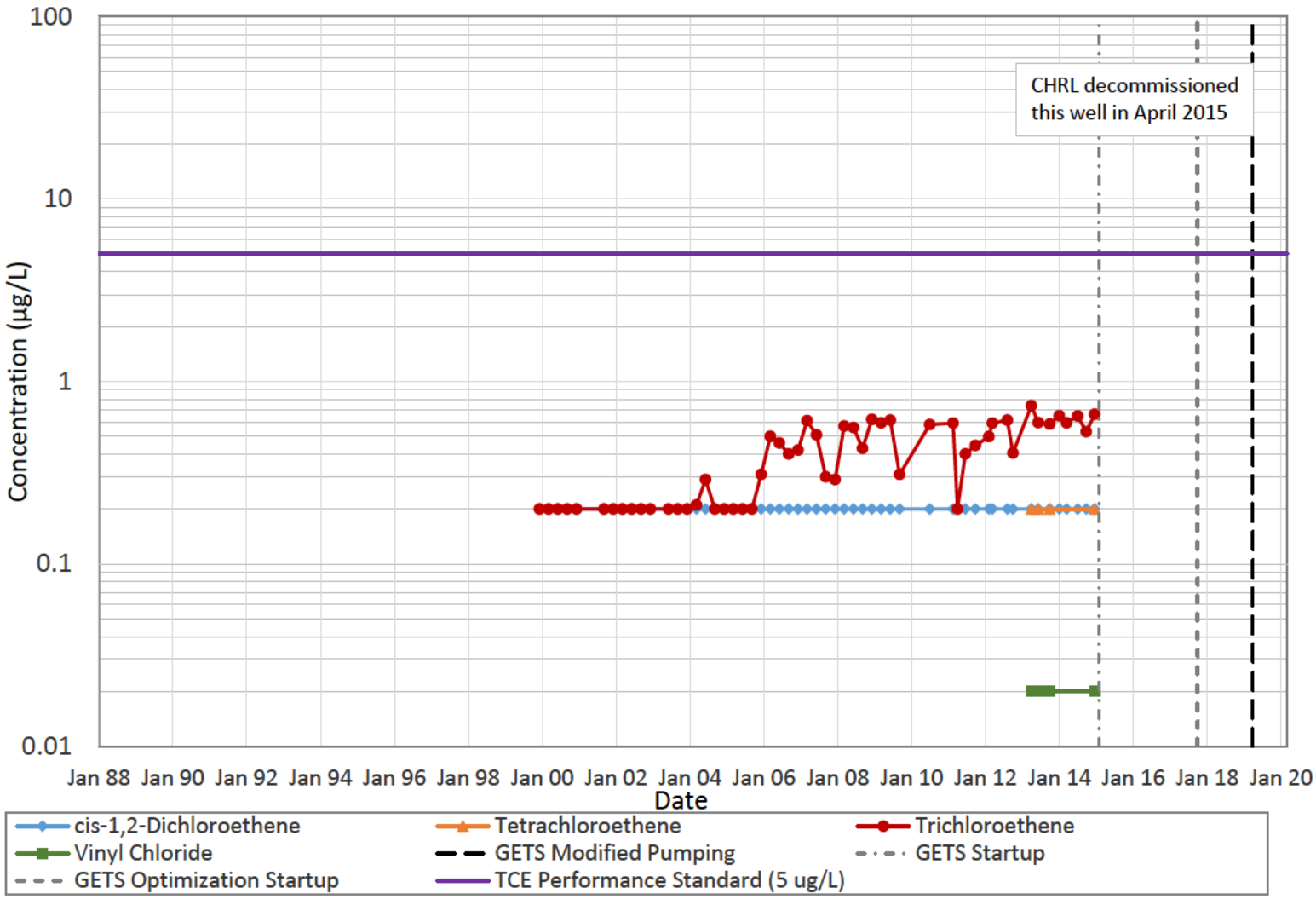

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CHRL Aquifer 2a MW-78 Time Series

Figure
E-20

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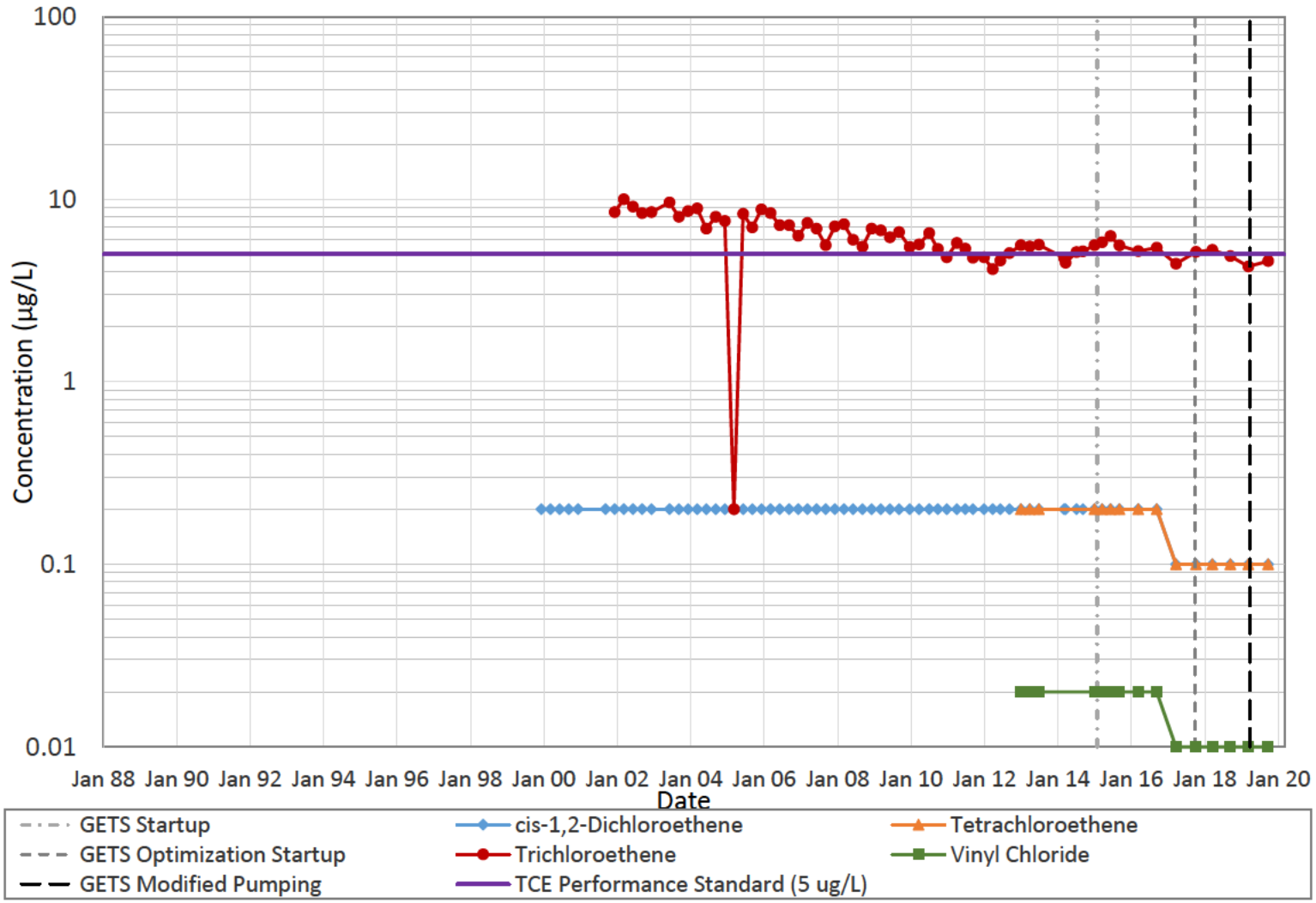

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CHRL Aquifer 2a MW-82 Time Series

Figure
E-21

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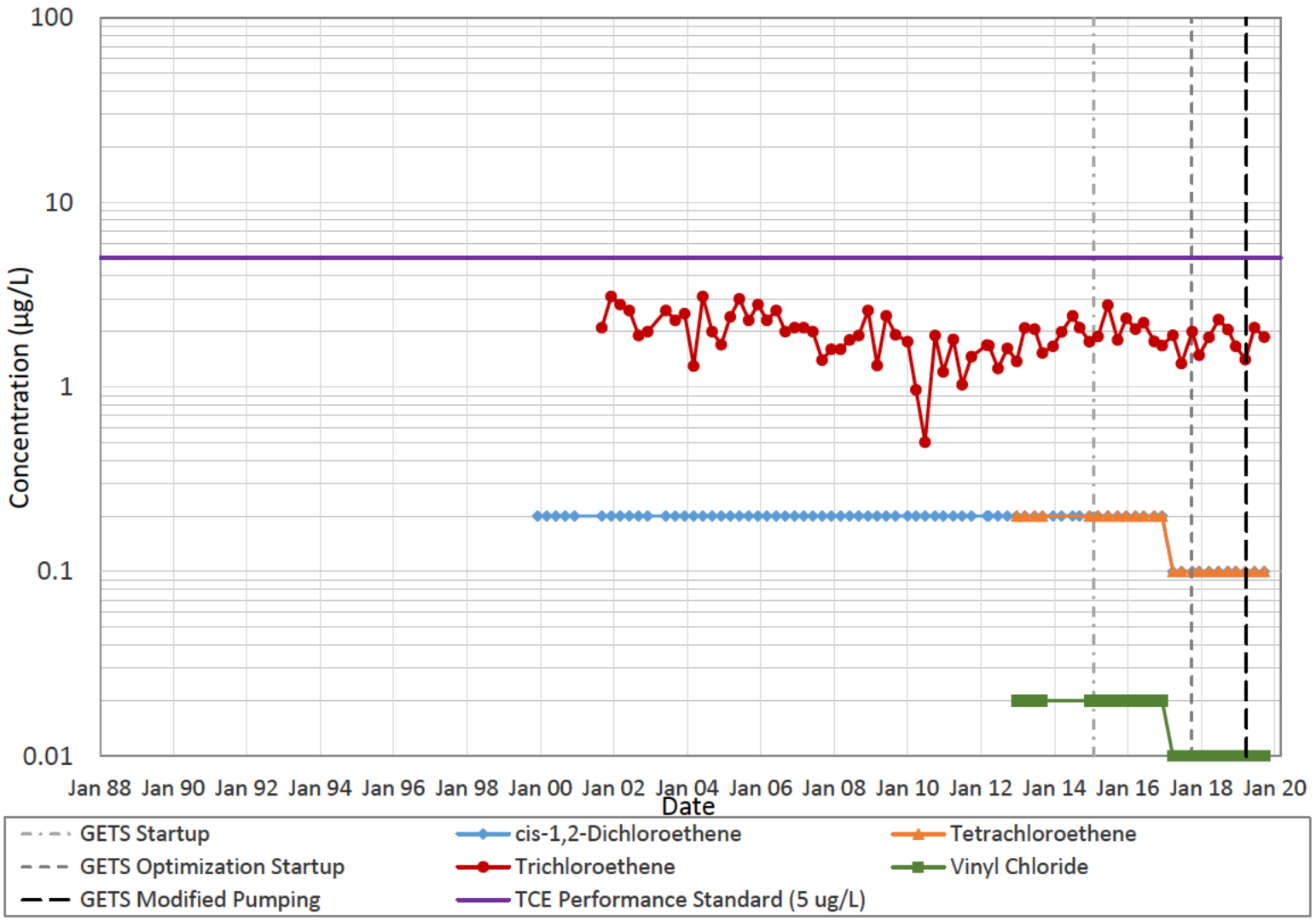

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CHRL Aquifer 2a MW-83 Time Series

Figure
E-22

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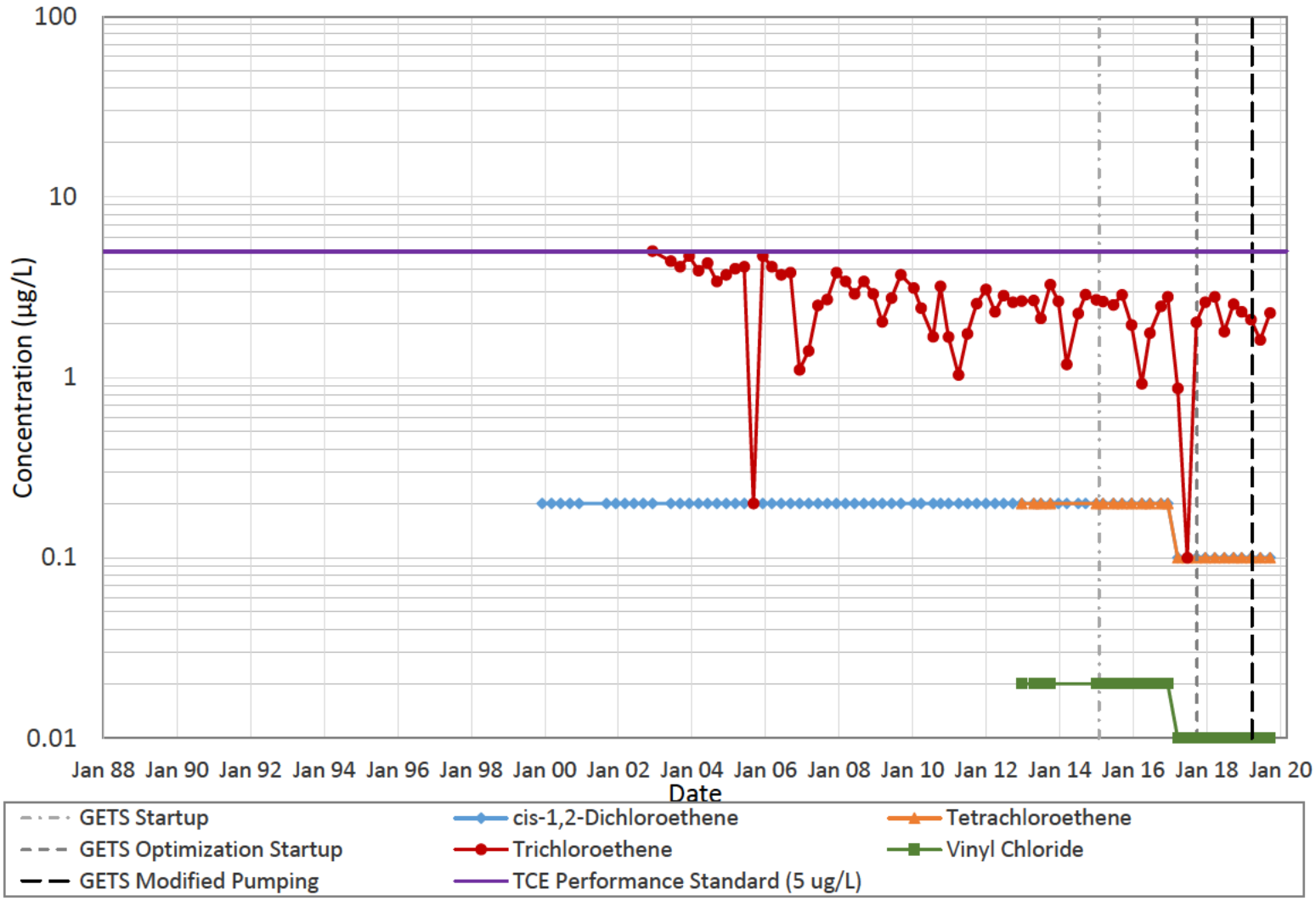

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CHRL Aquifer 2a MW-94 Time Series

Figure
E-23

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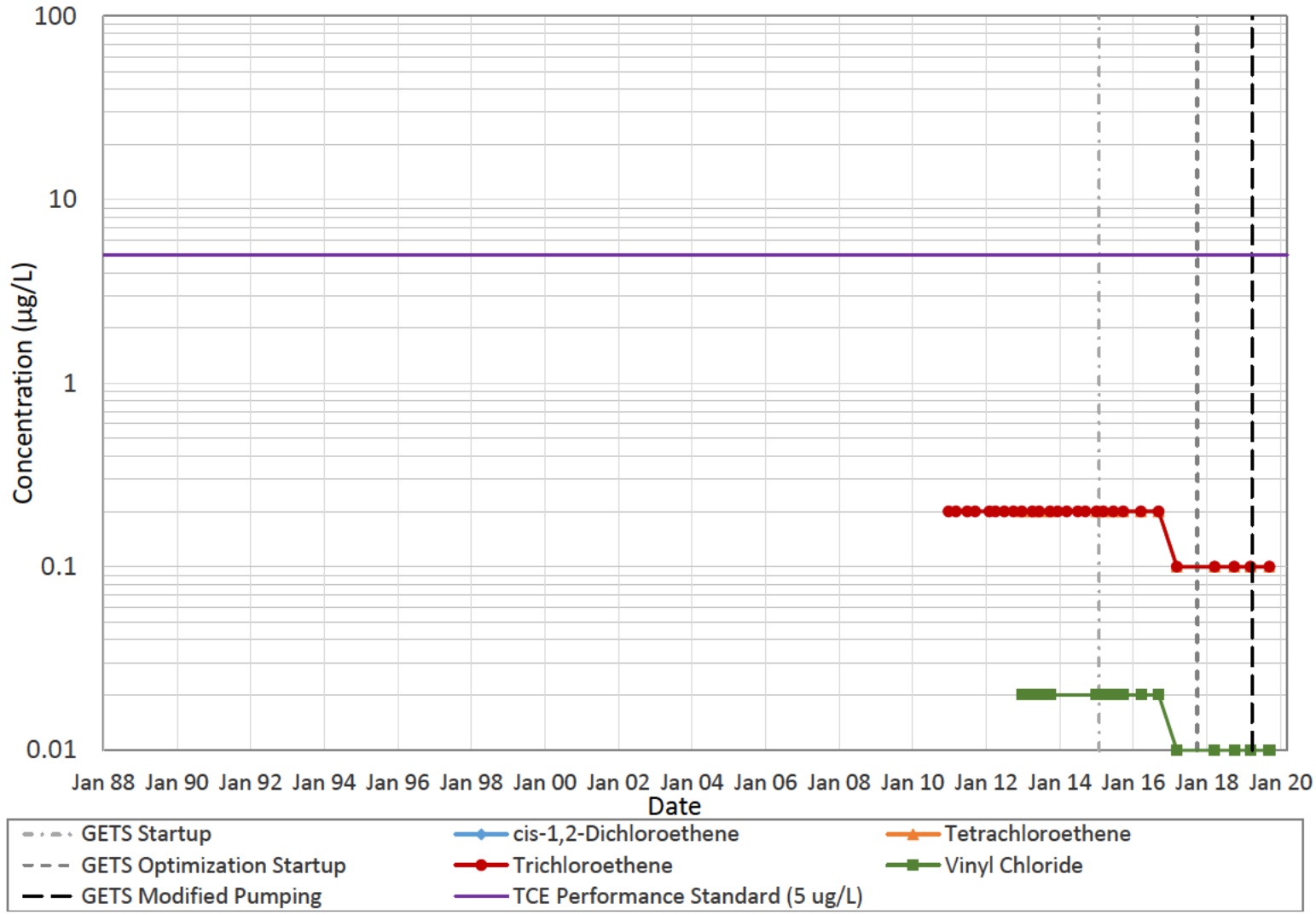

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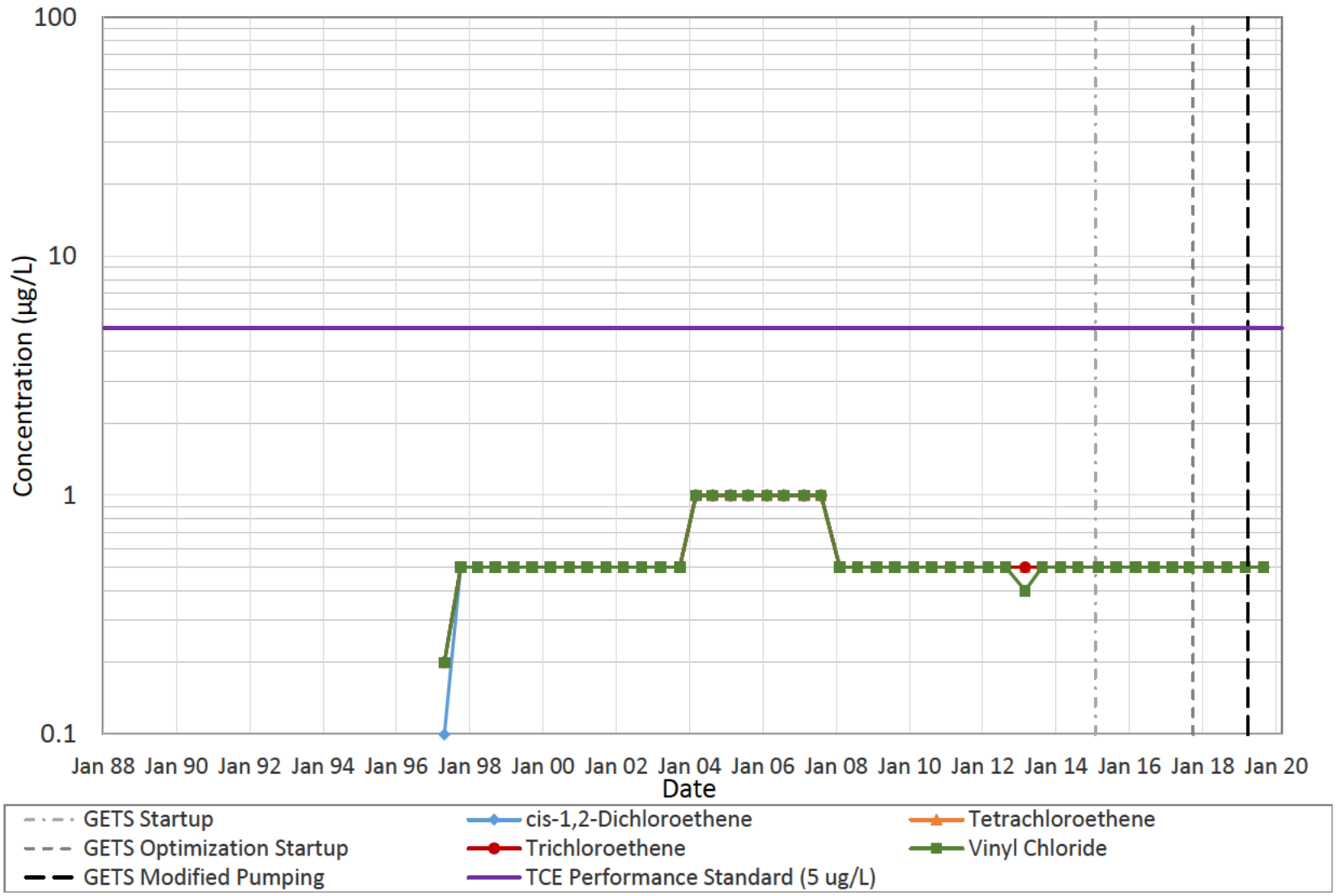
CHRL Aquifer 2a MW-95 Time Series

Figure
E-24

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCF_SurfWater,Offsite-COCPlots,Data_AppE_63,64,25,75



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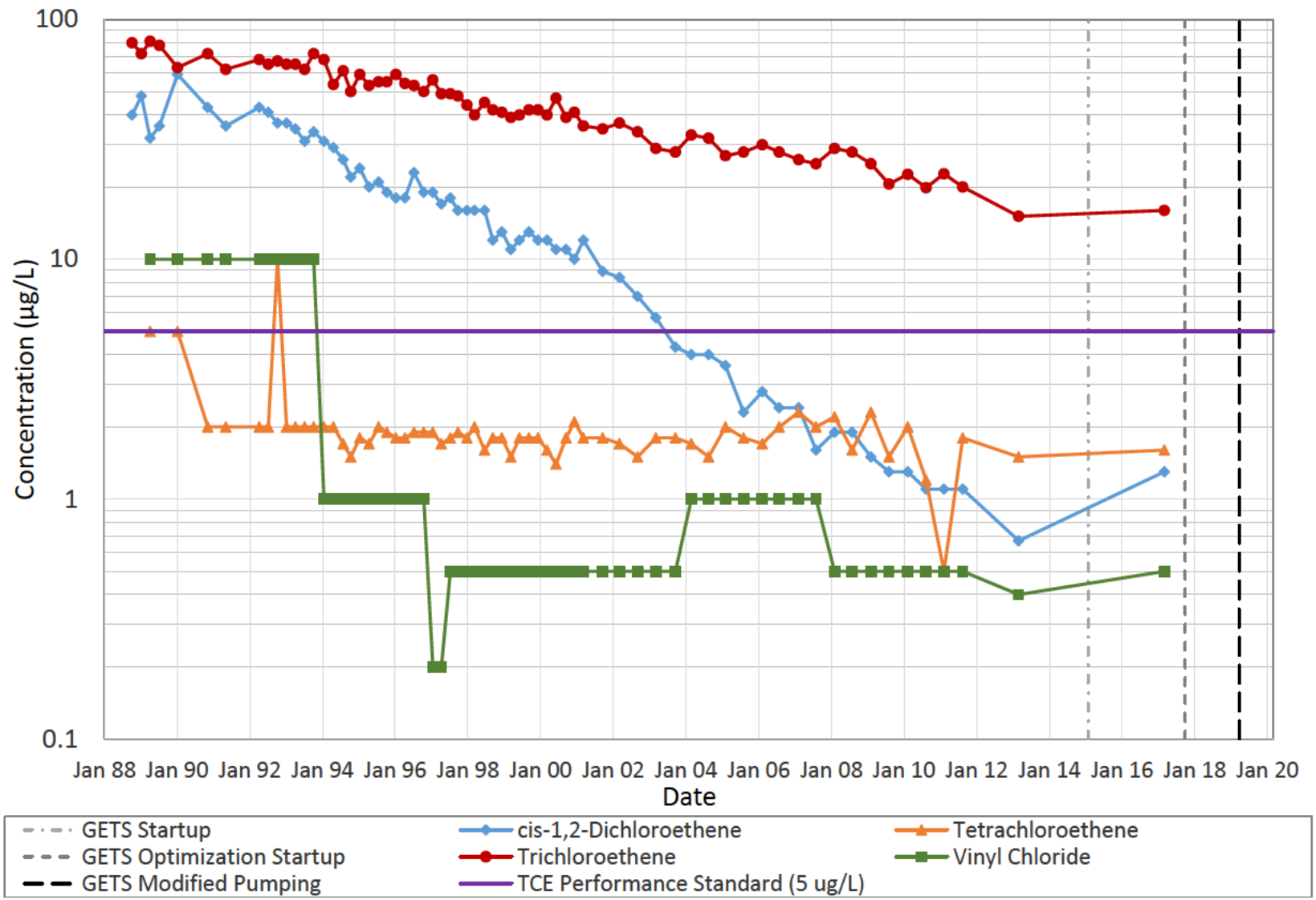
Offsite Well (b) (6) (LR) Time Series

Figure
E-25

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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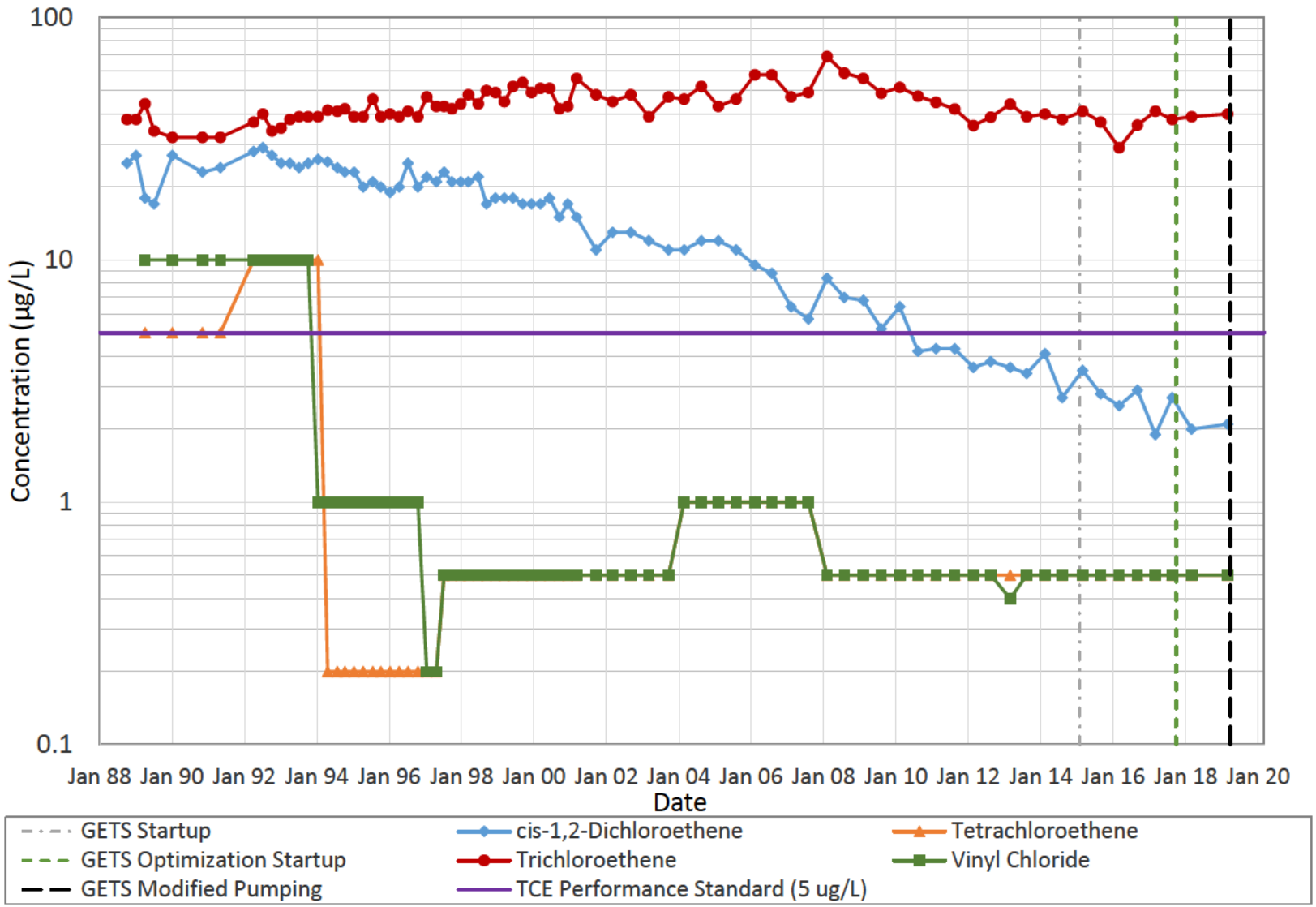
Aquifer 2 B-2 Time Series

Figure
E-26

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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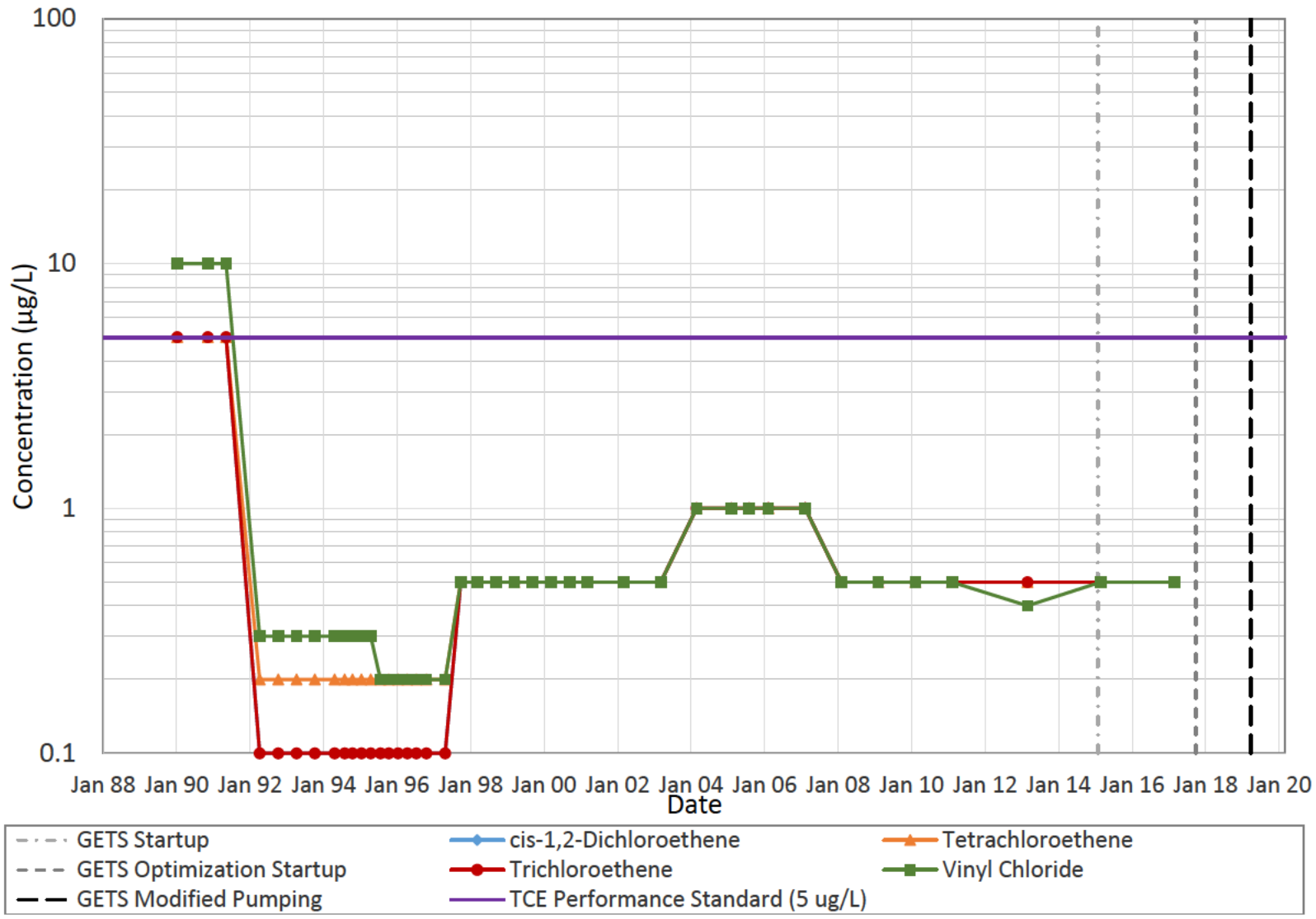
Aquifer 2 C-2 Time Series

Figure
E-27

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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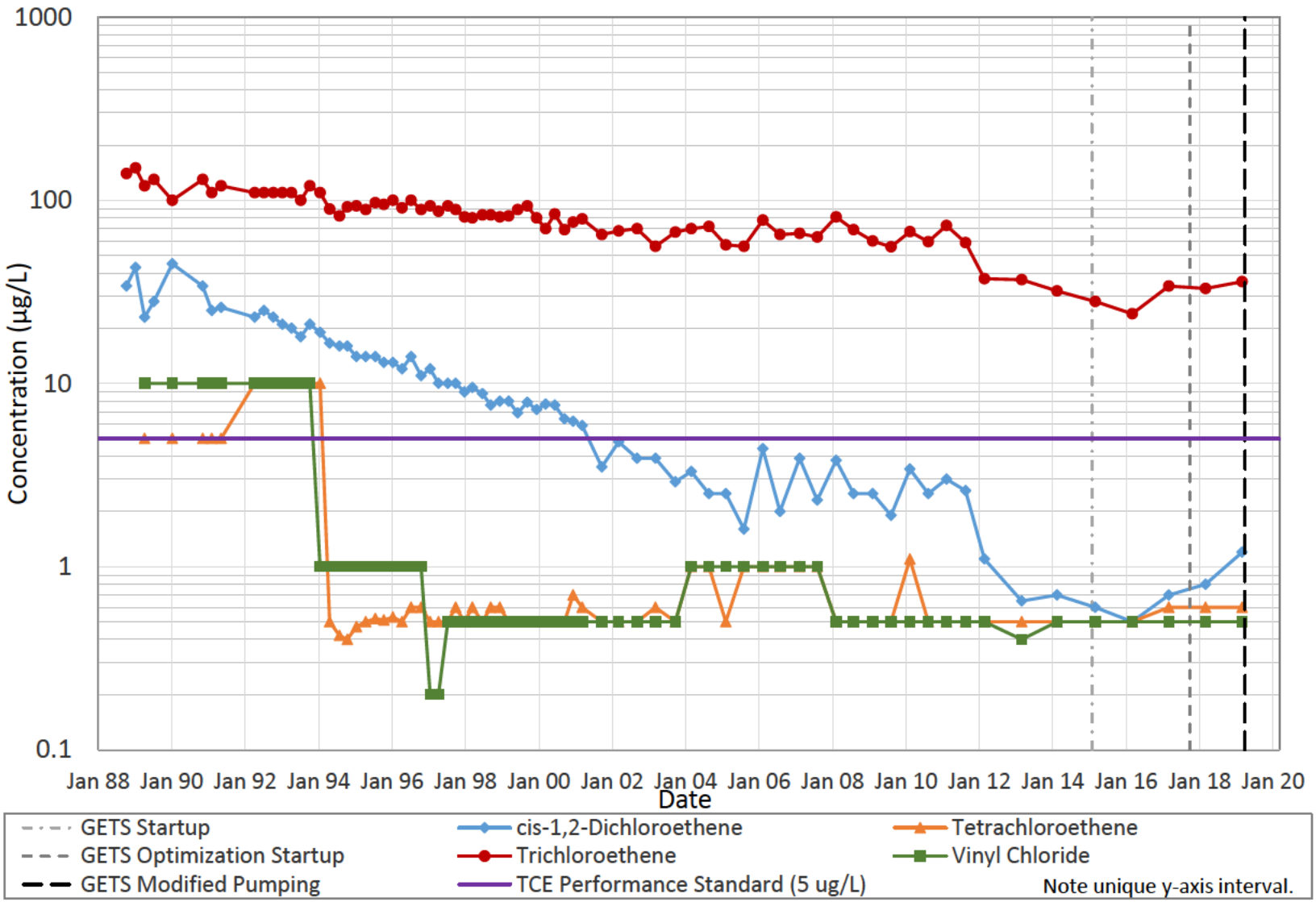
Aquifer 2 D-2 Time Series

Figure
E-28

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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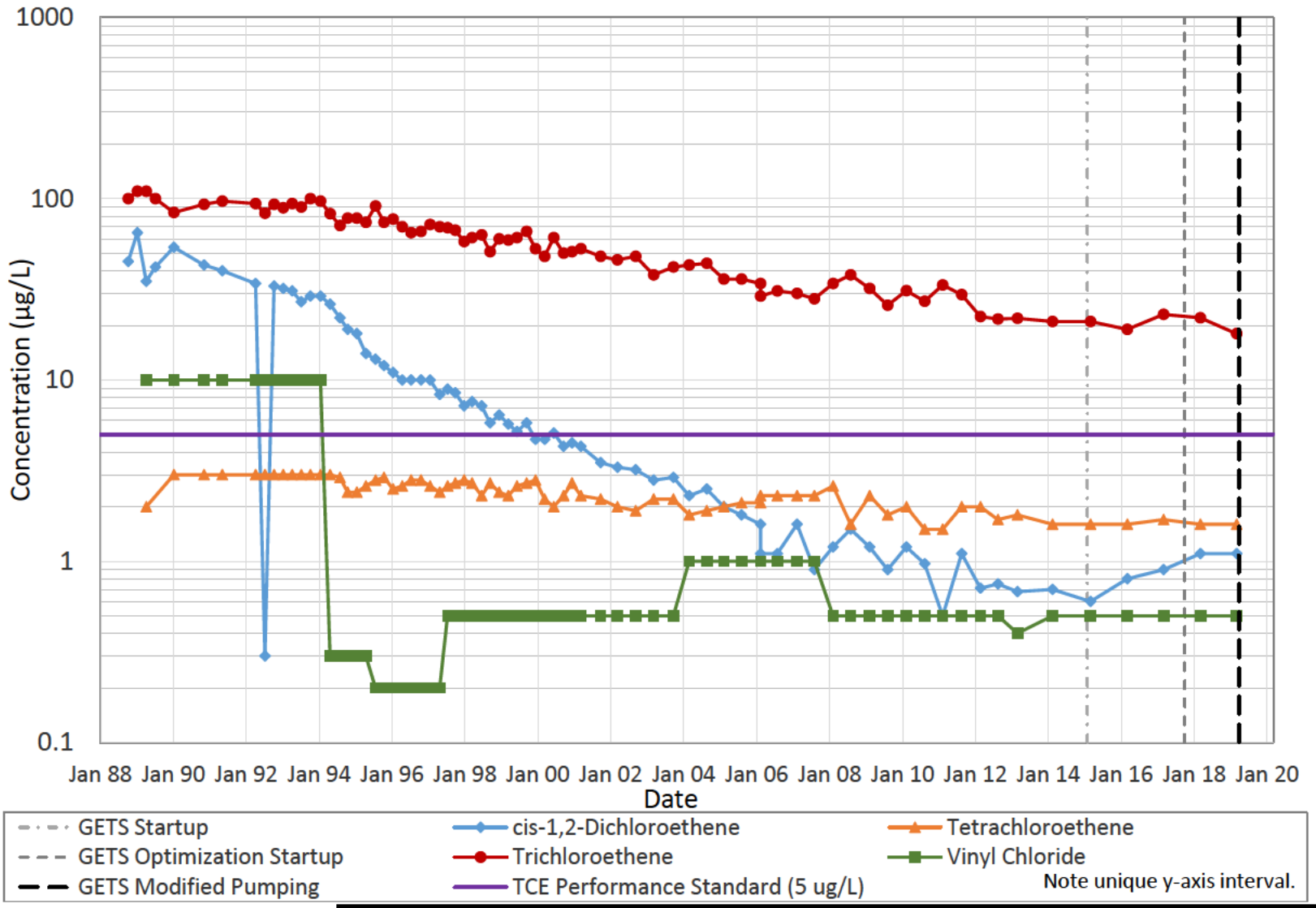
Aquifer 2 E-2 Time Series

Figure
E-29

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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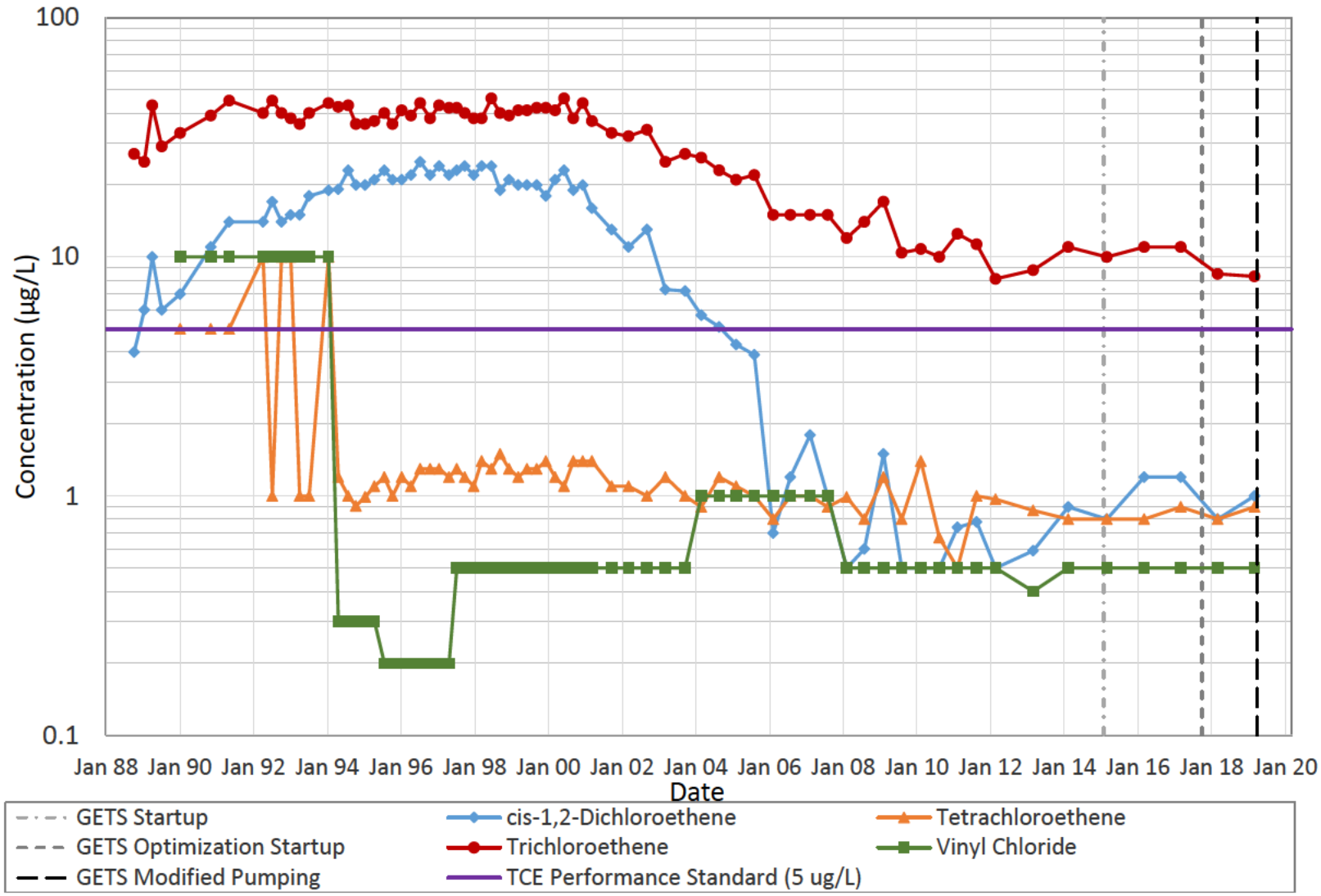
Aquifer 2 F-2 Time Series

Figure
E-30

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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Aquifer 2 G-2 Time Series

Figure
E-31

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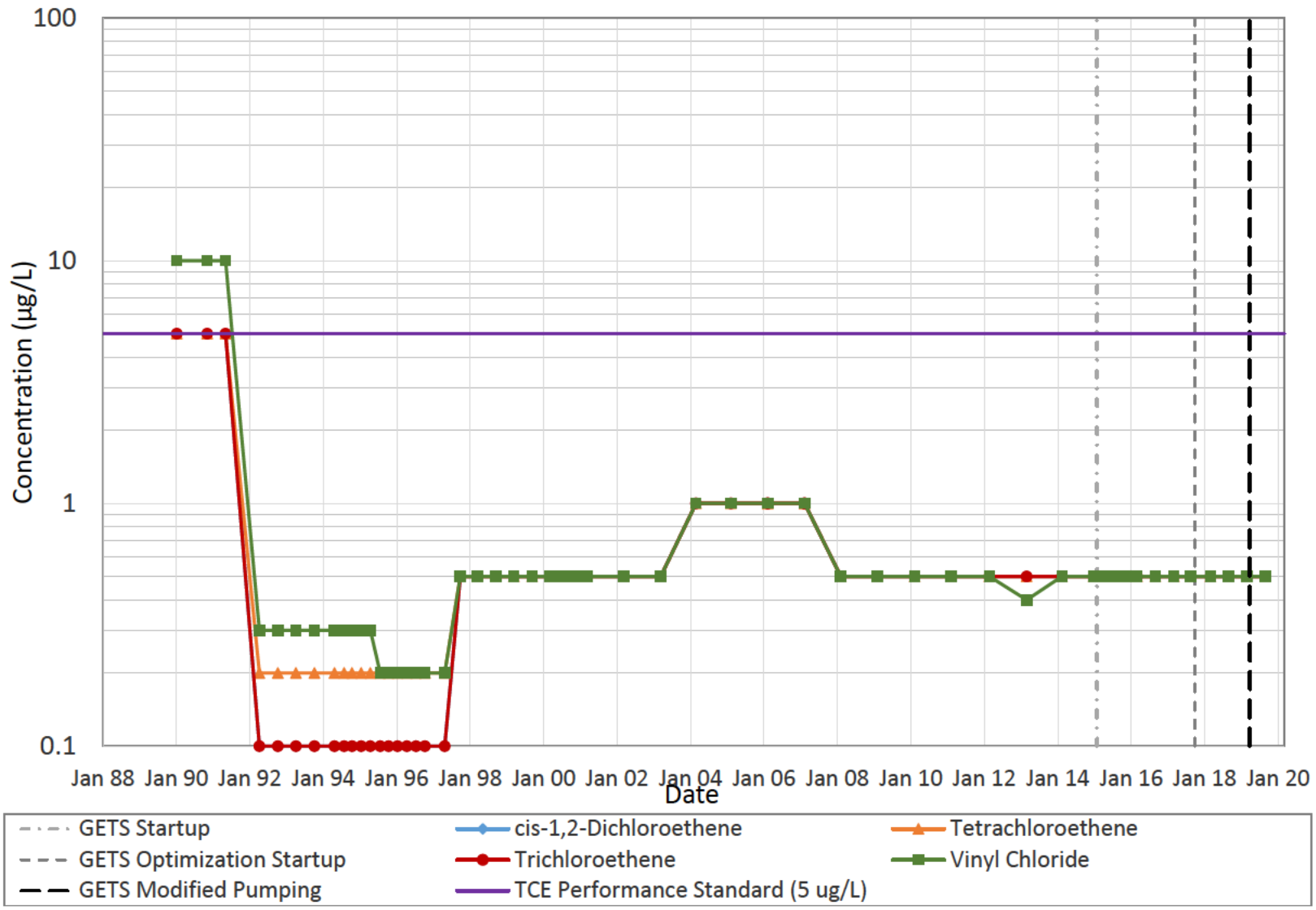

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Aquifer 2 H-2 Time Series

Figure
E-32

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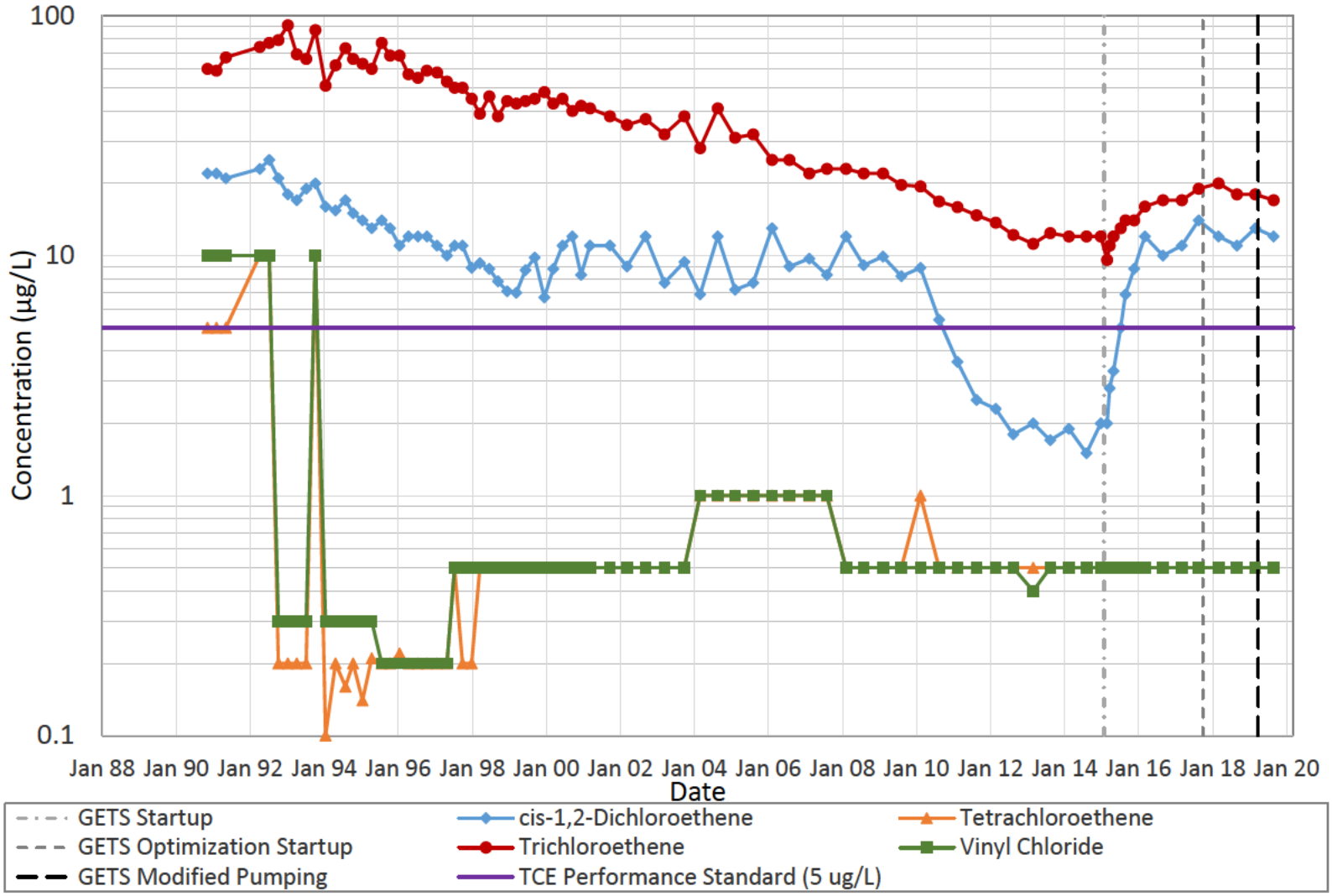


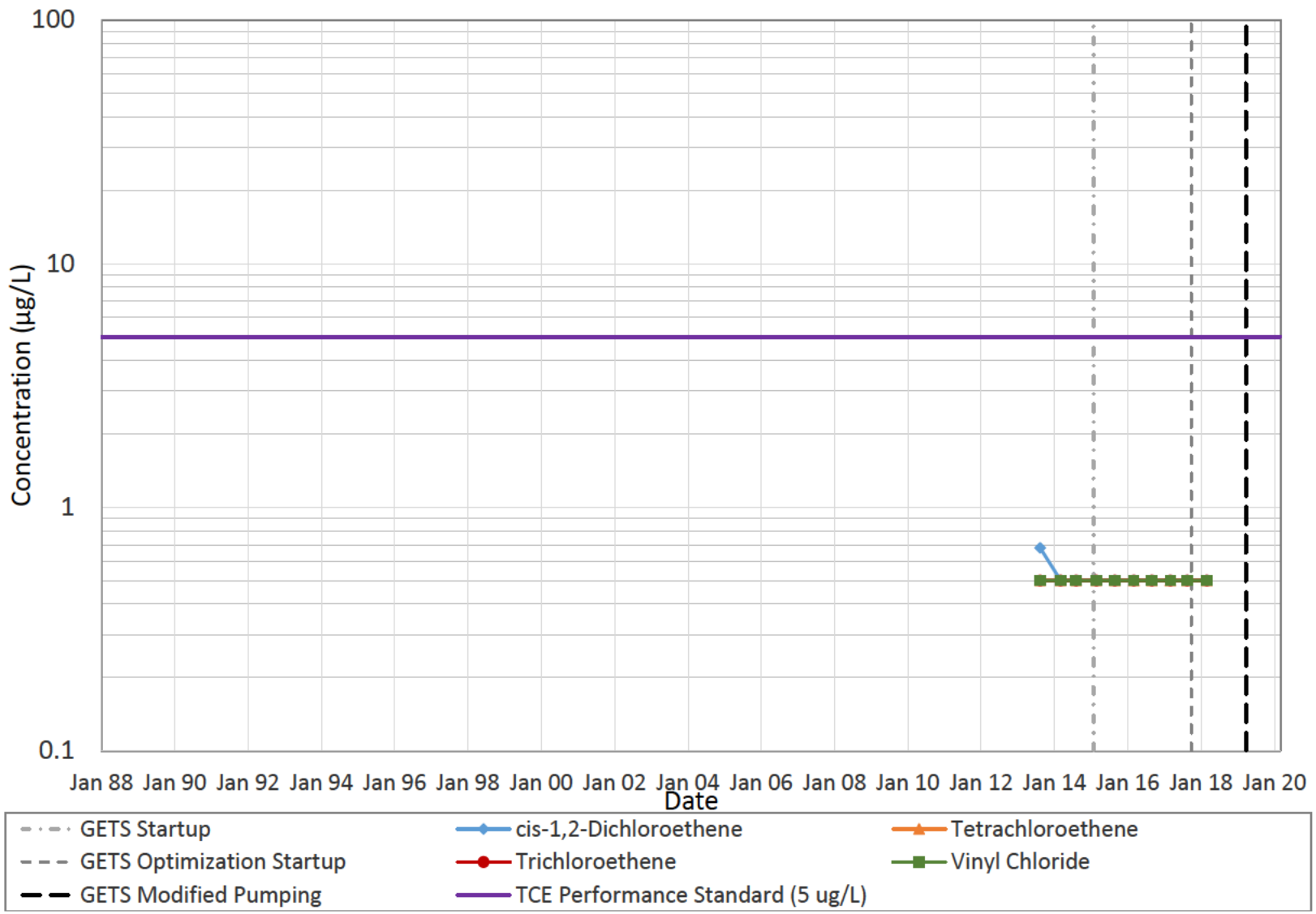
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Aquifer 2 I-2 Time Series

Figure
E-33

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Aquifer 2 IB-2 Time Series

Figure
E-34

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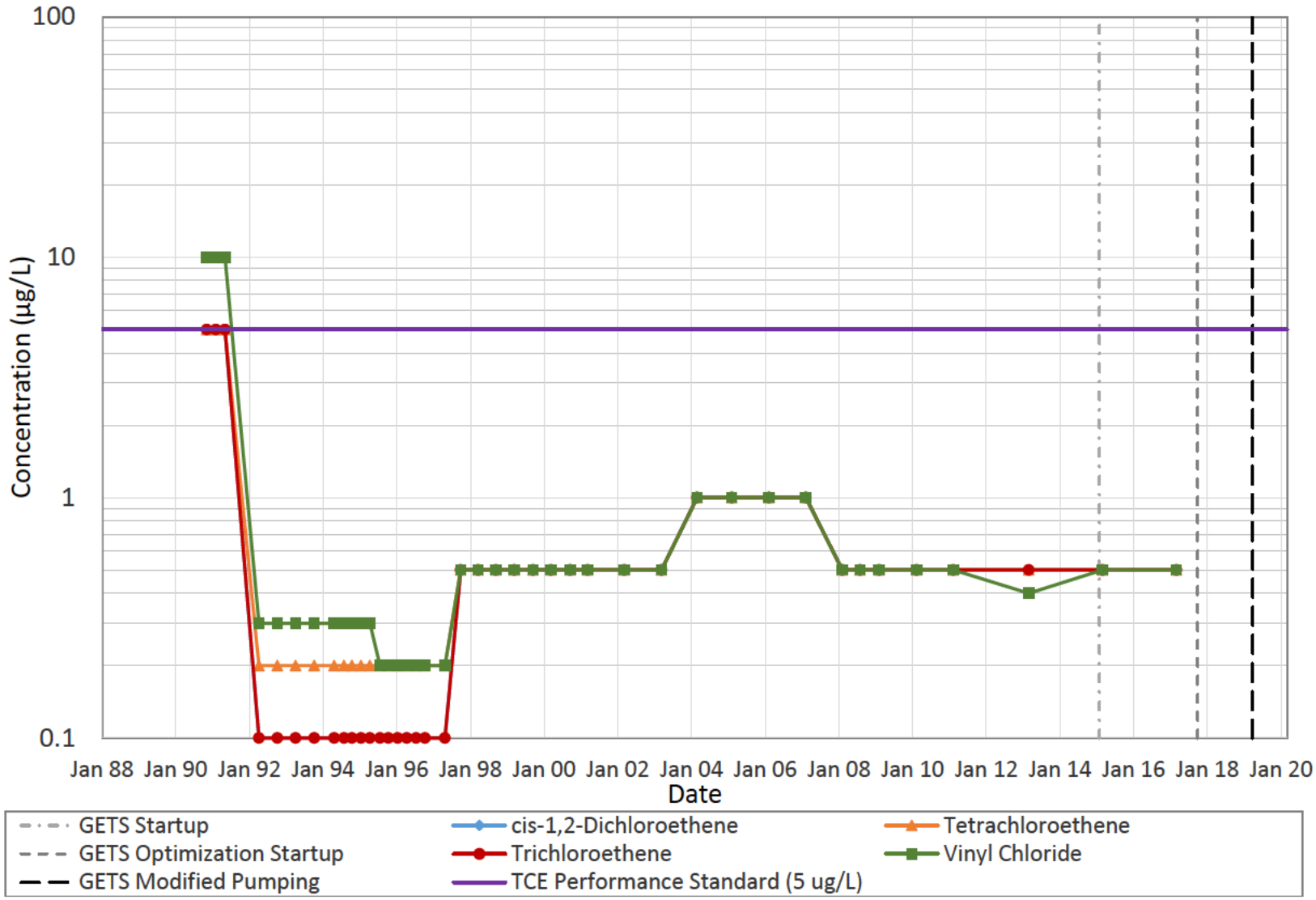

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Queen City Farms
Maple Valley, Washington

Aquifer 2 J-2 Time Series

Figure
E-35

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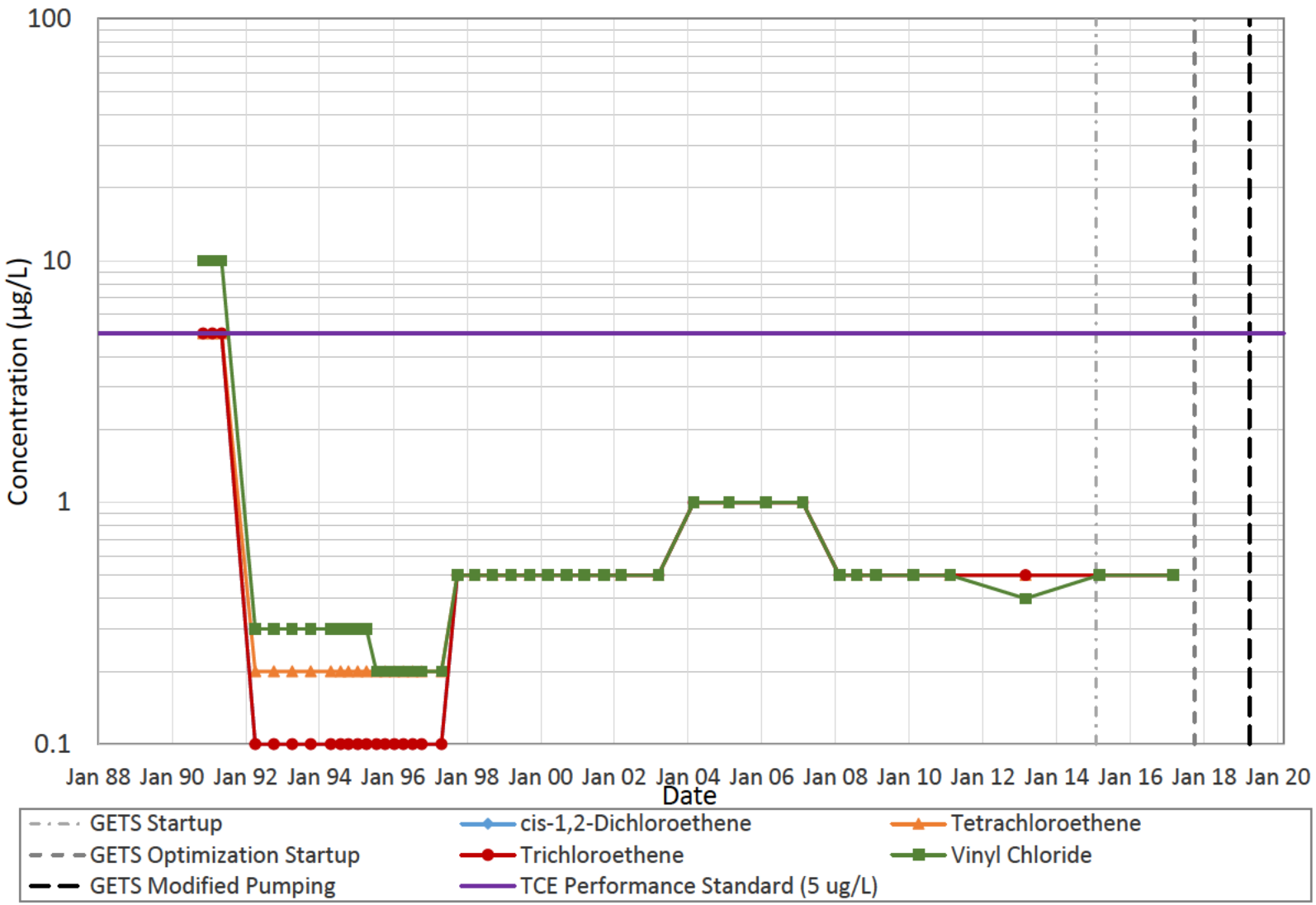

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Queen City Farms
Maple Valley, Washington

Aquifer 2 K-2 Time Series

Figure
E-36

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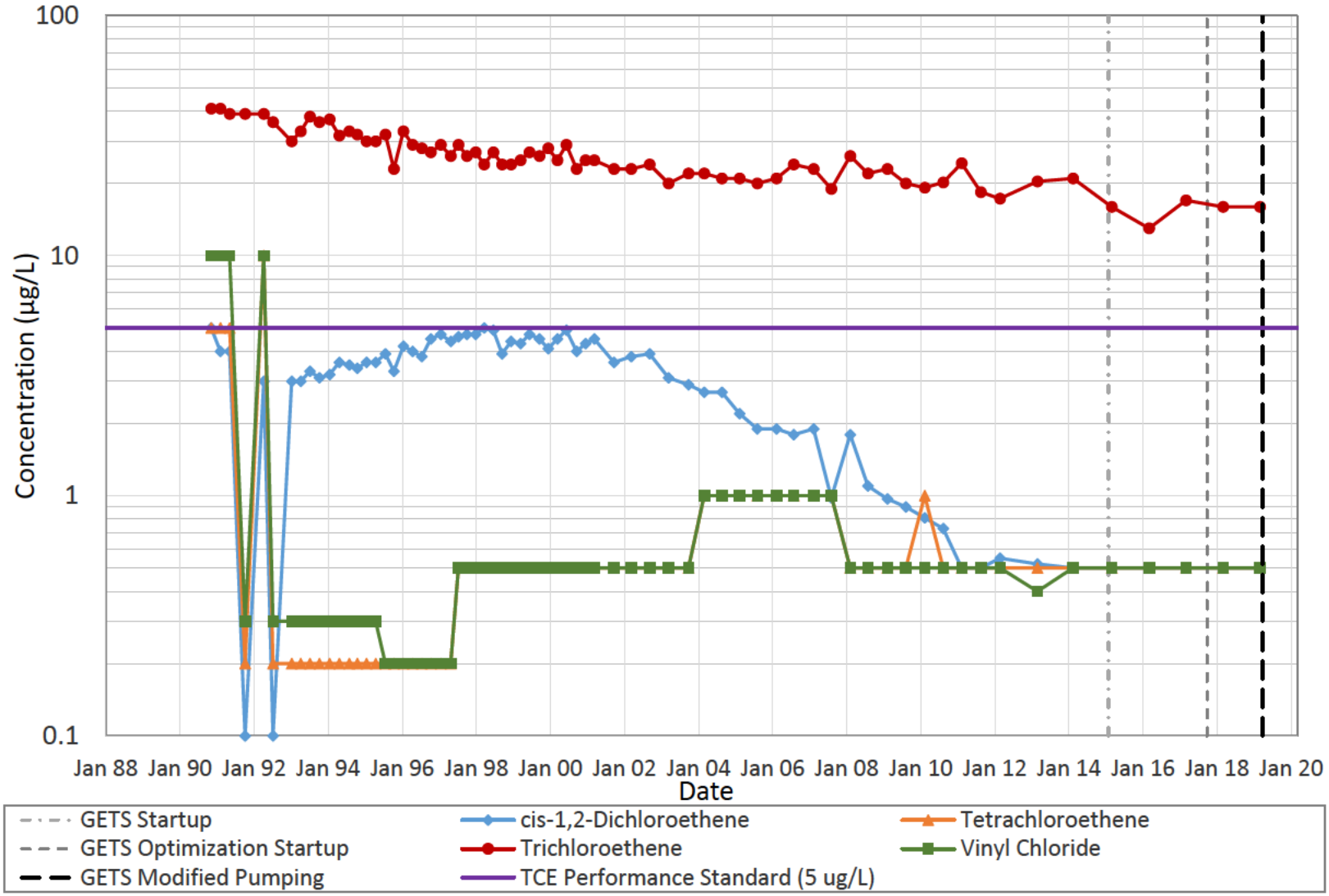

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Queen City Farms
Maple Valley, Washington

Aquifer 2 L-2 Time Series

Figure
E-37

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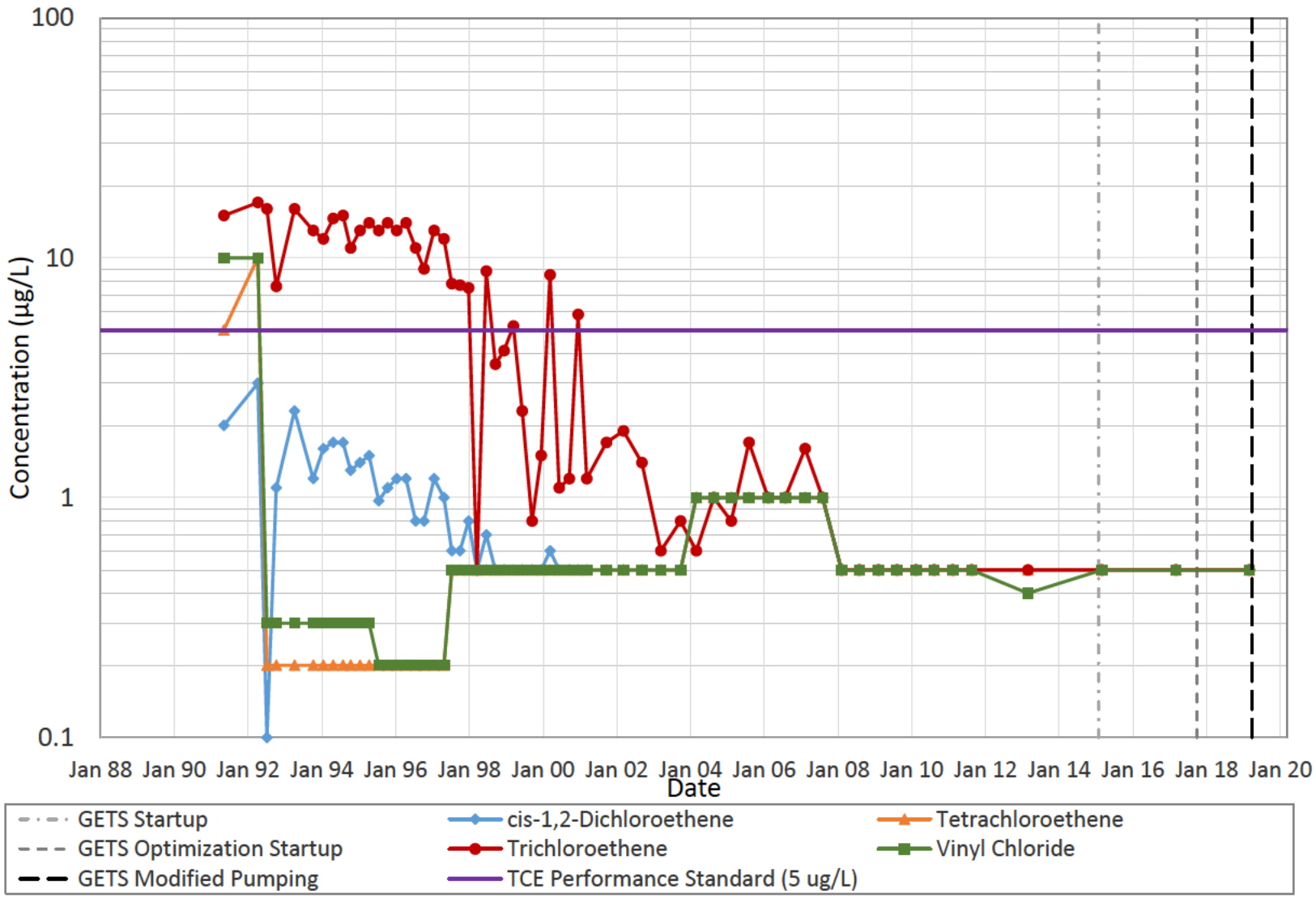

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Queen City Farms
Maple Valley, Washington

