Hillsborough County Florida

PUBLIC UTILITIES
PO Box 1110
Tampa, FL 33601-1110

March 19, 2018

Mr. Steve Morgan
Florida Department of Environmental Protection
Waste Permitting Section
13051 Telecom Parkway
Temple Terrace, FL 33637

SUBJECT: **Closed Ruskin New Landfill**
Semi-Annual Analytical Data Report
October 2017

Dear Mr. Morgan,

The Hillsborough County Public Utilities Department (County) is pleased to submit this Analytical Data Report (ADR) for the semi-annual groundwater and surface water monitoring event conducted at the closed Ruskin New Landfill (RNLF). Representative samples were collected from twelve (12) surficial aquifer groundwater monitoring wells and four (4) surface water locations on October 25-26, 2017 by the County and analyzed by our contracted laboratory, Advanced Environmental Laboratories. The remaining two (2) monitoring wells, identified as RN-2S and RN-10S were not able to be accessed due to construction equipment and supplies, heavy vegetation, and/or deep standing water at each of these locations. A brief discussion of the analytical results from this sampling event is provided herein.

Surficial Aquifer

Nine (9) of the twelve (12) surficial aquifer groundwater monitoring wells continue to exhibit arsenic above the specific State of Florida Primary Drinking Water Standard (PDWS) set forth in Chapter 62-550.310. Total Dissolved Solids (TDS) was above the Secondary Drinking Water Standard (SDWS) in accordance with Chapter 62-550.320 at eleven (11) of the twelve (12) monitoring well locations. No violations of standards for any volatile organic compounds within the surficial aquifer were observed during this water quality monitoring event.

Field Parameters

Field parameters recorded at each of the twelve (12) surficial aquifer monitoring wells were all within the applicable secondary drinking water standards. The pH values ranged from 6.68 to 7.27 pH units. Conductivity values continue to be relatively elevated and range from 869 to 3,372 uhmos/cm. Dissolved oxygen levels from each of the monitoring wells ranged from 0.27 to 1.62 mg/l and turbidity ranged from 1.15 to 12.5 NTU's, respectively. No unusual changes in the field parameter values were observed during this water quality monitoring event and each are consistent with their historical values over the period of record.

Arsenic

Total arsenic was observed above the PDWS of 0.01 milligrams per liter (mg/l) in nine (9) of the twelve (12) surficial aquifer monitoring wells with concentrations ranging from 0.016 to 0.13 mg/l. Several wells with arsenic values above the PDWS continue to be up or cross gradient of the buried waste. The values exhibited in upgradient wells RN-1S RN-6S, and RN-11S were 0.085, 0.06, and 0.085 mg/l, respectively. These values observed in the surficial aquifer groundwater are not attributable to the buried waste and are likely naturally occurring background conditions or other sources other than the landfill. The area over the period of record has demonstrated extensive agricultural operations throughout the Ruskin area. Since the surficial aquifer is not utilized for water supply, the arsenic present in the surficial aquifer does not present an immediate threat to any potential down gradient receptors.

Total Dissolved Solids

Total dissolved solids (TDS) was observed above the SDWS of 500 mg/l in eleven (11) of the twelve (12) surficial aquifer monitoring wells. The TDS values in these wells range from 720 to 2,200 mg/l and are consistent with the historical data over the period of record. A review of the TDS values upgradient and downgradient of the landfill do not exhibit any correlation to the buried waste; therefore, the County believes the TDS has some aspect of other sources or naturally occurring in the surficial aquifer.

Volatile Organic Compounds

The County has observed elevated concentrations of chlorobenzene in the surficial aquifer. The concentrations of this constituent over the period of record supports the position that the elevated chlorobenzene initially observed during contamination assessment in 2002/2003 does not indicate characteristics attributable to an older landfill and former oxidation pond that has been closed for more than 30 years. Chlorobenzene in RN-8S has been observed above the standard from initial assessment in 2002 through 2012. The historical data clearly indicates elevated results then a rapid decrease of VOC constituents during the following monitoring event. Analytical data supports the position that the source of the elevated chlorobenzene is from a surface release of chlorinated solvents on the edge of the landfill footprint or surface

water ditches in the vicinity of RN-8S. The water quality from September 2015 through October 2017 exhibited water quality within respective standards; however, the County shall continue to closely monitor this location.

Surface Water Sampling Locations

The County collected surface water samples from each of the four (4) designated locations around the site. Sampling of the designated surface water site RNSW-2 was conducted to evaluate the potential impacts to the pond located on the Kenco Manufacturing Property. Sampling of RNSW-3, RNSW-5, and RNSW-6 were conducted to evaluate impacts to the ditch system between the southern property boundary of the landfill and Kennco Manufacturing where surface water eventually leaves the site.

Field Parameters

Conductivity values at surface water sampling locations RNSW-3 and RNSW-6 exceeded the standard of 1,275 umhos/cm with results of 1,557 and 1,718 umhos/cm, respectively. Dissolved oxygen levels from the surface water ranged from 0.23 to 0.8 mg/l and pH ranged from 6.39 at RNSW-3 to 7.39 pH units. No unusual changes in the field parameter values were observed during this water quality monitoring event and are consistent with their historical values over the period of record.

Arsenic

Total arsenic was observed above the surface water standard of 0.05 milligrams per liter (mg/l) at two (2) of the four (4) monitoring locations. Surface water monitoring locations RNSW-3 and RNSW-5 exhibited concentrations of arsenic at 0.093 and 0.2 mg/l, which is consistent with the historical data over the period of record. As observed in the groundwater across the area, arsenic is believed to be naturally occurring within the surface waters.

Unionized Ammonia

Surface water sites RNSW-3, RNSW-5, and RNSW-6 exhibited unionized ammonia above the standard of 0.02 mg/l. Each of these locations are associated with the ditch system between the southern property boundary of the landfill and Kennco. The unionized ammonia is likely naturally occurring due to algal growth, organic decay, and low dissolved oxygen levels exhibited over the period of record.

Volatile Organic Compounds (VOCs)

Over the period of record, the County has observed chlorobenzene and 1,4-dichlorobenzene in surface water sampling location RNSW-3 above their respective standards over the last 15 years. The County is concerned with the contaminants observed in the surface water within

the ditches at this site, and it appears that these impacts water are from a source other than the buried wastes within the landfill.

Surface water location RNSW-3 exhibited a concentration of chlorobenzene and 1,4-dischlorobenzene at 470 and 19 ug/l, exceeding the surface water standards of 17 and 3 ug/l, respectively. Over the period of record, there have been a number of monitoring events exhibiting benzene, chlorobenzene, and 1,4-dichlorobenzene over their respective surface water standards. However, the County noticed the concentrations of these constituents dramatically drops off during the following monitoring event. This pattern periodically continues only at this location throughout the period of record. Based on the concentrations observed over the period of record, the County maintains the position that the contaminants in the surface water at this location do not appear to be associated with the buried wastes, and based on the history with this site and the information presented, they are more logically a result of a recent discharge of solvents from another nearby source.

Evaluation of Groundwater Flow

The flow within the surficial aquifer was evaluated and mapped utilizing AutoCAD™ and Surfer 7™ contouring software. The general direction of flow across the site in the surficial aquifer is from the south and the east converging to the northwest. However, several factors may be affecting the flow patterns observed across the site, including the two ponds and the drainage ditches around the north, central and southern portions of the landfill. The map generated presents the convergence of flow from the south and east turning to the northwest across the landfill, which is the most consistently observed pattern over the period of record. The flow within the intermediate aquifer is to the northwest, which is consistent with historical data set.

Evaluation of Hydraulic Gradient

The hydraulic gradient evaluation table from this sampling event is provided herein. A positive or upward hydraulic gradient continues to be present in each of the six (6) well pairs. It should be noted that over the period of record, the intermediate aquifer has not exhibited the presence of any contaminants attributable to the buried wastes within the closed RNLF site. These observations indicate that the confining unit appears to be continuous across the site. Combined with the prevalent hydraulic gradient during the wet season, the clay confining strata appears to be effective in preventing downward migration of any contamination present in the surficial aquifer. For now, the County intends to continue recording groundwater elevations at all of the monitoring points during each semi-annual sampling event. This data will be utilized in the continued effort to evaluate the seasonal fluctuations in flow directions and the hydraulic gradient at the site.

Conclusions and Recommendations

Laboratory analytical data from the October 2017 sampling event demonstrates that contaminants associated with the buried waste have decreased significantly since the contamination assessment was conducted in 2002 and continues to naturally attenuate. Arsenic observed within the surficial aquifer appears to be present across the entire site, and the highest concentrations are observed in up and cross gradient monitoring wells. This fact supports the position that arsenic present in the surficial aquifer appears to be from sources other than the landfill. The arsenic observed does not pose any immediate threat to human health as the surficial aquifer is not utilized for supply anywhere around the landfill.

A network of surface water ditches surrounding the buried waste at the site has periodically exhibited chlorobenzene and 1,4-dichlorobenzene at sampling location RNSW-3 over the period of record. Surface water sampling location RNSW-3 exhibited VOC constituents above their respective standards during this monitoring event and based upon a close review of the historical data and water quality at nearby surficial aquifer groundwater monitoring well RS-8S, the contamination is being generated from an outside source and not emanating from the landfill.

The County will continue to evaluate groundwater and surface water qualities, the flow directions, and the hydraulic gradient at the site. Based on the extensive data set, the County has optimized the monitoring plan in an effort to more appropriately evaluate the environmental conditions at the closed Ruskin New Landfill site. Historical data tables compiling the results from groundwater and surface water sampling over the last eight years are provided within this report.

County personnel discovered land clearing on the north landfill cells owned by the Ruskin Property Group and the staging of utility construction equipment. After discussing with onsite construction personnel, the addition of water, wastewater, and reclaimed water lines were installed to the west and north of the buried waste. It was also revealed this portion of the landfill is being advertised for development by the property owner. The County contacted the Hillsborough County Environmental Protection Commission (EPC) in regards to the permitting and authorization to development of this property. To date, no Director's Authorization has been granted and the County shall continue to closely monitor this situation with EPC and the Department.

Enclosed for your review, please find a site location map, the October 2017 surficial groundwater and surface water analytical data summary tables, a groundwater elevation summary table, the surficial aquifer and intermediate aquifer groundwater elevation and contour diagrams, a hydraulic gradient evaluation summary table, historical summary tables of

groundwater and surface water analytical data, and the complete laboratory analytical data sheets.

Should you have any questions or require any additional information regarding this submittal, please do not hesitate to contact us at (813) 663-3222.

Respectfully,

3/19/2018

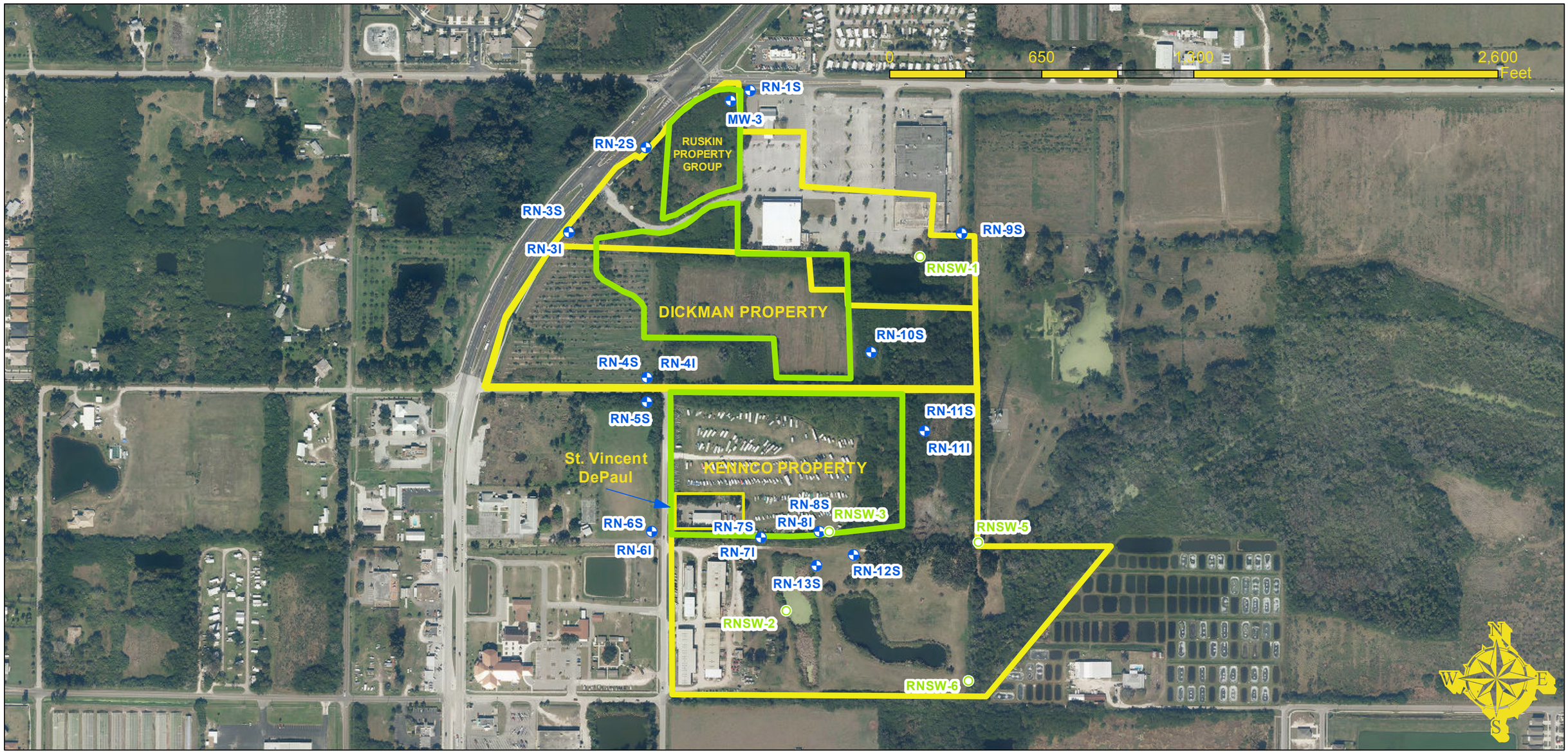
Michael D. Townsel
Senior Hydrologist
Environmental Services
Public Utilities Department

03/19/18

Jeffry Greenwell, P.E.
Section Manager - GM III
Environmental Services
Public Utilities Department

xc: Edward Watson, Environmental Manager, Public Utilities Department
Kimberly Byer, Director, Solid Waste Division, Public Works
Robin Knowles, Kennco, Inc.
Calvin Bell, Ruskin Property Group
John Tipton, Artesian Farms
Ron Cope, EPC

TSD\:Groups\TSD\Operations\Environmental\Solid Waste\Enviro\Ruskin New\Scanned Reports-docs\RNLF1017ADR.doc



CLOSED RUSKIN NEW LANDFILL SITE MAP

TOWNSHIP RANGE SECTION 32-19-05

2014 AERIAL PHOTO

Legend

- Ruskin Surface Water
- Monitoring Well Locations
- Ruskin New Landfill Waste Boundaries

Hillsborough County Government Florida

Closed Ruskin New Landfill
Laboratory Analytical Data
Surficial Aquifer Groundwater Monitoring Wells
October 25-26, 2017

General Parameters	RN-1S	RN-2S	RN-3S	RN-4S	RN-5S	RN-6S	RN-7S	RN-8S	RN-9S	RN-10S	RN-11S	RN-12S	RN-13S	MW-3	MCL Standard
conductivity (umhos/cm) (field)	3322	ND	1179	1224	2780	869	2693	2277	1424	ND	3372	1576	1452	3206	**NS**
dissolved oxygen (mg/l)(field)	0.49	ND	0.42	0.35	0.54	0.4	0.83	1.62	0.27	ND	1.07	0.74	0.81	0.39	**NS**
ORP (mV)	-95.5	ND	-22.9	-88.1	-81.2	-22.8	-99.1	-34.5	-38.5	ND	-87.3	-40	-71.8	-89.2	**NS**
temperature (°C) (field)	29.55	ND	24.95	25.19	24.67	26.83	25.42	24.57	25.58	ND	26.19	25.55	26	25.02	**NS**
turbidity (NTU) (field)	12.5	ND	3.3	5.69	4.49	1.32	4.2	2.57	1.15	ND	10.37	10.99	2.02	8.8	**NS**
pH (field)	6.68	ND	6.90	7.27	6.80	7.05	6.69	6.95	6.74	ND	6.78	6.89	6.96	6.8	**(6.5 - 8.5)****
total dissolved solids (mg/l)	**2200**	ND	**1300**	**720**	**1900**	380	**1400**	**610**	**780**	ND	**1600**	**810**	**720**	**2200**	**500****
ammonia (mg/l)	0.27	ND	0.10	0.04 i	0.16	0.19	0.14	0.025 u	0.33	ND	4.0	0.025 u	0.09 i	0.15	**NS**
Metals (mg/l)															**MCL Standard**
arsenic	**0.085**	ND	0.0032	0.0025	**0.016**	**0.021**	**0.06**	**0.022**	0.009	ND	**0.085**	**0.13**	**0.042**	**0.038**	**0.01***
Organic Parameters Detected (ug/l)															**MCL Standard**
acetone	1 u	ND	1 u	3.6	1 u	1 u	1 u	1 u	1.4 i	ND	1.0 i	1 u	1 u	1 u	**6300*****
benzene	0.17 u	ND	0.17 u	0.17 u	0.17 u	0.17 u	0.17 u	0.17 u	0.17 u	ND	0.17 u	0.17 u	0.17 u	0.17 u	**1***
chlorobenzene	0.56 u	ND	0.56 u	0.56 u	0.56 u	0.56 u	0.56 u	0.56 u	0.56 u	ND	7.1	0.76 i	0.56 u	0.56 u	**100***
cis-1,2-dichloroethylene	0.51 u	ND	0.51 u	0.51 u	0.51 u	0.51 u	0.51 u	0.51 u	0.51 u	ND	1.4	0.51 u	0.51 u	0.51 u	**70***
1,3-dichlorobenzene	0.43 u	ND	0.43 u	0.43 u	0.43 u	0.43 u	0.43 u	0.43 u	0.43 u	ND	0.43 u	0.43 u	0.43 u	0.43 u	**210*****
methyl tert-butyl ether (MTBE)	0.41 u	ND	0.41 u	0.41 u	0.41 u	0.41 u	0.41 u	0.41 u	3.0	ND	0.41 u	0.41 u	0.41 u	0.41 u	**20*****

Note: Ref. Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

ND=No Data (unable to sample monitor well).

* = Primary Drinking Water Standard as per Chapter 62-550.310, F.A.C.

** = Secondary Drinking Water sTandard as per Chapter 62-550.320, F.A.C.

***=Groundwater Cleanup Target Level

2200 : Exceeds Standard

ug/l=Micrograms per liter

mg/l=Milligrams per liter

NS=No Standard

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Laboratory Analytical Data
Surface Sampling Locations
October 25-26, 2017

General Parameters	RNSW-2	RNSW-3	RNSW-5	RNSW-6	MCL Standard
conductivity (umhos/cm) (field)	404	**1557**	897	**1718**	**1275**
dissolved oxygen (mg/l)(field)	**0.8**	**0.38**	**0.4**	**0.23**	**Value must be greater than 5**
ORP (mV)	-135	-83.2	-200.5	-312.2	**NS**
temperature (°C) (field)	23.65	19.44	18.61	20.3	**NS**
turbidity (NTU) (field)	4.76	19	24.1	24.2	**< 29 above background**
pH (field)	7.18	**6.39**	7.39	7.07	**(6.5-8.5)**
Total Hardness (mg/l)(as CaCO3)	170	2800	3200	1000	**NS**
unionized ammonia (mg/l)	0.0015 i	**0.025 i**	0.13	0.020 i	**< or = to 0.02**
Metals (mg/l)					**MCL Standard**
arsenic	0.0062	**0.093**	**0.2**	0.023	**< or = to 0.05**
Organic Parameters Detected (ug/l)					**MCL Standard**
1,2,4-Trimethylbenzene	0.90 i	0.54 u	0.54 u	0.54 u	**220**
1,2,4-Trichlorobenzene	0.84 u	4.0	0.84 u	0.84 u	**23**
1,2-dichlorobenzene	0.63 u	1.8	0.63 u	0.63 u	**99**
1,3-dichlorobenzene	0.43 u	12	0.66 i	0.43 u	**85**
1,4-dichlorobenzene	0.97 u	**19**	2.1	0.97 u	**3**
acetone	1.0 u	9.9	4.4	1.1 i	**1700**
benzene	0.17 u	2.6	0.17 u	0.17 u	**< or = to 71.28 annual avg.**
chlorobenzene	0.56 u	**470**	0.56 u	0.56 u	**17**
isopropylbenzene	0.31 u	0.34 i	0.31 u	0.31 u	**260**
naphthalene	7.6	5.2	0.73 u	0.73 u	**26**
toluene	0.45 u	1.8	0.45 u	0.45 u	**480**

Note: Ref. Surface Water Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

ug/l=micrograms per liter

mg/l=milligrams per liter

ND=No Data (Representative amount of surface water unable to be collected)

Dissolved oxygen probe malfunctioned and not operating properly

NS=No Standard

InH=natural logarithm of total hardness expressed as milligrams/L of CaCo3. Hardness shall be set at 25 if actual hardness is <25 mg/l and set at 400 if actual hardness is >400 mg/l.

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Hydraulic Gradient Evaluation
October 25, 2017

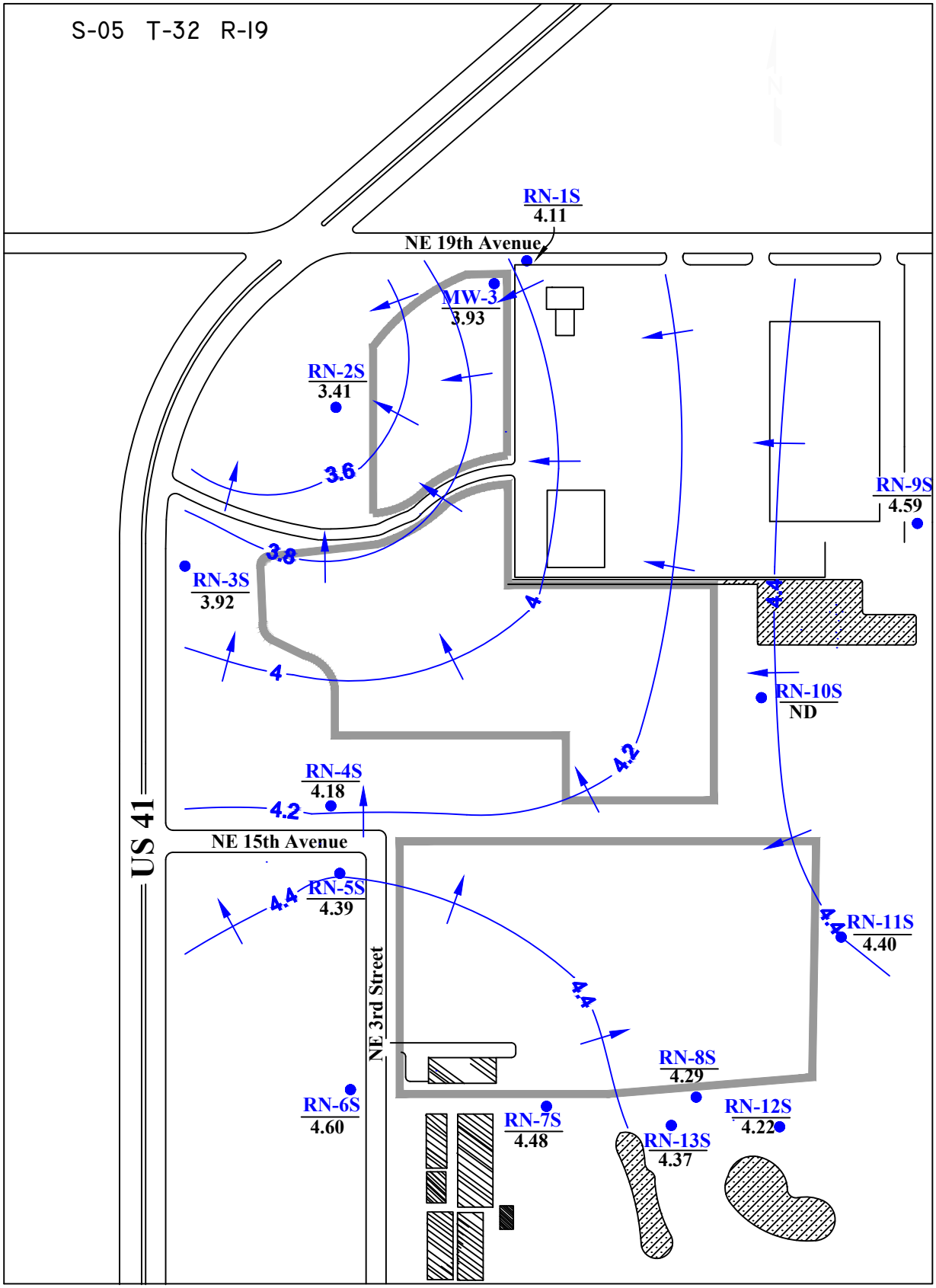
	Well ID #	W.L. (NGVD)
Surficial Aquifer Monitoring Well	RN-3-S	3.92
Intermediate Aquifer Monitoring Well	RN-3-I	4.48
Surficial Aquifer Monitoring Well	RN-4-S	4.18
Intermediate Aquifer Monitoring Well	RN-4-I	5.22
Surficial Aquifer Monitoring Well	RN-6-S	4.60
Intermediate Aquifer Monitoring Well	RN-6-I	6.28
Surficial Aquifer Monitoring Well	RN-7-S	4.48
Intermediate Aquifer Monitoring Well	RN-7-I	7.69
Surficial Aquifer Monitoring Well	RN-8-S	4.29
Intermediate Aquifer Monitoring Well	RN-8-I	8.39
Surficial Aquifer Monitoring Well	RN-11-S	4.40
Intermediate Aquifer Monitoring Well	RN-11-I	8.08

Ruskin New Landfill
Groundwater and Surface Water Elevations
October 25, 2017

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)
RN-1-S	10.89	6.78	4.11
RN-2-S	8.10	4.69	3.41
RN-3-S	8.67	4.75	3.92
RN-4-S	9.03	4.85	4.18
RN-5-S	8.84	4.45	4.39
RN-6-S	9.43	4.83	4.60
RN-7-S	9.36	4.88	4.48
RN-8-S	9.42	5.13	4.29
RN-9-S	9.64	5.05	4.59
RN-10-S	8.54	ND	ND
RN-11-S	9.02	4.62	4.40
RN-12-S	10.44	6.22	4.22
RN-13-S	10.05	5.68	4.37
MW-3	8.66	4.73	3.93
RN-3-I	9.02	4.54	4.48
RN-4-I	9.15	3.93	5.22
RN-6-I	9.62	3.34	6.28
RN-7-I	9.69	2.00	7.69
RN-8-I	9.34	0.95	8.39
RN-11-I	8.45	0.37	8.08
RNSW-1	6.0'=5.81	4.40	4.21
RNSW-2	6.0'=6.96	4.36	5.32

NGVD	=National Geodetic Vertical Datum
T.O.C.	=Top of Casing
B.T.O.C.	=Below Top of Casing
ND	=No Data
W.L.	=Water Level

RUSKIN NEW LANDFILL SITE



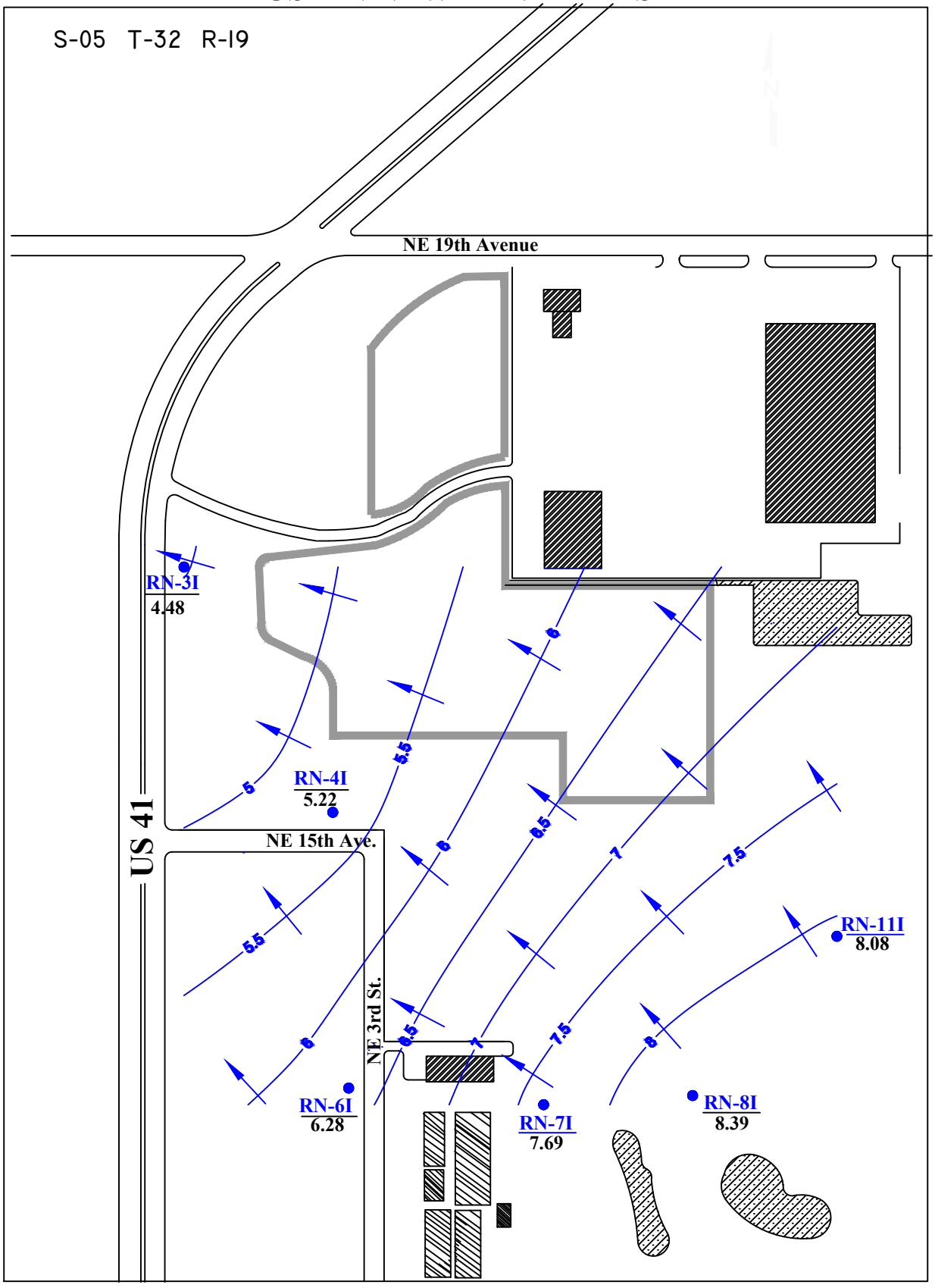
RUSKIN NEW LANDFILL
Surficial Aquifer Groundwater Elevation and Contour Diagram
October 25, 2017

Hillsborough County Public Utilities Department
Environmental Services

LEGEND

- RN-1S / 4.11 — Surficial Aquifer Groundwater Monitoring Well and Groundwater Elevation (NGVD)
- General Direction of Groundwater Flow
- 4.4 — Groundwater Elevation Contour

RUSKIN NEW LANDFILL SITE



RUSKIN NEW LANDFILL Intermediate Aquifer Groundwater Elevation and Contour Diagram October 25, 2017	LEGEND
Hillsborough County Public Utilities Department Environmental Services	RN-3I 4.48 Groundwater Monitoring Well Location and Elevation Relative to NGVD -6.5- Groundwater Elevation Contour Line and Value Realative to NGVD General Direction of Groundwater Flow

enviro/acad/rnlf/ruskin int wl 0-17.dwg

Closed Ruskin New Landfill
Historical Groundwater Data
RN-1S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1899	2054	2011	1863	1828	2075	2104	1958	2300	1607	1713	2830	2899	2754	2722	2962	2558	3322	NS
dissolved oxygen (mg/l)(field)	0.2	0.18	4.98	0.53	0.67	0.62	0.63	1.2	0.73	0.47	0.52	1.49	0.89	0.3	0.15	0.22	0.21	0.49	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-131.2	-77.5	-95.5	NA
temperature (°C) (field)	24.43	29.88	23.47	29.80	23.1	29.6	25.2	28.8	25.0	28.93	24.83	29.25	24.85	29.51	25.63	29.34	25.73	29.55	NS
turbidity (NTU) (field)	2	5	13	9.4	15.7	12	17.4	8.62	10.3	20.5	14.3	10.4	2.32	1.67	3.08	11.7	4.03	12.5	NS
pH (field)	6.83	6.83	7.48	6.71	6.85	6.88	6.74	6.74	6.67	6.80	6.80	6.92	7.13	7.11	6.76	6.64	7.10	6.68	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2400**	**2200**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.32	0.27	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.085**	**0.091**	**0.058**	**0.1**	**0.067**	**0.12**	**0.14**	**0.1**	**0.099**	**0.098**	**0.11**	**0.12**	**0.085**	**0.083**	**0.074**	**0.086**	**0.067**	**0.085**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.00026 i	0.000056 u	0.000031 i	0.00003 i	NA	NA	0.005*
chromium	0.002 u	0.004 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.003 u	0.00075 i	0.00011 u	0.00011 u	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.006 i	0.00022 u	0.00011 u	0.00011 u	NA	NA	0.3**
nickel	0.0055 i	0.0034 i	0.0041 i	0.0032 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0026 i	0.0028 i	0.0031 i	0.0012 u	0.0028	0.0017	0.002	NA	NA	0.1*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0087 i	0.005 u	0.0083 u	0.005 u	0.012	0.0082 i	0.0092 i	0.012	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.085 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-2S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	2563	3162	3071	3444	3558	4207	3551	3467	2923	2614	2703	3364	4040	4800	4054	4759	2761	ND	NS
dissolved oxygen (mg/l)(field)	0.77	0.13	2.91	0.44	0.34	0.26	0.56	0.81	0.34	0.33	0.28	0.71	0.35	0.34	0.25	0.21	1.07	ND	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-154.2	-75.7	ND	NS
temperature (°C) (field)	20.89	25.81	17.64	25.3	19.8	25	20.7	24.9	20.4	25.16	19.93	24.7	19.92	24.73	18.79	24.76	21.09	ND	NS
turbidity (NTU) (field)	6	2.4	1.3	0.9	2.8	2	14.8	2.28	9.5	2.86	9.07	6.94	13.1	1.89	2.71	6.89	3.08	ND	NS
pH (field)	6.81	6.76	7.39	6.59	6.8	6.77	6.61	6.52	6.73	6.85	6.75	6.84	6.64	7.05	6.81	6.72	7.16	ND	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2800**	ND	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.3	ND	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.016**	**0.02**	0.0092 i	**0.015**	**0.011**	**0.027**	**0.041**	**0.045**	**0.04**	**0.018**	**0.015**	**0.016**	0.0093 i	**0.039**	**0.021**	**0.02**	**0.02**	ND	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00015 iv	0.001 u	0.00024 u	0.000072 i	0.000056 u	0.000035 i	NA	ND	0.005*
chromium	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0023 i	0.002 u	0.0025 u	0.002 u	0.003 u	0.0063 i	0.00021 u	0.00028 i	NA	ND	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.004 i	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0054 i	0.00022 u	0.00022 u	0.00011 u	NA	ND	0.3**
nickel	0.0037 i	0.0061 i	0.0068 i	0.0054 i	0.0031 i	0.0059 i	0.0047 i	0.0056 i	0.0036 i	0.0061 i	0.0049 i	0.0029 i	0.0012 u	0.006	0.0032	0.0028	NA	ND	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0086 i	0.0064 i	0.005 u	0.0053 i	0.001 u	0.005 u	0.0041 u	0.0012 u	0.0047 i	0.00058 u	NA	ND	0.05*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.011	0.002 u	0.008 i	0.012	NA	ND	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
chlorobenzene	0.63 u	0.9 i	1.3	0.67 i	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.56 u	0.56 u	0.56 u	0.21 u	0.56 u	ND	100*
ethylbenzene	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.44 u	0.26 u	0.26 u	0.58 i	0.24 u	0.26 u	ND	700*
isopropylbenzene	0.19 u	0.24 u	0.19 u	0.24 u	**0.87 i**	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.31 u	0.31 u	0.31 u	0.14 u	0.31 u	ND	0.8***
4-isopropyltoluene	0.69 u	1.7	0.69 u	0.2 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	NA	NA	NA	NA	NA	ND	NS
naphthalene	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	2.5 u	0.73 u	0.73 u	3.2	0.27 u	0.73 u	ND	14***
1,1,2-trichloroethane	0.47 u	0.34 u	0.47 u	0.34 u	0.47 u	0.47 u	4	0.47 u	0.47 u	0.47 u	0.47 u	0.47 u	0.4 u	0.4 u	0.4 u	0.29 u	0.46 u	ND	5*

Reference - Groundwater Guidance Concentrations, FDEP 2012
MCL=Maximum Contaminant Level
NTU=Nephelometric Turbidity Units
NA = Not Analyzed
NS=No Standard
ND=No Data (Well not able to be accessed and sampled)
*=Denotes Primary Drinking Water Standard
**=Denotes Secondary Drinking Water Standard
***=Denotes Groundwater Cleanup Target Level
0.016 Exceeds Primary or Secondary Drinking Water Standard
ug/l=micrograms per liter
mg/l=milligrams per liter
i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-3S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	894	950	868	960	909	1028	860	926	933	706	1015	1068	1058	1022	984	1062	995	1179	NS
dissolved oxygen (mg/l)(field)	0.51	0.24	4.14	0.37	0.24	0.3	0.24	0.29	0.63	0.52	0.77	1.48	0.33	0.68	0.73	0.73	0.33	0.42	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-84.3	-0.1	-22.9	NS
temperature (°C) (field)	22.13	27.24	19.89	27.5	21.6	26.1	21.7	25.38	21	26.16	21.15	25.81	21.55	25.92	20.82	26.53	22.33	24.95	NS
turbidity (NTU) (field)	4.7	2.3	2	3.3	5.4	4	1.7	3.84	7.91	2.7	18.8	9.94	18.20	8.74	14.2	9.54	1.93	3.3	NS
pH (field)	7.01	6.9	7.65	6.86	7.03	6.94	6.93	6.84	6.92	7.09	6.93	6.9	6.74	7.14	7.02	6.82	7.32	6.90	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**610**	**1300**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 u	0.1	NS
Metals (mg/l)																			**MCL Standard**
arsenic	0.0075 i	0.0063 i	0.0046 i	0.0042 i	0.0044 i	0.004 u	0.004 u	0.004 u	0.0042 i	0.004 u	0.0079	0.0078 i	0.0051 i	0.0037	0.0031	0.0031	0.0033	0.0032	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00023 iv	0.001 u	0.00024 u	0.000056 u	0.000058 i	0.000032 i	NA	NA	0.005*
chromium	0.0048 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00083 i	0.00096 i	0.00097 i	0.00025 i	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 i	0.0029 u	0.0053 i	0.00051 i	0.00058 i	0.00013 i	NA	NA	0.3**
nickel	0.0025 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0012 u	0.0017	0.00085	0.00066 i	NA	NA	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0041 u	0.0017 i	0.00058 u	0.0045 i	NA	NA	0.05*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.012	0.01	0.0099 i	0.012	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012
MCL=Maximum Contaminant Level
NTU=Nephelometric Turbidity Units
NA=Not Analyzed
NS=No Standard
*=Denotes Primary Drinking Water Standard
**=Denotes Secondary Drinking Water Standard
ug/l=micrograms per liter
mg/l=milligrams per liter
i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-4S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	801	962	990	816	823	919	828	1363	854	546	1301	839	1062	1075	993	1290	835	1224	**NS**
dissolved oxygen (mg/l)(field)	0.21	0.24	1.49	0.36	0.21	0.33	0.38	0.49	0.37	0.5	1.71	0.29	0.54	0.24	0.2	0.46	0.23	0.35	**NS**
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	167.1	-91.2	-88.1	**NS**
temperature (°C) (field)	20.14	25.26	18.7	25.2	20.1	25.5	21.3	25.61	20.7	25.44	20.5	25.74	20.58	25.49	20.15	25.3	21.32	25.19	**NS**
turbidity (NTU) (field)	13.5	3.1	2.5	2.6	5.7	5.5	4.7	4.6	3.09	14.6	11.9	3.66	2.39	0.96	2.28	3.59	5.76	5.69	**NS**
pH (field)	7.11	7.05	7.02	7.02	7.18	7.15	6.94	6.88	6.97	7.24	6.96	7.14	6.84	7.24	7.13	6.99	7.50	7.27	**(6.5 - 8.5)****
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**570**	**720**	**500****
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.02 u	0.04 i	**NS**
Metals (mg/l)																			**MCL Standard**
arsenic	0.0046 i	0.006 i	0.0062 i	0.0043 i	0.0073 i	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.0079	0.004 u	0.0027 i	0.0031	0.0023	0.0027	0.0025	0.0025	**0.01***
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00019 iv	0.001 u	0.00024 u	0.000056 u	0.000028 u	0.000048 i	NA	NA	**0.005***
chromium	0.004 i	0.0023 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00082 i	0.00021 u	0.00014 i	0.00018 i	NA	NA	**0.1***
copper	0.004 i	0.0029 u	0.0039 i	0.0029 u	0.0029 u	0.0042 i	0.0029 u	0.0079 i	0.0032 i	0.0038 i	0.042	0.0044 i	0.009	0.0015	0.0031	0.0060	NA	NA	**0.3****
nickel	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0013 i	0.0014 i	0.00037 i	0.00032 i	NA	NA	**0.1***
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0025	0.005 u	0.0041 u	0.0012 u	0.00058 u	0.00076 i	NA	NA	**0.05***
zinc	0.005 u	0.021	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0063 i	0.0083 u	0.005 u	0.0096 i	0.0098 i	0.006 i	0.0140	NA	NA	**5****
Organic Parameters Detected (ug/l)																			**MCL Standard**
acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 u	1 u	1 u	2.1 u	1 u	3.6	**6300*****