Aquifer 2 M-2 Time Series

Figure
E-38

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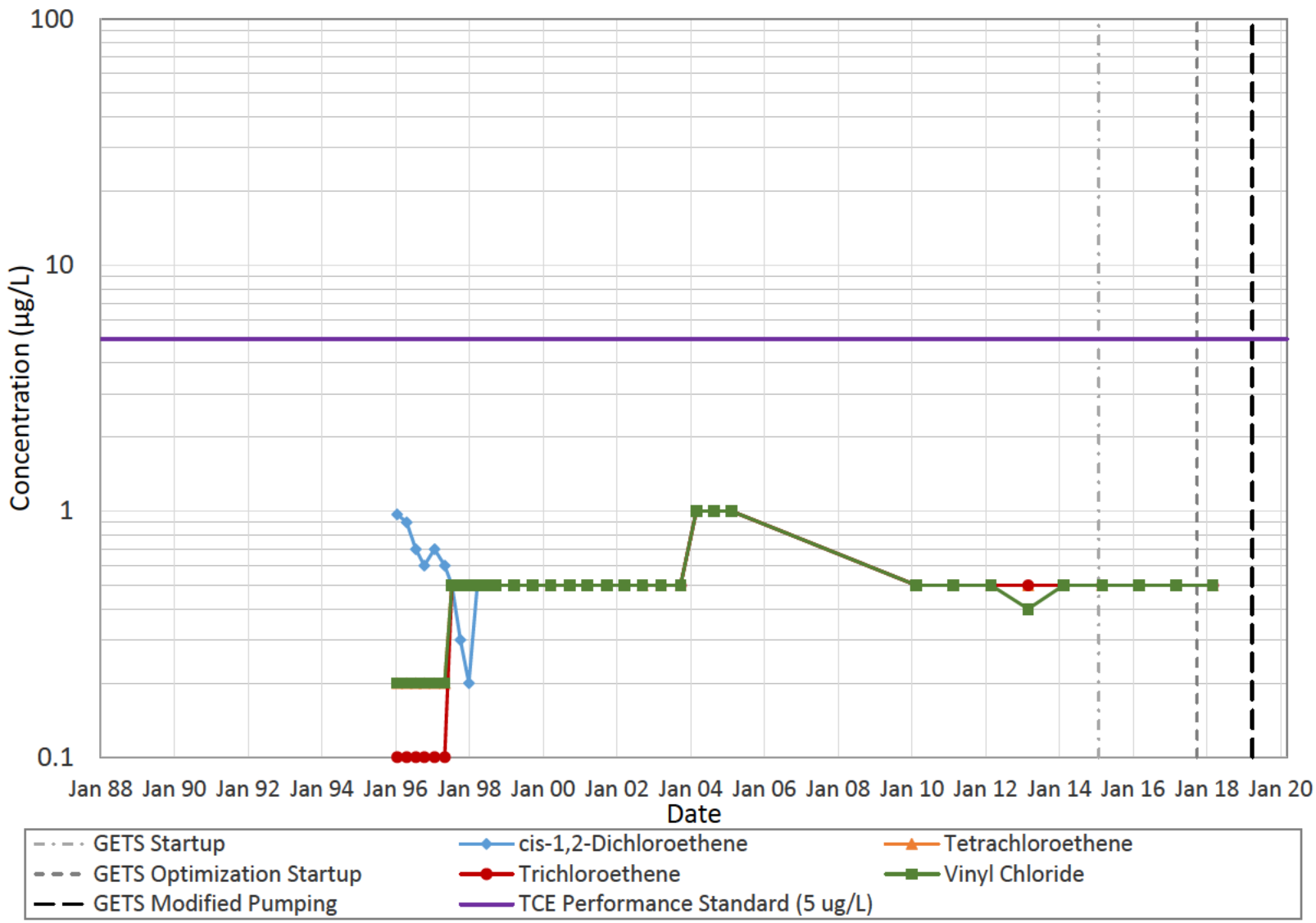

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Queen City Farms
Maple Valley, Washington

Aquifer 2 MW-71 Time Series

Figure
E-39

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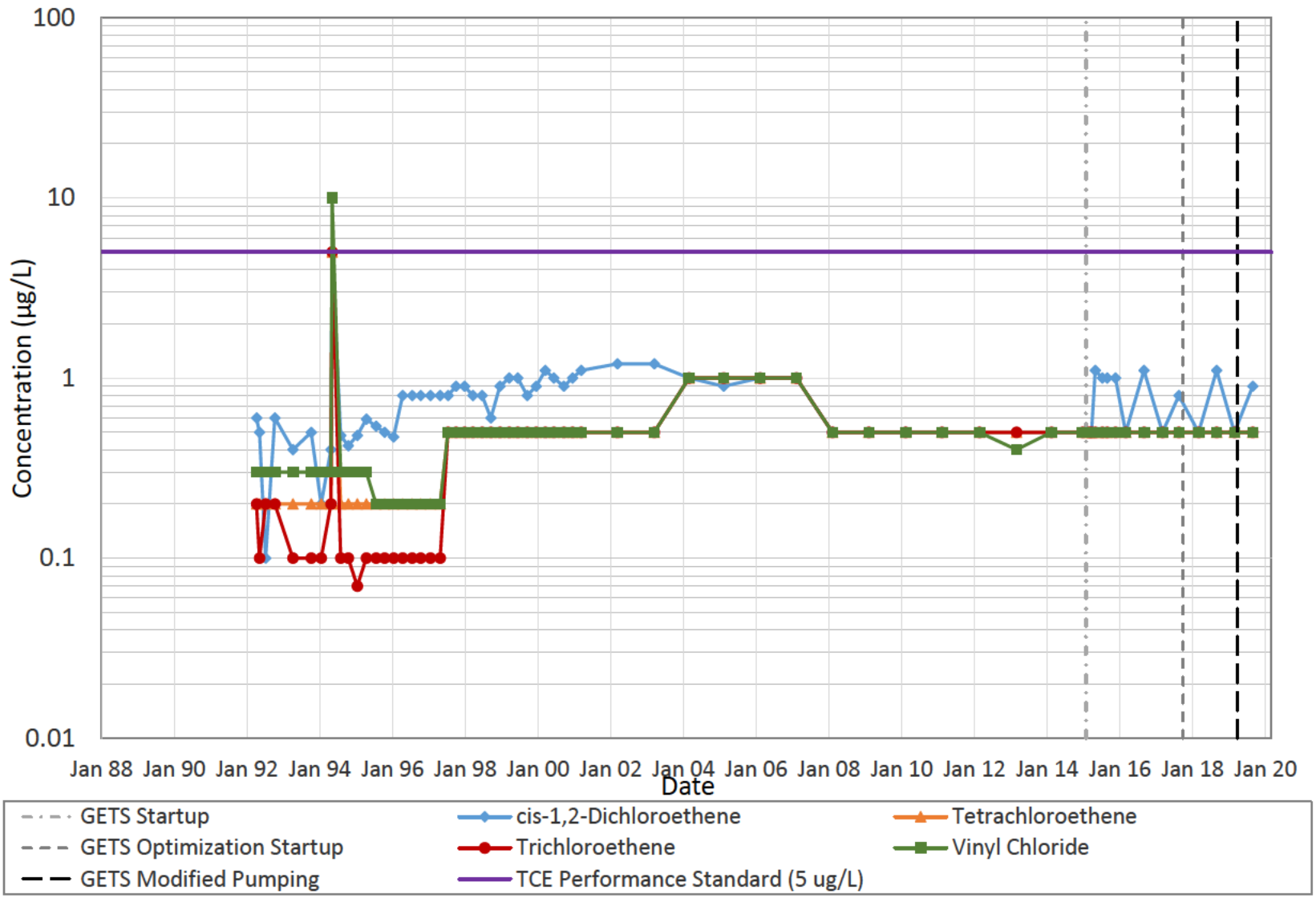

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Queen City Farms
Maple Valley, Washington

Aquifer 2 N-2 Time Series

Figure
E-40

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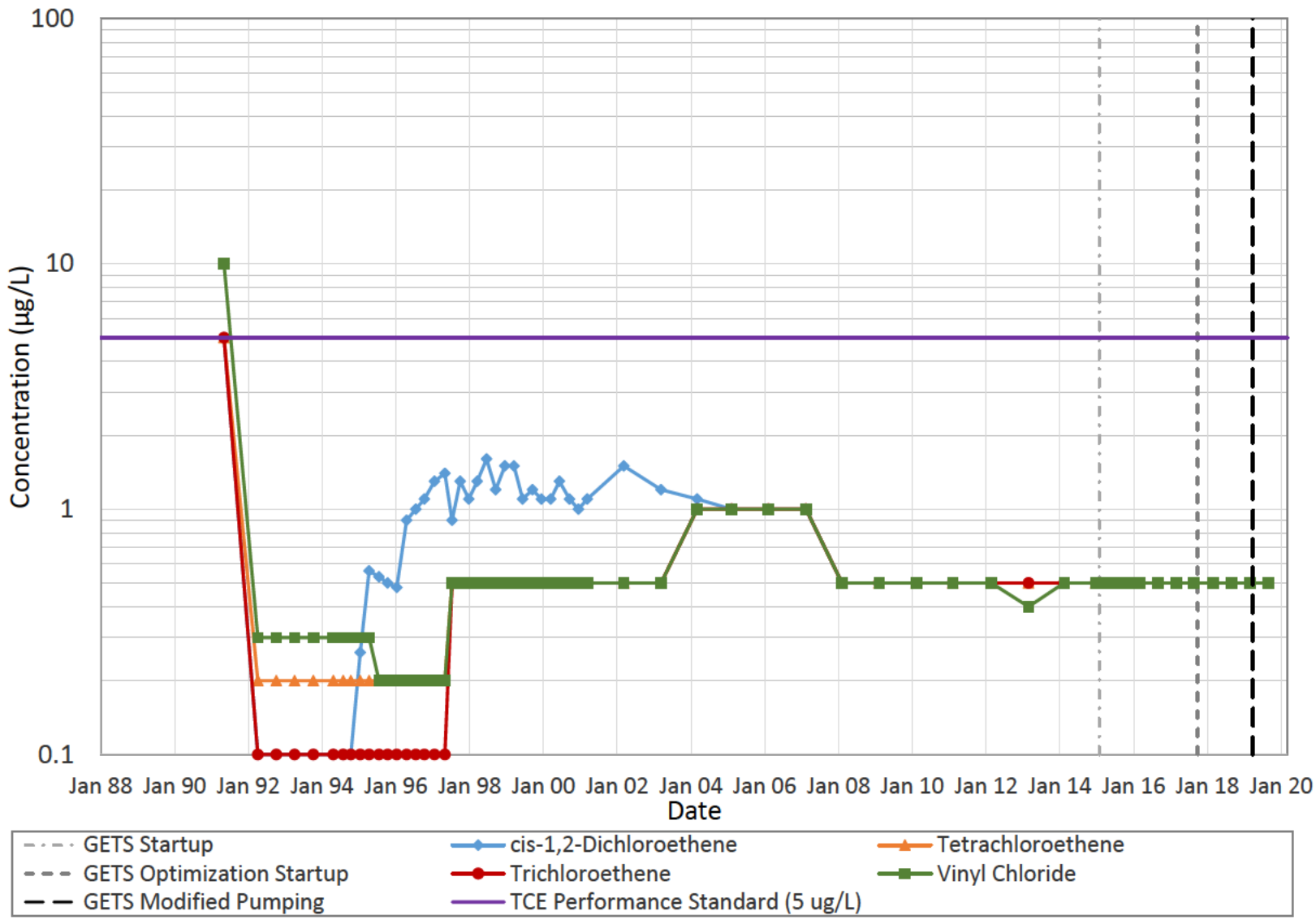

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Queen City Farms
Maple Valley, Washington

Aquifer 2 O-2 Time Series

Figure
E-41

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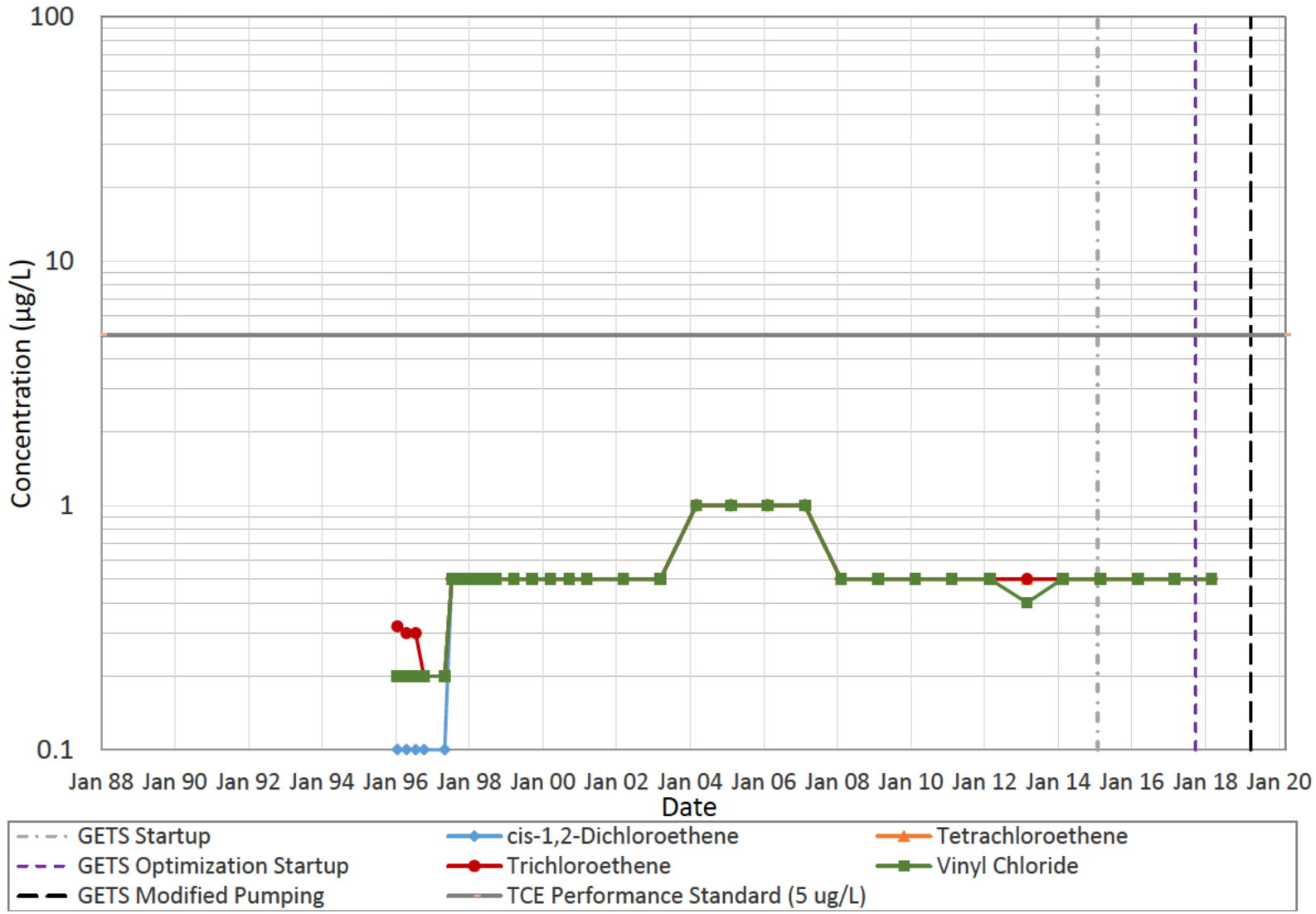

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Queen City Farms
Maple Valley, Washington

Aquifer 2 R-2 Time Series

Figure
E-42

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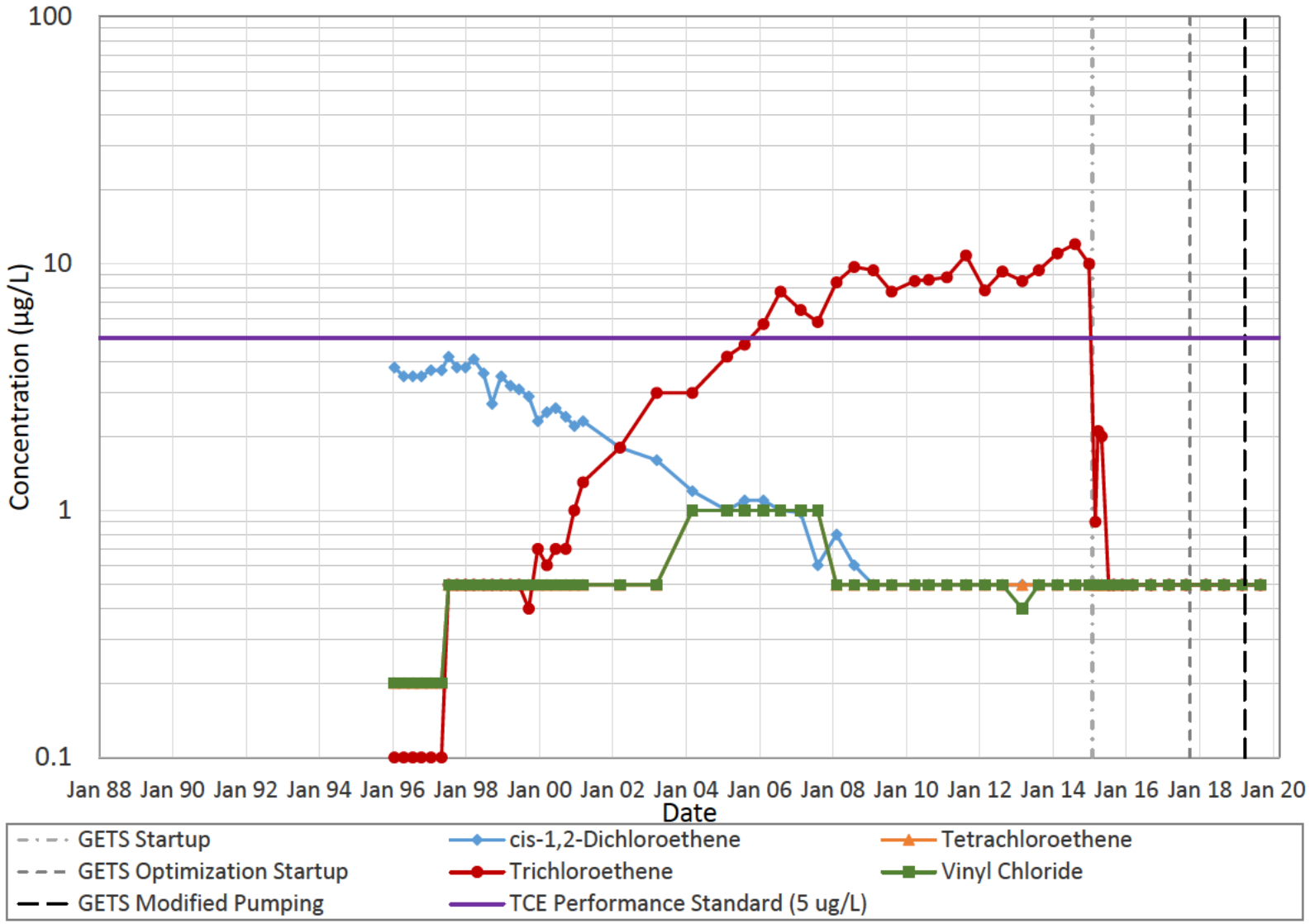

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Queen City Farms
Maple Valley, Washington

Aquifer 2 S-2 Time Series

Figure
E-43

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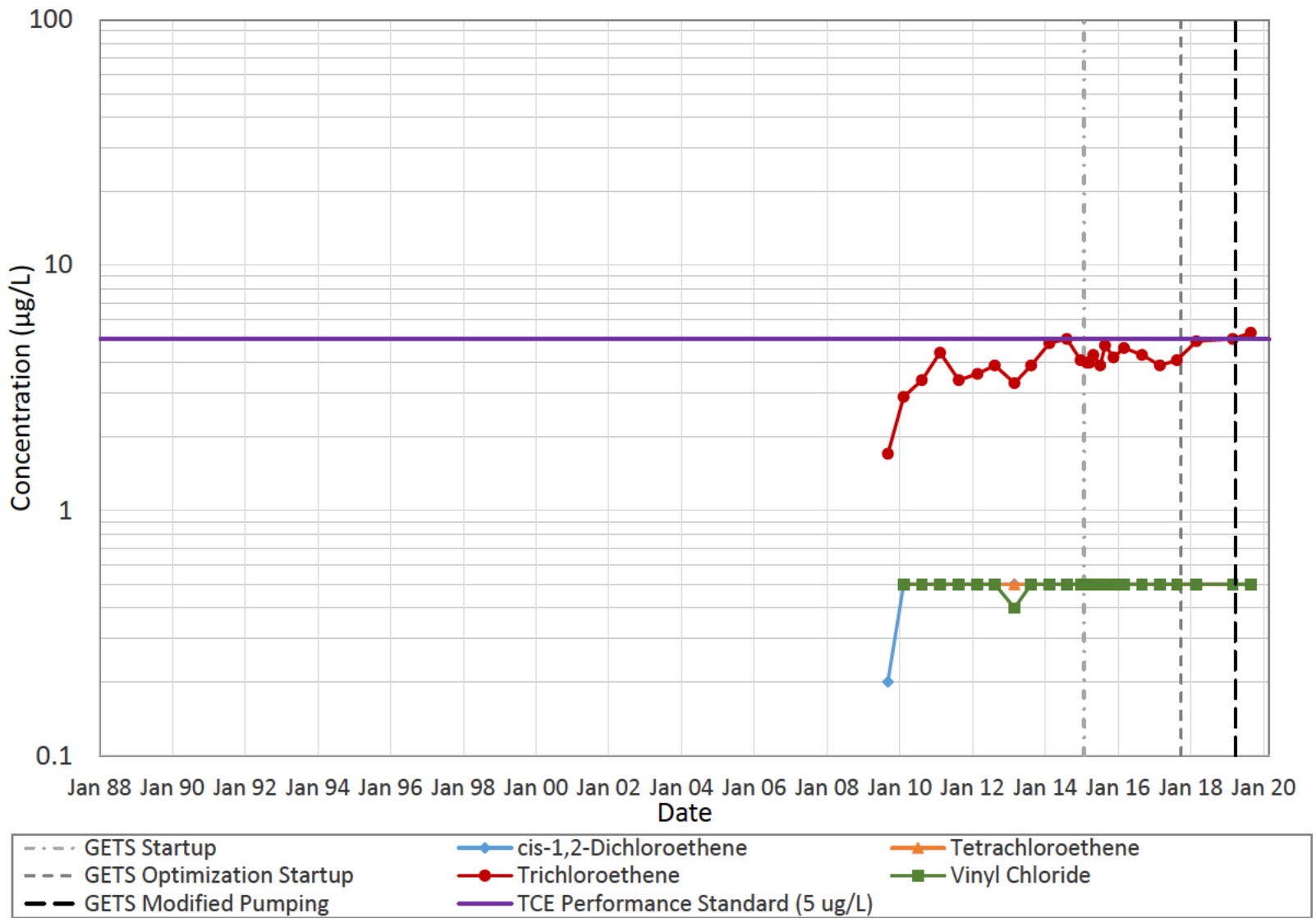

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Queen City Farms
Maple Valley, Washington

Aquifer 2 SA-2 Time Series

Figure
E-44

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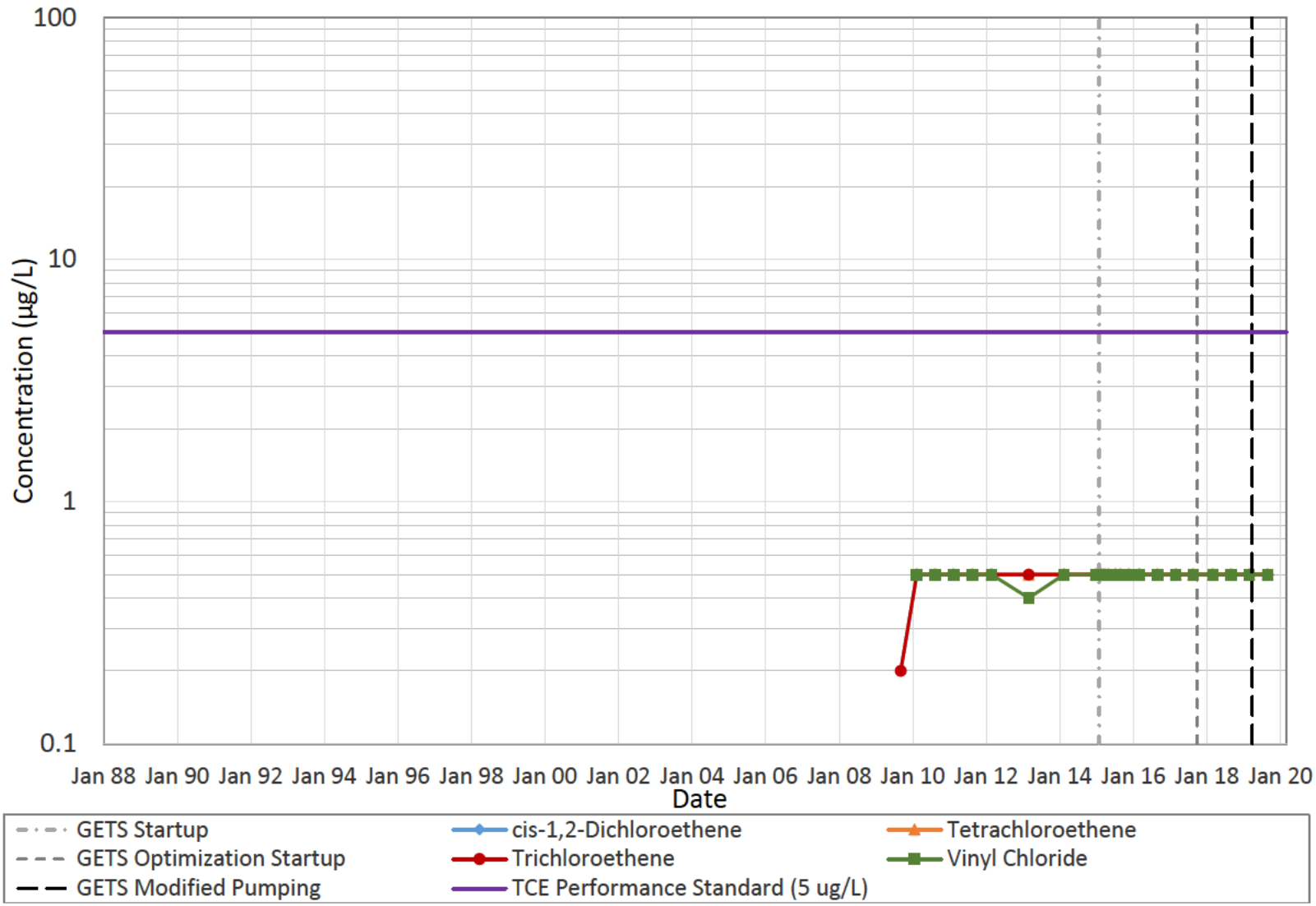

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Queen City Farms
Maple Valley, Washington

Aquifer 2 SB-2 Time Series

Figure
E-45

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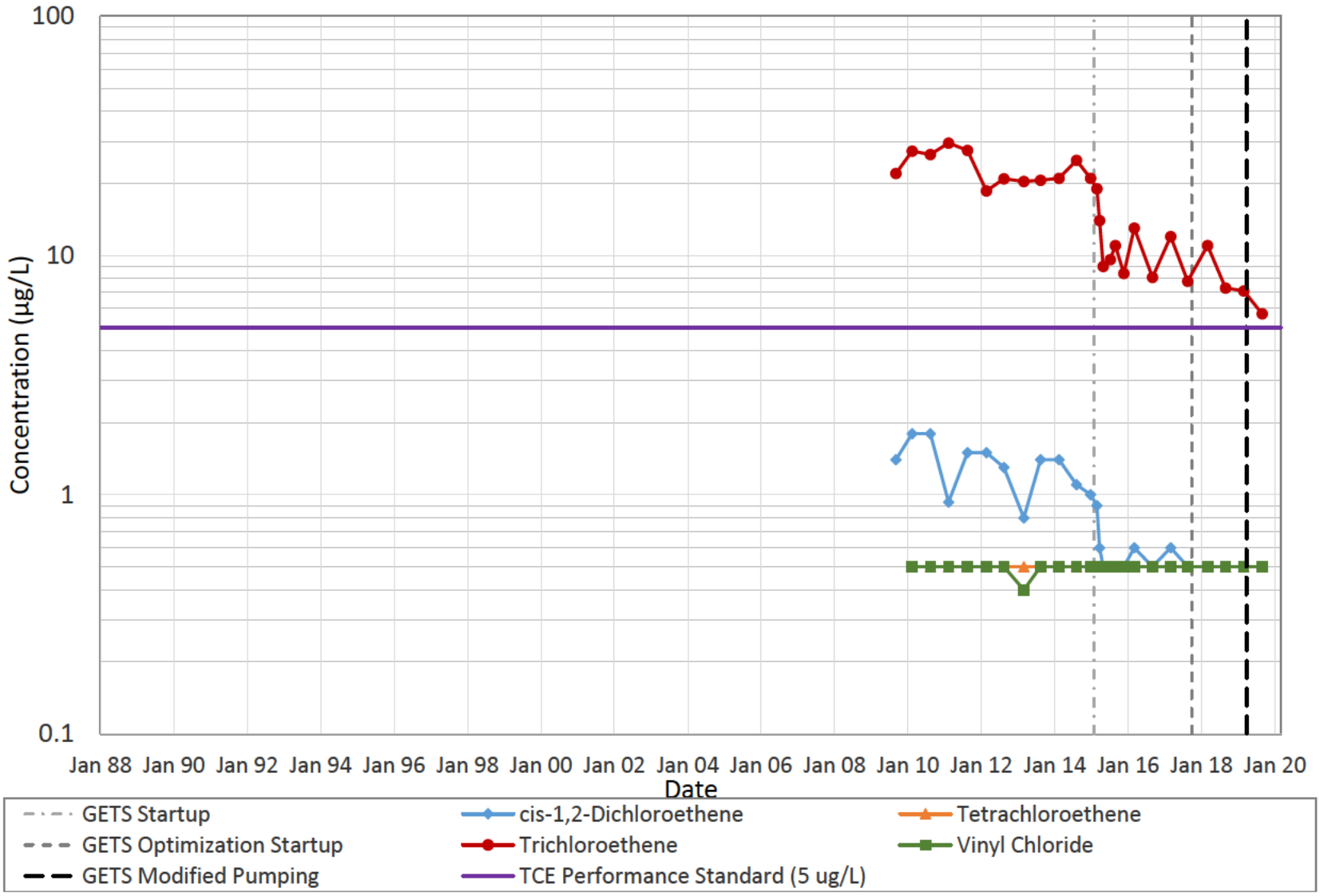

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Queen City Farms
Maple Valley, Washington

Aquifer 2 SC-2 Time Series

Figure
E-46

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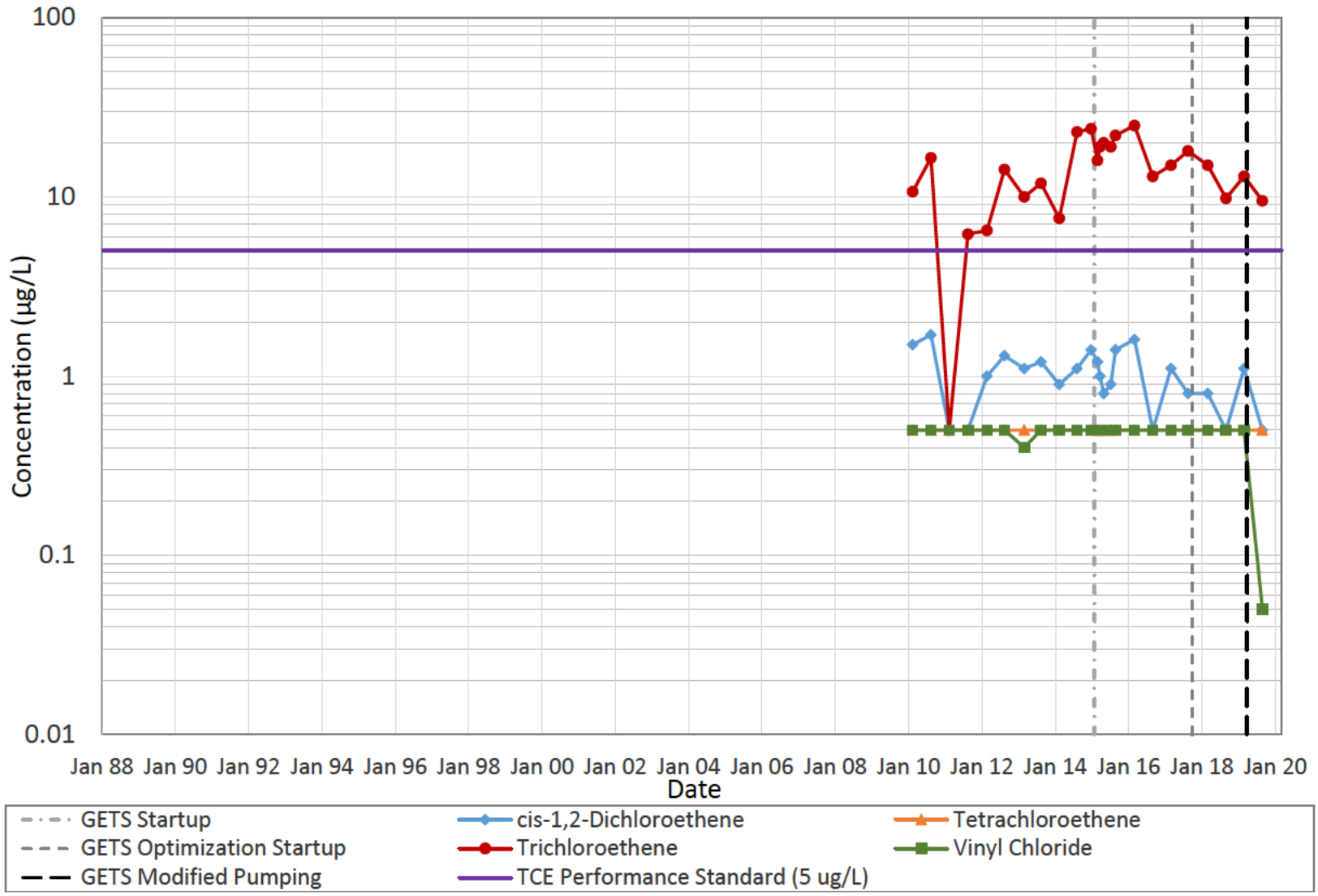

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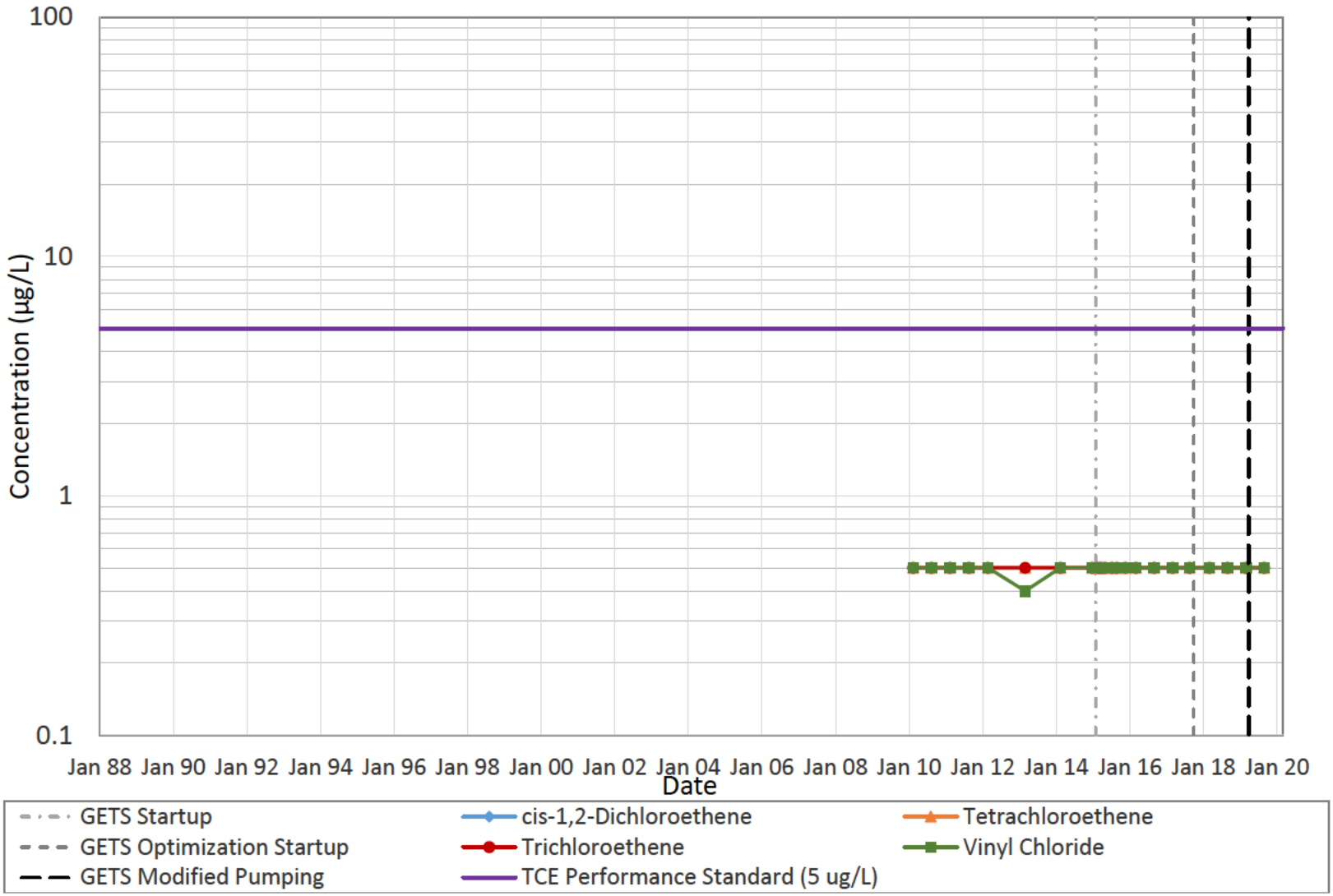
Queen City Farms
Maple Valley, Washington

Aquifer 2 SD-2 Time Series

Figure
E-47

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer2-COCPlots,Data_aPPE_26-49



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Queen City Farms
Maple Valley, Washington

Aquifer 2 SE-2 Time Series

Figure
E-48

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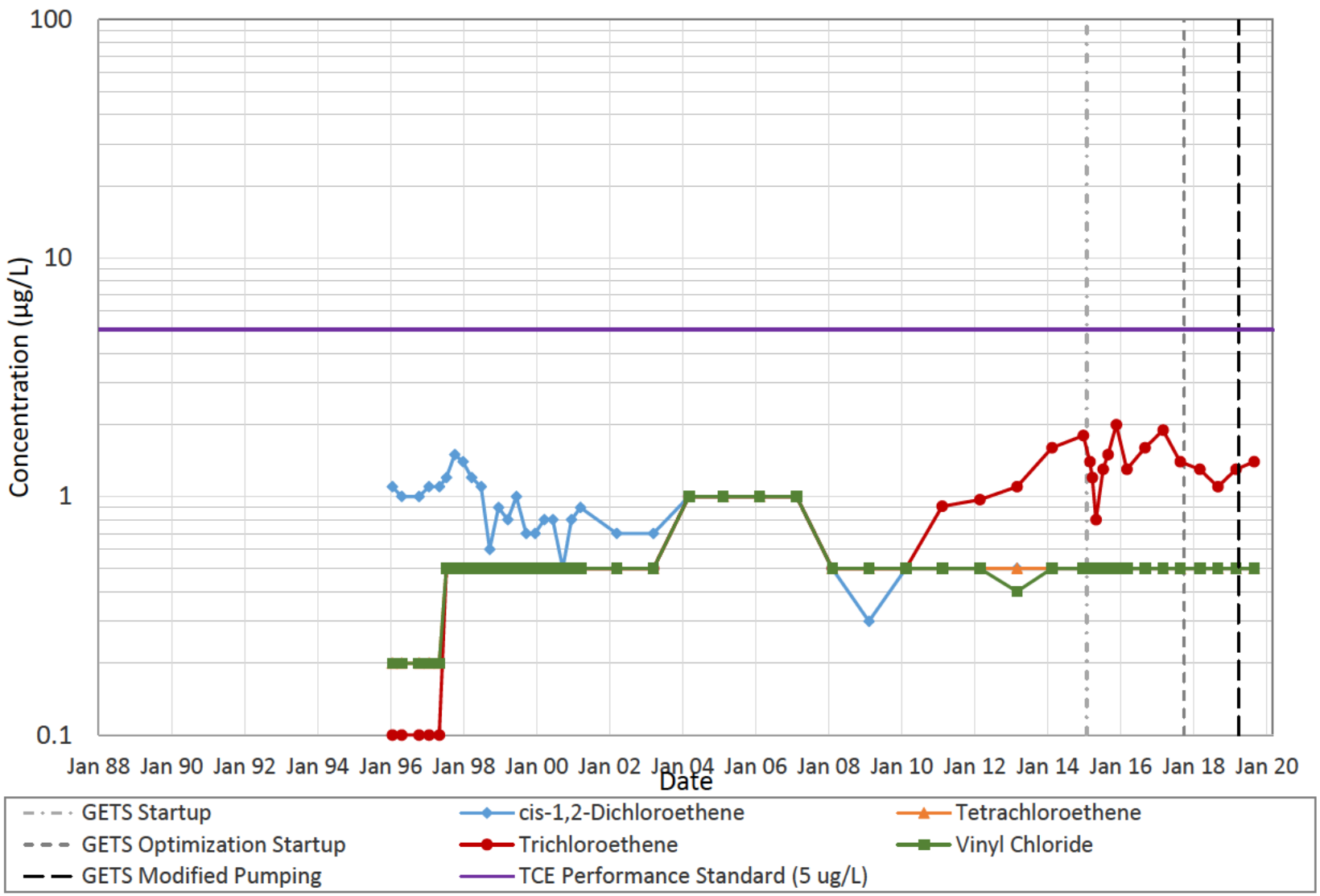

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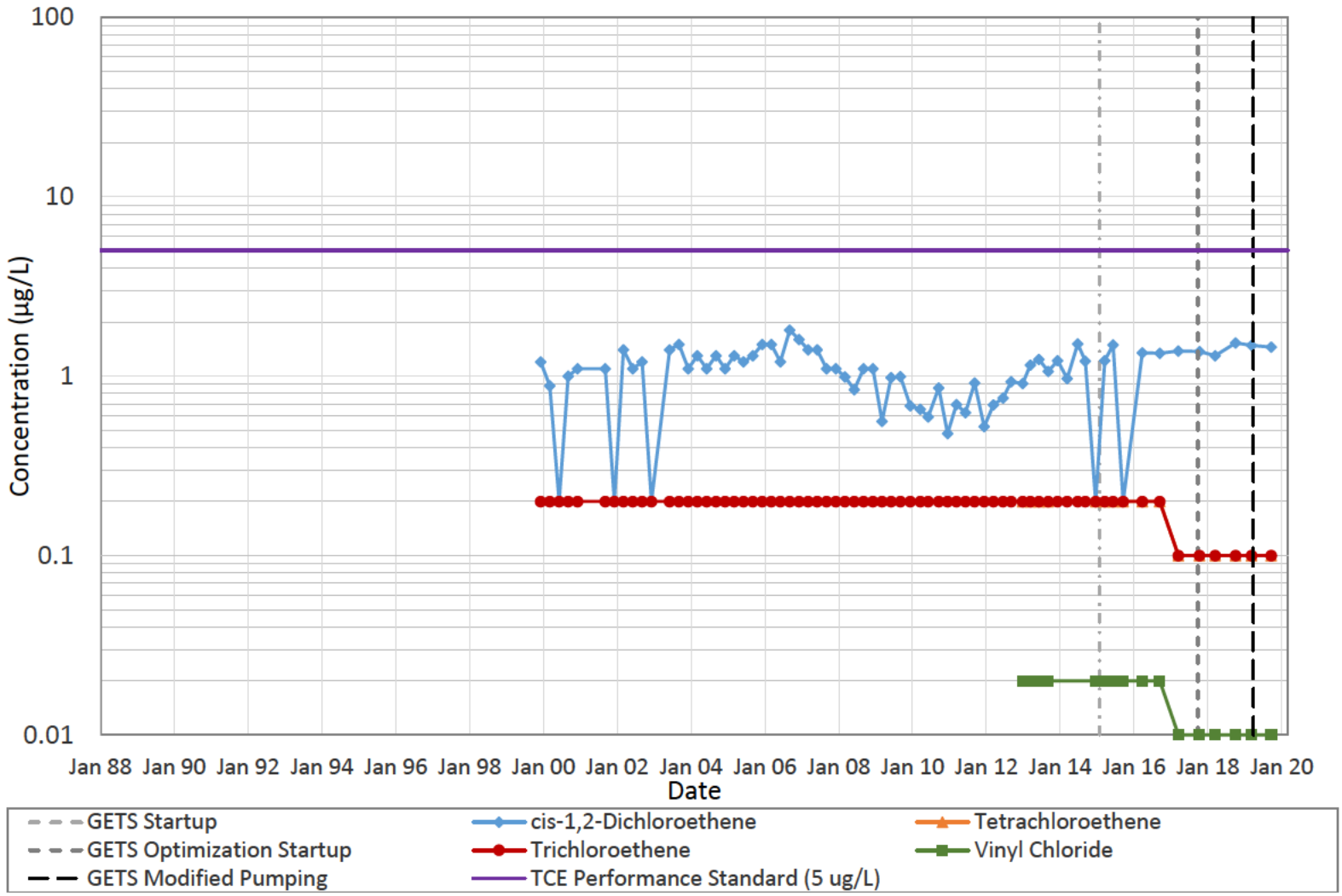
Queen City Farms
Maple Valley, Washington

Aquifer 2 U-2 Time Series

Figure
E-49

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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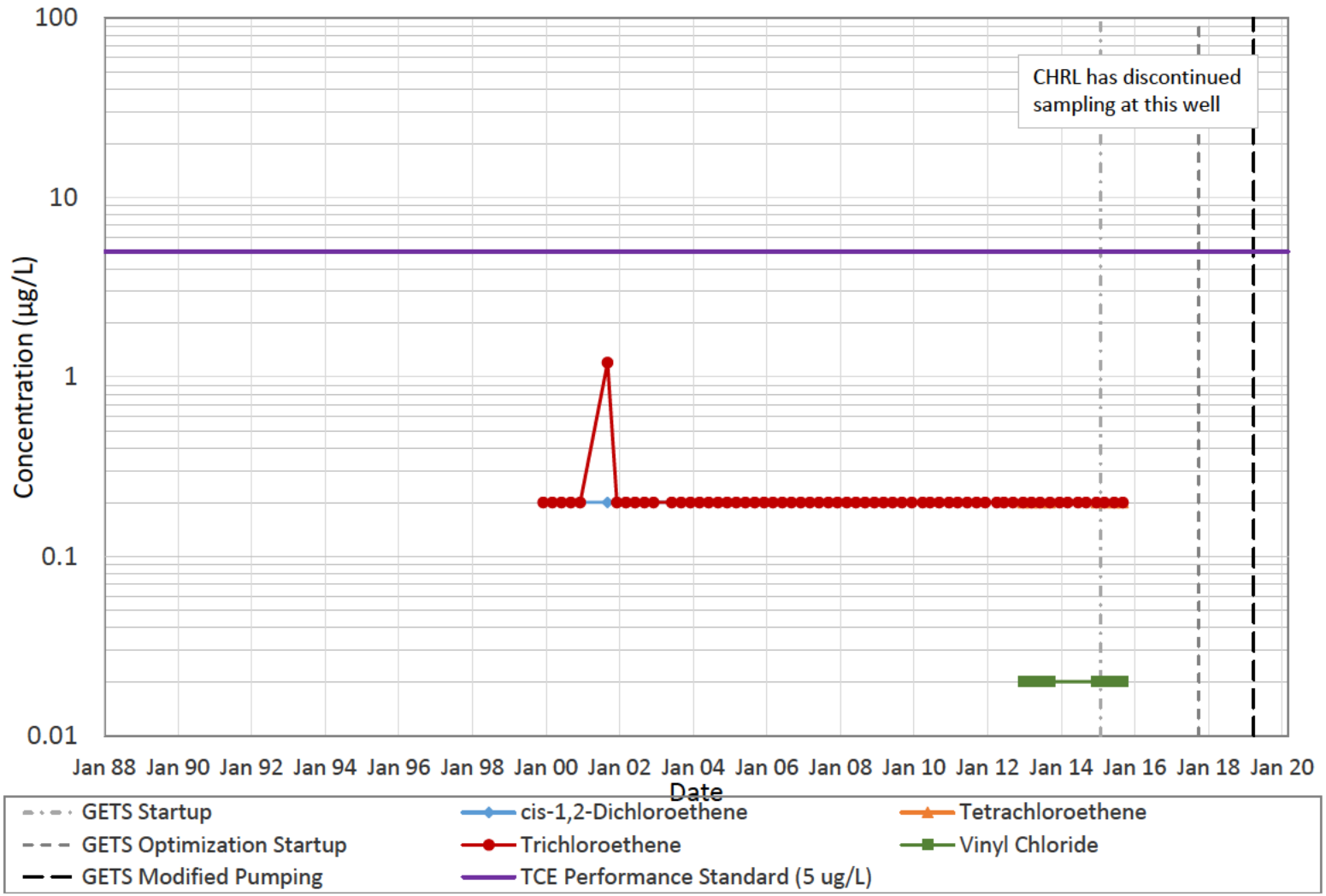
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 2 MW-56 Time Series

Figure
E-50

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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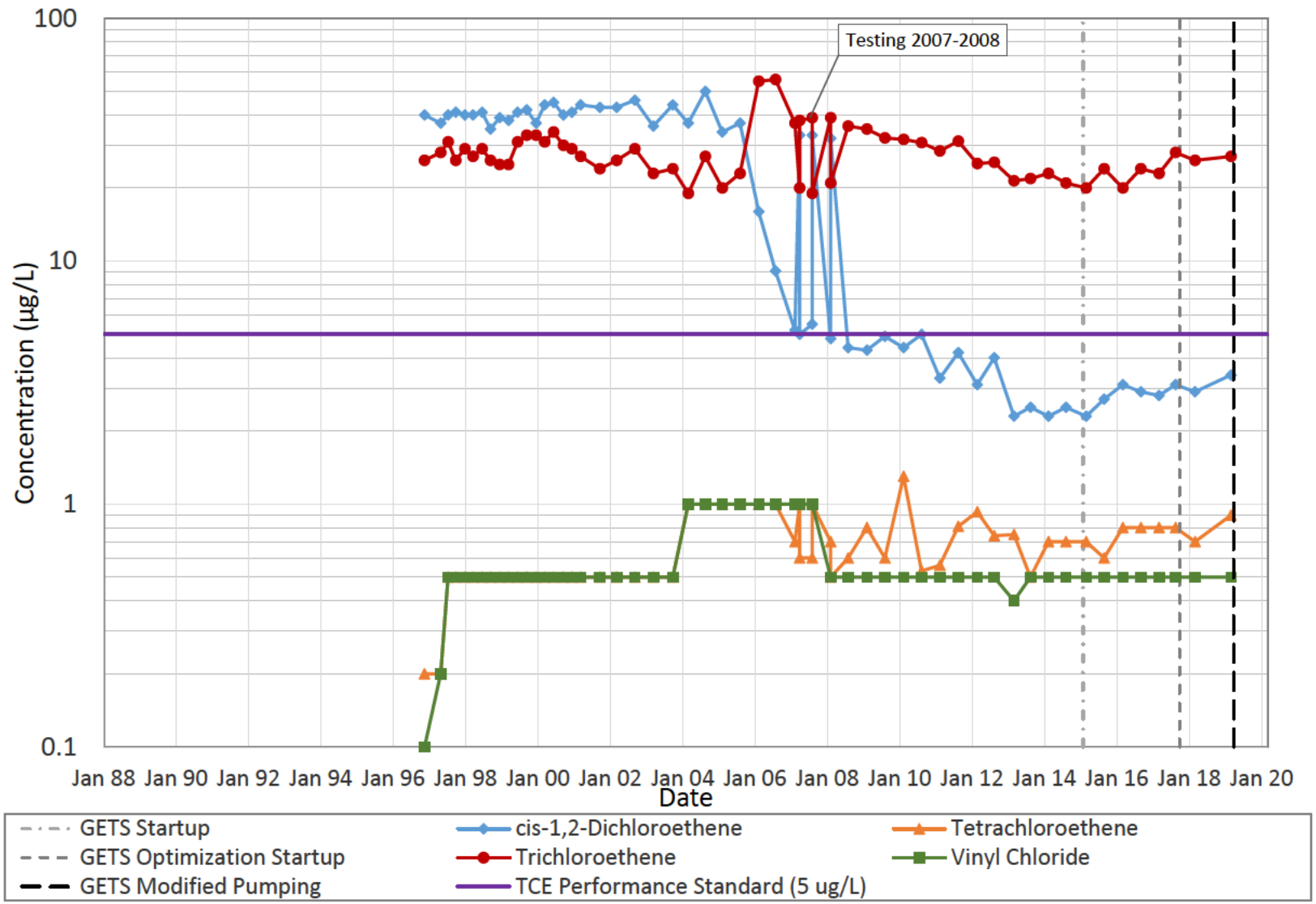
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 2 MW-57 Time Series

Figure
E-51

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



See Table C-1 for further explanation of testing.

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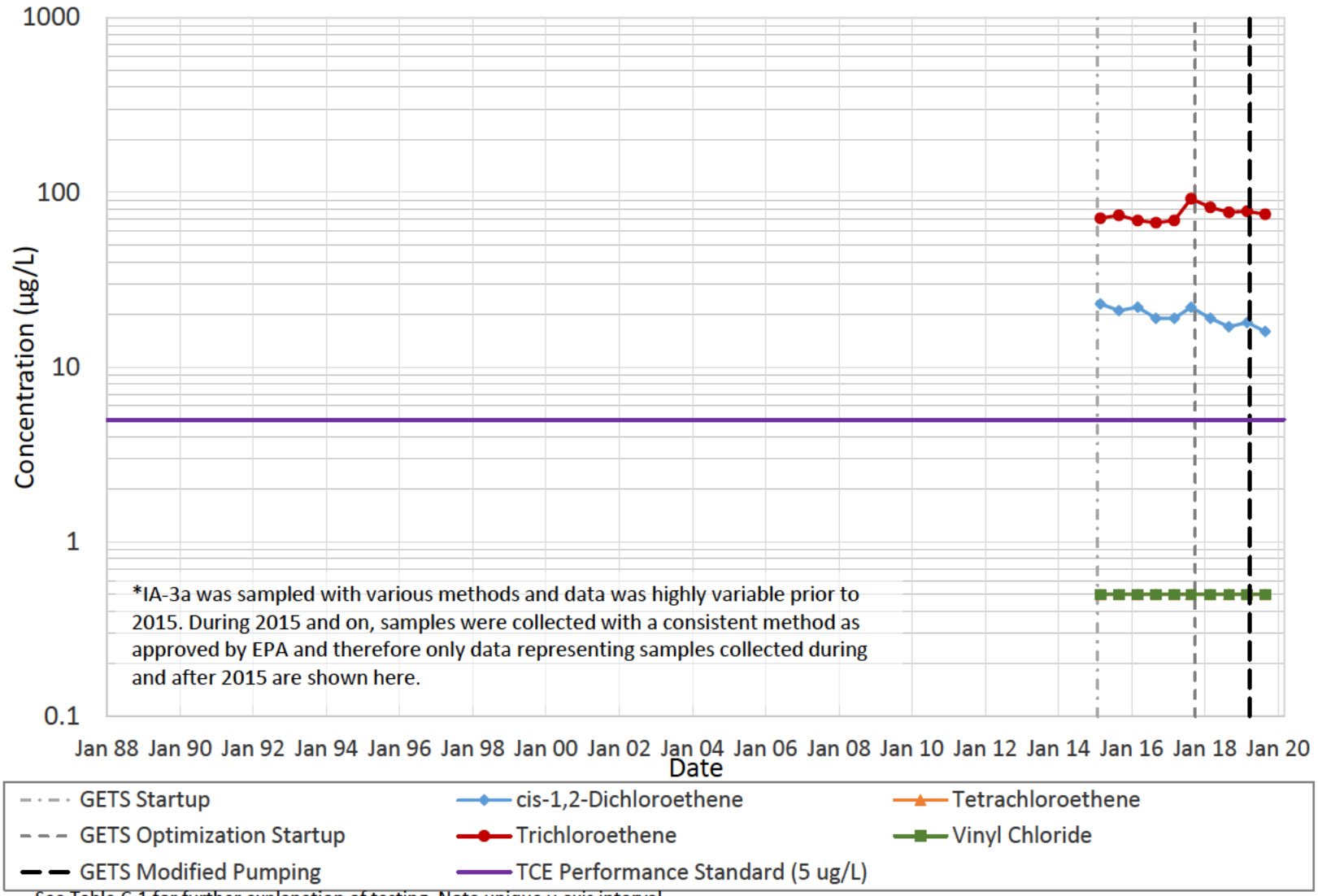
Queen City Farms
Maple Valley, Washington

Aquifer 3a I-3a Time Series

Figure
E-52

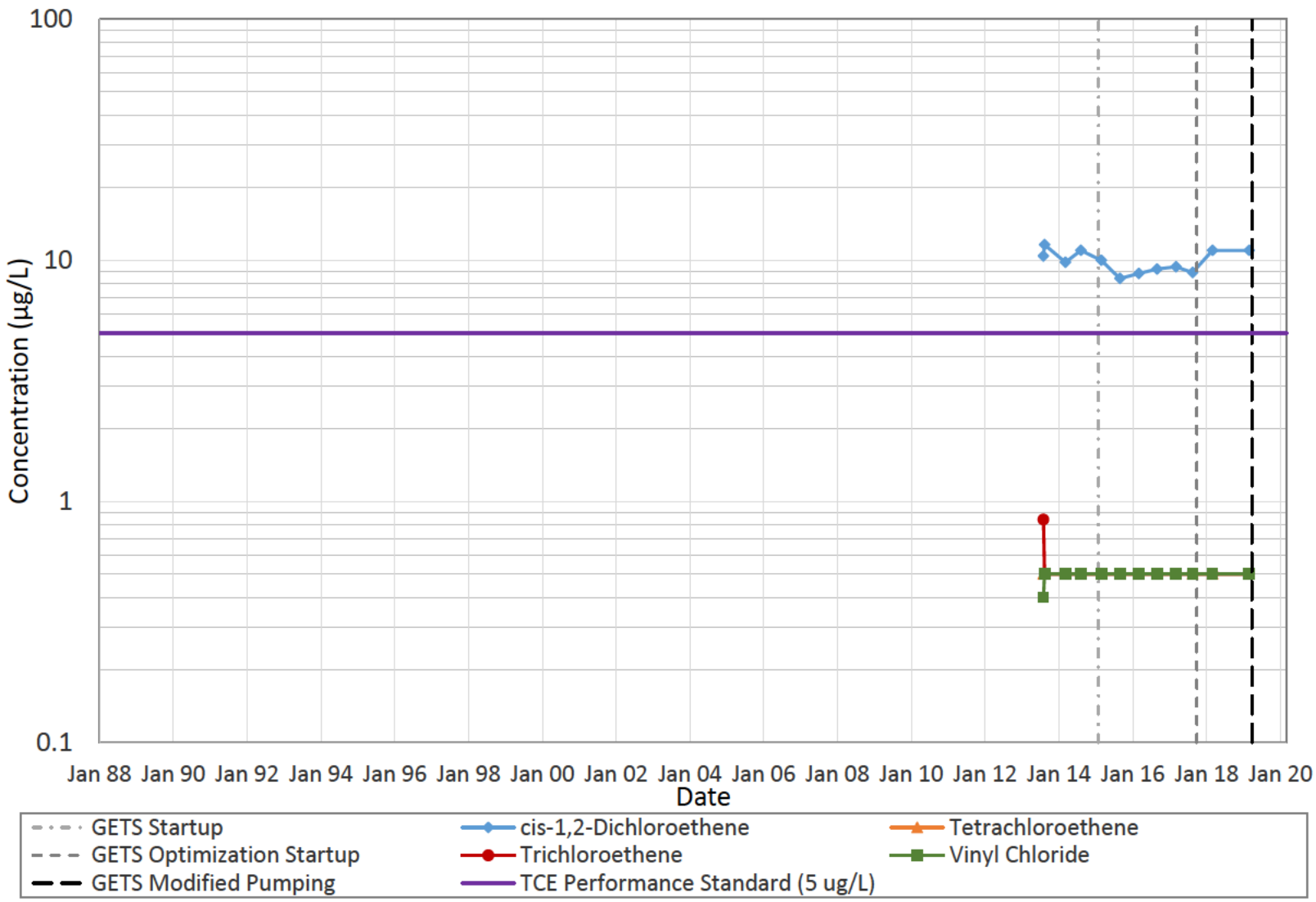
\\tacoma3\PROJECT\025\178 QCF\T\Data\DataAnalysis\2020\QCFAquifer3a-COCPlots,Data_AppE_52-61



See Table C-1 for further explanation of testing. Note unique y-axis interval.

LANDAU ASSOCIATES	Queen City Farms Maple Valley, Washington	**Aquifer 3a IA-3a Time Series***	Figure E-53

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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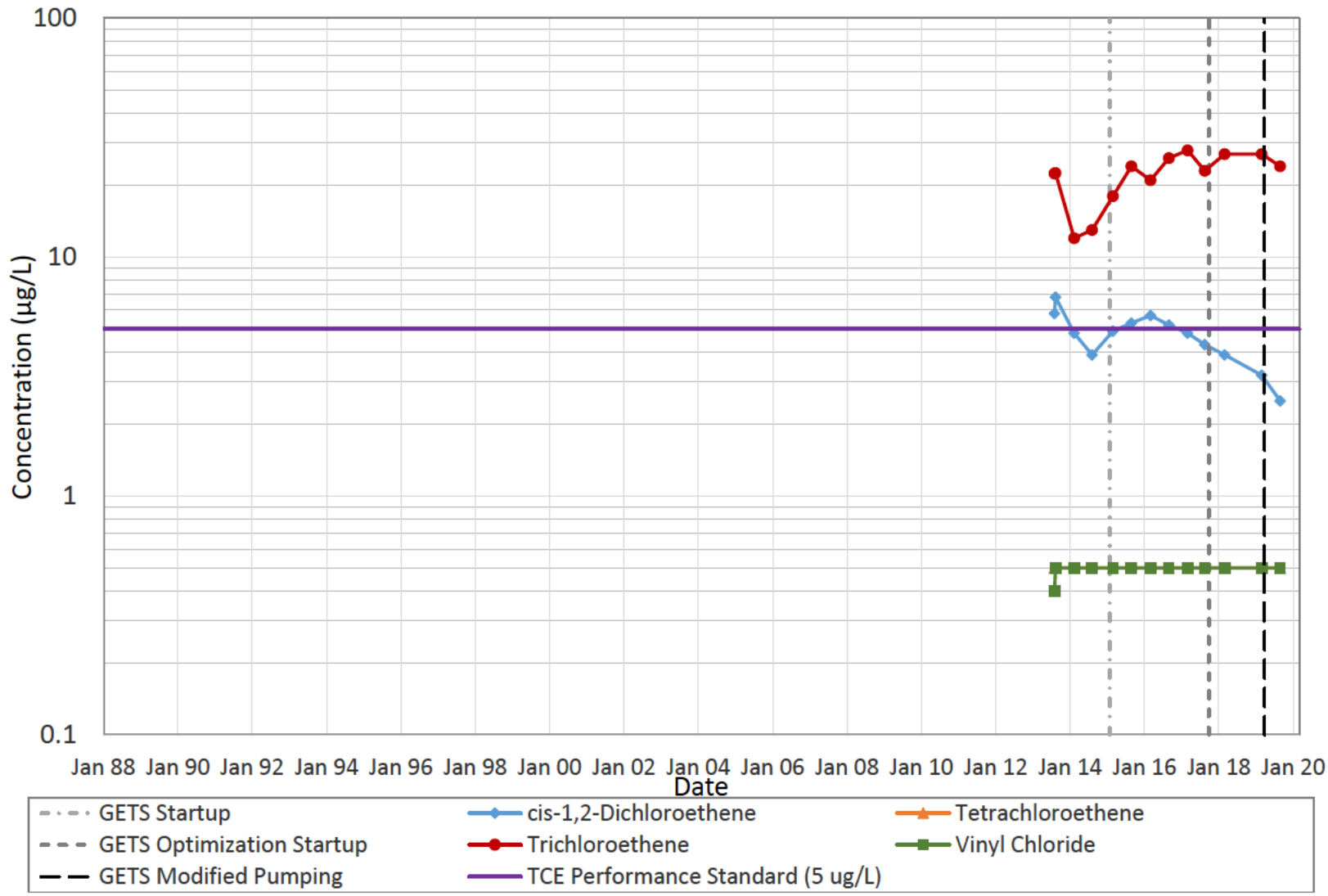
Queen City Farms
Maple Valley, Washington

Aquifer 3a IB-3a Time Series

Figure
E-54

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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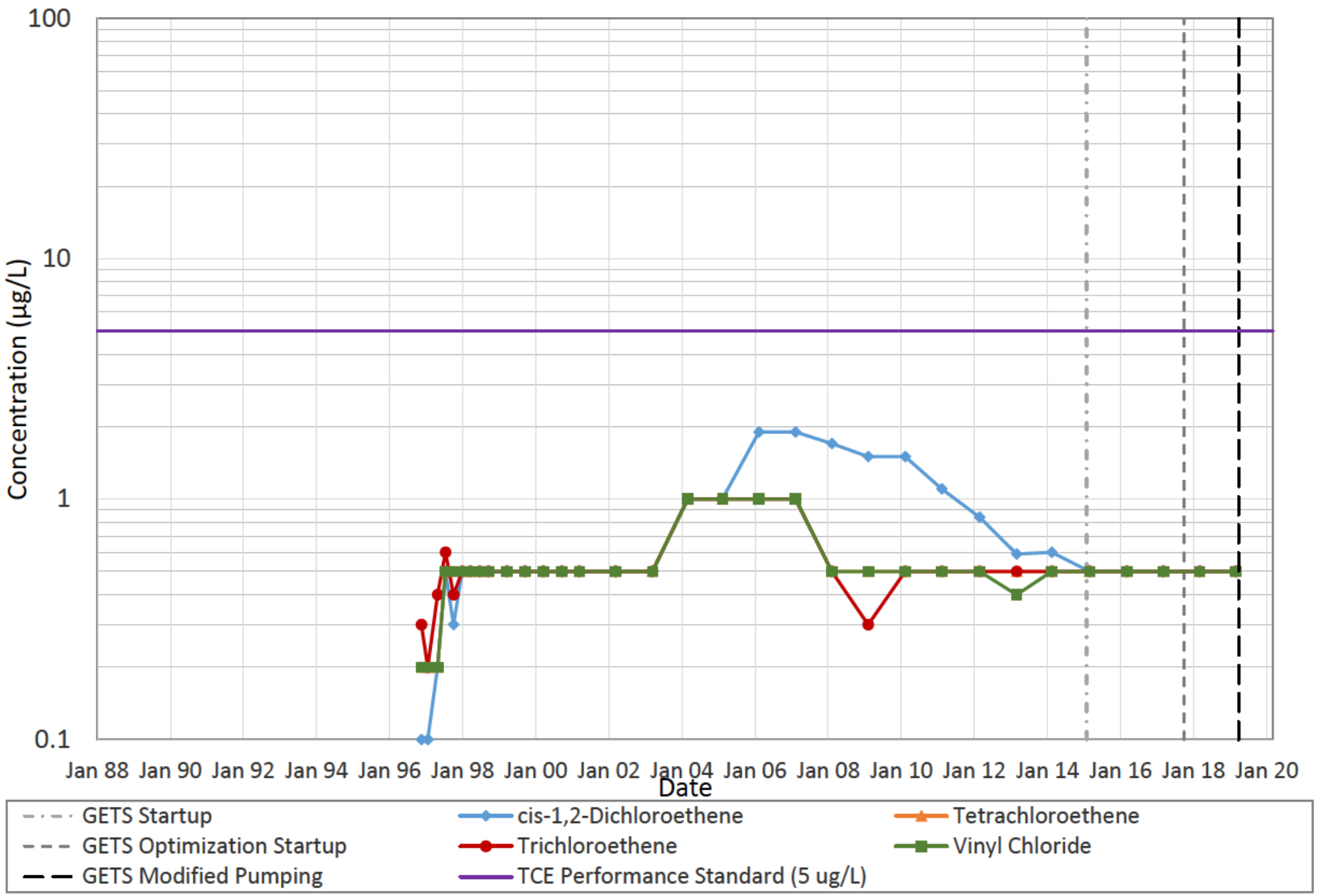
Queen City Farms
Maple Valley, Washington

Aquifer 3a MA-3a Time Series

Figure
E-55

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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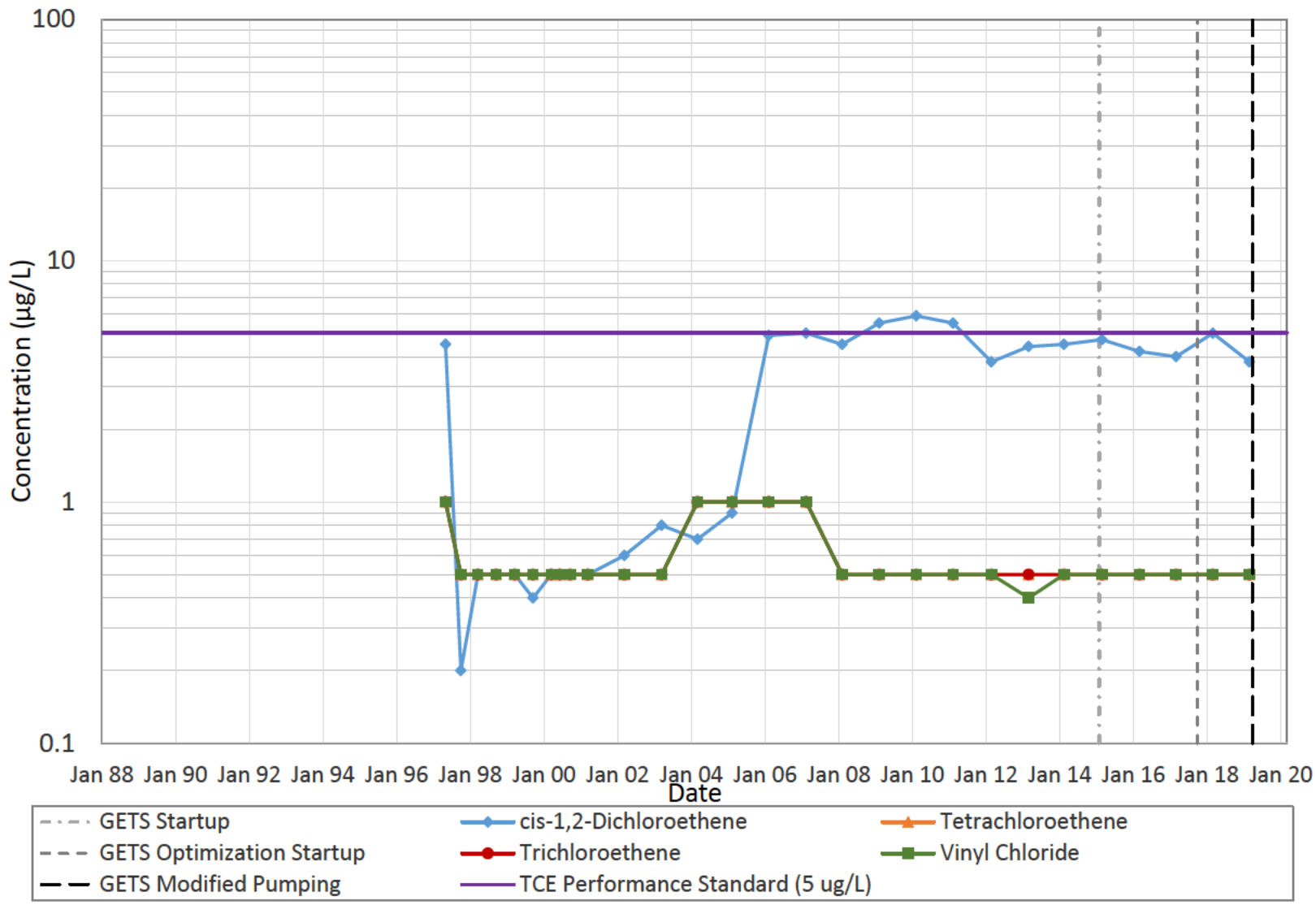
Queen City Farms
Maple Valley, Washington

Aquifer 3a N-3a Time Series

Figure
E-56

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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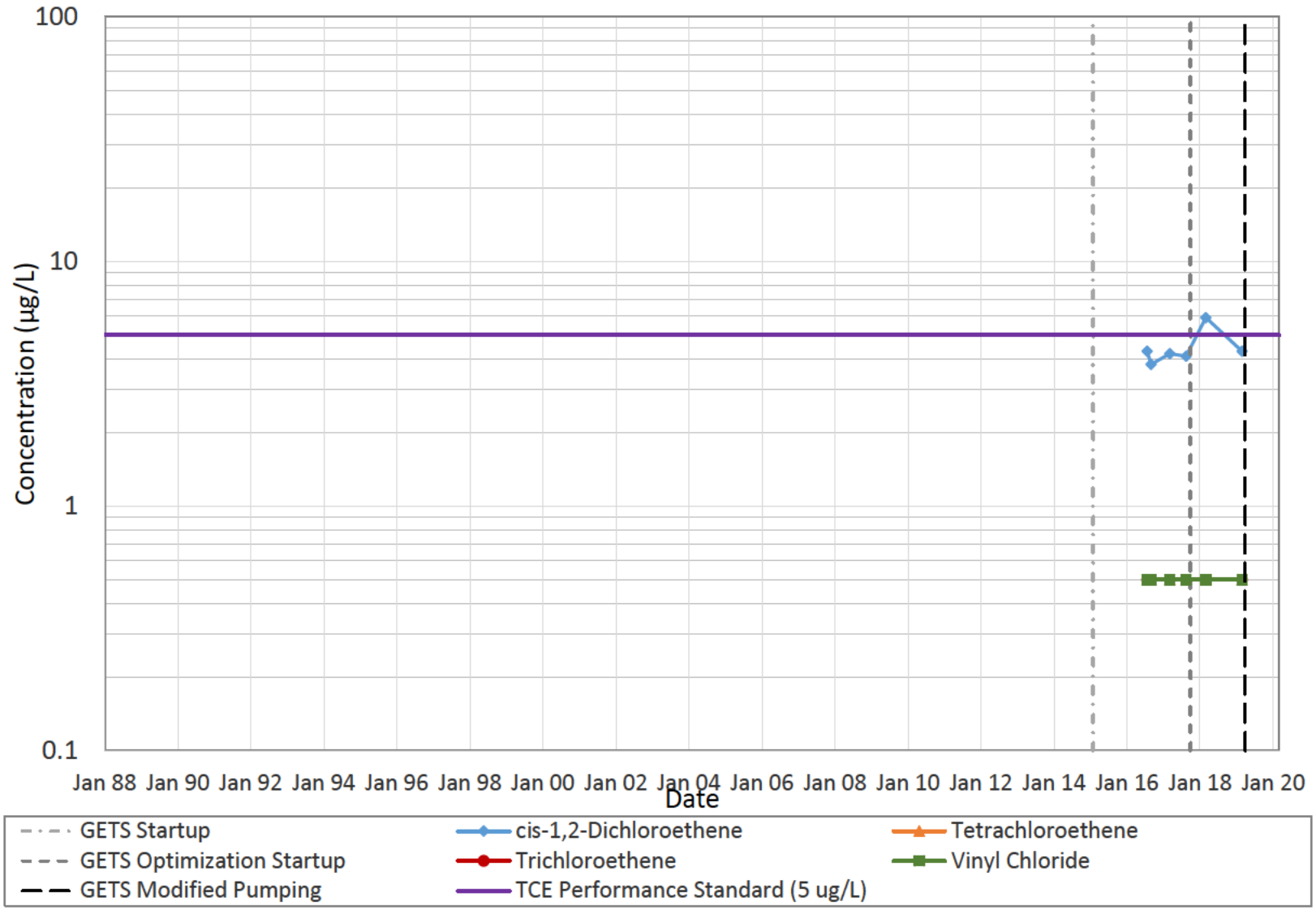
Queen City Farms
Maple Valley, Washington

Aquifer 3a O-3a Time Series

Figure
E-57

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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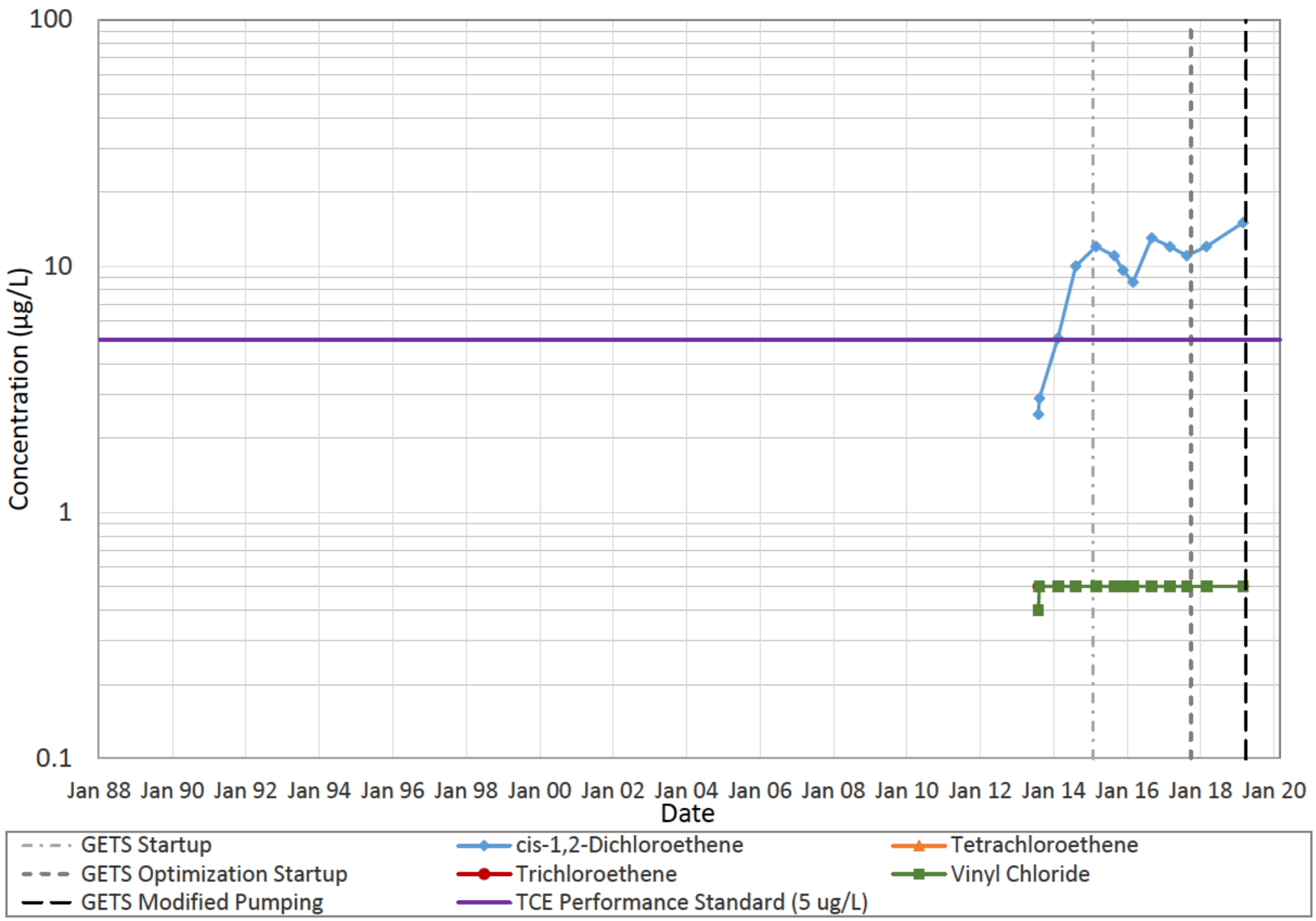
Queen City Farms
Maple Valley, Washington

Aquifer 3a OA-3a Time Series

Figure
E-58

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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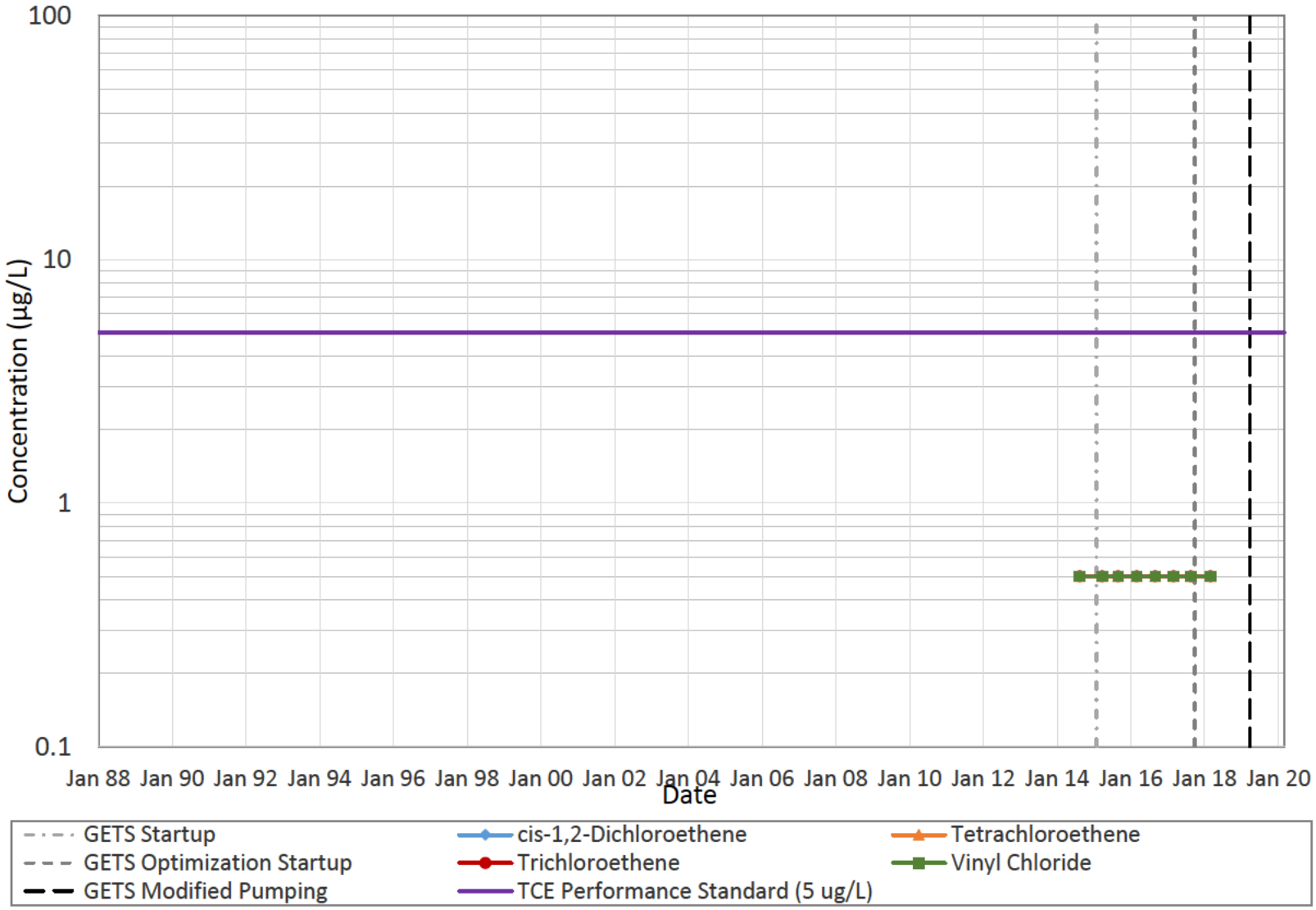
Queen City Farms
Maple Valley, Washington

Aquifer 3a SD-3a Time Series

Figure
E-59

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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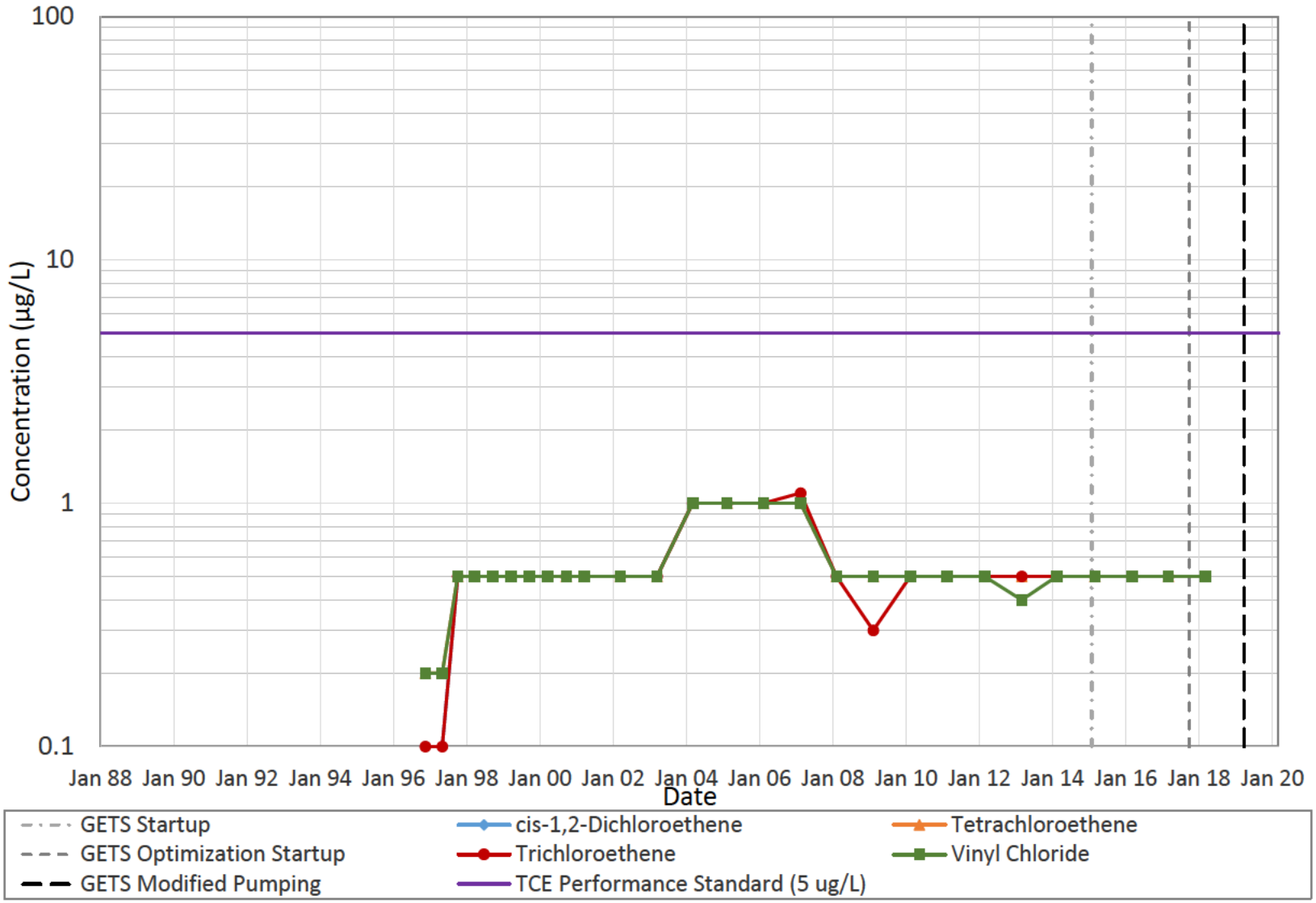
Queen City Farms
Maple Valley, Washington

Aquifer 3a TB-3a Time Series

Figure
E-60

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3a-COCPlots,Data_AppE_52-61



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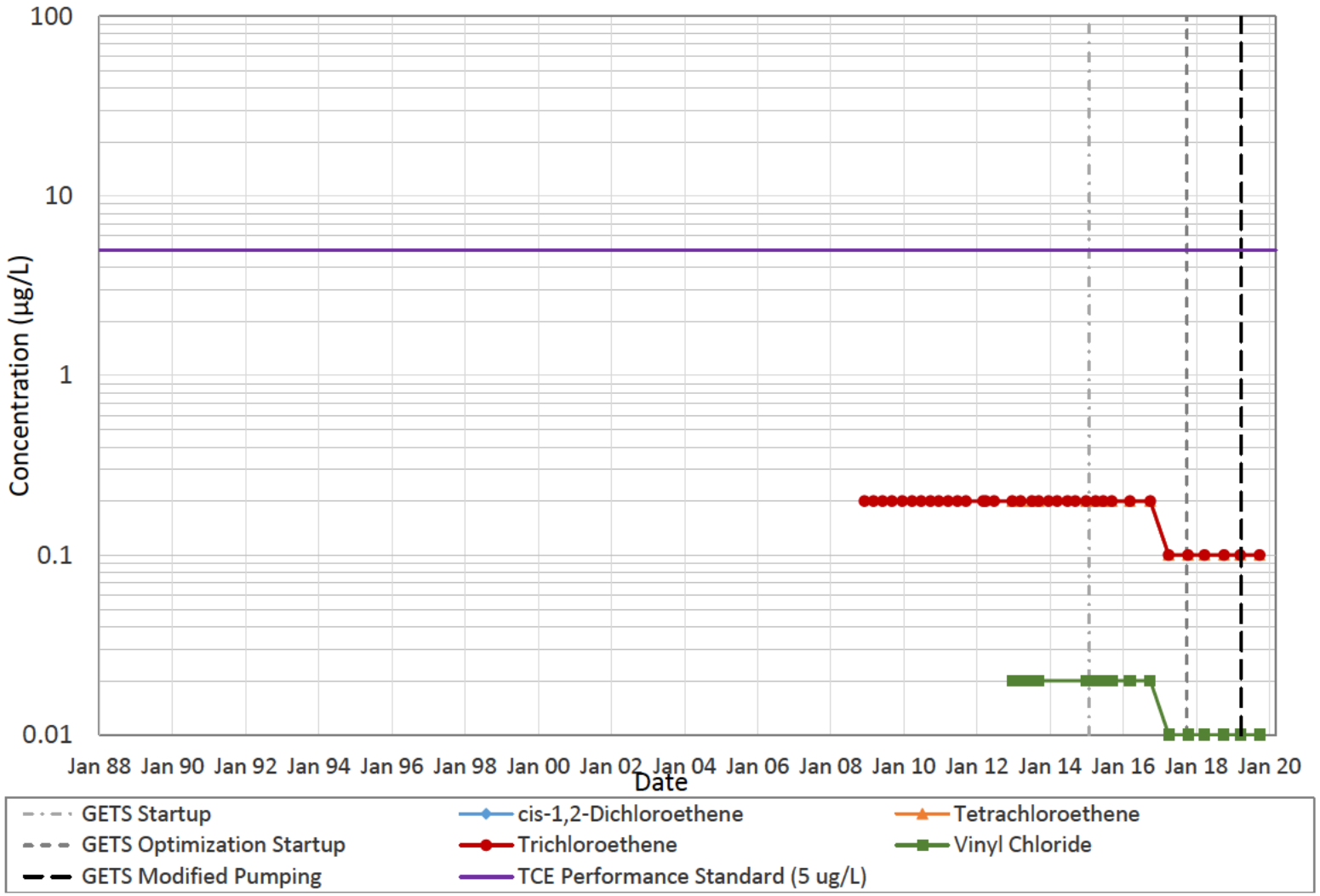
Queen City Farms
Maple Valley, Washington

Aquifer 3a U-3a Time Series

Figure
E-61

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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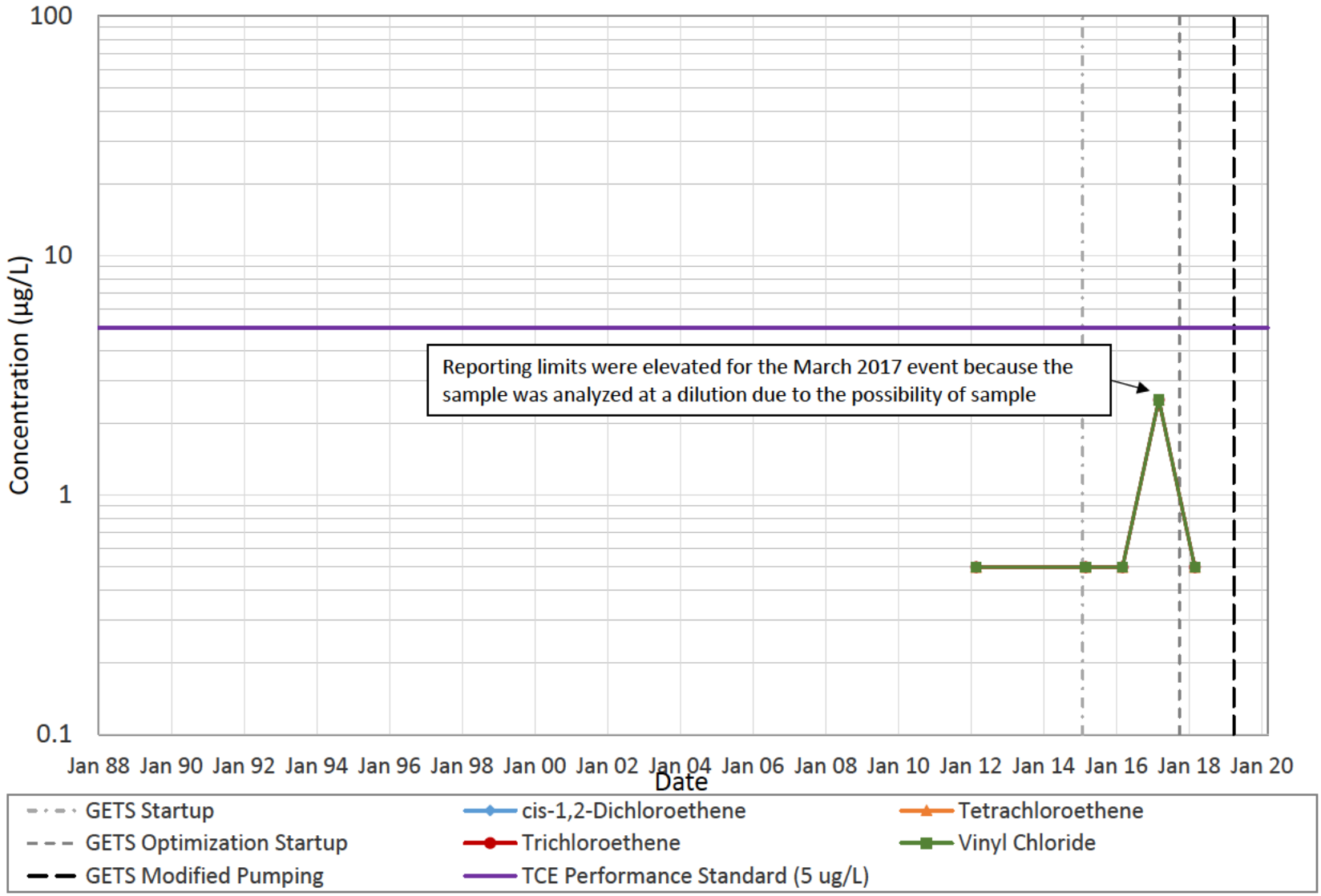
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 3a MW-64 Time Series

Figure
E-62

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCF_SurfWater,Offsite-COCPlots,Data_AppE_63,64,25,75



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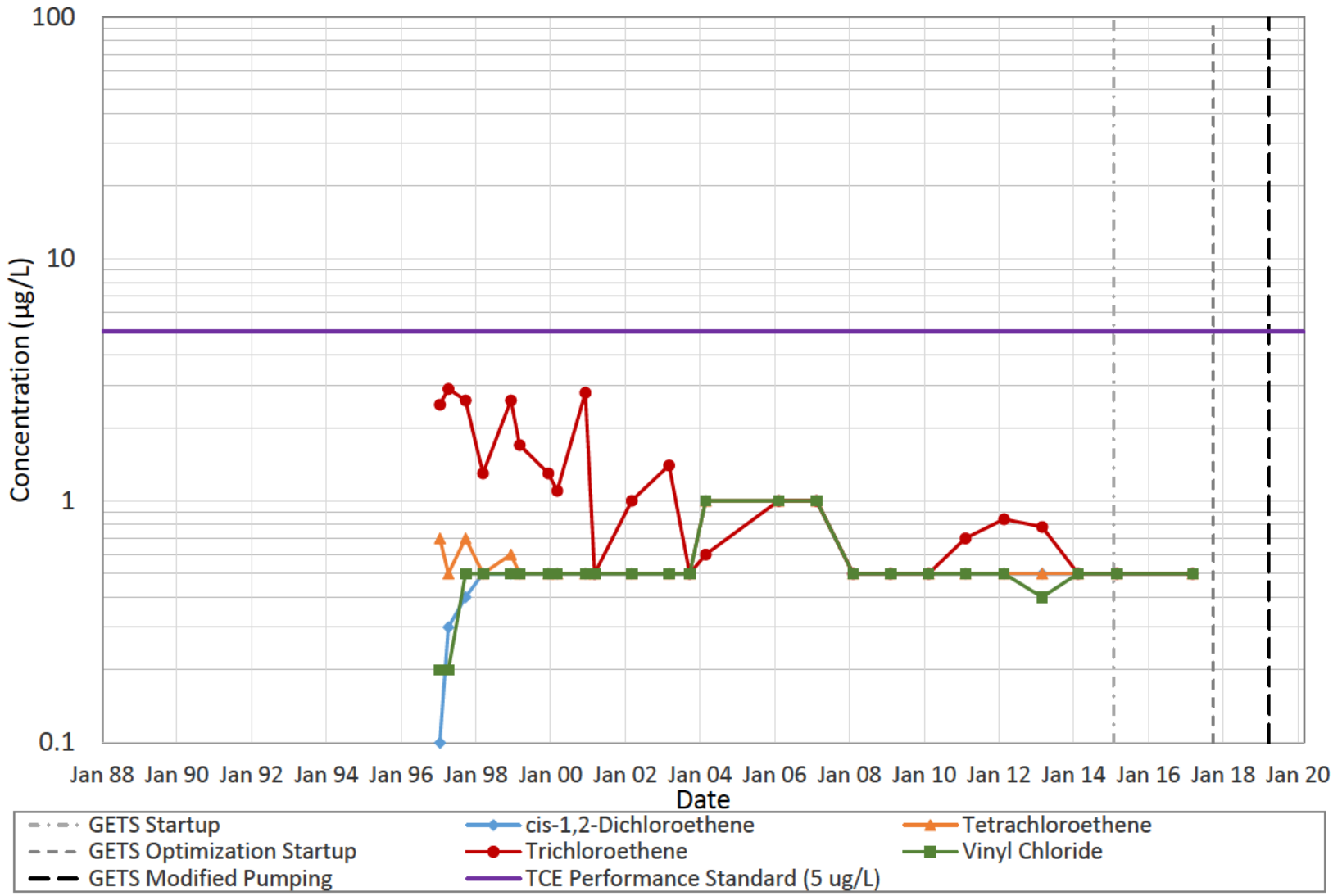
Queen City Farms
Maple Valley, Washington

Surface Water QCF Spring Time Series

Figure
E-63

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCF_SurfWater,Offsite-COCPlots,Data_AppE_63,64,25,75



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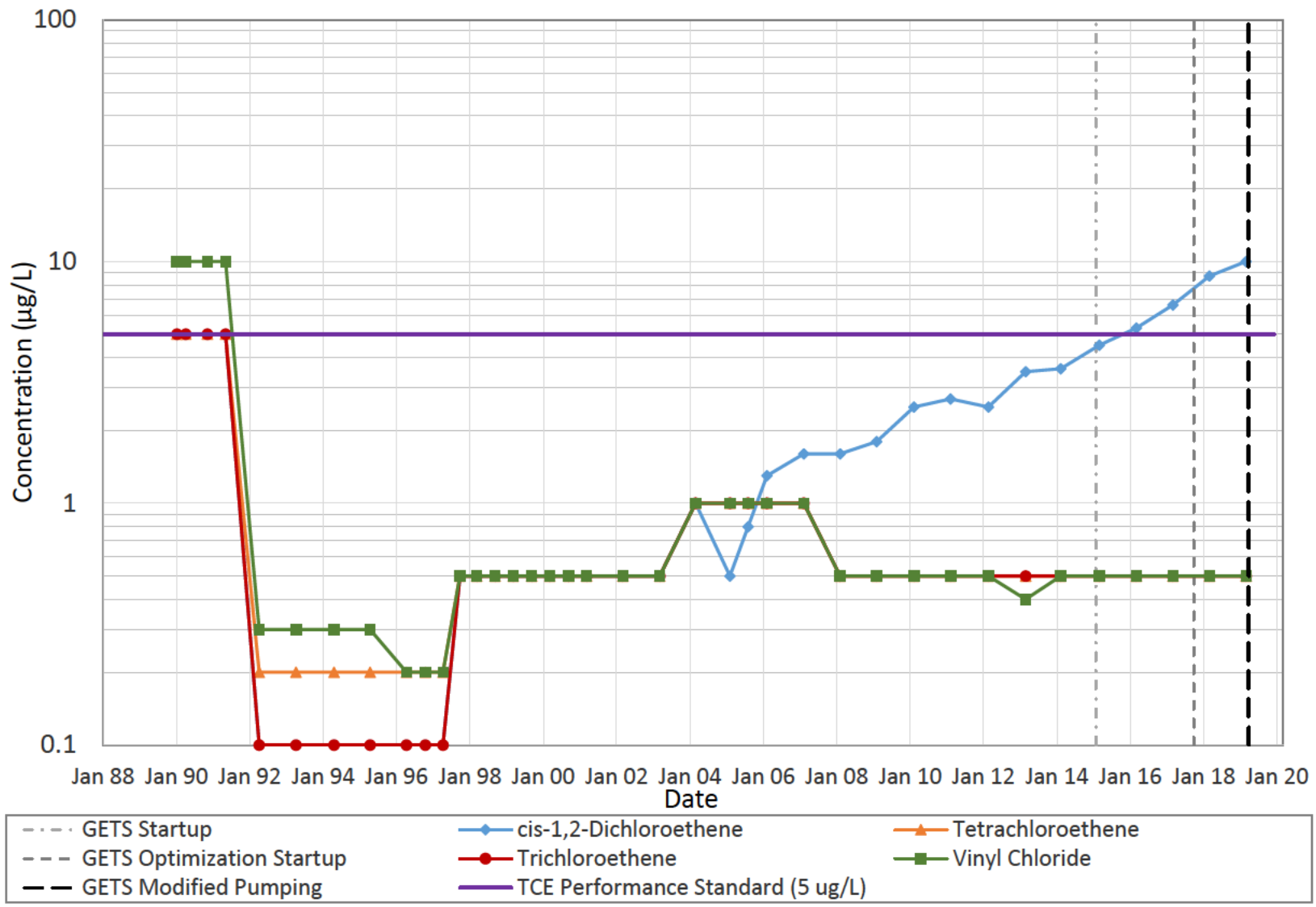
Queen City Farms
Maple Valley, Washington

Surface Water SP-5 Time Series

Figure
E-64

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



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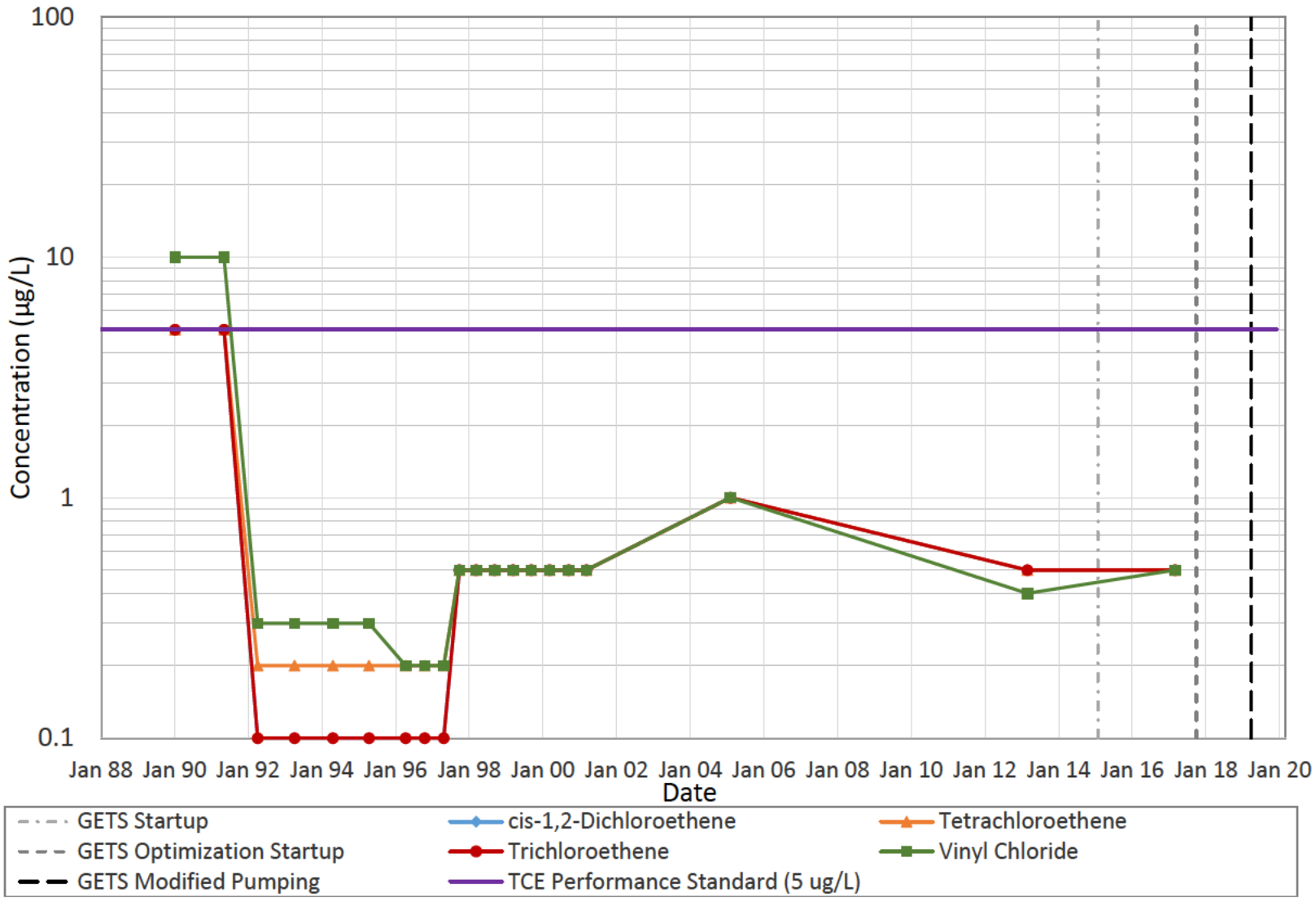
Queen City Farms
Maple Valley, Washington

Aquifer 3 B-3 Time Series

Figure
E-65

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



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Maple Valley, Washington

Aquifer 3 D-3 Time Series

Figure
E-66

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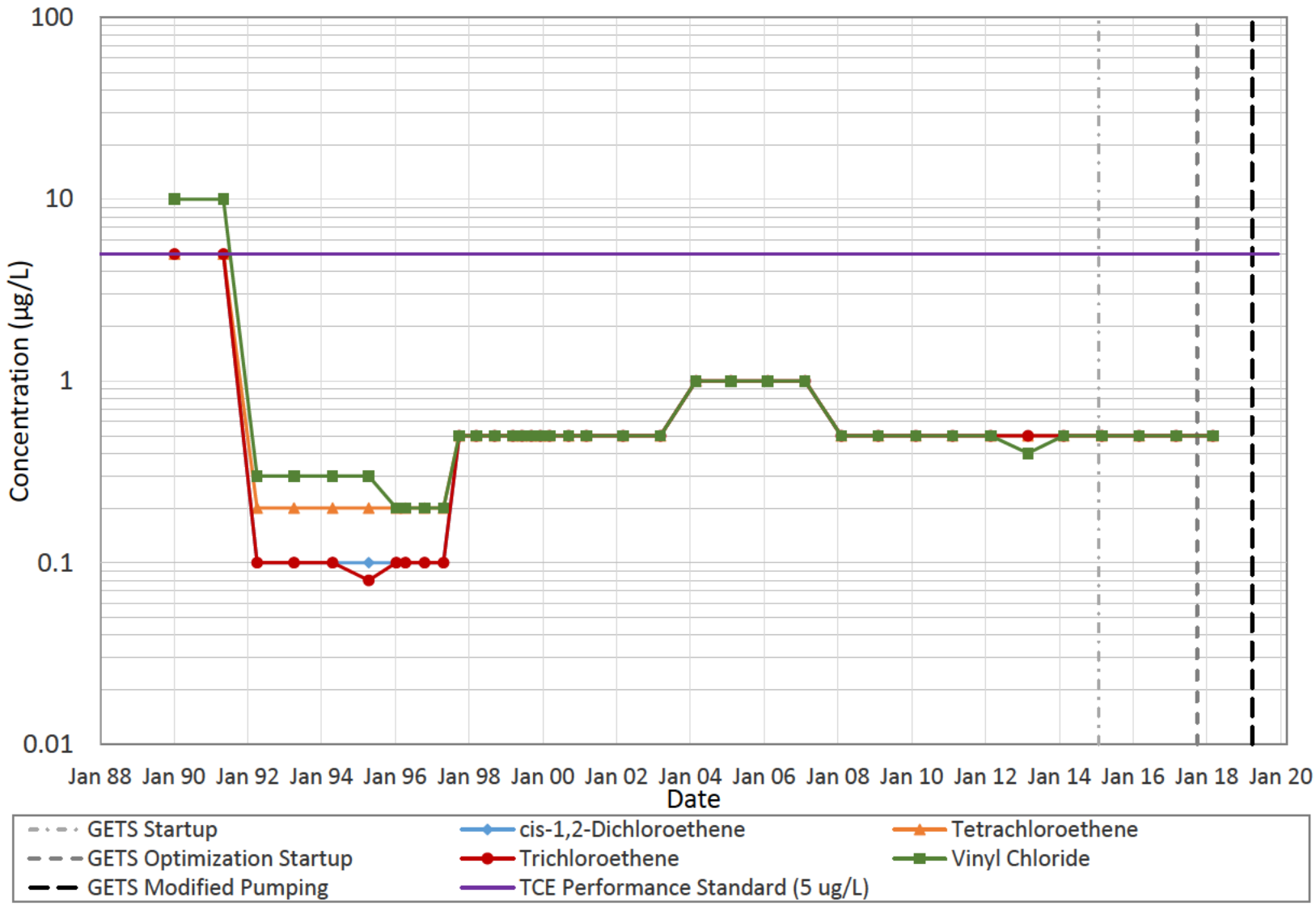


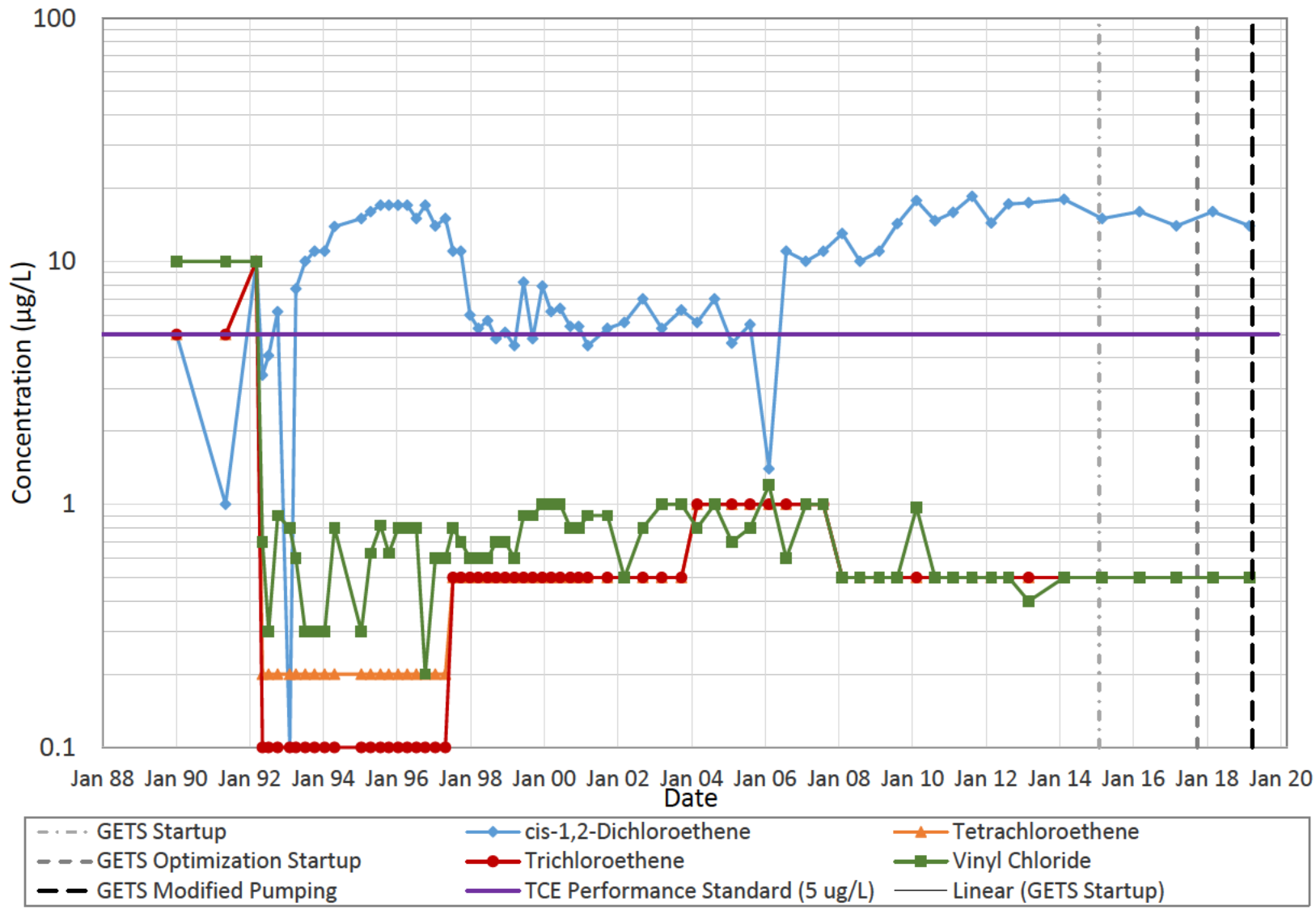
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Aquifer 3 H-3 Time Series

Figure
E-67

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



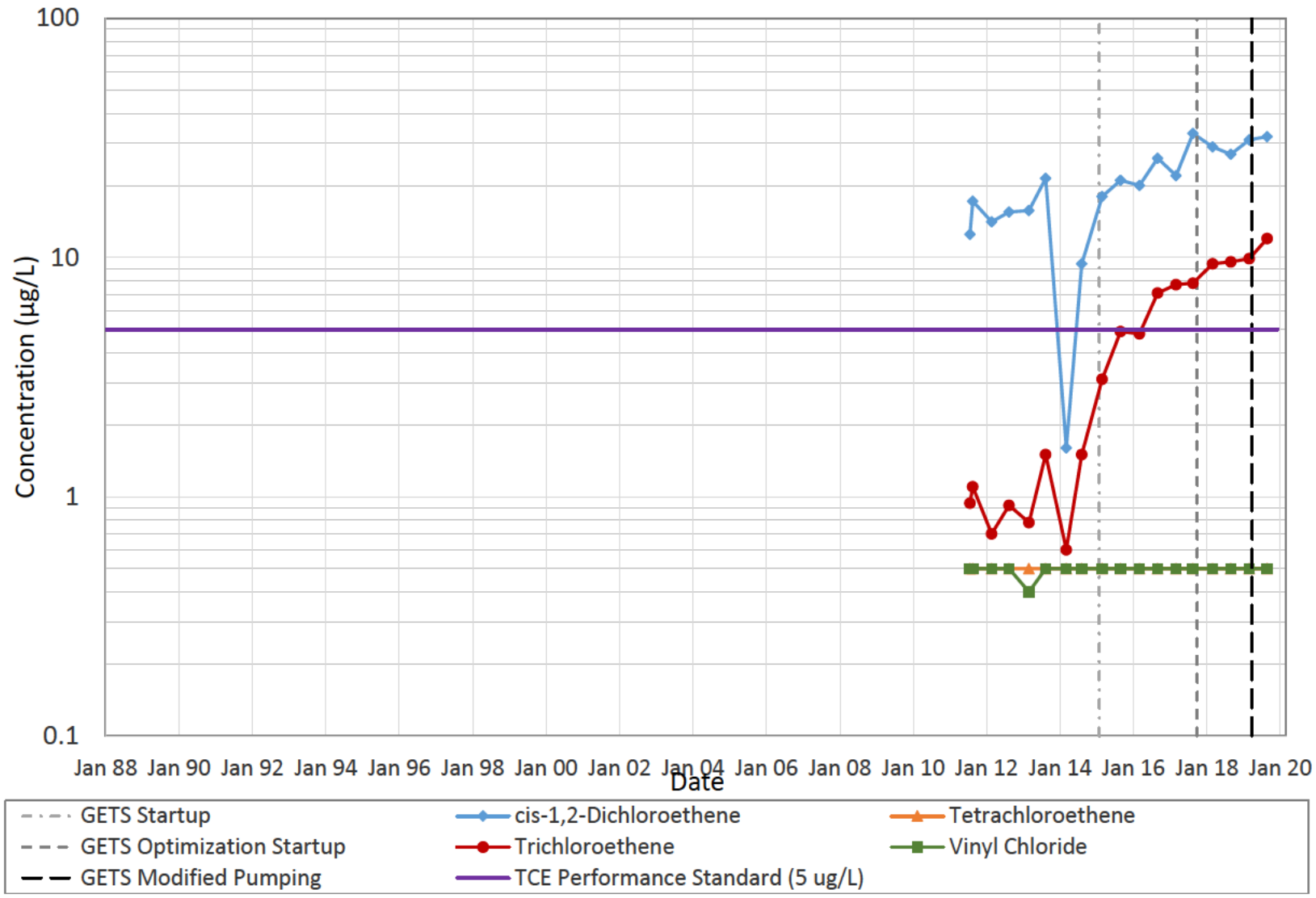
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Aquifer 3 I-3 Time Series

Figure
E-68

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



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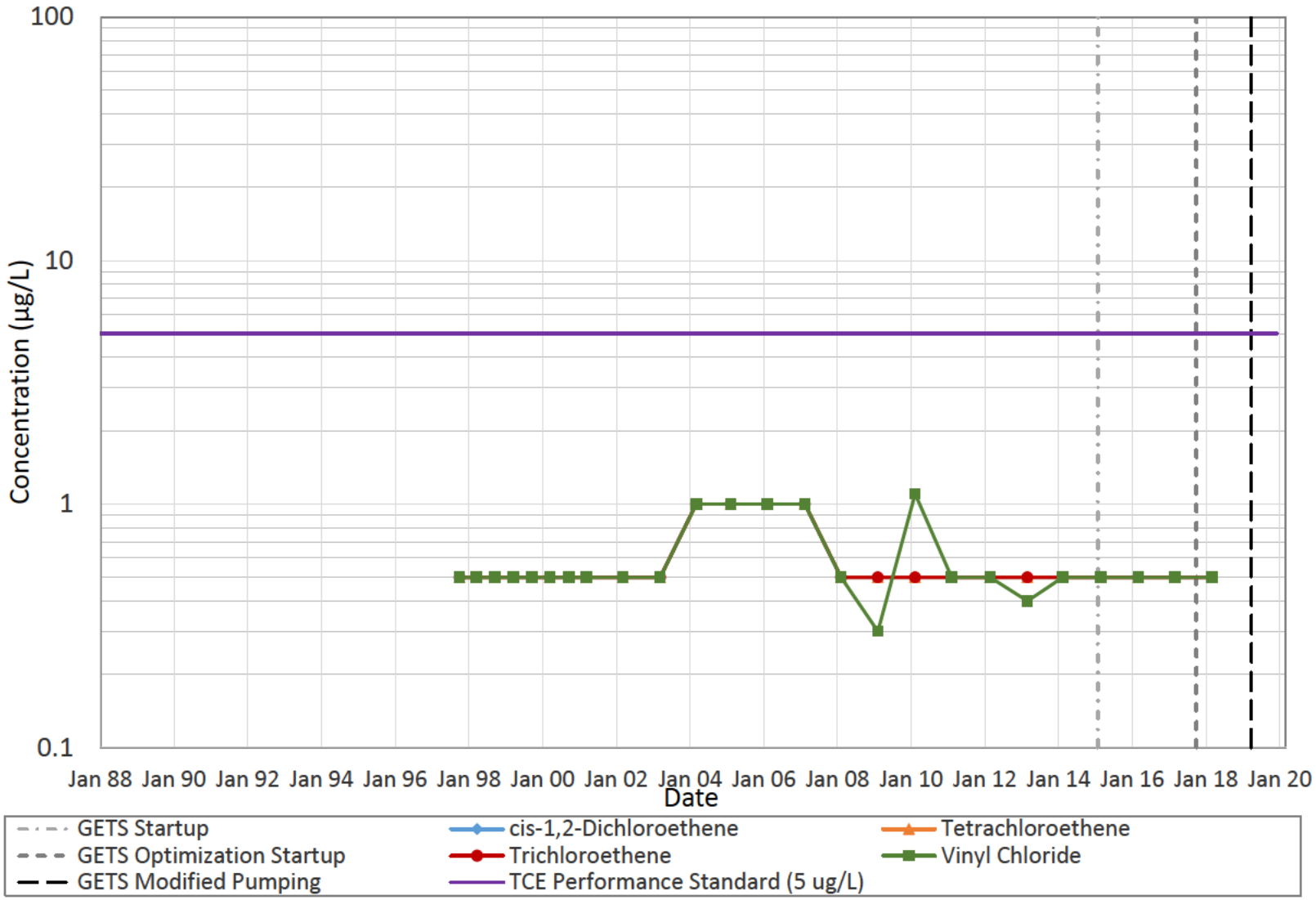
Queen City Farms
Maple Valley, Washington

Aquifer 3 IA-3 Time Series

Figure
E-69

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



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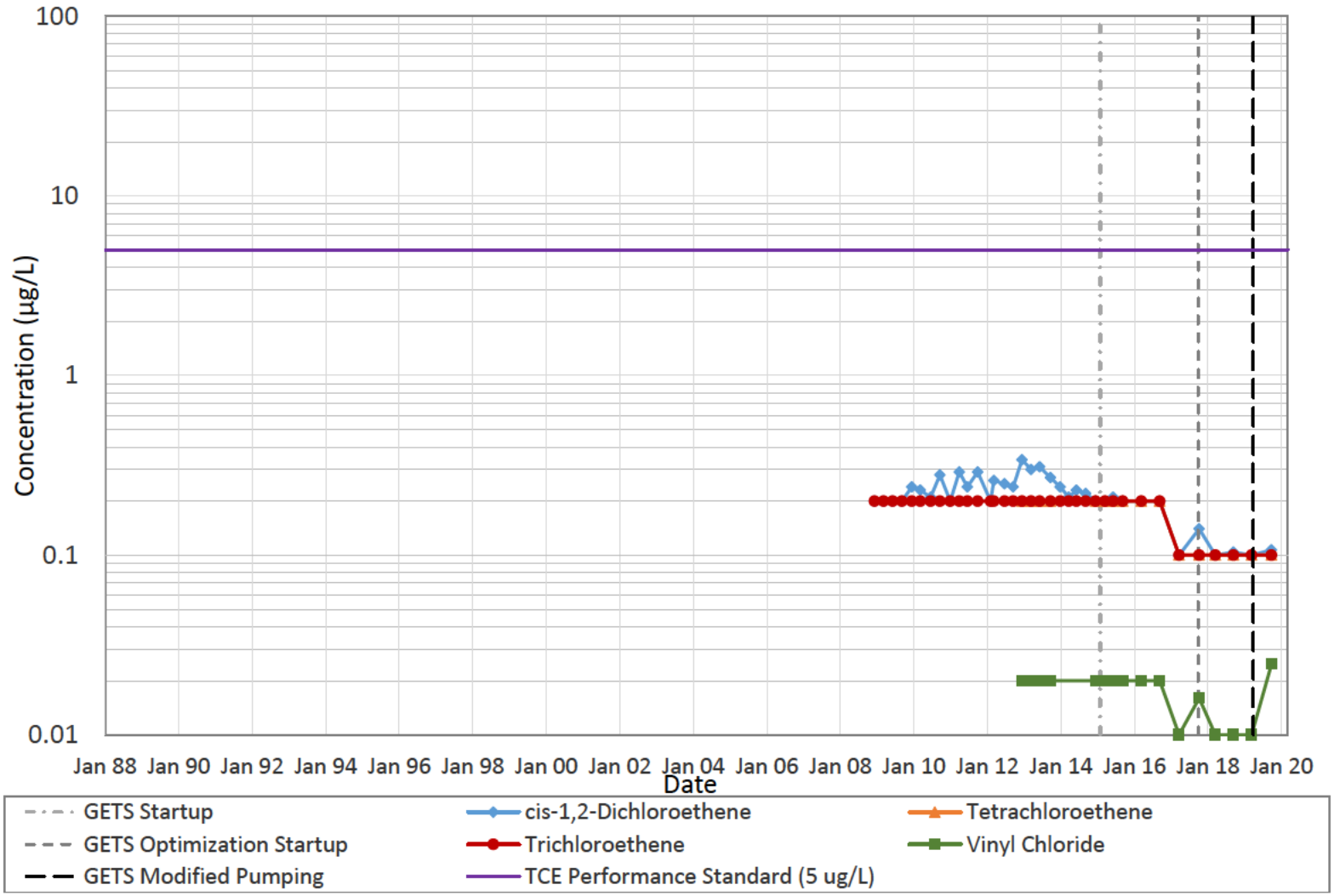
Queen City Farms
Maple Valley, Washington

Aquifer 3 O-3 Time Series

Figure
E-70

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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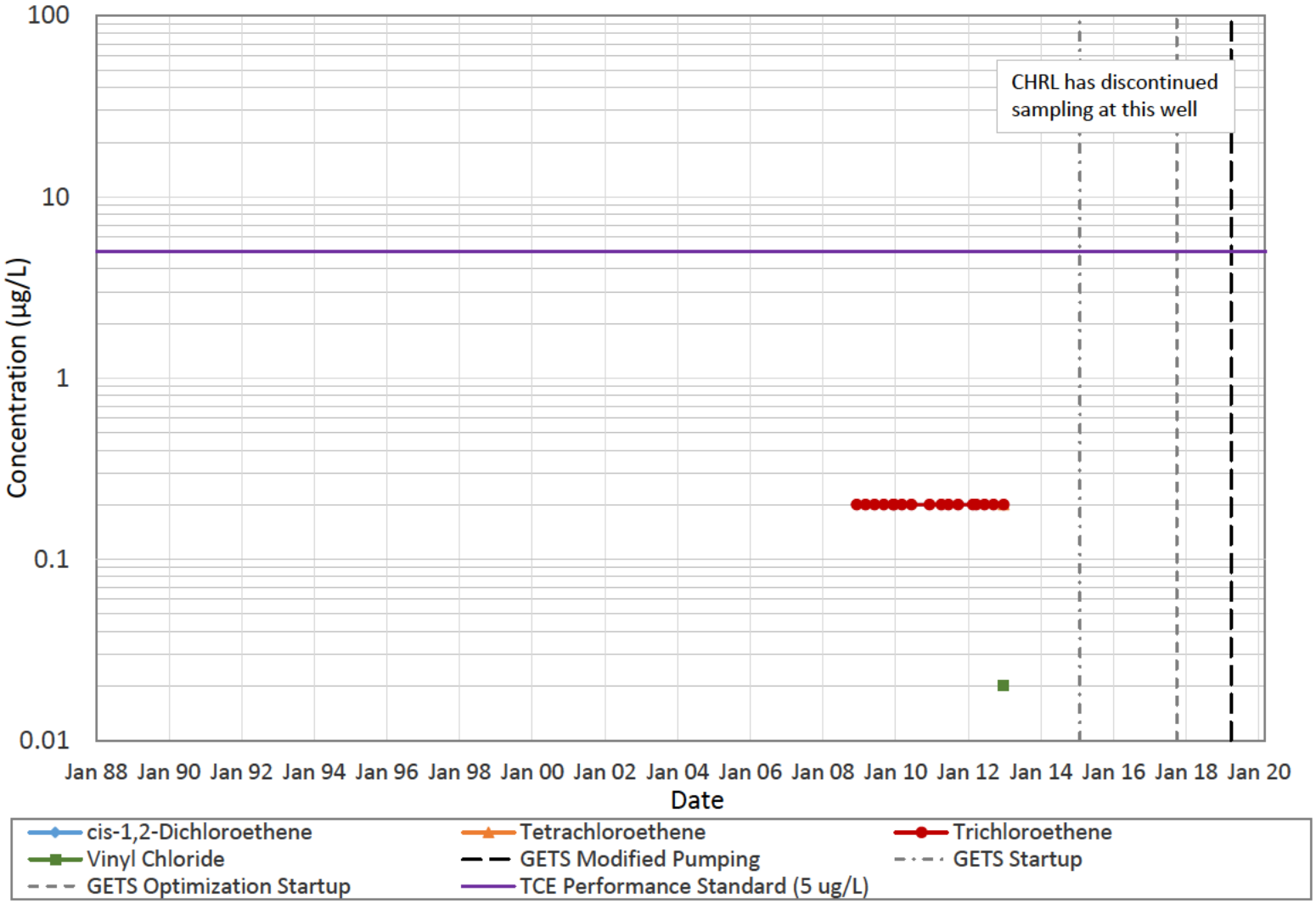
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 3 MW-24 Time Series

Figure
E-71

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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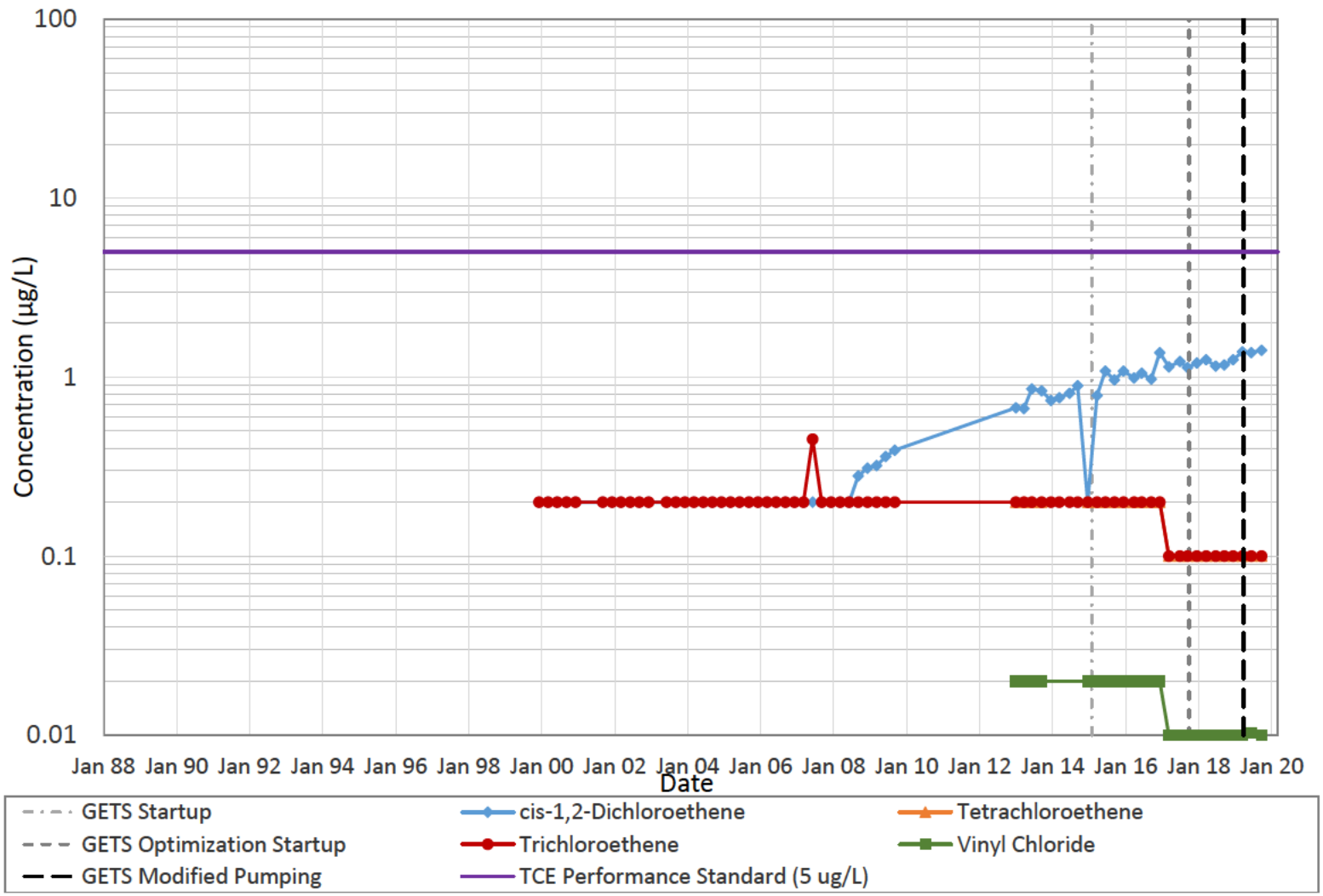
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 3 MW-58A Time Series

Figure
E-72

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



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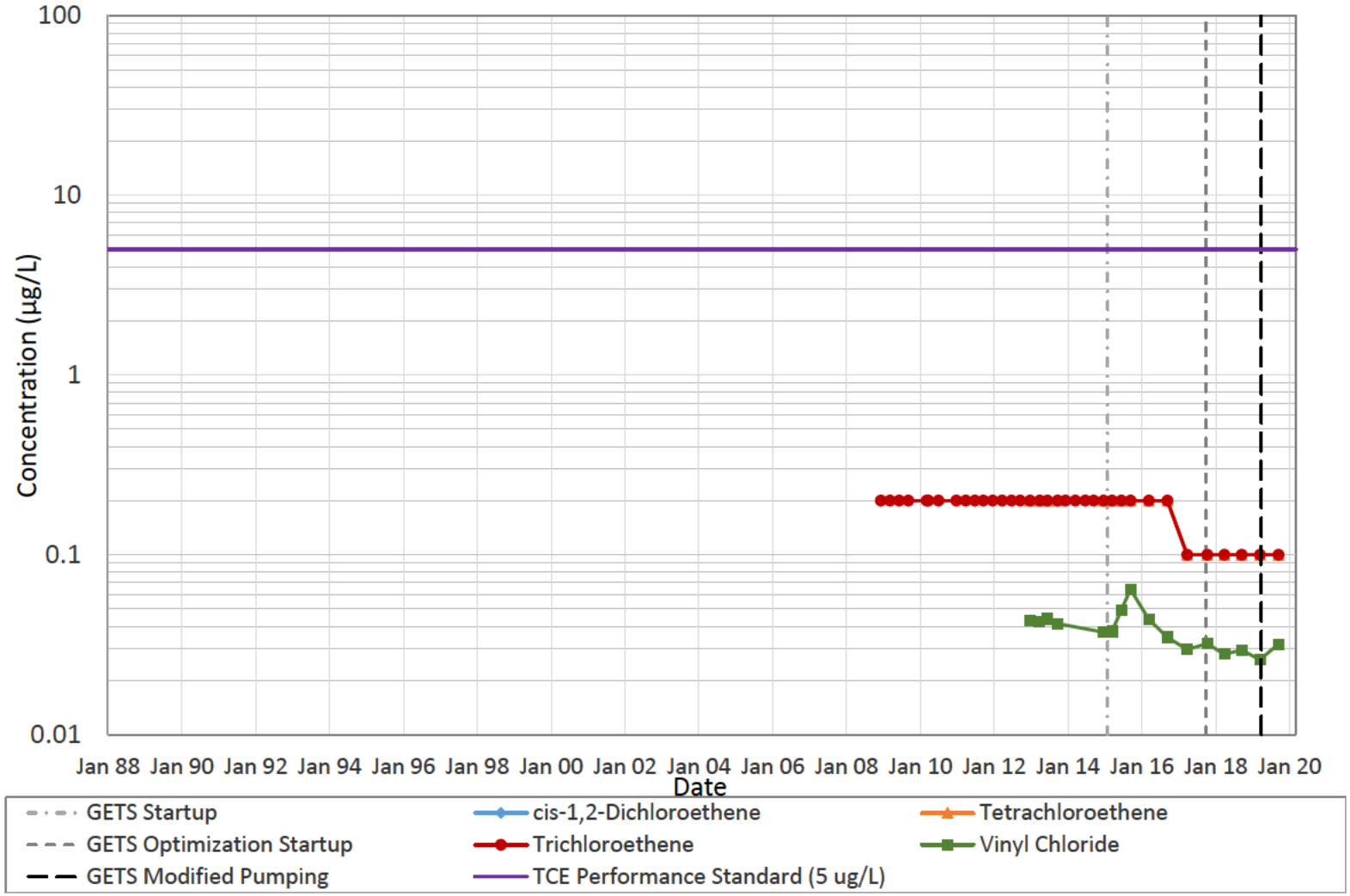
Queen City Farms
Maple Valley, Washington

CHRL Aquifer 3 MW-59 Time Series

Figure
E-73

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\CHRL-COCPlots,Data_AppE_16-24,50-51,62,71-74



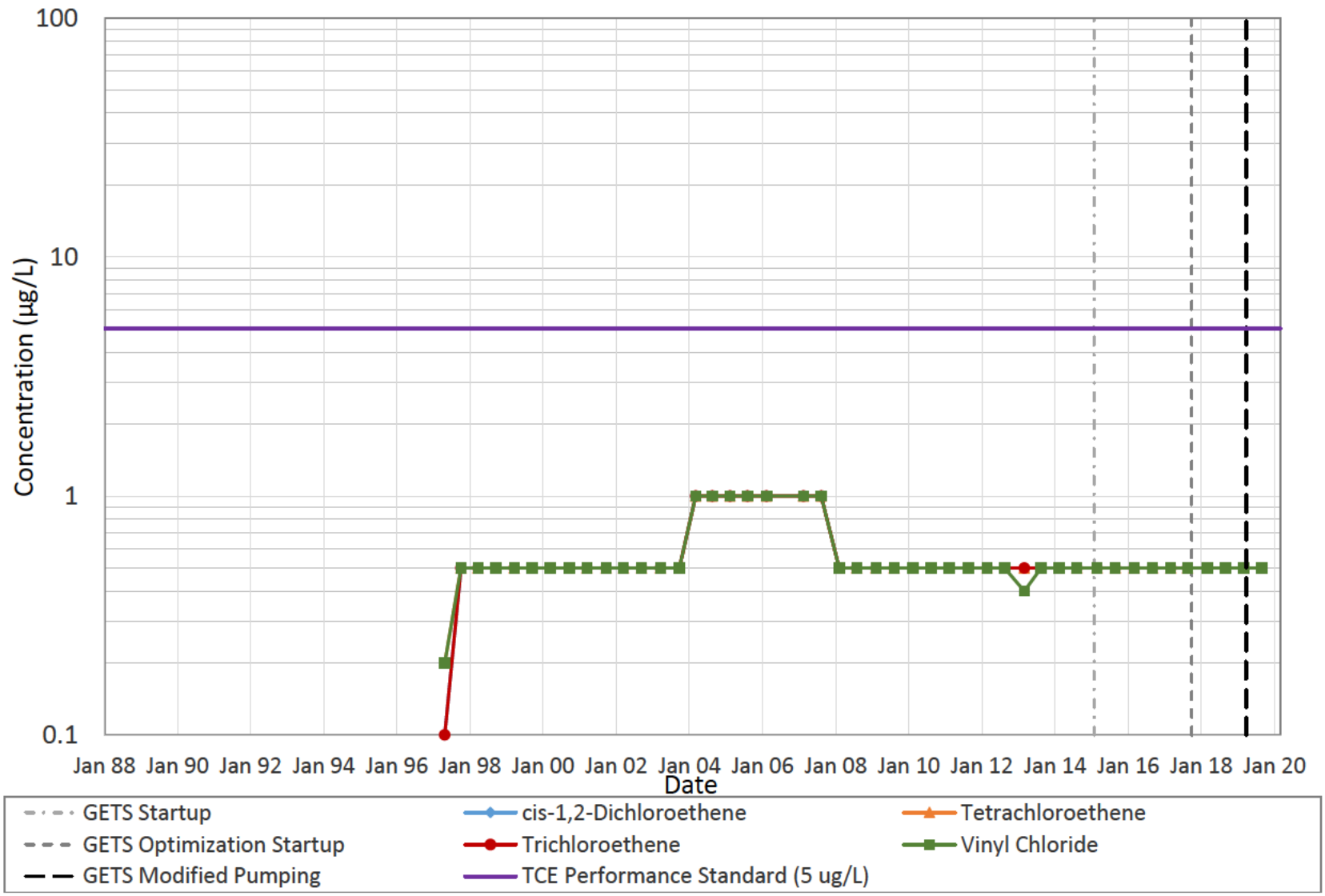
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

CHRL Aquifer 3 MW-65 Time Series

Figure
E-74

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCF_SurfWater,Offsite-COCPlots,Data_AppE_63,64,25,75



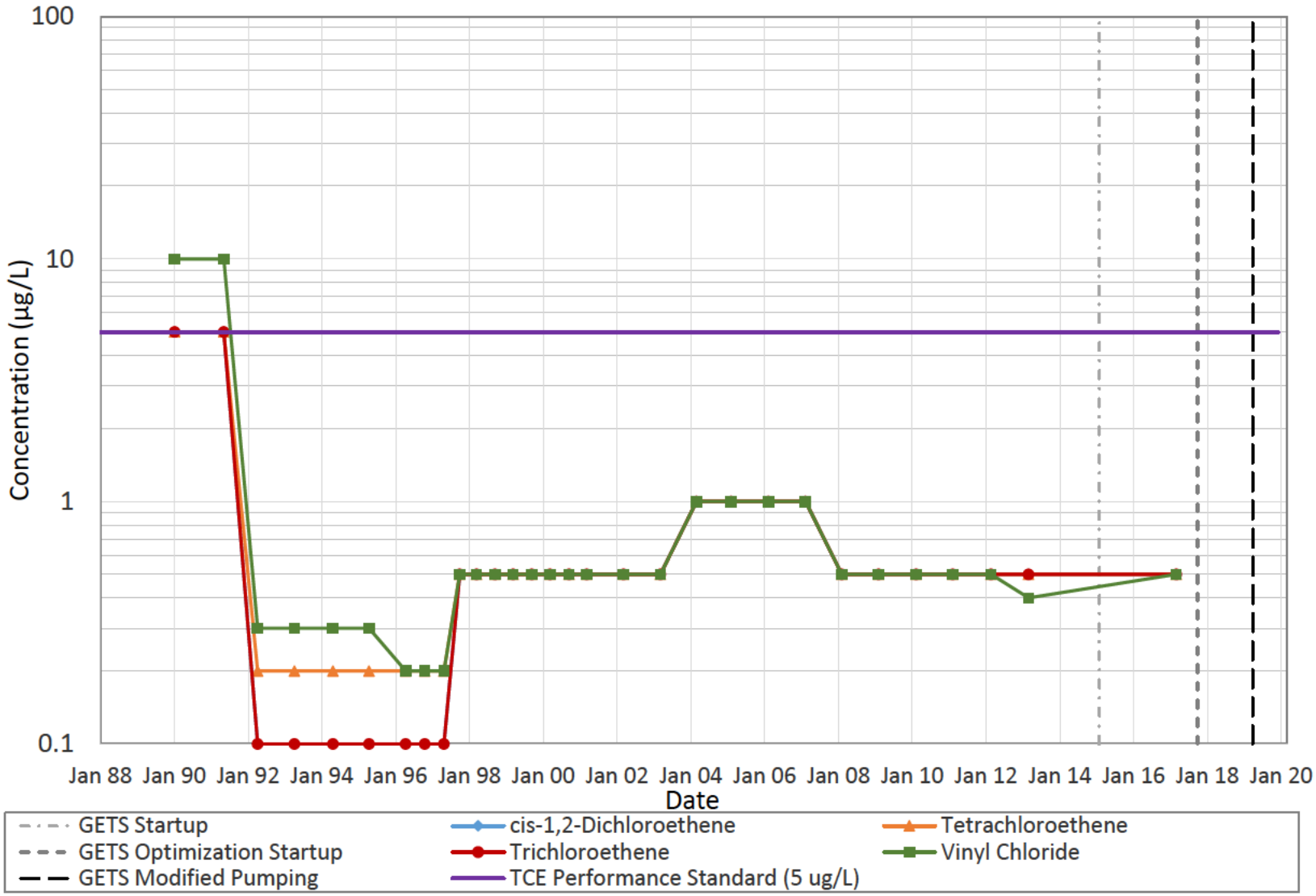
LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Offsite Aquifer 4 Well
(b) (6) **(LM) Time Series**

Figure
E-75

C:\Users\ajohnson\Documents\Working Locally Files\QCF\2020 AR last QC tasks\App E\QCFAquifer3,4-COCPlots,Data_AppE_65-70,76