Reference - Groundwater Guidance Concentrations, FDEP 2012
MCL=Maximum Contaminant Level
NTU=Nephelometric Turbidity Units
NA=Not Analyzed
NS=No Standard
BDL= Below Detection Limit
*=Denotes Primary Drinking Water Standard
**=Denotes Secondary Drinking Water Standard
***=Groundwater Cleanup Target Level
ug/l=micrograms per liter
mg/l=milligrams per liter
i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-5S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	922	1997	1468	2021	2016	2122	1734	2081	802	1164	1079	1055	1962	2631	2548	2900	1333	2780	NS
dissolved oxygen (mg/l)(field)	1.71	0.39	1.38	0.67	0.23	0.23	0.51	0.18	0.51	1.18	0.39	1.13	0.4	0.29	1.26	0.55	0.72	0.54	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-112.2	-73.1	-81.2	NS
temperature (°C) (field)	20.94	25.28	18.74	24.5	20.6	24.8	21.3	24.76	21.2	24.75	20.72	25.1	20.87	25.16	20.27	25.14	21.69	24.67	NS
turbidity (NTU) (field)	0.9	2.5	13.0	0.8	2.3	5	4.5	1.81	2.26	3.15	12	16.23	1.86	2.06	8.66	6.46	6.13	4.49	NS
pH (field)	7.03	6.65	6.77	6.63	6.96	6.73	6.77	6.55	6.88	6.79	6.86	6.96	6.66	7.02	6.79	**6.49**	7.25	6.80	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1200**	**1900**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.11	0.16	NS
Metals (mg/l)																			**MCL Standard**
arsenic	0.0055 i	**0.023**	0.0089 i	**0.027**	**0.012**	**0.022**	**0.013**	**0.015**	0.0084 i	**0.011**	**0.013**	**0.011**	**0.013**	**0.032**	**0.018**	**0.027**	0.01	**0.016**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00013 iv	0.001 u	0.00024 u	0.000056 u	0.00015 i	0.000033 i	NA	NA	0.005*
chromium	0.002 u	0.0032 i	0.0039 i	0.002 u	0.0061 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00071 i	0.00076 i	0.00035 i	0.00038 i	NA	NA	0.1*
copper	0.0044 i	0.0029 u	0.0032 i	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0076 i	0.00022 u	0.0019	0.00011 u	NA	NA	0.3**
nickel	0.002 u	0.0057 i	0.0021 i	0.0025 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0012 u	0.00056 i	0.0016	0.0027	NA	NA	0.1*
zinc	0.005 u	0.0075 i	0.0086 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.011	0.011	0.015	0.012	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.023 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-6S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1078	1020	975	1160	1019	1002	917	963	954	1039	1005	1367	1342	1146	1292	846	720	869	NS
dissolved oxygen (mg/l)(field)	2.39	3.63	2.02	0.4	0.6	1.97	1.71	1.49	0.45	0.89	1.89	0.42	0.18	0.39	0.16	0.26	0.21	0.4	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-138.9	-29.4	-22.8	NS
temperature (°C) (field)	20.99	24.66	19.08	27.4	20.9	27.4	21.9	27.27	21.4	26.98	20.33	28.02	21.83	27.89	21.64	27.95	22.76	26.83	NS
turbidity (NTU) (field)	6.7	12.7	0.73	2.2	2.2	2.8	2.9	1.41	2.12	5.14	2.79	4.73	1.48	0.73	1.25	1.12	0.91	1.32	NS
pH (field)	6.91	6.91	6.80	6.78	6.90	6.99	6.79	6.82	6.69	6.74	6.88	6.79	6.67	6.99	6.85	6.88	7.33	7.05	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	400	380	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.20	0.19	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.025**	**0.018**	**0.022**	**0.015**	**0.018**	**0.012**	**0.02**	**0.011**	0.0081 i	**0.011**	**0.012**	**0.056**	**0.056**	**0.034**	**0.023**	**0.016**	**0.036**	**0.021**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00023 iv	0.001 u	0.00024 u	0.000056 u	0.000042 i	0.000050 i	NA	NA	0.005*
chromium	0.002 u	0.0036 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0032 i	0.002 u	0.0025 u	0.002 u	0.003 u	0.00044 i	0.00013 i	0.00022 i	NA	NA	0.1*
copper	0.0029 u	0.0086 i	0.0029 u	0.0037 i	0.0029 u	0.0086 i	0.0029 u	0.0056 i	0.0034 i	0.0039 i	0.0058	0.0029 u	0.0052 i	0.0051	0.0013	0.0042	NA	NA	0.3**
nickel	0.0075 i	0.0034 i	0.0043 i	0.0067 i	0.0067 i	0.0043 i	0.011	0.011	0.021	0.048	0.01	0.025	0.016	0.0091	0.0018	0.0021	NA	NA	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0024 i	0.005 u	0.0041 u	0.0012 u	0.0012 i	0.00058 u	NA	NA	0.05*
zinc	0.0056 i	0.0094 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.0064 i	0.011	0.0063 i	0.0120	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.025 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-7S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1346	1080	1111	1268	1441	1286	1380	1249	1212	863	1199	1396	1635	1743	1723	1884	1492	2693	NS
dissolved oxygen (mg/l)(field)	0.95	0.48	0.77	0.4	0.23	0.24	0.3	0.69	0.48	0.28	0.58	0.73	0.21	0.47	0.17	0.19	0.24	0.83	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-148.3	-76.8	-99.1	NS
temperature (°C) (field)	20.4	25.06	19.31	25.3	20.6	25.3	21.3	24.7	21.2	25.28	20.5	26.34	21.26	25.96	21.12	25.95	22.35	25.42	NS
turbidity (NTU) (field)	1.7	1.4	1.3	0.7	0.9	0.9	1	1.99	2.55	4.45	16	17.4	3.08	3.42	2.24	3.6	2.16	4.2	NS
pH (field)	6.75	6.82	6.84	6.74	6.84	6.77	6.67	6.68	6.74	6.89	6.82	6.79	6.70	7.10	6.62	6.64	7.16	6.69	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1100**	**1400**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.24	0.14	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.044**	**0.058**	**0.051**	**0.062**	**0.063**	**0.064**	**0.059**	**0.051**	**0.06**	**0.072**	**0.072**	**0.11**	**0.05**	**0.062**	**0.057**	**0.062**	**0.05**	**0.06**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.00034 i	0.000056 u	0.00006 i	0.00013 i	NA	NA	0.005*
chromium	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.001 i	0.00021 u	0.00021 u	0.00015 i	NA	NA	0.1*
copper	0.0042 i	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0068 i	0.00022 u	0.00022 u	0.00011 u	NA	NA	0.3**
nickel	0.0066 i	0.0074 i	0.0067	0.0068 i	0.0068 i	0.0059 i	0.006 i	0.0058 i	0.0047 i	0.0077 i	0.0098	0.0084	0.0029 i	0.005	0.0076	0.0075	NA	NA	0.1*
zinc	0.005 u	0.012 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.012	0.012	0.02 u	0.012	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.044 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-8S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	2916	1229	2014	2103	2893	2210	2722	838	2192	1266	1568	2395	3051	1331	2333	1578	2589	2277	NS
dissolved oxygen (mg/l)(field)	0.78	1.62	4	1.72	1.58	1.93	0.88	3.79	1.26	1.18	1.68	0.91	0.83	1.92	1.5	1.14	ND	1.62	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-4.4	-55.4	-34.5	NS
temperature (°C) (field)	20.45	24.88	18.78	24.8	20.4	24.7	21	24.7	21.2	27.01	21.02	26.11	21.26	25.32	21.26	25.81	21.7	24.57	NS
turbidity (NTU) (field)	0.5	4	1.1	1.6	0.5	2.8	1.8	8.13	2.46	26.6	2.66	3.44	4.88	1.47	1.91	3.13	1.11	2.57	NS
pH (field)	6.69	7	6.94	6.84	6.87	6.85	6.74	6.88	6.75	7	6.93	6.67	6.56	7.15	6.73	6.79	7.10	6.95	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1900**	**610**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.5	0.025 u	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.066**	**0.032**	**0.047**	**0.029**	**0.069**	**0.045**	**0.093**	0.0093 i	**0.04**	**0.016**	**0.027**	**0.062**	**0.07**	**0.019**	**0.016**	**0.015**	**0.086**	**0.022**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00025 iv	0.001 u	0.00024 i	0.00013 i	0.00013 i	0.000073 i	NA	NA	0.005*
chromium	0.002 u	0.0023 i	0.0026 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0027 i	0.0025 u	0.002 u	0.0013 i	0.00016 i	0.00023 i	0.00023 i	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0078 i	0.00022 u	0.00024 i	0.00011 u	NA	NA	0.3**
nickel	0.026	0.0067 i	0.014	0.0075 i	0.017	0.0083	0.016	0.002 u	0.012	0.004 i	0.0068	0.016	0.011	0.0018 u	0.0082	0.0003	NA	NA	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.008 i	0.005 u	0.005 u	0.005 u	0.001 u	0.005 u	0.0041 u	0.0012 u	0.0018 i	0.00092 i	NA	NA	0.05*
zinc	0.005 u	0.005 u	0.0053 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0084 i	0.0083 u	0.005 u	0.012	0.0096 i	0.02 u	0.015	NA	NA	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
benzene	0.5 u	0.28 u	**1**	0.28 u	**3.3**	0.5 u	0.5 u	0.5 u	0.5 u	0.5 u	0.53 i	**10**	**5.8**	0.15 u	0.15 u	0.16 u	0.70 i	0.17 u	1*
chlorobenzene	**800**	30	**170**	18	**170 L**	52	**120**	1.8	20	1.2	8.9	**150**	**110**	9.2	0.56 u	0.21 u	29	0.56 u	100*
cis-1,2-dichloroethene	0.65 u	0.22 u	0.65 u	0.22 u	0.9 i	0.65 u	0.66 i	0.65 u	0.65 u	0.65 u	0.65 u	0.65 u	0.51 u	0.51 u	0.51 u	0.24 u	0.51 u	0.51 u	70*
isopropylbenzene	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.19 u	0.21 i	0.31 u	0.31 u	0.31 u	0.14 u	0.31 u	0.31 u	0.8***
1,2-dichlorobenzene	0.44 u	0.36 i	0.73 i	0.18 u	1.8	0.56 i	2.3	0.18 u	0.18 u	0.44 u	0.44 u	0.44 u	0.63 u	0.63 u	0.62 u	0.18 u	0.63 u	0.63 u	600*
1,3-dichlorobenzene	11	1	2.7	0.44 i	6.8	1.9	9	0.64 u	2	0.64 u	0.73 i	2.1	1.6	0.97 u	0.43 u	0.19 u	0.80 i	0.43 u	210***
1,4-dichlorobenzene	**79**	7.1	19	3	38	11	37	0.68 i	9.7	0.57 i	4.5	10	9.9	1.3	0.97 u	0.22 u	0.97 u	0.97 u	75*
1,1-dichloroethane	0.52 u	0.18 u	0.52 u	0.18 u	0.64 i	0.52 u	0.66 i	0.52 u	0.68 i	0.52 u	0.52 u	0.52 u	0.86 u	0.86 u	0.86 u	0.14 u	0.86 u	0.86 u	70***

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND=No Data (Dissolved Oxygen probe not working properly)

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.066 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

L = unable to report dilution for chlorobenzene. Result reported over calibration curve.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-9S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1082	1043	915	903	1073	999	938	1020	1013	807	1256	1440	1219	1337	1329	1381	1353	1424	NS
dissolved oxygen (mg/l)(field)	0.7	0.81	2.79	0.4	0.28	0.42	0.24	0.43	0.41	0.23	0.93	0.84	0.59	0.29	0.18	0.18	0.20	0.27	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-91.5	-24.5	-38.5	NS
temperature (°C) (field)	22.5	25.77	18.9	25.5	20.3	25.4	21.2	25.1	20.8	25.25	20.66	25.82	20.56	25.05	20.2	25.03	21	25.58	NS
turbidity (NTU) (field)	2.7	1.7	1.6	2.9	7	2	1.2	1.6	1.95	1.21	1.61	1.89	4.2	0.22	0.6	0.46	2.47	1.15	NS
pH (field)	6.93	6.97	7.94	6.73	6.94	6.79	6.81	6.65	6.83	6.97	6.88	6.93	6.67	**6.47**	6.74	6.63	7.11	6.74	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**810**	**780**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36	0.33	NS
Metals (mg/l)																			**MCL Standard**
arsenic	0.0056 i	0.0079 i	0.004 u	0.0055 i	0.0085 i	0.0055 i	0.0045 i	**0.015**	**0.011**	0.0081 i	**0.011**	0.0096 i	0.0063 i	0.0073	0.0085	0.0055	**0.011**	0.009	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00011 i	0.001 u	0.00011 i	0.000056 u	0.000028 u	0.000028 u	NA	NA	0.005*
chromium	0.0029 u	0.0029 u	0.002 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.003 u	0.00021 u	0.00011 u	0.00011 u	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0038 i	0.0062 i	0.0049 i	0.0031 i	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0052 i	0.00022 u	0.00011 u	0.00011 u	NA	NA	0.3**
nickel	0.0097	0.0051 i	0.0045 i	0.0046 i	0.0087	0.0083	0.011	0.017	0.015	0.014	0.02	0.019	0.0043 i	0.0073	0.0053	0.0043	NA	NA	0.1*
zinc	0.005 u	0.0068 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.011	0.0099 i	0.02 u	0.012	NA	NA	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 u	1 u	1 u	2.1 u	1 u	1 i	**6300*** **
4-isopropyltoluene	0.69 u	0.2 u	0.69 u	1 i	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	NA	NA	NA	NA	NA	NA	NS

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA = Not Analyzed

NS=No Standard

BDL= Below Detection Limit

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

***=Groundwater Cleanup Target Level

0.015 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-10S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1935	1203	1265	1628	2165	819	2227	896	1531	629	1103	1432	1709	1535	1533	ND	1476	ND	NS
dissolved oxygen (mg/l)(field)	1.37	0.93	1.76	0.61	0.49	0.53	0.41	1.29	0.80	0.30	0.60	0.32	1.65	0.51	2.00	ND	ND	ND	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	-31.50	ND	NS
temperature (°C) (field)	19.96	25.86	18.27	25.5	19.3	25.2	20.5	24.7	19.9	25.68	19.78	24.72	19.58	24.87	19.87	ND	20.54	ND	NS
turbidity (NTU) (field)	1.2	1.7	0.6	3.4	1.3	2.4	6.3	2.5	2.98	3	13.5	2.87	2.8	1.81	2.03	ND	1.51	ND	NS
pH (field)	6.82	6.81	7.52	6.5	6.79	6.76	6.5	6.50	6.57	6.85	6.81	6.82	7.31	**6.27**	6.89	ND	7.18	ND	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	**1100**	ND	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.34	ND	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.035**	**0.052**	**0.035**	**0.067**	**0.046**	**0.031**	**0.055**	**0.047**	**0.039**	**0.057**	**0.043**	**0.05**	**0.034**	**0.084**	**0.037**	ND	**0.021**	ND	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.00024 u	0.000056 u	0.000064 i	ND	NA	ND	0.005*
chromium	0.002 u	0.0022 i	0.002 u	0.002 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00051 i	0.00088 i	0.00012 i	ND	NA	ND	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.029	0.014	0.013	0.0100	0.0058 i	0.0029 u	0.0043 i	0.0063	0.0056 i	0.0092	0.0034	0.0024	ND	NA	ND	0.3**
nickel	0.0140	0.0140	0.012	0.016	0.022	0.0047 i	0.014	0.0065 i	0.0086	0.0034 i	0.0047 i	0.0045 i	0.0067 i	0.0092	0.0088	ND	NA	ND	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.001 u	0.005 i	0.0041 i	0.0012 u	0.0011 i	ND	NA	ND	0.05*
zinc	0.005 u	0.005 u	0.005 u	0.0052 i	0.0067 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.014	0.0091 i	0.01	ND	NA	ND	5**
Reference - Groundwater Guidance Concentrations, FDEP 2012																			

MCL=Maximum Contaminant Level
NTU=Nephelometric Turbidity Units
NA=Not Analyzed
ND=No Data (Well not able to be accessed and sampled)
Dissolved Oxygen probe not working properly during March 2017 sampling event
NS=No Standard
*=Denotes Primary Drinking Water Standard
**=Denotes Secondary Drinking Water Standard
0.035 Exceeds Primary or Secondary Drinking Water Standards
ug/l=micrograms per liter
mg/l=milligrams per liter
i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-11S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	3656	2693	2879	3442	3542	3516	2862	2530	2637	2327	2749	2890	3145	1643	2143	2370	2467	3372	NS
dissolved oxygen (mg/l)(field)	1.92	1.24	5.24	0.49	0.3	0.22	0.6	0.45	0.88	0.8	0.56	0.9	0.42	0.38	0.36	0.76	ND	1.07	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-190.8	-67	-87.3	NS
temperature (°C) (field)	19.78	25.51	16.96	24.2	19.2	24.4	20.3	24.8	19.3	24.79	20.41	26.51	21.22	27.02	20.09	26.76	21.64	26.19	NS
turbidity (NTU) (field)	3.4	10	3.1	1	7.1	4.8	0.6	2.68	6.92	8.86	34	18.2	18.8	14.9	4.38	12.9	3.82	10.37	NS
pH (field)	6.74	7.19	6.86	6.69	6.75	6.63	6.61	**6.49**	6.55	6.80	6.79	6.78	6.54	7.08	6.61	6.72	7.10	6.78	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1700**	**1600**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.7	4	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.082**	**0.09**	**0.11**	**0.12**	**0.064**	**0.12**	**0.088**	**0.044**	**0.085**	**0.12**	**0.063**	**0.13**	**0.088**	**0.082**	**0.07**	**0.07**	**0.11**	**0.085**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.0011 i	0.00072 v	0.001 u	0.00058 i	0.00014 i	0.000078 i	0.00016 i	NA	NA	0.005*
chromium	0.002 u	0.0065 i	0.0054 i	0.002 u	0.002 u	0.0029 i	0.002 u	0.002 u	0.002 u	0.0027 i	0.0025 u	0.0085 i	0.003	0.0038 i	0.00038 i	0.004	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0042 i	0.0029 u	0.0029 u	0.0047 i	0.0029 u	0.0029 u	0.0029 u	0.0051 i	0.0011 u	0.0035 i	0.011	0.00037 i	0.00014 i	0.00057 i	NA	NA	0.3**
nickel	0.024	0.027	0.043	0.035	0.025	0.030	0.02	0.026	0.015	0.025	0.048	0.023	0.015	0.0089	0.012	0.009	NA	NA	0.1*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0057 i	0.005 u	0.005 u	0.005 u	0.0069 i	0.0083 u	0.0088 i	0.013	0.01	0.02 u	0.012	NA	NA	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1 u	1 u	1 u	2.1 u	1 u	1 i	6300***
benzene	0.5 u	0.28 u	0.28 u	0.29 i	0.5 u	0.5 u	0.5 u	0.5 u	0.5 u	0.5 u	0.5 u	0.5 u	0.34 u	0.15 u	0.15 u	0.16 u	0.17 u	0.17 u	1*
chlorobenzene	0.64 i	1.3	2.6	3.7	0.63 u	1.3	1.2	2.7	1.8	4.6	0.63 u	7.2	4.6	2.1	3.1	0.21 u	0.56 u	7.1	100*
cis-1,2-dichloroethene	0.65 u	0.22 u	0.22 u	0.86 i	0.65 u	0.65 u	0.76 i	0.65 u	0.65 u	0.65 u	0.65 u	0.69 i	0.51 u	0.51 u	0.67 i	0.23 u	0.82 i	1.4	70*
1,1-dichloroethane	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.95 i	0.86 u	0.7 u	0.86 u	0.14 u	0.86 u	0.86 u	70***
1,3-dichloropropane	**1**	0.29 u	0.29 u	0.29 u	0.39 u	0.39 u	0.39 u	0.39 u	0.39 u	0.39 u	0.39 u	0.39 u	0.8 u	0.23 u	0.23 u	0.24 u	0.31 u	0.31 u	0.4***
vinyl chloride	0.5 u	0.29 u	0.29 u	**1.2**	0.5 u	0.58 i	**1.5**	0.5 u	0.95 i	0.5 u	0.5 u	0.5 u	0.73 u	0.15 u	0.15 u	0.20 u	0.26 u	0.26 u	1*

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND=No Data (Dissolved Oxygen probe not working properly)

NS=No Standard

BDL= Below Detection Limit

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

***=Groundwater Cleanup Target Level

0.082 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-12S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	2801	2282	1538	1626	2095	1643	1948	1384	2000	1214	1067	1338	1424	1652	1218	1358	2143	1576	NS
dissolved oxygen (mg/l)(field)	0.17	0.88	1.37	0.45	0.64	0.5	0.34	0.38	0.66	0.52	0.83	0.89	0.4	0.62	0.29	0.4	ND	0.74	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	125.6	-42.4	-40	NS
temperature (°C) (field)	22.05	25.41	20.05	25.2	21.3	25.2	21.9	25.1	21.6	25.05	20.16	26.8	21.51	25.01	21.72	25.58	22.89	25.55	NS
turbidity (NTU) (field)	2.8	7.1	1.4	8.8	4	14.3	3	19.3	6.69	16.9	37.9	14.2	9.62	4.27	17.9	5.75	5.17	10.99	NS
pH (field)	6.64	6.91	6.82	6.75	6.81	6.77	6.69	6.72	6.69	6.88	6.88	6.86	6.69	6.98	6.73	6.72	7.14	6.89	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1500**	**810**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.12	0.025 u	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.11**	**0.092**	**0.055**	**0.09**	**0.074**	**0.2**	**0.13**	**0.091**	**0.12**	**0.42**	**0.22**	**0.23**	**0.048**	**0.1**	**0.081**	**0.11**	**0.09**	**0.13**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.0013 i	0.001 u	0.001 u	0.001 u	0.0014 i	0.00018 iv	0.001 u	0.00024 u	0.000066 i	0.000038 i	0.000046 i	NA	NA	0.005*
chromium	0.002 u	0.0029 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00097 i	0.00021 u	0.00011 u	0.00011 u	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0059 i	0.00022 u	0.00011 u	0.00011 u	NA	NA	0.3**
nickel	0.013	0.014	0.0092	0.0085	0.0090	0.0072 i	0.0098	0.0067 i	0.0087	0.0077 i	0.0057	0.0056 i	0.0012 u	0.0046	0.0044	0.0038	NA	NA	0.1*
selenium	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0057 i	0.005 u	0.005 u	0.005 u	0.0038	0.005 u	0.0041 u	0.0012 u	0.001 i	0.0013 i	NA	NA	0.05*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.01	0.0073 i	0.02 u	0.012	NA	NA	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
chlorobenzene	14	5	10	5.7	2.9	4.2	5.5	6.1	2.9	2.3	3.8	6.7	5.7	2.4	2.3	0.21 u	0.56 u	0.76 i	100*
1,4-dichlorobenzene	0.52 u	0.19 u	0.52 u	0.99 i	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.52 u	0.97 u	0.97 u	0.97 u	0.22 u	0.97 u	0.97 u	75*