LANDAU ASSOCIATES

Queen City Farms
Maple Valley, Washington

Aquifer 4 G-3 Time Series

Figure
E-76

Table E-1 Chemicals of Concern

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
Queen City Farms						
Aquifer 1						
E-1	1	02/10/97	**1.7**	0 2 U	**0.2**	**0.2**
		05/05/97	**0.9**	0 2 U	**0.2**	0.2 U
		08/04/97	**2.8**	0 5 U	0 5 U	**1**
		10/20/97	**1.7 J**	0 5 U	0 5 U	**0.6 J**
		01/22/98	**1.0**	0 5 U	0 5 U	**0.30 J**
		04/07/98	**2**	0 5 U	0 5 U	0.5 U
		07/20/98	**1.7**	0 5 U	0 5 U	**0.8**
		10/05/98	**3.5**	0 5 U	0 5 U	**2**
		01/07/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/01/99	**0.8**	0 5 U	0 5 U	0.5 U
		07/01/99	**1.2**	0 5 U	0 5 U	0.5 U
		10/07/99	**2.9**	0 5 U	0 5 U	**1.4**
		01/05/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/00	**0.8**	0 5 U	0 5 U	0.5 U
		07/06/00	**1.2**	0 5 U	0 5 U	0.5 U
		10/09/00	**3.5**	0 5 U	0 5 U	**1.4**
		01/04/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/01/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/04	1 U	1 U	1 U	1 U
		03/03/05	1 U	1 U	1 U	1 U
		08/29/05	**1.1**	1 U	1 U	1 U
		03/07/07	1 U	1 U	1 U	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/19/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/10/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/19	0 5 U	0 5 U	0 5 U	0.5 U
X-5	1	04/01/99	**92**	0 5 U	**11**	**7.2**
		10/07/99	**104**	25 U	25 U	25 U
Aquifer 2a						
C-2a	2af	02/06/96	**12**	**1.8**	**42**	1 U
		05/07/96	**10**	**1.7**	**37**	1 U
		08/06/96	**12**	**2**	**40**	1 U
		11/12/96	**9.8**	**1.8**	**35**	1 U
		02/11/97	**9.4**	**1.9**	**38**	0.2 U
		05/19/97	**7.5**	**1.8**	**33**	0.2 U
		08/04/97	**7.8**	**1.8**	**32**	0.5 U
		10/21/97	**7**	**1.9**	**28**	0.5 U
		01/19/98	**7.0**	**1.8**	**30**	0.5 U
		04/06/98	**6.1**	**1.9**	**27**	0.5 U
		07/14/98	**5.8**	**1.7**	**31**	0.5 U
		10/06/98	**4.5**	**1.6**	**26**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
C-2a (cont.)	2af	01/04/99	**5.4**	**1.7**	**27**	0.5 U
		04/05/99	**4.3**	**1.5**	**26**	0.5 U
		07/01/99	**4.1**	**1.6**	**25**	0.5 U
		10/05/99	**4.7**	**1.7**	**27**	0.5 U
		01/03/00	**4.7**	**1.8**	**27**	0.5 U
		04/03/00	**4.1**	**1.5**	**25**	0.5 U
		07/03/00	**3.9**	**1.4**	**27**	0.5 U
		10/10/00	**3.7**	**1.6**	**24**	0.5 U
		01/02/01	**4.7**	**1.9**	**30**	0.5 U
		04/03/01	**5.6**	**1.7**	**29**	0.5 U
		10/15/01	**5.9**	**1.7**	**30**	0.5 U
		04/01/02	**3.7**	**1.5**	**26**	0.5 U
		10/01/02	**3.9**	**1.2**	**25**	0.5 U
		04/02/03	**3.9**	**1.6**	**24**	0.5 U
		10/16/03	**3.3**	**1.4**	**23**	0.5 U
		03/23/04	**2.9**	**1.4**	**24**	1 U
		09/13/04	**3.1**	**1.3**	**26**	1 U
		03/03/05	**3.5**	**1.7**	**28**	1 U
		08/29/05	**2.6**	**1.6**	**26**	1 U
		03/06/06	**2.4**	**1.5**	**26**	1 U
		08/23/06	**2**	**1.4**	**22**	1 U
		03/07/07	**2.2**	**1.5**	**18**	1 U
		08/28/07	**1.6**	**1.4**	**20**	1 U
		03/03/08	**2**	**1.5**	**22**	0.5 U
		08/25/08	**1.9**	**1.1**	**23**	0.5 U
		03/03/09	**1.6**	**1.5**	**21**	0.5 U
		09/01/09	**1.4**	**1.1**	**18.1**	0.5 U
		03/08/10	**1.6**	**1.6**	**19.7**	0.5 U
		09/07/10	**1.3**	**0.96**	**19.1**	0.5 U
		03/07/11	0.5 UJ	**1.1 J**	**20.1**	0.5 U
		09/12/11	**1.3**	**1.2**	**17.8**	0.5 U
		03/19/12	**1.1**	**1**	**14**	0.5 U
		09/11/12	**0.95**	**1**	**15.1**	0.5 U
		03/25/13	**0.82**	**1.1**	**15.3**	0.4 U
		03/10/14	**0.7**	**1**	**16**	0.5 U
		03/26/15	**0.6**	**1**	**16**	0.5 U
		03/29/16	0 5 U	**0.8**	**14**	0.5 U
		03/28/17	0 5 U	**1.0**	**15**	0.5 U
		03/29/18	0 5 U	**0.8**	**13**	0.5 U
		03/29/19	0 5 U	**0.9**	**14**	0.5 U
D-2a	2ae	02/06/96	0.1 U	0 2 U	**1.8**	0.2 U
		05/07/96	**0.1**	0 2 U	**1.8**	0.2 U
		08/06/96	**0.2**	0 2 U	**2.6**	0.2 U
		11/12/96	0.1 U	0 2 U	**4.4**	0.2 U
		02/10/97	0.1 U	0 2 U	**4**	0.2 U
		05/19/97	0.1 U	0 2 U	**4.3**	0.2 U
		08/04/97	0 5 U	0 5 U	**1.8**	0.5 U
		10/21/97	0 5 U	0 5 U	**1.8**	0.5 U
		01/19/98	0 5 U	0 5 U	**3.1**	0.5 U
		04/06/98	0 5 U	0 5 U	**3.6**	0.5 U
		07/14/98	0 5 U	0 5 U	**2.2**	0.5 U
		10/06/98	0 5 U	0 5 U	**3.2**	0.5 U
		01/04/99	0 5 U	0 5 U	**2.4**	0.5 U
		04/06/99	0 5 U	0 5 U	**3.1**	0.5 U
		07/01/99	0 5 U	0 5 U	**1.8**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
D-2a (cont.)	2ae	10/05/99	0 5 U	0 5 U	**3.2**	0.5 U
		01/04/00	0 5 U	0 5 U	**1.9**	0.5 U
		04/04/00	0 5 U	0 5 U	**2.5**	0.5 U
		07/03/00	0 5 U	0 5 U	**1.8**	0.5 U
		10/10/00	0 5 U	0 5 U	**3**	0.5 U
		01/02/01	0 5 U	0 5 U	**4.3**	0.5 U
		04/03/01	0 5 U	0 5 U	**1.6**	0.5 U
		10/16/01	0 5 U	0 5 U	**2.6**	0.5 U
		04/01/02	0 5 U	0 5 U	**2.4**	0.5 U
		10/01/02	0 5 U	0 5 U	**2.7**	0.5 U
		04/02/03	0 5 U	0 5 U	**1.3**	0.5 U
		10/16/03	0 5 U	0 5 U	**2.4**	0.5 U
		03/23/04	1 U	1 U	**1.2**	1 U
		09/14/04	1 U	1 U	**2.6**	1 U
		03/03/05	1 U	1 U	**1.2**	1 U
		08/29/05	1 U	1 U	**1.8**	1 U
		03/06/06	1 U	1 U	**1.1**	1 U
		08/23/06	1 U	1 U	**1.2**	1 U
		03/07/07	1 U	1 U	**1.1**	1 U
		08/28/07	1 U	1 U	**0.98 J**	1 U
		03/03/08	0 5 U	0 5 U	**1.1**	0.5 U
		08/25/08	0 5 U	0 5 U	**1.4**	0.5 U
		03/03/09	0 5 U	0 5 U	**1**	0.5 U
		09/01/09	0 5 U	0 5 U	**0.9**	0.5 U
		03/08/10	0 5 U	0 5 U	**0.94**	0.5 U
		09/07/10	0 5 U	0 5 U	**1.1**	0.5 U
		03/07/11	0 5 U	0 5 U	**1.2**	0.5 U
		09/12/11	0 5 U	0 5 U	**1.1**	0.5 U
		03/19/12	0 5 U	0 5 U	**0.78**	0.5 U
		09/11/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	**0.65**	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	**0.7**	0.5 U
		03/30/16	0 5 U	0 5 U	**0.8**	0.5 U
		03/27/17	0 5 U	0 5 U	**0.8**	0.5 U
		03/28/18	0 5 U	0 5 U	**1**	0.5 U
		03/26/19	0 5 U	0 5 U	**1.0**	0.5 U
E-2a	2af	12/01/90	**22**	**2 J**	**77**	10 U
		03/01/91	**17**	**2 J**	**71**	10 U
		06/01/91	**14**	**2 J**	**71**	10 U
		05/01/92	**11**	**2 J**	**74**	10 U
		08/01/92	**13**	10 U	**71**	10 U
		11/01/92	**12**	**2 J**	**75**	10 U
		02/01/93	**9 J**	**1 J**	**62**	10 U
		05/01/93	**10**	**2 J**	**75**	10 U
		08/01/93	**8 J**	**2 J**	**69**	10 U
		11/01/93	**10**	**2 J**	**81**	10 U
		02/10/94	**9 J**	10 U	**71**	10 U
		05/17/94	**7.7**	**2**	**54.8**	0.3 U
		08/23/94	**8.5**	**1.8**	**75**	0.3 U
		11/08/94	**6.8**	**1.5**	**60**	0.3 U
		02/07/95	**6.5**	**1.7**	**62**	0.3 U
		05/10/95	**5.2**	**1.7**	**60**	0.3 U
		08/15/95	**5.1**	**1.7**	**73**	0.2 U
		11/06/95	**5**	**1.7**	**62**	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
E-2a (cont.)	2af	02/05/96	**4.2**	**1.6**	**63**	0.2 U
		05/06/96	**4.4**	**1.6**	**59**	0.2 U
		08/05/96	**4.2**	**1.9**	**63**	0.2 U
		11/11/96	**3.6**	**1.8**	**45**	0.2 U
		02/10/97	**5**	**1.8**	**56**	0.2 U
		05/05/97	**4.3**	**1.6**	**55**	0.2 U
		08/04/97	**5.1**	**1.6**	**53**	0.5 U
		10/21/97	**9.1**	**1.6**	**48**	0.5 U
		01/19/98	**5.9**	**1.5**	**47**	0.5 U
		04/06/98	**6.5**	**1.6**	**42**	0.5 U
		07/14/98	**3.7**	**1.3**	**50**	0.5 U
		10/06/98	**2.7**	**1.5**	**49**	0.5 U
		01/05/99	**3.7**	**1.3**	**51**	0.5 U
		04/01/99	**2.2**	**1.2**	**47**	0.5 U
		07/01/99	**2.3**	**1.3**	**50**	0.5 U
		10/05/99	**2.8**	**1.2**	**58**	0.5 U
		01/04/00	**2.5**	**1.4**	**48**	0.5 U
		04/04/00	**2.1**	**1.2**	**48**	0.5 U
		07/03/00	**2.4**	**0.9**	**53**	0.5 U
		10/10/00	**1.9**	**1.2**	**48**	0.5 U
		01/03/01	**2.1**	**1.3**	**45**	0.5 U
		04/03/01	**1.8**	**1**	**45**	0.5 U
		10/16/01	**1**	**0.9**	**37**	0.5 U
		04/01/02	**1.4**	**1**	**40**	0.5 U
		10/02/02	**1.1**	**0.9**	**40**	0.5 U
		04/02/03	**0.8**	**1.1**	**31**	0.5 U
		10/16/03	**0.7**	**1.1**	**34**	0.5 U
		03/23/04	**0.6 J**	**0.9 J**	**34**	1 U
		09/14/04	**0.5 J**	**0.8 J**	**34**	1 U
		03/03/05	1 U	**1**	**27**	1 U
		08/29/05	1 U	**0.9 J**	**27**	1 U
		03/06/06	**1.2**	1 U	**44**	1 U
		08/23/06	**0.7 J**	1 U	**40**	1 U
		03/07/07	**0.8 J**	1 U	**36**	1 U
		08/28/07	1 U	1 U	**35**	1 U
		03/03/08	**0.8 J**	0 5 U	**46**	0.5 U
		08/25/08	**0.7 J**	0 5 U	**40**	0.5 U
		03/03/09	**0.7**	**0.3 J**	**39**	0.5 U
		09/01/09	**0.6**	0 5 U	**34.3**	0.5 U
		03/08/10	**0.56**	**1.1**	**34.2**	0.5 U
		09/07/10	0 5 U	0 5 U	**31.2**	0.5 U
		03/07/11	**0.53**	0 5 U	**37.2**	0.5 U
		09/12/11	0 5 U	0 5 U	**34.1**	0.5 U
		03/19/12	0 5 U	0 5 U	**24.3**	0.5 U
		09/11/12	0 5 U	0 5 U	**27.7**	0.5 U
		03/25/13	0 5 U	0 5 U	**26.9**	0.4 U
		03/10/14	0 5 U	0 5 U	**27**	0.5 U
		03/26/15	0 5 U	0 5 U	**22**	0.5 U
		03/29/16	0 5 U	0 5 U	**22**	0.5 U
		03/28/17	0 5 U	0 5 U	**22**	0.5 U
		03/29/18	0 5 U	0 5 U	**19**	0.5 U
		03/28/19	0 5 U	0 5 U	**20**	0.5 U
F-2a	2ae	02/06/96	**0.52**	0 2 U	**1.2**	0.2 U
		05/07/96	**0.2**	0 2 U	**1.3**	0.2 U
		08/06/96	**0.5**	**0.1 J**	**3.4**	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
F-2a (cont.)	2ae	11/12/96	**0.3**	0 2 U	**3**	0.2 U
		02/11/97	0.1 U	0 2 U	**0.8**	0.2 U
		05/19/97	0.1 U	0 2 U	**1.4**	0.2 U
		08/05/97	0 5 U	0 5 U	**1.9**	0.5 U
		10/21/97	0 5 U	0 5 U	**2.3**	0.5 U
		01/19/98	0 5 U	0 5 U	**1.2**	0.5 U
		04/07/98	0 5 U	0 5 U	**1.2**	0.5 U
		07/14/98	0 5 U	0 5 U	**2.5**	0.5 U
		10/06/98	0 5 U	0 5 U	**3.9**	0.5 U
		01/05/99	0 5 U	0 5 U	**0.8**	0.5 U
		04/06/99	0 5 U	0 5 U	**0.8**	0.5 U
		07/01/99	0 5 U	0 5 U	**2.1**	0.5 U
		10/05/99	0 5 U	0 5 U	**3.9**	0.5 U
		01/04/00	0 5 U	0 5 U	**1.3**	0.5 U
		04/04/00	0 5 U	0 5 U	**1.1**	0.5 U
		07/03/00	0 5 U	0 5 U	**2.7**	0.5 U
		10/10/00	0 5 U	0 5 U	**5.1**	0.5 U
		01/03/01	0 5 U	0 5 U	**3.3**	0.5 U
		04/03/01	0 5 U	0 5 U	**2.7**	0.5 U
		04/02/02	0 5 U	0 5 U	**1.1**	0.5 U
		04/02/03	0 5 U	0 5 U	**1.4**	0.5 U
		03/23/04	1 U	1 U	**1.6**	1 U
		03/03/05	1 U	1 U	**2.1 J**	1 U
		08/29/05	1 U	1 U	**3.5**	1 U
		03/06/06	1 U	1 U	**1.5**	1 U
		03/07/07	1 U	1 U	**1.4**	1 U
		03/03/08	0 5 U	0 5 U	**2**	0.5 U
		03/03/09	0 5 U	0 5 U	**1.9**	0.5 U
		03/08/10	0 5 U	**0.96**	**1.5**	0.5 U
		09/07/10	0 5 U	0 5 U	**2.6**	0.5 U
		03/07/11	0 5 U	0 5 U	**1.4**	0.5 U
		09/12/11	0 5 U	0 5 U	**3.3**	0.5 U
		03/19/12	0 5 U	0 5 U	**1.1**	0.5 U
		09/10/12	0 5 U	0 5 U	**2.3**	0.5 U
		03/25/13	0 5 U	0 5 U	**1**	0.4 U
		03/10/14	0 5 U	0 5 U	**0.9**	0.5 U
		03/26/15	0 5 U	0 5 U	**0.7**	0.5 U
		03/29/16	0 5 U	0 5 U	**0.6**	0.5 U
		03/28/17	0 5 U	0 5 U	**0.7**	0.5 U
		03/29/18	0 5 U	0 5 U	**0.7**	0.5 U
		03/28/19	0 5 U	0 5 U	**0.6**	0.5 U
G-2a	2ae	02/06/96	**3.6**	**0.56**	**10**	0.2 U
		05/07/96	**4.3**	**0.6**	**9.7**	0.2 U
		08/06/96	**3.7**	**0.7**	**12**	0.2 U
		11/12/96	**6.8**	**1.1**	**17**	0.2 U
		05/20/97	**1.2**	**0.3**	**5.4**	0.2 U
		08/05/97	**1.7**	**0.5**	**7.4**	0.5 U
		10/22/97	**2.9**	**0.7**	**10**	0.5 U
		01/19/98	**2.1**	**0.5 J**	**7.0**	0.5 U
		04/07/98	**1.1**	0 5 U	**4.5**	0.5 U
		07/14/98	**2.2**	**0.5**	**9**	0.5 U
		10/07/98	**0.6**	0 5 U	**4.7**	0.5 U
		01/05/99	**1.9**	0 5 U	**7.4**	0.5 U
		04/06/99	**0.7**	0 5 U	**4**	0.5 U
		07/06/99	**1.5**	0 5 U	**7.2**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
G-2a (cont.)	2ae	10/06/99	**0.6**	0 5 U	**5.6**	0.5 U
		01/04/00	**1.2**	0 5 U	**6.3**	0.5 U
		04/04/00	**1**	0 5 U	**4.9**	0.5 U
		07/03/00	**2.1**	0 5 U	**9**	0.5 U
		10/11/00	0 5 U	0 5 U	**4**	0.5 U
		01/03/01	**2.2**	**0.7**	**11**	0.5 U
		04/04/01	**2.4**	**0.7**	**9.8**	0.5 U
		10/16/01	0 5 U	0 5 U	**3.5**	0.5 U
		04/02/02	**0.8**	0 5 U	**4.5**	0.5 U
		10/02/02	0 5 U	0 5 U	**4**	0.5 U
		04/02/03	**1.3**	0 5 U	**5.8**	0.5 U
		10/16/03	0 5 U	0 5 U	**4.5**	0.5 U
		03/24/04	**0.9 J**	1 U	**4.9**	1 U
		09/14/04	1 U	1 U	**3.5**	1 U
		03/03/05	**1.4**	1 U	**7**	1 U
		08/29/05	1 U	1 U	**5.3**	1 U
		03/06/06	**0.7 J**	1 U	**5.1**	1 U
		08/23/06	**0.7 J**	1 U	**7.2**	1 U
		03/08/07	**0.7 J**	1 U	**4.2**	1 U
		08/28/07	1 U	1 U	**3.5**	1 U
		03/03/08	**0.9 J**	0 5 U	**5.5**	0.5 U
		08/25/08	**0.5 J**	0 5 U	**7.1**	0.5 U
		03/03/09	**0.8**	**0.5 J**	**6.5**	0.5 U
		09/01/09	0 5 U	0 5 U	**3.9**	0.5 U
		03/08/10	**0.81**	**1.1 J**	**5.5**	0.5 U
		09/07/10	**1**	0 5 U	**7.6**	0.5 U
		03/07/11	**0.7**	0 5 U	**5.2**	0.5 U
		09/12/11	**0.56**	0 5 U	**6.1**	0.5 U
		03/19/12	**0.52**	0 5 U	**4.2**	0.5 U
		09/11/12	**0.85**	0 5 U	**6 J**	0.5 U
		03/25/13	**0.5**	0 5 U	**3.5**	0.4 U
		03/10/14	**0.9**	0 5 U	**5.9**	0.5 U
		03/26/15	**0.6**	0 5 U	**4.7**	0.5 U
		03/29/16	**0.6**	0 5 U	**4.6**	0.5 U
		03/29/17	**0.7**	0 5 U	**5.7**	0.5 U
		03/29/18	0 5 U	0 5 U	**3.1**	0.5 U
		03/28/19	0 5 U	0 5 U	**3.5**	0.5 U
H-2a	2ae	12/10/96	0.1 U	0 2 U	**2.8**	0.2 U
		02/11/97	0.1 U	0 2 U	**0.9**	0.2 U
		05/20/97	0.1 U	0 2 U	**1.2**	0.2 U
		08/05/97	0 5 U	0 5 U	**1.8**	0.5 U
		10/22/97	0 5 U	0 5 U	**2**	0.5 U
		01/20/98	0 5 U	0 5 U	**1.5**	0.5 U
		04/08/98	0 5 U	0 5 U	**2.2**	0.5 U
		07/15/98	0 5 U	0 5 U	**2.9**	0.5 U
		10/07/98	0 5 U	0 5 U	**1**	0.5 U
		01/05/99	0 5 U	0 5 U	**1.9**	0.5 U
		04/07/99	0 5 U	0 5 U	**2**	0.5 U
		07/06/99	0 5 U	0 5 U	**2.3**	0.5 U
		10/06/99	0 5 U	0 5 U	**2.1**	0.5 U
		01/04/00	0 5 U	0 5 U	**1.7**	0.5 U
		04/04/00	0 5 U	0 5 U	**1.7**	0.5 U
		07/05/00	0 5 U	0 5 U	**2.1**	0.5 U
		10/11/00	0 5 U	0 5 U	**2.2**	0.5 U
		01/03/01	0 5 U	0 5 U	**4.6**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
H-2a (cont.)	2ae	04/04/01	0 5 U	0 5 U	**2**	0.5 U
		10/16/01	0 5 U	0 5 U	**1.4**	0.5 U
		04/02/02	0 5 U	0 5 U	**0.7**	0.5 U
		10/02/02	0 5 U	0 5 U	**1.4**	0.5 U
		04/07/03	0 5 U	0 5 U	**1.3**	0.5 U
		10/20/03	0 5 U	0 5 U	**4**	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		09/14/04	1 U	1 U	**1.7**	1 U
		03/04/05	1 U	1 U	1 U	1 U
		08/30/05	1 U	1 U	**0.6 J**	1 U
		03/06/06	1 U	1 U	1 U	1 U
		08/23/06	1 U	1 U	**0.5 J**	1 U
		03/08/07	1 U	1 U	1 U	1 U
		08/28/07	1 U	1 U	**1**	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/25/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	**0.3 J**	0.5 U
		09/01/09	0 5 U	0 5 U	**0.6**	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/07/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/12/11	0 5 U	0 5 U	**1**	0.5 U
		03/19/12	0 5 U	0 5 U	0 5 U	0.5 U
		09/11/12	0 5 U	0 5 U	**0.65**	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		09/09/13	0 5 U	0 5 U	**0.84**	0.5 U
		03/12/14	0 5 U	0 5 U	**0.6**	0.5 U
		09/02/14	0 5 U	0 5 U	**1.1**	0.5 U
		03/23/15	0 5 U	0 5 U	**1**	0.5 U
		09/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/14/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/23/19	0 5 U	0 5 U	0 5 U	0.5 U
I-2a	2af	12/01/90	**1 J**	**2 J**	**10**	10 U
		03/01/91	5 U	**2 J**	**7**	10 U
		06/01/91	5 U	**1 J**	**5**	10 U
		05/01/92	10 U	10 U	**6 J**	10 U
		08/01/92	0 3 U	**1.4**	**6.7**	0.3 U
		11/01/92	10 U	10 U	**6 J**	10 U
		02/01/93	10 U	**1 J**	**7 J**	10 U
		05/01/93	10 U	**1 J**	**5 J**	10 U
		02/09/94	10 U	**1 J**	**6 J**	10 U
		05/18/94	0.1 U	**1.5**	**4.9**	0.3 U
		08/24/94	0.1 U	**1.3**	**4.9**	0.3 U
		11/09/94	0.1 U	**1.2**	**4.3**	0.3 U
		02/08/95	0.1 U	**1.3**	**4.9**	0.3 U
		05/11/95	**0.15**	**1.2**	**4.1**	0.3 U
		08/16/95	**0.16**	**1.3**	**4.3**	0.2 U
		11/08/95	**0.22**	**1.3**	**4.4**	0.2 U
		02/08/96	0.1 U	**1.3**	**4.6**	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
I-2a (cont.)	2af	05/08/96	**0.1**	**1.2**	**3.8**	0.2 U
		08/08/96	0.1 U	**1**	**2.7**	0.2 U
		11/04/96	0.1 U	**1.2**	**3.3**	0.2 U
		02/12/97	0.1 U	**1.2**	**3.5**	0.2 U
		05/21/97	0.1 U	**0.9**	**2.7**	0.2 U
		08/05/97	0 5 U	**0.8**	**2**	0.5 U
		10/21/97	0 5 U	**0.8**	**2.1**	0.5 U
		01/20/98	0 5 U	**0.70**	**1.6**	0.5 U
		04/13/98	0 5 U	**0.70**	**1.5**	0.5 U
		07/15/98	0 5 U	**0.6**	**1.4**	0.5 U
		10/07/98	0 5 U	**0.70**	**1.7**	0.5 U
		01/06/99	0 5 U	**0.8**	**2.4**	0.5 U
		04/07/99	0 5 U	**0.8**	**2.3**	0.5 U
		07/06/99	0 5 U	**0.8**	**2.2**	0.5 U
		10/06/99	0 5 U	**0.8**	**2.2**	0.5 U
		01/09/00	0 5 U	**1.1 J**	**2.7**	0.5 U
		04/05/00	0 5 U	**0.8**	**2.4**	0.5 U
		07/05/00	0 5 U	**0.7**	**2.2**	0.5 U
		10/12/00	0 5 U	**0.8**	**2.1**	0.5 U
		01/04/01	0 5 U	**0.9**	**2.5**	0.5 U
		04/04/01	0 5 U	**1**	**2.5**	0.5 U
		10/16/01	0 5 U	**0.9**	**2.2**	0.5 U
		04/02/02	0 5 U	**0.7**	**2.2**	0.5 U
		10/03/02	0 5 U	**0.6**	**2**	0.5 U
		04/07/03	0 5 U	**0.8**	**2.3**	0.5 U
		10/20/03	0 5 U	**0.8**	**1.9**	0.5 U
		03/25/04	1 U	**0.7 J**	**1.5**	1 U
		09/14/04	1 U	**0.7 J**	**2.1**	1 U
		03/04/05	1 U	**0.7 J**	**1.8**	1 U
		08/30/05	1 U	**0.7 J**	**1.7**	1 U
		03/06/06	1 U	**0.6 J**	**1.7**	1 U
		08/23/06	1 U	**0.6 J**	**1.5**	1 U
		03/08/07	1 U	1 U	**1.6**	1 U
		08/28/07	1 U	**0.6 J**	**1.1**	1 U
		03/03/08	0 5 U	**0.6 J**	**1.5**	0.5 U
		08/25/08	0 5 U	**0.5 J**	**1.4**	0.5 U
		03/03/09	0 5 U	**0.7**	**1.4**	0.5 U
		09/01/09	0 5 U	0 5 U	**1.1**	0.5 U
		03/09/10	0 5 U	**1.2 J**	**1.2**	0.5 U
		09/07/10	0 5 U	0 5 U	**0.91**	0.5 U
		03/08/11	0 5 U	0 5 U	**1.1**	0.5 U
		09/12/11	0 5 U	0 5 U	**0.61**	0.5 U
		03/20/12	0 5 U	0 5 U	**0.73**	0.5 U
		09/10/12	0 5 U	0 5 U	**0.65**	0.5 U
		03/26/13	0 5 U	0 5 U	**0.77**	0.4 U
		03/11/14	0 5 U	0 5 U	**0.8**	0.5 U
		03/25/15	0 5 U	0 5 U	**0.9**	0.5 U
		03/30/16	0 5 U	0 5 U	**1**	0.5 U
		03/31/17	0 5 U	0 5 U	**0.9**	0.5 U
		03/27/18	0 5 U	0 5 U	**0.9**	0.5 U
		03/26/19	0 5 U	0 5 U	**1.0**	0.5 U
IB-2a	2a	09/09/13	0 5 U	0 5 U	**0.84**	0.5 U
		04/02/14	0 5 U	0 5 U	**1.1**	0.5 U
		09/02/14	0 5 U	0 5 U	**1**	0.5 U
		03/23/15	0 5 U	0 5 U	**0.8**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
IB-2a (cont.)	2a	09/23/15	0 5 U	0 5 U	**1.3**	0.5 U
		03/30/16	0 5 U	0 5 U	**0.8**	0.5 U
		09/26/16	0 5 U	0 5 U	**1.0**	0.5 U
		03/31/17	0 5 U	0 5 U	**0.7**	0.5 U
		09/13/17	0 5 U	0 5 U	**1**	0.5 U
		03/29/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/19	0 5 U	0 5 U	0 5 U	0.5 U
L-2a	2ae	12/01/90	**10**	5 U	**14**	10 U
		03/01/91	**6**	5 U	**14**	10 U
		06/01/91	**4 J**	**5**	**7**	10 U
		05/01/92	10 U	10 U	**7 J**	10 U
		08/01/92	**1 J**	10 U	**3 J**	10 U
		11/01/92	10 U	10 U	**4 J**	10 U
		02/01/93	**4 J**	10 U	**8 J**	10 U
		05/01/93	**6 J**	10 U	**9 J**	10 U
		02/09/94	**5 J**	10 U	**10**	10 U
		05/18/94	**3.8**	**0.5**	**9.6**	0.3 U
		08/24/94	**0.61**	**0.17 J**	**4.1**	0.3 U
		11/09/94	**0.47**	**0.2**	**4.5**	0.3 U
		02/08/95	**4.6**	**0.63**	**12**	0.3 U
		05/08/95	**2.1**	**0.39**	**7.2**	0.3 U
		08/16/95	**0.54**	**0.26**	**4.4**	0.2 U
		11/07/95	**0.4**	**0.22**	**4.2**	0.2 U
		02/08/96	**5.1**	**0.6**	**14**	0.2 U
		05/08/96	**4**	**0.5**	**10**	0.2 U
		08/07/96	**0.8**	**0.3**	**5.4**	0.2 U
		11/04/96	**0.4**	**0.2**	**3.9**	0.2 U
		02/11/97	**3.3**	**0.5**	**10**	0.2 U
		05/19/97	**1.6**	**0.4**	**7**	0.2 U
		08/05/97	**0.9**	0 5 U	**5.8**	0.5 U
		10/27/97	**0.8**	**0.3 J**	**4.9**	0.5 U
		01/20/98	**2.7**	**0.5**	**9.5**	0.5 U
		04/15/98	**1.2**	0 5 U	**5.7**	0.5 U
		07/15/98	0 5 U	0 5 U	**3.5**	0.5 U
		10/08/98	0 5 U	0 5 U	**2.1**	0.5 U
		01/06/99	**3.4**	**0.6**	**12**	0.5 U
		04/08/99	**1.2**	0 5 U	**6.3**	0.5 U
		07/06/99	0 5 U	0 5 U	**3.8**	0.5 U
		10/11/99	0 5 U	0 5 U	**3.2**	0.5 U
		01/05/00	0 5 U	**0.6**	**8.4**	0.5 U
		04/06/00	**0.7**	0 5 U	**5.5**	0.5 U
		07/03/00	0 5 U	0 5 U	**4.2**	0.5 U
		10/13/00	0 5 U	0 5 U	**1.7**	0.5 U
		01/08/01	0 5 U	0 5 U	**2.6**	0.5 U
		04/05/01	0 5 U	0 5 U	**3.3**	0.5 U
		10/16/01	0 5 U	0 5 U	**1.3**	0.5 U
		04/03/02	**0.9**	0 5 U	**6**	0.5 U
		10/03/02	0 5 U	0 5 U	**2.4**	0.5 U
		04/08/03	**1.1**	0 5 U	**6**	0.5 U
		10/20/03	0 5 U	0 5 U	**1.7**	0.5 U
		03/24/04	**0.5 J**	1 U	**5.2**	1 U
		09/15/04	1 U	1 U	**1.8**	1 U
		03/07/05	1 U	1 U	**3.5**	1 U
		08/30/05	1 U	1 U	**1.5**	1 U
		03/07/06	**0.7 J**	1 U	**5.9**	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
L-2a (cont.)	2ae	08/23/06	1 U	1 U	**3.9**	1 U
		03/08/07	1 U	1 U	**5**	1 U
		08/29/07	1 U	1 U	**3.5**	1 U
		03/04/08	**0.5 J**	0 5 U	**5.7**	0.5 U
		08/26/08	0 5 U	0 5 U	**3.7**	0.5 U
		03/04/09	**0.4 J**	**0.4 J**	**5.6**	0.5 U
		09/02/09	0 5 U	0 5 U	**3.6**	0.5 U
		03/09/10	0 5 U	**1.1 J**	**5.4**	0.5 U
		09/07/10	0 5 U	0 5 U	**3.1**	0.5 U
		03/07/11	0 5 U	0 5 U	**6.1**	0.5 U
		09/12/11	0 5 U	0 5 U	**4.1**	0.5 U
		03/19/12	0 5 U	0 5 U	**4.6**	0.5 U
		09/11/12	0 5 U	0 5 U	**3.3**	0.5 U
		03/25/13	0 5 U	0 5 U	**3.5**	0.4 U
		09/09/13	0 5 U	0 5 U	**3.2**	0.5 U
		03/10/14	**0.6**	0 5 U	**5.8**	0.5 U
		09/02/14	0 5 U	0 5 U	**3.7**	0.5 U
		03/26/15	0 5 U	0 5 U	**4.3**	0.5 U
		09/23/15	0 5 U	0 5 U	**3.2**	0.5 U
		03/30/16	0 5 U	0 5 U	**4.8**	0.5 U
		09/27/16	0 5 U	0 5 U	**3.3**	0.5 U
		03/28/17	0 5 U	0 5 U	**4.7**	0.5 U
		09/14/17	0 5 U	0 5 U	**3.4**	0.5 U
		03/29/18	0 5 U	0 5 U	**3.9**	0.5 U
		09/26/18	0 5 U	0 5 U	**3.4**	0.5 U
		03/29/19	0 5 U	0 5 U	**3.9**	0.5 U
		09/25/19	0 5 U	0 5 U	**3.1**	0.5 U
R-2a	2ae	02/13/96	**0.37**	0 2 U	**0.88**	0.2 U
		05/13/96	**0.4**	0 2 U	**0.9**	0.2 U
		08/13/96	**0.2**	0 2 U	**1.8**	0.2 U
		11/05/96	0.1 U	0 2 U	**2.3**	0.2 U
		02/13/97	**0.3**	0 2 U	**0.5**	0.2 U
		05/27/97	**0.3**	0 2 U	**0.8**	0.2 U
		08/07/97	0 5 U	0 5 U	**0.9**	0.5 U
		10/28/97	0 5 U	0 5 U	**1.4**	0.5 U
		01/21/98	**0.30 J**	0 5 U	**0.5 J**	0.5 U
		04/14/98	0 5 U	0 5 U	**0.5**	0.5 U
		07/20/98	0 5 U	0 5 U	**1.9**	0.5 U
		10/13/98	0 5 U	0 5 U	**1.4**	0.5 U
		01/11/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/13/99	0 5 U	0 5 U	0 5 U	0.5 U
		07/07/99	0 5 U	0 5 U	**1.4**	0.5 U
		10/13/99	0 5 U	0 5 U	**1.4**	0.5 U
		01/09/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		07/05/00	0 5 U	0 5 U	**1.7**	0.5 U
		10/16/00	0 5 U	0 5 U	**1.4**	0.5 U
		01/08/01	0 5 U	0 5 U	**1.3**	0.5 U
		04/06/01	0 5 U	0 5 U	0 5 U	0.5 U
		10/17/01	0 5 U	0 5 U	**1.4**	0.5 U
		04/04/02	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/02	0 5 U	0 5 U	**0.9**	0.5 U
		04/09/03	0 5 U	0 5 U	0 5 U	0.5 U
		10/20/03	0 5 U	0 5 U	**0.8**	0.5 U
		03/29/04	1 U	1 U	1 U	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
R-2a (cont.)	2ae	09/15/04	1 U	1 U	**0.8 J**	1 U
		03/07/05	1 U	1 U	**1 J**	1 U
		08/31/05	1 U	1 U	**1**	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		08/24/06	1 U	1 U	**0.7 J**	1 U
		03/12/07	1 U	1 U	1 U	1 U
		08/29/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	**0.6 J**	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		09/02/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		09/11/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/30/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
S-2a	2ae	02/12/96	**0.14**	**0.21**	**8.1**	0.2 U
		05/14/96	**0.1**	**0.2**	**8**	0.2 U
		08/13/96	0.1 U	**0.2**	**7.3**	0.2 U
		11/06/96	0.1 U	**0.2**	**6.6**	0.2 U
		02/13/97	0.1 U	**0.2**	**5.7**	0.2 U
		05/27/97	0.1 U	**0.2**	**5.9**	0.2 U
		08/07/97	0 5 U	0 5 U	**5.6**	0.5 U
		10/28/97	0 5 U	**0.2 J**	**4.7**	0.5 U
		01/21/98	0 5 U	**0.30 J**	**4.6**	0.5 U
		04/14/98	0 5 U	0 5 U	**4.3**	0.5 U
		07/20/98	0 5 U	0 5 U	**3.7**	0.5 U
		10/13/98	0 5 U	0 5 U	**3.6**	0.5 U
		01/11/99	0 5 U	0 5 U	**3.8**	0.5 U
		04/13/99	0 5 U	0 5 U	**3.7**	0.5 U
		07/07/99	0 5 U	0 5 U	**3.8**	0.5 U
		10/13/99	0 5 U	**0.2 J**	**3.5**	0.5 U
		01/10/00	0 5 U	0 5 U	**3.6**	0.5 U
		04/11/00	0 5 U	0 5 U	**3.5**	0.5 U
		07/06/00	0 5 U	0 5 U	**3.3**	0.5 U
		10/16/00	0 5 U	0 5 U	**3**	0.5 U
		01/08/01	0 5 U	0 5 U	**2.4**	0.5 U
		04/06/01	0 5 U	0 5 U	**2.7**	0.5 U
		10/17/01	0 5 U	0 5 U	**2.8**	0.5 U
		04/08/02	0 5 U	0 5 U	**2.8**	0.5 U
		10/07/02	0 5 U	0 5 U	**2.7**	0.5 U
		04/09/03	0 5 U	0 5 U	**2.8**	0.5 U
		10/20/03	0 5 U	0 5 U	**2.3**	0.5 U
		03/29/04	1 U	1 U	**2**	1 U
		09/15/04	1 U	1 U	**2.1**	1 U
		03/08/05	1 U	1 U	**2.1**	1 U
		08/31/05	1 U	1 U	**2.1**	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
S-2a (cont.)	2ae	03/07/06	1 U	1 U	**2**	1 U
		08/24/06	1 U	1 U	**2.2**	1 U
		03/12/07	1 U	1 U	**2**	1 U
		08/29/07	1 U	1 U	**2**	1 U
		03/04/08	0 5 U	0 5 U	**1.9**	0.5 U
		08/26/08	0 5 U	0 5 U	**1.8**	0.5 U
		03/05/09	0 5 U	0 5 U	**1.6**	0.5 U
		09/02/09	0 5 U	0 5 U	**1.8**	0.5 U
		03/10/10	0 5 U	0 5 U	**1.5**	0.5 U
		09/08/10	0 5 U	0 5 U	**1.4**	0.5 U
		03/08/11	0 5 U	0 5 U	**1.5 J**	0.5 U
		09/13/11	0 5 U	0 5 U	**1.6**	0.5 U
		03/20/12	0 5 U	0 5 U	**1.1**	0.5 U
		09/10/12	0 5 U	0 5 U	**1.2**	0.5 U
		03/26/13	0 5 U	0 5 U	**0.78**	0.4 U
		09/09/13	0 5 U	0 5 U	**1**	0.5 U
		03/11/14	0 5 U	0 5 U	**0.9**	0.5 U
		09/03/14	0 5 U	0 5 U	**0.9**	0.5 U
		03/23/15	0 5 U	0 5 U	**1**	0.5 U
		09/23/15	0 5 U	0 5 U	**0.8**	0.5 U
		03/29/16	0 5 U	0 5 U	**2.1**	0.5 U
		09/26/16	0 5 U	0 5 U	**3.1**	0.5 U
		03/27/17	0 5 U	0 5 U	**3.3**	0.5 U
		09/13/17	0 5 U	0 5 U	**2.0**	0.5 U
		03/29/18	0 5 U	0 5 U	**2.8**	0.5 U
		03/28/19	0 5 U	0 5 U	**3.5**	0.5 U
		09/24/19	0 5 U	0 5 U	**3.3**	0.5 U
U-2a	2af	08/17/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		09/11/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
V-2a	2af	02/12/96	**4.4**	0 2 U	**13**	0.2 U
		05/15/96	**4.1**	0 2 U	**13**	0.2 U
		08/14/96	**3.5**	0 2 U	**16**	0.2 U
		11/06/96	**4.6**	0 2 U	**6**	0.2 U
		05/27/97	**3.2**	0 2 U	**15**	0.2 U
		08/07/97	**4.1**	0 5 U	**12**	0.5 U
		10/29/97	**4.8**	0 5 U	**2.8**	0.5 U
		01/22/98	**4.3**	0 5 U	**5.3**	0.5 U
		04/16/98	**3.2**	0 5 U	**10**	0.5 U
		07/20/98	**3.6**	0 5 U	**8.6**	0.5 U
		10/14/98	**2.1 J**	0 5 U	**7.8**	0.5 U
		01/11/99	**3.4**	0 5 U	**9.5**	0.5 U
		04/14/99	**3.1**	0 5 U	**10**	0.5 U
		07/07/99	**3.3**	0 5 U	**11**	0.5 U
		10/14/99	**2.9**	0 5 U	**7.7**	0.5 U
		01/05/00	**3.3**	0 5 U	**5**	0.5 U
		04/11/00	**3**	0 5 U	**10**	0.5 U
		07/06/00	**4**	0 5 U	**6.8**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
V-2a (cont.)	2af	10/16/00	**2.6**	0 5 U	**9**	0.5 U
		01/09/01	**4.7**	0 5 U	**1.7**	0.5 U
		04/09/01	**5.5**	0 5 U	**0.9**	0.5 U
		10/17/01	**2.9**	0 5 U	**7.5**	0.5 U
		04/08/02	**3.2**	0 5 U	**8.1**	0.5 U
		10/07/02	**2.6**	0 5 U	**12**	0.5 U
		04/09/03	**3.4**	0 5 U	**3.4**	0.5 U
		10/21/03	**2.1**	0 5 U	**8.8**	0.5 U
		03/29/04	**3**	1 U	**2.3**	1 U
		09/15/04	**2.4**	1 U	**7.4**	1 U
		03/08/05	**3.5**	1 U	**1.6**	1 U
		08/31/05	**3.1**	1 U	**5**	1 U
		03/07/06	**2.3**	1 U	**8.3**	1 U
		03/07/06	**1.3**	1 U	**6.7**	1 U
		08/24/06	**2.8**	1 U	**5.6**	1 U
		03/12/07	**4.3**	1 U	1 U	1 U
		08/29/07	**1.2**	1 U	**9.9**	1 U
		03/04/08	**4.8**	0 5 U	**1.1**	0.5 U
		08/26/08	**2.4**	0 5 U	**8**	0.5 U
		03/05/09	**3.1**	0 5 U	**7.2**	0.5 U
		09/02/09	**1.6**	0 5 U	**11.8**	0.5 U
		03/11/10	**5**	0 5 U	**0.92**	0.5 U
		09/08/10	**1.1**	0 5 U	**10.8**	0.5 U
		03/09/11	**3.6**	0 5 U	**5.2**	0.5 U
		09/13/11	**1**	0 5 U	**13.8**	0.5 U
		03/21/12	**4.5**	0 5 U	**0.92**	0.5 U
		09/11/12	**0.74**	0 5 U	**10.7**	0.5 U
		03/25/13	**3.4**	0 5 U	**1.1**	0.4 U
		04/02/14	**2.4**	0 5 U	**6.4**	0.5 U
		09/02/14	**0.8**	0 5 U	**23**	0.5 U
		03/26/15	**2.5**	0 5 U	**3.6**	0.5 U
		09/23/15	**0.7**	0 5 U	**22**	0.5 U
		03/28/16	**2.5**	0 5 U	**3.2**	0.5 U
		09/27/16	**0.8**	0 5 U	**20**	0.5 U
		03/28/17	**1.7**	0 5 U	**9.4**	0.5 U
		09/13/17	**0.6**	0 5 U	**21**	0.5 U
		03/27/18	**0.7**	0 5 U	**13**	0.5 U
		09/26/18	0 5 U	0 5 U	**18**	0.5 U
		03/27/19	**2.8**	0 5 U	**2.9**	0.5 U
		09/25/19	**0.5**	0 5 U	**19**	0.5 U
Aquifer 2						
B-2	2	11/01/88	**40**	-	**80**	-
		02/01/89	**48**	-	**72**	-
		05/01/89	**32**	5 U	**81**	10 U
		08/01/89	**36**	-	**78**	-
		02/01/90	**59**	5 U	**63**	10 U
		12/01/90	**43**	**2 J**	**72**	10 U
		06/01/91	**36**	**2 J**	**62**	10 U
		05/01/92	**43**	**2 J**	**68**	10 U
		08/01/92	**41**	**2 J**	**65**	10 U
		11/01/92	**37**	10 U	**67**	10 U
		02/01/93	**37**	**2 J**	**65**	10 U
		05/01/93	**35**	**2 J**	**65**	10 U
		08/01/93	**31**	**2 J**	**62**	10 U
		11/01/93	**34**	**2 J**	**72**	10 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
B-2 (cont.)	2	02/10/94	**31**	**2 J**	**68**	1 U
		05/17/94	**29.2**	**2 J**	**53.6**	1 U
		08/23/94	**26**	**1.7**	**61**	1 U
		11/08/94	**22**	**1.5**	**50**	1 U
		02/07/95	**24**	**1.8**	**59**	1 U
		05/10/95	**20**	**1.7**	**53**	1 U
		08/15/95	**21**	**2**	**55**	1 U
		11/06/95	**19**	**1.9**	**55**	1 U
		02/05/96	**18**	**1.8**	**59**	1 U
		05/06/96	**18**	**1.8**	**54**	1 U
		08/05/96	**23**	**1.9**	**53**	1 U
		11/11/96	**19**	**1.9**	**50**	1 U
		02/10/97	**19**	**1.9**	**56**	0.2 U
		05/06/97	**17**	**1.7**	**49**	0.2 U
		08/04/97	**18**	**1.8**	**49**	0.5 U
		10/21/97	**16**	**1.9**	**48**	0.5 U
		01/19/98	**16**	**1.8**	**44**	0.5 U
		04/06/98	**16**	**2**	**40**	0.5 U
		07/14/98	**16**	**1.6**	**45**	0.5 U
		10/06/98	**12**	**1.8**	**42**	0.5 U
		01/04/99	**13**	**1.8**	**41**	0.5 U
		04/05/99	**11**	**1.5**	**39**	0.5 U
		07/01/99	**12**	**1.8**	**40**	0.5 U
		10/04/99	**13**	**1.8**	**42**	0.5 U
		01/03/00	**12**	**1.8**	**42**	0.5 U
		04/03/00	**12**	**1.6**	**40**	0.5 U
		07/03/00	**11**	**1.4**	**47**	0.5 U
		10/10/00	**11**	**1.8**	**39**	0.5 U
		01/02/01	**10**	**2.1**	**41**	0.5 U
		04/03/01	**12**	**1.8**	**36**	0.5 U
		10/15/01	**8.9**	**1.8**	**35**	0.5 U
		04/01/02	**8.4**	**1.7**	**37**	0.5 U
		10/01/02	**7**	**1.5**	**34**	0.5 U
		04/02/03	**5.7**	**1.8**	**29**	0.5 U
		10/16/03	**4.3**	**1.8**	**28**	0.5 U
		03/23/04	**4**	**1.7**	**33**	1 U
		09/13/04	**4**	**1.5**	**32**	1 U
		03/02/05	**3.6**	**2**	**27**	1 U
		08/29/05	**2.3**	**1.8**	**28**	1 U
		03/06/06	**2.8**	**1.7**	**30**	1 U
		08/23/06	**2.4**	**2**	**28**	1 U
		03/07/07	**2.4**	**2.3**	**26**	1 U
		08/28/07	**1.6**	**2**	**25**	1 U
		03/03/08	**1.9**	**2.2**	**29**	0.5 U
		08/25/08	**1.9**	**1.6**	**28**	0.5 U
		03/03/09	**1.5**	**2.3**	**25**	0.5 U
		09/01/09	**1.3**	**1.5**	**20.6**	0.5 U
		03/08/10	**1.3**	**2**	**22.6**	0.5 U
		09/07/10	**1.1**	**1.2**	**19.9**	0.5 U
		03/07/11	**1.1**	0 5 U	**22.7**	0.5 U
		09/12/11	**1.1**	**1.8**	**20**	0.5 U
		03/25/13	**0.67**	**1.5**	**15.1**	0.4 U
		03/29/17	**1.3**	**1.6**	**16**	0.5 U
C-2	2	11/01/88	**25**	-	**38**	-
	2	02/01/89	**27**	-	**38**	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
C-2 (cont.)	2	05/01/89	**18**	5 U	**44**	10 U
		08/01/89	**17**	-	**34**	-
		02/01/90	**27**	5 U	**32**	10 U
		12/01/90	**23**	5 U	**32**	10 U
		06/01/91	**24**	5 U	**32**	10 U
		05/01/92	**28**	10 U	**37**	10 U
		08/01/92	**29**	10 U	**40**	10 U
		11/01/92	**27**	10 U	**34**	10 U
		02/01/93	**25**	10 U	**35**	10 U
		05/01/93	**25**	10 U	**38**	10 U
		08/01/93	**24**	10 U	**39**	10 U
		11/01/93	**25**	10 U	**39**	10 U
		02/10/94	**26**	10 U	**39**	1 U
		05/17/94	**25.4**	0 2 U	**41.4**	1 U
		08/23/94	**24**	0 2 U	**41**	1 U
		11/08/94	**23**	0 2 U	**42**	1 U
		02/07/95	**23**	0 2 U	**39**	1 U
		05/10/95	**20**	0 2 U	**39**	1 U
		08/15/95	**21**	0 2 U	**46**	1 U
		11/06/95	**20**	0 2 U	**39**	1 U
		02/06/96	**19**	0 2 U	**40**	1 U
		05/07/96	**20**	0 2 U	**39**	1 U
		08/06/96	**25**	0 2 U	**41**	1 U
		11/12/96	**20**	0 2 U	**39**	1 U
		02/11/97	**22**	0 2 U	**47**	0.2 U
		05/19/97	**21**	0 2 U	**43**	0.2 U
		08/04/97	**23**	0 5 U	**43**	0.5 U
		10/21/97	**21**	0 5 U	**42**	0.5 U
		01/19/98	**21**	0 5 U	**44**	0.5 U
		04/06/98	**21**	0 5 U	**48**	0.5 U
		07/14/98	**22**	0 5 U	**44**	0.5 U
		10/06/98	**17**	0 5 U	**50**	0.5 U
		01/04/99	**18**	0 5 U	**49**	0.5 U
		04/05/99	**18**	0 5 U	**45**	0.5 U
		07/01/99	**18**	0 5 U	**52**	0.5 U
		10/05/99	**17**	0 5 U	**54**	0.5 U
		01/04/00	**17**	0 5 U	**49**	0.5 U
		04/03/00	**17**	0 5 U	**51**	0.5 U
		07/03/00	**18**	0 5 U	**51**	0.5 U
		10/10/00	**15**	0 5 U	**42**	0.5 U
		01/02/01	**17**	0 5 U	**43**	0.5 U
		04/03/01	**15**	0 5 U	**56**	0.5 U
		10/15/01	**11**	0 5 U	**48**	0.5 U
		04/01/02	**13**	0 5 U	**45**	0.5 U
		10/01/02	**13**	0 5 U	**48**	0.5 U
		04/02/03	**12**	0 5 U	**39**	0.5 U
		10/16/03	**11**	0 5 U	**47**	0.5 U
		03/23/04	**11**	1 U	**46**	1 U
		09/13/04	**12**	1 U	**52**	1 U
		03/03/05	**12**	1 U	**43**	1 U
		08/29/05	**11**	1 U	**46**	1 U
		03/06/06	**9.5**	1 U	**58**	1 U
		08/23/06	**8.8**	1 U	**58**	1 U
		03/07/07	**6.4**	1 U	**47**	1 U
		08/28/07	**5.7**	1 U	**49**	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
C-2 (cont.)	2	03/03/08	**8.4**	0 5 U	**69**	0.5 U
		08/25/08	**7**	0 5 U	**59**	0.5 U
		03/03/09	**6.8**	0 5 U	**56**	0.5 U
		09/01/09	**5.2**	0 5 U	**48.7**	0.5 U
		03/08/10	**6.4**	0 5 U	**51.5**	0.5 U
		09/07/10	**4.2**	0 5 U	**47.3**	0.5 U
		03/07/11	**4.3**	0 5 U	**44.6**	0.5 U
		09/12/11	**4.3**	0 5 U	**41.9**	0.5 U
		03/19/12	**3.6**	0 5 U	**35.8**	0.5 U
		09/11/12	**3.8**	0 5 U	**38.8**	0.5 U
		03/25/13	**3.6**	0 5 U	**43.9**	0.4 U
		09/09/13	**3.4**	0 5 U	**39**	0.5 U
		03/10/14	**4.1**	0 5 U	**40**	0.5 U
		09/02/14	**2.7**	0 5 U	**38**	0.5 U
		03/26/15	**3.5**	0 5 U	**41**	0.5 U
		09/23/15	**2.8**	0 5 U	**37**	0.5 U
		03/29/16	**2.5**	0 5 U	**29**	0.5 U
		09/27/16	**2.9**	0 5 U	**36**	0.5 U
		03/28/17	**1.9**	0 5 U	**41**	0.5 U
		09/14/17	**2.7**	0 5 U	**38**	0.5 U
		03/29/18	**2.0**	0 5 U	**39**	0.5 U
		03/29/19	**2.1**	0 5 U	**40**	0.5 U
D-2	2	02/01/90	5 U	5 U	5 U	10 U
		12/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/17/94	0.1 U	0 2 U	0.1 U	0.3 U
		08/23/94	0.1 U	0 2 U	0.1 U	0.3 U
		11/08/94	0.1 U	0 2 U	0.1 U	0.3 U
		02/07/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/09/95	0.1 U	0 2 U	0.1 U	0.3 U
		08/15/95	0.1 U	0 2 U	0.1 U	0.2 U
		11/06/95	0.1 U	0 2 U	0.1 U	0.2 U
		02/06/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		08/06/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/12/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/19/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/21/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/05/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/10/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/01/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/04	1 U	1 U	1 U	1 U
		03/03/05	1 U	1 U	1 U	1 U
		08/29/05	1 U	1 U	1 U	1 U
		03/06/06	1 U	1 U	1 U	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
D-2 (cont.)	2	03/06/06	1 U	1 U	1 U	1 U
		03/07/07	1 U	1 U	1 U	1 U
		03/07/07	1 U	1 U	1 U	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
E-2	2	11/01/88	**34**	-	**140**	-
		02/01/89	**43**	-	**150**	-
		05/01/89	**23**	5 U	**120**	10 U
		08/01/89	**28**	-	**130**	-
		02/01/90	**45**	5 U	**100**	10 U
		12/01/90	**34**	5 U	**130**	10 U
		03/01/91	**25**	5 U	**110**	10 U
		06/01/91	**26**	5 U	**120**	10 U
		05/01/92	**23**	10 U	**110**	10 U
		08/01/92	**25**	10 U	**110**	10 U
		11/01/92	**23**	10 U	**110**	10 U
		02/01/93	**21**	10 U	**110**	10 U
		05/01/93	**20**	10 U	**110**	10 U
		08/01/93	**18**	10 U	**100**	10 U
		11/01/93	**21**	10 U	**120**	10 U
		02/10/94	**19**	10 U	**110**	1 U
		05/17/94	**16.6**	**0.5**	**89.4**	1 U
		08/23/94	**16**	**0.42**	**82**	1 U
		11/08/94	**16**	**0.4**	**92**	1 U
		02/07/95	**14**	**0.47**	**93**	1 U
		05/10/95	**14**	**0.5**	**89**	1 U
		08/15/95	**14**	**0.52**	**97**	1 U
		11/06/95	**13**	**0.51**	**95**	1 U
		02/05/96	**13**	**0.53**	**100**	1 U
		05/06/96	**12**	**0.5**	**91**	1 U
		08/05/96	**14**	**0.6**	**100**	1 U
		11/11/96	**11**	**0.6**	**89**	1 U
		02/10/97	**12**	**0.5**	**93**	0.2 U
		05/05/97	**10**	**0.5**	**87**	0.2 U
		08/04/97	**10**	0 5 U	**93**	0.5 U
		10/21/97	**10**	**0.6**	**89**	0.5 U
		01/19/98	**9.0**	**0.5**	**81**	0.5 U
		04/06/98	**9.5**	**0.60**	**80**	0.5 U
		07/14/98	**8.8**	0 5 U	**83**	0.5 U
		10/06/98	**7.6**	**0.6**	**83**	0.5 U
		01/05/99	**8**	**0.6**	**81**	0.5 U
		04/01/99	**8**	0 5 U	**82**	0.5 U
		07/01/99	**6.9**	**0.5**	**89**	0.5 U
		10/05/99	**7.9**	0 5 U	**93**	0.5 U
		01/04/00	**7.2**	**0.5**	**80**	0.5 U
		04/04/00	**7.7**	0 5 U	**70**	0.5 U
		07/03/00	**7.6**	0 5 U	**84**	0.5 U
		10/10/00	**6.4**	**0.5**	**69**	0.5 U
		01/03/01	**6.2**	**0.7**	**76**	0.5 U
		04/03/01	**5.9**	**0.6**	**79**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
E-2 (cont.)	2	10/16/01	**3.5**	0 5 U	**65**	0.5 U
		04/01/02	**4.8**	0 5 U	**68**	0.5 U
		10/02/02	**3.9**	0 5 U	**70**	0.5 U
		04/02/03	**3.9**	**0.6**	**56**	0.5 U
		10/16/03	**2.9**	0 5 U	**67**	0.5 U
		03/23/04	**3.3**	1 U	**70**	1 U
		09/14/04	**2.5**	1 U	**72**	1 U
		03/03/05	**2.5**	**0.5 J**	**57**	1 U
		08/29/05	**1.6**	1 U	**56**	1 U
		03/06/06	**4.4**	1 U	**78**	1 U
		08/23/06	**2**	1 U	**65**	1 U
		03/07/07	**3.9**	1 U	**66**	1 U
		08/28/07	**2.3**	1 U	**63**	1 U
		03/03/08	**3.8**	0 5 U	**81**	0.5 U
		08/25/08	**2.5**	0 5 U	**69**	0.5 U
		03/03/09	**2.5**	**0.5**	**60**	0.5 U
		09/01/09	**1.9**	0 5 U	**55.6**	0.5 U
		03/08/10	**3.4**	**1.1**	**67.3**	0.5 U
		09/07/10	**2.5**	0 5 U	**59.4**	0.5 U
		03/07/11	**3**	0 5 U	**72.8**	0.5 U
		09/12/11	**2.6**	0 5 U	**58.7 J**	0.5 U
		03/19/12	**1.1**	0 5 U	**37.3**	0.5 U
		03/25/13	**0.65**	0 5 U	**36.8**	0.4 U
		03/10/14	**0.7**	0 5 U	**32**	0.5 U
		03/26/15	**0.6**	**0.5**	**28**	0.5 U
		03/29/16	0 5 U	**0.5**	**24**	0.5 U
		03/28/17	**0.7**	**0.6**	**34**	0.5 U
		03/29/18	**0.8**	**0.6**	**33**	0.5 U
		03/28/19	**1.2**	**0.6**	**36**	0.5 U
F-2	2	11/01/88	**45**	-	**100**	-
		02/01/89	**65**	-	**110**	-
		05/01/89	**35**	**2 J**	**110**	10 U
		08/01/89	**42**	-	**100**	-
		02/01/90	**54**	**3 J**	**84**	10 U
		12/01/90	**43**	**3 J**	**93**	10 U
		06/01/91	**40**	**3 J**	**97**	10 U
		05/01/92	**34**	**3 J**	**94**	10 U
		08/01/92	**0.3**	**3 J**	**83**	10 U
		11/01/92	**33**	**3 J**	**93**	10 U
		02/01/93	**32**	**3 J**	**89**	10 U
		05/01/93	**31**	**3 J**	**94**	10 U
		08/01/93	**27**	**3 J**	**90**	10 U
		11/01/93	**29**	**3 J**	**100**	10 U
		02/10/94	**29**	**3 J**	**97**	10 U
		05/17/94	**26.2**	**3**	**82.6**	0.3 U
		08/23/94	**22**	**2.9**	**71**	0.3 U
		11/08/94	**19**	**2.4**	**78**	0.3 U
		02/07/95	**18**	**2.4**	**78**	0.3 U
		05/10/95	**14**	**2.6**	**74**	0.3 U
		08/15/95	**13**	**2.8**	**91**	0.2 U
		11/06/95	**12**	**2.9**	**74**	0.2 U
		02/06/96	**11**	**2.5**	**77**	0.2 U
		05/07/96	**10**	**2.6**	**70**	0.2 U
		08/06/96	**10**	**2.8**	**65**	0.2 U
		11/12/96	**10**	**2.8**	**66**	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
F-2	2	02/11/97	**10**	**2.6**	**72**	0.2 U
		05/19/97	**8.3**	**2.4**	**70**	0.2 U
		08/05/97	**8.9**	**2.6**	**69**	0.5 U
		10/21/97	**8.5**	**2.7**	**67**	0.5 U
		01/19/98	**7.2**	**2.8**	**58**	0.5 U
		04/07/98	**7.6**	**2.7**	**61**	0.5 U
		07/14/98	**7.2**	**2.3**	**63**	0.5 U
		10/06/98	**5.8**	**2.7**	**51**	0.5 U
		01/05/99	**6.4**	**2.4**	**60**	0.5 U
		04/06/99	**5.7**	**2.3**	**59**	0.5 U
		07/01/99	**5.2**	**2.6**	**61**	0.5 U
		10/05/99	**5.8**	**2.7**	**66**	0.5 U
		01/04/00	**4.7**	**2.8**	**53**	0.5 U
		04/04/00	**4.7**	**2.2**	**48**	0.5 U
		07/03/00	**5.1**	**2**	**61**	0.5 U
		10/10/00	**4.3**	**2.3**	**50**	0.5 U
		01/03/01	**4.5**	**2.7**	**51**	0.5 U
		04/03/01	**4.3**	**2.3**	**53**	0.5 U
		10/16/01	**3.5**	**2.2**	**48**	0.5 U
		04/02/02	**3.3**	**2**	**46**	0.5 U
		10/02/02	**3.2**	**1.9**	**48**	0.5 U
		04/02/03	**2.8**	**2.2**	**38**	0.5 U
		10/16/03	**2.9**	**2.2**	**42**	0.5 U
		03/23/04	**2.3**	**1.8**	**43**	1 U
		09/14/04	**2.5**	**1.9**	**44**	1 U
		03/03/05	**2**	**2**	**36**	1 U
		08/29/05	**1.8**	**2.1**	**36**	1 U
		03/06/06	**1.6**	**2.1**	**34**	1 U
		03/06/06	**1.1**	**2.3**	**29**	1 U
		08/23/06	**1.1**	**2.3**	**31**	1 U
		03/07/07	**1.6**	**2.3**	**30**	1 U
		08/28/07	**0.9 J**	**2.3**	**28**	1 U
		03/03/08	**1.2**	**2.6**	**34**	0.5 U
		08/25/08	**1.5**	**1.6**	**38**	0.5 U
		03/03/09	**1.2**	**2.3**	**32**	0.5 U
		09/01/09	**0.9**	**1.8**	**25.8**	0.5 U
		03/08/10	**1.2**	**2**	**31.1**	0.5 U
		09/07/10	**0.97**	**1.5**	**27.2**	0.5 U
		03/07/11	0 5 U	**1.5 J**	**33.4**	0.5 U
		09/12/11	**1.1**	**2**	**29.6**	0.5 U
		03/19/12	**0.71**	**2**	**22.4**	0.5 U
		09/10/12	**0.75**	**1.7**	**21.7**	0.5 U
		03/25/13	**0.68**	**1.8**	**21.9**	0.4 U
		03/10/14	**0.7**	**1.6**	**21**	0.5 U
		03/26/15	**0.6**	**1.6**	**21**	0.5 U
		03/29/16	**0.8**	**1.6**	**19**	0.5 U
		03/28/17	**0.9**	**1.7**	**23**	0.5 U
		03/29/18	**1.1**	**1.6**	**22**	0.5 U
		03/28/19	**1.1**	**1.6**	**18**	0.5 U
G-2	2	11/01/88	**4**	-	**27**	-
		02/10/89	**6**	-	**25**	-
		05/01/89	**10**	-	**43**	-
		08/01/89	**6**	-	**29**	-
		02/01/90	**7**	5 U	**33**	10 U
		12/01/90	**11**	5 U	**39**	10 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
G-2 (cont.)	2	06/01/91	**14**	5 U	**45**	10 U
		05/01/92	**14**	10 U	**40**	10 U
		08/01/92	**17**	**1 J**	**45**	10 U
		11/01/92	**14**	10 U	**40**	10 U
		02/01/93	**15**	10 U	**38**	10 U
		05/01/93	**15**	**1 J**	**36**	10 U
		08/01/93	**18**	**1 J**	**40**	10 U
		02/09/94	**19**	10 U	**44**	10 U
		05/18/94	**19.2**	**1.2**	**42.4**	0.3 U
		08/24/94	**23**	**1**	**43**	0.3 U
		11/08/94	**20**	**0.91**	**36**	0.3 U
		02/08/95	**20**	**0.99**	**36**	0.3 U
		05/11/95	**21**	**1.1**	**37**	0.3 U
		08/16/95	**23**	**1.2**	**40**	0.2 U
		11/07/95	**21**	**1**	**36**	0.2 U
		02/06/96	**21**	**1.2**	**41**	0.2 U
		05/07/96	**22**	**1.1**	**39**	0.2 U
		08/06/96	**25**	**1.3**	**44**	0.2 U
		11/12/96	**22**	**1.3**	**38**	0.2 U
		02/11/97	**24**	**1.3**	**43**	0.2 U
		05/20/97	**22**	**1.2**	**42**	0.2 U
		08/05/97	**23**	**1.3**	**42**	0.5 U
		10/22/97	**24**	**1.2**	**40**	0.5 U
		01/19/98	**22**	**1.1**	**38**	0.5 U
		04/07/98	**24**	**1.4**	**38**	0.5 U
		07/14/98	**24**	**1.3**	**46**	0.5 U
		10/07/98	**19**	**1.5**	**40**	0.5 U
		01/05/99	**21**	**1.3**	**39**	0.5 U
		04/06/99	**20**	**1.2**	**41**	0.5 U
		07/01/99	**20**	**1.3**	**41**	0.5 U
		10/06/99	**20**	**1.3**	**42**	0.5 U
		01/04/00	**18**	**1.4**	**42**	0.5 U
		04/04/00	**21**	**1.2**	**41**	0.5 U
		07/03/00	**23**	**1.1**	**46**	0.5 U
		10/01/00	**19**	**1.4**	**38**	0.5 U
		01/03/01	**20**	**1.4**	**44**	0.5 U
		04/04/01	**16**	**1.4**	**37**	0.5 U
		10/16/01	**13**	**1.1**	**33**	0.5 U
		04/02/02	**11**	**1.1**	**32**	0.5 U
		10/02/02	**13**	**1**	**34**	0.5 U
		04/02/03	**7.3**	**1.2**	**25**	0.5 U
		10/16/03	**7.2**	**1**	**27**	0.5 U
		03/24/04	**5.7**	**0.9 J**	**26**	1 U
		09/16/04	**5.1**	**1.2**	**23**	1 U
		03/03/05	**4.3**	**1.1**	**21**	1 U
		08/30/05	**3.9**	**1**	**22**	1 U
		03/06/06	**0.7 J**	**0.8 J**	**15**	1 U
		08/23/06	**1.2**	**1**	**15**	1 U
		03/08/07	**1.8**	**1**	**15**	1 U
		08/28/07	**0.99 J**	**0.9 J**	**15**	1 U
		03/03/08	0 5 U	**0.99 J**	**12**	0.5 U
		08/25/08	**0.6 J**	**0.8 J**	**14**	0.5 U
		03/03/09	**1.5**	**1.2**	**17**	0.5 U
		09/01/09	0 5 U	**0.8**	**10.4**	0.5 U
		03/08/10	0 5 U	**1.4 J**	**10.8**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
G-2 (cont.)	2	09/07/10	0 5 U	**0.67**	**10**	0.5 U
		03/07/11	**0.74**	0 5 U	**12.5**	0.5 U
		09/12/11	**0.78**	**1**	**11.3**	0.5 U
		03/19/12	0 5 U	**0.97**	**8.1**	0.5 U
		03/25/13	**0.59**	**0.87**	**8.8**	0.4 U
		03/10/14	**0.9**	**0.8**	**11**	0.5 U
		03/26/15	**0.8**	**0.8**	**10**	0.5 U
		03/29/16	**1.2**	**0.8**	**11**	0.5 U
		03/29/17	**1.2**	**0.9**	**11**	0.5 U
		03/29/18	**0.8**	**0.8**	**8.5**	0.5 U
		03/28/19	**1.0**	**0.9**	**8.3**	0.5 U
H-2	2	02/01/90	5 U	5 U	5 U	10 U
		12/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	**0.1**	0.3 U
		11/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/18/94	0.1 U	0 2 U	0.1 U	0.3 U
		08/24/94	0.1 U	0 2 U	0.1 U	0.3 U
		11/09/94	0.1 U	0 2 U	0.1 U	0.3 U
		02/09/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/11/95	0.1 U	0 2 U	0.1 U	0.3 U
		08/16/95	0.1 U	0 2 U	0.1 U	0.2 U
		11/08/95	0.1 U	0 2 U	0.1 U	0.2 U
		02/06/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/08/96	0.1 U	0 2 U	0.1 U	0.2 U
		08/08/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/04/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/20/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/22/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		07/05/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		01/08/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		03/04/05	1 U	1 U	1 U	1 U
		03/06/06	1 U	1 U	1 U	1 U
		03/06/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/19/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
H-2 (cont.)	2	01/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		05/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		08/04/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		12/16/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/14/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/23/19	0 5 U	0 5 U	0 5 U	0.5 U
I-2	2	12/01/90	**22**	5 U	**60**	10 U
		03/01/91	**22**	5 U	**59**	10 U
		06/01/91	**21**	5 U	**67**	10 U
		05/01/92	**23**	10 U	**74**	10 U
		08/01/92	**25**	10 U	**77**	10 U
		11/01/92	**21**	0 2 U	**79**	0.3 U
		02/01/93	**18**	0 2 U	**91**	0.3 U
		05/01/93	**17**	0 2 U	**69**	0.3 U
		08/01/93	**19**	0 2 U	**66**	0.3 U
		11/01/93	**20**	10 U	**87**	10 U
		02/09/94	**16**	**0.1 J**	**51**	0.3 U
		05/18/94	**15.4**	0 2 U	**62**	0.3 U
		08/24/94	**17**	**0.16 J**	**73**	0.3 U
		11/09/94	**15**	0 2 U	**66**	0.3 U
		02/08/95	**14**	**0.14 J**	**63**	0.3 U
		05/11/95	**13**	**0.21**	**60**	0.3 U
		08/16/95	**14**	0 2 U	**77**	0.2 U
		11/08/95	**13**	0 2 U	**68**	0.2 U
		02/08/96	**11**	**0.22**	**68**	0.2 U
		05/08/96	**12**	**0.2**	**57**	0.2 U
		08/08/96	**12**	**0.2 J**	**55**	0.2 U
		11/04/96	**12**	**0.2**	**59**	0.2 U
		02/12/97	**11**	**0.2**	**58**	0.2 U
		05/21/97	**10**	**0.2**	**53**	0.2 U
		08/05/97	**11**	0 5 U	**50**	0.5 U
		10/22/97	**11**	**0.2 J**	**50**	0.5 U
		01/20/98	**8.9**	**0.20 J**	**45**	0.5 U
		04/13/98	**9.3**	0 5 U	**39**	0.5 U
		07/15/98	**8.8**	0 5 U	**46**	0.5 U
		10/07/98	**7.8**	0 5 U	**38**	0.5 U
		01/06/99	**7.1**	0 5 U	**44**	0.5 U
		04/07/99	**7**	0 5 U	**43**	0.5 U
		07/06/99	**8.7**	0 5 U	**44**	0.5 U
		10/06/99	**9.8**	0 5 U	**45**	0.5 U
		01/09/00	**6.7**	0 5 U	**48**	0.5 U
		04/05/00	**8.8**	0 5 U	**43**	0.5 U
		07/05/00	**11**	0 5 U	**45**	0.5 U
		10/12/00	**12**	0 5 U	**40**	0.5 U
		01/04/01	**8.3**	0 5 U	**42**	0.5 U
		04/04/01	**11**	0 5 U	**41**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
I-2 (cont.)	2	10/16/01	**11**	0 5 U	**38**	0.5 U
		04/02/02	**9**	0 5 U	**35**	0.5 U
		10/03/02	**12**	0 5 U	**37**	0.5 U
		04/07/03	**7.7**	0 5 U	**32**	0.5 U
		10/20/03	**9.4**	0 5 U	**38**	0.5 U
		03/25/04	**6.9**	1 U	**28**	1 U
		09/14/04	**12**	1 U	**41**	1 U
		03/04/05	**7.2**	1 U	**31**	1 U
		08/30/05	**7.7**	1 U	**32**	1 U
		03/06/06	**13**	1 U	**25**	1 U
		08/23/06	**9**	1 U	**25**	1 U
		03/08/07	**9.7**	1 U	**22**	1 U
		08/28/07	**8.3**	1 U	**23**	1 U
		03/03/08	**12**	0 5 U	**23**	0.5 U
		08/25/08	**9.1**	0 5 U	**22**	0.5 U
		03/03/09	**9.9**	0 5 U	**22**	0.5 U
		09/01/09	**8.2**	0 5 U	**19.7**	0.5 U
		03/09/10	**8.9**	**1 J**	**19.4**	0.5 U
		09/07/10	**5.4**	0 5 U	**16.8**	0.5 U
		03/08/11	**3.6**	0 5 U	**15.9**	0.5 U
		09/12/11	**2.5**	0 5 U	**14.7**	0.5 U
		03/20/12	**2.3**	0 5 U	**13.7**	0.5 U
		09/10/12	**1.8**	0 5 U	**12.2**	0.5 U
		03/26/13	**2**	0 5 U	**11.2**	0.4 U
		09/09/13	**1.7**	0 5 U	**12.4**	0.5 U
		03/11/14	**1.9**	0 5 U	**12**	0.5 U
		09/02/14	**1.5**	0 5 U	**12**	0.5 U
		01/20/15	**2.0**	0 5 U	**12**	0.5 U
		03/25/15	**2.0**	0 5 U	**9.6**	0.5 U
		04/20/15	**2.8**	0 5 U	**11**	0.5 U
		05/26/15	**3.3**	0 5 U	**12**	0.5 U
		08/04/15	**5.0**	0 5 U	**13**	0.5 U
		09/22/15	**6.9**	0 5 U	**14**	0.5 U
		12/16/15	**8.8**	0 5 U	**14**	0.5 U
		03/30/16	**12**	0 5 U	**16**	0.5 U
		09/26/16	**10**	0 5 U	**17**	0.5 U
		03/31/17	**11**	0 5 U	**17**	0.5 U
		09/13/17	**14**	0 5 U	**19**	0.5 U
		03/27/18	**12**	0 5 U	**20**	0.5 U
		09/26/18	**11**	0 5 U	**18**	0.5 U
		03/26/19	**13**	0 5 U	**18**	0.5 U
		09/24/19	**12**	0 5 U	**17**	0.5 U
IB-2	2	09/09/13	**0.68**	0 5 U	0 5 U	0.5 U
		04/02/14	0 5 U	0 5 U	0 5 U	0.5 U
		09/02/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/30/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/31/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/18	0 5 U	0 5 U	0 5 U	0.5 U
J-2	2	12/01/90	5 U	5 U	5 U	10 U
		03/01/91	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
J-2 (cont.)	2	05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/18/94	0.1 U	0 2 U	0.1 U	0.3 U
		08/23/94	0.1 U	0 2 U	0.1 U	0.3 U
		11/09/94	0.1 U	0 2 U	0.1 U	0.3 U
		02/08/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/08/95	0.1 U	0 2 U	0.1 U	0.3 U
		08/14/95	0.1 U	0 2 U	0.1 U	0.2 U
		11/07/95	0.1 U	0 2 U	0.1 U	0.2 U
		02/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/08/96	0.1 U	0 2 U	0.1 U	0.2 U
		08/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/04/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/19/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/23/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/15/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/11/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		03/04/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/04/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
K-2	2	12/01/90	5 U	5 U	5 U	10 U
		03/01/91	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/18/94	0.1 U	0 2 U	0.1 U	0.3 U
		08/23/94	0.1 U	0 2 U	0.1 U	0.3 U
		11/09/94	0.1 U	0 2 U	0.1 U	0.3 U
		02/08/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/08/95	0.1 U	0 2 U	0.1 U	0.3 U
		08/14/95	0.1 U	0 2 U	0.1 U	0.2 U
		11/08/95	0.1 U	0 2 U	0.1 U	0.2 U
		02/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/08/96	0.1 U	0 2 U	0.1 U	0.2 U
		08/08/96	0.1 U	0 2 U	0.1 U	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
K-2	2	11/04/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/20/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/23/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/08/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/11/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/01	0 5 U	0 5 U	0 5 U	0.5 U
		10/16/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		03/07/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/04/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
L-2	2	12/01/90	**5**	5 U	**41**	10 U
		03/01/91	**4 J**	5 U	**41**	10 U
		06/01/91	**4 J**	5 U	**39**	10 U
		11/01/91	0.1 U	0 2 U	**39**	0.3 U
		05/01/92	**3 J**	10 U	**39**	10 U
		08/01/92	0.1 U	0 2 U	**36**	0.3 U
		02/01/93	**3**	0 2 U	**30**	0.3 U
		05/01/93	**3**	0 2 U	**33**	0.3 U
		08/01/93	**3.3**	0 2 U	**38**	0.3 U
		11/01/93	**3.1**	0 2 U	**36**	0.3 U
		02/09/94	**3.2**	0 2 U	**37**	0.3 U
		05/18/94	**3.6**	0 2 U	**31.7**	0.3 U
		08/24/94	**3.5**	0 2 U	**33**	0.3 U
		11/09/94	**3.4**	0 2 U	**32**	0.3 U
		02/08/95	**3.6**	0 2 U	**30**	0.3 U
		05/11/95	**3.6**	0 2 U	**30**	0.3 U
		08/16/95	**3.9**	0 2 U	**32**	0.2 U
		11/07/95	**3.3**	0 2 U	**23**	0.2 U
		02/07/96	**4.2**	0 2 U	**33**	0.2 U
		05/09/96	**4**	0 2 U	**29**	0.2 U
		08/07/96	**3.8**	0 2 U	**28**	0.2 U
		11/04/96	**4.5**	0 2 U	**27**	0.2 U
		02/11/97	**4.7**	0 2 U	**29**	0.2 U
		05/19/97	**4.4**	0 2 U	**26**	0.2 U
		08/05/97	**4.6**	0 5 U	**29**	0.5 U
		10/27/97	**4.7**	0 5 U	**26**	0.5 U
		01/20/98	**4.7**	0 5 U	**27**	0.5 U
		04/15/98	**5**	0 5 U	**24**	0.5 U
		07/15/98	**4.9**	0 5 U	**27**	0.5 U
		10/08/98	**3.9 J**	0 5 U	**24**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
L-2 (cont.)	2	01/06/99	**4.4**	0 5 U	**24**	0.5 U
		04/08/99	**4.3**	0 5 U	**25**	0.5 U
		07/06/99	**4.7**	0 5 U	**27**	0.5 U
		10/11/99	**4.5**	0 5 U	**26**	0.5 U
		01/05/00	**4.1**	0 5 U	**28**	0.5 U
		04/06/00	**4.5**	0 5 U	**25**	0.5 U
		07/03/00	**4.9**	0 5 U	**29**	0.5 U
		10/13/00	**4**	0 5 U	**23**	0.5 U
		01/08/01	**4.3**	0 5 U	**25**	0.5 U
		04/05/01	**4.5**	0 5 U	**25**	0.5 U
		10/16/01	**3.6**	0 5 U	**23**	0.5 U
		04/03/02	**3.8**	0 5 U	**23**	0.5 U
		10/03/02	**3.9**	0 5 U	**24**	0.5 U
		04/08/03	**3.1**	0 5 U	**20**	0.5 U
		10/20/03	**2.9**	0 5 U	**22**	0.5 U
		03/24/04	**2.7**	1 U	**22**	1 U
		09/15/04	**2.7**	1 U	**21**	1 U
		03/07/05	**2.2**	1 U	**21**	1 U
		08/30/05	**1.9**	1 U	**20**	1 U
		03/07/06	**1.9**	1 U	**21**	1 U
		08/23/06	**1.8**	1 U	**24**	1 U
		03/08/07	**1.9**	1 U	**23**	1 U
		08/29/07	**0.98 J**	1 U	**19**	1 U
		03/04/08	**1.8**	0 5 U	**26**	0.5 U
		08/26/08	**1.1**	0 5 U	**22**	0.5 U
		03/04/09	**0.97**	0 5 U	**23**	0.5 U
		09/02/09	**0.9**	0 5 U	**20**	0.5 U
		03/09/10	**0.81**	**1 J**	**19.2**	0.5 U
		09/07/10	**0.73**	0 5 U	**20.2**	0.5 U
		03/07/11	0 5 U	0 5 U	**24.3**	0.5 U
		09/12/11	0 5 U	0 5 U	**18.4**	0.5 U
		03/19/12	**0.55**	0 5 U	**17.3**	0.5 U
		03/25/13	**0.52**	0 5 U	**20.4**	0.4 U
		03/10/14	0 5 U	0 5 U	**21**	0.5 U
		03/26/15	0 5 U	0 5 U	**16**	0.5 U
		03/30/16	0 5 U	0 5 U	**13**	0.5 U
		03/28/17	0 5 U	0 5 U	**17**	0.5 U
		03/29/18	0 5 U	0 5 U	**16**	0.5 U
		03/29/19	0 5 U	0 5 U	**16**	0.5 U
M-2	2	06/01/91	**2 J**	5 U	**15**	10 U
		05/01/92	**3 J**	10 U	**17**	10 U
		08/01/92	0.1 U	0 2 U	**16**	0.3 U
		11/01/92	**1.1**	0 2 U	**7.6**	0.3 U
		05/01/93	**2.3**	0 2 U	**16**	0.3 U
		11/01/93	**1.2**	0 2 U	**13**	0.3 U
		02/09/94	**1.6**	0 2 U	**12**	0.3 U
		05/18/94	**1.7**	0 2 U	**14.6**	0.3 U
		08/24/94	**1.7**	0 2 U	**15**	0.3 U
		11/09/94	**1.3**	0 2 U	**11**	0.3 U
		02/08/95	**1.4**	0 2 U	**13**	0.3 U
		05/09/95	**1.5**	0 2 U	**14**	0.3 U
		08/14/95	**0.97**	0 2 U	**13**	0.2 U
		11/08/95	**1.1**	0 2 U	**14**	0.2 U
		02/08/96	**1.2**	0 2 U	**13**	0.2 U
		05/09/96	**1.2**	0 2 U	**14**	0.2 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
M-2 (cont.)	2	08/12/96	**0.8**	0 2 U	**11**	0.2 U
		11/05/96	**0.8**	0 2 U	**9**	0.2 U
		02/12/97	**1.2**	0 2 U	**13**	0.2 U
		05/21/97	**1**	0 2 U	**12**	0.2 U
		08/07/97	**0.6**	0 5 U	**7.8**	0.5 U
		10/27/97	**0.6**	0 5 U	**7.7**	0.5 U
		01/20/98	**0.80**	0 5 U	**7.5**	0.5 U
		04/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		07/15/98	**0.7**	0 5 U	**8.8**	0.5 U
		10/12/98	0 5 U	0 5 U	**3.6**	0.5 U
		01/06/99	0 5 U	0 5 U	**4.1**	0.5 U
		04/08/99	0 5 U	0 5 U	**5.2**	0.5 U
		07/06/99	0 5 U	0 5 U	**2.3**	0.5 U
		10/11/99	0 5 U	0 5 U	**0.8**	0.5 U
		01/09/00	0 5 U	0 5 U	**1.5**	0.5 U
		04/06/00	**0.6**	0 5 U	**8.5**	0.5 U
		07/05/00	0 5 U	0 5 U	**1.1**	0.5 U
		10/13/00	0 5 U	0 5 U	**1.2**	0.5 U
		01/08/01	0 5 U	0 5 U	**5.8**	0.5 U
		04/05/01	0 5 U	0 5 U	**1.2**	0.5 U
		10/17/01	0 5 U	0 5 U	**1.7**	0.5 U
		04/03/02	0 5 U	0 5 U	**1.9**	0.5 U
		10/03/02	0 5 U	0 5 U	**1.4**	0.5 U
		04/08/03	0 5 U	0 5 U	**0.6**	0.5 U
		10/20/03	0 5 U	0 5 U	**0.8**	0.5 U
		03/25/04	1 U	1 U	**0.6 J**	1 U
		09/15/04	1 U	1 U	1 U	1 U
		03/07/05	1 U	1 U	**0.8 J**	1 U
		08/30/05	1 U	1 U	**1.7**	1 U
		03/07/06	1 U	1 U	1 U	1 U
		08/23/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	**1.6**	1 U
		08/29/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/04/09	0 5 U	0 5 U	0 5 U	0.5 U
		09/02/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/07/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/12/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/19	0 5 U	0 5 U	0 5 U	0.5 U
MW-71	2	02/12/96	**0.97**	0 2 U	0.1 U	0.2 U
		05/15/96	**0.9**	0 2 U	0.1 U	0.2 U
		08/14/96	**0.7**	0 2 U	0.1 U	0.2 U
		11/06/96	**0.6**	0 2 U	0.1 U	0.2 U
		02/14/97	**0.7**	0 2 U	0.1 U	0.2 U
		05/27/97	**0.6**	0 2 U	0.1 U	0.2 U
		08/07/97	0 5 U	0 5 U	0 5 U	0.5 U
		10/29/97	**0.3 J**	0 5 U	0 5 U	0.5 U
		01/22/98	**0.20 J**	0 5 U	0 5 U	0.5 U
		04/16/98	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-71 (cont.)	2	07/20/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/14/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/14/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/16/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/01	0 5 U	0 5 U	0 5 U	0.5 U
		10/17/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/02	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/03	0 5 U	0 5 U	0 5 U	0.5 U
		10/21/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/04	1 U	1 U	1 U	1 U
		09/16/04	1 U	1 U	1 U	1 U
		03/08/05	1 U	1 U	1 U	1 U
		03/08/05	1 U	1 U	1 U	1 U
		03/11/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/21/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
N-2	2	05/01/92	**0.6**	0 2 U	**0.2**	0.3 U
		06/01/92	**0.5**	0 2 U	0.1 U	0.3 U
		08/01/92	0.1 U	0 2 U	**0.2**	0.3 U
		11/01/92	**0.6**	0 2 U	**0.2**	0.3 U
		05/01/93	**0.4**	0 2 U	0.1 U	0.3 U
		11/01/93	**0.5**	0 2 U	0.1 U	0.3 U
		02/09/94	**0.2**	0 2 U	0.1 U	0.3 U
		05/18/94	**0.4**	0 2 U	**0.2**	0.3 U
		06/01/94	5 U	5 U	5 U	10 U
		08/24/94	**0.48**	0 2 U	0.1 U	0.3 U
		11/09/94	**0.42**	0 2 U	0.1 U	0.3 U
		02/08/95	**0.48**	0 2 U	**0.07 J**	0.3 U
		05/08/95	**0.59**	0 2 U	0.1 U	0.3 U
		08/14/95	**0.54**	0 2 U	0.1 U	0.2 U
		11/08/95	**0.5**	0 2 U	0.1 U	0.2 U
		02/08/96	**0.47**	0 2 U	0.1 U	0.2 U
		05/09/96	**0.8**	0 2 U	**0.1**	0.2 U
		08/12/96	**0.8**	0 2 U	0.1 U	0.2 U
		11/05/96	**0.8**	0 2 U	0.1 U	0.2 U
		02/12/97	**0.8**	0 2 U	0.1 U	0.2 U
		05/21/97	**0.8**	0 2 U	0.1 U	0.2 U
		08/07/97	**0.8**	0 5 U	0 5 U	0.5 U
		10/27/97	**0.9**	0 5 U	0 5 U	0.5 U
		01/21/98	**0.90**	0 5 U	0 5 U	0.5 U
		04/13/98	**0.80**	0 5 U	0 5 U	0.5 U
		07/16/98	**0.8**	0 5 U	0 5 U	0.5 U
		10/12/98	**0.6**	0 5 U	0 5 U	0.5 U
		01/11/99	**0.9**	0 5 U	0 5 U	0.5 U
		04/12/99	**1**	0 5 U	0 5 U	0.5 U
		07/07/99	**1**	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
N-2 (cont.)	2	10/12/99	**0.8**	0 5 U	0 5 U	0.5 U
		01/09/00	**0.9**	0 5 U	0 5 U	0.5 U
		04/10/00	**1.1**	0 5 U	0 5 U	0.5 U
		07/05/00	**1**	0 5 U	0 5 U	0.5 U
		10/13/00	**0.9**	0 5 U	0 5 U	0.5 U
		01/08/01	**1**	0 5 U	0 5 U	0.5 U
		04/05/01	**1.1**	0 5 U	0 5 U	0.5 U
		04/04/02	**1.2**	0 5 U	0 5 U	0.5 U
		04/08/03	**1.2**	0 5 U	0 5 U	0.5 U
		03/25/04	**1 J**	1 U	1 U	1 U
		03/07/05	**0.9 J**	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/04/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		01/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		05/26/15	**1.1**	0 5 U	0 5 U	0.5 U
		08/04/15	**1.0**	0 5 U	0 5 U	0.5 U
		09/22/15	**1.0**	0 5 U	0 5 U	0.5 U
		12/16/15	**1.0**	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	**1.1**	0 5 U	0 5 U	0.5 U
		03/31/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	**0.8**	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	**1.1**	0 5 U	**0.5**	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	**0.9**	0 5 U	**0.5**	0.5 U
O-2	2	06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		11/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/19/94	0.1 U	0 2 U	0.1 U	0.3 U
		08/24/94	0.1 U	0 2 U	0.1 U	0.3 U
		11/09/94	0.1 U	0 2 U	0.1 U	0.3 U
		02/09/95	**0.26**	0 2 U	0.1 U	0.3 U
		05/08/95	**0.56**	0 2 U	0.1 U	0.3 U
		08/14/95	**0.53**	0 2 U	0.1 U	0.2 U
		11/08/95	**0.5**	0 2 U	0.1 U	0.2 U
		02/07/96	**0.48**	0 2 U	0.1 U	0.2 U
		05/13/96	**0.9**	0 2 U	0.1 U	0.2 U
		08/12/96	**1**	0 2 U	0.1 U	0.2 U
		11/05/96	**1.1**	0 2 U	0.1 U	0.2 U
		02/13/97	**1.3**	0 2 U	0.1 U	0.2 U
		05/28/97	**1.4**	0 2 U	0.1 U	0.2 U
		08/07/97	**0.9**	0 5 U	0 5 U	0.5 U
		10/27/97	**1.3**	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
O-2 (cont.)	2	01/21/98	**1.1**	0 5 U	0 5 U	0.5 U
		04/14/98	**1.3**	0 5 U	0 5 U	0.5 U
		07/16/98	**1.6**	0 5 U	0 5 U	0.5 U
		10/12/98	**1.2**	0 5 U	0 5 U	0.5 U
		01/11/99	**1.5**	0 5 U	0 5 U	0.5 U
		04/12/99	**1.5**	0 5 U	0 5 U	0.5 U
		07/06/99	**1.1**	0 5 U	0 5 U	0.5 U
		10/12/99	**1.2**	0 5 U	0 5 U	0.5 U
		01/09/00	**1.1**	0 5 U	0 5 U	0.5 U
		04/10/00	**1.1**	0 5 U	0 5 U	0.5 U
		07/05/00	**1.3**	0 5 U	0 5 U	0.5 U
		10/13/00	**1.1**	0 5 U	0 5 U	0.5 U
		01/08/01	**1**	0 5 U	0 5 U	0.5 U
		04/06/01	**1.1**	0 5 U	0 5 U	0.5 U
		04/04/02	**1.5**	0 5 U	0 5 U	0.5 U
		04/08/03	**1.2**	0 5 U	0 5 U	0.5 U
		03/29/04	**1.1**	1 U	1 U	1 U
		03/07/05	**1**	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/21/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		01/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/21/15	0 5 U	0 5 U	0 5 U	0.5 U
		05/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		08/04/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		12/16/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/14/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/25/19	0 5 U	0 5 U	0 5 U	0.5 U
OA-3a-68	2	8/4/2016	0 5 U	0 5 U	0 5 U	0.5 U
R-2	2	02/13/96	0.1 U	0 2 U	**0.32**	0.2 U
		05/13/96	0.1 U	0 2 U	**0.3**	0.2 U
		08/13/96	0.1 U	0 2 U	**0.3**	0.2 U
		11/05/96	0.1 U	0 2 U	**0.2**	0.2 U
		05/27/97	0.1 U	0 2 U	**0.2**	0.2 U
		08/07/97	0 5 U	0 5 U	0 5 U	0.5 U
		10/28/97	0 5 U	0 5 U	0 5 U	0.5 U
		01/21/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/98	0 5 U	0 5 U	0 5 U	0.5 U
		07/20/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/13/99	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
R-2 (cont.)	2	10/13/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/16/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/04	1 U	1 U	1 U	1 U
		03/07/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/30/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
S-2	2	02/12/96	**3.8**	0 2 U	0.1 U	0.2 U
		05/14/96	**3.5**	0 2 U	0.1 U	0.2 U
		08/13/96	**3.5**	0 2 U	0.1 U	0.2 U
		11/06/96	**3.5**	0 2 U	0.1 U	0.2 U
		02/13/97	**3.7**	0 2 U	0.1 U	0.2 U
		05/27/97	**3.7**	0 2 U	0.1 U	0.2 U
		08/07/97	**4.2**	0 5 U	0 5 U	0.5 U
		10/28/97	**3.8**	0 5 U	0 5 U	0.5 U
		01/21/98	**3.8**	0 5 U	0 5 U	0.5 U
		04/14/98	**4.1**	0 5 U	0 5 U	0.5 U
		07/20/98	**3.6**	0 5 U	0 5 U	0.5 U
		10/13/98	**2.7 J**	0 5 U	0 5 U	0.5 U
		01/11/99	**3.5**	0 5 U	0 5 U	0.5 U
		04/13/99	**3.2**	0 5 U	0 5 U	0.5 U
		07/07/99	**3.1**	0 5 U	0 5 U	0.5 U
		10/13/99	**2.9**	0 5 U	**0.4 J**	0.5 U
		01/10/00	**2.3**	0 5 U	**0.7**	0.5 U
		04/11/00	**2.5**	0 5 U	**0.6**	0.5 U
		07/06/00	**2.6**	0 5 U	**0.7**	0.5 U
		10/16/00	**2.4**	0 5 U	**0.7**	0.5 U
		01/08/01	**2.2**	0 5 U	**1**	0.5 U
		04/06/01	**2.3**	0 5 U	**1.3**	0.5 U
		04/08/02	**1.8**	0 5 U	**1.8**	0.5 U
		04/09/03	**1.6**	0 5 U	**3**	0.5 U
		03/29/04	**1.2**	1 U	**3**	1 U
		03/08/05	**1**	1 U	**4.2**	1 U
		08/31/05	**1.1**	1 U	**4.7**	1 U
		03/07/06	**1.1**	1 U	**5.7**	1 U
		08/24/06	**1**	1 U	**7.7**	1 U
		03/12/07	**0.98 J**	1 U	**6.5**	1 U
		08/29/07	**0.6 J**	1 U	**5.8**	1 U
		03/04/08	**0.8 J**	0 5 U	**8.4**	0.5 U
		08/26/08	**0.6 J**	0 5 U	**9.7**	0.5 U
		03/05/09	**0.5**	0 5 U	**9.4**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
S-2	2	09/02/09	**0.5**	0 5 U	**7.7**	0.5 U
		04/20/10	**0.5**	0 5 U	**8.5**	0.5 U
		09/08/10	0 5 U	0 5 U	**8.6**	0.5 U
		03/08/11	0 5 U	0 5 U	**8.8**	0.5 U
		09/13/11	0 5 U	0 5 U	**10.8**	0.5 U
		03/20/12	0 5 U	0 5 U	**7.8**	0.5 U
		09/10/12	0 5 U	0 5 U	**9.3**	0.5 U
		03/26/13	0 5 U	0 5 U	**8.5**	0.4 U
		09/09/13	0 5 U	0 5 U	**9.4**	0.5 U
		03/11/14	0 5 U	0 5 U	**11**	0.5 U
		09/03/14	0 5 U	0 5 U	**12**	0.5 U
		01/20/15	0 5 U	0 5 U	**10**	0.5 U
		03/23/15	0 5 U	0 5 U	**0.9**	0.5 U
		04/20/15	0 5 U	0 5 U	**2.1**	0.5 U
		05/26/15	0 5 U	0 5 U	**2.0**	0.5 U
		08/04/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		12/16/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/25/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	0 5 U	0 5 U	0 5 U	0.5 U
SA-2	2	10/01/09	0 2 U	-	**1.7**	-
		03/10/10	0 5 U	0 5 U	**2.9**	0.5 U
		09/08/10	0 5 U	0 5 U	**3.4**	0.5 U
		03/09/11	0 5 U	0 5 U	**4.4**	0.5 U
		09/13/11	0 5 U	0 5 U	**3.4**	0.5 U
		03/20/12	0 5 U	0 5 U	**3.6**	0.5 U
		09/10/12	0 5 U	0 5 U	**3.9**	0.5 U
		03/26/13	0 5 U	0 5 U	**3.3**	0.4 U
		09/09/13	0 5 U	0 5 U	**3.9**	0.5 U
		03/11/14	0 5 U	0 5 U	**4.8**	0.5 U
		09/03/14	0 5 U	0 5 U	**5**	0.5 U
		01/20/15	0 5 U	0 5 U	**4.1**	0.5 U
		03/23/15	0 5 U	0 5 U	**4.0**	0.5 U
		04/20/15	0 5 U	0 5 U	**4.0**	0.5 U
		05/26/15	0 5 U	0 5 U	**4.3**	0.5 U
		08/04/15	0 5 U	0 5 U	**3.9**	0.5 U
		09/22/15	0 5 U	0 5 U	**4.7**	0.5 U
		12/16/15	0 5 U	0 5 U	**4.2**	0.5 U
		03/30/16	0 5 U	0 5 U	**4.6**	0.5 U
		09/26/16	0 5 U	0 5 U	**4.3**	0.5 U
		03/27/17	0 5 U	0 5 U	**3.9**	0.5 U
		09/14/17	0 5 U	0 5 U	**4.1**	0.5 U
		03/28/18	0 5 U	0 5 U	**4.9**	0.5 U
		03/28/19	0 5 U	0 5 U	**5.0**	0.5 U
		09/24/19	0 5 U	0 5 U	**5.3**	0.5 U
SB-2	2	10/01/09	0 2 U	-	0 2 U	-
		03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
SB-2 (cont.)	2	09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		01/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		05/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		08/04/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		12/16/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/14/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	0 5 U	0 5 U	0 5 U	0.5 U
SC-2	2	10/01/09	**1.4**	-	**22**	-
		03/10/10	**1.8**	0 5 U	**27.3**	0.5 U
		09/08/10	**1.8**	0 5 U	**26.4**	0.5 U
		03/09/11	**0.93**	0 5 U	**29.5**	0.5 U
		09/13/11	**1.5**	0 5 U	**27.5**	0.5 U
		03/20/12	**1.5**	0 5 U	**18.6**	0.5 U
		09/10/12	**1.3**	0 5 U	**20.9**	0.5 U
		03/26/13	**0.8**	0 5 U	**20.4**	0.4 U
		09/09/13	**1.4**	0 5 U	**20.6**	0.5 U
		03/11/14	**1.4**	0 5 U	**21**	0.5 U
		09/03/14	**1.1**	0 5 U	**25**	0.5 U
		01/20/15	**1**	0 5 U	**21**	0.5 U
		03/23/15	**0.9**	0 5 U	**19**	0.5 U
		04/20/15	**0.6**	0 5 U	**14**	0.5 U
		05/26/15	0 5 U	0 5 U	**9.0**	0.5 U
		08/04/15	0 5 U	0 5 U	**9.6**	0.5 U
		09/22/15	0 5 U	0 5 U	**11**	0.5 U
		12/16/15	0 5 U	0 5 U	**8.4**	0.5 U
		03/30/16	**0.6**	0 5 U	**13**	0.5 U
		09/26/16	0 5 U	0 5 U	**8.1**	0.5 U
		03/27/17	**0.6**	0 5 U	**12**	0.5 U
		09/13/17	0 5 U	0 5 U	**7.8**	0.5 U
		03/29/18	0 5 U	0 5 U	**11**	0.5 U
		09/25/18	0 5 U	0 5 U	**7.3**	0.5 U
		03/25/19	0 5 U	0 5 U	**7.1**	0.5 U
		09/24/19	0 5 U	0 5 U	**5.7**	0.5 U
SD-2	2	03/10/10	**1.5**	0 5 U	**10.7**	0.5 U
		09/08/10	**1.7**	0 5 U	**16.5**	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	**6.2**	0.5 U
		03/20/12	**1**	0 5 U	**6.5**	0.5 U
		09/10/12	**1.3**	0 5 U	**14.2**	0.5 U
		03/26/13	**1.1**	0 5 U	**10**	0.4 U
		09/09/13	**1.2**	0 5 U	**11.9**	0.5 U
		03/11/14	**0.9**	0 5 U	**7.6**	0.5 U
		09/03/14	**1.1**	0 5 U	**23**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
SD-2 (cont.)	2	01/20/15	**1.4**	0 5 U	**24**	0.5 U
		03/25/15	**1.2**	0 5 U	**16**	0.5 U
		04/20/15	**1.0**	0 5 U	**19**	0.5 U
		05/26/15	**0.8**	0 5 U	**20**	0.5 U
		08/04/15	**0.9**	0 5 U	**19**	0.5 U
		09/22/15	**1.4**	0 5 U	**22**	0.5 U
		03/28/16	**1.6**	0 5 U	**25**	0.5 U
		09/26/16	0 5 U	0 5 U	**13**	0.5 U
		03/27/17	**1.1**	0 5 U	**15**	0.5 U
		09/13/17	**0.8**	0 5 U	**18**	0.5 U
		03/28/18	**0.8**	0 5 U	**15**	0.5 U
		09/26/18	0 5 U	0 5 U	**9.8**	0.5 U
		03/26/19	**1.1**	0 5 U	**13**	0.5 U
		09/24/19	0 5 U	0 5 U	**9.5**	0.5 U
SE-2	2	03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		01/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		05/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		08/04/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		12/16/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/30/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	0 5 U	0 5 U	0 5 U	0.5 U
U-2	2	02/12/96	**1.1**	0 2 U	0.1 U	0.2 U
		05/15/96	**1**	0 2 U	0.1 U	0.2 U
		11/06/96	**1**	0 2 U	0.1 U	0.2 U
		02/13/97	**1.1**	0 2 U	0.1 U	0.2 U
		05/27/97	**1.1**	0 2 U	0.1 U	0.2 U
		08/07/97	**1.2**	0 5 U	0 5 U	0.5 U
		10/28/97	**1.5**	0 5 U	0 5 U	0.5 U
		01/21/98	**1.4**	0 5 U	0 5 U	0.5 U
		04/15/98	**1.2**	0 5 U	0 5 U	0.5 U
		07/20/98	**1.1**	0 5 U	0 5 U	0.5 U
		10/14/98	**0.6 J**	0 5 U	0 5 U	0.5 U
		01/11/99	**0.9**	0 5 U	0 5 U	0.5 U
		04/14/99	**0.8**	0 5 U	0 5 U	0.5 U
		07/07/99	**1**	0 5 U	0 5 U	0.5 U
		10/13/99	**0.7**	0 5 U	0 5 U	0.5 U
		01/10/00	**0.7**	0 5 U	0 5 U	0.5 U
		04/11/00	**0.8**	0 5 U	0 5 U	0.5 U
		07/06/00	**0.8**	0 5 U	0 5 U	0.5 U
		10/16/00	**0.5**	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
U-2 (cont.)	2	01/09/01	**0.8**	0 5 U	0 5 U	0.5 U
		04/09/01	**0.9**	0 5 U	0 5 U	0.5 U
		04/08/02	**0.7**	0 5 U	0 5 U	0.5 U
		04/09/03	**0.7**	0 5 U	0 5 U	0.5 U
		03/29/04	1 U	1 U	1 U	1 U
		03/08/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	**0.3 J**	0 5 U	**0.5 J**	0.5 U
		03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	**0.91**	0.5 U
		03/20/12	0 5 U	0 5 U	**0.97**	0.5 U
		03/26/13	0 5 U	0 5 U	**1.1**	0.4 U
		03/11/14	0 5 U	0 5 U	**1.6**	0.5 U
		01/20/15	0 5 U	0 5 U	**1.8**	0.5 U
		03/25/15	0 5 U	0 5 U	**1.4**	0.5 U
		04/20/15	0 5 U	0 5 U	**1.2**	0.5 U
		05/26/15	0 5 U	0 5 U	**0.8**	0.5 U
		08/04/15	0 5 U	0 5 U	**1.3**	0.5 U
		09/22/15	0 5 U	0 5 U	**1.5**	0.5 U
		12/16/15	0 5 U	0 5 U	**2.0**	0.5 U
		03/29/16	0 5 U	0 5 U	**1.3**	0.5 U
		09/26/16	0 5 U	0 5 U	**1.6**	0.5 U
		03/27/17	0 5 U	0 5 U	**1.9**	0.5 U
		09/14/17	0 5 U	0 5 U	**1.4**	0.5 U
		03/28/18	0 5 U	0 5 U	**1.3**	0.5 U
		09/26/18	0 5 U	0 5 U	**1.1**	0.5 U
		03/26/19	0 5 U	0 5 U	**1.3**	0.5 U
		09/24/19	0 5 U	0 5 U	**1.4**	0.5 U
Aquifer 3a						
I-3a	3a	12/10/96	**40**	0 2 U	**26**	0.1 U
		05/21/97	**37**	0 2 U	**28**	0.2 U
		08/05/97	**40**	0 5 U	**31**	0.5 U
		10/22/97	**41**	0 5 U	**26**	0.5 U
		01/20/98	**40**	0 5 U	**29**	0.5 U
		04/13/98	**40**	0 5 U	**27**	0.5 U
		07/15/98	**41**	0 5 U	**29**	0.5 U
		10/07/98	**35**	0 5 U	**26**	0.5 U
		01/06/99	**39**	0 5 U	**25**	0.5 U
		04/07/99	**38**	0 5 U	**25**	0.5 U
		07/06/99	**41**	0 5 U	**31**	0.5 U
		10/06/99	**42**	0 5 U	**33**	0.5 U
		01/09/00	**37**	0 5 U	**33**	0.5 U
		04/05/00	**44**	0 5 U	**31**	0.5 U
		07/05/00	**45**	0 5 U	**34**	0.5 U
		10/12/00	**40**	0 5 U	**30**	0.5 U
		01/04/01	**41**	0 5 U	**29**	0.5 U
		04/04/01	**44**	0 5 U	**27**	0.5 U
		10/16/01	**43**	0 5 U	**24**	0.5 U
		04/02/02	**43**	0 5 U	**26**	0.5 U
		10/03/02	**46**	0 5 U	**29**	0.5 U
		04/07/03	**36**	0 5 U	**23**	0.5 U
		10/20/03	**44**	0 5 U	**24**	0.5 U
		03/25/04	**37**	1 U	**19**	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
I-3a (cont.)	3a	09/14/04	**50**	1 U	**27**	1 U
		03/04/05	**34**	1 U	**20**	1 U
		08/30/05	**37**	1 U	**23**	1 U
		03/06/06	**16**	1 U	**55**	1 U
		08/23/06	**9.1**	1 U	**56**	1 U
		03/08/07	**5.2**	**0.7 J**	**37**	1 U
I-3a[1]	3a	04/24/07	**33**	1 U	**20**	1 U
		04/24/07	**5**	**0.6 J**	**38**	1 U
		08/28/07	**5.5**	**0.6 J**	**39**	1 U
		08/28/07	**33**	1 U	**19**	1 U
		03/03/08	**4.8**	**0.7 J**	**39**	0.5 U
		03/03/08	**32**	0 5 U	**21**	0.5 U
I-3a	3a	08/25/08	**4.4**	**0.6 J**	**36**	0.5 U
		03/03/09	**4.3**	**0.8**	**35**	0.5 U
		09/01/09	**4.9**	**0.6**	**32.2**	0.5 U
		03/09/10	**4.4**	**1.3 J**	**31.7**	0.5 U
		09/07/10	**5**	**0.53**	**30.8**	0.5 U
		03/08/11	**3.3**	**0.56 J**	**28.4**	0.5 U
		09/12/11	**4.2**	**0.81**	**31.2**	0.5 U
		03/20/12	**3.1**	**0.93**	**25.2**	0.5 U
		09/10/12	**4**	**0.74**	**25.5**	0.5 U
		03/26/13	**2.3**	**0.75**	**21.4**	0.4 U
		09/09/13	**2.5**	0 5 U	**21.9**	0.5 U
		03/11/14	**2.3**	**0.7**	**23**	0.5 U
		09/02/14	**2.5**	**0.7**	**21**	0.5 U
		03/25/15	**2.3**	**0.7**	**20**	0.5 U
		09/23/15	**2.7**	**0.6**	**24**	0.5 U
		03/30/16	**3.1**	**0.8**	**20**	0.5 U
		09/26/16	**2.9**	**0.8**	**24**	0.5 U
		03/31/17	**2.8**	**0.8**	**23**	0.5 U
		09/13/17	**3.1**	**0.8**	**28**	0.5 U
		03/27/18	**2.9**	**0.7**	**26**	0.5 U
		03/26/19	**3.4**	**0.9**	**27**	0.5 U
IA-3a	3a	08/17/11	**31.6**	0 5 U	**74.9**	0.5 U
		09/13/11	**27.4**	0 5 U	**63.2 J**	0.5 U
		03/20/12	**63.3**	0 5 U	**1.8**	0.5 U
		09/10/12	**68.2**	0 5 U	**1.2**	0.5 U
IA-3a[2]	3a	10/11/12	**39.3**	0 5 U	**37.2**	0.5 U
		10/11/12	**24.5**	0 5 U	**8.9**	0.5 U
IA-3a	3a	03/26/13	**59.5**	0 5 U	**9.8**	0.4 U
IA-3a[2]	3a	04/23/13	**44.1**	0 5 U	**26.2**	0.4 U
		04/23/13	**46.8**	0 5 U	**72.1**	0.4 U
		04/23/13	**43.1**	0 5 U	**92.2**	0.4 U
		04/23/13	**41.6**	0 5 U	**104**	0.4 U
		04/23/13	**40.6**	0 5 U	**108**	0.4 U
		04/23/13	**63.7**	0 5 U	**11.4**	0.4 U
		04/23/13	**44**	0 5 U	**26.7**	0.4 U
		09/25/13	**43.4**	0 5 U	**31.6**	0.5 U
		09/25/13	**31.1**	0 5 U	**20.6**	0.5 U
		09/25/13	**21.1**	0 5 U	**24**	0.5 U
		04/02/14	**28**	0 5 U	**49**	0.5 U
		04/02/14	**24**	0 5 U	**38**	0.5 U
		04/02/14	**23**	0 5 U	**32**	0.5 U
IA-3a	3a	09/03/14	**25**	0 5 U	**86**	0.5 U
		03/24/15	**23**	0 5 U	**71**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
IA-3a (cont.)	3a	09/23/15	**21**	0 5 U	**74**	0.5 U
		03/29/16	**22**	0 5 U	**69**	0.5 U
		09/27/16	**19**	0 5 U	**67**	0.5 U
		03/30/17	**19**	0 5 U	**69**	0.5 U
		09/13/17	**22**	0 5 U	**92**	0.5 U
		03/26/18	**19**	0 5 U	**82**	0.5 U
		09/25/18	**17**	0 5 U	**77**	0.5 U
		03/27/19	**18**	0 5 U	**78**	0.5 U
		09/23/19	**16**	0 5 U	**75**	0.5 U
IB-3a	3a	08/28/13	**10.4**	0 5 U	**0.84**	0.4 U
		09/09/13	**11.6**	0 5 U	0 5 U	0.5 U
		04/02/14	**9.8**	0 5 U	0 5 U	0.5 U
		09/02/14	**11**	0 5 U	0 5 U	0.5 U
		03/23/15	**10**	0 5 U	0 5 U	0.5 U
		09/23/15	**8.4**	0 5 U	0 5 U	0.5 U
		03/30/16	**8.8**	0 5 U	0 5 U	0.5 U
		09/26/16	**9.2**	0 5 U	0 5 U	0.5 U
		03/31/17	**9.4**	0 5 U	0 5 U	0.5 U
		09/13/17	**8.9**	0 5 U	0 5 U	0.5 U
		03/29/18	**11**	0 5 U	0 5 U	0.5 U
		03/27/19	**11**	0 5 U	0 5 U	0.5 U
MA-3a	3a	08/28/13	**5.8**	0 5 U	**22.4**	0.4 U
		09/09/13	**6.8**	0 5 U	**22.5**	0.5 U
		03/11/14	**4.8**	0 5 U	**12**	0.5 U
		09/02/14	**3.9**	0 5 U	**13**	0.5 U
		03/25/15	**4.9**	0 5 U	**18**	0.5 U
		09/23/15	**5.3**	0 5 U	**24**	0.5 U
		03/28/16	**5.7**	0 5 U	**21**	0.5 U
		09/27/16	**5.2**	0 5 U	**26**	0.5 U
		03/28/17	**4.8**	0 5 U	**28**	0.5 U
		09/14/17	**4.3**	0 5 U	**23**	0.5 U
		03/27/18	**3.9**	0 5 U	**27**	0.5 U
		03/27/19	**3.2**	0 5 U	**27**	0.5 U
		09/25/19	**2.5**	0 5 U	**24**	0.5 U
N-3a	3a	12/10/96	**0.1**	0 2 U	0 3 U	0.2 U
		02/12/97	**0.1**	0 2 U	**0.2**	0.2 U
		02/12/97	**0.1**	0 2 U	**0.2**	0.2 U
		05/21/97	**0.2**	0 2 U	**0.4**	0.2 U
		08/07/97	0 5 U	0 5 U	**0.6**	0.5 U
		10/27/97	**0.3 J**	0 5 U	**0.4 J**	0.5 U
		01/21/98	**0.5 J**	0 5 U	**0.5 J**	0.5 U
		04/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		07/16/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/10/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/03	**0.5**	0 5 U	0 5 U	0.5 U
		03/25/04	1 U	1 U	1 U	1 U
		03/07/05	1 U	1 U	1 U	1 U
		03/07/06	**1.9**	1 U	1 U	1 U
		03/08/07	**1.9**	1 U	1 U	1 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
N-3a (cont.)	3a	03/04/08	**1.7**	0 5 U	0 5 U	0.5 U
		03/04/09	**1.5**	0 5 U	**0.3 J**	0.5 U
		03/09/10	**1.5**	0 5 U	0 5 U	0.5 U
		03/08/11	**1.1**	0 5 U	0 5 U	0.5 U
		03/20/12	**0.84**	0 5 U	0 5 U	0.5 U
		03/26/13	**0.59**	0 5 U	0 5 U	0.4 U
		03/11/14	**0.6**	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/31/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/19	0 5 U	0 5 U	0 5 U	0.5 U
O-3a	3a	05/27/97	**4.5**	1 U	1 U	1 U
		10/27/97	**0.2 J**	0 5 U	0 5 U	0.5 U
		04/14/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/99	**0.4 J**	0 5 U	0 5 U	0.5 U
		04/10/00	**0.5**	0 5 U	0 5 U	0.5 U
		07/05/00	**0.5**	0 5 U	0 5 U	0.5 U
		10/13/00	**0.5**	0 5 U	0 5 U	0.5 U
		04/06/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/02	**0.6**	0 5 U	0 5 U	0.5 U
		04/08/03	**0.8**	0 5 U	0 5 U	0.5 U
		03/29/04	**0.7 J**	1 U	1 U	1 U
		03/07/05	**0.9 J**	1 U	1 U	1 U
		03/07/06	**4.9**	1 U	1 U	1 U
		03/12/07	**5**	1 U	1 U	1 U
		03/04/08	**4.5**	0 5 U	0 5 U	0.5 U
		03/05/09	**5.5**	0 5 U	0 5 U	0.5 U
		03/09/10	**5.9**	0 5 U	0 5 U	0.5 U
		03/07/11	**5.5**	0 5 U	0 5 U	0.5 U
		03/21/12	**3.8**	0 5 U	0 5 U	0.5 U
		03/26/13	**4.4**	0 5 U	0 5 U	0.4 U
		03/12/14	**4.5**	0 5 U	0 5 U	0.5 U
		03/24/15	**4.7**	0 5 U	0 5 U	0.5 U
		03/28/16	**4.2**	0 5 U	0 5 U	0.5 U
		03/28/17	**4.0**	0 5 U	0 5 U	0.5 U
		03/27/18	**5.0**	0 5 U	0 5 U	0.5 U
		03/25/19	**3.8**	0 5 U	0 5 U	0.5 U
OA-3a	3a	08/18/16	**4.3**	0 5 U	0 5 U	0.5 U
		09/27/16	**3.8**	0 5 U	0 5 U	0.5 U
		04/03/17	**4.2**	0 5 U	0 5 U	0.5 U
		09/13/17	**4.1**	0 5 U	0 5 U	0.5 U
		03/28/18	**5.9**	0 5 U	0 5 U	0.5 U
		03/25/19	**4.3**	0 5 U	0 5 U	0.5 U
SD-3a	3a	08/28/13	**2.5**	0 5 U	0 5 U	0.4 U
		09/09/13	**2.9**	0 5 U	0 5 U	0.5 U
		03/11/14	**5.1**	0 5 U	0 5 U	0.5 U
		09/03/14	**10**	0 5 U	0 5 U	0.5 U
		03/25/15	**12**	0 5 U	0 5 U	0.5 U
		09/22/15	**11**	0 5 U	0 5 U	0.5 U
		12/16/15	**9.6**	0 5 U	0 5 U	0.5 U
		03/28/16	**8.6**	0 5 U	0 5 U	0.5 U
		09/26/16	**13**	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
SD-3a (cont.)	3a	03/28/17	**12**	0 5 U	0 5 U	0.5 U
		09/13/17	**11**	0 5 U	0 5 U	0.5 U
		03/28/18	**12**	0 5 U	0 5 U	0.5 U
		03/26/19	**15**	0 5 U	0 5 U	0.5 U
TB-3a	3a	09/09/14	0 5 U	0 5 U	0 5 U	0.5 U
		04/20/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/27/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/14/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
U-3a	3a	12/10/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/27/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/28/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/15/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/14/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/16/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/04	1 U	1 U	1 U	1 U
		03/08/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	**1.1**	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	**0.3 J**	0.5 U
		03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/20/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/11/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
Aquifer 3						
B-3	3	02/01/90	5 U	5 U	5 U	10 U
		05/01/90	5 U	5 U	5 U	10 U
		12/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/17/94	0.1 U	0 2 U	0.1 U	0.3 U
		05/10/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/06/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/11/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/06/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/21/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/05/99	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
B-3 (cont.)	3	10/04/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/10/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/01/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/03	**0.5**	0 5 U	0 5 U	0.5 U
		03/23/04	1 U	1 U	1 U	1 U
		03/02/05	**0.5 J**	1 U	1 U	1 U
		08/29/05	**0.8 J**	1 U	1 U	1 U
		03/06/06	**1.3**	1 U	1 U	1 U
		03/07/07	**1.6**	1 U	1 U	1 U
		03/03/08	**1.6**	0 5 U	0 5 U	0.5 U
		03/03/09	**1.8**	0 5 U	0 5 U	0.5 U
		03/08/10	**2.5**	0 5 U	0 5 U	0.5 U
		03/07/11	**2.7**	0 5 U	0 5 U	0.5 U
		03/19/12	**2.5**	0 5 U	0 5 U	0.5 U
		03/25/13	**3.5**	0 5 U	0 5 U	0.4 U
		03/10/14	**3.6**	0 5 U	0 5 U	0.5 U
		03/26/15	**4.5**	0 5 U	0 5 U	0.5 U
		03/29/16	**5.3**	0 5 U	0 5 U	0.5 U
		03/29/17	**6.6**	0 5 U	0 5 U	0.5 U
		03/29/18	**8.7**	0 5 U	0 5 U	0.5 U
		03/29/19	**10**	0 5 U	0 5 U	0.5 U
D-3	3	02/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/17/94	0.1 U	0 2 U	0.1 U	0.3 U
		05/10/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/12/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/19/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/21/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/05/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/10/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/03/01	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/05	1 U	1 U	1 U	1 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/27/17	0 5 U	0 5 U	0 5 U	0.5 U
H-3	3	02/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/18/94	0.1 U	0 2 U	0.1 U	0.3 U
		05/11/95	0.1 U	0 2 U	**0.08 J**	0.3 U
		02/06/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/08/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/12/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/20/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/22/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/98	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
H-3 (cont.)	3	10/07/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/99	0 5 U	0 5 U	0 5 U	0.5 U
		07/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		01/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/07/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		03/04/05	1 U	1 U	1 U	1 U
		03/06/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/19/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/18	0 5 U	0 5 U	0 5 U	0.5 U
I-3	3	02/01/90	5 U	5 U	5 U	10 U
		06/01/91	**1 J**	5 U	5 U	10 U
		04/01/92	10 U	10 U	10 U	10 U
		06/01/92	**3.4**	0 2 U	0.1 U	**0.7**
		08/01/92	**4.1**	0 2 U	0.1 U	0.3 U
		11/01/92	**6.2**	0 2 U	0.1 U	**0.9**
		03/01/93	0.1 U	0 2 U	0.1 U	**0.8**
		05/01/93	**7.7**	0 2 U	0.1 U	**0.6**
		08/01/93	**10**	0 2 U	0.1 U	0.3 U
		11/01/93	**11**	0 2 U	0.1 U	0.3 U
		02/09/94	**11**	0 2 U	0.1 U	0.3 U
		05/18/94	**13.9**	0 2 U	0.1 U	**0.8**
		02/08/95	**15**	0 2 U	0.1 U	0.3 U
		05/11/95	**16**	0 2 U	0.1 U	**0.63**
		08/16/95	**17**	0 2 U	0.1 U	**0.82**
		11/08/95	**17**	0 2 U	0.1 U	**0.63**
		02/08/96	**17**	0 2 U	0.1 U	**0.8**
		05/08/96	**17**	0 2 U	0.1 U	**0.8**
		08/08/96	**15**	0 2 U	0.1 U	**0.8**
		11/04/96	**17**	0 2 U	0.1 U	0.2 U
		02/12/97	**14**	0 2 U	0.1 U	**0.6**
		05/21/97	**15**	0 2 U	0.1 U	**0.6**
		08/05/97	**11**	0 5 U	0 5 U	**0.8**
		10/22/97	**11**	0 5 U	0 5 U	**0.7**
		01/20/98	**6.0**	0 5 U	0 5 U	**0.60**
		04/13/98	**5.3**	0 5 U	0 5 U	**0.60**
		07/15/98	**5.7**	0 5 U	0 5 U	**0.6**
		10/07/98	**4.8**	0 5 U	0 5 U	**0.70**
		01/06/99	**5.1**	0 5 U	0 5 U	**0.7**
		04/07/99	**4.5**	0 5 U	0 5 U	**0.6**