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND=No Data (Dissolved Oxygen probe not working properly)

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.11 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
RN-13S

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	1483	1192	1330	1369	1495	1247	1408	1265	1348	1009	1272	1820	1811	1209	1702	1432	1708	1452	NS
dissolved oxygen (mg/l)(field)	2.06	1.76	2.91	2.7	2.59	2.4	2.33	2.27	1.78	3.53	2.11	1.4	1.58	1.95	0.96	0.55	ND	0.81	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-117.9	-83.3	-71.8	NS
temperature (°C) (field)	21.91	26.38	21	26.3	21.7	26.2	22.5	26.1	22.2	26.45	21.41	27.63	22.28	26.35	22.68	27.31	22.94	26	NS
turbidity (NTU) (field)	0.8	3.4	3.7	0.9	15.4	3.7	7.3	5.92	5.44	9.42	48.9	7.46	3.23	1.8	11.9	3.43	9.28	2.02	NS
pH (field)	6.91	7.18	7.09	6.87	7.02	6.87	6.92	6.83	6.85	7.18	6.91	7.1	6.88	7.17	6.86	6.74	7.40	6.96	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**960**	**720**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.16	0.09 i	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.047**	**0.036**	**0.043**	**0.044**	**0.053**	**0.037**	**0.047**	**0.036**	**0.047**	**0.058**	**0.2**	**0.067**	**0.06**	**0.049**	**0.072**	**0.059**	**0.061**	**0.042**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.00024 u	0.000056 u	0.000038 i	0.00035 i	NA	NA	0.005*
chromium	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.00034 i	0.00075 i	0.00011 u	0.00011 i	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0065 i	0.00022 u	0.00011 u	0.00011 u	NA	NA	0.3**
nickel	0.0024 i	0.0046 i	0.0039 i	0.0022 i	0.0026 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0023 i	0.002 u	0.0012 u	0.0028	0.001	0.002	NA	NA	0.1*
zinc	0.005 u	0.0051 i	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.014	0.0082 i	0.02 u	0.013	NA	NA	5**
Organic Parameters Detected (ug/l)																			**MCL Standard**
chlorobenzene	0.63 u	0.29 i	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.63 u	0.56 u	0.56 u	0.56 u	0.21 u	0.56 u	0.56 u	100*

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND=No Data (Dissolved Oxygen probe not working properly)

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.047 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Groundwater Data
MW-3

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	2030	2204	2128	2190	2333	2298	2106	1943	2180	1747	1997	2496	2822	2584	2556	2778	2350	3206	NS
dissolved oxygen (mg/l)(field)	0.14	0.17	0.74	0.42	0.15	0.35	0.25	0.51	0.24	0.28	0.45	0.43	0.87	0.4	0.11	0.15	0.14	0.39	NS
ORP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-147.8	-80.8	-89.2	NS
temperature (°C) (field)	21.66	25.08	21.08	24.4	21.3	24	22.1	24.1	22.4	24.27	22.23	24.42	22.70	26.21	22.64	25.61	22.59	25.02	NS
turbidity (NTU) (field)	1.5	9.3	3	7.7	11.9	16.2	6.1	14.2	22.2	57	29.7	6.99	5.55	8.17	5.29	4.31	2.94	8.8	NS
pH (field)	6.89	6.8	7.58	6.74	6.93	6.87	6.76	6.62	6.8	6.98	6.87	6.92	7.22	7.14	6.87	6.76	7.21	6.80	(6.5 - 8.5)**
total dissolved solids (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**2200**	**2200**	500**
ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13	0.15	NS
Metals (mg/l)																			**MCL Standard**
arsenic	**0.055**	**0.051**	**0.042**	**0.048**	**0.042**	**0.056**	**0.045**	**0.045**	**0.049**	**0.046**	**0.059**	**0.05**	**0.044**	**0.052**	**0.055**	**0.055**	**0.036**	**0.038**	0.01*
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.00011 i	0.001 u	0.00027 i	0.000056 u	0.000028 u	0.000031 i	NA	NA	0.005*
chromium	0.002 u	0.0043 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.003 u	0.00075 i	0.00011 u	0.00011 u	NA	NA	0.1*
copper	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0079 i	0.00022 u	0.00011 u	0.00011 u	NA	NA	0.3**
nickel	0.002 u	0.0036 i	0.0038 i	0.0027 i	0.002 u	0.0021 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0012 u	0.0028	0.0014	0.0012	NA	NA	0.1*
zinc	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.005 u	0.0083 u	0.005 u	0.013	0.0082 i	0.0088 i	0.0078 i	NA	NA	5**

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Contaminant Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

*=Denotes Primary Drinking Water Standard

**=Denotes Secondary Drinking Water Standard

0.055 Exceeds Primary or Secondary Drinking Water Standards

ug/l=micrograms per liter

mg/l=milligrams per liter

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u = parameter was analyzed but not detected.

Closed Ruskin New Landfill
Historical Surface Water Data
RNSW-2

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	544	420	415	381	425	372	391	349	426	289	403	387	403	329	340	367	489	404	1275
dissolved oxygen (mg/l)(field)	**4.83**	**2.05**	6.27	**1.76**	5.32	**1.4**	**1.51**	**0.16**	**0.48**	**1.09**	**1.45**	**3.7**	**0.69**	**1.2**	**1.27**	**0.23**	ND	**0.8**	Value must be greater than 5
ORP (mV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	-161.8	23.4	-135	NS
temperature (°C) (field)	22.38	28.08	18.5	28.5	22.7	26.3	22.7	26.1	17	27.92	17.08	26.6	20.73	26.22	17.21	27.39	20.52	23.65	NS
turbidity (NTU) (field)	4.5	2	2	7.2	1.7	1	4.2	7.62	2.04	7.21	6.51	5.25	1.67	6.99	0.96	9.47	NA	4.76	< 29 above background
pH (field)	7.56	7.28	7.86	7.51	7.65	7.13	7.33	6.81	7.28	7.11	6.91	7.26	7.52	6.74	7.00	6.92	7.82	7.18	(6.5-8.5)
General Parameters																			**MCL Standard**
Total Hardness (mg/l)(as CaCO3)	260	190	260	190	190	150	190	160	200	200	230	170	180	140	180	110	170	170	NS
unionized ammonia (mg/l)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.008 u	0.0015 i	< or = to 0.02
Metals (mg/l)																			**MCL Standard**
arsenic	0.004 u	0.0078 i	0.0042 i	0.007 i	0.0042 i	0.0055 i	0.0057 i	0.0066 i	0.004 u	0.0067 i	0.0013 u	0.006 i	0.0016 u	0.0078	0.0026	0.0042	0.0042	0.0062	< or = 0.05
cadmium	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.00074 i	0.00028 u	0.00028 u	0.000028 u	NA	NA	< or = e(0.7852[lnH]-3.49)
chromium	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0025 u	0.002 u	0.0016 i	0.00031 i	0.00011 u	0.00011 u	NA	NA	NS
copper	0.0029 u	0.0034 i	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0029 u	0.0011 u	0.0029 u	0.0096	0.00042 i	0.00011 u	0.00011 u	NA	NA	e(0.8545(lnH)-1.465)
nickel	0.002 u	0.0021 i	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.002 u	0.0012 u	0.001 i	0.0005 i	0.00062 i	NA	NA	e(0.846{lnH}+1.1645)
zinc	0.005 u	0.022	0.037	0.0053 i	0.005 u	0.005 u	0.32	0.016 i	0.005 u	0.039	0.0083 u	0.005 u	0.015	0.016	0.0072 i	0.013	NA	NA	< or =e(0.8473[lnH]+0.884)
Organic Parameters Detected (ug/l)																			**MCL Standard**
1,2,4-Trimethylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.86 u	0.86 u	0.86 u	0.86 u	0.54 u	0.54 u	0.54 u	0.18 u	0.54 u	0.9 i	220
naphthalene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.5 u	2.5 u	2.5 u	2.5 u	0.73 u	0.73 u	0.73 u	0.27 u	0.73 u	7.6	26
4-isopropyltoluene	0.69 u	0.2 u	0.69 u	0.2 u	0.69 u	0.69 u	0.69 u	0.69 u	0.69 u	9.4	0.69 u	0.69 u	NA	NA	NA	NA	NA	NA	NS

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Containment Level

NTU=Nephelometric Turbidity Units

NA = Not Analyzed

ND=No Data (Dissolved Oxygen probe not working properly)

NS=No Standard

BDL= Below Detection Limit

4.83 Exceeds Surface Water Criteria (62-302, F.A.C.) or Freshwater Surface Water Criteria (62-777 F.A.C.)

ug/l=micrograms per liter

mg/l=milligrams per liter

Closed Ruskin New Landfill
Historical Surface Water Data
RNSW-3

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	ND	ND	ND	ND	ND	760	ND	ND	ND	1079	ND	ND	ND	1172	1060	ND	ND	**1557**	1275
dissolved oxygen (mg/l)(field)	ND	ND	ND	ND	ND	**0.81**	ND	ND	ND	**0.46**	ND	ND	ND	**0.64**	**0.95**	ND	ND	**0.38**	Value must be greater than 5
ORP (mV)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-83.2	NS
temperature (°C) (field)	ND	ND	ND	ND	ND	25.5	ND	ND	ND	25.75	ND	ND	ND	25.09	18.57	ND	ND	19.44	NS
turbidity (NTU) (field)	ND	ND	ND	ND	ND	9.2	ND	ND	ND	43.2	ND	ND	ND	12	12.02	ND	ND	19	< 29 above background
pH (field)	ND	ND	ND	ND	ND	7.20	ND	ND	ND	6.82	ND	ND	ND	7.05	6.74	ND	ND	**6.39**	(6.5-8.5)
General Parameters																			**MCL Standard**
Total Hardness (mg/l)(as CaCO3)	ND	ND	ND	ND	ND	320	ND	ND	ND	3500	ND	ND	ND	460	460	ND	ND	2800	NS
unionized ammonia (mg/l)	ND	ND	ND	ND	ND	NA	ND	ND	ND	NA	ND	ND	ND	NA	NA	ND	ND	**0.025 i**	< or = to 0.02
Metals (mg/l)																			**MCL Standard**
arsenic	ND	ND	ND	ND	ND	**0.052**	ND	ND	ND	**1.9**	ND	ND	ND	**0.057**	0.037	ND	ND	**0.093**	< or = 0.05
cadmium	ND	ND	ND	ND	ND	0.001 u	ND	ND	ND	0.02	ND	ND	ND	0.000056 u	0.000056 u	ND	ND	ND	< or = e(0.7852[lnH]-3.49)
copper	ND	ND	ND	ND	ND	0.0029 u	ND	ND	ND	0.54	ND	ND	ND	0.00022 u	0.00022 i	ND	ND	ND	e(0.8545(lnH)-1.465)
chromium	ND	ND	ND	ND	ND	0.002 u	ND	ND	ND	0.39	ND	ND	ND	0.00021 u	0.00016 i	ND	ND	ND	NS
nickel	ND	ND	ND	ND	ND	0.002 u	ND	ND	ND	0.2	ND	ND	ND	0.00022 u	0.0013	ND	ND	ND	e(0.846{lnH}+1.1645)
selenium	ND	ND	ND	ND	ND	0.005 u	ND	ND	ND	**0.027 i**	ND	ND	ND	0.0012 u	0.00058 u	ND	ND	ND	< or = 0.012
zinc	ND	ND	ND	ND	ND	0.051	ND	ND	ND	7.6	ND	ND	ND	0.018	0.016	ND	ND	ND	< or =e(0.8473[lnH]+0.884)
Organic Parameters Detected (ug/l)																			**MCL Standard**
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	BDL	ND	ND	ND	0.58 u	ND	ND	ND	4.2 u	0.84 u	ND	ND	4	23
1,2-dichlorobenzene	ND	ND	ND	ND	ND	0.44 u	ND	ND	ND	2.1	ND	ND	ND	4.7 i	3.2 u	ND	ND	1.8	99
1,3-dichlorobenzene	ND	ND	ND	ND	ND	0.64 u	ND	ND	ND	12	ND	ND	ND	29	11	ND	ND	12	85
1,4-dichlorobenzene	ND	ND	ND	ND	ND	0.63 u	ND	ND	ND	43	ND	ND	ND	**100**	**210 j4**	ND	ND	**19**	3
4-isopropyltoluene	ND	ND	ND	ND	ND		ND	ND	ND	2.4	ND	ND	ND	NA	NA	ND	ND	NA	NS
acetone	ND	ND	ND	ND	ND	BDL	ND	ND	ND	NA	ND	ND	ND	5 u	1 u	ND	ND	9.9	1700
benzene	ND	ND	ND	ND	ND	BDL	ND	ND	ND	0.5 u	ND	ND	ND	1.7 u	0.15 u	ND	ND	2.6	< or = to 71.28 annual avg.
chlorobenzene	ND	ND	ND	ND	ND	BDL	ND	ND	ND	**160**	ND	ND	ND	**220**	0.56 u	ND	ND	**470**	17
Isopropylbenzene	ND	ND	ND	ND	ND	0.69 u	ND	ND	ND	0.19 u	ND	ND	ND	1.6 u	NA	ND	ND	0.34 i	260
naphthalene	ND	ND	ND	ND	ND	BDL	ND	ND	ND	2.5 u	ND	ND	ND	3.6 u	0.73 u	ND	ND	5.2	26
toluene	ND	ND	ND	ND	ND	0.52 u	ND	ND	ND	**43**	ND	ND	ND	2.2 u	**37**	ND	ND	1.8	480

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Containment Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND= No Data (No Surface Water)

BDL= Below Detection Limit

NS=No Standard

0.81 Exceeds Surface Water Criteria (62-302, F.A.C.) or Freshwater Surface Water Criteria (62-777 F.A.C.)

ug/l=micrograms per liter

mg/l=milligrams per liter

Closed Ruskin New Landfill
Historical Surface Water Data
RNSW-5

Field Parameters	Mar-09	Sep-09	Mar-10	Sep-10	Mar-11	Sep-11	Mar-12	Sep-12	Mar-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	ND	1036	1255	1389	ND	ND	ND	1249	ND	719	1110	ND	ND	1632	821	722	ND	897	1275
dissolved oxygen (mg/l)(field)	ND	**0.74**	**1.73**	**0.88**	ND	ND	ND	**0.69**	ND	**0.74**	**3.65**	ND	ND	**0.46**	**3.02**	**0.78**	ND	**0.4**	Value must be greater than 5
ORP (mV)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	149.1	ND	-200.5	NS
temperature (°C) (field)	ND	25.26	15.29	23.5	ND	ND	ND	25.2	ND	24.92	13.87	ND	ND	25.99	15.54	25.77	ND	18.61	NS
turbidity (NTU) (field)	ND	11.6	6.99	10.2	ND	ND	ND	18.5	ND	11.4	7.84	ND	ND	29.4	5.55	3.83	ND	24.1	< 29 above background
pH (field)	ND	6.9	7.12	7.34	ND	ND	ND	7.12	ND	7.68	7.3	ND	ND	7.83	7.32	6.81	ND	7.39	(6.5-8.5)
General Parameters																			**MCL Standard**
Total Hardness (mg/l)(as CaCO3)	ND	540	540	600	ND	ND	ND	690	ND	460	790	ND	ND	700	490	330	ND	3200	NS
unionized ammonia (mg/l)	ND	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	NA	NA	NA	ND	**0.13**	< or = to 0.02
Metals (mg/l)																			**MCL Standard**
arsenic	ND	**0.054**	**0.035**	**0.13**	ND	ND	ND	**0.17**	ND	0.05	**0.097**	ND	ND	**0.086**	0.012	0.042	ND	**0.2**	< or = 0.05
cadmium	ND	0.001 u	0.001 u	0.001 u	ND	ND	ND	0.001 u	ND	0.001 u	0.000095 u	ND	ND	0.000056 u	0.000028 u	0.000028 u	ND	ND	< or = e(0.7852[lnH]-3.49)
copper	ND	0.0029 u	0.0029 u	0.0043 i	ND	ND	ND	0.0029 u	ND	0.0029 u	0.0011 u	ND	ND	0.00022 u	0.00013 i	0.00061 i	ND	ND	e(0.8545(lnH)-1.465)
chromium	ND	0.002 u	0.002 u	0.0038 i	ND	ND	ND	0.002 u	ND	0.002 u	0.0025 u	ND	ND	0.00027 i	0.00012 i	0.00026 i	ND	ND	NS
nickel	ND	0.0038 i	0.0022 i	0.0051 i	ND	ND	ND	0.0042 i	ND	0.002 u	0.002 u	ND	ND	0.001 i	0.0015	0.0013	ND	ND	e(0.846{lnH}+1.1645)
selenium	ND	0.005 u	0.005 u	0.005 u	ND	ND	ND	0.005 u	ND	0.005 u	0.001 u	ND	ND	0.0012 u	0.00058 u	0.00058 u	ND	ND	< or = 0.012
zinc	ND	0.0074 i	0.011 i	0.96	ND	ND	ND	0.005 u	ND	0.005 u	0.0083 u	ND	ND	0.017	0.0096 i	0.021	ND	ND	< or =e(0.8473[lnH]+0.884)
Organic Parameters Detected (ug/l)																			**MCL Standard**
acetone	ND	NA	NA	NA	ND	ND	ND	NA	ND	NA	NA	ND	ND	1 u	NA	2.1 u	ND	4.4	1700
chlorobenzene	ND	17	**19**	0.27 u	ND	ND	ND	0.63 u	ND	0.63 u	4	ND	ND	**61**	5.2	0.21 u	ND	0.56 u	17
1,2-dichlorobenzene	ND	0.64 i	0.44 u	0.18 u	ND	ND	ND	0.69 i	ND	0.69 u	0.44 u	ND	ND	1.7	0.63 u	0.18 u	ND	0.63 u	NS
1,3-dichlorobenzene	ND	3.5	2.5	0.21 u	ND	ND	ND	4.9	ND	0.44 u	0.82 i	ND	ND	11	3.3	0.19 u	ND	0.66 i	99
1,4-dichlorobenzene	ND	18	9.4	0.19 u	ND	ND	ND	26	ND	2	2.6	ND	ND	38	16	0.22 u	ND	2.1	85
4-isopropyltoluene	ND	0.2 u	1.2	0.2 u	ND	ND	ND	0.69 u	ND	**11**	0.69 u	ND	ND	NA	NA	NA	ND	ND	NS

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Containment Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

ND= No Data (No Surface Water)

NS=No Standard

BDL= Below Detection Limit

0.74 Exceeds Surface Water Criteria (62-302, F.A.C.) or Freshwater Surface Water Criteria (62-777 F.A.C.)

ug/l=micrograms per liter

mg/l=milligrams per liter

Closed Ruskin New Landfill
Historical Surface Water Data
RNSW-6

Field Parameters	Mar-11	Sep-11	Mar-12	Sep-12	Apr-13	Sep-13	Mar-14	Sep-14	Mar-15	Sep-15	Mar-16	Sep-16	Mar-17	Oct-17	MCL Standard
conductivity (umhos/cm) (field)	ND	ND	ND	1326	901	680	1029	1039	1625	1691	1089	1307	ND	1718	1275
dissolved oxygen (mg/l)(field)	ND	ND	ND	**0.14**	6.34	**0.61**	**1.32**	**0.36**	**0.05**	**0.2**	**0.69**	**0.2**	ND	**0.23**	Value must be greater than 5
ORP (mV)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-297.8	ND	-312.2	NS
temperature (°C) (field)	ND	ND	ND	25.4	23.15	24.92	15.64	25.79	21.88	26.17	18.72	25.56	ND	20.3	NS
turbidity (NTU) (field)	ND	ND	ND	31	11	19.8	14.3	8.33	19.8	3.9	4.7	3.81	ND	24.2	< 29 above background
pH (field)	ND	ND	ND	7.05	6.94	7.38	7.16	7.24	7.20	6.91	7.60	7.12	ND	7.07	(6.5-8.5)
General Parameters															
Total Hardness (mg/l)(as CaCO3)	ND	ND	ND	710	740	510	770	540	500	670	480	370	ND	1000	NS
unionized ammonia (mg/l)	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	0.020 i	< or = to 0.02
Metals (mg/l)															**MCL Standard**
arsenic	ND	ND	ND	**0.17**	0.018	0.017	0.0013 u	0.004 u	0.014	**0.065**	0.014	0.039	ND	0.023	< or = 0.05
cadmium	ND	ND	ND	0.001 u	0.001 u	0.001 u	0.000095 u	0.001 u	0.001 u	0.000056 u	0.000028 u	0.000028 u	ND	ND	< or = e(0.7852[lnH]-3.49)
chromium	ND	ND	ND	0.002 u	0.0091 i	0.002 u	0.0025 u	0.002 u	0.00038	0.00047 i	0.00011 u	0.00024 i	ND	ND	NS
copper	ND	ND	ND	0.0029 u	0.022	0.0029 u	0.0011 u	0.0029 u	0.0054 i	0.00048 i	0.00011 u	0.00011 u	ND	ND	e(0.8545(lnH)-1.465)
nickel	ND	ND	ND	0.0041 i	0.0035 i	0.002 u	0.002 u	0.002 u	0.0012 u	0.0034	0.00059 i	0.0011	ND	ND	e(0.846{lnH}+1.1645)
zinc	ND	ND	ND	0.005 u	0.1	0.005 u	0.0083 u	0.005 i	0.035	0.016	0.0088 i	0.018	ND	ND	< or =e(0.8473[lnH]+0.884)
Organic Parameters Detected (ug/l)															**MCL Standard**
Acetone	ND	ND	ND	NA	ND	NA	NA	NA	1 u	1 u	1 u	2.1 u	ND	1.1 i	1700
chlorobenzene	ND	ND	ND	0.94 i	ND	0.63 u	0.63 u	0.63 u	0.56 u	0.56 u	0.56 u	0.0021 u	ND	0.56 u	17
4-isopropyltoluene	ND	ND	ND	6.1	ND	0.95 i	0.69 u	0.69 u	NA	NA	NA	NA	ND	NA	NS
1,2-dichlorobenzene	ND	ND	ND	32	ND	0.44 u	0.44 u	0.44 u	0.63 u	0.63 u	0.63 u	0.18 u	ND	0.63 u	99
1,3-dichlorobenzene	ND	ND	ND	0.64 u	ND	0.64 u	0.64 u	0.64 u	0.43 u	3	0.43 u	0.19 u	ND	0.43 u	85
1,4-dichlorobenzene	ND	ND	ND	0.52 u	ND	0.97 i	0.52 u	0.52 u	0.97 u	**12**	2.1	0.22 u	ND	0.97 u	3