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
I-3 (cont.)	3	07/06/99	**8.2**	0 5 U	0 5 U	**0.9**
		10/06/99	**4.8**	0 5 U	0 5 U	**0.9**
		01/09/00	**7.9**	0 5 U	0 5 U	**1**
		04/05/00	**6.2**	0 5 U	0 5 U	**1**
		07/05/00	**6.4**	0 5 U	0 5 U	**1**
		10/12/00	**5.4**	0 5 U	0 5 U	**0.8**
		01/04/01	**5.4**	0 5 U	0 5 U	**0.8**
		04/04/01	**4.5**	0 5 U	0 5 U	**0.9**
		10/16/01	**5.3**	0 5 U	0 5 U	**0.9**
		04/02/02	**5.6**	0 5 U	0 5 U	0.5 U
		10/03/02	**7**	0 5 U	0 5 U	**0.8**
		04/07/03	**5.3**	0 5 U	0 5 U	**1**
		10/20/03	**6.3**	0 5 U	0 5 U	**1.00**
		03/25/04	**5.6**	1 U	1 U	**0.8 J**
		09/14/04	**7**	1 U	1 U	**1 J**
		03/04/05	**4.6**	1 U	1 U	**0.7 J**
		08/30/05	**5.5**	1 U	1 U	**0.8 J**
		03/06/06	**1.4**	1 U	1 U	**1.2**
		08/23/06	**11**	1 U	1 U	**0.6 J**
		03/08/07	**10**	1 U	1 U	1 U
		08/28/07	**11**	1 U	1 U	1 U
		03/03/08	**13**	0 5 U	0 5 U	0.5 U
		08/25/08	**10**	0 5 U	0 5 U	0.5 U
		03/03/09	**11**	0 5 U	0 5 U	0.5 U
		09/01/09	**14.3**	0 5 U	0 5 U	0.5 U
		03/09/10	**17.8**	0 5 U	0 5 U	**0.97**
		09/07/10	**14.7**	0 5 U	0 5 U	0.5 U
		03/08/11	**15.9**	0 5 U	0 5 U	0.5 U
		09/12/11	**18.5**	0 5 U	0 5 U	0.5 U
		03/20/12	**14.4**	0 5 U	0 5 U	0.5 U
		09/10/12	**17.2**	0 5 U	0 5 U	0.5 U
		03/26/13	**17.4**	0 5 U	0 5 U	0.4 U
		03/11/14	**18**	0 5 U	0 5 U	0.5 U
		03/25/15	**15**	0 5 U	0 5 U	0.5 U
		03/30/16	**16**	0 5 U	0 5 U	0.5 U
		03/31/17	**14**	0 5 U	0 5 U	0.5 U
		03/27/18	**16**	0 5 U	0 5 U	0.5 U
		03/26/19	**14**	0 5 U	0 5 U	0.5 U
IA-3	3	08/17/11	**12.5**	0 5 U	**0.94**	0.5 U
		09/13/11	**17.2**	0 5 U	**1.1**	0.5 U
		03/20/12	**14.1**	0 5 U	**0.7**	0.5 U
		09/10/12	**15.5**	0 5 U	**0.92**	0.5 U
		03/26/13	**15.7**	0 5 U	**0.78**	0.4 U
		09/09/13	**21.4**	0 5 U	**1.5**	0.5 U
		04/02/14	**1.6**	0 5 U	**0.6**	0.5 U
		09/02/14	**9.4**	0 5 U	**1.5**	0.5 U
		03/24/15	**18**	0 5 U	**3.1**	0.5 U
		09/23/15	**21**	0 5 U	**4.9**	0.5 U
		03/29/16	**20**	0 5 U	**4.8**	0.5 U
		09/27/16	**26**	0 5 U	**7.1**	0.5 U
		03/30/17	**22**	0 5 U	**7.7**	0.5 U
		09/13/17	**33**	0 5 U	**7.8**	0.5 U
		03/29/18	**29**	0 5 U	**9.4**	0.5 U
		09/25/18	**27**	0 5 U	**9.6**	0.5 U
		03/27/19	**31**	0 5 U	**9.9**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
IA-3 (cont.)	3	09/23/19	**32**	0 5 U	**12**	0.5 U
O-3	3	10/27/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/10/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/04	1 U	1 U	1 U	1 U
		03/07/05	1 U	1 U	1 U	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	**0.3 J**
		03/09/10	0 5 U	0 5 U	0 5 U	**1.1**
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/21/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
Aquifer 4						
G-3	4	02/01/90	5 U	5 U	5 U	10 U
		06/01/91	5 U	5 U	5 U	10 U
		05/01/92	0.1 U	0 2 U	0.1 U	0.3 U
		05/01/93	0.1 U	0 2 U	0.1 U	0.3 U
		05/18/94	0.1 U	0 2 U	0.1 U	0.3 U
		05/11/95	0.1 U	0 2 U	0.1 U	0.3 U
		05/07/96	0.1 U	0 2 U	0.1 U	0.2 U
		11/12/96	0.1 U	0 2 U	0.1 U	0.2 U
		05/20/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/22/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/08/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/06/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/02/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/24/04	1 U	1 U	1 U	1 U
		03/03/05	1 U	1 U	1 U	1 U
		03/06/06	1 U	1 U	1 U	1 U
		03/08/07	1 U	1 U	1 U	1 U
		03/03/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/07/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/19/12	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
G-3 (cont.)	4	03/25/13	0 5 U	0 5 U	0 5 U	0.4 U
		03/29/17	0 5 U	0 5 U	0 5 U	0.5 U
GETS						
EW-1	2	05/29/14	0 5 U	0 5 U	**2.2**	0.5 U
		01/21/15	0 5 U	0 5 U	**2.8**	0.5 U
		03/24/15	0 5 U	0 5 U	**3.4**	0.5 U
		04/21/15	0 5 U	0 5 U	**0.6**	0.5 U
		05/26/15	0 5 U	0 5 U	**2.1**	0.5 U
		08/04/15	0 5 U	0 5 U	**2.5**	0.5 U
		09/22/15	0 5 U	0 5 U	**2.3**	0.5 U
		12/16/15	**0.6**	0 5 U	**2.3**	0.5 U
		03/28/16	**0.6**	0 5 U	**1.6**	0.5 U
		09/26/16	**0.6**	0 5 U	**1.5**	0.5 U
		03/27/17	**0.6**	0 5 U	**1.4**	0.5 U
		09/14/17	**0.5**	0 5 U	**1.4**	0.5 U
		03/26/18	0 5 U	0 5 U	**1.4**	0.5 U
		09/25/18	0 5 U	0 5 U	**1.2**	0.5 U
		03/25/19	0 5 U	0 5 U	**1.0**	0.5 U
		04/29/19	0 5 U	0 5 U	**0.8**	0.5 U
		05/22/19	0 5 U	0 5 U	0 5 U	0.5 U
		06/21/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/23/19	0 5 U	0 5 U	0 5 U	0.5 U
EW-2	2	05/29/14	0 5 U	0 5 U	**2.7**	0.5 U
		01/21/15	0 5 U	0 5 U	**2.2**	0.5 U
		03/24/15	0 5 U	0 5 U	**11**	0.5 U
		04/21/15	0 5 U	0 5 U	**9.7**	0.5 U
		05/26/15	**0.6**	0 5 U	**9.6**	0.5 U
		08/04/15	**0.9**	0 5 U	**8.7**	0.5 U
		09/22/15	**1**	0 5 U	**8.4**	0.5 U
		12/16/15	**1.0**	0 5 U	**7.6**	0.5 U
		03/28/16	**1.3**	0 5 U	**7.2**	0.5 U
		09/26/16	**1.3**	0 5 U	**6.5**	0.5 U
		03/27/17	**1.2**	0 5 U	**5.9**	0.5 U
		09/14/17	**0.5**	0 5 U	**1.6**	0.5 U
		03/26/18	0 5 U	0 5 U	**1.4**	0.5 U
		09/25/18	**1.3**	0 5 U	**5.5**	0.5 U
		03/25/19	**1.1**	0 5 U	**5.1**	0.5 U
		04/29/19	**1**	0 5 U	**4.6**	0.5 U
		05/22/19	**0.6**	0 5 U	**3.5**	0.5 U
		06/21/19	**0.5**	0 5 U	**3.5**	0.5 U
		09/23/19	0 5 U	0 5 U	**3.2**	0.5 U
EW-3	2	05/29/14	**1.3**	0 5 U	**9.3**	0.5 U
		01/21/15	**2.0**	0 5 U	**9.7**	0.5 U
		03/24/15	**0.9**	0 5 U	**17**	0.5 U
		04/21/15	**1**	0 5 U	**15**	0.5 U
		05/26/15	**0.9**	0 5 U	**14**	0.5 U
		08/04/15	**1.2**	0 5 U	**12**	0.5 U
		09/22/15	**1.2**	0 5 U	**12**	0.5 U
		12/16/15	**1.3**	0 5 U	**12**	0.5 U
		03/28/16	**1.5**	0 5 U	**10**	0.5 U
		09/26/16	**1.5**	0 5 U	**9.3**	0.5 U
		03/27/17	**1.3**	0 5 U	**7.8**	0.5 U
		09/14/17	**1.1**	0 5 U	**7.5**	0.5 U
		03/26/18	**1.2**	0 5 U	**7.0**	0.5 U
		09/25/18	**1.2**	0 5 U	**6.2**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
EW-3 (cont.)	2	03/25/19	**1.0**	0 5 U	**5.6**	0.5 U
		04/29/19	**1.1**	0 5 U	**6.2**	0.5 U
		05/22/19	**1.1**	0 5 U	**5.1**	0.5 U
		06/21/19	**1.1**	0 5 U	**4.9**	0.5 U
		09/23/19	**1.0**	0 5 U	**5.2**	0.5 U
EW-4	2	05/29/14	**1.5**	0 5 U	**10**	0.5 U
		01/21/15	**1**	0 5 U	**9.3**	0.5 U
		03/24/15	**1.1**	0 5 U	**6.7**	0.5 U
		04/21/15	**1**	0 5 U	**6.4**	0.5 U
		05/26/15	**1**	0 5 U	**6.2**	0.5 U
		08/04/15	**1.1**	0 5 U	**6.2**	0.5 U
		09/22/15	**1.1**	0 5 U	**6.5**	0.5 U
		12/16/15	**1.0**	0 5 U	**6.0**	0.5 U
		03/28/16	**1.1**	0 5 U	**5.6**	0.5 U
		09/26/16	**1.1**	0 5 U	**5.8**	0.5 U
		03/27/17	**0.8**	0 5 U	**5.2**	0.5 U
		09/14/17	**0.7**	0 5 U	**4.8**	0.5 U
		03/26/18	**0.8**	0 5 U	**4.9**	0.5 U
		10/03/18	**0.9**	0 5 U	**6.2**	0.5 U
		03/25/19	**0.6**	0 5 U	**4.5**	0.5 U
		04/29/19	**0.7**	0 5 U	**4.6**	0.5 U
		05/22/19	**0.7**	0 5 U	**4.5**	0.5 U
		06/21/19	**0.7**	0 5 U	**4.4**	0.5 U
		09/23/19	**1.0**	0 5 U	**4.9**	0.5 U
EW-5	2	05/29/14	**1**	0 5 U	**14**	0.5 U
		01/21/15	**1**	0 5 U	**14**	0.5 U
		03/24/15	**1.5**	0 5 U	**7.2**	0.5 U
		04/21/15	**1.4**	0 5 U	**7.3**	0.5 U
		05/26/15	**1.4**	0 5 U	**7.1**	0.5 U
		08/04/15	**1.3**	0 5 U	**6.3**	0.5 U
		09/22/15	**1.3**	0 5 U	**6.2**	0.5 U
		12/16/15	**1.1**	0 5 U	**5.8**	0.5 U
		03/28/16	**1.2**	0 5 U	**5.6**	0.5 U
		09/26/16	**1.0**	0 5 U	**5.0**	0.5 U
		03/27/17	**0.9**	0 5 U	**4.2**	0.5 U
		09/14/17	**0.9**	0 5 U	**4.2**	0.5 U
		03/26/18	**0.8**	0 5 U	**3.7**	0.5 U
		09/25/18	**0.8**	0 5 U	**3.6**	0.5 U
		03/25/19	**0.7**	0 5 U	**3.1**	0.5 U
		04/29/19	**0.8**	0 5 U	**3.6**	0.5 U
		05/22/19	**0.8**	0 5 U	**3.0**	0.5 U
		06/21/19	**0.8**	0 5 U	**2.8**	0.5 U
		09/23/19	**0.9**	0 5 U	**2.9**	0.5 U
EW-6	2	05/29/14	**1.8**	0 5 U	**18**	0.5 U
		01/21/15	**2.4**	0 5 U	**14**	0.5 U
		03/24/15	**0.8**	0 5 U	0 5 U	0.5 U
		04/21/15	**0.9**	0 5 U	0 5 U	0.5 U
		05/26/15	**0.9**	0 5 U	0 5 U	0.5 U
		08/04/15	**0.8**	0 5 U	0 5 U	0.5 U
		09/22/15	**0.9**	0 5 U	0 5 U	0.5 U
		12/16/15	**0.9**	0 5 U	0 5 U	0.5 U
		03/28/16	**1.1**	0 5 U	0 5 U	0.5 U
		09/26/16	**1.4**	0 5 U	**0.9**	0.5 U
		03/27/17	**1.4**	0 5 U	**0.9**	0.5 U
		09/14/17	**1.5**	0 5 U	**0.8**	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
EW-6 (cont.)	2	03/26/18	**1.7**	0 5 U	**1.0**	0.5 U
		09/25/18	**1.7**	0 5 U	**1.3**	0.5 U
		03/25/19	**1.7**	0 5 U	**1.2**	0.5 U
		04/29/19	**2.0**	0 5 U	**2.7**	0.5 U
		05/22/19	**2.0**	0 5 U	**2.5**	0.5 U
		06/21/19	**2.0**	0 5 U	**1.4**	0.5 U
		09/23/19	**1.8**	0 5 U	**1.2**	0.5 U
EW-7	2	05/29/14	**3.4**	0 5 U	**0.8**	0.5 U
		01/21/15	**5.9**	0 5 U	**2.5**	0.5 U
		03/24/15	**2.0**	0 5 U	0 5 U	0.5 U
		04/21/15	**2.4**	0 5 U	0 5 U	0.5 U
		05/26/15	**2.3**	0 5 U	0 5 U	0.5 U
		08/04/15	**2.5**	0 5 U	**0.6**	0.5 U
		09/22/15	**2.5**	0 5 U	**0.7**	0.5 U
		12/16/15	**2.5**	0 5 U	**1.2**	0.5 U
		03/28/16	**2.9**	0 5 U	**1.9**	0.5 U
		09/26/16	**3.0**	0 5 U	**3.2**	0.5 U
		03/27/17	**2.7**	0 5 U	**3.4**	0.5 U
		09/14/17	**2.5**	0 5 U	**3.2**	0.5 U
		03/26/18	**3.0**	0 5 U	**4.7**	0.5 U
		09/25/18	**3.0**	0 5 U	**4.7**	0.5 U
		03/25/19	**2.6**	0 5 U	**4.6**	0.5 U
		04/29/19	**3.1**	0 5 U	**6.3**	0.5 U
		05/22/19	**3.0**	0 5 U	**5.8**	0.5 U
		06/21/19	**2.8**	0 5 U	**4.9**	0.5 U
		09/23/19	**3.0**	0 5 U	**4.7**	0.5 U
Surface Water						
QCF Spring	N/A	03/19/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/25/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/17	2 5 U	2 5 U	2 5 U	2.5 U
		03/26/18	0 5 U	0 5 U	0 5 U	0.5 U
SP-5	N/A	02/10/97	0.1 U	**0.7**	**2.5**	0.2 U
		05/05/97	**0.3**	**0.5**	**2.9**	0.2 U
		10/20/97	**0.4 J**	**0.7**	**2.6**	0.5 U
		04/07/98	0 5 U	0 5 U	**1.3**	0.5 U
		01/07/99	0 5 U	**0.6**	**2.6**	0.5 U
		04/01/99	0 5 U	0 5 U	**1.7**	0.5 U
		01/05/00	0 5 U	0 5 U	**1.3**	0.5 U
		04/03/00	0 5 U	0 5 U	**1.1**	0.5 U
		01/04/01	0 5 U	0 5 U	**2.8**	0.5 U
		04/02/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/01/02	0 5 U	0 5 U	**1**	0.5 U
		04/02/03	0 5 U	0 5 U	**1.4**	0.5 U
		10/20/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/04	1 U	1 U	**0.6 J**	1 U
		03/07/06	1 U	1 U	1 U	1 U
		03/12/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/11/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/08/11	0 5 U	0 5 U	**0.7**	0.5 U
		03/20/12	0 5 U	0 5 U	**0.84**	0.5 U
		03/26/13	0 5 U	0 5 U	**0.78**	0.4 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
SP-5 (cont.)	N/A	03/26/15	0 5 U	0 5 U	0 5 U	0.5 U
		04/04/17	0 5 U	0 5 U	0 5 U	0.5 U
Offsite						
(b) LR)	2ae	05/20/97	0.1 U	0 2 U	**0.2**	0.2 U
		10/29/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/16/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/13/99	0 5 U	0 5 U	0 5 U	0.5 U
		10/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/17/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/10/01	0 5 U	0 5 U	0 5 U	0.5 U
		10/18/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/02	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/03	0 5 U	0 5 U	0 5 U	0.5 U
		10/21/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/31/04	1 U	1 U	1 U	1 U
		09/13/04	1 U	1 U	1 U	1 U
		03/09/05	1 U	1 U	1 U	1 U
		08/31/05	1 U	1 U	1 U	1 U
		03/08/06	1 U	1 U	1 U	1 U
		08/24/06	1 U	1 U	1 U	1 U
		03/13/07	1 U	1 U	1 U	1 U
		08/29/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		09/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/21/12	0 5 U	0 5 U	0 5 U	0.5 U
		09/11/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		09/10/13	0 5 U	0 5 U	0 5 U	0.5 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		09/03/14	0 5 U	0 5 U	0 5 U	0.5 U
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/27/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	0 5 U	0 5 U	0 5 U	0.5 U
(b) (LM)	4	05/20/97	0.1 U	0 2 U	0.1 U	0.2 U
		10/29/97	0 5 U	0 5 U	0 5 U	0.5 U
		04/16/98	0 5 U	0 5 U	0 5 U	0.5 U
		10/13/98	0 5 U	0 5 U	0 5 U	0.5 U
		04/13/99	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
LM (cont.)	4	10/12/99	0 5 U	0 5 U	0 5 U	0.5 U
		04/11/00	0 5 U	0 5 U	0 5 U	0.5 U
		10/17/00	0 5 U	0 5 U	0 5 U	0.5 U
		04/10/01	0 5 U	0 5 U	0 5 U	0.5 U
		10/18/01	0 5 U	0 5 U	0 5 U	0.5 U
		04/09/02	0 5 U	0 5 U	0 5 U	0.5 U
		10/07/02	0 5 U	0 5 U	0 5 U	0.5 U
		04/14/03	0 5 U	0 5 U	0 5 U	0.5 U
		10/21/03	0 5 U	0 5 U	0 5 U	0.5 U
		03/31/04	1 U	1 U	1 U	1 U
		09/13/04	1 U	1 U	1 U	1 U
		03/09/05	1 U	1 U	1 U	1 U
		08/31/05	1 U	1 U	1 U	1 U
		03/08/06	1 U	1 U	1 U	1 U
		03/13/07	1 U	1 U	1 U	1 U
		09/07/07	1 U	1 U	1 U	1 U
		03/04/08	0 5 U	0 5 U	0 5 U	0.5 U
		08/26/08	0 5 U	0 5 U	0 5 U	0.5 U
		03/05/09	0 5 U	0 5 U	0 5 U	0.5 U
		09/03/09	0 5 U	0 5 U	0 5 U	0.5 U
		03/10/10	0 5 U	0 5 U	0 5 U	0.5 U
		09/08/10	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/09/11	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/11	0 5 U	0 5 U	0 5 U	0.5 U
		03/21/12	0 5 U	0 5 U	0 5 U	0.5 U
		09/11/12	0 5 U	0 5 U	0 5 U	0.5 U
		03/26/13	0 5 U	0 5 U	0 5 U	0.4 U
		09/10/13	0 5 U	0 5 U	0 5 U	0.5 U
		03/12/14	0 5 U	0 5 U	0 5 U	0.5 U
		09/03/14	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ
		03/23/15	0 5 U	0 5 U	0 5 U	0.5 U
		09/22/15	0 5 U	0 5 U	0 5 U	0.5 U
		03/29/16	0 5 U	0 5 U	0 5 U	0.5 U
		09/27/16	0 5 U	0 5 U	0 5 U	0.5 U
		03/28/17	0 5 U	0 5 U	0 5 U	0.5 U
		09/13/17	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/18	0 5 U	0 5 U	0 5 U	0.5 U
		09/26/18	0 5 U	0 5 U	0 5 U	0.5 U
		03/27/19	0 5 U	0 5 U	0 5 U	0.5 U
		09/24/19	0 5 U	0 5 U	0 5 U	0.5 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
Cedar Hills Regional Landfill						
Aquifer 2a						
MW-83	2ae	01/01/00	0 2 U	-	-	-
		04/01/00	0 2 U	-	-	-
		07/01/00	0 2 U	-	-	-
		10/01/00	0 2 U	-	-	-
		01/01/01	0 2 U	-	-	-
		10/01/01	0 2 U	-	**2.1**	-
		01/01/02	0 2 U	-	**3.1**	-
		04/01/02	0 2 U	-	**2.8**	-
		07/01/02	0 2 U	-	**2.6**	-
		10/01/02	0 2 U	-	**1.9**	-
		01/01/03	0 2 U	-	**2**	-
		07/01/03	0 2 U	-	**2.6**	-
		10/01/03	0 2 U	-	**2.3**	-
		01/01/04	0 2 U	-	**2.5**	-
		04/01/04	0 2 U	-	**1.3**	-
		07/01/04	0 2 U	-	**3.1**	-
		10/01/04	0 2 U	-	**2**	-
		01/01/05	0 2 U	-	**1.7**	-
		04/01/05	0 2 U	-	**2.4**	-
		07/01/05	0 2 U	-	**3**	-
		10/01/05	0 2 U	-	**2.3**	-
		01/01/06	0 2 U	-	**2.8**	-
		04/01/06	0 2 U	-	**2.3**	-
		07/01/06	0 2 U	-	**2.6**	-
		10/01/06	0 2 U	-	**2**	-
		01/01/07	0 2 U	-	**2.1**	-
		04/01/07	0 2 U	-	**2.1**	-
		07/01/07	0 2 U	-	**2**	-
		10/01/07	0 2 U	-	**1.4**	-
		01/01/08	0 2 U	-	**1.6**	-
		04/01/08	0 2 U	-	**1.6**	-
		07/01/08	0 2 U	-	**1.8**	-
		10/01/08	0 2 U	-	**1.9**	-
		01/01/09	0 2 U	-	**2.6**	-
		04/01/09	0 2 U	-	**1.31**	-
		07/01/09	0 2 U	-	**2.43**	-
		10/01/09	0 2 U	-	**1.92**	-
		01/29/10	0 2 U	-	**1.76**	-
		04/23/10	0 2 U	-	**0.968**	-
		07/22/10	0 2 U	-	**0.54**	-
		10/29/10	0 2 U	-	**1.9**	-
		01/20/11	0 2 U	-	**1.21**	-
		04/28/11	0 2 U	-	**1.81**	-
		07/25/11	0 2 U	-	**1.03**	-
		10/26/11	0 2 U	-	**1.46**	-
		03/29/12	0 2 U	-	**1.69**	-
		04/18/12	0 2 U	-	**1.68**	-
		07/17/12	0 2 U	-	**1.26**	-
		10/18/12	0 2 U	-	**1.62**	-
		01/18/13	0 2 U	0 2 U	**1.38**	0.02 U
		04/09/13	0 2 U	0 2 U	**2.09**	0.02 U
		07/17/13	0 2 U	0 2 U	**2.06**	0.02 U
		10/03/13	0 2 U	0 2 U	**1.53**	0.02 U
		01/16/14	0 2 U	-	**1.66**	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-83 (cont.)	2ae	04/10/14	0 2 U	-	**1.99**	-
		07/31/14	0 2 U	-	**2.43**	-
		10/06/14	0 2 U	-	**2.1**	-
		01/13/15	0 2 U	0 2 U	**1.76**	0.02 U
		04/07/15	0 2 U	0 2 U	**1.88**	0.02 U
		07/14/15	0 2 U	0 2 U	**2.78**	0.02 U
		10/20/15	0 2 U	0 2 U	**1.8**	0.02 U
		01/14/16	0 2 U	0 2 U	**2.36**	0.02 U
		04/15/16	0 2 U	0 2 U	**2.06**	0.02 U
		07/06/16	0 2 U	0 2 U	**2.23**	0.02 U
		10/19/16	0 2 U	0 2 U	**1.77**	0.02 U
		01/04/17	0 2 U	0 2 U	**1.68**	0.02 U
		04/21/17	0.1 U	0.1 U	**1.91**	0.01 U
		07/17/17	0.1 U	0.1 U	**1.34**	0.01 U
		10/31/17	0.1 U	0.1 U	**2**	0.01 U
		01/09/18	0.1 U	0.1 U	**1.49**	0.01 U
		04/16/18	0.1 U	0.1 U	**1.86**	0.01 U
		07/20/18	0.1 U	0.1 U	**2.32**	0.01 U
		10/22/18	0.1 U	0.1 U	**2.05**	0.01 U
		01/09/19	0.1 U	0.1 U	**1.66**	0.01 U
		04/12/19	0.1 U	0.1 U	**1.41**	0.01 U
		07/12/19	0.1 U	0.1 U	**2.1**	0.01 U
		10/18/19	0.1 U	0.1 U	**1.87**	0.01 U
MW-94	2ae	01/01/00	0 2 U	-	-	-
		04/01/00	0 2 U	-	-	-
		07/01/00	0 2 U	-	-	-
		10/01/00	0 2 U	-	-	-
		01/01/01	0 2 U	-	-	-
		10/01/01	0 2 U	-	-	-
		01/01/02	0 2 U	-	-	-
		04/01/02	0 2 U	-	-	-
		07/01/02	0 2 U	-	-	-
		10/01/02	0 2 U	-	-	-
		01/01/03	0 2 U	-	**5**	-
		07/01/03	0 2 U	-	**4.4**	-
		10/01/03	0 2 U	-	**4.1**	-
		01/01/04	0 2 U	-	**4.7**	-
		04/01/04	0 2 U	-	**3.9**	-
		07/01/04	0 2 U	-	**4.3**	-
		10/01/04	0 2 U	-	**3.4**	-
		01/01/05	0 2 U	-	**3.7**	-
		04/01/05	0 2 U	-	**4**	-
		07/01/05	0 2 U	-	**4.1**	-
		10/01/05	0 2 U	-	0 2 U	-
		01/01/06	0 2 U	-	**4.7**	-
		04/01/06	0 2 U	-	**4.1**	-
		07/01/06	0 2 U	-	**3.7**	-
		10/01/06	0 2 U	-	**3.8**	-
		01/01/07	0 2 U	-	**1.1**	-
		04/01/07	0 2 U	-	**1.4**	-
		07/01/07	0 2 U	-	**2.5**	-
		10/01/07	0 2 U	-	**2.7**	-
		01/01/08	0 2 U	-	**3.8**	-
		04/01/08	0 2 U	-	**3.4**	-
		07/01/08	0 2 U	-	**2.9**	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-94 (cont.)	2ae	10/01/08	0 2 U	-	**3.4**	-
		01/01/09	0 2 U	-	**2.9**	-
		04/01/09	0 2 U	-	**2.03**	-
		07/01/09	0 2 U	-	**2.75**	-
		10/01/09	0 2 U	-	**3.7**	-
		02/09/10	0 2 U	-	**3.12**	-
		04/23/10	0 2 U	-	**2.42**	-
		08/18/10	0 2 U	-	**1.68**	-
		11/01/10	0 2 U	-	**3.19**	-
		01/18/11	0 2 U	-	**1.67**	-
		04/28/11	0 2 U	-	**1.03**	-
		07/26/11	0 2 U	-	**1.74**	-
		10/26/11	0 2 U	-	**2.56**	-
		01/27/12	0 2 U	-	**3.07**	-
		04/24/12	0 2 U	-	**2.31**	-
		07/19/12	0 2 U	-	**2.84**	-
		10/18/12	0 2 U	-	**2.61**	-
		01/14/13	0 2 U	0 2 U	**2.65**	0.02 U
		05/14/13	0 2 U	0 2 U	**2.66**	0.02 U
		07/23/13	0 2 U	0 2 U	**2.12**	0.02 U
		10/25/13	0 2 U	0 2 U	**3.26**	0.02 U
		01/13/14	0 2 U	-	**2.64**	-
		04/07/14	0 2 U	-	**1.18**	-
		07/31/14	0 2 U	-	**2.26**	-
		10/10/14	0 2 U	-	**2.87**	-
		01/26/15	0 2 U	0 2 U	**2.69**	0.02 U
		04/02/15	0 2 U	0 2 U	**2.63**	0.02 U
		07/14/15	0 2 U	0 2 U	**2.52**	0.02 U
		10/08/15	0 2 U	0 2 U	**2.86**	0.02 U
		01/11/16	0 2 U	0 2 U	**1.95**	0.02 U
		04/22/16	0 2 U	0 2 U	**0.921**	0.02 U
		07/12/16	0 2 U	0 2 U	**1.76**	0.02 U
		10/28/16	0 2 U	0 2 U	**2.47**	0.02 U
		01/05/17	0 2 U	0 2 U	**2.79**	0.02 U
		04/14/17	0.1 U	0.1 U	**0.868**	0.01 U
		07/17/17	0.1 U	0.1 U	0.1 U	0.01 U
		10/16/17	0.1 U	0.1 U	**2.02**	0.01 U
		01/11/18	0.1 U	0.1 U	**2.61**	0.01 U
		04/16/18	0.1 U	0.1 U	**2.79**	0.01 U
		07/20/18	0.1 U	0.1 U	**1.79**	0.01 U
		10/19/18	0.1 U	0.1 U	**2.54**	0.01 U
		01/09/19	0.1 U	0.1 U	**2.31**	0.01 U
		04/10/19	0.1 U	0.1 U	**2.09**	0.01 U
		07/12/19	0.1 U	0.1 U	**1.61**	0.01 U
		10/18/19	0.1 U	0.1 U	**2.27**	0.01 U
MW-60	2af	01/01/00	0 2 U	-	0 2 U	-
		04/01/00	0 2 U	-	0 2 U	-
		07/01/00	0 2 U	-	0 2 U	-
		10/01/00	0 2 U	-	0 2 U	-
		01/01/01	0 2 U	-	0 2 U	-
		10/01/01	0 2 U	-	0 2 U	-
		01/01/02	0 2 U	-	0 2 U	-
		04/01/02	0 2 U	-	0 2 U	-
		07/01/02	0 2 U	-	0 2 U	-
		10/01/02	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-60 (cont.)	2af	01/01/03	0 2 U	-	0 2 U	-
		07/01/03	0 2 U	-	0 2 U	-
		10/01/03	0 2 U	-	0 2 U	-
		01/01/04	0 2 U	-	0 2 U	-
		04/01/04	0 2 U	-	0 2 U	-
		07/01/04	0 2 U	-	0 2 U	-
		10/01/04	0 2 U	-	0 2 U	-
		01/01/05	0 2 U	-	0 2 U	-
		04/01/05	0 2 U	-	0 2 U	-
		07/01/05	0 2 U	-	0 2 U	-
		10/01/05	0 2 U	-	0 2 U	-
		01/01/06	0 2 U	-	0 2 U	-
		04/01/06	0 2 U	-	0 2 U	-
		07/01/06	0 2 U	-	0 2 U	-
		10/01/06	0 2 U	-	0 2 U	-
		01/01/07	0 2 U	-	0 2 U	-
		04/01/07	0 2 U	-	0 2 U	-
		07/01/07	0 2 U	-	0 2 U	-
		10/01/07	0 2 U	-	0 2 U	-
		01/01/08	0 2 U	-	0 2 U	-
		04/01/08	0 2 U	-	0 2 U	-
		07/01/08	0 2 U	-	0 2 U	-
		10/01/08	0 2 U	-	0 2 U	-
		01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/11/10	0 2 U	-	0 2 U	-
		04/27/10	0 2 U	-	0 2 U	-
		07/20/10	0 2 U	-	0 2 U	-
		10/18/10	0 2 U	-	0 2 U	-
		01/06/11	0 2 U	-	0 2 U	-
		04/25/11	0 2 U	-	0 2 U	-
		07/25/11	0 2 U	-	0 2 U	-
		10/04/11	0 2 U	-	0 2 U	-
		01/12/12	0 2 U	-	0 2 U	-
		04/12/12	0 2 U	-	0 2 U	-
		07/25/12	0 2 U	-	0 2 U	-
		10/09/12	0 2 U	-	0 2 U	-
		01/07/13	0 2 U	0 2 U	0 2 U	0.02 U
		04/23/13	0 2 U	0 2 U	0 2 U	0.02 U
		07/03/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/15/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/09/14	0 2 U	-	0 2 U	-
		04/07/14	0 2 U	-	0 2 U	-
		07/15/14	0 2 U	-	0 2 U	-
		10/06/14	0 2 U	-	0 2 U	-
		01/08/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/07/15	0 2 U	0 2 U	0 2 U	0.02 U
		07/09/15	0 2 U	0 2 U	0 2 U	0.02 U
		10/02/15	0 2 U	0 2 U	0 2 U	0.02 U
MW-70	2af	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-70 (cont.)	2af	01/15/10	0 2 U	-	0 2 U	-
		04/15/10	0 2 U	-	0 2 U	-
		07/19/10	0 2 U	-	0 2 U	-
		10/26/10	0 2 U	-	0 2 U	-
		01/03/11	0 2 U	-	0 2 U	-
		04/23/11	0 2 U	-	0 2 U	-
		07/11/11	0 2 U	-	0 2 U	-
		10/10/11	0 2 U	-	0 2 U	-
		01/17/12	0 2 U	-	0 2 U	-
		04/06/12	0 2 U	-	0 2 U	-
		07/13/12	0 2 U	-	0 2 U	-
		10/15/12	0 2 U	-	0 2 U	-
		01/25/13	0 2 U	0 2 U	0 2 U	0.02 U
		04/23/13	0 2 U	0 2 U	0 2 U	0.02 U
		07/17/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/21/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/14/14	0 2 U	-	0 2 U	-
		04/18/14	0 2 U	-	0 2 U	-
		07/11/14	0 2 U	-	0 2 U	-
		10/21/14	0 2 U	-	0 2 U	-
		01/12/15	0 2 U	0 2 U	0 2 U	0.02 U
MW-76	2af	01/01/00	**2.9**	-	**17**	-
		04/01/00	**2.2**	-	**13**	-
		07/01/00	**1.8**	-	**12**	-
		10/01/00	**1.8**	-	**14**	-
		01/01/01	0 2 U	-	**13**	-
		10/01/01	**0.93**	-	**11**	-
		01/01/02	**3.1**	-	**16**	-
		04/01/02	**2.3**	-	**14**	-
		07/01/02	**1.8**	-	**10**	-
		10/01/02	**1.9**	-	**14**	-
		01/01/03	0 2 U	-	**16**	-
		07/01/03	**1.5**	-	**11**	-
		10/01/03	**1.9**	-	**14**	-
		01/01/04	**2**	-	**13**	-
		04/01/04	**1.6**	-	**9.6**	-
		07/01/04	**0.43**	-	**11**	-
		10/01/04	**1.6**	-	**13**	-
		01/01/05	**1.3**	-	**11**	-
		04/01/05	**1.7**	-	**11**	-
		07/01/05	**1.8**	-	**13**	-
		10/01/05	**1.2**	-	**13.5**	-
		01/01/06	**2.2**	-	**15**	-
		04/01/06	**1.5**	-	**13**	-
		07/01/06	**1**	-	**11**	-
		10/01/06	**1.1**	-	**11**	-
		01/01/07	**1.7**	-	**12**	-
		04/01/07	**1.5**	-	**13**	-
		07/01/07	**0.85**	-	**9.7**	-
		10/01/07	**0.74**	-	**11**	-
		01/01/08	**1.2**	-	**10**	-
		04/01/08	**0.99**	-	**8.7**	-
		07/01/08	**0.8**	-	**8.9**	-
		10/01/08	**0.81**	-	**11**	-
		01/01/09	**1.7**	-	**15**	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-76 (cont.)	2af	04/01/09	**0.986**	-	**9.06**	-
		07/01/09	**0.798**	-	**9.71**	-
		10/01/09	**0.93**	-	**11.4**	-
		01/14/10	**1.15**	-	**10.8**	-
		04/15/10	**0.719**	-	**9.65**	-
		07/20/10	**0.669**	-	**10.8**	-
		10/29/10	**0.615**	-	**11.2**	-
		01/18/11	**0.768**	-	**9.97**	-
		04/25/11	**0.927**	-	**11.2**	-
		07/14/11	**0.473**	-	**7.69**	-
		10/11/11	**0.735**	-	**9.58**	-
		01/26/12	**0.435**	-	**8.36**	-
		04/16/12	**1.01**	-	**11.5**	-
		07/17/12	**0.459**	-	**8.3**	-
		10/26/12	**0.49**	-	**10.1**	-
		01/25/13	**0.831**	**0.42**	**9.02**	0.02 U
		05/01/13	**0.668**	**0.411**	**8.11**	0.02 U
		07/15/13	**0.429**	**0.37**	**6.69**	0.02 U
		10/31/13	**0.44**	**0.453**	**8.07**	0.02 U
		01/10/14	**0.59**	-	**7.89**	-
		04/07/14	**0.831**	-	**10.7**	-
		07/24/14	**0.484**	-	**7.61**	-
		10/21/14	**0.531**	-	**9.65**	-
		01/26/15	0 2 U	**0.475**	**9.09**	0.02 U
		04/07/15	**0.567**	**0.442**	**8.91**	0.02 U
		07/14/15	**0.38**	**0.467**	**8.79**	0.02 U
		10/02/15	**0.37**	**0.478**	**9.58**	0.02 U
		04/05/16	**0.607**	**0.38**	**9.51**	0.02 U
		10/28/16	**0.33 T**	**0.511**	**9.47**	0.02 U
		04/14/17	**0.548**	**0.379**	**8.21**	0.01 U
		11/06/17	**0.294**	**0.437**	**9.44**	0.01 U
		04/16/18	**0.403**	**0.409**	**8.05**	0.01 U
		10/12/18	**0.221**	**0.44**	**9.12**	0.01 U
		04/10/19	0.327	0.309	6.07	0.01 U
		10/11/19	0.195 JT	0.401	7.89	0.01 U
MW-77	2af	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/22/10	0 2 U	-	0 2 U	-
		04/20/10	0 2 U	-	0 2 U	-
		07/19/10	0 2 U	-	0 2 U	-
		10/28/10	0 2 U	-	0 2 U	-
		01/18/11	0 2 U	-	0 2 U	-
		05/09/11	0 2 U	-	0 2 U	-
		07/27/11	0 2 U	-	0 2 U	-
		03/29/12	0 2 U	-	0 2 U	-
		04/23/12	0 2 U	-	0 2 U	-
		08/30/12	0 2 U	-	0 2 U	-
		10/25/12	0 2 U	-	0 2 U	-
		01/25/13	0 2 U	0 2 U	0 2 U	0.02 U
		04/25/13	0 2 U	0 2 U	0 2 U	0.02 U
		08/02/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/25/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/28/14	0 2 U	-	0 2 U	-
		04/11/14	0 2 U	-	0 2 U	-
		08/01/14	0 2 U	-	0 2 U	-
		10/27/14	0 2 U	-	0 2 U	-
		01/15/15	0 2 U	0 2 U	0 2 U	0.02 U
MW-78	2af	01/01/00	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-78 (cont.)	2af	04/01/00	0 2 U	-	0 2 U	-
		07/01/00	0 2 U	-	0 2 U	-
		10/01/00	0 2 U	-	0 2 U	-
		01/01/01	0 2 U	-	0 2 U	-
		10/01/01	0 2 U	-	0 2 U	-
		01/01/02	0 2 U	-	0 2 U	-
		04/01/02	0 2 U	-	0 2 U	-
		07/01/02	0 2 U	-	0 2 U	-
		10/01/02	0 2 U	-	0 2 U	-
		01/01/03	0 2 U	-	0 2 U	-
		07/01/03	0 2 U	-	0 2 U	-
		10/01/03	0 2 U	-	0 2 U	-
		01/01/04	0 2 U	-	0 2 U	-
		04/01/04	0 2 U	-	**0.21**	-
		07/01/04	0 2 U	-	**0.29**	-
		10/01/04	0 2 U	-	0 2 U	-
		01/01/05	0 2 U	-	0 2 U	-
		04/01/05	0 2 U	-	0 2 U	-
		07/01/05	0 2 U	-	0 2 U	-
		10/01/05	0 2 U	-	0 2 U	-
		01/01/06	0 2 U	-	**0.31**	-
		04/01/06	0 2 U	-	**0.5**	-
		07/01/06	0 2 U	-	**0.46**	-
		10/01/06	0 2 U	-	**0.4**	-
		01/01/07	0 2 U	-	**0.42**	-
		04/01/07	0 2 U	-	**0.61**	-
		07/01/07	0 2 U	-	**0.51**	-
		10/01/07	0 2 U	-	**0.3**	-
		01/01/08	0 2 U	-	**0.29**	-
		04/01/08	0 2 U	-	**0.57**	-
		07/01/08	0 2 U	-	**0.56**	-
		10/01/08	0 2 U	-	**0.43**	-
		01/01/09	0 2 U	-	**0.62**	-
		04/01/09	0 2 U	-	**0.594**	-
		07/01/09	0 2 U	-	**0.613**	-
		10/01/09	0 2 U	-	**0.31**	-
		07/27/10	0 2 U	-	**0.581**	-
		03/14/11	0 2 U	-	**0.592**	-
		04/27/11	0 2 U	-	0 2 U	-
		07/14/11	0 2 U	-	**0.4**	-
		10/21/11	0 2 U	-	**0.446**	-
		03/01/12	0 2 U	-	**0.499**	-
		04/06/12	0 2 U	-	**0.591**	-
		08/30/12	0 2 U	-	**0.613**	-
		10/26/12	0 2 U	-	**0.405**	-
		04/26/13	0 2 U	0 2 U	**0.738**	0.02 U
		07/03/13	0 2 U	0 2 U	**0.596**	0.02 U
		10/25/13	0 2 U	0 2 U	**0.584**	0.02 U
		01/27/14	0 2 U	-	**0.649**	-
		04/10/14	0 2 U	-	**0.593**	-
		07/29/14	0 2 U	-	**0.648**	-
		10/22/14	0 2 U	-	**0.531**	-
		01/12/15	0 2 U	0 2 U	**0.662**	0.02 U
MW-82	2af	01/01/00	0 2 U	-	-	-
		04/01/00	0 2 U	-	-	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-82	2af	07/01/00	0 2 U	-	-	-
		10/01/00	0 2 U	-	-	-
		01/01/01	0 2 U	-	-	-
		10/01/01	0 2 U	-	-	-
		01/01/02	0 2 U	-	**8.5**	-
		04/01/02	0 2 U	-	**10**	-
		07/01/02	0 2 U	-	**9.1**	-
		10/01/02	0 2 U	-	**8.4**	-
		01/01/03	0 2 U	-	**8.5**	-
		07/01/03	0 2 U	-	**9.6**	-
		10/01/03	0 2 U	-	**8**	-
		01/01/04	0 2 U	-	**8.6**	-
		04/01/04	0 2 U	-	**8.9**	-
		07/01/04	0 2 U	-	**6.9**	-
		10/01/04	0 2 U	-	**8**	-
		01/01/05	0 2 U	-	**7.6**	-
		04/01/05	0 2 U	-	0 2 U	-
		07/01/05	0 2 U	-	**8.3**	-
		10/01/05	0 2 U	-	**7**	-
		01/01/06	0 2 U	-	**8.8**	-
		04/01/06	0 2 U	-	**8.4**	-
		07/01/06	0 2 U	-	**7.2**	-
		10/01/06	0 2 U	-	**7.2**	-
		01/01/07	0 2 U	-	**6.3**	-
		04/01/07	0 2 U	-	**7.4**	-
		07/01/07	0 2 U	-	**6.9**	-
		10/01/07	0 2 U	-	**5.6**	-
		01/01/08	0 2 U	-	**7.1**	-
		04/01/08	0 2 U	-	**7.3**	-
		07/01/08	0 2 U	-	**6**	-
		10/01/08	0 2 U	-	**5.5**	-
		01/01/09	0 2 U	-	**6.9**	-
		04/01/09	0 2 U	-	**6.75**	-
		07/01/09	0 2 U	-	**6.18**	-
		10/01/09	0 2 U	-	**6.6**	-
		01/15/10	0 2 U	-	**5.48**	-
		04/16/10	0 2 U	-	**5.65**	-
		07/27/10	0 2 U	-	**6.52**	-
		10/22/10	0 2 U	-	**5.34**	-
		01/18/11	0 2 U	-	**4.8**	-
		04/28/11	0 2 U	-	**5.76**	-
		07/21/11	0 2 U	-	**5.35**	-
		10/04/11	0 2 U	-	**4.78**	-
		01/23/12	0 2 U	-	**4.81**	-
		04/18/12	0 2 U	-	**4.14**	-
		07/03/12	0 2 U	-	**4.61**	-
		10/02/12	0 2 U	-	**5.06**	-
		01/23/13	0 2 U	0 2 U	**5.6**	0.02 U
		04/22/13	0 2 U	0 2 U	**5.51**	0.02 U
		07/23/13	0 2 U	0 2 U	**5.63**	0.02 U
		03/31/14	0 2 U	-	**4.76**	-
		04/14/14	0 2 U	-	**4.49**	-
		07/30/14	0 2 U	-	**5.12**	-
		10/03/14	0 2 U	-	**5.17**	-
		01/26/15	0 2 U	0 2 U	**5.59**	0.02 U