Reference - Groundwater Guidance Concentrations, FDEP 2012

MCL=Maximum Containment Level

NTU=Nephelometric Turbidity Units

NA=Not Analyzed

NS=No Standard

ND= No Data (No Surface Water)

BDL= Below Detection Limit

0.14 Exceeds Surface Water Criteria (62-302, F.A.C.) or Freshwater Surface Water Criteria (62-777 F.A.C.)

ug/l=micrograms per liter

mg/l=milligrams per liter

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

November 20, 2017

MIchael Townsel
Hillsborough Co Public Utilites
332 North Falkenburg Rd
Tampa, FL 33619

RE: Workorder: T1718309 Ruskin New Landfill

Dear MIchael Townsel:

Enclosed are the analytical results for sample(s) received by the laboratory between Wednesday, October 25, 2017 and Thursday, October 26, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heidi Parker - Project Manager
HParker@AELLab.com

Enclosures

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

SAMPLE SUMMARY

Workorder: T1718309 Ruskin New Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1718309001	RNSW-2	Water	10/25/2017 11:06	10/25/2017 15:08
T1718309002	RNSW-3	Water	10/25/2017 09:10	10/25/2017 15:08
T1718309003	RNSW-5	Water	10/25/2017 09:45	10/25/2017 15:08
T1718309004	RNSW-6	Water	10/25/2017 10:20	10/25/2017 15:08
T1718309005	Field Blank	Water	10/25/2017 08:12	10/25/2017 15:08
T1718309006	Travel Blank	Water	10/25/2017 00:00	10/25/2017 15:08
T1718309007	RN-7S	Water	10/25/2017 08:31	10/25/2017 15:08
T1718309008	Field Blank	Water	10/25/2017 08:12	10/25/2017 15:08
T1718309009	RN-13S	Water	10/25/2017 08:52	10/25/2017 15:08
T1718309010	RN-12S	Water	10/25/2017 09:10	10/25/2017 15:08
T1718309011	RN-8S	Water	10/25/2017 09:43	10/25/2017 15:08
T1718309012	RN-6S	Water	10/25/2017 10:15	10/25/2017 15:08
T1718309013	RN-5S	Water	10/25/2017 10:56	10/25/2017 15:08
T1718309014	RN-11S	Water	10/25/2017 11:37	10/25/2017 15:08
T1718309015	RN-4S	Water	10/25/2017 12:58	10/25/2017 15:08
T1718309016	Duplicate	Water	10/25/2017 00:00	10/25/2017 15:08
T1718309017	RN-3S	Water	10/26/2017 08:47	10/26/2017 10:53
T1718309018	RN-1S	Water	10/26/2017 09:18	10/26/2017 10:53
T1718309019	MW-3	Water	10/26/2017 09:49	10/26/2017 10:53
T1718309020	RN-9S	Water	10/26/2017 10:13	10/26/2017 10:53

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309001** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-2** Date Collected: 10/25/17 11:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**404**		**uS/cm**	**1**			10/25/2017 11:06	....
Dissolved Oxygen	**0.8**		**mg/L**	**1**			10/25/2017 11:06	....
ORP-2580BW	**-135**		**mV**	**1**			10/25/2017 11:06	....
Temperature	**23.65**		**°C**	**1**			10/25/2017 11:06	....
Turbidity	**4.76**		**NTU**	**1**			10/25/2017 11:06	....
pH	**7.18**		**SU**	**1**			10/25/2017 11:06	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**6.2**		**ug/L**	**1**	1.0	0.077	11/8/2017 13:44	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 20:08	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 20:08	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/28/2017 20:08	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/28/2017 20:08	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 20:08	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/28/2017 20:08	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/28/2017 20:08	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 20:08	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 20:08	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 20:08	T
1,2,4-Trimethylbenzene	**0.90**	**I**	**ug/L**	**1**	1.0	0.54	10/28/2017 20:08	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/28/2017 20:08	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/28/2017 20:08	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 20:08	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 20:08	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/28/2017 20:08	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/28/2017 20:08	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 20:08	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/28/2017 20:08	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/28/2017 20:08	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309001** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-2** Date Collected: 10/25/17 11:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	10/28/2017 20:08	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 20:08	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 20:08	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/28/2017 20:08	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 20:08	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/28/2017 20:08	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 20:08	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/28/2017 20:08	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/28/2017 20:08	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 20:08	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 20:08	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/28/2017 20:08	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 20:08	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/28/2017 20:08	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/28/2017 20:08	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 20:08	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/28/2017 20:08	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/28/2017 20:08	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 20:08	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 20:08	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 20:08	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 20:08	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 20:08	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 20:08	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 20:08	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/28/2017 20:08	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/28/2017 20:08	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/28/2017 20:08	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 20:08	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/28/2017 20:08	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 20:08	T
Naphthalene	**7.6**		**ug/L**	**1**	1.0	0.73	10/28/2017 20:08	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 20:08	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/28/2017 20:08	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/28/2017 20:08	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/28/2017 20:08	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 20:08	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/28/2017 20:08	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 20:08	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/28/2017 20:08	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309001** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-2** Date Collected: 10/25/17 11:06

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/28/2017 20:08	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 20:08	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 20:08	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/28/2017 20:08	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 20:08	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/28/2017 20:08	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2017 20:08	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/28/2017 20:08	T
1,2-Dichloroethane-d4 (S)	**95**		**%**	**1**	70-128		10/28/2017 20:08	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		10/28/2017 20:08	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		10/28/2017 20:08	
WET CHEMISTRY								
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.0015**	**I**	**mg/L**	**1**	0.10	0.00023	11/2/2017 14:46	T
Analysis Desc: Hardness,SM2340C,Water	Analytical Method: SM 2340C							
Hardness (as CaCO3)	**170**		**mg/L**	**1**	10	2.6	11/3/2017 07:52	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309002** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-3** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1557**		**uS/cm**	**1**			10/25/2017 09:10	....
Dissolved Oxygen	**0.38**		**mg/L**	**1**			10/25/2017 09:10	....
ORP-2580BW	**-83.2**		**mV**	**1**			10/25/2017 09:10	....
Temperature	**19.44**		**°C**	**1**			10/25/2017 09:10	....
Turbidity	**19**		**NTU**	**1**			10/25/2017 09:10	....
pH	**6.39**		**SU**	**1**			10/25/2017 09:10	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**93**		**ug/L**	**10**	10	0.77	11/8/2017 13:55	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 23:08	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 23:08	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/28/2017 23:08	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/28/2017 23:08	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 23:08	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/28/2017 23:08	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/28/2017 23:08	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 23:08	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 23:08	T
1,2,4-Trichlorobenzene	**4.0**		**ug/L**	**1**	1.0	0.84	10/28/2017 23:08	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/28/2017 23:08	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/28/2017 23:08	T
1,2-Dichlorobenzene	**1.8**		**ug/L**	**1**	1.0	0.63	10/28/2017 23:08	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:08	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 23:08	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/28/2017 23:08	T
1,3-Dichlorobenzene	**12**		**ug/L**	**1**	1.0	0.43	10/28/2017 23:08	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:08	T
1,4-Dichlorobenzene	**19**		**ug/L**	**1**	1.0	0.97	10/28/2017 23:08	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/28/2017 23:08	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309002** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-3** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	10/28/2017 23:08	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 23:08	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:08	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/28/2017 23:08	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 23:08	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/28/2017 23:08	T
Acetone	**9.9**		**ug/L**	**1**	2.0	1.0	10/28/2017 23:08	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/28/2017 23:08	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/28/2017 23:08	T
Benzene	**2.6**		**ug/L**	**1**	1.0	0.17	10/28/2017 23:08	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 23:08	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/28/2017 23:08	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:08	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/28/2017 23:08	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/28/2017 23:08	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:08	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/28/2017 23:08	T
Chlorobenzene	**470**		**ug/L**	**10**	10	5.6	10/31/2017 06:38	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:08	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:08	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 23:08	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:08	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 23:08	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 23:08	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 23:08	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/28/2017 23:08	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/28/2017 23:08	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/28/2017 23:08	T
Isopropylbenzene	**0.34**	**I**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:08	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/28/2017 23:08	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 23:08	T
Naphthalene	**5.2**		**ug/L**	**1**	1.0	0.73	10/28/2017 23:08	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 23:08	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/28/2017 23:08	T
Toluene	**1.8**		**ug/L**	**1**	1.0	0.45	10/28/2017 23:08	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/28/2017 23:08	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 23:08	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/28/2017 23:08	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 23:08	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/28/2017 23:08	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309002** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-3** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/28/2017 23:08	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 23:08	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 23:08	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/28/2017 23:08	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:08	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/28/2017 23:08	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2017 23:08	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/28/2017 23:08	T
1,2-Dichloroethane-d4 (S)	**95**		**%**	**1**	70-128		10/28/2017 23:08	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		10/28/2017 23:08	
Bromofluorobenzene (S)	**102**		**%**	**1**	86-123		10/28/2017 23:08	
WET CHEMISTRY								
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.025**	**I**	**mg/L**	**1**	0.10	0.00028	11/2/2017 14:46	T
Analysis Desc: Hardness,SM2340C,Water	Analytical Method: SM 2340C							
Hardness (as CaCO3)	**2800**		**mg/L**	**1**	10	2.6	11/3/2017 07:52	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309003** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-5** Date Collected: 10/25/17 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**897**		**uS/cm**	**1**			10/25/2017 09:45	....
Dissolved Oxygen	**0.4**		**mg/L**	**1**			10/25/2017 09:45	....
ORP-2580BW	**-200.5**		**mV**	**1**			10/25/2017 09:45	....
Temperature	**18.61**		**°C**	**1**			10/25/2017 09:45	....
Turbidity	**24.1**		**NTU**	**1**			10/25/2017 09:45	....
pH	**7.39**		**SU**	**1**			10/25/2017 09:45	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**200**		**ug/L**	**10**	10	0.77	11/8/2017 13:59	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 23:34	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 23:34	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/28/2017 23:34	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/28/2017 23:34	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 23:34	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/28/2017 23:34	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/28/2017 23:34	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 23:34	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 23:34	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 23:34	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/28/2017 23:34	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/28/2017 23:34	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/28/2017 23:34	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:34	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 23:34	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/28/2017 23:34	T
1,3-Dichlorobenzene	**0.66**	**I**	**ug/L**	**1**	1.0	0.43	10/28/2017 23:34	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:34	T
1,4-Dichlorobenzene	**2.1**		**ug/L**	**1**	1.0	0.97	10/28/2017 23:34	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/28/2017 23:34	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309003** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-5** Date Collected: 10/25/17 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	10/28/2017 23:34	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 23:34	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:34	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/28/2017 23:34	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 23:34	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/28/2017 23:34	T
Acetone	**4.4**		**ug/L**	**1**	2.0	1.0	10/28/2017 23:34	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/28/2017 23:34	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/28/2017 23:34	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 23:34	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 23:34	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/28/2017 23:34	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:34	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/28/2017 23:34	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/28/2017 23:34	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 23:34	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/28/2017 23:34	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/28/2017 23:34	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:34	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:34	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 23:34	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:34	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 23:34	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 23:34	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 23:34	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/28/2017 23:34	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/28/2017 23:34	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/28/2017 23:34	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 23:34	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/28/2017 23:34	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 23:34	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 23:34	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 23:34	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/28/2017 23:34	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/28/2017 23:34	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/28/2017 23:34	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 23:34	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/28/2017 23:34	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 23:34	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/28/2017 23:34	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309003** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-5** Date Collected: 10/25/17 09:45

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/28/2017 23:34	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 23:34	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 23:34	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/28/2017 23:34	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 23:34	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/28/2017 23:34	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2017 23:34	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/28/2017 23:34	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		10/28/2017 23:34	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		10/28/2017 23:34	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		10/28/2017 23:34	
WET CHEMISTRY								
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.13**		**mg/L**	**1**	0.10	0.0013	11/2/2017 14:46	T
Analysis Desc: Hardness,SM2340C,Water	Analytical Method: SM 2340C							
Hardness (as CaCO3)	**3200**		**mg/L**	**1**	10	2.6	11/3/2017 07:52	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309004** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-6** Date Collected: 10/25/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1718**		**uS/cm**	**1**			10/25/2017 10:20	....
Dissolved Oxygen	**0.23**		**mg/L**	**1**			10/25/2017 10:20	....
ORP-2580BW	**-312.2**		**mV**	**1**			10/25/2017 10:20	....
Temperature	**20.3**		**°C**	**1**			10/25/2017 10:20	....
Turbidity	**24.2**		**NTU**	**1**			10/25/2017 10:20	....
pH	**7.07**		**SU**	**1**			10/25/2017 10:20	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**23**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:03	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/29/2017 00:00	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/29/2017 00:00	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/29/2017 00:00	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/29/2017 00:00	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/29/2017 00:00	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/29/2017 00:00	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/29/2017 00:00	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/29/2017 00:00	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/29/2017 00:00	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/29/2017 00:00	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/29/2017 00:00	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/29/2017 00:00	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/29/2017 00:00	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/29/2017 00:00	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/29/2017 00:00	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/29/2017 00:00	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/29/2017 00:00	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/29/2017 00:00	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/29/2017 00:00	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/29/2017 00:00	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309004** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-6** Date Collected: 10/25/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	10/29/2017 00:00	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/29/2017 00:00	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/29/2017 00:00	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/29/2017 00:00	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/29/2017 00:00	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/29/2017 00:00	T
Acetone	**1.1**	**I**	**ug/L**	**1**	2.0	1.0	10/29/2017 00:00	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/29/2017 00:00	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/29/2017 00:00	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/29/2017 00:00	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/29/2017 00:00	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/29/2017 00:00	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/29/2017 00:00	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/29/2017 00:00	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/29/2017 00:00	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/29/2017 00:00	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/29/2017 00:00	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/29/2017 00:00	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/29/2017 00:00	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/29/2017 00:00	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/29/2017 00:00	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/29/2017 00:00	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/29/2017 00:00	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/29/2017 00:00	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/29/2017 00:00	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/29/2017 00:00	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/29/2017 00:00	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/29/2017 00:00	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/29/2017 00:00	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/29/2017 00:00	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/29/2017 00:00	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/29/2017 00:00	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/29/2017 00:00	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/29/2017 00:00	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/29/2017 00:00	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/29/2017 00:00	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/29/2017 00:00	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/29/2017 00:00	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/29/2017 00:00	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/29/2017 00:00	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309004** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RNSW-6** Date Collected: 10/25/17 10:20

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/29/2017 00:00	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/29/2017 00:00	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/29/2017 00:00	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/29/2017 00:00	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/29/2017 00:00	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/29/2017 00:00	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/29/2017 00:00	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/29/2017 00:00	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		10/29/2017 00:00	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		10/29/2017 00:00	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		10/29/2017 00:00	
WET CHEMISTRY								
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.020**	**I**	**mg/L**	**1**	0.10	0.00014	11/2/2017 14:46	T
Analysis Desc: Hardness,SM2340C,Water	Analytical Method: SM 2340C							
Hardness (as CaCO3)	**1000**		**mg/L**	**1**	10	2.6	11/3/2017 07:52	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309005** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**0.077**	**U**	**ug/L**	**1**	1.0	0.077	11/8/2017 14:07	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 14:58	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 14:58	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/28/2017 14:58	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/28/2017 14:58	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 14:58	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/28/2017 14:58	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/28/2017 14:58	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 14:58	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 14:58	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 14:58	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/28/2017 14:58	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/28/2017 14:58	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/28/2017 14:58	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 14:58	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 14:58	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/28/2017 14:58	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/28/2017 14:58	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 14:58	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/28/2017 14:58	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/28/2017 14:58	T
2-Butanone (MEK)	**0.82**	**I**	**ug/L**	**1**	1.0	0.59	10/28/2017 14:58	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 14:58	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 14:58	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/28/2017 14:58	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 14:58	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/28/2017 14:58	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 14:58	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/28/2017 14:58	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/28/2017 14:58	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 14:58	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 14:58	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309005** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/28/2017 14:58	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 14:58	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/28/2017 14:58	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/28/2017 14:58	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 14:58	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/28/2017 14:58	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/28/2017 14:58	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 14:58	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 14:58	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 14:58	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 14:58	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 14:58	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 14:58	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 14:58	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/28/2017 14:58	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/28/2017 14:58	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/28/2017 14:58	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 14:58	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/28/2017 14:58	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	10/28/2017 14:58	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 14:58	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 14:58	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/28/2017 14:58	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/28/2017 14:58	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/28/2017 14:58	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 14:58	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/28/2017 14:58	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 14:58	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/28/2017 14:58	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/28/2017 14:58	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 14:58	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 14:58	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/28/2017 14:58	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 14:58	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/28/2017 14:58	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2017 14:58	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/28/2017 14:58	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		10/28/2017 14:58	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		10/28/2017 14:58	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		10/28/2017 14:58	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309005** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: Unionized Ammonia,DEP SOP,Water	Analytical Method: DEP SOP 10/03/83							
Unionized Ammonia	**0.00015**	**U**	**mg/L**	**1**	0.10	0.00015	11/2/2017 14:46	T
Analysis Desc: Hardness,SM2340C,Water	Analytical Method: SM 2340C							
Hardness (as CaCO3)	**2.6**	**U**	**mg/L**	**1**	10	2.6	11/3/2017 07:52	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309006** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Travel Blank** Date Collected: 10/25/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 15:24	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 15:24	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	10/28/2017 15:24	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	10/28/2017 15:24	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 15:24	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	10/28/2017 15:24	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	10/28/2017 15:24	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	10/28/2017 15:24	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 15:24	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 15:24	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	10/28/2017 15:24	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	10/28/2017 15:24	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	10/28/2017 15:24	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 15:24	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 15:24	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	10/28/2017 15:24	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	10/28/2017 15:24	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 15:24	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	10/28/2017 15:24	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	10/28/2017 15:24	T
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	10/28/2017 15:24	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	10/28/2017 15:24	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 15:24	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	10/28/2017 15:24	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	10/28/2017 15:24	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	10/28/2017 15:24	T
Acetone	**14**		**ug/L**	**1**	2.0	1.0	10/28/2017 15:24	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	10/28/2017 15:24	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	10/28/2017 15:24	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 15:24	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 15:24	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	10/28/2017 15:24	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 15:24	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	10/28/2017 15:24	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	10/28/2017 15:24	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	10/28/2017 15:24	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309006** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Travel Blank** Date Collected: 10/25/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	10/28/2017 15:24	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	10/28/2017 15:24	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 15:24	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 15:24	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 15:24	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 15:24	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	10/28/2017 15:24	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	10/28/2017 15:24	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 15:24	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	10/28/2017 15:24	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	10/28/2017 15:24	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	10/28/2017 15:24	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	10/28/2017 15:24	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	10/28/2017 15:24	T
Methylene Chloride	**4.2**		**ug/L**	**1**	2.0	1.0	10/28/2017 15:24	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	10/28/2017 15:24	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 15:24	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	10/28/2017 15:24	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	10/28/2017 15:24	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	10/28/2017 15:24	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	10/28/2017 15:24	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	10/28/2017 15:24	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	10/28/2017 15:24	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	10/28/2017 15:24	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	10/28/2017 15:24	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	10/28/2017 15:24	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	10/28/2017 15:24	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	10/28/2017 15:24	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	10/28/2017 15:24	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	10/28/2017 15:24	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	10/28/2017 15:24	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	10/28/2017 15:24	T
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	70-128		10/28/2017 15:24	
Toluene-d8 (S)	**102**		**%**	**1**	77-119		10/28/2017 15:24	
Bromofluorobenzene (S)	**104**		**%**	**1**	86-123		10/28/2017 15:24	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309007** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-7S** Date Collected: 10/25/17 08:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**2693**		**uS/cm**	**1**			10/25/2017 08:31	....
Dissolved Oxygen	**0.83**		**mg/L**	**1**			10/25/2017 08:31	....
ORP-2580BW	**-99.1**		**mV**	**1**			10/25/2017 08:31	....
Temperature	**25.42**		**°C**	**1**			10/25/2017 08:31	....
Turbidity	**4.2**		**NTU**	**1**			10/25/2017 08:31	....
pH	**6.69**		**SU**	**1**			10/25/2017 08:31	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**60**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:11	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 02:23	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 02:23	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 02:23	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 02:23	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 02:23	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 02:23	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 02:23	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 02:23	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 02:23	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:23	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 02:23	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 02:23	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 02:23	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:23	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 02:23	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 02:23	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 02:23	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:23	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 02:23	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 02:23	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309007** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-7S** Date Collected: 10/25/17 08:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 02:23	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 02:23	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:23	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 02:23	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 02:23	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 02:23	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 02:23	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 02:23	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 02:23	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 02:23	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 02:23	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 02:23	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:23	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 02:23	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 02:23	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:23	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 02:23	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 02:23	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:23	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:23	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 02:23	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:23	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 02:23	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 02:23	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 02:23	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 02:23	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 02:23	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 02:23	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:23	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 02:23	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 02:23	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 02:23	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:23	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 02:23	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 02:23	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 02:23	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:23	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 02:23	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 02:23	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 02:23	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309007** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-7S** Date Collected: 10/25/17 08:31

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 02:23	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 02:23	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 02:23	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 02:23	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:23	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 02:23	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 02:23	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 02:23	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		11/2/2017 02:23	
Toluene-d8 (S)	**101**		**%**	**1**	77-119		11/2/2017 02:23	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		11/2/2017 02:23	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.14**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1400**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309008** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**0.077**	**U**	**ug/L**	**1**	1.0	0.077	11/8/2017 14:15	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 01:31	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 01:31	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 01:31	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 01:31	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 01:31	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 01:31	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 01:31	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 01:31	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 01:31	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:31	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 01:31	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 01:31	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 01:31	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:31	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 01:31	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 01:31	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 01:31	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:31	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 01:31	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 01:31	T
2-Butanone (MEK)	**0.79**	**I**	**ug/L**	**1**	1.0	0.59	11/2/2017 01:31	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 01:31	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:31	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 01:31	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 01:31	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 01:31	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 01:31	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 01:31	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 01:31	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 01:31	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 01:31	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309008** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 01:31	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:31	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 01:31	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 01:31	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:31	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 01:31	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 01:31	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:31	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:31	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 01:31	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:31	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 01:31	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 01:31	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 01:31	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 01:31	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 01:31	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 01:31	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:31	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 01:31	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 01:31	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 01:31	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:31	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 01:31	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 01:31	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 01:31	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:31	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 01:31	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 01:31	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 01:31	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 01:31	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 01:31	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 01:31	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 01:31	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:31	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 01:31	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 01:31	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 01:31	T
1,2-Dichloroethane-d4 (S)	**97**		**%**	**1**	70-128		11/2/2017 01:31	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		11/2/2017 01:31	
Bromofluorobenzene (S)	**104**		**%**	**1**	86-123		11/2/2017 01:31	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309008** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Field Blank** Date Collected: 10/25/17 08:12

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.025**	**U**	**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**12**	**U**	**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309009** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-13S** Date Collected: 10/25/17 08:52

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1452**		**uS/cm**	**1**			10/25/2017 08:52	....
Dissolved Oxygen	**0.81**		**mg/L**	**1**			10/25/2017 08:52	....
ORP-2580BW	**-71.8**		**mV**	**1**			10/25/2017 08:52	....
Temperature	**26**		**°C**	**1**			10/25/2017 08:52	....
Turbidity	**2.02**		**NTU**	**1**			10/25/2017 08:52	....
pH	**6.96**		**SU**	**1**			10/25/2017 08:52	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**42**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:18	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 02:48	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 02:48	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 02:48	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 02:48	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 02:48	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 02:48	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 02:48	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 02:48	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 02:48	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:48	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 02:48	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 02:48	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 02:48	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:48	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 02:48	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 02:48	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 02:48	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:48	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 02:48	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 02:48	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309009** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-13S** Date Collected: 10/25/17 08:52

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 02:48	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 02:48	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:48	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 02:48	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 02:48	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 02:48	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 02:48	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 02:48	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 02:48	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 02:48	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 02:48	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 02:48	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:48	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 02:48	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 02:48	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 02:48	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 02:48	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 02:48	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:48	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:48	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 02:48	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:48	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 02:48	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 02:48	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 02:48	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 02:48	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 02:48	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 02:48	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 02:48	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 02:48	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 02:48	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 02:48	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:48	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 02:48	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 02:48	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 02:48	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 02:48	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 02:48	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 02:48	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 02:48	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309009** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-13S** Date Collected: 10/25/17 08:52

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 02:48	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 02:48	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 02:48	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 02:48	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 02:48	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 02:48	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 02:48	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 02:48	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 02:48	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		11/2/2017 02:48	
Bromofluorobenzene (S)	**107**		**%**	**1**	86-123		11/2/2017 02:48	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.09**	**I**	**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**720**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309010** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-12S** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1576**		**uS/cm**	**1**			10/25/2017 09:10	....
Dissolved Oxygen	**0.74**		**mg/L**	**1**			10/25/2017 09:10	....
ORP-2580BW	**-40**		**mV**	**1**			10/25/2017 09:10	....
Temperature	**25.55**		**°C**	**1**			10/25/2017 09:10	....
Turbidity	**10.99**		**NTU**	**1**			10/25/2017 09:10	....
pH	**6.89**		**SU**	**1**			10/25/2017 09:10	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**130**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:22	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 03:14	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 03:14	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 03:14	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 03:14	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 03:14	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 03:14	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 03:14	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 03:14	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 03:14	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:14	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 03:14	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 03:14	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 03:14	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:14	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 03:14	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 03:14	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 03:14	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:14	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 03:14	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 03:14	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309010** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-12S** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 03:14	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 03:14	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:14	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 03:14	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 03:14	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 03:14	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 03:14	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 03:14	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 03:14	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 03:14	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 03:14	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 03:14	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:14	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 03:14	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 03:14	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:14	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 03:14	T
Chlorobenzene	**0.76**	**I**	**ug/L**	**1**	1.0	0.56	11/2/2017 03:14	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:14	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:14	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 03:14	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:14	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 03:14	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 03:14	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 03:14	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 03:14	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 03:14	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 03:14	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:14	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 03:14	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 03:14	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 03:14	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:14	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 03:14	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 03:14	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 03:14	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:14	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 03:14	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 03:14	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 03:14	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309010** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-12S** Date Collected: 10/25/17 09:10

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 03:14	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 03:14	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 03:14	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 03:14	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:14	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 03:14	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 03:14	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 03:14	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 03:14	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 03:14	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		11/2/2017 03:14	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.025**	**U**	**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**810**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309011** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-8S** Date Collected: 10/25/17 09:43

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**2277**		**uS/cm**	**1**			10/25/2017 09:43	....
Dissolved Oxygen	**1.62**		**mg/L**	**1**			10/25/2017 09:43	....
ORP-2580BW	**-34.5**		**mV**	**1**			10/25/2017 09:43	....
Temperature	**24.57**		**°C**	**1**			10/25/2017 09:43	....
Turbidity	**2.57**		**NTU**	**1**			10/25/2017 09:43	....
pH	**6.95**		**SU**	**1**			10/25/2017 09:43	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**22**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:34	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 03:40	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 03:40	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 03:40	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 03:40	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 03:40	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 03:40	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 03:40	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 03:40	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 03:40	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:40	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 03:40	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 03:40	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 03:40	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:40	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 03:40	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 03:40	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 03:40	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:40	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 03:40	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 03:40	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309011** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-8S** Date Collected: 10/25/17 09:43

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 03:40	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 03:40	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:40	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 03:40	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 03:40	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 03:40	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 03:40	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 03:40	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 03:40	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 03:40	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 03:40	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 03:40	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:40	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 03:40	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 03:40	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 03:40	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 03:40	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 03:40	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:40	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:40	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 03:40	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:40	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 03:40	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 03:40	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 03:40	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 03:40	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 03:40	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 03:40	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 03:40	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 03:40	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 03:40	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 03:40	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:40	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 03:40	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 03:40	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 03:40	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 03:40	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 03:40	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 03:40	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 03:40	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309011** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-8S** Date Collected: 10/25/17 09:43

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 03:40	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 03:40	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 03:40	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 03:40	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 03:40	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 03:40	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 03:40	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 03:40	T
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	70-128		11/2/2017 03:40	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 03:40	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		11/2/2017 03:40	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.025**	**U**	**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**610**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309012** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-6S** Date Collected: 10/25/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**869**		**uS/cm**	**1**			10/25/2017 10:15	....
Dissolved Oxygen	**0.4**		**mg/L**	**1**			10/25/2017 10:15	....
ORP-2580BW	**-22.8**		**mV**	**1**			10/25/2017 10:15	....
Temperature	**26.83**		**°C**	**1**			10/25/2017 10:15	....
Turbidity	**1.32**		**NTU**	**1**			10/25/2017 10:15	....
pH	**7.05**		**SU**	**1**			10/25/2017 10:15	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**21**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:38	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:05	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:05	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 04:05	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 04:05	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:05	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 04:05	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 04:05	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:05	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:05	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:05	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 04:05	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 04:05	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 04:05	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:05	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:05	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 04:05	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 04:05	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:05	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 04:05	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 04:05	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309012** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-6S** Date Collected: 10/25/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 04:05	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:05	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:05	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 04:05	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:05	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 04:05	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:05	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 04:05	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 04:05	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:05	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:05	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 04:05	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:05	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 04:05	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 04:05	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:05	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 04:05	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 04:05	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:05	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:05	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:05	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:05	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:05	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:05	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:05	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 04:05	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 04:05	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 04:05	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:05	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 04:05	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:05	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:05	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:05	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 04:05	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 04:05	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 04:05	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:05	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 04:05	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:05	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 04:05	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309012** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-6S** Date Collected: 10/25/17 10:15

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 04:05	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:05	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:05	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 04:05	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:05	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 04:05	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 04:05	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 04:05	T
1,2-Dichloroethane-d4 (S)	**102**		**%**	**1**	70-128		11/2/2017 04:05	
Toluene-d8 (S)	**96**		**%**	**1**	77-119		11/2/2017 04:05	
Bromofluorobenzene (S)	**103**		**%**	**1**	86-123		11/2/2017 04:05	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.19**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**380**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309013** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-5S** Date Collected: 10/25/17 10:56

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**2780**		**uS/cm**	**1**			10/25/2017 10:56	....
Dissolved Oxygen	**0.54**		**mg/L**	**1**			10/25/2017 10:56	....
ORP-2580BW	**-81.2**		**mV**	**1**			10/25/2017 10:56	....
Temperature	**24.67**		**°C**	**1**			10/25/2017 10:56	....
Turbidity	**4.49**		**NTU**	**1**			10/25/2017 10:56	....
pH	**6.8**		**SU**	**1**			10/25/2017 10:56	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**16**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:42	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:31	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:31	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 04:31	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 04:31	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:31	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 04:31	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 04:31	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:31	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:31	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:31	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 04:31	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 04:31	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 04:31	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:31	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:31	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 04:31	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 04:31	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:31	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 04:31	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 04:31	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309013** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-5S** Date Collected: 10/25/17 10:56

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 04:31	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:31	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:31	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 04:31	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:31	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 04:31	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:31	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 04:31	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 04:31	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:31	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:31	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 04:31	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:31	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 04:31	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 04:31	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:31	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 04:31	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 04:31	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:31	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:31	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:31	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:31	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:31	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:31	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:31	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 04:31	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 04:31	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 04:31	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:31	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 04:31	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:31	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:31	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:31	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 04:31	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 04:31	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 04:31	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:31	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 04:31	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:31	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 04:31	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309013** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-5S** Date Collected: 10/25/17 10:56

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 04:31	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:31	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:31	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 04:31	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:31	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 04:31	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 04:31	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 04:31	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 04:31	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 04:31	
Bromofluorobenzene (S)	**104**		**%**	**1**	86-123		11/2/2017 04:31	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.16**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1900**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309014** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-11S** Date Collected: 10/25/17 11:37

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**3372**		**uS/cm**	**1**			10/25/2017 11:37	....
Dissolved Oxygen	**1.07**		**mg/L**	**1**			10/25/2017 11:37	....
ORP-2580BW	**-87.3**		**mV**	**1**			10/25/2017 11:37	....
Temperature	**26.19**		**°C**	**1**			10/25/2017 11:37	....
Turbidity	**10.37**		**NTU**	**1**			10/25/2017 11:37	....
pH	**6.78**		**SU**	**1**			10/25/2017 11:37	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**85**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:45	J
VOLATILES								
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1600**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:57	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:57	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 04:57	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 04:57	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:57	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 04:57	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 04:57	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 04:57	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:57	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:57	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 04:57	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 04:57	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 04:57	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:57	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:57	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 04:57	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 04:57	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309014** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-11S** Date Collected: 10/25/17 11:37

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:57	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 04:57	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 04:57	T
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 04:57	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 04:57	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:57	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 04:57	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 04:57	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 04:57	T
Acetone	**1.0**	**I**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:57	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 04:57	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 04:57	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:57	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:57	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 04:57	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:57	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 04:57	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 04:57	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 04:57	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 04:57	T
Chlorobenzene	**7.1**		**ug/L**	**1**	1.0	0.56	11/2/2017 04:57	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:57	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:57	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:57	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:57	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 04:57	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 04:57	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:57	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 04:57	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 04:57	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 04:57	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 04:57	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 04:57	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 04:57	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 04:57	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:57	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 04:57	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 04:57	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 04:57	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 04:57	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309014** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-11S** Date Collected: 10/25/17 11:37

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 04:57	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 04:57	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 04:57	T
cis-1,2-Dichloroethylene	**1.4**		**ug/L**	**1**	1.0	0.51	11/2/2017 04:57	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 04:57	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 04:57	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 04:57	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 04:57	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 04:57	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 04:57	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 04:57	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		11/2/2017 04:57	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		11/2/2017 04:57	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		11/2/2017 04:57	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**4.0**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309015** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-4S** Date Collected: 10/25/17 12:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1224**		**uS/cm**	**1**			10/25/2017 12:58	....
Dissolved Oxygen	**0.35**		**mg/L**	**1**			10/25/2017 12:58	....
ORP-2580BW	**-88.1**		**mV**	**1**			10/25/2017 12:58	....
Temperature	**25.19**		**°C**	**1**			10/25/2017 12:58	....
Turbidity	**5.69**		**NTU**	**1**			10/25/2017 12:58	....
pH	**7.27**		**SU**	**1**			10/25/2017 12:58	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**2.5**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:49	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 05:23	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 05:23	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 05:23	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 05:23	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 05:23	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 05:23	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 05:23	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 05:23	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 05:23	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:23	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 05:23	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 05:23	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 05:23	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:23	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 05:23	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 05:23	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 05:23	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:23	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 05:23	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 05:23	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309015** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-4S** Date Collected: 10/25/17 12:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 05:23	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 05:23	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:23	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 05:23	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 05:23	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 05:23	T
Acetone	**3.6**		**ug/L**	**1**	2.0	1.0	11/2/2017 05:23	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 05:23	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 05:23	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 05:23	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 05:23	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 05:23	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:23	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 05:23	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 05:23	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:23	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 05:23	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 05:23	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:23	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:23	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 05:23	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:23	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 05:23	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 05:23	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 05:23	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 05:23	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 05:23	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 05:23	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:23	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 05:23	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 05:23	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 05:23	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:23	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 05:23	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 05:23	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 05:23	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:23	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 05:23	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 05:23	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 05:23	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309015** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **RN-4S** Date Collected: 10/25/17 12:58

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 05:23	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 05:23	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 05:23	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 05:23	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:23	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 05:23	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 05:23	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 05:23	T
1,2-Dichloroethane-d4 (S)	**101**		**%**	**1**	70-128		11/2/2017 05:23	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 05:23	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		11/2/2017 05:23	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.04**	**I**	**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**720**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309016** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Duplicate** Date Collected: 10/25/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**85**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:53	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 05:48	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 05:48	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 05:48	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 05:48	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 05:48	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 05:48	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 05:48	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 05:48	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 05:48	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:48	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 05:48	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 05:48	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 05:48	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:48	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 05:48	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 05:48	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 05:48	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:48	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 05:48	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 05:48	T
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 05:48	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 05:48	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:48	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 05:48	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 05:48	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 05:48	T
Acetone	**1.6**	**I**	**ug/L**	**1**	2.0	1.0	11/2/2017 05:48	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 05:48	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 05:48	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 05:48	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 05:48	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309016** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Duplicate** Date Collected: 10/25/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 05:48	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:48	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 05:48	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 05:48	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 05:48	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 05:48	T
Chlorobenzene	**7.4**		**ug/L**	**1**	1.0	0.56	11/2/2017 05:48	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:48	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:48	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 05:48	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:48	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 05:48	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 05:48	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 05:48	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 05:48	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 05:48	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 05:48	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 05:48	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 05:48	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 05:48	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 05:48	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:48	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 05:48	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 05:48	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 05:48	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 05:48	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 05:48	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 05:48	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 05:48	T
cis-1,2-Dichloroethylene	**1.5**		**ug/L**	**1**	1.0	0.51	11/2/2017 05:48	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 05:48	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 05:48	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 05:48	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 05:48	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 05:48	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 05:48	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 05:48	T
1,2-Dichloroethane-d4 (S)	**98**		**%**	**1**	70-128		11/2/2017 05:48	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 05:48	
Bromofluorobenzene (S)	**106**		**%**	**1**	86-123		11/2/2017 05:48	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309016** Date Received: 10/25/17 15:08 Matrix: Water

Sample ID: **Duplicate** Date Collected: 10/25/17 00:00

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**3.9**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1600**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309017** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-3S** Date Collected: 10/26/17 08:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1179**		**uS/cm**	**1**			10/26/2017 08:47	....
Dissolved Oxygen	**0.42**		**mg/L**	**1**			10/26/2017 08:47	....
ORP-2580BW	**-22.9**		**mV**	**1**			10/26/2017 08:47	....
Temperature	**24.95**		**°C**	**1**			10/26/2017 08:47	....
Turbidity	**3.3**		**NTU**	**1**			10/26/2017 08:47	....
pH	**6.9**		**SU**	**1**			10/26/2017 08:47	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**3.2**		**ug/L**	**1**	1.0	0.077	11/8/2017 14:57	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 01:57	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 01:57	T
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	11/2/2017 01:57	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 01:57	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 01:57	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 01:57	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 01:57	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 01:57	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 01:57	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:57	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 01:57	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 01:57	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 01:57	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:57	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 01:57	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 01:57	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 01:57	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:57	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 01:57	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 01:57	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309017** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-3S** Date Collected: 10/26/17 08:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 01:57	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 01:57	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:57	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 01:57	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 01:57	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 01:57	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 01:57	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 01:57	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 01:57	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 01:57	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 01:57	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 01:57	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:57	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 01:57	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 01:57	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 01:57	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 01:57	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 01:57	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:57	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:57	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 01:57	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:57	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 01:57	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 01:57	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 01:57	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 01:57	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 01:57	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 01:57	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 01:57	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 01:57	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 01:57	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 01:57	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:57	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 01:57	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 01:57	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 01:57	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 01:57	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 01:57	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 01:57	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 01:57	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309017** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-3S** Date Collected: 10/26/17 08:47

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 01:57	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 01:57	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 01:57	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 01:57	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 01:57	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 01:57	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 01:57	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 01:57	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 01:57	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		11/2/2017 01:57	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		11/2/2017 01:57	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.10**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**1300**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309018** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-1S** Date Collected: 10/26/17 09:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**3322**		**uS/cm**	**1**			10/26/2017 09:18	....
Dissolved Oxygen	**0.49**		**mg/L**	**1**			10/26/2017 09:18	....
ORP-2580BW	**-95.5**		**mV**	**1**			10/26/2017 09:18	....
Temperature	**29.55**		**°C**	**1**			10/26/2017 09:18	....
Turbidity	**12.5**		**NTU**	**1**			10/26/2017 09:18	....
pH	**6.68**		**SU**	**1**			10/26/2017 09:18	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**85**		**ug/L**	**1**	1.0	0.077	11/8/2017 15:01	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 06:14	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 06:14	T
1,1,2,2-Tetrachloroethane	**0.20**	**U**	**ug/L**	**1**	1.0	0.20	11/2/2017 06:14	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 06:14	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 06:14	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 06:14	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 06:14	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 06:14	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 06:14	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:14	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 06:14	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 06:14	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 06:14	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:14	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 06:14	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 06:14	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 06:14	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:14	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 06:14	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 06:14	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309018** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-1S** Date Collected: 10/26/17 09:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 06:14	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 06:14	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:14	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 06:14	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 06:14	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 06:14	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 06:14	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 06:14	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 06:14	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 06:14	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 06:14	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 06:14	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:14	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 06:14	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 06:14	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:14	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 06:14	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 06:14	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:14	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:14	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 06:14	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:14	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 06:14	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 06:14	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 06:14	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 06:14	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 06:14	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 06:14	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:14	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 06:14	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 06:14	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 06:14	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:14	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 06:14	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 06:14	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 06:14	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:14	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 06:14	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 06:14	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 06:14	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309018** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-1S** Date Collected: 10/26/17 09:18

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 06:14	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 06:14	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 06:14	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 06:14	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:14	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 06:14	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 06:14	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 06:14	T
1,2-Dichloroethane-d4 (S)	**99**		**%**	**1**	70-128		11/2/2017 06:14	
Toluene-d8 (S)	**98**		**%**	**1**	77-119		11/2/2017 06:14	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		11/2/2017 06:14	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.27**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**2200**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309019** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **MW-3** Date Collected: 10/26/17 09:49