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-82 (cont.)	2af	04/14/15	0 2 U	0 2 U	**5.81**	0.02 U
		07/06/15	0 2 U	0 2 U	**6.27**	0.02 U
		10/02/15	0 2 U	0 2 U	**5.57**	0.02 U
		04/06/16	0 2 U	0 2 U	**5.19**	0.02 U
		10/06/16	0 2 U	0 2 U	**5.42**	0.02 U
		04/17/17	0.1 U	0.1 U	**4.43**	0.01 U
		11/02/17	0.1 U	0.1 U	**5.14**	0.01 U
		04/13/18	0.1 U	0.1 U	**5.28**	0.01 U
		10/10/18	0.1 U	0.1 U	**4.88**	0.01 U
		04/08/19	0.1 U	0.1 U	**4.28**	0.01 U
		10/22/19	0.1 U	0.1 U	**4.59**	0.01 DU
MW-95	2af	01/20/11	0 2 U	-	0 2 U	-
		04/04/11	0 2 U	-	0 2 U	-
		07/26/11	0 2 U	-	0 2 U	-
		10/11/11	0 2 U	-	0 2 U	-
		03/01/12	0 2 U	-	0 2 U	-
		04/30/12	0 2 U	-	0 2 U	-
		07/27/12	0 2 U	-	0 2 U	-
		10/25/12	0 2 U	-	0 2 U	-
		01/17/13	0 2 U	0 2 U	0 2 U	0.02 U
		05/01/13	0 2 U	0 2 U	0 2 U	0.02 U
		07/09/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/24/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/07/14	0 2 U	-	0 2 U	-
		04/07/14	0 2 U	-	0 2 U	-
		07/28/14	0 2 U	-	0 2 U	-
		10/10/14	0 2 U	-	0 2 U	-
		01/28/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/06/15	0 2 U	0 2 U	0 2 U	0.02 U
		07/16/15	0 2 U	0 2 U	0 2 U	0.02 U
		10/22/15	0 2 U	0 2 U	0 2 U	0.02 U
		4/14/2016	0 2 U	0 2 U	0 2 U	0.02 U
		10/7/2016	0 2 U	0 2 U	0 2 U	0.02 U
		4/5/2017	0.1 U	0.1 U	0.1 U	0.01 U
		04/16/18	0.1 U	0.1 U	0.1 U	0.01 U
		10/29/18	0.1 U	0.1 U	0.1 U	0.01 U
		04/08/19	0.1 U	0.1 U	0.1 U	0.01 U
		10/11/19	0.1 U	0.1 U	0.1 U	0.01 U
Aquifer 2						
MW-56	2	01/01/00	**1.2**	-	0 2 U	-
		04/01/00	**0.88**	-	0 2 U	-
		07/01/00	0 2 U	-	0 2 U	-
		10/01/00	**1**	-	0 2 U	-
		01/01/01	**1.1**	-	0 2 U	-
		10/01/01	**1.1**	-	0 2 U	-
		01/01/02	0 2 U	-	0 2 U	-
		04/01/02	**1.4**	-	0 2 U	-
		07/01/02	**1.1**	-	0 2 U	-
		10/01/02	**1.2**	-	0 2 U	-
		01/01/03	0 2 U	-	0 2 U	-
		07/01/03	**1.4**	-	0 2 U	-
		10/01/03	**1.5**	-	0 2 U	-
		01/01/04	**1.1**	-	0 2 U	-
		04/01/04	**1.3**	-	0 2 U	-
		07/01/04	**1.1**	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-56 (cont.)	2	10/01/04	**1.3**	-	0 2 U	-
		01/01/05	**1.1**	-	0 2 U	-
		04/01/05	**1.3**	-	0 2 U	-
		07/01/05	**1.2**	-	0 2 U	-
		10/01/05	**1.3**	-	0 2 U	-
		01/01/06	**1.5**	-	0 2 U	-
		04/01/06	**1.5**	-	0 2 U	-
		07/01/06	**1.2**	-	0 2 U	-
		10/01/06	**1.8**	-	0 2 U	-
		01/01/07	**1.6**	-	0 2 U	-
		04/01/07	**1.4**	-	0 2 U	-
		07/01/07	**1.4**	-	0 2 U	-
		10/01/07	**1.1**	-	0 2 U	-
		01/01/08	**1.1**	-	0 2 U	-
		04/01/08	**0.99**	-	0 2 U	-
		07/01/08	**0.84**	-	0 2 U	-
		10/01/08	**1.1**	-	0 2 U	-
		01/01/09	**1.1**	-	0 2 U	-
		04/01/09	**0.56**	-	0 2 U	-
		07/01/09	**0.981**	-	0 2 U	-
		10/01/09	**0.994**	-	0 2 U	-
		01/07/10	**0.682**	-	0 2 U	-
		04/16/10	**0.654**	-	0 2 U	-
		07/02/10	**0.592**	-	0 2 U	-
		10/14/10	**0.858**	-	0 2 U	-
		01/11/11	**0.478**	-	0 2 U	-
		04/08/11	**0.694**	-	0 2 U	-
		07/06/11	**0.625**	-	0 2 U	-
		10/06/11	**0.915**	-	0 2 U	-
		01/09/12	**0.522**	-	0 2 U	-
		04/10/12	**0.692**	-	0 2 U	-
		07/13/12	**0.755**	-	0 2 U	-
		10/02/12	**0.93**	-	0 2 U	-
		01/24/13	**0.91**	0 2 U	0 2 U	0.02 U
		04/08/13	**1.15**	0 2 U	0 2 U	0.02 U
		07/03/13	**1.24**	0 2 U	0 2 U	0.02 U
		10/03/13	**1.06**	0 2 U	0 2 U	0.02 U
		01/03/14	**1.22**	-	0 2 U	-
		04/08/14	**0.97**	-	0 2 U	-
		07/21/14	**1.51**	-	0 2 U	-
		10/06/14	**1.21**	-	0 2 U	-
		01/15/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/14/15	**1.22**	0 2 U	0 2 U	0.02 U
		07/06/15	**1.49**	0 2 U	0 2 U	0.02 U
		10/15/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/20/16	**1.35**	0 2 U	0 2 U	0.02 U
		10/11/16	**1.34**	0 2 U	0 2 U	0.02 U
		04/14/17	**1.38**	0.1 U	0.1 U	0.01 U
		11/08/17	**1.37**	0.1 U	0.1 U	0.01 U
		04/12/18	**1.3**	0.1 U	0.1 U	0.01 U
		11/01/18	**1.53**	0.1 U	0.1 U	0.01 U
		04/08/19	**1.48**	0.1 U	0.1 U	0.01 U
		10/18/19	**1.45**	0.1 U	0.1 U	0.01 U
MW-57	2	01/01/00	0 2 U	-	0 2 U	-
		04/01/00	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-57 (cont.)	2	07/01/00	0 2 U	-	0 2 U	-
		10/01/00	0 2 U	-	0 2 U	-
		01/01/01	0 2 U	-	0 2 U	-
		10/01/01	0 2 U	-	**1.2**	-
		01/01/02	0 2 U	-	0 2 U	-
		04/01/02	0 2 U	-	0 2 U	-
		07/01/02	0 2 U	-	0 2 U	-
		10/01/02	0 2 U	-	0 2 U	-
		01/01/03	0 2 U	-	0 2 U	-
		07/01/03	0 2 U	-	0 2 U	-
		10/01/03	0 2 U	-	0 2 U	-
		01/01/04	0 2 U	-	0 2 U	-
		04/01/04	0 2 U	-	0 2 U	-
		07/01/04	0 2 U	-	0 2 U	-
		10/01/04	0 2 U	-	0 2 U	-
		01/01/05	0 2 U	-	0 2 U	-
		04/01/05	0 2 U	-	0 2 U	-
		07/01/05	0 2 U	-	0 2 U	-
		10/01/05	0 2 U	-	0 2 U	-
		01/01/06	0 2 U	-	0 2 U	-
		04/01/06	0 2 U	-	0 2 U	-
		07/01/06	0 2 U	-	0 2 U	-
		10/01/06	0 2 U	-	0 2 U	-
		01/01/07	0 2 U	-	0 2 U	-
		04/01/07	0 2 U	-	0 2 U	-
		07/01/07	0 2 U	-	0 2 U	-
		10/01/07	0 2 U	-	0 2 U	-
		01/01/08	0 2 U	-	0 2 U	-
		04/01/08	0 2 U	-	0 2 U	-
		07/01/08	0 2 U	-	0 2 U	-
		10/01/08	0 2 U	-	0 2 U	-
		01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/07/10	0 2 U	-	0 2 U	-
		04/26/10	0 2 U	-	0 2 U	-
		07/07/10	0 2 U	-	0 2 U	-
		10/05/10	0 2 U	-	0 2 U	-
		01/11/11	0 2 U	-	0 2 U	-
		04/08/11	0 2 U	-	0 2 U	-
		07/11/11	0 2 U	-	0 2 U	-
		10/12/11	0 2 U	-	0 2 U	-
		01/06/12	0 2 U	-	0 2 U	-
		04/30/12	0 2 U	-	0 2 U	-
		07/09/12	0 2 U	-	0 2 U	-
		10/08/12	0 2 U	-	0 2 U	-
		01/17/13	0 2 U	0 2 U	0 2 U	0.02 U
		04/09/13	0 2 U	0 2 U	0 2 U	0.02 U
		07/03/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/09/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/13/14	0 2 U	-	0 2 U	-
		04/03/14	0 2 U	-	0 2 U	-
		07/14/14	0 2 U	-	0 2 U	-
		10/03/14	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-57	2	01/15/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/02/15	0 2 U	0 2 U	0 2 U	0.02 U
		07/09/15	0 2 U	0 2 U	0 2 U	0.02 U
		10/02/15	0 2 U	0 2 U	0 2 U	0.02 U
Aquifer 3a						
MW-64	3a	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/12/10	0 2 U	-	0 2 U	-
		04/20/10	0 2 U	-	0 2 U	-
		07/20/10	0 2 U	-	0 2 U	-
		10/22/10	0 2 U	-	0 2 U	-
		01/13/11	0 2 U	-	0 2 U	-
		04/15/11	0 2 U	-	0 2 U	-
		07/18/11	0 2 U	-	0 2 U	-
		10/10/11	0 2 U	-	0 2 U	-
		03/30/12	0 2 U	-	0 2 U	-
		04/27/12	0 2 U	-	0 2 U	-
		07/19/12	0 2 U	-	0 2 U	-
		01/16/13	0 2 U	0 2 U	0 2 U	0.02 U
		04/10/13	0 2 U	0 2 U	0 2 U	0.02 U
		07/31/13	0 2 U	0 2 U	0 2 U	0.02 U
		10/07/13	0 2 U	0 2 U	0 2 U	0.02 U
		01/14/14	0 2 U	-	0 2 U	-
		04/08/14	0 2 U	-	0 2 U	-
		07/22/14	0 2 U	-	0 2 U	-
		10/07/14	0 2 U	-	0 2 U	-
		01/23/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/28/15	0 2 U	0 2 U	0 2 U	0.02 U
		07/13/15	0 2 U	0 2 U	0 2 U	0.02 U
		10/08/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/06/16	0 2 U	0 2 U	0 2 U	0.02 U
		10/26/16	0 2 U	0 2 U	0 2 U	0.02 U
		04/27/17	0.1 U	0.1 U	0.1 U	0.01 U
		11/06/17	0.1 U	0.1 U	0.1 U	0.01 U
		04/19/18	0.1 U	0.1 U	0.1 U	0.01 U
		11/02/18	0.1 U	0.1 U	0.1 U	0.01 U
		04/12/19	0.1 U	0.1 U	0.1 U	0.01 U
		10/22/19	0.1 U	0.1 U	0.1 U	0.01 DU
Aquifer 3						
MW-24	3	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/07/10	**0.24**	-	0 2 U	-
		04/02/10	**0.23**	-	0 2 U	-
		07/13/10	**0.21**	-	0 2 U	-
		10/13/10	**0.28**	-	0 2 U	-
		01/24/11	0 2 U	-	0 2 U	-
		04/25/11	**0.29**	-	0 2 U	-
		07/14/11	**0.24**	-	0 2 U	-
		10/24/11	**0.29**	-	0 2 U	-
		03/01/12	0 2 U	-	0 2 U	-
		04/03/12	**0.26**	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-24 (cont.)	3	07/18/12	**0.25**	-	0 2 U	-
		10/10/12	**0.24**	-	0 2 U	-
		01/08/13	**0.34**	0 2 U	0 2 U	0.02 U
		04/08/13	**0.30**	0 2 U	0 2 U	0.02 U
		07/02/13	**0.31**	0 2 U	0 2 U	0.02 U
		10/17/13	**0.27**	0 2 U	0 2 U	0.02 U
		01/21/14	**0.24**	-	0 2 U	-
		04/18/14	**0.21**	-	0 2 U	-
		07/02/14	**0.23**	-	0 2 U	-
		10/03/14	**0.22**	-	0 2 U	-
		01/08/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/13/15	0 2 U	0 2 U	0 2 U	0.02 U
		07/02/15	**0.21**	0 2 U	0 2 U	0.02 U
		10/05/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/06/16	0 2 U	0 2 U	0 2 U	0.02 U
		10/06/16	0 2 U	0 2 U	0 2 U	0.02 U
		04/17/17	0.1 U	0.1 U	0.1 U	0.01 U
		04/13/18	0.1 U	0.1 U	0.1 U	0.01 U
		10/10/18	**0.104 JT**	0.1 U	0.1 U	**0.0154 JT**
		04/08/19	0.1 U	0.1 U	0.1 U	0.01 U
		10/22/19	**0.107 JT**	0.1 U	0.1 U	**0.0247 D**
MW-58A	3	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		01/04/10	0 2 U	-	0 2 U	-
		01/14/10	0 2 U	-	0 2 U	-
		04/02/10	0 2 U	-	0 2 U	-
		07/06/10	0 2 U	-	0 2 U	-
		01/05/11	0 2 U	-	0 2 U	-
		05/02/11	0 2 U	-	0 2 U	-
		07/12/11	0 2 U	-	0 2 U	-
		10/20/11	0 2 U	-	0 2 U	-
		03/15/12	0 2 U	-	0 2 U	-
		04/19/12	0 2 U	-	0 2 U	-
		07/10/12	0 2 U	-	0 2 U	-
		10/09/12	0 2 U	-	0 2 U	-
		01/18/13	0 2 U	0 2 U	0 2 U	0.02 U
MW-59	3	01/01/00	0 2 U	-	0 2 U	-
		04/01/00	0 2 U	-	0 2 U	-
		07/01/00	0 2 U	-	0 2 U	-
		10/01/00	0 2 U	-	0 2 U	-
		01/01/01	0 2 U	-	0 2 U	-
		10/01/01	0 2 U	-	0 2 U	-
		01/01/02	0 2 U	-	0 2 U	-
		04/01/02	0 2 U	-	0 2 U	-
		07/01/02	0 2 U	-	0 2 U	-
		10/01/02	0 2 U	-	0 2 U	-
		01/01/03	0 2 U	-	0 2 U	-
		07/01/03	0 2 U	-	0 2 U	-
		10/01/03	0 2 U	-	0 2 U	-
		01/01/04	0 2 U	-	0 2 U	-
		04/01/04	0 2 U	-	0 2 U	-
		07/01/04	0 2 U	-	0 2 U	-
		10/01/04	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-59 (cont.)	3	01/01/05	0 2 U	-	0 2 U	-
		04/01/05	0 2 U	-	0 2 U	-
		07/01/05	0 2 U	-	0 2 U	-
		10/01/05	0 2 U	-	0 2 U	-
		01/01/06	0 2 U	-	0 2 U	-
		04/01/06	0 2 U	-	0 2 U	-
		07/01/06	0 2 U	-	0 2 U	-
		10/01/06	0 2 U	-	0 2 U	-
		01/01/07	0 2 U	-	0 2 U	-
		04/01/07	0 2 U	-	0 2 U	-
		07/01/07	0 2 U	-	**0.45**	-
		10/01/07	0 2 U	-	0 2 U	-
		01/01/08	0 2 U	-	0 2 U	-
		04/01/08	0 2 U	-	0 2 U	-
		07/01/08	0 2 U	-	0 2 U	-
		10/01/08	**0.28**	-	0 2 U	-
		01/01/09	**0.31**	-	0 2 U	-
		04/01/09	**0.32**	-	0 2 U	-
		07/01/09	**0.36**	-	0 2 U	-
		10/01/09	**0.39**	-	0 2 U	-
		01/25/13	**0.674**	0 2 U	0 2 U	0.02 U
		04/16/13	**0.666**	0 2 U	0 2 U	0.02 U
		07/02/13	**0.857**	0 2 U	0 2 U	0.02 U
		10/09/13	**0.836**	0 2 U	0 2 U	0.02 U
		01/10/14	**0.74**	-	0 2 U	-
		04/03/14	**0.765**	-	0 2 U	-
		07/16/14	**0.812**	-	0 2 U	-
		10/06/14	**0.895**	-	0 2 U	-
		01/13/15	0 2 U	0 2 U	0 2 U	0.02 U
		04/17/15	**0.788**	0 2 U	0 2 U	0.02 U
		07/08/15	**1.08**	0 2 U	0 2 U	0.02 U
		10/07/15	**0.965**	0 2 U	0 2 U	0.02 U
		01/07/16	**1.08**	0 2 U	0 2 U	0.02 U
		04/20/16	**0.99**	0 2 U	0 2 U	0.02 U
		07/06/16	**1.05**	0 2 U	0 2 U	0.02 U
		10/10/16	**0.974**	0 2 U	0 2 U	0.02 U
		01/04/17	**1.37**	0 2 U	0 2 U	0.02 U
		04/05/17	**1.14**	0.1 U	0.1 U	0.01 U
		07/24/17	**1.22**	0.1 U	0.1 U	0.01 U
		10/09/17	**1.13**	0.1 U	0.1 U	0.01 U
		01/09/18	**1.2**	0.1 U	0.1 U	0.01 U
		04/12/18	**1.25**	0.1 U	0.1 U	0.01 U
		07/16/18	**1.15**	0.1 U	0.1 U	0.01 U
		10/12/18	**1.17**	0.1 U	0.1 U	0.01 U
		01/08/19	**1.25**	0.1 U	0.1 U	0.01 U
		04/10/19	**1.38**	0.1 U	0.1 U	0.01 U
		07/08/19	**1.37**	0.1 U	0.1 U	**0.0103 DJT**
		10/18/19	**1.41**	0.1 U	0.1 U	0.01 U
MW-65	3	01/01/09	0 2 U	-	0 2 U	-
		04/01/09	0 2 U	-	0 2 U	-
		07/01/09	0 2 U	-	0 2 U	-
		10/01/09	0 2 U	-	0 2 U	-
		03/30/10	0 2 U	-	0 2 U	-
		04/16/10	0 2 U	-	0 2 U	-
		07/26/10	0 2 U	-	0 2 U	-

Table E-1
Historical Data for Chemicals of Concern
Queen City Farms
Maple Valley, Washington

Sample Location	Aquifer	Sample Date	cDCE	PCE	TCE	VC
MW-65 (cont.)	3	01/19/11	0 2 U	-	0 2 U	-
		04/22/11	0 2 U	-	0 2 U	-
		07/21/11	0 2 U	-	0 2 U	-
		10/12/11	0 2 U	-	0 2 U	-
		01/12/12	0 2 U	-	0 2 U	-
		04/16/12	0 2 U	-	0 2 U	-
		07/17/12	0 2 U	-	**0.2**	-
		10/12/12	**0.2**	-	**0.2**	-
		01/18/13	0 2 U	0 2 U	0 2 U	**0.0432**
		04/23/13	0 2 U	0 2 U	0 2 U	**0.0423**
		07/08/13	0 2 U	0 2 U	0 2 U	**0.044**
		10/15/13	0 2 U	0 2 U	0 2 U	**0.0414**
		01/03/14	0 2 U	-	0 2 U	-
		04/10/14	0 2 U	-	0 2 U	-
		07/16/14	0 2 U	-	0 2 U	-
		10/09/14	0 2 U	-	0 2 U	-
		01/15/15	0 2 U	0 2 U	0 2 U	**0.0371**
		04/08/15	0 2 U	0 2 U	0 2 U	**0.0374**
		07/10/15	0 2 U	0 2 U	0 2 U	**0.0493**
		10/09/15	0 2 U	0 2 U	0 2 U	**0.0643**
		04/06/16	0 2 U	0 2 U	0 2 U	**0.0437**
		10/07/16	0 2 U	0 2 U	0 2 U	**0.0348**
		04/21/17	0.1 U	0.1 U	0.1 U	**0.0297**
		11/06/17	0.1 U	0.1 U	0.1 U	**0.032**
		04/23/18	0.1 U	0.1 U	0.1 U	**0.028**
		10/12/18	0.1 U	0.1 U	0.1 U	**0.0295**
		04/12/19	0.1 U	0.1 U	0.1 U	**0.0261**
		10/11/19	0.1 U	0.1 U	0.1 U	**0.0318**

Notes:

1. Well I-3a was sampled using two methods (purge-and-sample with a bladder pump and passive sampling with a PDB) on five occasions in 2007 through 2008. The sampling events are documented in the 2007 and 2008 Annual Monitoring Data Reports for QCF prepared by EcoChem and Boeing.
2. A sampling protocol was developed for IA-3a based on tests conducted in October 2012, April and September 2013, and April 2014. Results from these tests are plotted independently in this appendix to improve readability. The testing methods and selected protocol are documented in the Field Sampling Plan (August 6, 2014), the Purge Test for Well IA-3a Report (July 16, 2013), and the Site Characterization Update (October 14, 2014).
3. VOCs at QCF monitoring locations are analyzed using EPA Method 524.2 (µg/L).

- = not analyzed
Bold = Detected analyte
D = Laboratory specific qualifier indicating result is from a re-analysis due to dilution.
DU = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
OA-3a-68 = A grab sample collected within Aquifer 2 at the OA-3a well location, 68 feet below ground surface.
T = Laboratory-specific qualifier indicating an estimated value less than the reporting detection limit but greater than the method detection limit.
U = The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
UJ = The analyte was not detected in the sample; the reported sample reporting limit is an estimate.

Acronyms/Abbreviations:

cDCE = cis-1,2-dichloroethene
COC = constituents of concern
EPA = Environmental Protection Agency
EW = extraction well
GETS = Groundwater Extraction and Treatment System
LM = (b) offsite well (previously identified as LM-3)
LR = (b) offsite well
µg/L = micrograms/liter
MW = monitoring well
N/A = not applicable
PCE = tetrachloroethene
PDB = passive diffusion bag
QCF = Queen City Farms
SP = spring
TCE = trichloroethene
VC = vinyl chloride
VOC = volatile organic compound

APPENDIX F

Data Validation Reports

Spring 2019 Sampling Event Data Validation Technical Memorandum

Technical Memorandum

TO: Jennifer Wynkoop, Project Manager

FROM: Kristi Schultz and Danille Jorgensen

DATE: May 1, 2019

RE: **Stage 2A Laboratory Data Verification and Validation Results - Spring 2019**
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

This technical memorandum provides the results of a Stage 2A verification and validation check of analytical data for 44 water samples and 5 trip blanks collected from March 25-29, 2019 at the Queen City Farms (QCF) Superfund Site located in Maple Valley, Washington. The samples were collected and analyzed as part of the QCF groundwater monitoring program. All sample analyses were conducted at Eurofins Lancaster Laboratories Environmental (ELLE) laboratory, located in Lancaster, Pennsylvania.

Water samples were analyzed for volatile organic compounds (VOCs) using US Environmental Protection Agency (EPA) Method 524.2; methane, ethane, ethene (MEE) using method RSK-175; nitrate and sulfate using EPA Method 300.0; and total organic carbon (TOC) using method SM5310C. A Stage 2A verification and validation check was conducted on the analytical data associated with these analyses. The analytical results are reported in the ELLE laboratory data packages identified as 2035427, 2035669, 2035882, 2036153, and 2036348. Laboratory data package 2035427 also included samples collected as part of the QCF Groundwater Extraction and Treatment System (GETS) Performance Monitoring; these samples were validated, but are not included in this Stage 2A verification and validation memorandum. Electronic copies of these data packages are provided as Attachment 1. Sample names and the dates of sample collection and analysis are provided in the table below.

Sample Name	Lab Sample ID	Sample Collection Date	Sample Analysis Date
QCF-SC2-190325	1018081	3/25/2019	3/27/2019 (MEE); 3/27/2019 (Nitrate, Sulfate); 3/30/2019 (TOC); 4/4/2019 (VOCs)
QCF-O2-190325	1018082	3/25/2019	4/2/2019 (VOCs)
QCF-O3a-190325	1018083	3/25/2019	4/2/2019 (VOCs)
QCF-N3a-190325	1018084	3/25/2019	4/2/2019 (VOCs)
QCF-N2-190325	1018085	3/25/2019	4/2/2019 (VOCs)
QCF-OA3a-190325	1018086	3/25/2019	4/2/2019 (VOCs)
QCF-H2a-190325	1018087	3/25/2019	4/2/2019 (VOCs)
QCF-H2-190325	1018088	3/25/2019	4/2/2019 (VOCs)
QCF-S2-190325	1018089	3/25/2019	3/27/2019 (MEE); 3/27/2019 (Nitrate, Sulfate); 3/30/2019 (TOC); 4/2/2019 (VOCs)
QCF-TripBlank-190325	1018090	3/25/2019	4/1/2019 (VOCs)
QCF-TripBlank-190326	1019020	3/26/2019	4/1/2019 (VOCs)
QCF-I2-190326	1019021	3/26/2019	3/28/2019 (MEE, Nitrate, Sulfate); 3/30/2019 (TOC); 4/1/2019 (VOCs)

Sample Name	Lab Sample ID	Sample Collection Date	Sample Analysis Date
QCF-I2a-190326	1019022	3/26/2019	3/28/2019 (MEE, Nitrate, Sulfate); 3/30/2019 (TOC); 4/1/2019 (VOCs)
QCF-I3-190326	1019023	3/26/2019	3/28/2019 (MEE, Nitrate); 3/29/2019 (Sulfate); 3/30/2019 (TOC); 4/1/2019 (VOCs)
QCF-I3a-190326	1019024	3/26/2019	3/28/2019 (MEE, Nitrate, Sulfate); 3/30/2019 (TOC); 4/1/2019 (VOCs)
QCF-SD3a-190326	1019025	3/26/2019	3/28/2019 (MEE, Nitrate, Sulfate); 3/30/2019 (TOC); 4/1/2019 (VOCs)
QCF-SD2-190326	1019026	3/26/2019	3/28/2019 (MEE, Nitrate, Sulfate); 3/30/2019 (TOC); 4/2/2019 (VOCs)
QCF-SB2-190326	1019027	3/26/2019	4/2/2019 (VOCs)
QCF-U2-190326	1019028	3/26/2019	4/2/2019 (VOCs)
QCF-SE2-190326	1019029	3/26/2019	4/2/2019 (VOCs)
QCF-D2a-190326	1019030	3/26/2019	4/2/2019 (VOCs)
QCF-TripBlank-190327	1019836	3/27/2019	4/4/2019 (VOCs)
QCF-LR-190327	1019837	3/27/2019	4/4/2019 (VOCs)
QCF-LM-190327	1019838	3/27/2019	4/4/2019 (VOCs)
QCF-IB2a-190327	1019839	3/27/2019	4/4/2019 (VOCs)
QCF-V2a-190327	1019840	3/27/2019	4/4/2019 (VOCs)
QCF-IB3a-190327	1019841	3/27/2019	4/5/2019 (VOCs)
QCF-MA3a-190327	1019842	3/27/2019	3/28/2019 (Nitrate, Sulfate); 3/29/2019 (MEE); 4/4/2019 (TOC); 4/5/2019 (VOCs)
QCF-M2-190327	1019843	3/27/2019	3/28/2019 (Nitrate, Sulfate); 3/29/2019 (MEE); 4/4/2019 (TOC); 4/5/2019 (VOCs)
QCF-IA3a-190327	1019844	3/27/2019	3/28/2019 (Nitrate, Sulfate); 3/29/2019 (MEE); 4/4/2019 (TOC); 4/5/2019 (VOCs)
QCF-IA3-190327	1019845	3/27/2019	3/28/2019 (Nitrate, Sulfate); 3/29/2019 (MEE); 4/4/2019 (TOC); 4/5/2019 (VOCs)
QCF-Dup3-190327	1019846	3/27/2019	3/28/2019 (Nitrate, Sulfate); 3/29/2019 (MEE); 4/4/2019 (TOC); 4/5-4/7/2019 (VOCs)
QCF-TripBlank-190328	1021232	3/28/2019	4/4/2019 (VOCs)
QCF-SA2-190328	1021233	3/28/2019	3/29/2019 (Nitrate, Sulfate); 4/1/2019 (MEE); 4/5/2019 (TOC); 4/7/2019 (VOCs)
QCF-S2a-190328	1021234	3/28/2019	3/29/2019 (Nitrate, Sulfate); 4/1/2019 (MEE); 4/5/2019 (VOCs, TOC)
QCF-F2-190328	1021235	3/28/2019	3/29/2019 (Nitrate, Sulfate); 4/1/2019 (MEE); 4/5/2019 (VOCs, TOC)
QCF-F2a-190328	1021236	3/28/2019	3/29/2019 (Nitrate, Sulfate); 4/1/2019 (MEE); 4/5/2019 (VOCs, TOC)

Sample Name	Lab Sample ID	Sample Collection Date	Sample Analysis Date
QCF-G2-190328	1021237	3/28/2019	4/7/2019 (VOCs)
QCF-G2a-190328	1021238	3/28/2019	4/7/2019 (VOCs)
QCF-E2-190328	1021239	3/28/2019	4/7/2019 (VOCs)
QCF-Dup1-190328	1021240	3/28/2019	4/7/2019 (VOCs)
QCF-E2a-190328	1021241	3/28/2019	4/7/2019 (VOCs)
QCF-E1-190328	1021242	3/28/2019	4/7/2019 (VOCs)
QCF-TripBlank-190329	1022209	3/29/2019	4/8/2019 (VOCs)
QCF-B3-190329	1022210	3/29/2019	3/30/2019 (Nitrate); 4/1/2019 (MEE, Sulfate); 4/8/2019 (VOCs, TOC)
QCF-C2-190329	1022211	3/29/2019	3/30/2019 (Nitrate); 4/1/2019 (MEE); 4/2/2019 (Sulfate); 4/8/2019 (VOCs, TOC)
QCF-C2a-190329	1022212	3/29/2019	4/8/2019 (VOCs)
QCF-L2a-190329	1022213	3/29/2019	4/8/2019 (VOCs)
QCF-L2-190329	1022214	3/29/2019	3/30/2019 (Nitrate); 4/1/2019 (MEE); 4/2/2019 (Sulfate); 4/8/2019 (VOCs, TOC)

Abbreviations/Acronyms: ID = identification, VOC = volatile organic compound

The Stage 2A verification and validation check was conducted in accordance with EPA's Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA 2009); the Quality Assurance Project Plan (QAPP), Version 3.0 (EcoChem and LAI 2015); and with guidance from applicable portions of the National Functional Guidelines for Organic Data Review (EPA 2016). The Stage 2A verification and validation check for each laboratory data package included the following:

- Verification that the laboratory data package contained all necessary documentation (including chain-of-custody records [COC]; identification of samples received by the laboratory; date and time of receipt of the samples at the laboratory; sample conditions upon receipt at the laboratory; date and time of sample analysis; and, if applicable, date of extraction; definition of laboratory data qualifiers; all sample-related quality control (QC) data; and QC acceptance criteria).
- Verification that all requested analyses, special cleanups, and special handling methods were performed.
- Verification that QC samples were performed as specified in the QAPP.
- Evaluation of sample holding times.
- Evaluation of QC data compared to acceptance criteria, including method blanks, field trip blanks, surrogate recoveries, laboratory control sample (LCS) results, and blind field duplicate pair relative percent differences (RPD).
- Evaluation of reporting limits (RLs) compared to target RLs specified in the QAPP.

Data validation qualifiers are added to the sample results, as appropriate, based on the Stage 2A verification and validation check. The absence of a data qualifier indicates that the reported result is

acceptable without qualification. Data qualifiers are summarized in the attached Table 1. The data quality evaluation is summarized below.

Laboratory Data Package Completeness

Each laboratory data package contained a signed COC, a cooler receipt form documenting the condition of the samples upon receipt at the laboratory; a cooler temperature compliance form; sample analytical results; and QC results (method blanks, field trip blanks, surrogate recoveries, and LCS results). A case narrative identifying any complications was also provided with each laboratory data package. Definitions of laboratory qualifiers and QC acceptance criteria were provided, as appropriate.

Sample Conditions and Analysis

The laboratory received the samples in good condition and all analyses were performed as requested. Upon receipt by LLI, the sample container information was compared to the associated COC and the cooler temperatures were recorded. Coolers were received with temperatures ranging from 0.4 degrees Celsius (°C) to 1.5°C, which is within the EPA-recommended limit of ≤6°C.

Holding Times

For all analyses and all samples, the time between sample collection, extraction (if applicable), and analysis was determined to be within EPA and project-specified holding times, with the following exception:

- Per the case narrative, the 1x dilution nitrate analysis for sample QCF-IA3a-190327 in data package 2035882 was analyzed slightly outside the method-recommended hold time, and the results for the initial 5x dilution analysis and the 1x dilution analysis were non-detect. The laboratory only reported the 5x dilution analysis which was analyzed within the method-recommended hold time. No qualification of the data was necessary.

Blank Results

Laboratory Method Blanks

At least one method blank was analyzed with each batch of samples. Target analytes were not detected at concentrations greater than RLs in the associated method blanks. No qualification of the data was necessary.

Field Trip Blanks

At least one field (trip) blank was analyzed with each batch of samples submitted to the laboratory for VOC analysis. Target analytes were not detected at concentrations greater than the RLs in the associated field blanks. No qualification of the data was necessary.

Surrogate Recoveries

Appropriate compounds were used as surrogate spikes. Recovery values for the surrogate spikes were within the current laboratory-specified control limits for all project samples. No qualification of the data was necessary.

Matrix Spike (MS) and Laboratory Replicate Results

At least one MS and/or laboratory replicate sample were analyzed with the conventional analyses in data packages 2035669, 2035882, 2036153, and 2036348. The recovery values for each required spiking compound and/or the relative percent differences (RPDs) between the laboratory replicate results were within the current project-specified and/or laboratory-specified control limits for all project samples with the following exceptions:

- The MS recoveries for nitrate associated with the conventionals analysis of sample QCF-I2-190326 in data package 2035669 and sample QCF-B3-190329 in data package 2036348 were greater than the laboratory-specified control limits. Nitrate was not detected at a concentration greater than the reporting limit in the associated samples; therefore, no qualification of the data was necessary.
- The MS recoveries for sulfate associated with the conventionals analysis of sample QCF-I2-190326 in data package 2035669 and sample QCF-B3-190329 in data package 2036348 were greater than the laboratory-specified control limits. The associated sample results were qualified as estimated (J), as indicated in Table 1.
- The MS recoveries for nitrate and sulfate associated with the conventionals analysis of sample QCF-SA2-190328 in data package 2036153 were greater than the laboratory-specified control limits. The associated sample results were qualified as estimated (J), as indicated in Table 1.

Laboratory Control Sample Results

At least one LCS was analyzed with each batch of samples. Recoveries for each LCS were within the current laboratory-specified control limits, with the following exception:

- The LCS recovery for hexachlorobutadiene associated with the VOC analysis in data package 2035669 was greater than the laboratory-specified control limits. Hexachlorobutadiene was not detected at a concentration greater than the reporting limit in the associated samples; no qualification of the data was necessary.

Blind Field Duplicates

Two pairs of blind field duplicate groundwater samples (QCF-Dup1-190328/QCF-E2-190328 and QCF-Dup3-190327/QCF-IA3-190327) were submitted for analysis with data packages 2036153 and 2035882 and were analyzed for VOCs, MEE, nitrate, sulfate, and TOC.

A project-specified control limit of 35 percent was used to evaluate the RPDs between the duplicate water samples, except when the sample results were within five times the RL. In these cases, a project-specified control limit of plus or minus the RL was used. RPDs for the duplicate sample pairs

submitted for analysis were within the project-specified control limits. No qualification of the data was necessary.

Initial and Continuing Calibrations and Internal Standards

According to the case narratives, laboratory-specified calibration limits for initial and continuing calibrations and internal standards were met for all analyses, with the following exception:

- The case narratives indicated the initial calibration verification was high for hexachlorobutadiene for select samples in data packages 2035882 and 2036153. Hexachlorobutadiene was not detected at concentrations greater than the reporting limit in the associated samples. No qualification of the data was necessary.

Reporting Limits

Project-specified RLs were met for all samples with the following exception:

- The RLs for trichloroethene or cis-1,2-dichloroethene for three water samples were raised due to required sample dilution; however, the associated results were detected concentrations above the raised RL.

A listing of the specific samples with raised RLs is provided below.

Sample Name	Lab Sample ID	Analyte	Target Quantitation Limit	Sample Reporting Limit	Sample Result
QCF-IA3a-190327	1019844	Trichloroethene	0.5 µg/L	5.0 µg/L	78 µg/L
QCF-IA3-190327	1019845	cis-1,2-Dichloroethene	0.5 µg/L	5.0 µg/L	31 µg/L
QCF-Dup3-190327	1019846	cis-1,2-Dichloroethene	0.5 µg/L	5.0 µg/L	31 µg/L

Completeness and Overall Data Quality

The completeness for this data set is 100 percent, which meets the project-specified goal of 95 percent minimum.

Data precision was evaluated through blind field duplicate samples. Data accuracy was evaluated through LCS, MS, and surrogate spikes. Based on this Stage 2A data quality verification and validation, all of the data were determined to be acceptable. No data were rejected.

LANDAU ASSOCIATES, INC.

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KES/DRJ/jrc
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Attachment

Table D-1: Summary of Data Qualifiers
Attachment 1: ELLE Analytical Reports 2035427, 2035669, 2035882, 2036153, and 2036348

References

EcoChem and LAI. 2015. Quality Assurance Project Plan, Groundwater Monitoring and Groundwater Extraction and Treatment System Performance Monitoring, Queen City Farms Superfund Site, Maple Valley, King County, Washington. EcoChem, Inc. and Landau Associates, Inc. February 27.

EPA. 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. OSWER No. 9200.1-85; EPA 540-R-08-005. US Environmental Protection Agency. January 13.

EPA. 2016. National Functional Guidelines for Superfund Organic Methods Data Review. Publication No. OLEM 9355.0-134, EPA-540-R-2016-002. Office of Superfund Remediation and Technology Innovation (OSRTI), US Environmental Protection Agency. September.

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
Conv.	2035669	1019021	QCF-I2-190326	Sulfate	5.6	J	High matrix spike recovery
VOCs	2035882	1019844	QCF-IA3a-190327	Trichloroethene	95 E	DNR	Do not report; use dilution analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Benzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Bromobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Bromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Bromodichloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Bromoform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Bromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	n-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	sec-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	tert-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Carbon Tetrachloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Chlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Chloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Chloroform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Chloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	2-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	4-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Dibromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2-Dibromoethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Dibromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,3-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,4-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Dichlorodifluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	cis-1,2-Dichloroethene	15	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	trans-1,2-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,3-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	2,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1-Dichloropropene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	cis-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	trans-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Ethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Hexachlorobutadiene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Isopropylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	p-Isopropyltoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Methylene Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Naphthalene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	n-Propylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Styrene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Tetrachloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Toluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1,1-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,1,2-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	Trichlorofluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2,3-Trichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2035882	1019844	QCF-IA3a-190327	Vinyl Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	m,p-Xylene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019844	QCF-IA3a-190327	o-Xylene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	cis-1,2-Dichloroethene	34 E	DNR	Do not report; use dilution analysis
VOCs	2035882	1019845	QCF-IA3-190327	Benzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Bromobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Bromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Bromodichloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Bromoform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Bromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	n-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	sec-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	tert-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Carbon Tetrachloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Chlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Chloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Chloroform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Chloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	2-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	4-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Dibromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2-Dibromoethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Dibromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,3-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,4-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Dichlorodifluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	trans-1,2-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,3-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	2,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1-Dichloropropene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	cis-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	trans-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Ethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Hexachlorobutadiene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Isopropylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	p-Isopropyltoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Methylene Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Naphthalene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	n-Propylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Styrene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Tetrachloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Toluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1,1-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,1,2-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Trichloroethene	8.6	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Trichlorofluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,2,3-Trichloropropane	5.0 U	DNR	Do not report; use original analysis

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2035882	1019845	QCF-IA3-190327	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	Vinyl Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	m,p-Xylene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019845	QCF-IA3-190327	o-Xylene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	cis-1,2-Dichloroethene	33 E	DNR	Do not report; use dilution analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Benzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Bromobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Bromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Bromodichloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Bromoform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Bromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	n-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	sec-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	tert-Butylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Carbon Tetrachloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Chlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Chloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Chloroform	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Chloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	2-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	4-Chlorotoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Dibromochloromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2-Dibromoethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Dibromomethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,3-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,4-Dichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Dichlorodifluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2-Dichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	trans-1,2-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,3-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	2,2-Dichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1-Dichloropropene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	cis-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	trans-1,3-Dichloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Ethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Hexachlorobutadiene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Isopropylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	p-Isopropyltoluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Methylene Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Naphthalene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	n-Propylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Styrene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Tetrachloroethene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Toluene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1,1-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,1,2-Trichloroethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Trichloroethene	9.3	DNR	Do not report; use original analysis

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2035882	1019846	QCF-Dup3-190327	Trichlorofluoromethane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2,3-Trichloropropane	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	Vinyl Chloride	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	m,p-Xylene	5.0 U	DNR	Do not report; use original analysis
VOCs	2035882	1019846	QCF-Dup3-190327	o-Xylene	5.0 U	DNR	Do not report; use original analysis
Conv.	2036153	1021233	QCF-SA2-190328	Nitrate	1.6	J	Low matrix spike recovery
Conv.	2036153	1021233	QCF-SA2-190328	Sulfate	4.9	J	Low matrix spike recovery
Conv.	2036348	1022210	QCF-B3-190329	Sulfate	16.7	J	High matrix spike recovery

Notes:

E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Abbreviations/Acronyms:

Conv. = conventionals
DNR = Do not report
VOC = volatile organic compound

ATTACHMENT 1

Eurofins Lancaster Laboratories Environmental Analytical Reports 1924102, 1926069, and 1926073

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REVISED

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MS 2R-96
PO Box 3707
Seattle WA 98124-2207

Report Date: April 04, 2019 11:39

Project: Boeing_QCF

Account #: 13419
Group Number: 2035427
SDG: BNI95
State of Sample Origin: WA

Electronic Copy To	The Boeing Company	Attn: Joe Flaherty
Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen

Respectfully Submitted,

Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-IGW-190325 Water	03/25/2019 09:12	1018071
QCF-EGW-190325 Water	03/25/2019 09:19	1018072
QCF-EW7-190325 Water	03/25/2019 10:10	1018073
QCF-EW6-190325 Water	03/25/2019 10:50	1018074
QCF-EW5-190325 Water	03/25/2019 11:24	1018075
QCF-EW4-190325 Water	03/25/2019 11:51	1018076
QCF-EW3-190325 Water	03/25/2019 10:53	1018077
QCF-EW2-190325 Water	03/25/2019 10:09	1018078
QCF-EW1-190325 Water	03/25/2019 09:31	1018079
QCF-DUP2-190325 Water	03/25/2019 10:55	1018080
QCF-SC2-190325 Water	03/25/2019 14:37	1018081
QCF-O2-190325 Water	03/25/2019 13:04	1018082
QCF-O3a-190325 Water	03/25/2019 14:06	1018083
QCF-N3a-190325 Water	03/25/2019 13:48	1018084
QCF-N2-190325 Water	03/25/2019 13:52	1018085
QCF-OA3a-190325 Water	03/25/2019 14:38	1018086
QCF-H2a-190325 Water	03/25/2019 16:05	1018087
QCF-H2-190325 Water	03/25/2019 16:17	1018088
QCF-S2-190325 Water	03/25/2019 16:18	1018089
QCF-Tripblank-190325 Water	03/25/2019	1018090

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: Boeing_QCF
ELLE Group #: 2035427

General Comments:

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.

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

Analysis Specific Comments:

No additional comments are necessary.