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**3206**		**uS/cm**	**1**			10/26/2017 09:49	....
Dissolved Oxygen	**0.39**		**mg/L**	**1**			10/26/2017 09:49	....
ORP-2580BW	**-89.2**		**mV**	**1**			10/26/2017 09:49	....
Temperature	**25.02**		**°C**	**1**			10/26/2017 09:49	....
Turbidity	**8.8**		**NTU**	**1**			10/26/2017 09:49	....
pH	**6.8**		**SU**	**1**			10/26/2017 09:49	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**38**		**ug/L**	**1**	1.0	0.077	11/8/2017 15:05	J
VOLATILES								
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 06:40	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 06:40	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 06:40	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 06:40	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 06:40	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 06:40	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 06:40	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 06:40	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 06:40	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:40	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 06:40	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 06:40	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 06:40	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:40	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 06:40	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 06:40	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 06:40	T
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:40	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 06:40	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 06:40	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309019** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **MW-3** Date Collected: 10/26/17 09:49

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 06:40	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 06:40	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:40	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 06:40	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 06:40	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 06:40	T
Acetone	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 06:40	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 06:40	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 06:40	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 06:40	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 06:40	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 06:40	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:40	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 06:40	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 06:40	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 06:40	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 06:40	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 06:40	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:40	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:40	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 06:40	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:40	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 06:40	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 06:40	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 06:40	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 06:40	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 06:40	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 06:40	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 06:40	T
Methyl tert-butyl Ether (MTBE)	**0.41**	**U**	**ug/L**	**1**	1.0	0.41	11/2/2017 06:40	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 06:40	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 06:40	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:40	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 06:40	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 06:40	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 06:40	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 06:40	T
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 06:40	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 06:40	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 06:40	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309019** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **MW-3** Date Collected: 10/26/17 09:49

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 06:40	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 06:40	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 06:40	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 06:40	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 06:40	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 06:40	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 06:40	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 06:40	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 06:40	
Toluene-d8 (S)	**99**		**%**	**1**	77-119		11/2/2017 06:40	
Bromofluorobenzene (S)	**105**		**%**	**1**	86-123		11/2/2017 06:40	
WET CHEMISTRY								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.15**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**2200**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309020** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-9S** Date Collected: 10/26/17 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Analytical Method: Field Measurements							
Conductivity	**1424**		**uS/cm**	**1**			10/26/2017 10:13	....
Dissolved Oxygen	**0.27**		**mg/L**	**1**			10/26/2017 10:13	....
ORP-2580BW	**-38.5**		**mV**	**1**			10/26/2017 10:13	....
Temperature	**25.58**		**°C**	**1**			10/26/2017 10:13	....
Turbidity	**1.15**		**NTU**	**1**			10/26/2017 10:13	....
pH	**6.74**		**SU**	**1**			10/26/2017 10:13	....
METALS								
Analysis Desc: SW846 6020B Analysis,Total	Preparation Method: SW-846 3010A Analytical Method: SW-846 6020							
Arsenic	**9.0**		**ug/L**	**1**	1.0	0.077	11/8/2017 15:09	J
VOLATILES								
Analysis Desc: Ammonia,E350.1,Water	Analytical Method: EPA 350.1							
Ammonia (N)	**0.33**		**mg/L**	**1**	0.10	0.025	11/1/2017 15:17	T
Analysis Desc: 8260B Analysis, Water	Preparation Method: SW-846 5030B Analytical Method: SW-846 8260B							
1,1,1,2-Tetrachloroethane	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 07:05	T
1,1,1-Trichloroethane	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 07:05	T
1,1,2,2-Tetrachloroethane	**0.32**	**U**	**ug/L**	**1**	1.0	0.32	11/2/2017 07:05	T
1,1,2-Trichloroethane	**0.46**	**U**	**ug/L**	**1**	1.0	0.46	11/2/2017 07:05	T
1,1-Dichloroethane	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 07:05	T
1,1-Dichloroethylene	**0.70**	**U**	**ug/L**	**1**	1.0	0.70	11/2/2017 07:05	T
1,1-Dichloropropene	**0.39**	**U**	**ug/L**	**1**	1.0	0.39	11/2/2017 07:05	T
1,2,3-Trichlorobenzene	**0.86**	**U**	**ug/L**	**1**	1.0	0.86	11/2/2017 07:05	T
1,2,3-Trichloropropane	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 07:05	T
1,2,4-Trichlorobenzene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 07:05	T
1,2,4-Trimethylbenzene	**0.54**	**U**	**ug/L**	**1**	1.0	0.54	11/2/2017 07:05	T
1,2-Dibromo-3-Chloropropane	**2.3**	**U**	**ug/L**	**1**	3.0	2.3	11/2/2017 07:05	T
1,2-Dichlorobenzene	**0.63**	**U**	**ug/L**	**1**	1.0	0.63	11/2/2017 07:05	T
1,2-Dichloroethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 07:05	T
1,2-Dichloropropane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 07:05	T
1,3,5-Trimethylbenzene	**0.68**	**U**	**ug/L**	**1**	1.0	0.68	11/2/2017 07:05	T
1,3-Dichlorobenzene	**0.43**	**U**	**ug/L**	**1**	1.0	0.43	11/2/2017 07:05	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309020** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-9S** Date Collected: 10/26/17 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
1,3-Dichloropropane	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 07:05	T
1,4-Dichlorobenzene	**0.97**	**U**	**ug/L**	**1**	1.0	0.97	11/2/2017 07:05	T
2,2-Dichloropropane	**0.82**	**U**	**ug/L**	**1**	1.0	0.82	11/2/2017 07:05	T
2-Butanone (MEK)	**0.59**	**U**	**ug/L**	**1**	1.0	0.59	11/2/2017 07:05	T
2-Chloroethyl Vinyl Ether	**0.58**	**U**	**ug/L**	**1**	1.0	0.58	11/2/2017 07:05	T
2-Chlorotoluene	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 07:05	T
2-Hexanone	**0.99**	**U**	**ug/L**	**1**	1.0	0.99	11/2/2017 07:05	T
4-Chlorotoluene	**0.44**	**U**	**ug/L**	**1**	1.0	0.44	11/2/2017 07:05	T
4-Methyl-2-pentanone (MIBK)	**0.93**	**U**	**ug/L**	**1**	1.0	0.93	11/2/2017 07:05	T
Acetone	**1.4**	**I**	**ug/L**	**1**	2.0	1.0	11/2/2017 07:05	T
Acrolein (Propenal)	**3.1**	**U**	**ug/L**	**1**	4.0	3.1	11/2/2017 07:05	T
Acrylonitrile	**4.6**	**U**	**ug/L**	**1**	5.0	4.6	11/2/2017 07:05	T
Benzene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 07:05	T
Bromobenzene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 07:05	T
Bromochloromethane	**0.33**	**U**	**ug/L**	**1**	1.0	0.33	11/2/2017 07:05	T
Bromodichloromethane	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 07:05	T
Bromoform	**0.61**	**U**	**ug/L**	**1**	1.0	0.61	11/2/2017 07:05	T
Bromomethane	**0.81**	**U**	**ug/L**	**1**	1.0	0.81	11/2/2017 07:05	T
Carbon Disulfide	**0.49**	**U**	**ug/L**	**1**	1.0	0.49	11/2/2017 07:05	T
Carbon Tetrachloride	**0.57**	**U**	**ug/L**	**1**	1.0	0.57	11/2/2017 07:05	T
Chlorobenzene	**0.56**	**U**	**ug/L**	**1**	1.0	0.56	11/2/2017 07:05	T
Chloroethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 07:05	T
Chloroform	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 07:05	T
Chloromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 07:05	T
Dibromochloromethane	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 07:05	T
Dibromomethane	**0.76**	**U**	**ug/L**	**1**	1.0	0.76	11/2/2017 07:05	T
Dichlorodifluoromethane	**0.36**	**U**	**ug/L**	**1**	1.0	0.36	11/2/2017 07:05	T
Ethylbenzene	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 07:05	T
Ethylene Dibromide (EDB)	**0.67**	**U**	**ug/L**	**1**	1.0	0.67	11/2/2017 07:05	T
Hexachlorobutadiene	**0.94**	**U**	**ug/L**	**1**	1.0	0.94	11/2/2017 07:05	T
Iodomethane (Methyl Iodide)	**0.65**	**U**	**ug/L**	**1**	1.0	0.65	11/2/2017 07:05	T
Isopropylbenzene	**0.31**	**U**	**ug/L**	**1**	1.0	0.31	11/2/2017 07:05	T
Methyl tert-butyl Ether (MTBE)	**3.0**		**ug/L**	**1**	1.0	0.41	11/2/2017 07:05	T
Methylene Chloride	**1.0**	**U**	**ug/L**	**1**	2.0	1.0	11/2/2017 07:05	T
Naphthalene	**0.73**	**U**	**ug/L**	**1**	1.0	0.73	11/2/2017 07:05	T
Styrene	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 07:05	T
Tetrachloroethylene (PCE)	**0.52**	**U**	**ug/L**	**1**	1.0	0.52	11/2/2017 07:05	T
Toluene	**0.45**	**U**	**ug/L**	**1**	1.0	0.45	11/2/2017 07:05	T
Trichloroethene	**0.66**	**U**	**ug/L**	**1**	1.0	0.66	11/2/2017 07:05	T
Trichlorofluoromethane	**0.84**	**U**	**ug/L**	**1**	1.0	0.84	11/2/2017 07:05	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS

Workorder: T1718309 Ruskin New Landfill

Lab ID: **T1718309020** Date Received: 10/26/17 10:53 Matrix: Water

Sample ID: **RN-9S** Date Collected: 10/26/17 10:13

Sample Description: Location:

Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
Vinyl Acetate	**0.40**	**U**	**ug/L**	**1**	1.0	0.40	11/2/2017 07:05	T
Vinyl Chloride	**0.26**	**U**	**ug/L**	**1**	1.0	0.26	11/2/2017 07:05	T
Xylene (Total)	**1.1**	**U**	**ug/L**	**1**	3.0	1.1	11/2/2017 07:05	T
cis-1,2-Dichloroethylene	**0.51**	**U**	**ug/L**	**1**	1.0	0.51	11/2/2017 07:05	T
cis-1,3-Dichloropropene	**0.17**	**U**	**ug/L**	**1**	1.0	0.17	11/2/2017 07:05	T
n-Butylbenzene	**0.64**	**U**	**ug/L**	**1**	1.0	0.64	11/2/2017 07:05	T
n-propylbenzene	**0.48**	**U**	**ug/L**	**1**	1.0	0.48	11/2/2017 07:05	T
sec-butylbenzene	**0.38**	**U**	**ug/L**	**1**	1.0	0.38	11/2/2017 07:05	T
tert-butylbenzene	**0.53**	**U**	**ug/L**	**1**	1.0	0.53	11/2/2017 07:05	T
trans-1,2-Dichloroethylene	**0.50**	**U**	**ug/L**	**1**	1.0	0.50	11/2/2017 07:05	T
trans-1,3-Dichloropropylene	**0.29**	**U**	**ug/L**	**1**	1.0	0.29	11/2/2017 07:05	T
1,2-Dichloroethane-d4 (S)	**100**		**%**	**1**	70-128		11/2/2017 07:05	
Toluene-d8 (S)	**100**		**%**	**1**	77-119		11/2/2017 07:05	
Bromofluorobenzene (S)	**109**		**%**	**1**	86-123		11/2/2017 07:05	

VOLATILES

Analysis Desc: Tot Dissolved Solids,SM2540C	Analytical Method: SM 2540 C							
Total Dissolved Solids	**780**		**mg/L**	**1.25**	12	12	10/31/2017 09:02	T

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.

Advanced Environmental Laboratories, Inc
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

ANALYTICAL RESULTS QUALIFIERS

Workorder: T1718309 Ruskin New Landfill

PARAMETER QUALIFIERS

U	The compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

LAB QUALIFIERS

J	DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
T	DOH Certification #E84589(AEL-T)(FL NELAC Certification)
T^	Not Certified

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

QC Batch: DGMj/3724 Analysis Method: SW-846 6020
QC Batch Method: SW-846 3010A Prepared: 10/31/2017 03:30
Associated Lab Samples: T1718309001, T1718309002, T1718309003, T1718309004, T1718309005, T1718309007, T1718309008,

METHOD BLANK: 2515024

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
METALS				
Arsenic	ug/L	0.077	0.077	U

LABORATORY CONTROL SAMPLE: 2515025

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
METALS						
Arsenic	ug/L	100	94	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2515026 2515027 Original: T1718309001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
METALS											
Arsenic	ug/L	6.2	100	100	110	95	99	75-125	4	20	

QC Batch: MSVt/3833 Analysis Method: SW-846 8260B
QC Batch Method: SW-846 5030B Prepared: 10/27/2017 18:00
Associated Lab Samples: T1718309001, T1718309002, T1718309003, T1718309004, T1718309005, T1718309006

METHOD BLANK: 2515258

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Dichlorodifluoromethane	ug/L	0.36	0.36	U
Chloromethane	ug/L	0.53	0.53	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Trichlorofluoromethane	ug/L	0.84	0.84	U
Acrolein (Propenal)	ug/L	3.5	3.5	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

METHOD BLANK: 2515258

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Acetone	ug/L	1.0	1.0	U
1,1-Dichloroethylene	ug/L	0.70	0.70	U
Iodomethane (Methyl Iodide)	ug/L	0.65	0.65	U
Acrylonitrile	ug/L	1.9	1.9	U
Methylene Chloride	ug/L	1.0	1.0	U
Carbon Disulfide	ug/L	0.49	0.49	U
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	U
Methyl tert-butyl Ether (MTBE)	ug/L	0.41	0.41	U
1,1-Dichloroethane	ug/L	0.86	0.86	U
Vinyl Acetate	ug/L	0.40	0.40	U
2-Butanone (MEK)	ug/L	0.59	0.59	U
cis-1,2-Dichloroethylene	ug/L	0.51	0.51	U
Bromochloromethane	ug/L	0.33	0.33	U
Chloroform	ug/L	0.31	0.31	U
2,2-Dichloropropane	ug/L	0.82	0.82	U
1,2-Dichloroethane	ug/L	0.60	0.60	U
1,1,1-Trichloroethane	ug/L	0.44	0.44	U
1,1-Dichloropropene	ug/L	0.39	0.39	U
Carbon Tetrachloride	ug/L	0.60	0.60	U
Benzene	ug/L	0.20	0.20	U
Dibromomethane	ug/L	0.76	0.76	U
1,2-Dichloropropane	ug/L	0.76	0.76	U
Trichloroethene	ug/L	0.60	0.60	U
Bromodichloromethane	ug/L	0.60	0.60	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
cis-1,3-Dichloropropene	ug/L	0.20	0.20	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.93	0.93	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2-Trichloroethane	ug/L	0.46	0.46	U
Toluene	ug/L	0.45	0.45	U
1,3-Dichloropropane	ug/L	0.40	0.40	U
2-Hexanone	ug/L	0.99	0.99	U
Dibromochloromethane	ug/L	0.40	0.40	U
Ethylene Dibromide (EDB)	ug/L	0.67	0.67	U
Tetrachloroethylene (PCE)	ug/L	0.60	0.60	U
1,1,1,2-Tetrachloroethane	ug/L	0.64	0.64	U
Chlorobenzene	ug/L	0.56	0.56	U
Ethylbenzene	ug/L	0.26	0.26	U
Bromoform	ug/L	0.88	0.88	U
Styrene	ug/L	0.84	0.84	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.58	0.58	U
Isopropylbenzene	ug/L	0.80	0.80	U
Bromobenzene	ug/L	0.73	0.73	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

METHOD BLANK: 2515258

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
n-propylbenzene	ug/L	0.48	0.48	U
2-Chlorotoluene	ug/L	0.49	0.49	U
4-Chlorotoluene	ug/L	0.44	0.44	U
1,3,5-Trimethylbenzene	ug/L	0.68	0.68	U
tert-butylbenzene	ug/L	0.53	0.53	U
1,2,4-Trimethylbenzene	ug/L	0.54	0.54	U
sec-butylbenzene	ug/L	0.38	0.38	U
1,3-Dichlorobenzene	ug/L	0.43	0.43	U
1,4-Dichlorobenzene	ug/L	0.97	0.97	U
1,2-Dichlorobenzene	ug/L	0.63	0.63	U
n-Butylbenzene	ug/L	0.64	0.64	U
1,2-Dibromo-3-Chloropropane	ug/L	2.3	2.3	U
1,2,4-Trichlorobenzene	ug/L	0.84	0.84	U
Naphthalene	ug/L	0.73	0.73	U
Hexachlorobutadiene	ug/L	0.40	0.40	U
1,2,3-Trichlorobenzene	ug/L	0.86	0.86	U
Xylene (Total)	ug/L	0.56	0.56	U
1,2-Dichloroethane-d4 (S)	%	96	70-128	
Toluene-d8 (S)	%	97	77-119	
Bromofluorobenzene (S)	%	104	86-123	

LABORATORY CONTROL SAMPLE: 2515259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
VOLATILES						
Vinyl Chloride	ug/L	20	20	101	70-130	
1,1-Dichloroethylene	ug/L	20	20	99	70-130	
Methyl tert-butyl Ether (MTBE)	ug/L	20	20	101	70-130	
cis-1,2-Dichloroethylene	ug/L	20	20	98	70-130	
Chloroform	ug/L	20	20	101	70-130	
Benzene	ug/L	20	21	103	70-130	
Trichloroethene	ug/L	20	20	99	70-130	
Toluene	ug/L	20	20	100	70-130	
Tetrachloroethylene (PCE)	ug/L	20	19	95	70-130	
Chlorobenzene	ug/L	20	19	96	70-130	
Ethylbenzene	ug/L	20	20	99	70-130	
1,2,4-Trimethylbenzene	ug/L	20	20	99	70-130	
1,3-Dichlorobenzene	ug/L	20	19	96	70-130	
1,2-Dichlorobenzene	ug/L	20	20	99	70-130	
Xylene (Total)	ug/L	60	60	100	70-130	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

LABORATORY CONTROL SAMPLE: 2515259

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			98	70-128	
Toluene-d8 (S)	%			98	77-119	
Bromofluorobenzene (S)	%			100	86-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2515260 2515261 Original: T1718309001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES											
Vinyl Chloride	ug/L	0	20	17	17	87	87	70-130	0	30	
1,1-Dichloroethylene	ug/L	0	20	20	19	100	97	70-130	3	30	
Methyl tert-butyl Ether (MTBE)	ug/L	0	20	20	19	102	97	70-130	5	30	
cis-1,2-Dichloroethylene	ug/L	0	20	20	19	102	97	70-130	5	30	
Chloroform	ug/L	0	20	20	19	102	95	70-130	7	30	
Benzene	ug/L	0	20	21	19	103	96	70-130	7	30	
Trichloroethene	ug/L	0	20	21	20	104	99	70-130	5	30	
Toluene	ug/L	0	20	20	20	101	98	70-130	4	30	
Tetrachloroethylene (PCE)	ug/L	0	20	23	22	114	112	70-130	2	30	
Chlorobenzene	ug/L	0	20	20	20	102	98	70-130	4	30	
Ethylbenzene	ug/L	0	20	21	20	106	100	70-130	6	30	
1,2,4-Trimethylbenzene	ug/L	0.9	20	20	20	98	93	70-130	5	30	
1,3-Dichlorobenzene	ug/L	0	20	20	19	100	94	70-130	6	30	
1,2-Dichlorobenzene	ug/L	0	20	21	19	103	95	70-130	8	30	
Xylene (Total)	ug/L	0.98	60	63	60	105	99	70-130	6	30	
1,2-Dichloroethane-d4 (S)	%	95				93	94	70-128	1		
Toluene-d8 (S)	%	101				97	98	77-119	2		
Bromofluorobenzene (S)	%	105				102	101	86-123	1		

QC Batch: WCAt/11744 Analysis Method: SM 2540 C

QC Batch Method: SM 2540 C Prepared:

Associated Lab Samples: T1718309007, T1718309008, T1718309009, T1718309010, T1718309011, T1718309012, T1718309013, T1718309014,

METHOD BLANK: 2515437

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Total Dissolved Solids	mg/L	10	10	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

LABORATORY CONTROL SAMPLE: 2515438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	660	610	93	75-125	

SAMPLE DUPLICATE: 2515439 Original: T1718285001

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	240	250	4	5	

SAMPLE DUPLICATE: 2515440 Original: T1718309014

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
WET CHEMISTRY						
Total Dissolved Solids	mg/L	1600	1600	1	5	

QC Batch: WCAt/11788 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Prepared:

Associated Lab Samples: T1718309007, T1718309008, T1718309009, T1718309010, T1718309011, T1718309012, T1718309013, T1718309014,

METHOD BLANK: 2517507

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Ammonia (N)	mg/L	0.025	0.025	U

LABORATORY CONTROL SAMPLE: 2517508

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Ammonia (N)	mg/L	0.5	0.54	109	90-110	

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2517509 2517510 Original: T1718309011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0	1	0.95	0.93	95	93	90-110	2	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2517511 2517512 Original: T1718309020

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Ammonia (N)	mg/L	0.33	1	1.3	1.3	97	97	90-110	0	10	

QC Batch: MSVt/3860 Analysis Method: SW-846 8260B

QC Batch Method: SW-846 5030B Prepared: 11/01/2017 17:00

Associated Lab Samples: T1718309007, T1718309008, T1718309009, T1718309010, T1718309011, T1718309012, T1718309013, T1718309014,