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Analysis Report

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Sample Description: **QCF-IGW-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:12
SDG#: BNI95-01

The Boeing Company
ELLE Sample #: WW 1018071
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.2**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-IGW-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:12
SDG#: BNI95-01

The Boeing Company
ELLE Sample #: WW 1018071
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.4**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 20:29	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-EGW-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:19
SDG#: BNI95-02

The Boeing Company
ELLE Sample #: WW 1018072
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.7**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-EGW-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:19
SDG#: BNI95-02

The Boeing Company
ELLE Sample #: WW 1018072
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.6**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 20:56	Don V Viray	1

REVISED

Sample Description: **QCF-EW7-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:10
SDG#: BNI95-03

The Boeing Company
ELLE Sample #: WW 1018073
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**2.6**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW7-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:10
SDG#: BNI95-03

The Boeing Company
ELLE Sample #: WW 1018073
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**4.6**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 21:23	Don V Viray	1

REVISED

Sample Description: **QCF-EW6-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:50
SDG#: BNI95-04

The Boeing Company
ELLE Sample #: WW 1018074
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.7**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW6-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:50
SDG#: BNI95-04

The Boeing Company
ELLE Sample #: WW 1018074
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.2**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 21:49	Don V Viray	1

REVISED

Sample Description: **QCF-EW5-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 11:24
SDG#: BNI95-05

The Boeing Company
ELLE Sample #: WW 1018075
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.7**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW5-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 11:24
SDG#: BNI95-05

The Boeing Company
ELLE Sample #: WW 1018075
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.1**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 22:16	Don V Viray	1

REVISED

Sample Description: **QCF-EW4-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 11:51
SDG#: BNI95-06

The Boeing Company
ELLE Sample #: WW 1018076
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.6**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW4-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 11:51
SDG#: BNI95-06

The Boeing Company
ELLE Sample #: WW 1018076
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**4.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 22:43	Don V Viray	1

REVISED

Sample Description: **QCF-EW3-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:53
SDG#: BNI95-07

The Boeing Company
ELLE Sample #: WW 1018077
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW3-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:53
SDG#: BNI95-07

The Boeing Company
ELLE Sample #: WW 1018077
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.6**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 23:10	Don V Viray	1

REVISED

Sample Description: **QCF-EW2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:09
SDG#: BNI95-08

The Boeing Company
ELLE Sample #: WW 1018078
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.1**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW2-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:09
SDG#: BNI95-08

The Boeing Company
ELLE Sample #: WW 1018078
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.1**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 23:37	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-EW1-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:31
SDG#: BNI95-09

The Boeing Company
ELLE Sample #: WW 1018079
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-EW1-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 09:31
SDG#: BNI95-09

The Boeing Company
ELLE Sample #: WW 1018079
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.0**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 00:04	Don V Viray	1

REVISED

Sample Description: **QCF-DUP2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:55
SDG#: BNI95-10FD

The Boeing Company
ELLE Sample #: WW 1018080
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-DUP2-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 10:55
SDG#: BNI95-10FD

The Boeing Company
ELLE Sample #: WW 1018080
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 00:31	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-SC2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:37
SDG#: BNI95-11

The Boeing Company
ELLE Sample #: WW 1018081
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-SC2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:37
SDG#: BNI95-11

The Boeing Company
ELLE Sample #: WW 1018081
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**7.1**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.5**		0.10	1
00228	**Sulfate**		14808-79-8	**6.1**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 00:58	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190860002A	03/27/2019 12:44	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19086987109A	03/27/2019 11:49	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19086987109A	03/27/2019 11:49	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602A	03/30/2019 02:17	Drew M Gerhart	1

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Analysis Report

REVISED

Sample Description: **QCF-O2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:04
SDG#: BNI95-12

The Boeing Company
ELLE Sample #: WW 1018082
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-O2-190325 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:04
SDG#: BNI95-12

The Boeing Company
ELLE Sample #: WW 1018082
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 01:25	Don V Viray	1

REVISED

Sample Description: **QCF-O3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:06
SDG#: BNI95-13

The Boeing Company
ELLE Sample #: WW 1018083
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**3.8**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-O3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:06
SDG#: BNI95-13

The Boeing Company
ELLE Sample #: WW 1018083
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 01:52	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-N3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:48
SDG#: BNI95-14

The Boeing Company
ELLE Sample #: WW 1018084
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-N3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:48
SDG#: BNI95-14

The Boeing Company
ELLE Sample #: WW 1018084
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 02:18	Don V Viray	1

REVISED

Sample Description: **QCF-N2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:52
SDG#: BNI95-15

The Boeing Company
ELLE Sample #: WW 1018085
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-N2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 13:52
SDG#: BNI95-15

The Boeing Company
ELLE Sample #: WW 1018085
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 02:45	Don V Viray	1

REVISED

Sample Description: **QCF-OA3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:38
SDG#: BNI95-16

The Boeing Company
ELLE Sample #: WW 1018086
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**4.3**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-OA3a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 14:38
SDG#: BNI95-16

The Boeing Company
ELLE Sample #: WW 1018086
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 03:12	Don V Viray	1

REVISED

Sample Description: **QCF-H2a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:05
SDG#: BNI95-17

The Boeing Company
ELLE Sample #: WW 1018087
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-H2a-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:05
SDG#: BNI95-17

The Boeing Company
ELLE Sample #: WW 1018087
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 03:38	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-H2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:17
SDG#: BNI95-18

The Boeing Company
ELLE Sample #: WW 1018088
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-H2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:17
SDG#: BNI95-18

The Boeing Company
ELLE Sample #: WW 1018088
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 04:05	Don V Viray	1

REVISED

Sample Description: **QCF-S2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:18
SDG#: BNI95-19

The Boeing Company
ELLE Sample #: WW 1018089
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-S2-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019 16:18
SDG#: BNI95-19

The Boeing Company
ELLE Sample #: WW 1018089
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	Trichloroethene		79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**8.4**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/02/2019 04:32	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190860002A	03/27/2019 13:02	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19086987109A	03/27/2019 13:00	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19086987109A	03/27/2019 13:00	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602A	03/30/2019 02:30	Drew M Gerhart	1

REVISED

Sample Description: **QCF-Tripblank-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019
SDG#: BNI95-20TB

The Boeing Company
ELLE Sample #: WW 1018090
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-Tripblank-190325 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/26/2019 10:10
Collection Date/Time: 03/25/2019
SDG#: BNI95-20TB

The Boeing Company
ELLE Sample #: WW 1018090
ELLE Group #: 2035427
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	S190911AA	04/01/2019 20:02	Don V Viray	1

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/04/2019 11:39

Group Number: 2035427

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: S190911AA	Sample number(s): 1018071-1018090		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/04/2019 11:39

Group Number: 2035427

Method Blank (continued)

Analysis Name	Result		LOQ
	ug/l		ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: 190860002A	Sample number(s): 1018081,1018089		
Ethane	5.0	U	5.0
Ethene	5.0	U	5.0
Methane	5.0	U	5.0
	mg/l		mg/l
Batch number: 19086987109A	Sample number(s): 1018081,1018089		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0
Batch number: 19088667602A	Sample number(s): 1018081,1018089		
Total Organic Carbon	2.0	U	2.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: S190911AA	Sample number(s): 1018071-1018090								
Benzene	5.00	4.43			89		70-130		
Bromobenzene	5.00	5.62			112		70-130		
Bromochloromethane	5.00	3.91			78		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/04/2019 11:39

Group Number: 2035427

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromodichloromethane	5.00	4.79			96		70-130		
Bromoform	5.00	5.19			104		70-130		
Bromomethane	2.00	1.93			97		70-130		
n-Butylbenzene	5.00	5.10			102		70-130		
sec-Buty benzene	5.00	4.76			95		70-130		
tert-Buty benzene	5.00	4.77			95		70-130		
Carbon Tetrachloride	5.00	5.76			115		70-130		
Chlorobenzene	5.00	5.41			108		70-130		
Chloroethane	2.00	2.37			119		70-130		
Chloroform	5.00	4.76			95		70-130		
Chloromethane	2.00	1.85			93		70-130		
2-Chlorotoluene	5.00	4.65			93		70-130		
4-Chlorotoluene	5.00	4.62			92		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.49			110		70-130		
Dibromochloromethane	5.00	4.88			98		70-130		
1,2-Dibromoethane	5.00	5.55			111		70-130		
Dibromomethane	5.00	5.05			101		70-130		
1,2-Dichlorobenzene	5.00	5.56			111		70-130		
1,3-Dichlorobenzene	5.00	5.50			110		70-130		
1,4-Dichlorobenzene	5.00	5.59			112		70-130		
Dichlorodifluoromethane	2.00	1.79			90		70-130		
1,1-Dichloroethane	5.00	6.19			124		70-130		
1,2-Dichloroethane	5.00	6.32			126		70-130		
1,1-Dichloroethene	5.00	5.57			111		70-130		
cis-1,2-Dichloroethene	5.00	5.11			102		70-130		
trans-1,2-Dichloroethene	5.00	5.64			113		70-130		
1,2-Dichloropropane	5.00	5.70			114		70-130		
1,3-Dichloropropane	5.00	4.86			97		70-130		
2,2-Dichloropropane	5.00	5.30			106		70-130		
1,1-Dichloropropene	5.00	4.94			99		70-130		
cis-1,3-Dichloropropene	5.00	5.10			102		70-130		
trans-1,3-Dichloropropene	5.00	5.07			101		70-130		
Ethylbenzene	5.00	5.56			111		70-130		
Hexachlorobutadiene	5.00	5.84			117		70-130		
Isopropylbenzene	5.00	5.01			100		70-130		
p-Isopropyltoluene	5.00	5.25			105		70-130		
Methylene Chloride	5.00	5.17			103		70-130		
Naphthalene	5.00	4.65			93		70-130		
n-Propy benzene	5.00	4.94			99		70-130		
Styrene	5.00	5.56			111		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.04			101		70-130		
1,1,2,2-Tetrachloroethane	5.00	4.48			90		70-130		
Tetrachloroethene	5.00	5.18			104		70-130		
Toluene	5.00	5.02			100		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/04/2019 11:39

Group Number: 2035427

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,3-Trichlorobenzene	5.00	5.12			102		70-130		
1,2,4-Trichlorobenzene	5.00	5.19			104		70-130		
1,1,1-Trichloroethane	5.00	5.66			113		70-130		
1,1,2-Trichloroethane	5.00	4.67			93		70-130		
Trichloroethene	5.00	5.08			102		70-130		
Trichlorofluoromethane	2.00	2.41			120		70-130		
1,2,3-Trichloropropane	5.00	5.53			111		70-130		
1,2,4-Trimethy benzene	5.00	5.60			112		70-130		
1,3,5-Trimethy benzene	5.00	5.72			114		70-130		
Vinyl Chloride	2.00	2.29			115		70-130		
m+p-Xylene	10	11.41			114		70-130		
o-Xylene	5.00	5.61			112		70-130		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 190860002A	Sample number(s): 1018081,1018089								
Ethane	58.44	59.22	58.44	58.91	101	101	85-115	1	20
Ethene	60.85	61.76	60.85	60.65	101	100	83-115	2	20
Methane	59.83	62.67	59.83	62.98	105	105	85-115	0	20
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 19086987109A	Sample number(s): 1018081,1018089								
Nitrate Nitrogen	0.750	0.781			104		90-110		
Sulfate	7.50	7.98			106		90-110		
Batch number: 19088667602A	Sample number(s): 1018081,1018089								
Total Organic Carbon	25	24.23			97		91-113		

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: S190911AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1018071	88	97
1018072	90	99
1018073	90	103
1018074	88	101
1018075	88	99
1018076	87	101
1018077	88	101

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/04/2019 11:39

Group Number: 2035427

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: S190911AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1018078	87	100
1018079	88	99
1018080	87	98
1018081	86	95
1018082	87	100
1018083	90	101
1018084	86	99
1018085	86	99
1018086	85	97
1018087	86	95
1018088	87	101
1018089	85	96
1018090	88	102
Blank	91	100
LCS	95	106
Limits:	80-120	80-120

Analysis Name: MEE by RSK-175
Batch number: 190860002A

	Propene
1018081	65
1018089	78
Blank	101
LCS	102
LCSD	103
Limits:	46-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419 For Eurofins Lancaster Laboratories use only Group # 635427 Sample # 1018071-90

Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Annual Sampling
Site Program/#: 0025178.160.401
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: [X] Boeing EHS [ ] Other (specify):
Sampler: KAM/HER # of Coolers: 1

4 Analyses Requested

5 Remarks/Comments

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TOC SM 5310C
QCF-1GW-190325	3/25/19	912	Aq	3	X			
QCF-EGW-190325	3/25/19	919	Aq	3	X			
QCF-EW7-190325	3/25/19	1010 ~~1009~~	Aq	3	X			
QCF-EW6-190325	3/25/19	1050	Aq	3	X			
QCF-EW5-190325	3/25/19	1124	Aq	3	X			
QCF-EW4-190325		1151	Aq	3	X			
QCF-EW3-190325		1053	Aq	3	X			
QCF-EW2-190325		1009	Aq	3	X			
QCF-EW1-190325		931	Aq	3	X			
~~Dup~~ QCF-Dup2-190325	3/25	~~14~~ 1055	Aq	3	X			
QCF-SC2-190325	3/25	1437	Aq	8	X	X	X	X
QCF-02-190325	3/25	1304	Aq	3	X			
QCF-03a-190325	3/25	1406	Aq	3	X			
QCF-N3a-190325	3/25	1348	Aq	3	X			
QCF-N2-190325	3/25	1352	Aq	3	X			

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Date needed: _____

Relinquished by:	Date/Time	Received by:	Date/Time
Kristin M. Jurgensen	3/25/19 1700		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time 3/26/19 1010

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 0.4 °C

Custody Seals Intact?: Yes No

Eurofins Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 717-656-2300
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Issued by Dept. 40 Management 7063.02

Boeing Chain of Custody

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Acct. # 134 A

For Eurofins Lancaster Laboratories use only
Group # 1035427 Sample # 1018071-90
Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Annual Sampling
Site Program/#: 0025178.160.401
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: ☒ Boeing EHS ☐ Other (specify):
Sampler: KAM/HER # of Coolers: 1

4 Analyses Requested / 5 Remarks/Comments

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TOC SM 5310C	5 Remarks/Comments
QCF - OA3 - 190325	3/25/19	14:38	Aq	3	X				
QCF - H2a - 190325	3/25/19	1605	Aq	3	X				
QCF - H2 - 190325	3/25/19	1617	Aq	3	X				
QCF - S2 - 190325	3/25/19	1618	Aq	~~3~~ 8	X	X	X	X	
QCF - Trip blank - 190325	—	—	Aq	2	X				
~~QCF - DUP2 - 190325~~	~~3/25/19~~	~~1055~~	~~Aq~~	~~3~~	~~X~~				Trip

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time	Received by:	Date/Time
Katie M. Yaughz	3/25/19 1700		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
			3/26/19 1010

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 0.4 °C

Custody Seals Intact?: Yes No

Eurofins Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.
Issued by Dept. 40 Management
7063.02

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Sample Administration Receipt Documentation Log

Doc Log ID: 244581

Group Number(s): 2035427

Client: Queen City Farms

Annual Sampling

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/26/2019 10:10
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Leah Foreman (12616) at 11:26 on 03/26/2019

Samples Chilled Details: Annual Sampling

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-02	0.4	DT	Wet	Y	Bagged	N

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Lancaster, PA 17605-2425

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MS 2R-96
PO Box 3707
Seattle WA 98124-2207

Report Date: April 26, 2019 12:06

Project: Boeing_QCF

Account #: 13419
Group Number: 2035669
SDG: BNI96
State of Sample Origin: WA

Electronic Copy To	The Boeing Company	Attn: Joe Flaherty
Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen

Respectfully Submitted,

Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TripBlank-190326 Water	03/26/2019	1019020
QCF-I2-190326 Water	03/26/2019 09:56	1019021
QCF-I2a-190326 Water	03/26/2019 11:42	1019022
QCF-I3-190326 Water	03/26/2019 10:40	1019023
QCF-I3a-190326 Water	03/26/2019 11:06	1019024
QCF-SD3a-190326 Water	03/26/2019 13:23	1019025
QCF-SD2-190326 Water	03/26/2019 13:54	1019026
QCF-SB2-190326 Water	03/26/2019 14:24	1019027
QCF-U2-190326 Water	03/26/2019 14:46	1019028
QCF-SE2-190326 Water	03/26/2019 15:04	1019029
QCF-D2a-190326 Water	03/26/2019 15:26	1019030

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: Boeing_QCF
ELLE Group #: 2035669

General Comments:

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.

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

Analysis Specific Comments:

EPA 524.2, GC/MS Volatiles

Sample #s: 1019020, 1019021, 1019022, 1019023, 1019024, 1019025, 1019026, 1019027, 1019028, 1019029, 1019030

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Batch #: K190912AA (Sample number(s): 1019020-1019030)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Hexachlorobutadiene

EPA 300.0, Wet Chemistry

Batch #: 19087520106A (Sample number(s): 1019021-1019026 UNSPK: 1019021 BKG: 1019021)

The recovery(ies) for the following analyte(s) in the MS exceeded the acceptance window indicating a positive bias: Sulfate, Nitrate Nitrogen

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Analysis Report

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Sample Description: **QCF-TripBlank-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019
SDG#: BNI96-01TB

The Boeing Company
ELLE Sample #: WW 1019020
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-TripBlank-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019
SDG#: BNI96-01TB

The Boeing Company
ELLE Sample #: WW 1019020
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 21:50	Don V Viray	1

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Analysis Report

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Sample Description: **QCF-I2-190326 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 09:56
SDG#: BNI96-02

The Boeing Company
ELLE Sample #: WW 1019021
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**13**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-I2-190326 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 09:56
SDG#: BNI96-02

The Boeing Company
ELLE Sample #: WW 1019021
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**18**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**150**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**5.6**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**		n.a.	**1.4**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 22:13	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 10:26	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 09:17	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 09:17	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602A	03/30/2019 03:27	Drew M Gerhart	1

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Analysis Report

REVISED

Sample Description: **QCF-I2a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 11:42
SDG#: BNI96-03

The Boeing Company
ELLE Sample #: WW 1019022
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-I2a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 11:42
SDG#: BNI96-03

The Boeing Company
ELLE Sample #: WW 1019022
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**1.0**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**180**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**5.0**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**		n.a.	**1.9**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 22:37	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 10:41	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 11:09	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 11:09	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602A	03/30/2019 03:41	Drew M Gerhart	1

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Analysis Report

REVISED

Sample Description: **QCF-I3-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 10:40
SDG#: BNI96-04

The Boeing Company
ELLE Sample #: WW 1019023
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**14**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-I3-190326 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 10:40
SDG#: BNI96-04

The Boeing Company
ELLE Sample #: WW 1019023
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	Trichloroethene		79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**18.7**		5.0	5
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 23:00	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 11:01	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 10:13	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/29/2019 16:33	Ashlynn M Cornelius	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602B	03/30/2019 04:36	Drew M Gerhart	1

REVISED

Sample Description: **QCF-I3a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 11:06
SDG#: BNI96-05

The Boeing Company
ELLE Sample #: WW 1019024
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**3.4**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**0.9**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-I3a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 11:06
SDG#: BNI96-05

The Boeing Company
ELLE Sample #: WW 1019024
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**27**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**100**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**6.9**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**		n.a.	**1.3**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 23:24	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 11:16	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 10:32	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 10:32	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602B	03/30/2019 04:50	Drew M Gerhart	1

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Analysis Report

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Sample Description: **QCF-SD3a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 13:23
SDG#: BNI96-06

The Boeing Company
ELLE Sample #: WW 1019025
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**15**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-SD3a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 13:23
SDG#: BNI96-06

The Boeing Company
ELLE Sample #: WW 1019025
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	Trichloroethene		79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**24**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**8.5**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/01/2019 23:47	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 11:31	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 11:28	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 11:28	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602B	03/30/2019 05:03	Drew M Gerhart	1

REVISED

Sample Description: **QCF-SD2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 13:54
SDG#: BNI96-07

The Boeing Company
ELLE Sample #: WW 1019026
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.1**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-SD2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 13:54
SDG#: BNI96-07

The Boeing Company
ELLE Sample #: WW 1019026
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**13**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**5.0**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.1**		0.10	1
00228	**Sulfate**		14808-79-8	**7.1**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/02/2019 00:11	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190870002A	03/28/2019 11:47	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 11:47	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 11:47	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19088667602B	03/30/2019 05:32	Drew M Gerhart	1

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Analysis Report

REVISED

Sample Description: **QCF-SB2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 14:24
SDG#: BNI96-08

The Boeing Company
ELLE Sample #: WW 1019027
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-SB2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 14:24
SDG#: BNI96-08

The Boeing Company
ELLE Sample #: WW 1019027
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/02/2019 00:35	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-U2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 14:46
SDG#: BNI96-09

The Boeing Company
ELLE Sample #: WW 1019028
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

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Sample Description: **QCF-U2-190326 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 14:46
SDG#: BNI96-09

The Boeing Company
ELLE Sample #: WW 1019028
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.3**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/02/2019 00:58	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-SE2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 15:04
SDG#: BNI96-10

The Boeing Company
ELLE Sample #: WW 1019029
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-SE2-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 15:04
SDG#: BNI96-10

The Boeing Company
ELLE Sample #: WW 1019029
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/02/2019 01:22	Don V Viray	1

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Analysis Report

REVISED

Sample Description: **QCF-D2a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 15:26
SDG#: BNI96-11

The Boeing Company
ELLE Sample #: WW 1019030
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

REVISED

Sample Description: **QCF-D2a-190326 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/27/2019 10:10
Collection Date/Time: 03/26/2019 15:26
SDG#: BNI96-11

The Boeing Company
ELLE Sample #: WW 1019030
ELLE Group #: 2035669
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.0**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190912AA	04/02/2019 01:45	Don V Viray	1

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K190912AA	Sample number(s): 1019020-1019030		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

Method Blank (continued)

Analysis Name	Result		LOQ
	ug/l		ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: 190870002A	Sample number(s): 1019021-1019026		
Ethane	5.0	U	5.0
Ethene	5.0	U	5.0
Methane	5.0	U	5.0
	mg/l		mg/l
Batch number: 19087520106A	Sample number(s): 1019021-1019026		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0
Batch number: 19088667602A	Sample number(s): 1019021-1019022		
Total Organic Carbon	2.0	U	2.0
Batch number: 19088667602B	Sample number(s): 1019023-1019026		
Total Organic Carbon	2.0	U	2.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K190912AA	Sample number(s): 1019020-1019030								
Benzene	5.00	5.21			104		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromobenzene	5.00	5.54			111		70-130		
Bromochloromethane	5.00	5.12			102		70-130		
Bromodichloromethane	5.00	5.18			104		70-130		
Bromoform	5.00	5.06			101		70-130		
Bromomethane	2.00	2.01			101		70-130		
n-Butylbenzene	5.00	6.37			127		70-130		
sec-Buty benzene	5.00	5.94			119		70-130		
tert-Buty benzene	5.00	5.67			113		70-130		
Carbon Tetrachloride	5.00	5.22			104		70-130		
Chlorobenzene	5.00	5.62			112		70-130		
Chloroethane	2.00	2.11			106		70-130		
Chloroform	5.00	5.39			108		70-130		
Chloromethane	2.00	2.16			108		70-130		
2-Chlorotoluene	5.00	5.77			115		70-130		
4-Chlorotoluene	5.00	5.86			117		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.19			104		70-130		
Dibromochloromethane	5.00	5.34			107		70-130		
1,2-Dibromoethane	5.00	5.23			105		70-130		
Dibromomethane	5.00	5.51			110		70-130		
1,2-Dichlorobenzene	5.00	5.97			119		70-130		
1,3-Dichlorobenzene	5.00	5.89			118		70-130		
1,4-Dichlorobenzene	5.00	6.04			121		70-130		
Dichlorodifluoromethane	2.00	2.00			100		70-130		
1,1-Dichloroethane	5.00	5.30			106		70-130		
1,2-Dichloroethane	5.00	5.51			110		70-130		
1,1-Dichloroethene	5.00	5.71			114		70-130		
cis-1,2-Dichloroethene	5.00	5.36			107		70-130		
trans-1,2-Dichloroethene	5.00	5.54			111		70-130		
1,2-Dichloropropane	5.00	5.33			107		70-130		
1,3-Dichloropropane	5.00	5.21			104		70-130		
2,2-Dichloropropane	5.00	4.75			95		70-130		
1,1-Dichloropropene	5.00	5.26			105		70-130		
cis-1,3-Dichloropropene	5.00	4.82			96		70-130		
trans-1,3-Dichloropropene	5.00	4.86			97		70-130		
Ethylbenzene	5.00	5.32			106		70-130		
Hexachlorobutadiene	5.00	6.81			136*		70-130		
Isopropylbenzene	5.00	5.46			109		70-130		
p-Isopropyltoluene	5.00	6.01			120		70-130		
Methylene Chloride	5.00	5.52			110		70-130		
Naphthalene	5.00	5.12			102		70-130		
n-Propy benzene	5.00	5.77			115		70-130		
Styrene	5.00	5.38			108		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.44			109		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.40			108		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
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REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Tetrachloroethene	5.00	5.48			110		70-130		
Toluene	5.00	5.19			104		70-130		
1,2,3-Trichlorobenzene	5.00	6.11			122		70-130		
1,2,4-Trichlorobenzene	5.00	6.28			126		70-130		
1,1,1-Trichloroethane	5.00	4.98			100		70-130		
1,1,2-Trichloroethane	5.00	5.53			111		70-130		
Trichloroethene	5.00	5.36			107		70-130		
Trichlorofluoromethane	2.00	2.06			103		70-130		
1,2,3-Trichloropropane	5.00	5.59			112		70-130		
1,2,4-Trimethy benzene	5.00	5.54			111		70-130		
1,3,5-Trimethy benzene	5.00	5.69			114		70-130		
Vinyl Chloride	2.00	2.18			109		70-130		
m+p-Xylene	10	10.88			109		70-130		
o-Xylene	5.00	5.23			105		70-130		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 190870002A	Sample number(s): 1019021-1019026								
Ethane	58.44	59.99	58.44	58.05	103	99	85-115	3	20
Ethene	60.85	62.77	60.85	60.62	103	100	83-115	3	20
Methane	59.83	64.8	59.83	62.74	108	105	85-115	3	20
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 19087520106A	Sample number(s): 1019021-1019026								
Nitrate Nitrogen	0.750	0.691			92		90-110		
Sulfate	7.50	7.66			102		90-110		
Batch number: 19088667602A	Sample number(s): 1019021-1019022								
Total Organic Carbon	25	24.23			97		91-113		
Batch number: 19088667602B	Sample number(s): 1019023-1019026								
Total Organic Carbon	25	24.23			97		91-113		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix sp ke

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 19087520106A	Sample number(s): 1019021-1019026 UNSPK: 1019021									
Nitrate Nitrogen	0.10 U	1.00	1.30			130*		90-110		
Sulfate	5.61	10	20.05			144*		90-110		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix sp ke

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 19087520106A	Sample number(s): 1019021-1019026 BKG: 1019021			
Nitrate Nitrogen	0.10 U	0.10 U	0 (1)	15
Sulfate	5.61	5.39	4	15

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190912AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1019020	88	102
1019021	89	101
1019022	85	100
1019023	87	101
1019024	88	101
1019025	85	99
1019026	89	103
1019027	87	102
1019028	85	100
1019029	86	102
1019030	88	104
Blank	86	98
LCS	99	105
Limits:	80-120	80-120

Analysis Name: MEE by RSK-175
Batch number: 190870002A

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

REVISED

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/26/2019 12:06

Group Number: 2035669

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: MEE by RSK-175
Batch number: 190870002A

	Propene
1019021	100
1019022	101
1019023	98
1019024	96
1019025	100
1019026	100
Blank	110
LCS	109
LCSD	107
Limits:	46-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419 For Eurofins Lancaster Laboratories use only Group # 1035669 Sample # 1019020-30

Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Annual Sampling
Site Program/#: 0025178.160.40P
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: ☒ Boeing EHS ☐ Other (specify):
Sampler: KAM/HER/MDK # of Coolers: 1

4 Analyses Requested

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TOC SM 5310C	5 Remarks/Comments
QCF-TripBlank-190326	—	—	Aq	2	X				
QCF-12-190326	3/26/19	956	Aq	8	X	X	X	X	
QCF-12a-190326	↓	1142	Aq	8	X	X	X	X	
QCF-13-190326	↓	1040	Aq	8	X	X	X	X	
QCF-13a-190326	↓	1106	Aq	8	X	X	X	X	
QCF-SD3a-190326	↓	1323	Aq	8	X	X	X	X	
QCF-SD2-190326	↓	1354	Aq	8	X	X	X	X	
QCF-SB2-190326	↓	1424	Aq	3	X				
QCF-U2-190326	↓	1446	Aq	3	X				
QCF-SE2-190326	↓	1504	Aq	3	X				
QCF-D2a-190326	↓	1526	Aq	3	X				

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time	Received by:	Date/Time
Kelsey Maar	3/26/19 1618		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time
		[illegible]	3/27/19 1010

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 1.5 °C

Custody Seals Intact?: Yes No

Eurofins Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.
Issued by Dept. 40 Management
7063.02

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Sample Administration Receipt Documentation Log

Doc Log ID: 244703

Group Number(s): 235669

Client: Boeing

Annual Sampling

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/27/2019 10:10
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Nicole Reiff (25684) at 13:59 on 03/27/2019

Samples Chilled Details: Annual Sampling

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	1.5	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MS 2R-96
PO Box 3707
Seattle WA 98124-2207

Report Date: April 08, 2019 12:05

Project: Boeing_QCF

Account #: 13419
Group Number: 2035882
SDG: BNI97
State of Sample Origin: WA

Electronic Copy To	The Boeing Company	Attn: Joe Flaherty
Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen

Respectfully Submitted,

Kay Hower

(717) 556-7364

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TripBlank-190327 Water	03/27/2019	1019836
QCF-LR-190327 Water	03/27/2019 09:44	1019837
QCF-LM-190327 Water	03/27/2019 10:15	1019838
QCF-IB2a-190327 Water	03/27/2019 10:42	1019839
QCF-V2a-190327 Water	03/27/2019 11:46	1019840
QCF-IB3a-190327 Water	03/27/2019 10:48	1019841
QCF-MA3a-190327 Water	03/27/2019 10:23	1019842
QCF-M2-190327 Water	03/27/2019 11:40	1019843
QCF-IA3a-190327 Water	03/27/2019 13:49	1019844
QCF-IA3-190327 Water	03/27/2019 15:03	1019845
QCF-Dup3-190327 Water	03/27/2019 15:06	1019846

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: Boeing_QCF
ELLE Group #: 2035882

General Comments:

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.

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

Analysis Specific Comments:

EPA 524.2, GC/MS Volatiles

Sample #s: 1019846

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

EPA 300.0, Wet Chemistry

Sample #s: 1019844

The sample was reanalyzed at a 1X dilution outside of the holding time 3/29/2019 at 16:50. The result of the rerun is 0.10 U mg/l.

Sample Description: **QCF-TripBlank-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019
SDG#: BNI97-01TB

The Boeing Company
ELLE Sample #: WW 1019836
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TripBlank-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019
SDG#: BNI97-01TB

The Boeing Company
ELLE Sample #: WW 1019836
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190931AA	04/04/2019 00:32	Don V Viray	1

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Analysis Report

Sample Description: **QCF-LR-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 09:44
SDG#: BNI97-02

The Boeing Company
ELLE Sample #: WW 1019837
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-LR-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 09:44
SDG#: BNI97-02

The Boeing Company
ELLE Sample #: WW 1019837
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190931AA	04/04/2019 00:56	Don V Viray	1

Sample Description: **QCF-LM-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:15
SDG#: BNI97-03

The Boeing Company
ELLE Sample #: WW 1019838
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-LM-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:15
SDG#: BNI97-03

The Boeing Company
ELLE Sample #: WW 1019838
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190931AA	04/04/2019 01:20	Don V Viray	1

Sample Description: **QCF-IB2a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:42
SDG#: BNI97-04

The Boeing Company
ELLE Sample #: WW 1019839
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-IB2a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:42
SDG#: BNI97-04

The Boeing Company
ELLE Sample #: WW 1019839
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190931AA	04/04/2019 01:43	Don V Viray	1

Sample Description: **QCF-V2a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 11:46
SDG#: BNI97-05

The Boeing Company
ELLE Sample #: WW 1019840
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**2.8**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-V2a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 11:46
SDG#: BNI97-05

The Boeing Company
ELLE Sample #: WW 1019840
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**2.9**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/04/2019 23:50	Don V Viray	1

Sample Description: **QCF-IB3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:48
SDG#: BNI97-06

The Boeing Company
ELLE Sample #: WW 1019841
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**11**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-IB3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:48
SDG#: BNI97-06

The Boeing Company
ELLE Sample #: WW 1019841
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 00:14	Don V Viray	1

Sample Description: **QCF-MA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:23
SDG#: BNI97-07

The Boeing Company
ELLE Sample #: WW 1019842
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**3.2**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-MA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 10:23
SDG#: BNI97-07

The Boeing Company
ELLE Sample #: WW 1019842
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**27**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**9.3**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 00:38	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190880001A	03/29/2019 09:05	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 23:02	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 23:02	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19094667603A	04/04/2019 23:31	Drew M Gerhart	1

Sample Description: **QCF-M2-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 11:40
SDG#: BNI97-08

The Boeing Company
ELLE Sample #: WW 1019843
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-M2-190327 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 11:40
SDG#: BNI97-08

The Boeing Company
ELLE Sample #: WW 1019843
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	Trichloroethene		79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**0.78**		0.10	1
00228	**Sulfate**		14808-79-8	**5.7**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 01:01	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190880001A	03/29/2019 09:23	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 23:21	Ashlynn M Cornelius	1
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 23:21	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19094667602A	04/04/2019 19:15	Drew M Gerhart	1

Sample Description: **QCF-IA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 13:49
SDG#: BNI97-09

The Boeing Company
ELLE Sample #: WW 1019844
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**18**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-IA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 13:49
SDG#: BNI97-09

The Boeing Company
ELLE Sample #: WW 1019844
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**95.E**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**15**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	U	5.0	10

Sample Description: **QCF-IA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 13:49
SDG#: BNI97-09

The Boeing Company
ELLE Sample #: WW 1019844
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**78**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane	74-84-0	5.0	U	5.0	1
07105	Ethene	74-85-1	5.0	U	5.0	1
07105	**Methane**	74-82-8	**150**		5.0	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen	14797-55-8	0.50	U	0.50	5
	The sample was reanalyzed at a 1X dilution outside of the holding time 3/29/2019 at 16:50. The result of the rerun is 0.10 U mg/l.					
00228	**Sulfate**	14808-79-8	**8.7**		5.0	5
	SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**	n.a.	**1.0**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 03:23	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K190941AA	04/05/2019 03:46	Don V Viray	10

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Analysis Report

Sample Description: **QCF-IA3a-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 13:49
SDG#: BNI97-09

The Boeing Company
ELLE Sample #: WW 1019844
ELLE Group #: 2035882
Matrix: Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	MEE by RSK-175	RSKSOP-175 modified	1	190880001A	03/29/2019 09:41	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520206B	03/28/2019 22:24	Ashlynn M Cornelius	5
00228	Sulfate	EPA 300.0	1	19087520206B	03/28/2019 22:24	Ashlynn M Cornelius	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19094667602A	04/04/2019 19:28	Drew M Gerhart	1

Sample Description: **QCF-IA3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:03
SDG#: BNI97-10

The Boeing Company
ELLE Sample #: WW 1019845
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**34.E**		0.5	1
03648	**trans-1,2-Dichloroethene**	156-60-5	**0.5**		0.5	1
03648	**1,2-Dichloropropane**	78-87-5	**0.6**		0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-IA3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:03
SDG#: BNI97-10

The Boeing Company
ELLE Sample #: WW 1019845
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**9.9**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**31**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	U	5.0	10

Sample Description: **QCF-IA3-190327 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:03
SDG#: BNI97-10

The Boeing Company
ELLE Sample #: WW 1019845
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**8.6**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane	74-84-0	5.0	U	5.0	1
07105	Ethene	74-85-1	5.0	U	5.0	1
07105	**Methane**	74-82-8	**13**		5.0	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen	14797-55-8	0.10	U	0.10	1
00228	**Sulfate**	14808-79-8	**12.8**		1.0	1
	SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon	n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 04:10	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K190941AA	04/05/2019 04:34	Don V Viray	10
07105	MEE by RSK-175	RSKSOP-175 modified	1	190880001A	03/29/2019 09:59	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520106A	03/28/2019 23:39	Ashlynn M Cornelius	1

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Analysis Report

Sample Description: **QCF-IA3-190327 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:03
SDG#: BNI97-10

The Boeing Company
ELLE Sample #: WW 1019845
ELLE Group #: 2035882
Matrix: Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	19087520106A	03/28/2019 23:39	Ashlynn M Cornelius	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19094667602A	04/04/2019 19:42	Drew M Gerhart	1

Sample Description: **QCF-Dup3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:06
SDG#: BNI97-11FD

The Boeing Company
ELLE Sample #: WW 1019846
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**33.E**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	**1,2-Dichloropropane**	78-87-5	**0.5**		0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-Dup3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:06
SDG#: BNI97-11FD

The Boeing Company
ELLE Sample #: WW 1019846
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**9.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**31**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	UZ	5.0	10

Sample Description: **QCF-Dup3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:06
SDG#: BNI97-11FD

The Boeing Company
ELLE Sample #: WW 1019846
ELLE Group #: 2035882
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**9.3**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

GC Miscellaneous		**RSKSOP-175 modified**	**ug/l**		**ug/l**	
07105	Ethane	74-84-0	5.0	U	5.0	1
07105	Ethene	74-85-1	5.0	U	5.0	1
07105	**Methane**	74-82-8	**13**		5.0	1
Wet Chemistry		**EPA 300.0**	**mg/l**		**mg/l**	
00368	Nitrate Nitrogen	14797-55-8	0.50	U	0.50	5
00228	**Sulfate**	14808-79-8	**14.0**		5.0	5
		SM 5310 C-2011	**mg/l**		**mg/l**	
00273	Total Organic Carbon	n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

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Analysis Report

Sample Description: **QCF-Dup3-190327 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/28/2019 10:00
Collection Date/Time: 03/27/2019 15:06
SDG#: BNI97-11FD

The Boeing Company
ELLE Sample #: WW 1019846
ELLE Group #: 2035882
Matrix: Water

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 01:25	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K190971AA	04/07/2019 23:04	Don V Viray	10
07105	MEE by RSK-175	RSKSOP-175 modified	1	190880001A	03/29/2019 10:17	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19087520206B	03/28/2019 18:02	Ashlynn M Cornelius	5
00228	Sulfate	EPA 300.0	1	19087520206B	03/28/2019 18:02	Ashlynn M Cornelius	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19094667602A	04/04/2019 19:55	Drew M Gerhart	1

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Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K190931AA	Sample number(s): 1019836-1019839		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: K190941AA	Sample number(s): 1019840-1019846		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: K190971AA	Sample number(s): 1019846		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Method Blank (continued)

Analysis Name	Result		LOQ
	ug/l		ug/l
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: 190880001A	Sample number(s): 1019842-1019846		
Ethane	5.0	U	5.0
Ethene	5.0	U	5.0
Methane	5.0	U	5.0
	mg/l		mg/l
Batch number: 19087520106A	Sample number(s): 1019842-1019843,1019845		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0
Batch number: 19087520206B	Sample number(s): 1019844,1019846		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0
Batch number: 19094667602A	Sample number(s): 1019843-1019846		
Total Organic Carbon	1.0	U	1.0
Batch number: 19094667603A	Sample number(s): 1019842		
Total Organic Carbon	1.0	U	1.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K190931AA	Sample number(s): 1019836-1019839								
Benzene	5.00	5.12			102		70-130		
Bromobenzene	5.00	5.35			107		70-130		
Bromochloromethane	5.00	5.15			103		70-130		
Bromodichloromethane	5.00	4.91			98		70-130		
Bromoform	5.00	4.34			87		70-130		
Bromomethane	2.00	1.83			91		70-130		
n-Butylbenzene	5.00	6.20			124		70-130		
sec-Buty benzene	5.00	5.72			114		70-130		
tert-Buty benzene	5.00	5.37			107		70-130		
Carbon Tetrachloride	5.00	5.02			100		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chlorobenzene	5.00	5.39			108		70-130		
Chloroethane	2.00	1.94			97		70-130		
Chloroform	5.00	5.29			106		70-130		
Chloromethane	2.00	1.96			98		70-130		
2-Chlorotoluene	5.00	5.49			110		70-130		
4-Chlorotoluene	5.00	5.70			114		70-130		
1,2-Dibromo-3-chloropropane	5.00	4.95			99		70-130		
Dibromochloromethane	5.00	4.89			98		70-130		
1,2-Dibromoethane	5.00	5.05			101		70-130		
Dibromomethane	5.00	5.43			109		70-130		
1,2-Dichlorobenzene	5.00	5.71			114		70-130		
1,3-Dichlorobenzene	5.00	5.73			115		70-130		
1,4-Dichlorobenzene	5.00	5.72			114		70-130		
Dichlorodifluoromethane	2.00	1.76			88		70-130		
1,1-Dichloroethane	5.00	5.34			107		70-130		
1,2-Dichloroethane	5.00	5.48			110		70-130		
1,1-Dichloroethene	5.00	5.64			113		70-130		
cis-1,2-Dichloroethene	5.00	5.30			106		70-130		
trans-1,2-Dichloroethene	5.00	5.47			109		70-130		
1,2-Dichloropropane	5.00	5.24			105		70-130		
1,3-Dichloropropane	5.00	5.12			102		70-130		
2,2-Dichloropropane	5.00	4.51			90		70-130		
1,1-Dichloropropene	5.00	5.15			103		70-130		
cis-1,3-Dichloropropene	5.00	4.58			92		70-130		
trans-1,3-Dichloropropene	5.00	4.45			89		70-130		
Ethylbenzene	5.00	5.12			102		70-130		
Hexachlorobutadiene	5.00	6.39			128		70-130		
Isopropylbenzene	5.00	5.13			103		70-130		
p-Isopropyltoluene	5.00	5.70			114		70-130		
Methylene Chloride	5.00	5.50			110		70-130		
Naphthalene	5.00	4.73			95		70-130		
n-Propy benzene	5.00	5.58			112		70-130		
Styrene	5.00	5.17			103		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.20			104		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.17			103		70-130		
Tetrachloroethene	5.00	5.29			106		70-130		
Toluene	5.00	5.04			101		70-130		
1,2,3-Trichlorobenzene	5.00	5.83			117		70-130		
1,2,4-Trichlorobenzene	5.00	5.96			119		70-130		
1,1,1-Trichloroethane	5.00	4.83			97		70-130		
1,1,2-Trichloroethane	5.00	5.48			110		70-130		
Trichloroethene	5.00	5.15			103		70-130		
Trichlorofluoromethane	2.00	1.91			95		70-130		
1,2,3-Trichloropropane	5.00	5.47			109		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,4-Trimethy benzene	5.00	5.26			105		70-130		
1,3,5-Trimethy benzene	5.00	5.36			107		70-130		
Vinyl Chloride	2.00	2.01			100		70-130		
m+p-Xylene	10	10.46			105		70-130		
o-Xylene	5.00	5.00			100		70-130		
Batch number: K190941AA	Sample number(s): 1019840-1019846								
Benzene	5.00	5.13			103		70-130		
Bromobenzene	5.00	5.32			106		70-130		
Bromochloromethane	5.00	5.16			103		70-130		
Bromodichloromethane	5.00	4.87			97		70-130		
Bromoform	5.00	4.35			87		70-130		
Bromomethane	2.00	1.89			95		70-130		
n-Butylbenzene	5.00	6.21			124		70-130		
sec-Buty benzene	5.00	5.66			113		70-130		
tert-Buty benzene	5.00	5.37			107		70-130		
Carbon Tetrachloride	5.00	5.09			102		70-130		
Chlorobenzene	5.00	5.43			109		70-130		
Chloroethane	2.00	2.00			100		70-130		
Chloroform	5.00	5.34			107		70-130		
Chloromethane	2.00	2.03			102		70-130		
2-Chlorotoluene	5.00	5.44			109		70-130		
4-Chlorotoluene	5.00	5.66			113		70-130		
1,2-Dibromo-3-chloropropane	5.00	4.92			98		70-130		
Dibromochloromethane	5.00	4.85			97		70-130		
1,2-Dibromoethane	5.00	4.96			99		70-130		
Dibromomethane	5.00	5.52			110		70-130		
1,2-Dichlorobenzene	5.00	5.71			114		70-130		
1,3-Dichlorobenzene	5.00	5.73			115		70-130		
1,4-Dichlorobenzene	5.00	5.80			116		70-130		
Dichlorodifluoromethane	2.00	1.94			97		70-130		
1,1-Dichloroethane	5.00	5.34			107		70-130		
1,2-Dichloroethane	5.00	5.51			110		70-130		
1,1-Dichloroethene	5.00	5.71			114		70-130		
cis-1,2-Dichloroethene	5.00	5.28			106		70-130		
trans-1,2-Dichloroethene	5.00	5.50			110		70-130		
1,2-Dichloropropane	5.00	5.28			106		70-130		
1,3-Dichloropropane	5.00	5.12			102		70-130		
2,2-Dichloropropane	5.00	4.56			91		70-130		
1,1-Dichloropropene	5.00	5.23			105		70-130		
cis-1,3-Dichloropropene	5.00	4.67			93		70-130		
trans-1,3-Dichloropropene	5.00	4.46			89		70-130		
Ethylbenzene	5.00	5.17			103		70-130		
Hexachlorobutadiene	5.00	6.23			125		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isopropylbenzene	5.00	5.23			105		70-130		
p-Isopropyltoluene	5.00	5.73			115		70-130		
Methylene Chloride	5.00	5.51			110		70-130		
Naphthalene	5.00	4.55			91		70-130		
n-Propy benzene	5.00	5.64			113		70-130		
Styrene	5.00	5.19			104		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.18			104		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.21			104		70-130		
Tetrachloroethene	5.00	5.30			106		70-130		
Toluene	5.00	5.07			101		70-130		
1,2,3-Trichlorobenzene	5.00	5.70			114		70-130		
1,2,4-Trichlorobenzene	5.00	5.84			117		70-130		
1,1,1-Trichloroethane	5.00	4.89			98		70-130		
1,1,2-Trichloroethane	5.00	5.49			110		70-130		
Trichloroethene	5.00	5.20			104		70-130		
Trichlorofluoromethane	2.00	2.04			102		70-130		
1,2,3-Trichloropropane	5.00	5.34			107		70-130		
1,2,4-Trimethy benzene	5.00	5.36			107		70-130		
1,3,5-Trimethy benzene	5.00	5.44			109		70-130		
Vinyl Chloride	2.00	2.08			104		70-130		
m+p-Xylene	10	10.56			106		70-130		
o-Xylene	5.00	5.04			101		70-130		
Batch number: K190971AA	Sample number(s): 1019846								
Benzene	5.00	5.18			104		70-130		
Bromobenzene	5.00	5.43			109		70-130		
Bromochloromethane	5.00	5.15			103		70-130		
Bromodichloromethane	5.00	5.10			102		70-130		
Bromoform	5.00	5.00			100		70-130		
Bromomethane	2.00	1.93			97		70-130		
n-Butylbenzene	5.00	6.05			121		70-130		
sec-Buty benzene	5.00	5.74			115		70-130		
tert-Buty benzene	5.00	5.42			108		70-130		
Carbon Tetrachloride	5.00	5.14			103		70-130		
Chlorobenzene	5.00	5.56			111		70-130		
Chloroethane	2.00	2.04			102		70-130		
Chloroform	5.00	5.44			109		70-130		
Chloromethane	2.00	2.04			102		70-130		
2-Chlorotoluene	5.00	5.58			112		70-130		
4-Chlorotoluene	5.00	5.73			115		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.31			106		70-130		
Dibromochloromethane	5.00	5.26			105		70-130		
1,2-Dibromoethane	5.00	5.24			105		70-130		
Dibromomethane	5.00	5.56			111		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichlorobenzene	5.00	5.73			115		70-130		
1,3-Dichlorobenzene	5.00	5.76			115		70-130		
1,4-Dichlorobenzene	5.00	5.90			118		70-130		
Dichlorodifluoromethane	2.00	1.93			97		70-130		
1,1-Dichloroethane	5.00	5.37			107		70-130		
1,2-Dichloroethane	5.00	5.57			111		70-130		
1,1-Dichloroethene	5.00	5.81			116		70-130		
cis-1,2-Dichloroethene	5.00	5.41			108		70-130		
trans-1,2-Dichloroethene	5.00	5.59			112		70-130		
1,2-Dichloropropane	5.00	5.35			107		70-130		
1,3-Dichloropropane	5.00	5.25			105		70-130		
2,2-Dichloropropane	5.00	4.65			93		70-130		
1,1-Dichloropropene	5.00	5.27			105		70-130		
cis-1,3-Dichloropropene	5.00	5.01			100		70-130		
trans-1,3-Dichloropropene	5.00	4.79			96		70-130		
Ethylbenzene	5.00	5.12			102		70-130		
Hexachlorobutadiene	5.00	6.19			124		70-130		
Isopropylbenzene	5.00	5.22			104		70-130		
p-Isopropyltoluene	5.00	5.72			114		70-130		
Methylene Chloride	5.00	5.56			111		70-130		
Naphthalene	5.00	4.58			92		70-130		
n-Propy benzene	5.00	5.62			112		70-130		
Styrene	5.00	5.33			107		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.40			108		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.45			109		70-130		
Tetrachloroethene	5.00	5.32			106		70-130		
Toluene	5.00	5.14			103		70-130		
1,2,3-Trichlorobenzene	5.00	5.49			110		70-130		
1,2,4-Trichlorobenzene	5.00	5.56			111		70-130		
1,1,1-Trichloroethane	5.00	4.95			99		70-130		
1,1,2-Trichloroethane	5.00	5.60			112		70-130		
Trichloroethene	5.00	5.29			106		70-130		
Trichlorofluoromethane	2.00	2.07			103		70-130		
1,2,3-Trichloropropane	5.00	5.50			110		70-130		
1,2,4-Trimethy benzene	5.00	5.29			106		70-130		
1,3,5-Trimethy benzene	5.00	5.48			110		70-130		
Vinyl Chloride	2.00	2.06			103		70-130		
m+p-Xylene	10	10.7			107		70-130		
o-Xylene	5.00	5.10			102		70-130		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 190880001A	Sample number(s): 1019842-1019846								
Ethane	58.44	60.12	58.44	60.4	103	103	85-115	0	20
Ethene	60.85	62.02	60.85	62.5	102	103	83-115	1	20

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methane	59.83	62.89	59.83	63.32	105	106	85-115	1	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 19087520106A	Sample number(s): 1019842-1019843,1019845								
Nitrate Nitrogen	0.750	0.691			92		90-110		
Sulfate	7.50	7.66			102		90-110		
Batch number: 19087520206B	Sample number(s): 1019844,1019846								
Nitrate Nitrogen	0.750	0.680			91		90-110		
Sulfate	7.50	7.61			102		90-110		
Batch number: 19094667602A	Sample number(s): 1019843-1019846								
Total Organic Carbon	25	24.81			99		91-113		
Batch number: 19094667603A	Sample number(s): 1019842								
Total Organic Carbon	25	24.82			99		91-113		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix sp ke

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 19094667603A	Sample number(s): 1019842 UNSPK: 1019842									
Total Organic Carbon	0.506	10	10.03			95		91-113		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 19094667603A	Sample number(s): 1019842 BKG: 1019842			
Total Organic Carbon	0.506	0.554	9 (1)	9

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190931AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1019836	84	95
1019837	85	97
1019838	85	100
1019839	86	102
Blank	86	102
LCS	97	103
Limits:	80-120	80-120

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190941AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1019840	85	102
1019841	84	98
1019842	86	101
1019843	83	96
1019844	85	97
1019844DL	84	98
1019845	85	98
1019845DL	86	101
1019846	84	101
Blank	85	99
LCS	99	103
Limits:	80-120	80-120

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190971AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1019846DL	86	103
Blank	87	101
LCS	97	103
Limits:	80-120	80-120

Analysis Name: MEE by RSK-175
Batch number: 190880001A

	Propene
1019842	60
1019843	60
1019844	60
1019845	59

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/08/2019 12:05

Group Number: 2035882

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: MEE by RSK-175
Batch number: 190880001A

	Propene
1019846	66
Blank	102
LCS	102
LCSD	103
Limits:	46-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 13419 For Eurofins Lancaster Laboratories use only Group # 635887 Sample # 1019836-46

Please print. Instructions on reverse side correspond.

GW 328 3/28/19

1 Client Information

Site Location: Queen City Farms
Site Project: Annual sampling
Site Program/#: 00251 78.160.401
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: ☒ Boeing EHS ☐ Other (specify):
Sampler: FAM/HER # of Coolers: 1

4 Analyses Requested / 5 Remarks/Comments

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TOC SM 5310C	5 Remarks/Comments
QCF-TripBlank-190327	—	—	Aq	2	X				
QCF-LR-190327	3/27/19	944	Aq	3	X				
QCF-LM-190327	3/27/19	1015	Aq	3	X				
QCF-IB2a-190327	3/27/19	1042	Aq	3	X				
QCF-V2a-190327	3/27/19	1146	Aq	3	X				
QCF-IB3a-190327	3/27/19	1048	Aq	3	X				
QCF-MA3a-190327	3/27/19	1023	Aq	8	X	X	X	X	
QCF-M2-190327	3/27/19	1140	Aq	8	X	X	X	X	
QCF-IA3a-190327	3/27/19	1349	Aq	8	X	X	X	X	
QCF-IA3-190327	3/27/19	1503	Aq	8	X	X	X	X	
QCF-Dup3-190327	3/27/19	1506	Aq	8	X	X	X	X	

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by	Date/Time	Received by	Date/Time
Kathleen M. Haughey	3/27/19 1600		
			3/28/19 1000

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 0.6 °C

Custody Seals Intact?: Yes No

Eurofins Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.
Issued by Dept. 40 Management
7063.02

eurofins | Lancaster Laboratories Environmental

Sample Administration Receipt Documentation Log

Doc Log ID: 244828

Group Number(s): 2035882

Client: Boeing

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/28/2019 10:00
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Brandy Barclay (2299) at 11:20 on 03/28/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-03	0.6	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T : 717-656-2300
F : 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MS 2R-96
PO Box 3707
Seattle WA 98124-2207

Report Date: April 09, 2019 12:46

Project: Boeing_QCF

Account #: 13419
Group Number: 2036153
SDG: BNI98
State of Sample Origin: WA

Electronic Copy To	The Boeing Company	Attn: Joe Flaherty
Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen

Respectfully Submitted,

Kay Hower

(717) 556-7364

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TRIPBLANK-190328 Water	03/28/2019	1021232
QCF-SA2-190328 Water	03/28/2019 12:16	1021233
QCF-S2a-190328 Water	03/28/2019 10:55	1021234
QCF-F2-190328 Water	03/28/2019 14:45	1021235
QCF-F2a-190328 Water	03/28/2019 14:05	1021236
QCF-G2-190328 Water	03/28/2019 13:06	1021237
QCF-G2a-190328 Water	03/28/2019 13:12	1021238
QCF-E2-190328 Water	03/28/2019 15:25	1021239
QCF-DUP1-190328 Water	03/28/2019 15:27	1021240
QCF-E2a-190328 Water	03/28/2019 15:30	1021241
QCF-E1-190328 Water	03/28/2019 15:35	1021242

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: Boeing_QCF
ELLE Group #: 2036153

General Comments:

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.

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

Analysis Specific Comments:

EPA 524.2, GC/MS Volatiles

Sample #s: 1021233, 1021237, 1021238, 1021239, 1021240, 1021241, 1021242

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

EPA 300.0, Wet Chemistry

Batch #: 19088987106A (Sample number(s): 1021233-1021236 UNSPK: 1021233 BKG: 1021233)

The recovery(ies) for the following analyte(s) in the MS were below the acceptance window: Sulfate, Nitrate Nitrogen

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Analysis Report

Sample Description: **QCF-TRIPBLANK-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019
SDG#: BNI98-01TB

The Boeing Company
ELLE Sample #: WW 1021232
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TRIPBLANK-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019
SDG#: BNI98-01TB

The Boeing Company
ELLE Sample #: WW 1021232
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/04/2019 23:26	Don V Viray	1

Sample Description: **QCF-SA2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 12:16
SDG#: BNI98-02

The Boeing Company
ELLE Sample #: WW 1021233
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SA2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 12:16
SDG#: BNI98-02

The Boeing Company
ELLE Sample #: WW 1021233
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.0**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane	74-84-0	5.0	U	5.0	1
07105	Ethene	74-85-1	5.0	U	5.0	1
07105	Methane	74-82-8	5.0	U	5.0	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**	14797-55-8	**1.6**		0.10	1
00228	**Sulfate**	14808-79-8	**4.9**		1.0	1
	SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon	n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 20:18	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 11:09	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106A	03/29/2019 20:53	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106A	03/29/2019 20:53	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19095667604A	04/05/2019 18:41	Drew M Gerhart	1

Sample Description: **QCF-S2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 10:55
SDG#: BNI98-03

The Boeing Company
ELLE Sample #: WW 1021234
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-S2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 10:55
SDG#: BNI98-03

The Boeing Company
ELLE Sample #: WW 1021234
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**3.5**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.2**		0.10	1
00228	**Sulfate**		14808-79-8	**5.0**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 02:13	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 11:26	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106A	03/29/2019 21:50	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106A	03/29/2019 21:50	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19095667604A	04/05/2019 18:54	Drew M Gerhart	1

Sample Description: **QCF-F2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 14:45
SDG#: BNI98-04

The Boeing Company
ELLE Sample #: WW 1021235
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.1**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**1.6**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-F2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 14:45
SDG#: BNI98-04

The Boeing Company
ELLE Sample #: WW 1021235
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**18**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	**Methane**		74-82-8	**6.1**		5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.9**		0.10	1
00228	**Sulfate**		14808-79-8	**14.9**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**		n.a.	**1.1**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 02:36	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 11:43	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106A	03/29/2019 22:08	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106A	03/29/2019 22:08	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19095667604A	04/05/2019 19:07	Drew M Gerhart	1

Sample Description: **QCF-F2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 14:05
SDG#: BNI98-05

The Boeing Company
ELLE Sample #: WW 1021236
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-F2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 14:05
SDG#: BNI98-05

The Boeing Company
ELLE Sample #: WW 1021236
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**0.6**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**8.9**		1.0	1
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	**Total Organic Carbon**		n.a.	**7.5**		1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190941AA	04/05/2019 02:59	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 11:59	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106A	03/29/2019 22:27	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106A	03/29/2019 22:27	Clinton M Wilson	1
00273	Total Organic Carbon	SM 5310 C-2011	1	19095667604A	04/05/2019 19:21	Drew M Gerhart	1

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Analysis Report

Sample Description: **QCF-G2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 13:06
SDG#: BNI98-06

The Boeing Company
ELLE Sample #: WW 1021237
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**0.9**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-G2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 13:06
SDG#: BNI98-06

The Boeing Company
ELLE Sample #: WW 1021237
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**8.3**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 20:41	Don V Viray	1

Sample Description: **QCF-G2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 13:12
SDG#: BNI98-07

The Boeing Company
ELLE Sample #: WW 1021238
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-G2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 13:12
SDG#: BNI98-07

The Boeing Company
ELLE Sample #: WW 1021238
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 21:05	Don V Viray	1

Sample Description: **QCF-E2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:25
SDG#: BNI98-08

The Boeing Company
ELLE Sample #: WW 1021239
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.2**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**0.6**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-E2-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:25
SDG#: BNI98-08

The Boeing Company
ELLE Sample #: WW 1021239
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**36**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 21:28	Don V Viray	1

Sample Description: **QCF-DUP1-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:27
SDG#: BNI98-09FD

The Boeing Company
ELLE Sample #: WW 1021240
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.2**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**0.6**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-DUP1-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:27
SDG#: BNI98-09FD

The Boeing Company
ELLE Sample #: WW 1021240
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**36**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 21:52	Don V Viray	1

Sample Description: **QCF-E2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:30
SDG#: BNI98-10

The Boeing Company
ELLE Sample #: WW 1021241
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-E2a-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:30
SDG#: BNI98-10

The Boeing Company
ELLE Sample #: WW 1021241
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**20**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 22:16	Don V Viray	1

Sample Description: **QCF-E1-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:35
SDG#: BNI98-11

The Boeing Company
ELLE Sample #: WW 1021242
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	UZ	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-E1-190328 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/29/2019 10:15
Collection Date/Time: 03/28/2019 15:35
SDG#: BNI98-11

The Boeing Company
ELLE Sample #: WW 1021242
ELLE Group #: 2036153
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Z=The response for a target analyte(s) in the initial cal bration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The affected analyte(s) and response(s) are:

Analyte	Response (%Drift)
hexachlorobutadiene	35

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190971AA	04/07/2019 22:40	Don V Viray	1

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Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K190941AA	Sample number(s): 1021232,1021234-1021236		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: K190971AA	Sample number(s): 1021233,1021237-1021242		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

Method Blank (continued)

Analysis Name	Result		LOQ
	ug/l		ug/l
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: 190910003A	Sample number(s): 1021233-1021236		
Ethane	5.0	U	5.0
Ethene	5.0	U	5.0
Methane	5.0	U	5.0
	mg/l		mg/l
Batch number: 19088987106A	Sample number(s): 1021233-1021236		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

Method Blank (continued)

Analysis Name	Result mg/l		LOQ mg/l
Batch number: 19095667604A	Sample number(s): 1021233-1021236		
Total Organic Carbon	1.0	U	1.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K190941AA	Sample number(s): 1021232,1021234-1021236								
Benzene	5.00	5.13			103		70-130		
Bromobenzene	5.00	5.32			106		70-130		
Bromochloromethane	5.00	5.16			103		70-130		
Bromodichloromethane	5.00	4.87			97		70-130		
Bromoform	5.00	4.35			87		70-130		
Bromomethane	2.00	1.89			95		70-130		
n-Butylbenzene	5.00	6.21			124		70-130		
sec-Buty benzene	5.00	5.66			113		70-130		
tert-Buty benzene	5.00	5.37			107		70-130		
Carbon Tetrachloride	5.00	5.09			102		70-130		
Chlorobenzene	5.00	5.43			109		70-130		
Chloroethane	2.00	2.00			100		70-130		
Chloroform	5.00	5.34			107		70-130		
Chloromethane	2.00	2.03			102		70-130		
2-Chlorotoluene	5.00	5.44			109		70-130		
4-Chlorotoluene	5.00	5.66			113		70-130		
1,2-D bromo-3-chloropropane	5.00	4.92			98		70-130		
Dibromochloromethane	5.00	4.85			97		70-130		
1,2-Dibromoethane	5.00	4.96			99		70-130		
Dibromomethane	5.00	5.52			110		70-130		
1,2-Dichlorobenzene	5.00	5.71			114		70-130		
1,3-Dichlorobenzene	5.00	5.73			115		70-130		
1,4-Dichlorobenzene	5.00	5.80			116		70-130		
Dichlorodifluoromethane	2.00	1.94			97		70-130		
1,1-Dichloroethane	5.00	5.34			107		70-130		
1,2-Dichloroethane	5.00	5.51			110		70-130		
1,1-Dichloroethene	5.00	5.71			114		70-130		
cis-1,2-Dichloroethene	5.00	5.28			106		70-130		
trans-1,2-Dichloroethene	5.00	5.50			110		70-130		
1,2-Dichloropropane	5.00	5.28			106		70-130		
1,3-Dichloropropane	5.00	5.12			102		70-130		
2,2-Dichloropropane	5.00	4.56			91		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloropropene	5.00	5.23			105		70-130		
cis-1,3-Dichloropropene	5.00	4.67			93		70-130		
trans-1,3-Dichloropropene	5.00	4.46			89		70-130		
Ethylbenzene	5.00	5.17			103		70-130		
Hexachlorobutadiene	5.00	6.23			125		70-130		
Isopropylbenzene	5.00	5.23			105		70-130		
p-Isopropyltoluene	5.00	5.73			115		70-130		
Methylene Chloride	5.00	5.51			110		70-130		
Naphthalene	5.00	4.55			91		70-130		
n-Propy benzene	5.00	5.64			113		70-130		
Styrene	5.00	5.19			104		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.18			104		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.21			104		70-130		
Tetrachloroethene	5.00	5.30			106		70-130		
Toluene	5.00	5.07			101		70-130		
1,2,3-Trichlorobenzene	5.00	5.70			114		70-130		
1,2,4-Trichlorobenzene	5.00	5.84			117		70-130		
1,1,1-Trichloroethane	5.00	4.89			98		70-130		
1,1,2-Trichloroethane	5.00	5.49			110		70-130		
Trichloroethene	5.00	5.20			104		70-130		
Trichlorofluoromethane	2.00	2.04			102		70-130		
1,2,3-Trichloropropane	5.00	5.34			107		70-130		
1,2,4-Trimethy benzene	5.00	5.36			107		70-130		
1,3,5-Trimethy benzene	5.00	5.44			109		70-130		
Vinyl Chloride	2.00	2.08			104		70-130		
m+p-Xylene	10	10.56			106		70-130		
o-Xylene	5.00	5.04			101		70-130		
Batch number: K190971AA	Sample number(s): 1021233,1021237-1021242								
Benzene	5.00	5.18			104		70-130		
Bromobenzene	5.00	5.43			109		70-130		
Bromochloromethane	5.00	5.15			103		70-130		
Bromodichloromethane	5.00	5.10			102		70-130		
Bromoform	5.00	5.00			100		70-130		
Bromomethane	2.00	1.93			97		70-130		
n-Butylbenzene	5.00	6.05			121		70-130		
sec-Buty benzene	5.00	5.74			115		70-130		
tert-Buty benzene	5.00	5.42			108		70-130		
Carbon Tetrachloride	5.00	5.14			103		70-130		
Chlorobenzene	5.00	5.56			111		70-130		
Chloroethane	2.00	2.04			102		70-130		
Chloroform	5.00	5.44			109		70-130		
Chloromethane	2.00	2.04			102		70-130		
2-Chlorotoluene	5.00	5.58			112		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chlorotoluene	5.00	5.73			115		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.31			106		70-130		
Dibromochloromethane	5.00	5.26			105		70-130		
1,2-Dibromoethane	5.00	5.24			105		70-130		
Dibromomethane	5.00	5.56			111		70-130		
1,2-Dichlorobenzene	5.00	5.73			115		70-130		
1,3-Dichlorobenzene	5.00	5.76			115		70-130		
1,4-Dichlorobenzene	5.00	5.90			118		70-130		
Dichlorodifluoromethane	2.00	1.93			97		70-130		
1,1-Dichloroethane	5.00	5.37			107		70-130		
1,2-Dichloroethane	5.00	5.57			111		70-130		
1,1-Dichloroethene	5.00	5.81			116		70-130		
cis-1,2-Dichloroethene	5.00	5.41			108		70-130		
trans-1,2-Dichloroethene	5.00	5.59			112		70-130		
1,2-Dichloropropane	5.00	5.35			107		70-130		
1,3-Dichloropropane	5.00	5.25			105		70-130		
2,2-Dichloropropane	5.00	4.65			93		70-130		
1,1-Dichloropropene	5.00	5.27			105		70-130		
cis-1,3-Dichloropropene	5.00	5.01			100		70-130		
trans-1,3-Dichloropropene	5.00	4.79			96		70-130		
Ethylbenzene	5.00	5.12			102		70-130		
Hexachlorobutadiene	5.00	6.19			124		70-130		
Isopropylbenzene	5.00	5.22			104		70-130		
p-Isopropyltoluene	5.00	5.72			114		70-130		
Methylene Chloride	5.00	5.56			111		70-130		
Naphthalene	5.00	4.58			92		70-130		
n-Propy benzene	5.00	5.62			112		70-130		
Styrene	5.00	5.33			107		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.40			108		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.45			109		70-130		
Tetrachloroethene	5.00	5.32			106		70-130		
Toluene	5.00	5.14			103		70-130		
1,2,3-Trichlorobenzene	5.00	5.49			110		70-130		
1,2,4-Trichlorobenzene	5.00	5.56			111		70-130		
1,1,1-Trichloroethane	5.00	4.95			99		70-130		
1,1,2-Trichloroethane	5.00	5.60			112		70-130		
Trichloroethene	5.00	5.29			106		70-130		
Trichlorofluoromethane	2.00	2.07			103		70-130		
1,2,3-Trichloropropane	5.00	5.50			110		70-130		
1,2,4-Trimethy benzene	5.00	5.29			106		70-130		
1,3,5-Trimethy benzene	5.00	5.48			110		70-130		
Vinyl Chloride	2.00	2.06			103		70-130		
m+p-Xylene	10	10.7			107		70-130		
o-Xylene	5.00	5.10			102		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 190910003A	Sample number(s): 1021233-1021236								
Ethane	58.44	56.81	58.44	57.18	97	98	85-115	1	20
Ethene	60.85	58.48	60.85	58.92	96	97	83-115	1	20
Methane	59.83	58.27	59.83	58.84	97	98	85-115	1	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 19088987106A	Sample number(s): 1021233-1021236								
Nitrate Nitrogen	0.750	0.727			97		90-110		
Sulfate	7.50	7.68			102		90-110		
Batch number: 19095667604A	Sample number(s): 1021233-1021236								
Total Organic Carbon	25	24.73			99		91-113		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix sp ke

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 19088987106A	Sample number(s): 1021233-1021236 UNSPK: 1021233									
Nitrate Nitrogen	1.62	1.00	2.13			51*		90-110		
Sulfate	4.94	10	10.32			54*		90-110		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 19088987106A	Sample number(s): 1021233-1021236 BKG: 1021233			
Nitrate Nitrogen	1.62	1.62	0	15
Sulfate	4.94	4.90	1 (1)	15

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/09/2019 12:46

Group Number: 2036153

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190941AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1021232	83	97
1021234	87	101
1021235	86	99
1021236	83	96
Blank	85	99
LCS	99	103
Limits:	80-120	80-120

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190971AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1021233	85	102
1021237	87	104
1021238	87	104
1021239	88	104
1021240	86	104
1021241	86	101
1021242	84	101
Blank	87	101
LCS	97	103
Limits:	80-120	80-120

Analysis Name: MEE by RSK-175
Batch number: 190910003A

	Propene
1021233	71
1021234	59
1021235	55
1021236	53
Blank	90
LCS	97
LCSD	97
Limits:	46-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419 For Eurofins Lancaster Laboratories use only Group # 636153 Sample # 1021232-42

Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Annual Sampling
Site Program/#: 6025178.160.401
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: [X] Boeing EHS [ ] Other (specify):
Sampler: KAM / HFR # of Coolers: 1

4 Analyses Requested / 5 Remarks/Comments

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TOC SM 5310 C	5 Remarks/Comments
QCF-TRIPBLANK-190328	—	—	Aq	2	X				
QCF-SA2-190328	3/28/19	1216	Aq	8	X	X	X	X	
QCF-S2a-190328	↓	1055	Aq	8	X	X	X	X	
QCF-F2-190328	↓	1445	Aq	8	X	X	X	X	
QCF-F2a-190328	↓	1405	Aq	8	X	X	X	X	
QCF-G2-190328	↓	1306	Aq	3	X				
QCF-G2a-190328	↓	1312	Aq	3	X				
QCF-E2-190328	↓	1525	Aq	3	X				
QCF-Dupl-190328	↓	1527	Aq	3	X				
QCF-E2a-190328	↓	1530	Aq	3	X				
QCF-E1-190328	↓	1535	Aq	3	X				

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time	Received by:	Date/Time
Kelsey Mack	3/28/19 1630		
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time: 3.29.19 1015

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 0.9 °C

Custody Seals Intact?: Yes No

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Sample Administration Receipt Documentation Log

Doc Log ID: 244959

Group Number(s): 236153

Client: Boeing

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/29/2019 10:15
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	HCL
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Brandy Barclay (2299) at 11:50 on 03/29/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-03	0.4	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MS 2R-96
PO Box 3707
Seattle WA 98124-2207

Report Date: April 17, 2019 11:35

Project: Boeing_QCF

Account #: 13419
Group Number: 2036348
SDG: BNI99
State of Sample Origin: WA

Electronic Copy To	The Boeing Company	Attn: Joe Flaherty
Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen

Respectfully Submitted,

Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TripBlank-190329 Water	03/29/2019	1022209
QCF-B3-190329 Water	03/29/2019 13:52	1022210
QCF-C2-190329 Water	03/29/2019 12:47	1022211
QCF-C2a-190329 Water	03/29/2019 12:42	1022212
QCF-L2a-190329 Water	03/29/2019 09:18	1022213
QCF-L2-190329 Water	03/29/2019 11:48	1022214

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: Boeing_QCF
ELLE Group #: 2036348

General Comments:

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.

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

Analysis Specific Comments:

EPA 300.0, Wet Chemistry

Batch #: 19088987106B (Sample number(s): 1022210-1022211, 1022214 UNSPK: 1022210 BKG: 1022210)

The recovery(ies) for the following analyte(s) in the MS exceeded the acceptance window indicating a positive bias: Sulfate, Nitrate Nitrogen

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Analysis Report

Sample Description: **QCF-TripBlank-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019
SDG#: BNI99-01TB

The Boeing Company
ELLE Sample #: WW 1022209
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TripBlank-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019
SDG#: BNI99-01TB

The Boeing Company
ELLE Sample #: WW 1022209
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 11:42	Don V Viray	1

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Analysis Report

Sample Description: **QCF-B3-190329 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 13:52
SDG#: BNI99-02

The Boeing Company
ELLE Sample #: WW 1022210
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**10**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-B3-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 13:52
SDG#: BNI99-02

The Boeing Company
ELLE Sample #: WW 1022210
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	Trichloroethene		79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	Nitrate Nitrogen		14797-55-8	0.10	U	0.10	1
00228	**Sulfate**		14808-79-8	**16.7**		5.0	5
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 12:06	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 12:33	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106B	03/30/2019 13:56	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106B	04/01/2019 23:49	Clinton M Wilson	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19098667603A	04/08/2019 20:39	Drew M Gerhart	1

Sample Description: **QCF-C2-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 12:47
SDG#: BNI99-03

The Boeing Company
ELLE Sample #: WW 1022211
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**2.1**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-C2-190329 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 12:47
SDG#: BNI99-03

The Boeing Company
ELLE Sample #: WW 1022211
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**40**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.6**		0.10	1
00228	**Sulfate**		14808-79-8	**27.1**		5.0	5
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 12:29	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 12:50	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106B	03/30/2019 14:52	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106B	04/02/2019 00:59	Clinton M Wilson	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19098667603A	04/08/2019 20:53	Drew M Gerhart	1

Sample Description: **QCF-C2a-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 12:42
SDG#: BNI99-04

The Boeing Company
ELLE Sample #: WW 1022212
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	**Tetrachloroethene**	127-18-4	**0.9**		0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-C2a-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 12:42
SDG#: BNI99-04

The Boeing Company
ELLE Sample #: WW 1022212
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**14**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 12:53	Don V Viray	1

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Analysis Report

Sample Description: **QCF-L2a-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 09:18
SDG#: BNI99-05

The Boeing Company
ELLE Sample #: WW 1022213
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-L2a-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 09:18
SDG#: BNI99-05

The Boeing Company
ELLE Sample #: WW 1022213
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.9**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 13:17	Don V Viray	1

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Analysis Report

Sample Description: **QCF-L2-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 11:48
SDG#: BNI99-06

The Boeing Company
ELLE Sample #: WW 1022214
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-L2-190329 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 03/30/2019 10:00
Collection Date/Time: 03/29/2019 11:48
SDG#: BNI99-06

The Boeing Company
ELLE Sample #: WW 1022214
ELLE Group #: 2036348
Matrix: Water

CAT No.	Analysis Name		CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles		**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane		71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane		79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**		79-01-6	**16**		0.5	1
03648	Trichlorofluoromethane		75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane		96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene		95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene		108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride		75-01-4	0.5	U	0.5	1
03648	m+p-Xylene		179601-23-1	0.5	U	0.5	1
03648	o-Xylene		95-47-6	0.5	U	0.5	1
GC Miscellaneous		**RSKSOP-175 modified**		**ug/l**		**ug/l**	
07105	Ethane		74-84-0	5.0	U	5.0	1
07105	Ethene		74-85-1	5.0	U	5.0	1
07105	Methane		74-82-8	5.0	U	5.0	1
Wet Chemistry		**EPA 300.0**		**mg/l**		**mg/l**	
00368	**Nitrate Nitrogen**		14797-55-8	**1.5**		0.10	1
00228	**Sulfate**		14808-79-8	**16.0**		5.0	5
		SM 5310 C-2011		**mg/l**		**mg/l**	
00273	Total Organic Carbon		n.a.	1.0	U	1.0	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K190981AA	04/08/2019 13:40	Don V Viray	1
07105	MEE by RSK-175	RSKSOP-175 modified	1	190910003A	04/01/2019 13:07	Johanna C Kennedy	1
00368	Nitrate Nitrogen	EPA 300.0	1	19088987106B	03/30/2019 15:11	Clinton M Wilson	1
00228	Sulfate	EPA 300.0	1	19088987106B	04/02/2019 01:13	Clinton M Wilson	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19098667603A	04/08/2019 21:06	Drew M Gerhart	1

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Quality Control Summary

Client Name: The Boeing Company
Reported: 04/17/2019 11:35

Group Number: 2036348

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K190981AA	Sample number(s): 1022209-1022214		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/17/2019 11:35

Group Number: 2036348

Method Blank (continued)

Analysis Name	Result		LOQ
	ug/l		ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: 190910003A	Sample number(s): 1022210-1022211,1022214		
Ethane	5.0	U	5.0
Ethene	5.0	U	5.0
Methane	5.0	U	5.0
	mg/l		mg/l
Batch number: 19088987106B	Sample number(s): 1022210-1022211,1022214		
Nitrate Nitrogen	0.10	U	0.10
Sulfate	1.0	U	1.0
Batch number: 19098667603A	Sample number(s): 1022210-1022211,1022214		
Total Organic Carbon	1.0	U	1.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K190981AA	Sample number(s): 1022209-1022214								
Benzene	5.00	5.19			104		70-130		
Bromobenzene	5.00	5.48			110		70-130		
Bromochloromethane	5.00	5.21			104		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/17/2019 11:35

Group Number: 2036348

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Bromodichloromethane	5.00	4.99			100		70-130		
Bromoform	5.00	4.63			93		70-130		
Bromomethane	2.00	1.92			96		70-130		
n-Butylbenzene	5.00	6.05			121		70-130		
sec-Buty benzene	5.00	5.75			115		70-130		
tert-Buty benzene	5.00	5.40			108		70-130		
Carbon Tetrachloride	5.00	5.10			102		70-130		
Chlorobenzene	5.00	5.50			110		70-130		
Chloroethane	2.00	2.02			101		70-130		
Chloroform	5.00	5.47			109		70-130		
Chloromethane	2.00	2.05			102		70-130		
2-Chlorotoluene	5.00	5.62			112		70-130		
4-Chlorotoluene	5.00	5.70			114		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.10			102		70-130		
Dibromochloromethane	5.00	4.96			99		70-130		
1,2-Dibromoethane	5.00	5.31			106		70-130		
Dibromomethane	5.00	5.55			111		70-130		
1,2-Dichlorobenzene	5.00	5.77			115		70-130		
1,3-Dichlorobenzene	5.00	5.66			113		70-130		
1,4-Dichlorobenzene	5.00	5.79			116		70-130		
Dichlorodifluoromethane	2.00	1.92			96		70-130		
1,1-Dichloroethane	5.00	5.46			109		70-130		
1,2-Dichloroethane	5.00	5.60			112		70-130		
1,1-Dichloroethene	5.00	5.79			116		70-130		
cis-1,2-Dichloroethene	5.00	5.36			107		70-130		
trans-1,2-Dichloroethene	5.00	5.68			114		70-130		
1,2-Dichloropropane	5.00	5.32			106		70-130		
1,3-Dichloropropane	5.00	5.26			105		70-130		
2,2-Dichloropropane	5.00	4.26			85		70-130		
1,1-Dichloropropene	5.00	5.29			106		70-130		
cis-1,3-Dichloropropene	5.00	4.86			97		70-130		
trans-1,3-Dichloropropene	5.00	4.61			92		70-130		
Ethylbenzene	5.00	5.23			105		70-130		
Hexachlorobutadiene	5.00	6.12			122		70-130		
Isopropylbenzene	5.00	5.23			105		70-130		
p-Isopropyltoluene	5.00	5.59			112		70-130		
Methylene Chloride	5.00	5.59			112		70-130		
Naphthalene	5.00	4.58			92		70-130		
n-Propy benzene	5.00	5.67			113		70-130		
Styrene	5.00	5.29			106		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.35			107		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.51			110		70-130		
Tetrachloroethene	5.00	5.30			106		70-130		
Toluene	5.00	5.15			103		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/17/2019 11:35

Group Number: 2036348

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,3-Trichlorobenzene	5.00	5.69			114		70-130		
1,2,4-Trichlorobenzene	5.00	5.55			111		70-130		
1,1,1-Trichloroethane	5.00	4.92			98		70-130		
1,1,2-Trichloroethane	5.00	5.66			113		70-130		
Trichloroethene	5.00	5.29			106		70-130		
Trichlorofluoromethane	2.00	2.05			102		70-130		
1,2,3-Trichloropropane	5.00	5.59			112		70-130		
1,2,4-Trimethy benzene	5.00	5.35			107		70-130		
1,3,5-Trimethy benzene	5.00	5.36			107		70-130		
Vinyl Chloride	2.00	2.07			104		70-130		
m+p-Xylene	10	10.66			107		70-130		
o-Xylene	5.00	5.03			101		70-130		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 190910003A	Sample number(s): 1022210-1022211,1022214								
Ethane	58.44	56.81	58.44	57.18	97	98	85-115	1	20
Ethene	60.85	58.48	60.85	58.92	96	97	83-115	1	20
Methane	59.83	58.27	59.83	58.84	97	98	85-115	1	20
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 19088987106B	Sample number(s): 1022210-1022211,1022214								
Nitrate Nitrogen	0.750	0.727			97		90-110		
Sulfate	7.50	7.68			102		90-110		
Batch number: 19098667603A	Sample number(s): 1022210-1022211,1022214								
Total Organic Carbon	25	24.46			98		91-113		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix sp ke

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 19088987106B	Sample number(s): 1022210-1022211,1022214 UNSPK: 1022210									
Nitrate Nitrogen	0.10 U	1.00	1.35			135*		90-110		
Sulfate	16.66	25	45.36			115*		90-110		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 04/17/2019 11:35

Group Number: 2036348

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 19088987106B	Sample number(s): 1022210-1022211,1022214 BKG: 1022210			
Nitrate Nitrogen	0.10 U	0.10 U	0 (1)	15
Sulfate	16.66	16.48	1 (1)	15

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K190981AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1022209	85	100
1022210	86	103
1022211	86	102
1022212	87	102
1022213	86	103
1022214	86	103
Blank	88	102
LCS	99	105
Limits:	80-120	80-120

Analysis Name: MEE by RSK-175
Batch number: 190910003A

	Propene
1022210	53
1022211	61
1022214	58
Blank	90
LCS	97
LCSD	97
Limits:	46-135

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419 For Eurofins Lancaster Laboratories use only Group # 2036348 Sample # 1022209-14

Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Annual Sampling
Site Program/#: 0025178.160.401
Boeing PM: Joe Flaherty
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: ☐ Boeing EHS ☐ Other (specify):
Sampler: KAM / MDV # of Coolers: 1

4 Analyses Requested

5 Remarks/Comments

Trip Blanks contained bubbles.

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA method 524.2	MEE RSK175	Nitrate/Sulfate EPA 300.0	TDC SM 5310C	Remarks/Comments
QCF-TripBlank-190329	—	—	Aq	2	X				~~Please hold~~
QCF-B3-190329	3/29/19	1352	Aq	8	X	X	X	X	~~QCF-L2-190329~~ km
QCF-C2-190329	↓	1247	Aq	8	X	X	X	X	~~H=hold~~
QCF-C2a-190329	↓	1242	Aq	3	X				km ~~wait for~~
~~QCF-L2-190329~~	↓	~~1148~~	~~Aq~~	~~8~~	~~X~~	~~X~~	~~X~~	~~X~~	~~km further~~
QCF-L2a-190329	↓	918	Aq	3	X				~~instruction~~ km
QCF-L2-190329	↓	1148	Aq	8	X	X	X	X	

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time	Received by:	Date/Time
Kelly [signature]	3/29/19 1540		
		[signature]	3.30.19 1000

Relinquished by commercial carrier (circle): UPS FedEx Other: _____

Temperature upon Receipt: 0.0 °C

Custody Seals Intact? Yes No

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Sample Administration Receipt Documentation Log

Doc Log ID: 245071

Group Number(s): 2036348

Client: Queen City Farms

Annual Sampling

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	03/30/2019 10:00
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	Yes
Samples Chilled:	Yes	VOA IDs (≥ 6mm):	See Below
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	2
Samples Intact:	Yes	Trip Blank Type:	HCl
Missing Samples:	No	Air Quality Samples Present:	No
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

VOA Vial IDs (Headspace ≥ 6mm): Trip Blank (1/2)

Unpacked by Darian Jaynes (29952) at 10:53 on 03/30/2019

Samples Chilled Details: Annual Sampling

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-02	0.8	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T 717-656-2300
F 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Fall 2019 Sampling Event Data Validation Technical Memorandum

Technical Memorandum

TO: Jennifer Wynkoop, Project Manager

FROM: Kristi Schultz and Danille Jorgensen

DATE: November 1, 2019

RE: **Stage 2A Laboratory Data Verification and Validation Results - Fall 2019**
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

This technical memorandum provides the results of a Stage 2A verification and validation check of analytical data for 22 water samples and 3 trip blanks collected from September 23-25, 2019 at the Queen City Farms (QCF) Superfund Site located in Maple Valley, Washington. The samples were collected and analyzed as part of the QCF groundwater monitoring program. All sample analyses were conducted at Eurofins Lancaster Laboratories Environmental (ELLE) laboratory, located in Lancaster, Pennsylvania.

Water samples were analyzed for volatile organic compounds (VOCs) using US Environmental Protection Agency (EPA) Method 524.2. A Stage 2A verification and validation check was conducted on the analytical data associated with these analyses. The analytical results are reported in the ELLE laboratory data packages identified as 2065773, 2066066, and 2066227. Laboratory data package 2065773 also included samples collected as part of the QCF Groundwater Extraction and Treatment System (GETS) Performance Monitoring; these samples were validated, but are not included in this Stage 2A verification and validation memorandum. Electronic copies of these data packages are provided as Attachment 1. Sample names and the dates of sample collection and analysis are provided in the table below.

Sample Name	Lab Sample ID	Sample Collection Date	Sample Analysis Date
QCF-TripBlank-190923	1159263	9/23/2019	10/2/2019 (VOCs)
QCF-H2a-190923	1159264	9/23/2019	10/2/2019 (VOCs)
QCF-H2-190923	1159265	9/23/2019	10/2/2019 (VOCs)
QCF-IA3a-190923	1159273	9/23/2019	10/3/2019 (VOCs)
QCF-IA3-190923	1159274	9/23/2019	10/3/2019 (VOCs)
QCF-Dup1-190923	1159275	9/23/2019	10/3/2019 (VOCs)
QCF-TripBlank-190924	1160544	9/24/2019	10/2/2019 (VOCs)
QCF-LM-190924	1160545	9/24/2019	10/3/2019 (VOCs)
QCF-LR-190924	1160546	9/24/2019	10/3/2019 (VOCs)
QCF-SB2-190924	1160547	9/24/2019	10/3/2019 (VOCs)
QCF-SA2-190924	1160548	9/24/2019	10/3/2019 (VOCs)
QCF-U2-190924	1160549	9/24/2019	10/6/2019 (VOCs)
QCF-S2-190924	1160550	9/24/2019	10/6/2019 (VOCs)
QCF-S2a-190924	1160551	9/24/2019	10/6/2019 (VOCs)
QCF-SC2-190326	1160552	9/24/2019	10/6/2019 (VOCs)
QCF-N2-190924	1160553	9/24/2019	10/6/2019 (VOCs)
QCF-SD2-190924	1160554	9/24/2019	10/6/2019 (VOCs)
QCF-I2-190924	1160555	9/24/2019	10/6/2019 (VOCs)

Sample Name	Lab Sample ID	Sample Collection Date	Sample Analysis Date
QCF-Dup2-190924	1160556	9/24/2019	10/6/2019 (VOCs)
QCF-SE2-190924	1160557	9/24/2019	10/6/2019 (VOCs)
QCF-TripBlank-190925	1161154	9/25/2019	10/6/2019 (VOCs)
QCF-L2a-190925	1161155	9/25/2019	10/6/2019 (VOCs)
QCF-MA3a-190925	1161156	9/25/2019	10/6/2019 (VOCs)
QCF-V2a-190925	1161157	9/25/2019	10/8/2019 (VOCs)
QCF-O2-190925	1161158	9/25/2019	10/8/2019 (VOCs)

Abbreviations/Acronyms: ID = identification, VOC = volatile organic compound

The Stage 2A verification and validation check was conducted in accordance with EPA's Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use (EPA 2009); the Quality Assurance Project Plan (QAPP), Version 3.0 (EcoChem and LAI 2015); and with guidance from applicable portions of the National Functional Guidelines for Organic Data Review (EPA 2016). The Stage 2A verification and validation check for each laboratory data package included the following:

- Verification that the laboratory data package contained all necessary documentation (including chain-of-custody records [COC]; identification of samples received by the laboratory; date and time of receipt of the samples at the laboratory; sample conditions upon receipt at the laboratory; date and time of sample analysis; and, if applicable, date of extraction; definition of laboratory data qualifiers; all sample-related quality control (QC) data; and QC acceptance criteria).
- Verification that all requested analyses, special cleanups, and special handling methods were performed.
- Verification that QC samples were performed as specified in the QAPP.
- Evaluation of sample holding times.
- Evaluation of QC data compared to acceptance criteria, including method blanks, field trip blanks, surrogate recoveries, laboratory control sample (LCS) results, and blind field duplicate pair relative percent differences (RPD).
- Evaluation of reporting limits (RLs) compared to target RLs specified in the QAPP.

Data validation qualifiers are added to the sample results, as appropriate, based on the Stage 2A verification and validation check. The absence of a data qualifier indicates that the reported result is acceptable without qualification. Data qualifiers are summarized in the attached Table 1. The data quality evaluation is summarized below.

Laboratory Data Package Completeness

Each laboratory data package contained a signed COC, a cooler receipt form documenting the condition of the samples upon receipt at the laboratory; a cooler temperature compliance form; sample analytical results; and QC results (method blanks, field trip blanks, surrogate recoveries, and LCS results). A case narrative identifying any complications was also provided with each laboratory

data package. Definitions of laboratory qualifiers and QC acceptance criteria were provided, as appropriate.

Sample Conditions and Analysis

The laboratory received the samples in good condition and all analyses were performed as requested. Upon receipt by LLI, the sample container information was compared to the associated COC and the cooler temperatures were recorded. Coolers were received with temperatures ranging from 0.8 degrees Celsius (°C) to 4.9°C, which is within the EPA-recommended limit of ≤6°C.

The laboratory did note in the case narrative for lab data package 2066227 that the trip blank sample container contained headspace at the time of analysis. Since all other quality control sample results were acceptable, no qualification of the data was determined necessary.

Holding Times

For all analyses and all samples, the time between sample collection, extraction (if applicable), and analysis was determined to be within EPA and project-specified holding times. No qualification of the data was necessary.

Blank Results

Laboratory Method Blanks

At least one method blank was analyzed with each batch of samples. Target analytes were not detected at concentrations greater than RLs in the associated method blanks. No qualification of the data was necessary.

Field Trip Blanks

At least one field (trip) blank was analyzed with each batch of samples submitted to the laboratory for VOC analysis. Target analytes were not detected at concentrations greater than the RLs in the associated field blanks. No qualification of the data was necessary.

Surrogate Recoveries

Appropriate compounds were used as surrogate spikes. Recovery values for the surrogate spikes were within the current laboratory-specified control limits for all project samples. No qualification of the data was necessary.

Matrix Spike (MS) and Laboratory Replicate Results

Matrix spikes are not required by the analytical method (EPA 524.2), and none were reported by the lab using project samples. No qualification of the data was necessary.

Laboratory Control Sample Results

At least one LCS was analyzed with each batch of samples. Recoveries for each LCS were within the current laboratory-specified control limits, with the following exception:

- The LCS recovery for hexachlorobutadiene associated with the VOC analysis of analytical batch K192792AA as reported in data packages 2066066 and 2066227 was greater than the laboratory-specified control limit. Hexachlorobutadiene was not detected at a concentration greater than the reporting limit in the associated samples; no qualification of the data was necessary.

Blind Field Duplicates

Two pairs of blind field duplicate groundwater samples (QCF-Dup1-190923/QCF-IA3a-190923 and QCF-Dup2-190924/QCF-I2-190924) were submitted for analysis with data packages 2065773 and 2066066 and were analyzed for VOCs.

A project-specified control limit of 35 percent was used to evaluate the RPDs between the duplicate water samples, except when the sample results were within five times the RL. In these cases, a project-specified control limit of plus or minus the RL was used. RPDs for the duplicate sample pairs submitted for analysis were within the project-specified control limits. No qualification of the data was necessary.

Initial and Continuing Calibrations and Internal Standards

According to the case narratives, laboratory-specified calibration limits for initial and continuing calibrations and internal standards were met for all analyses. No qualification of the data was necessary.

Reporting Limits

Project-specified RLs were met for all samples with the following exception:

- The RLs for trichloroethene and/or cis-1,2-dichloroethene for three water samples were raised due to required sample dilution; however, the associated results were detected concentrations above the raised RL.

A listing of the specific samples with raised RLs is provided below.

Sample Name	Lab Sample ID	Analyte	Target Quantitation Limit	Sample Reporting Limit	Sample Result
QCF-IA3a-190923	1159273	Trichloroethene	0.5 µg/L	5.0 µg/L	75 µg/L
QCF-IA3-190923	1159274	cis-1,2-Dichloroethene	0.5 µg/L	5.0 µg/L	32 µg/L
QCF-Dup1-190923	1159275	Trichloroethene	0.5 µg/L	5.0 µg/L	76 µg/L

Completeness and Overall Data Quality

The completeness for this data set is 100 percent, which meets the project-specified goal of 95 percent minimum.

Data precision was evaluated through blind field duplicate samples. Data accuracy was evaluated through LCS and surrogate spikes. Based on this Stage 2A data quality verification and validation, all of the data were determined to be acceptable. No data were rejected.

LANDAU ASSOCIATES, INC.

Kristi Schultz
Data Specialist

Danille Jorgensen
Environmental Data Manager

KES/DRJ/KJG
[\\TACOMA3\PROJECT\025\178\T\DATA\DV\FALL 2019 SAMPLING EVENT DV MEMO\QCF FALL 2019 DV MEMO.DOCX]

Attachments

Table 1: Summary of Data Qualifiers
Attachment 1: ELLE Analytical Reports 2065773, 2066066, and 2066227

References

EcoChem and LAI. 2015. Quality Assurance Project Plan, Groundwater Monitoring and Groundwater Extraction and Treatment System Performance Monitoring, Queen City Farms Superfund Site, Maple Valley, King County, Washington. EcoChem, Inc. and Landau Associates, Inc. February 27.

EPA. 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use. OSWER No. 9200.1-85; EPA 540-R-08-005. US Environmental Protection Agency. January 13.

EPA. 2016. National Functional Guidelines for Superfund Organic Methods Data Review. Publication No. OLEM 9355.0-134, EPA-540-R-2016-002. Office of Superfund Remediation and Technology Innovation (OSRTI), US Environmental Protection Agency. September.

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2065773	1159273	QCF-IA3a-190923 (orig)	Trichloroethene	84 E	DNR	Do not use; use dilution result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Benzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Bromobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Bromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Bromodichloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Bromoform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Bromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	n-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	sec-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	tert-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Carbon Tetrachloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Chlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Chloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Chloroform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Chloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	2-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	4-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Dibromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2-Dibromoethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Dibromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,3-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,4-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Dichlorodifluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	cis-1,2-Dichloroethene	14	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	trans-1,2-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,3-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	2,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	cis-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	trans-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Ethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Hexachlorobutadiene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Isopropylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	p-Isopropyltoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Methylene Chloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Naphthalene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	n-Propylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Styrene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Tetrachloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Toluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1,1-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,1,2-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Trichlorofluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2,3-Trichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	Vinyl Chloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	m,p-Xylene	5.0 U	DNR	Do not use; use original result

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2065773	1159273	QCF-IA3a-190923 (DL)	o-Xylene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (orig)	cis-1,2-Dichloroethene	35 E	DNR	Do not use; use dilution result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Benzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Bromobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Bromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Bromodichloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Bromoform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Bromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	n-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	sec-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	tert-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Carbon Tetrachloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Chlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Chloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Chloroform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Chloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	2-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	4-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Dibromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2-Dibromoethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Dibromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,3-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,4-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Dichlorodifluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	trans-1,2-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,3-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	2,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	cis-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	trans-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Ethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Hexachlorobutadiene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Isopropylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	p-Isopropyltoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Methylene Chloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Naphthalene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	n-Propylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Styrene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Tetrachloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Toluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1,1-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,1,2-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Trichloroethene	11	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Trichlorofluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2,3-Trichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	Vinyl Chloride	5.0 U	DNR	Do not use; use original result

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Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	m,p-Xylene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159274	QCF-IA3-190923 (DL)	o-Xylene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (orig)	Trichloroethene	85 E	DNR	Do not use; use dilution result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Benzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Bromobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Bromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Bromodichloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Bromoform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Bromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	n-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	sec-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	tert-Butylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Carbon Tetrachloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Chlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Chloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Chloroform	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Chloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	2-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	4-Chlorotoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2-Dibromo-3-chloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Dibromochloromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2-Dibromoethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Dibromomethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,3-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,4-Dichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Dichlorodifluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2-Dichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	cis-1,2-Dichloroethene	14	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	trans-1,2-Dichloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,3-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	2,2-Dichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	cis-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	trans-1,3-Dichloropropene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Ethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Hexachlorobutadiene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Isopropylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	p-Isopropyltoluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Methylene Chloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Naphthalene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	n-Propylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Styrene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1,1,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1,2,2-Tetrachloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Tetrachloroethene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Toluene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2,3-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2,4-Trichlorobenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1,1-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,1,2-Trichloroethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Trichlorofluoromethane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2,3-Trichloropropane	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,2,4-Trimethylbenzene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	1,3,5-Trimethylbenzene	5.0 U	DNR	Do not use; use original result

Table D-1
Summary of Data Qualifiers
Queen City Farms Groundwater Monitoring Program
Maple Valley, Washington

Analysis	Data Package	Lab Sample ID	Sample ID	Analyte	Result	Data Validation Qualifier	Reason
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	Vinyl Chloride	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	m,p-Xylene	5.0 U	DNR	Do not use; use original result
VOCs	2065773	1159275	QCF-Dup1-190923 (DL)	o-Xylene	5.0 U	DNR	Do not use; use original result

Notes:
E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

Abbreviations/Acronyms:
DL = dilution analysis
DNR = do not report
Orig = original analysis
VOC = volatile organic compound

ATTACHMENT 1

Eurofins Lancaster Laboratories Environmental Analytical Reports 2065773, 2066066, and 2066227

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MC 6Y-94
PO Box 3707
Seattle WA 98124

Report Date: October 03, 2019 19:36

Project: Boeing_QCF

Account #: 13419
Group Number: 2065773
SDG: BQF07
State of Sample Origin: WA

Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen
Electronic Copy To	The Boeing Company	Attn: Todd Swoboda

Respectfully Submitted,

Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-EGW-190923 Water	09/23/2019 09:54	1159261
QCF-IGW-190923 Water	09/23/2019 10:06	1159262
QCF-TripBlank-190923 Water	09/23/2019	1159263
QCF-H2a-190923 Water	09/23/2019 12:26	1159264
QCF-H2-190923 Water	09/23/2019 12:28	1159265
QCF-EW1-190923 Water	09/23/2019 11:32	1159266
QCF-EW2-190923 Water	09/23/2019 10:47	1159267
QCF-EW3-190923 Water	09/23/2019 10:05	1159268
QCF-EW4-190923 Water	09/23/2019 12:20	1159269
QCF-EW5-190923 Water	09/23/2019 14:40	1159270
QCF-EW6-190923 Water	09/23/2019 14:10	1159271
QCF-EW7-190923 Water	09/23/2019 13:24	1159272
QCF-IA3a-190923 Water	09/23/2019 15:40	1159273
QCF-IA3-190923 Water	09/23/2019 15:22	1159274
QCF-Dup1-190923 Water	09/23/2019 15:42	1159275

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: Boeing_QCF
ELLE Group #: 2065773

General Comments:

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.

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

Analysis Specific Comments:

No additional comments are necessary.

Sample Description: **QCF-EGW-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 09:54
SDG#: BQF07-01

The Boeing Company
ELLE Sample #: WW 1159261
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EGW-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 09:54
SDG#: BQF07-01

The Boeing Company
ELLE Sample #: WW 1159261
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.1**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 21:54	Don V Viray	1

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Analysis Report

Sample Description: **QCF-IGW-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:06
SDG#: BQF07-02

The Boeing Company
ELLE Sample #: WW 1159262
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.9**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-IGW-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:06
SDG#: BQF07-02

The Boeing Company
ELLE Sample #: WW 1159262
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**4.0**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 22:18	Don V Viray	1

Sample Description: **QCF-TripBlank-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019
SDG#: BQF07-03TB

The Boeing Company
ELLE Sample #: WW 1159263
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TripBlank-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019
SDG#: BQF07-03TB

The Boeing Company
ELLE Sample #: WW 1159263
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 21:07	Don V Viray	1

Sample Description: **QCF-H2a-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:26
SDG#: BQF07-04

The Boeing Company
ELLE Sample #: WW 1159264
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-H2a-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:26
SDG#: BQF07-04

The Boeing Company
ELLE Sample #: WW 1159264
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 22:41	Don V Viray	1

Sample Description: **QCF-H2-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:28
SDG#: BQF07-05

The Boeing Company
ELLE Sample #: WW 1159265
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-H2-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:28
SDG#: BQF07-05

The Boeing Company
ELLE Sample #: WW 1159265
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 23:05	Don V Viray	1

Sample Description: **QCF-EW1-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 11:32
SDG#: BQF07-06

The Boeing Company
ELLE Sample #: WW 1159266
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW1-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 11:32
SDG#: BQF07-06

The Boeing Company
ELLE Sample #: WW 1159266
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 23:28	Don V Viray	1

Sample Description: **QCF-EW2-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:47
SDG#: BQF07-07

The Boeing Company
ELLE Sample #: WW 1159267
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW2-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:47
SDG#: BQF07-07

The Boeing Company
ELLE Sample #: WW 1159267
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.2**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 23:51	Don V Viray	1

Sample Description: **QCF-EW3-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:05
SDG#: BQF07-08

The Boeing Company
ELLE Sample #: WW 1159268
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW3-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 10:05
SDG#: BQF07-08

The Boeing Company
ELLE Sample #: WW 1159268
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.2**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 00:15	Don V Viray	1

Sample Description: **QCF-EW4-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:20
SDG#: BQF07-09

The Boeing Company
ELLE Sample #: WW 1159269
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW4-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 12:20
SDG#: BQF07-09

The Boeing Company
ELLE Sample #: WW 1159269
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**4.9**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 00:38	Don V Viray	1

Sample Description: **QCF-EW5-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 14:40
SDG#: BQF07-10

The Boeing Company
ELLE Sample #: WW 1159270
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.9**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW5-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 14:40
SDG#: BQF07-10

The Boeing Company
ELLE Sample #: WW 1159270
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**2.9**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 01:02	Don V Viray	1

Sample Description: **QCF-EW6-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 14:10
SDG#: BQF07-11

The Boeing Company
ELLE Sample #: WW 1159271
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**1.8**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW6-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 14:10
SDG#: BQF07-11

The Boeing Company
ELLE Sample #: WW 1159271
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.2**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 01:26	Don V Viray	1

Sample Description: **QCF-EW7-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 13:24
SDG#: BQF07-12

The Boeing Company
ELLE Sample #: WW 1159272
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**3.0**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-EW7-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 13:24
SDG#: BQF07-12

The Boeing Company
ELLE Sample #: WW 1159272
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**4.7**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 01:50	Don V Viray	1

Sample Description: **QCF-IA3a-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:40
SDG#: BQF07-13

The Boeing Company
ELLE Sample #: WW 1159273
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**16**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-IA3a-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:40
SDG#: BQF07-13

The Boeing Company
ELLE Sample #: WW 1159273
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**84**	**E**	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**14**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	U	5.0	10

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Analysis Report

Sample Description: **QCF-IA3a-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:40
SDG#: BQF07-13

The Boeing Company
ELLE Sample #: WW 1159273
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**75**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 03:47	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K192751AA	10/03/2019 04:11	Don V Viray	10

Sample Description: **QCF-IA3-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:22
SDG#: BQF07-14

The Boeing Company
ELLE Sample #: WW 1159274
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**35**	**E**	0.5	1
03648	**trans-1,2-Dichloroethene**	156-60-5	**0.5**		0.5	1
03648	**1,2-Dichloropropane**	78-87-5	**0.6**		0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-IA3-190923 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:22
SDG#: BQF07-14

The Boeing Company
ELLE Sample #: WW 1159274
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**12**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**32**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	U	5.0	10

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Analysis Report

Sample Description: **QCF-IA3-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:22
SDG#: BQF07-14

The Boeing Company
ELLE Sample #: WW 1159274
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**11**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 04:34	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K192751AA	10/03/2019 04:58	Don V Viray	10

Sample Description: **QCF-Dup1-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:42
SDG#: BQF07-15FD

The Boeing Company
ELLE Sample #: WW 1159275
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**16**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

Sample Description: **QCF-Dup1-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:42
SDG#: BQF07-15FD

The Boeing Company
ELLE Sample #: WW 1159275
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**85**	**E**	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1
Trial ID: DL						
03648	Benzene	71-43-2	5.0	U	5.0	10
03648	Bromobenzene	108-86-1	5.0	U	5.0	10
03648	Bromochloromethane	74-97-5	5.0	U	5.0	10
03648	Bromodichloromethane	75-27-4	5.0	U	5.0	10
03648	Bromoform	75-25-2	5.0	U	5.0	10
03648	Bromomethane	74-83-9	5.0	U	5.0	10
03648	n-Butylbenzene	104-51-8	5.0	U	5.0	10
03648	sec-Butylbenzene	135-98-8	5.0	U	5.0	10
03648	tert-Buty benzene	98-06-6	5.0	U	5.0	10
03648	Carbon Tetrachloride	56-23-5	5.0	U	5.0	10
03648	Chlorobenzene	108-90-7	5.0	U	5.0	10
03648	Chloroethane	75-00-3	5.0	U	5.0	10
03648	Chloroform	67-66-3	5.0	U	5.0	10
03648	Chloromethane	74-87-3	5.0	U	5.0	10
03648	2-Chlorotoluene	95-49-8	5.0	U	5.0	10
03648	4-Chlorotoluene	106-43-4	5.0	U	5.0	10
03648	1,2-D bromo-3-chloropropane	96-12-8	5.0	U	5.0	10
03648	D bromochloromethane	124-48-1	5.0	U	5.0	10
03648	1,2-D bromoethane	106-93-4	5.0	U	5.0	10
03648	D bromomethane	74-95-3	5.0	U	5.0	10
03648	1,2-Dichlorobenzene	95-50-1	5.0	U	5.0	10
03648	1,3-Dichlorobenzene	541-73-1	5.0	U	5.0	10
03648	1,4-Dichlorobenzene	106-46-7	5.0	U	5.0	10
03648	Dichlorodifluoromethane	75-71-8	5.0	U	5.0	10
03648	1,1-Dichloroethane	75-34-3	5.0	U	5.0	10
03648	1,2-Dichloroethane	107-06-2	5.0	U	5.0	10
03648	1,1-Dichloroethene	75-35-4	5.0	U	5.0	10
03648	**cis-1,2-Dichloroethene**	156-59-2	**14**		5.0	10
03648	trans-1,2-Dichloroethene	156-60-5	5.0	U	5.0	10
03648	1,2-Dichloropropane	78-87-5	5.0	U	5.0	10
03648	1,3-Dichloropropane	142-28-9	5.0	U	5.0	10
03648	2,2-Dichloropropane	594-20-7	5.0	U	5.0	10
03648	1,1-Dichloropropene	563-58-6	5.0	U	5.0	10
03648	cis-1,3-Dichloropropene	10061-01-5	5.0	U	5.0	10
03648	trans-1,3-Dichloropropene	10061-02-6	5.0	U	5.0	10
03648	Ethylbenzene	100-41-4	5.0	U	5.0	10
03648	Hexachlorobutadiene	87-68-3	5.0	U	5.0	10

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Analysis Report

Sample Description: **QCF-Dup1-190923 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/24/2019 10:17
Collection Date/Time: 09/23/2019 15:42
SDG#: BQF07-15FD

The Boeing Company
ELLE Sample #: WW 1159275
ELLE Group #: 2065773
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Isopropylbenzene	98-82-8	5.0	U	5.0	10
03648	p-Isopropyltoluene	99-87-6	5.0	U	5.0	10
03648	Methylene Chloride	75-09-2	5.0	U	5.0	10
03648	Naphthalene	91-20-3	5.0	U	5.0	10
03648	n-Propylbenzene	103-65-1	5.0	U	5.0	10
03648	Styrene	100-42-5	5.0	U	5.0	10
03648	1,1,1,2-Tetrachloroethane	630-20-6	5.0	U	5.0	10
03648	1,1,2,2-Tetrachloroethane	79-34-5	5.0	U	5.0	10
03648	Tetrachloroethene	127-18-4	5.0	U	5.0	10
03648	Toluene	108-88-3	5.0	U	5.0	10
03648	1,2,3-Trichlorobenzene	87-61-6	5.0	U	5.0	10
03648	1,2,4-Trichlorobenzene	120-82-1	5.0	U	5.0	10
03648	1,1,1-Trichloroethane	71-55-6	5.0	U	5.0	10
03648	1,1,2-Trichloroethane	79-00-5	5.0	U	5.0	10
03648	**Trichloroethene**	79-01-6	**76**		5.0	10
03648	Trichlorofluoromethane	75-69-4	5.0	U	5.0	10
03648	1,2,3-Trichloropropane	96-18-4	5.0	U	5.0	10
03648	1,2,4-Trimethy benzene	95-63-6	5.0	U	5.0	10
03648	1,3,5-Trimethy benzene	108-67-8	5.0	U	5.0	10
03648	Vinyl Chloride	75-01-4	5.0	U	5.0	10
03648	m+p-Xylene	179601-23-1	5.0	U	5.0	10
03648	o-Xylene	95-47-6	5.0	U	5.0	10

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 05:21	Don V Viray	1
03648	VOCs- 25ml Water by 524.2	EPA 524.2	2-DL	K192751AA	10/03/2019 05:45	Don V Viray	10

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Quality Control Summary

Client Name: The Boeing Company
Reported: 10/03/2019 19:36

Group Number: 2065773

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K192751AA	Sample number(s): 1159261-1159275		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/03/2019 19:36

Group Number: 2065773

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K192751AA	Sample number(s): 1159261-1159275								
Benzene	5.00	5.05			101		70-130		
Bromobenzene	5.00	5.60			112		70-130		
Bromochloromethane	5.00	4.92			98		70-130		
Bromodichloromethane	5.00	5.16			103		70-130		
Bromoform	5.00	5.08			102		70-130		
Bromomethane	2.00	1.88			94		70-130		
n-Butylbenzene	5.00	5.55			111		70-130		
sec-Buty benzene	5.00	5.68			114		70-130		
tert-Buty benzene	5.00	5.34			107		70-130		
Carbon Tetrachloride	5.00	5.31			106		70-130		
Chlorobenzene	5.00	5.38			108		70-130		
Chloroethane	2.00	1.98			99		70-130		
Chloroform	5.00	5.80			116		70-130		
Chloromethane	2.00	1.95			97		70-130		
2-Chlorotoluene	5.00	5.51			110		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/03/2019 19:36

Group Number: 2065773

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chlorotoluene	5.00	5.52			110		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.52			110		70-130		
Dibromochloromethane	5.00	5.24			105		70-130		
1,2-Dibromoethane	5.00	5.17			103		70-130		
Dibromomethane	5.00	5.34			107		70-130		
1,2-Dichlorobenzene	5.00	5.61			112		70-130		
1,3-Dichlorobenzene	5.00	5.65			113		70-130		
1,4-Dichlorobenzene	5.00	5.71			114		70-130		
Dichlorodifluoromethane	2.00	1.68			84		70-130		
1,1-Dichloroethane	5.00	5.06			101		70-130		
1,2-Dichloroethane	5.00	5.44			109		70-130		
1,1-Dichloroethene	5.00	5.42			108		70-130		
cis-1,2-Dichloroethene	5.00	5.47			109		70-130		
trans-1,2-Dichloroethene	5.00	5.25			105		70-130		
1,2-Dichloropropane	5.00	5.32			106		70-130		
1,3-Dichloropropane	5.00	4.99			100		70-130		
2,2-Dichloropropane	5.00	5.07			101		70-130		
1,1-Dichloropropene	5.00	5.15			103		70-130		
cis-1,3-Dichloropropene	5.00	4.86			97		70-130		
trans-1,3-Dichloropropene	5.00	4.66			93		70-130		
Ethylbenzene	5.00	5.28			106		70-130		
Hexachlorobutadiene	5.00	6.40			128		70-130		
Isopropylbenzene	5.00	5.38			108		70-130		
p-Isopropyltoluene	5.00	5.50			110		70-130		
Methylene Chloride	5.00	5.47			109		70-130		
Naphthalene	5.00	5.32			106		70-130		
n-Propy benzene	5.00	5.57			111		70-130		
Styrene	5.00	5.23			105		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.41			108		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.18			104		70-130		
Tetrachloroethene	5.00	6.22			124		70-130		
Toluene	5.00	5.08			102		70-130		
1,2,3-Trichlorobenzene	5.00	5.94			119		70-130		
1,2,4-Trichlorobenzene	5.00	5.82			116		70-130		
1,1,1-Trichloroethane	5.00	5.23			105		70-130		
1,1,2-Trichloroethane	5.00	5.33			107		70-130		
Trichloroethene	5.00	5.26			105		70-130		
Trichlorofluoromethane	2.00	2.07			104		70-130		
1,2,3-Trichloropropane	5.00	5.61			112		70-130		
1,2,4-Trimethy benzene	5.00	5.28			106		70-130		
1,3,5-Trimethy benzene	5.00	5.37			107		70-130		
Vinyl Chloride	2.00	2.01			101		70-130		
m+p-Xylene	10	10.66			107		70-130		
o-Xylene	5.00	5.18			104		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/03/2019 19:36

Group Number: 2065773

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K192751AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1159261	99	111
1159262	100	112
1159263	100	112
1159264	101	113
1159265	100	112
1159266	100	112
1159267	101	112
1159268	101	111
1159269	102	112
1159270	100	110
1159271	102	110
1159272	100	111
1159273	102	111
1159273DL	99	112
1159274	100	111
1159274DL	99	112
1159275	99	110
1159275DL	99	110
Blank	100	110
LCS	108	111
Limits:	80-120	80-120

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419

For Eurofins Lancaster Laboratories use only
Group # 2065773 Sample # 1159261-75
Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: 2019 Semi Annual Sampling
Site Program/#: 0025178.1160.401
Boeing PM: Todd Swoboda
Consultant Contact: J. Wynkoop
Report To: J. Wynkoop, D. Jorgensen
Invoice To: [X] Boeing EHS [ ] Other (specify):
Sampler: KAM/JEC # of Coolers: 1

4 Analyses Requested

5 Remarks/Comments

page 1 of 1

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA Method 524.2
QCF-EGW-190923	9/23/19	954	Aq	3	X
QCF-IGW-190923	9/23/19	1006		3	X
QCF-TripBlank-190923	—	—		2	X
QCF-H2a-190923	9/23/19	1226		3	X
QCF-H2-190923	9/23/19	1228		3	X
QCF-EW1-190923	9/23/19	1132		3	X
QCF-EW2-190923	9/23/19	1047		3	X
QCF-EW3-190923	9/23/19	1005		3	X
QCF-EW4-190923	9/23/19	1220		3	X
QCF-EW5-190923	9/23/19	1440		3	X
QCF-EW6-190923	9/23/19	1410		3	X
QCF-EW7-190923	9/23/19	1324		3	X
QCF-IA3a-190923	9/23/19	1540		3	X
QCF-IA3-190923	9/23/19	1522		3	X
QCF-Dup1-190923	9/23/19	1542		3	X

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time 9/23/19	Received by:	Date/Time
Relinquished by:	Date/Time 10:14	Received by:	Date/Time
Relinquished by:	Date/Time	Received by: Kristi 3C	Date/Time 9/24/ 1017

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 1.4 °C

Custody Seals Intact?: Yes No

Eurofins Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories. The yellow copy should be retained by the client.

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Sample Administration Receipt Documentation Log

Doc Log ID: 261027

Group Number(s): 2065773

Client: Queen City Farms

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Date:	09/24/2019
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	2
Samples Chilled:	Yes	Trip Blank Type:	HCl
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Shalynn Ponzo (16735) at 21:48 on 09/24/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	1.4	DT	Wet	Y	Bagged	N

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Lancaster, PA 17605-2425
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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MC 6Y-94
PO Box 3707
Seattle WA 98124

Report Date: October 07, 2019 19:47

Project: Boeing_QCF

Account #: 13419
Group Number: 2066066
SDG: BQF08
State of Sample Origin: WA

Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen
Electronic Copy To	The Boeing Company	Attn: Todd Swoboda

Respectfully Submitted,

Kay Hower

(717) 556-7364

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TripBlank-190924 Water	09/24/2019	1160544
QCF-LM-190924 Water	09/24/2019 09:40	1160545
QCF-LR-190924 Water	09/24/2019 10:04	1160546
QCF-SB2-190924 Water	09/24/2019 10:54	1160547
QCF-SA2-190924 Water	09/24/2019 11:12	1160548
QCF-U2-190924 Water	09/24/2019 11:52	1160549
QCF-S2-190924 Water	09/24/2019 12:40	1160550
QCF-S2a-190924 Water	09/24/2019 12:50	1160551
QCF-SC2-190924 Water	09/24/2019 13:06	1160552
QCF-N2-190924 Water	09/24/2019 13:54	1160553
QCF-SD2-190924 Water	09/24/2019 14:12	1160554
QCF-I2-190924 Water	09/24/2019 14:30	1160555
QCF-Dup2-190924 Water	09/24/2019 14:32	1160556
QCF-SE2-190924 Water	09/24/2019 14:56	1160557

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: Boeing_QCF
ELLE Group #: 2066066

General Comments:

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.

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

Analysis Specific Comments:

EPA 524.2, GC/MS Volatiles

Sample #s: 1160549, 1160550, 1160551, 1160552, 1160553, 1160554, 1160555, 1160556

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Batch #: K192792AA (Sample number(s): 1160549-1160557)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Hexachlorobutadiene

Sample Description: **QCF-TripBlank-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019
SDG#: BQF08-01TB

The Boeing Company
ELLE Sample #: WW 1160544
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TripBlank-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019
SDG#: BQF08-01TB

The Boeing Company
ELLE Sample #: WW 1160544
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/02/2019 21:30	Don V Viray	1

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Analysis Report

Sample Description: **QCF-LM-190924 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 09:40
SDG#: BQF08-02

The Boeing Company
ELLE Sample #: WW 1160545
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-LM-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 09:40
SDG#: BQF08-02

The Boeing Company
ELLE Sample #: WW 1160545
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 02:13	Don V Viray	1

Sample Description: **QCF-LR-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 10:04
SDG#: BQF08-03

The Boeing Company
ELLE Sample #: WW 1160546
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-LR-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 10:04
SDG#: BQF08-03

The Boeing Company
ELLE Sample #: WW 1160546
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 02:37	Don V Viray	1

Sample Description: **QCF-SB2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 10:54
SDG#: BQF08-04

The Boeing Company
ELLE Sample #: WW 1160547
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SB2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 10:54
SDG#: BQF08-04

The Boeing Company
ELLE Sample #: WW 1160547
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 03:00	Don V Viray	1

Sample Description: **QCF-SA2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 11:12
SDG#: BQF08-05

The Boeing Company
ELLE Sample #: WW 1160548
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SA2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 11:12
SDG#: BQF08-05

The Boeing Company
ELLE Sample #: WW 1160548
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.3**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192751AA	10/03/2019 03:24	Don V Viray	1

Sample Description: **QCF-U2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 11:52
SDG#: BQF08-06

The Boeing Company
ELLE Sample #: WW 1160549
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-U2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 11:52
SDG#: BQF08-06

The Boeing Company
ELLE Sample #: WW 1160549
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**1.4**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 18:42	Don V Viray	1

Sample Description: **QCF-S2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 12:40
SDG#: BQF08-07

The Boeing Company
ELLE Sample #: WW 1160550
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-S2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 12:40
SDG#: BQF08-07

The Boeing Company
ELLE Sample #: WW 1160550
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 19:05	Don V Viray	1

Sample Description: **QCF-S2a-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 12:50
SDG#: BQF08-08

The Boeing Company
ELLE Sample #: WW 1160551
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-S2a-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 12:50
SDG#: BQF08-08

The Boeing Company
ELLE Sample #: WW 1160551
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.3**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 19:29	Don V Viray	1

Sample Description: **QCF-SC2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 13:06
SDG#: BQF08-09

The Boeing Company
ELLE Sample #: WW 1160552
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SC2-190924 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 13:06
SDG#: BQF08-09

The Boeing Company
ELLE Sample #: WW 1160552
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**5.7**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 19:52	Don V Viray	1

Sample Description: **QCF-N2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 13:54
SDG#: BQF08-10

The Boeing Company
ELLE Sample #: WW 1160553
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.9**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-N2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 13:54
SDG#: BQF08-10

The Boeing Company
ELLE Sample #: WW 1160553
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**0.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 20:16	Don V Viray	1

Sample Description: **QCF-SD2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:12
SDG#: BQF08-11

The Boeing Company
ELLE Sample #: WW 1160554
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SD2-190924 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:12
SDG#: BQF08-11

The Boeing Company
ELLE Sample #: WW 1160554
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**9.5**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 20:40	Don V Viray	1

Sample Description: **QCF-I2-190924 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:30
SDG#: BQF08-12

The Boeing Company
ELLE Sample #: WW 1160555
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**12**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-I2-190924 Water**
Boeing_QCF

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:30
SDG#: BQF08-12

The Boeing Company
ELLE Sample #: WW 1160555
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**17**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 21:03	Don V Viray	1

Sample Description: **QCF-Dup2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:32
SDG#: BQF08-13FD

The Boeing Company
ELLE Sample #: WW 1160556
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**12**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-Dup2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:32
SDG#: BQF08-13FD

The Boeing Company
ELLE Sample #: WW 1160556
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**16**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 21:27	Don V Viray	1

Sample Description: **QCF-SE2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:56
SDG#: BQF08-14

The Boeing Company
ELLE Sample #: WW 1160557
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-SE2-190924 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/25/2019 10:16
Collection Date/Time: 09/24/2019 14:56
SDG#: BQF08-14

The Boeing Company
ELLE Sample #: WW 1160557
ELLE Group #: 2066066
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 21:50	Don V Viray	1

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Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K192751AA	Sample number(s): 1160544-1160548		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: K192792AA	Sample number(s): 1160549-1160557		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K192751AA	Sample number(s): 1160544-1160548								
Benzene	5.00	5.05			101		70-130		
Bromobenzene	5.00	5.60			112		70-130		
Bromochloromethane	5.00	4.92			98		70-130		
Bromodichloromethane	5.00	5.16			103		70-130		
Bromoform	5.00	5.08			102		70-130		
Bromomethane	2.00	1.88			94		70-130		
n-Butylbenzene	5.00	5.55			111		70-130		
sec-Buty benzene	5.00	5.68			114		70-130		
tert-Buty benzene	5.00	5.34			107		70-130		
Carbon Tetrachloride	5.00	5.31			106		70-130		
Chlorobenzene	5.00	5.38			108		70-130		
Chloroethane	2.00	1.98			99		70-130		
Chloroform	5.00	5.80			116		70-130		
Chloromethane	2.00	1.95			97		70-130		
2-Chlorotoluene	5.00	5.51			110		70-130		
4-Chlorotoluene	5.00	5.52			110		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.52			110		70-130		
Dibromochloromethane	5.00	5.24			105		70-130		
1,2-Dibromoethane	5.00	5.17			103		70-130		
Dibromomethane	5.00	5.34			107		70-130		
1,2-Dichlorobenzene	5.00	5.61			112		70-130		
1,3-Dichlorobenzene	5.00	5.65			113		70-130		
1,4-Dichlorobenzene	5.00	5.71			114		70-130		
Dichlorodifluoromethane	2.00	1.68			84		70-130		
1,1-Dichloroethane	5.00	5.06			101		70-130		
1,2-Dichloroethane	5.00	5.44			109		70-130		
1,1-Dichloroethene	5.00	5.42			108		70-130		
cis-1,2-Dichloroethene	5.00	5.47			109		70-130		
trans-1,2-Dichloroethene	5.00	5.25			105		70-130		
1,2-Dichloropropane	5.00	5.32			106		70-130		
1,3-Dichloropropane	5.00	4.99			100		70-130		
2,2-Dichloropropane	5.00	5.07			101		70-130		
1,1-Dichloropropene	5.00	5.15			103		70-130		
cis-1,3-Dichloropropene	5.00	4.86			97		70-130		
trans-1,3-Dichloropropene	5.00	4.66			93		70-130		
Ethylbenzene	5.00	5.28			106		70-130		
Hexachlorobutadiene	5.00	6.40			128		70-130		
Isopropylbenzene	5.00	5.38			108		70-130		
p-Isopropyltoluene	5.00	5.50			110		70-130		
Methylene Chloride	5.00	5.47			109		70-130		
Naphthalene	5.00	5.32			106		70-130		
n-Propy benzene	5.00	5.57			111		70-130		
Styrene	5.00	5.23			105		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,1,2-Tetrachloroethane	5.00	5.41			108		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.18			104		70-130		
Tetrachloroethene	5.00	6.22			124		70-130		
Toluene	5.00	5.08			102		70-130		
1,2,3-Trichlorobenzene	5.00	5.94			119		70-130		
1,2,4-Trichlorobenzene	5.00	5.82			116		70-130		
1,1,1-Trichloroethane	5.00	5.23			105		70-130		
1,1,2-Trichloroethane	5.00	5.33			107		70-130		
Trichloroethene	5.00	5.26			105		70-130		
Trichlorofluoromethane	2.00	2.07			104		70-130		
1,2,3-Trichloropropane	5.00	5.61			112		70-130		
1,2,4-Trimethy benzene	5.00	5.28			106		70-130		
1,3,5-Trimethy benzene	5.00	5.37			107		70-130		
Vinyl Chloride	2.00	2.01			101		70-130		
m+p-Xylene	10	10.66			107		70-130		
o-Xylene	5.00	5.18			104		70-130		
Batch number: K192792AA	Sample number(s): 1160549-1160557								
Benzene	5.00	5.14			103		70-130		
Bromobenzene	5.00	5.66			113		70-130		
Bromochloromethane	5.00	5.04			101		70-130		
Bromodichloromethane	5.00	5.25			105		70-130		
Bromoform	5.00	5.29			106		70-130		
Bromomethane	2.00	1.86			93		70-130		
n-Butylbenzene	5.00	5.64			113		70-130		
sec-Buty benzene	5.00	5.82			116		70-130		
tert-Buty benzene	5.00	5.38			108		70-130		
Carbon Tetrachloride	5.00	5.51			110		70-130		
Chlorobenzene	5.00	5.49			110		70-130		
Chloroethane	2.00	1.90			95		70-130		
Chloroform	5.00	5.86			117		70-130		
Chloromethane	2.00	1.91			95		70-130		
2-Chlorotoluene	5.00	5.58			112		70-130		
4-Chlorotoluene	5.00	5.60			112		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.66			113		70-130		
Dibromochloromethane	5.00	5.43			109		70-130		
1,2-Dibromoethane	5.00	5.20			104		70-130		
Dibromomethane	5.00	5.39			108		70-130		
1,2-Dichlorobenzene	5.00	5.66			113		70-130		
1,3-Dichlorobenzene	5.00	5.74			115		70-130		
1,4-Dichlorobenzene	5.00	5.81			116		70-130		
Dichlorodifluoromethane	2.00	1.68			84		70-130		
1,1-Dichloroethane	5.00	5.29			106		70-130		
1,2-Dichloroethane	5.00	5.57			111		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloroethene	5.00	5.56			111		70-130		
cis-1,2-Dichloroethene	5.00	5.54			111		70-130		
trans-1,2-Dichloroethene	5.00	5.45			109		70-130		
1,2-Dichloropropane	5.00	5.36			107		70-130		
1,3-Dichloropropane	5.00	5.07			101		70-130		
2,2-Dichloropropane	5.00	5.19			104		70-130		
1,1-Dichloropropene	5.00	5.25			105		70-130		
cis-1,3-Dichloropropene	5.00	4.83			97		70-130		
trans-1,3-Dichloropropene	5.00	4.79			96		70-130		
Ethylbenzene	5.00	5.33			107		70-130		
Hexachlorobutadiene	5.00	6.91			138*		70-130		
Isopropylbenzene	5.00	5.40			108		70-130		
p-Isopropyltoluene	5.00	5.57			111		70-130		
Methylene Chloride	5.00	5.56			111		70-130		
Naphthalene	5.00	5.23			105		70-130		
n-Propy benzene	5.00	5.64			113		70-130		
Styrene	5.00	5.31			106		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.51			110		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.10			102		70-130		
Tetrachloroethene	5.00	6.27			125		70-130		
Toluene	5.00	5.16			103		70-130		
1,2,3-Trichlorobenzene	5.00	6.02			120		70-130		
1,2,4-Trichlorobenzene	5.00	6.02			120		70-130		
1,1,1-Trichloroethane	5.00	5.39			108		70-130		
1,1,2-Trichloroethane	5.00	5.32			106		70-130		
Trichloroethene	5.00	5.32			106		70-130		
Trichlorofluoromethane	2.00	2.03			101		70-130		
1,2,3-Trichloropropane	5.00	5.50			110		70-130		
1,2,4-Trimethy benzene	5.00	5.37			107		70-130		
1,3,5-Trimethy benzene	5.00	5.47			109		70-130		
Vinyl Chloride	2.00	2.00			100		70-130		
m+p-Xylene	10	10.89			109		70-130		
o-Xylene	5.00	5.25			105		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/07/2019 19:47

Group Number: 2066066

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K192751AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1160544	102	112
1160545	99	109
1160546	103	111
1160547	102	114
1160548	100	112
Blank	100	110
LCS	108	111
Limits:	80-120	80-120

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K192792AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1160549	101	114
1160550	102	114
1160551	102	114
1160552	103	114
1160553	101	112
1160554	101	113
1160555	102	114
1160556	102	113
1160557	102	115
Blank	102	111
LCS	109	114
Limits:	80-120	80-120

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 3419 For Eurofins Lancaster Laboratories use only Group # 206606 Sample # 1160344-57

Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms

Site Project: ~~GETS~~ Semi Annual Sampling

Site Program/#: 0025178.160.401

Boeing PM: Todd Swoboda

Consultant Contact: J. Wynkoop, D.J

Report To: J. Wynkoop, D. Jorgensen

Invoice To: ☒ Boeing EHS ☐ Other (specify):

Sampler: KAM / JEC # of Coolers: 1

4 Analyses Requested

5 Remarks/Comments

page 1 of 1

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA 524.2
QCF-TripBlank-190924	—	—	Aq	2	X
QCF-LM-190924	9/24/19	940		3	X
QCF-LR-190924	9/24/19	1004		3	X
QCF-SB2-190924	9/24/19	1054		3	X
QCF-SA2-190924	9/24/19	1112		3	X
QCF-U2-190924	9/24/19	1152		3	X
QCF-S2-190924	9/24/19	1240		3	X
QCF-S2a-190924	9/24/19	1250		3	X
QCF-SC2-190924	9/24/19	1306		3	X
QCF-N2-190924	9/24/19	1354		3	X
QCF-SD2-190924	9/24/19	1412		3	X
QCF-I2-190924	9/24/19	1430		3	X
QCF-Dup2-190924	9/24/19	1432		3	X
QCF-SE2-190924	9/24/19	1456		3	X

Page 39 of 42

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day

72 hour | 48 hour | 24 hour

Date needed: _____

7

Relinquished by:	Date/Time 9/24/19	Received by:	Date/Time
Relinquished by:	Date/Time 1517	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time 9/25/19 1056

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: _____ °C

Custody Seals Intact?: Yes No

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Sample Administration Receipt Documentation Log

Doc Log ID: 261162

Group Number(s): 2066066

Client: Boeing

Semi Annual Sampling

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Date:	09/25/2019
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	2
Samples Chilled:	Yes	Trip Blank Type:	HCl
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Stephanie Sanchez (1 382) at 08:33 on 09/26/2019

Samples Chilled Details: Semi Annual Sampling

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.8	DT	Wet	Y	Bagged	N

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

The Boeing Company
MC 6Y-94
PO Box 3707
Seattle WA 98124

Report Date: October 08, 2019 22:02

Project: Boeing_QCF

Account #: 13419
Group Number: 2066227
SDG: BQF09
State of Sample Origin: WA

Electronic Copy To	Landau Associates	Attn: Jennifer Wynkoop
Electronic Copy To	Landau Associates	Attn: Dani Jorgensen
Electronic Copy To	The Boeing Company	Attn: Todd Swoboda

Respectfully Submitted,

Kay Hower

(717) 556-7364

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QCF-TripBlank-190925 Water	09/25/2019	1161154
QCF-L2a-190925 Water	09/25/2019 11:40	1161155
QCF-MA3a-190925 Water	09/25/2019 13:00	1161156
QCF-V2a-190925 Water	09/25/2019 12:40	1161157
QCF-O2-190925 Water	09/25/2019 13:30	1161158

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: Boeing_QCF
ELLE Group #: 2066227

General Comments:

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.

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

Analysis Specific Comments:

EPA 524.2, GC/MS Volatiles

Sample #s: 1161155, 1161156

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Sample #s: 1161154

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

The requirement for no headspace at the time of analysis was not met. The container used for the testing had headspace at the time of analysis.

Batch #: K192792AA (Sample number(s): 1161154-1161156)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: Hexachlorobutadiene

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Analysis Report

Sample Description: **QCF-TripBlank-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019
SDG#: BQF09-01TB

The Boeing Company
ELLE Sample #: WW 1161154
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-TripBlank-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019
SDG#: BQF09-01TB

The Boeing Company
ELLE Sample #: WW 1161154
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

The requirement for no headspace at the time of analysis was not met. The container used for the testing had headspace at the time of analysis.

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 18:18	Don V Viray	1

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Analysis Report

Sample Description: **QCF-L2a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 11:40
SDG#: BQF09-02

The Boeing Company
ELLE Sample #: WW 1161155
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-L2a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 11:40
SDG#: BQF09-02

The Boeing Company
ELLE Sample #: WW 1161155
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**3.1**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 22:14	Don V Viray	1

Sample Description: **QCF-MA3a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 13:00
SDG#: BQF09-03

The Boeing Company
ELLE Sample #: WW 1161156
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**2.5**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-MA3a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 13:00
SDG#: BQF09-03

The Boeing Company
ELLE Sample #: WW 1161156
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**24**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192792AA	10/06/2019 22:37	Don V Viray	1

Sample Description: **QCF-V2a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 12:40
SDG#: BQF09-04

The Boeing Company
ELLE Sample #: WW 1161157
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	**cis-1,2-Dichloroethene**	156-59-2	**0.5**		0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-V2a-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 12:40
SDG#: BQF09-04

The Boeing Company
ELLE Sample #: WW 1161157
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	**Trichloroethene**	79-01-6	**19**		0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192802AA	10/08/2019 02:55	Don V Viray	1

Sample Description: **QCF-O2-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 13:30
SDG#: BQF09-05

The Boeing Company
ELLE Sample #: WW 1161158
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	Benzene	71-43-2	0.5	U	0.5	1
03648	Bromobenzene	108-86-1	0.5	U	0.5	1
03648	Bromochloromethane	74-97-5	0.5	U	0.5	1
03648	Bromodichloromethane	75-27-4	0.5	U	0.5	1
03648	Bromoform	75-25-2	0.5	U	0.5	1
03648	Bromomethane	74-83-9	0.5	U	0.5	1
03648	n-Butylbenzene	104-51-8	0.5	U	0.5	1
03648	sec-Butylbenzene	135-98-8	0.5	U	0.5	1
03648	tert-Buty benzene	98-06-6	0.5	U	0.5	1
03648	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1
03648	Chlorobenzene	108-90-7	0.5	U	0.5	1
03648	Chloroethane	75-00-3	0.5	U	0.5	1
03648	Chloroform	67-66-3	0.5	U	0.5	1
03648	Chloromethane	74-87-3	0.5	U	0.5	1
03648	2-Chlorotoluene	95-49-8	0.5	U	0.5	1
03648	4-Chlorotoluene	106-43-4	0.5	U	0.5	1
03648	1,2-D bromo-3-chloropropane	96-12-8	0.5	U	0.5	1
03648	D bromochloromethane	124-48-1	0.5	U	0.5	1
03648	1,2-D bromoethane	106-93-4	0.5	U	0.5	1
03648	D bromomethane	74-95-3	0.5	U	0.5	1
03648	1,2-Dichlorobenzene	95-50-1	0.5	U	0.5	1
03648	1,3-Dichlorobenzene	541-73-1	0.5	U	0.5	1
03648	1,4-Dichlorobenzene	106-46-7	0.5	U	0.5	1
03648	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1
03648	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1
03648	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1
03648	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1
03648	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1
03648	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1
03648	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1
03648	1,3-Dichloropropane	142-28-9	0.5	U	0.5	1
03648	2,2-Dichloropropane	594-20-7	0.5	U	0.5	1
03648	1,1-Dichloropropene	563-58-6	0.5	U	0.5	1
03648	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1
03648	trans-1,3-Dichloropropene	10061-02-6	0.5	U	0.5	1
03648	Ethylbenzene	100-41-4	0.5	U	0.5	1
03648	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1
03648	Isopropylbenzene	98-82-8	0.5	U	0.5	1
03648	p-Isopropyltoluene	99-87-6	0.5	U	0.5	1
03648	Methylene Chloride	75-09-2	0.5	U	0.5	1
03648	Naphthalene	91-20-3	0.5	U	0.5	1
03648	n-Propylbenzene	103-65-1	0.5	U	0.5	1
03648	Styrene	100-42-5	0.5	U	0.5	1
03648	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1
03648	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1
03648	Tetrachloroethene	127-18-4	0.5	U	0.5	1
03648	Toluene	108-88-3	0.5	U	0.5	1
03648	1,2,3-Trichlorobenzene	87-61-6	0.5	U	0.5	1
03648	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1

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Analysis Report

Sample Description: **QCF-O2-190925 Water Boeing_QCF**

Project Name: **Boeing_QCF**

Submittal Date/Time: 09/26/2019 10:39
Collection Date/Time: 09/25/2019 13:30
SDG#: BQF09-05

The Boeing Company
ELLE Sample #: WW 1161158
ELLE Group #: 2066227
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result		Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**EPA 524.2**		**ug/l**		**ug/l**	
03648	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1
03648	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1
03648	Trichloroethene	79-01-6	0.5	U	0.5	1
03648	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1
03648	1,2,3-Trichloropropane	96-18-4	0.5	U	0.5	1
03648	1,2,4-Trimethy benzene	95-63-6	0.5	U	0.5	1
03648	1,3,5-Trimethy benzene	108-67-8	0.5	U	0.5	1
03648	Vinyl Chloride	75-01-4	0.5	U	0.5	1
03648	m+p-Xylene	179601-23-1	0.5	U	0.5	1
03648	o-Xylene	95-47-6	0.5	U	0.5	1

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
03648	VOCs- 25ml Water by 524.2	EPA 524.2	1	K192802AA	10/08/2019 03:18	Don V Viray	1

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Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

Matrix QC may not be reported if insufficient sample or 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.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		LOQ
	ug/l		ug/l
Batch number: K192792AA	Sample number(s): 1161154-1161156		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5
Batch number: K192802AA	Sample number(s): 1161157-1161158		
Benzene	0.5	U	0.5
Bromobenzene	0.5	U	0.5
Bromochloromethane	0.5	U	0.5
Bromodichloromethane	0.5	U	0.5
Bromoform	0.5	U	0.5
Bromomethane	0.5	U	0.5
n-Butylbenzene	0.5	U	0.5
sec-Buty benzene	0.5	U	0.5
tert-Buty benzene	0.5	U	0.5
Carbon Tetrachloride	0.5	U	0.5
Chlorobenzene	0.5	U	0.5
Chloroethane	0.5	U	0.5
Chloroform	0.5	U	0.5
Chloromethane	0.5	U	0.5
2-Chlorotoluene	0.5	U	0.5
4-Chlorotoluene	0.5	U	0.5
1,2-Dibromo-3-chloropropane	0.5	U	0.5
Dibromochloromethane	0.5	U	0.5
1,2-Dibromoethane	0.5	U	0.5
Dibromomethane	0.5	U	0.5
1,2-Dichlorobenzene	0.5	U	0.5
1,3-Dichlorobenzene	0.5	U	0.5
1,4-Dichlorobenzene	0.5	U	0.5

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

Method Blank (continued)

Analysis Name	Result ug/l		LOQ ug/l
Dichlorodifluoromethane	0.5	U	0.5
1,1-Dichloroethane	0.5	U	0.5
1,2-Dichloroethane	0.5	U	0.5
1,1-Dichloroethene	0.5	U	0.5
cis-1,2-Dichloroethene	0.5	U	0.5
trans-1,2-Dichloroethene	0.5	U	0.5
1,2-Dichloropropane	0.5	U	0.5
1,3-Dichloropropane	0.5	U	0.5
2,2-Dichloropropane	0.5	U	0.5
1,1-Dichloropropene	0.5	U	0.5
cis-1,3-Dichloropropene	0.5	U	0.5
trans-1,3-Dichloropropene	0.5	U	0.5
Ethylbenzene	0.5	U	0.5
Hexachlorobutadiene	0.5	U	0.5
Isopropylbenzene	0.5	U	0.5
p-Isopropyltoluene	0.5	U	0.5
Methylene Chloride	0.5	U	0.5
Naphthalene	0.5	U	0.5
n-Propy benzene	0.5	U	0.5
Styrene	0.5	U	0.5
1,1,1,2-Tetrachloroethane	0.5	U	0.5
1,1,2,2-Tetrachloroethane	0.5	U	0.5
Tetrachloroethene	0.5	U	0.5
Toluene	0.5	U	0.5
1,2,3-Trichlorobenzene	0.5	U	0.5
1,2,4-Trichlorobenzene	0.5	U	0.5
1,1,1-Trichloroethane	0.5	U	0.5
1,1,2-Trichloroethane	0.5	U	0.5
Trichloroethene	0.5	U	0.5
Trichlorofluoromethane	0.5	U	0.5
1,2,3-Trichloropropane	0.5	U	0.5
1,2,4-Trimethy benzene	0.5	U	0.5
1,3,5-Trimethy benzene	0.5	U	0.5
Vinyl Chloride	0.5	U	0.5
m+p-Xylene	0.5	U	0.5
o-Xylene	0.5	U	0.5

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: K192792AA	Sample number(s): 1161154-1161156								
Benzene	5.00	5.14			103		70-130		
Bromobenzene	5.00	5.66			113		70-130		
Bromochloromethane	5.00	5.04			101		70-130		
Bromodichloromethane	5.00	5.25			105		70-130		
Bromoform	5.00	5.29			106		70-130		
Bromomethane	2.00	1.86			93		70-130		
n-Butylbenzene	5.00	5.64			113		70-130		
sec-Buty benzene	5.00	5.82			116		70-130		
tert-Buty benzene	5.00	5.38			108		70-130		
Carbon Tetrachloride	5.00	5.51			110		70-130		
Chlorobenzene	5.00	5.49			110		70-130		
Chloroethane	2.00	1.90			95		70-130		
Chloroform	5.00	5.86			117		70-130		
Chloromethane	2.00	1.91			95		70-130		
2-Chlorotoluene	5.00	5.58			112		70-130		
4-Chlorotoluene	5.00	5.60			112		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.66			113		70-130		
Dibromochloromethane	5.00	5.43			109		70-130		
1,2-Dibromoethane	5.00	5.20			104		70-130		
Dibromomethane	5.00	5.39			108		70-130		
1,2-Dichlorobenzene	5.00	5.66			113		70-130		
1,3-Dichlorobenzene	5.00	5.74			115		70-130		
1,4-Dichlorobenzene	5.00	5.81			116		70-130		
Dichlorodifluoromethane	2.00	1.68			84		70-130		
1,1-Dichloroethane	5.00	5.29			106		70-130		
1,2-Dichloroethane	5.00	5.57			111		70-130		
1,1-Dichloroethene	5.00	5.56			111		70-130		
cis-1,2-Dichloroethene	5.00	5.54			111		70-130		
trans-1,2-Dichloroethene	5.00	5.45			109		70-130		
1,2-Dichloropropane	5.00	5.36			107		70-130		
1,3-Dichloropropane	5.00	5.07			101		70-130		
2,2-Dichloropropane	5.00	5.19			104		70-130		
1,1-Dichloropropene	5.00	5.25			105		70-130		
cis-1,3-Dichloropropene	5.00	4.83			97		70-130		
trans-1,3-Dichloropropene	5.00	4.79			96		70-130		
Ethylbenzene	5.00	5.33			107		70-130		
Hexachlorobutadiene	5.00	6.91			138*		70-130		
Isopropylbenzene	5.00	5.40			108		70-130		
p-Isopropyltoluene	5.00	5.57			111		70-130		
Methylene Chloride	5.00	5.56			111		70-130		
Naphthalene	5.00	5.23			105		70-130		
n-Propy benzene	5.00	5.64			113		70-130		
Styrene	5.00	5.31			106		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,1,2-Tetrachloroethane	5.00	5.51			110		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.10			102		70-130		
Tetrachloroethene	5.00	6.27			125		70-130		
Toluene	5.00	5.16			103		70-130		
1,2,3-Trichlorobenzene	5.00	6.02			120		70-130		
1,2,4-Trichlorobenzene	5.00	6.02			120		70-130		
1,1,1-Trichloroethane	5.00	5.39			108		70-130		
1,1,2-Trichloroethane	5.00	5.32			106		70-130		
Trichloroethene	5.00	5.32			106		70-130		
Trichlorofluoromethane	2.00	2.03			101		70-130		
1,2,3-Trichloropropane	5.00	5.50			110		70-130		
1,2,4-Trimethy benzene	5.00	5.37			107		70-130		
1,3,5-Trimethy benzene	5.00	5.47			109		70-130		
Vinyl Chloride	2.00	2.00			100		70-130		
m+p-Xylene	10	10.89			109		70-130		
o-Xylene	5.00	5.25			105		70-130		
Batch number: K192802AA	Sample number(s): 1161157-1161158								
Benzene	5.00	5.20			104		70-130		
Bromobenzene	5.00	5.65			113		70-130		
Bromochloromethane	5.00	5.21			104		70-130		
Bromodichloromethane	5.00	5.40			108		70-130		
Bromoform	5.00	5.44			109		70-130		
Bromomethane	2.00	1.88			94		70-130		
n-Butylbenzene	5.00	5.44			109		70-130		
sec-Buty benzene	5.00	5.64			113		70-130		
tert-Buty benzene	5.00	5.46			109		70-130		
Carbon Tetrachloride	5.00	5.55			111		70-130		
Chlorobenzene	5.00	5.53			111		70-130		
Chloroethane	2.00	1.91			96		70-130		
Chloroform	5.00	6.05			121		70-130		
Chloromethane	2.00	1.92			96		70-130		
2-Chlorotoluene	5.00	5.59			112		70-130		
4-Chlorotoluene	5.00	5.68			114		70-130		
1,2-Dibromo-3-chloropropane	5.00	5.88			118		70-130		
Dibromochloromethane	5.00	5.53			111		70-130		
1,2-Dibromoethane	5.00	5.32			106		70-130		
Dibromomethane	5.00	5.53			111		70-130		
1,2-Dichlorobenzene	5.00	5.74			115		70-130		
1,3-Dichlorobenzene	5.00	5.72			114		70-130		
1,4-Dichlorobenzene	5.00	5.90			118		70-130		
Dichlorodifluoromethane	2.00	1.66			83		70-130		
1,1-Dichloroethane	5.00	5.32			106		70-130		
1,2-Dichloroethane	5.00	5.67			113		70-130		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloroethene	5.00	5.61			112		70-130		
cis-1,2-Dichloroethene	5.00	5.58			112		70-130		
trans-1,2-Dichloroethene	5.00	5.34			107		70-130		
1,2-Dichloropropane	5.00	5.40			108		70-130		
1,3-Dichloropropane	5.00	5.23			105		70-130		
2,2-Dichloropropane	5.00	4.71			94		70-130		
1,1-Dichloropropene	5.00	5.30			106		70-130		
cis-1,3-Dichloropropene	5.00	4.97			99		70-130		
trans-1,3-Dichloropropene	5.00	4.83			97		70-130		
Ethylbenzene	5.00	5.37			107		70-130		
Hexachlorobutadiene	5.00	6.40			128		70-130		
Isopropylbenzene	5.00	5.45			109		70-130		
p-Isopropyltoluene	5.00	5.55			111		70-130		
Methylene Chloride	5.00	5.63			113		70-130		
Naphthalene	5.00	5.31			106		70-130		
n-Propy benzene	5.00	5.54			111		70-130		
Styrene	5.00	5.40			108		70-130		
1,1,1,2-Tetrachloroethane	5.00	5.56			111		70-130		
1,1,2,2-Tetrachloroethane	5.00	5.52			110		70-130		
Tetrachloroethene	5.00	6.29			126		70-130		
Toluene	5.00	5.22			104		70-130		
1,2,3-Trichlorobenzene	5.00	6.05			121		70-130		
1,2,4-Trichlorobenzene	5.00	5.83			117		70-130		
1,1,1-Trichloroethane	5.00	5.42			108		70-130		
1,1,2-Trichloroethane	5.00	5.60			112		70-130		
Trichloroethene	5.00	5.37			107		70-130		
Trichlorofluoromethane	2.00	2.05			103		70-130		
1,2,3-Trichloropropane	5.00	5.84			117		70-130		
1,2,4-Trimethy benzene	5.00	5.33			107		70-130		
1,3,5-Trimethy benzene	5.00	5.47			109		70-130		
Vinyl Chloride	2.00	2.01			101		70-130		
m+p-Xylene	10	10.89			109		70-130		
o-Xylene	5.00	5.22			104		70-130		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Quality Control Summary

Client Name: The Boeing Company
Reported: 10/08/2019 22:02

Group Number: 2066227

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K192792AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1161154	100	112
1161155	102	115
1161156	102	113
Blank	102	111
LCS	109	114
Limits:	80-120	80-120

Analysis Name: VOCs- 25ml Water by 524.2
Batch number: K192802AA

	4-Bromofluorobenzene	1,2-Dichlorobenzene-d4
1161157	102	113
1161158	100	112
Blank	101	111
LCS	111	115
Limits:	80-120	80-120

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Boeing Chain of Custody

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Acct. # 13419

For Eurofins Lancaster Laboratories use only
Group # 2066227 Sample # 1161154-58
Please print. Instructions on reverse side correspond.

1 Client Information

Site Location: Queen City Farms
Site Project: Semi Annual Sampling
Site Program/#: 0025178.160.401
Boeing PM: Todd Swoboda
Consultant Contact: J. Wynkoop, ~~D. Jorgensen~~
Report To: J. Wynkoop, D. Jorgensen
Invoice To: [X] Boeing EHS [ ] Other (specify):
Sampler: KAM / JEC # of Coolers: 1

4 Analyses Requested

5 Remarks/Comments

page 1 of 1

2 Sample Identification	Collected Date	Collected Time	3 Matrix	No. of Containers	VOCs EPA 524.2
QCF-TripBlank-190925	—	—	Aq	2	X
QCF-L2a-190925	9/25/19	1140	Aq	3	X
QCF-MA3a-190925	9/25/19	1300	Aq	3	X
QCF-V2a-190925	9/25/19	1240	Aq	3	X
QCF-02-190925	9/25/19	1330	Aq	3	X

Page 21 of 24

6 Turnaround Time Requested (please circle)

Standard | 5 day | 4 day
72 hour | 48 hour | 24 hour

Date needed: _____

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	9/25/19 @ 1352		
Relinquished by:	Date/Time	Received by:	Date/Time
		[signature]	9/26/19 1039

Relinquished by commercial carrier (circle): UPS FedEx Other:

Temperature upon Receipt: 4.9 °C

Custody Seals Intact?: Yes No

7

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Sample Administration Receipt Documentation Log

Doc Log ID: 261265

Group Number(s): 2066227

Client: Boeing

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Date:	09/26/2019
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	2
Samples Chilled:	Yes	Trip Blank Type:	HCl
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Darian Jaynes (29 952) at 22:49 on 09/26/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-03	4.9	DT	Wet	Y	Bagged	N

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.