METHOD BLANK: 2519045

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
VOLATILES				
Dichlorodifluoromethane	ug/L	0.36	0.36	U
Chloromethane	ug/L	0.53	0.53	U
Vinyl Chloride	ug/L	0.20	0.20	U
Bromomethane	ug/L	0.97	0.97	U
Chloroethane	ug/L	0.38	0.38	U
Trichlorofluoromethane	ug/L	0.84	0.84	U
Acrolein (Propenal)	ug/L	3.5	3.5	U
Acetone	ug/L	1.0	1.0	U
1,1-Dichloroethylene	ug/L	0.70	0.70	U
Iodomethane (Methyl Iodide)	ug/L	0.65	0.65	U
Acrylonitrile	ug/L	1.9	1.9	U
Methylene Chloride	ug/L	1.0	1.0	U
Carbon Disulfide	ug/L	0.49	0.49	U
trans-1,2-Dichloroethylene	ug/L	0.50	0.50	U
Methyl tert-butyl Ether (MTBE)	ug/L	0.41	0.41	U
1,1-Dichloroethane	ug/L	0.86	0.86	U
Vinyl Acetate	ug/L	0.40	0.40	U
2-Butanone (MEK)	ug/L	0.59	0.59	U
cis-1,2-Dichloroethylene	ug/L	0.51	0.51	U
Bromochloromethane	ug/L	0.33	0.33	U
Chloroform	ug/L	0.31	0.31	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

METHOD BLANK: 2519045

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
2,2-Dichloropropane	ug/L	0.82	0.82	U
1,2-Dichloroethane	ug/L	0.60	0.60	U
1,1,1-Trichloroethane	ug/L	0.44	0.44	U
1,1-Dichloropropene	ug/L	0.39	0.39	U
Carbon Tetrachloride	ug/L	0.60	0.60	U
Benzene	ug/L	0.20	0.20	U
Dibromomethane	ug/L	0.76	0.76	U
1,2-Dichloropropane	ug/L	0.76	0.76	U
Trichloroethene	ug/L	0.60	0.60	U
Bromodichloromethane	ug/L	0.60	0.60	U
2-Chloroethyl Vinyl Ether	ug/L	0.58	0.58	U
cis-1,3-Dichloropropene	ug/L	0.20	0.20	U
4-Methyl-2-pentanone (MIBK)	ug/L	0.93	0.93	U
trans-1,3-Dichloropropylene	ug/L	0.20	0.20	U
1,1,2-Trichloroethane	ug/L	0.46	0.46	U
Toluene	ug/L	0.45	0.45	U
1,3-Dichloropropane	ug/L	0.40	0.40	U
2-Hexanone	ug/L	0.99	0.99	U
Dibromochloromethane	ug/L	0.40	0.40	U
Ethylene Dibromide (EDB)	ug/L	0.67	0.67	U
Tetrachloroethylene (PCE)	ug/L	0.60	0.60	U
1,1,1,2-Tetrachloroethane	ug/L	0.64	0.64	U
Chlorobenzene	ug/L	0.56	0.56	U
Ethylbenzene	ug/L	0.26	0.26	U
Bromoform	ug/L	0.88	0.88	U
Styrene	ug/L	0.84	0.84	U
1,1,2,2-Tetrachloroethane	ug/L	0.20	0.20	U
1,2,3-Trichloropropane	ug/L	0.58	0.58	U
Isopropylbenzene	ug/L	0.80	0.80	U
Bromobenzene	ug/L	0.73	0.73	U
n-propylbenzene	ug/L	0.48	0.48	U
2-Chlorotoluene	ug/L	0.49	0.49	U
4-Chlorotoluene	ug/L	0.44	0.44	U
1,3,5-Trimethylbenzene	ug/L	0.68	0.68	U
tert-butylbenzene	ug/L	0.53	0.53	U
1,2,4-Trimethylbenzene	ug/L	0.54	0.54	U
sec-butylbenzene	ug/L	0.38	0.38	U
1,3-Dichlorobenzene	ug/L	0.43	0.43	U
1,4-Dichlorobenzene	ug/L	0.97	0.97	U
1,2-Dichlorobenzene	ug/L	0.63	0.63	U
n-Butylbenzene	ug/L	0.64	0.64	U
1,2-Dibromo-3-Chloropropane	ug/L	2.3	2.3	U
1,2,4-Trichlorobenzene	ug/L	0.84	0.84	U
Naphthalene	ug/L	0.73	0.73	U
Hexachlorobutadiene	ug/L	0.40	0.40	U

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

METHOD BLANK: 2519045

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,2,3-Trichlorobenzene	ug/L	0.86	0.86	U
Xylene (Total)	ug/L	0.56	0.56	U
1,2-Dichloroethane-d4 (S)	%	96	70-128	
Toluene-d8 (S)	%	99	77-119	
Bromofluorobenzene (S)	%	105	86-123	

LABORATORY CONTROL SAMPLE: 2519046

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
VOLATILES						
Vinyl Chloride	ug/L	20	18	89	70-130	
1,1-Dichloroethylene	ug/L	20	19	95	70-130	
Methyl tert-butyl Ether (MTBE)	ug/L	20	19	95	70-130	
cis-1,2-Dichloroethylene	ug/L	20	19	95	70-130	
Chloroform	ug/L	20	19	95	70-130	
Benzene	ug/L	20	20	99	70-130	
Trichloroethene	ug/L	20	19	96	70-130	
Toluene	ug/L	20	19	95	70-130	
Tetrachloroethylene (PCE)	ug/L	20	18	92	70-130	
Chlorobenzene	ug/L	20	19	94	70-130	
Ethylbenzene	ug/L	20	19	96	70-130	
1,2,4-Trimethylbenzene	ug/L	20	19	97	70-130	
1,3-Dichlorobenzene	ug/L	20	19	95	70-130	
1,2-Dichlorobenzene	ug/L	20	19	94	70-130	
Xylene (Total)	ug/L	60	58	97	70-130	
1,2-Dichloroethane-d4 (S)	%			98	70-128	
Toluene-d8 (S)	%			99	77-119	
Bromofluorobenzene (S)	%			105	86-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2519047 2519048 Original: T1718309017

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
VOLATILES											
Vinyl Chloride	ug/L	0	20	19	15	93	77	70-130	19	30	
1,1-Dichloroethylene	ug/L	0	20	20	17	99	84	70-130	17	30	
Methyl tert-butyl Ether (MTBE)	ug/L	0	20	20	17	100	84	70-130	18	30	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2519047 2519048 Original: T1718309017

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethylene	ug/L	0	20	20	17	98	83	70-130	17	30	
Chloroform	ug/L	0	20	20	17	101	84	70-130	19	30	
Benzene	ug/L	0	20	20	17	102	87	70-130	16	30	
Trichloroethene	ug/L	0	20	20	17	100	83	70-130	19	30	
Toluene	ug/L	0	20	20	17	100	84	70-130	17	30	
Tetrachloroethylene (PCE)	ug/L	0	20	19	17	97	87	70-130	11	30	
Chlorobenzene	ug/L	0	20	20	16	99	82	70-130	18	30	
Ethylbenzene	ug/L	0	20	20	17	99	86	70-130	15	30	
1,2,4-Trimethylbenzene	ug/L	0	20	20	17	98	85	70-130	14	30	
1,3-Dichlorobenzene	ug/L	0	20	19	16	96	80	70-130	18	30	
1,2-Dichlorobenzene	ug/L	0	20	19	16	96	81	70-130	17	30	
Xylene (Total)	ug/L	0	60	60	52	101	86	70-130	16	30	
1,2-Dichloroethane-d4 (S)	%	100				96	96	70-128	0		
Toluene-d8 (S)	%	98				98	100	77-119	2		
Bromofluorobenzene (S)	%	105				104	102	86-123	2		

QC Batch: WCAt/11832 Analysis Method: SM 2340C

QC Batch Method: SM 2340C Prepared:

Associated Lab Samples: T1718309001, T1718309002, T1718309003, T1718309004, T1718309005

METHOD BLANK: 2519727

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
WET CHEMISTRY				
Hardness (as CaCO3)	mg/L	2.6	2.6	U

LABORATORY CONTROL SAMPLE: 2519728

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
WET CHEMISTRY						
Hardness (as CaCO3)	mg/L	400	400	101	90-110	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA

Workorder: T1718309 Ruskin New Landfill

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2519729 2519730 Original: T1718309001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY											
Hardness (as CaCO3)	mg/L	168	200	370	370	102	102	90-110	0	10	

CERTIFICATE OF ANALYSIS

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1718309 Ruskin New Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1718309001	RNSW-2	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309002	RNSW-3	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309003	RNSW-5	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309004	RNSW-6	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309005	Field Blank	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309007	RN-7S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309008	Field Blank	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309009	RN-13S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309010	RN-12S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309011	RN-8S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309012	RN-6S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309013	RN-5S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309014	RN-11S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309015	RN-4S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309016	Duplicate	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309017	RN-3S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309018	RN-1S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309019	MW-3	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309020	RN-9S	SW-846 3010A	DGMj/3724	SW-846 6020	ICMj/1772
T1718309001	RNSW-2	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309002	RNSW-3	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309003	RNSW-5	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309004	RNSW-6	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309005	Field Blank	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309006	Travel Blank	SW-846 5030B	MSVt/3833	SW-846 8260B	MSVt/3834
T1718309007	RN-7S			SM 2540 C	WCAt/11744
T1718309008	Field Blank			SM 2540 C	WCAt/11744
T1718309009	RN-13S			SM 2540 C	WCAt/11744
T1718309010	RN-12S			SM 2540 C	WCAt/11744
T1718309011	RN-8S			SM 2540 C	WCAt/11744
T1718309012	RN-6S			SM 2540 C	WCAt/11744
T1718309013	RN-5S			SM 2540 C	WCAt/11744

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1718309 Ruskin New Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1718309014	RN-11S			SM 2540 C	WCAt/11744
T1718309015	RN-4S			SM 2540 C	WCAt/11744
T1718309016	Duplicate			SM 2540 C	WCAt/11744
T1718309017	RN-3S			SM 2540 C	WCAt/11744
T1718309018	RN-1S			SM 2540 C	WCAt/11744
T1718309019	MW-3			SM 2540 C	WCAt/11744
T1718309020	RN-9S			SM 2540 C	WCAt/11744
T1718309007	RN-7S			EPA 350.1	WCAt/11788
T1718309008	Field Blank			EPA 350.1	WCAt/11788
T1718309009	RN-13S			EPA 350.1	WCAt/11788
T1718309010	RN-12S			EPA 350.1	WCAt/11788
T1718309011	RN-8S			EPA 350.1	WCAt/11788
T1718309012	RN-6S			EPA 350.1	WCAt/11788
T1718309013	RN-5S			EPA 350.1	WCAt/11788
T1718309014	RN-11S			EPA 350.1	WCAt/11788
T1718309015	RN-4S			EPA 350.1	WCAt/11788
T1718309016	Duplicate			EPA 350.1	WCAt/11788
T1718309017	RN-3S			EPA 350.1	WCAt/11788
T1718309018	RN-1S			EPA 350.1	WCAt/11788
T1718309019	MW-3			EPA 350.1	WCAt/11788
T1718309020	RN-9S			EPA 350.1	WCAt/11788
T1718309007	RN-7S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309008	Field Blank	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309009	RN-13S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309010	RN-12S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309011	RN-8S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309012	RN-6S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309013	RN-5S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309014	RN-11S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309015	RN-4S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309016	Duplicate	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309017	RN-3S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861

Advanced Environmental Laboratories, Inc.
9610 Princess Palm Ave Tampa, FL 33619
Payments: P.O. Box 551580 Jacksonville, FL 32255-1580
Phone: (813)630-9616
Fax: (813)630-4327

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1718309 Ruskin New Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1718309018	RN-1S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309019	MW-3	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309020	RN-9S	SW-846 5030B	MSVt/3860	SW-846 8260B	MSVt/3861
T1718309001	RNSW-2			SM 2340C	WCAt/11832
T1718309002	RNSW-3			SM 2340C	WCAt/11832
T1718309003	RNSW-5			SM 2340C	WCAt/11832
T1718309004	RNSW-6			SM 2340C	WCAt/11832
T1718309005	Field Blank			SM 2340C	WCAt/11832
T1718309001	RNSW-2			DEP SOP 10/03/83	WCAt/11891
T1718309002	RNSW-3			DEP SOP 10/03/83	WCAt/11891
T1718309003	RNSW-5			DEP SOP 10/03/83	WCAt/11891
T1718309004	RNSW-6			DEP SOP 10/03/83	WCAt/11891
T1718309005	Field Blank			DEP SOP 10/03/83	WCAt/11891
T1718309001	RNSW-2	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309002	RNSW-3	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309003	RNSW-5	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309004	RNSW-6	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309007	RN-7S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309009	RN-13S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309010	RN-12S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309011	RN-8S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309012	RN-6S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309013	RN-5S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309014	RN-11S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309015	RN-4S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309017	RN-3S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309018	RN-1S	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309019	MW-3	Field Measurements	FLDt/	Field Measurements	FLDt/
T1718309020	RN-9S	Field Measurements	FLDt/	Field Measurements	FLDt/

Advanced Environmental Laboratories, Inc.

☐ **Altamonte Springs:** 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
☐ **Gainesville:** 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐ **Miramar:** 10200 USA Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

T/718309

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: ANTHONY LAFEN
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: Ruskin New Landfill
P.O. Number/Project Number: N/A
Project Location: Ruskin, Florida
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: EPA 8260	Arsenic	Unionized Ammonia	Total Hardness								LABORATORY I.D. NUMBER
RNSW-2	RNSW-2	G	10/25/17	1100	SW				X	X	X	X								001
RNSW-3	RNSW-3	G		910	SW				X	X	X	X								002
RNSW-5	RNSW-5	G		945	SW				X	X	X	X								003
RNSW-6	RNSW-6	G		1020	SW				X	X	X	X								004
FIELD BLANK	FIELD BLANK (SW)	G	↓	812	DI				X	X	X	X								005
TRAVEL BLANK	TRAVEL BLANK	N/A	N/A	N/A	DI				X											006

Matrix Code: **WW** = wastewater **SW** = surface water **GW** = ground water **DW** = drinking water **O** = oil **A** = air **SO** = soil **SL** = sludge

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 2.6 (in degrees celcius)

Form revised 09/19/2012

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Anthony LaFen	10/25/17	1500		10/25/17	1506
2						
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:
Site Address:

Advanced Environmental Laboratories, Inc.

☐ **Altamonte Springs:** 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
☐ **Gainesville:** 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐ **Miramar:** 10200 USA Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

T718309

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By:
Turn Around Time: ☐ STANDARD ☐ RUSH
Page: ____ of: ____

Project Name: Ruskin New Landfill
P.O. Number/Project Number: N/A
Project Location: Ruskin, Florida
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: EPA 8260	Arsenic	TDS	Total Ammonia							LABORATORY I.D. NUMBER
																		Qs	10/25/17
	RN-7S	G	10/25/17	8:31	GW	6			X	X	X	X						207	001
	Field Blank	—	10/25/17	8:12	DI	6			X	X	X	X						1928	002
	RN-13S	G	10/25/17	8:52	GW	6			X	X	X	X						209	003
	RN-12S	G	10/25/17	9:10	GW	6			X	X	X	X						010	004
	RN-8S	G	10/25/17	9:43	GW	6			X	X	X	X						011	005
	RN-6S	G	10/25/17	10:15	GW	6			X	X	X	X						012	006
	RN-5S	G	10/25/17	10:56	GW	6			X	X	X	X						013	007
	RN-11S	G	10/25/17	11:37	GW	6			X	X	X	X						014	008
	RN-4S	G	10/25/17	12:58	GW	6			X	X	X	X						015	009
	Duplicate	G	10/25/17	—	GW	6			X	X	X	X						016	010

Matrix Code: **WW** = wastewater **SW** = surface water **GW** = ground water **DW** = drinking water **O** = oil **A** = air **SO** = soil **SL** = sludge

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☑ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 2.1 (in degrees celcius)

Form revised 09/19/2012

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		10/25/17	15:06		10/25/17	1506
2						
3						
4						

FOR DRINKING WATER USE (When PWS Information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:

Advanced Environmental Laboratories, Inc.

☐ **Altamonte Springs:** 528 S. Northlake Blvd., Ste. 1016 • Altamonte Springs, FL 32701 • 407.937.1594 • Fax 407.937.1597
☐ **Gainesville:** 4965 SW 41st Blvd. • Gainesville, FL 32608 • 352.377.2349 • Fax 352.395.6639
☐ **Jacksonville:** 6681 Southpoint Pkwy. • Jacksonville, FL 32216 • 904.363.9350 • Fax 904.363.9354
☐ **Miramar:** 10200 USA Today Way, Miramar, FL 33025 • 954.889.2288 • Fax 954.889.2281
☐ **Tallahassee:** 1288 Cedar Center Drive, Tallahassee, FL 32301 • 850.219.6274 • Fax 850.219.6275
☐ **Tampa:** 9610 Princess Palm Ave. • Tampa, FL 33619 • 813.630.9616 • Fax 813.630.4327

T/718309

Client Name: Hills. Co. Public Utilities
Address: 332 North Falkenburg Rd.
Tampa, Florida 33619
Phone: (813) 663-3222
FAX: (813) 274-6801
Contact: Michael Townsel
Sampled By: T. Aguilar J. Fuller
Turn Around Time: ☒ STANDARD ☐ RUSH
Page: 1 of: 1

Project Name: Ruskin New Landfill
P.O. Number/Project Number: N/A
Project Location: Ruskin, Florida
REMARKS/SPECIAL INSTRUCTIONS:

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	PRESERVATION	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: EPA 8260	Arsenic	TDS	Total Ammonia							LABORATORY I.D. NUMBER
	RN-3S	G	10/26/17	8:47	GW	6			X	X	X	X					017		~~001~~
	RN-1S	G	10/26/17	9:18	GW	6			X	X	X	X					018		~~002~~
	MW-3	G	10/26/17	9:49	GW	6			X	X	X	X					019		~~003~~
	RN-9S	G	10/26/17	10:13	GW	6			X	X	X	X					020		~~004~~

Matrix Code: **WW** = wastewater **SW** = surface water **GW** = ground water **DW** = drinking water **O** = oil **A** = air **SO** = soil **SL** = sludge

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on Ice ☐ Yes ☐ No ☑ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked Temperature when received 4.5 (in degrees celcius)

Form revised 09/19/2012

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 1A S: 1V

	Relinquished by:	Date	Time	Received by:	Date	Time
1		10/26/17	10:52		10-26-17	10:53
2						
3						
4						

FOR DRINKING WATER USE (When PWS information not otherwise supplied)

PWS ID:
Contact Person: Phone:
Supplier of Water:
Site Address:

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RNSW-2	SAMPLE ID:	RNSW-2	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
N/A	N/A		N/A	N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
N/A	N/A	N/A	N/A	N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1106	N/A	N/A	N/A	N/A	7.18	23.65	404	0.80	4.76	CLEAR	NONE
							AL 10/25/17				

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
A. LAFON		1106	1110

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
N/A	N/A		

FIELD DECONTAMINATION: PUMP ~~Y~~ N ~~Dedicated~~ TUBING ~~Y~~ N ~~Dedicated~~ DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 1106 (-135.0)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RNSW-3	SAMPLE ID:	RNSW-3	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
N/A	N/A		N/A	N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
N/A	N/A	N/A	N/A	N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
910	N/A	N/A	N/A	N/A	6.39	19.44	1557	0.38	19.0	MURKY	NONE
								AL 10/25/17			

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
A. LAFON		910	914

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
N/A	N/A		

FIELD DECONTAMINATION: PUMP ~~Y N Dedicated~~ TUBING ~~Y N Dedicated~~ DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 910 (-83.2)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RNSW-5	SAMPLE ID:	RNSW-5	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
N/A	N/A		N/A	N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
N/A	N/A	N/A	N/A	N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
945	N/A	N/A	N/A	N/A	7.39	18.61	897	0.40	24.1	MURKY	NONE
								At 10/25/17			

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
A. LAFON		945	949

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
N/A	N/A		

FIELD DECONTAMINATION: PUMP ~~Y N Dedicated~~ TUBING ~~Y N Dedicated~~ DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 945 (-200.5)

NOTE: FREE PRODUCT SHEEN @ WATER'S EDGE

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: RNSW-6	SAMPLE ID: RNSW-6	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1020	N/A	N/A	N/A	N/A	7.07	20.30	1718	0.23	24.2	MURKY	SULFUR
								AL 10/25/17			

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1020	SAMPLING ENDED AT: 1024
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP ~~Y N Dedicated~~ TUBING ~~Y N Dedicated~~		DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 1020 (-312.2)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-7S	SAMPLE ID:	RN-7S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.52 ft to 15.52 ft	~~4.89~~ 4.87	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.52 feet − ~~4.89~~ 4.87 feet) X 0.16 gallons/foot = ~~2.16~~ 1.7 ~~12.14~~ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.52	14.52	8:20	8:31	5.06

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
8:25	2.3	2.3	0.46	5.28	6.66	25.44	2707	0.31	7.16	Clear	None
8:27	.92	3.22	0.46	5.28	6.67	25.46	2714	0.53	5.56	Clear	None
8:29	.92	4.14	0.46	5.28	6.69	25.43	2709	1.62	4.10	Clear	None
8:31	.92	5.06	0.46	5.28	6.69	25.42	2693	0.83	4.20	Clear	None

10-25-17 DTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar & J. Fuller		8:31	8:35

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.52	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 8:25 (-88.7) 8:27 (-95.2) 8:29 (-97.6) 8:31 (-99.1)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Revision Date: February 2009Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

FIELD BLANK
M
10/25/17

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: A. LAFON	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 812	SAMPLING ENDED AT: 816
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: — µm
FIELD DECONTAMINATION: PUMP ~~Y N Dedicated~~	TUBING ~~Y N Dedicated~~	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP: N/A** FIELD BLANK (SW)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	SITE LOCATION:	
Ruskin New Landfill	Ruskin, FL	
WELL NO: RN-13S	SAMPLE ID: RN-13S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	9.17 ft to 19.17 ft	5.67	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

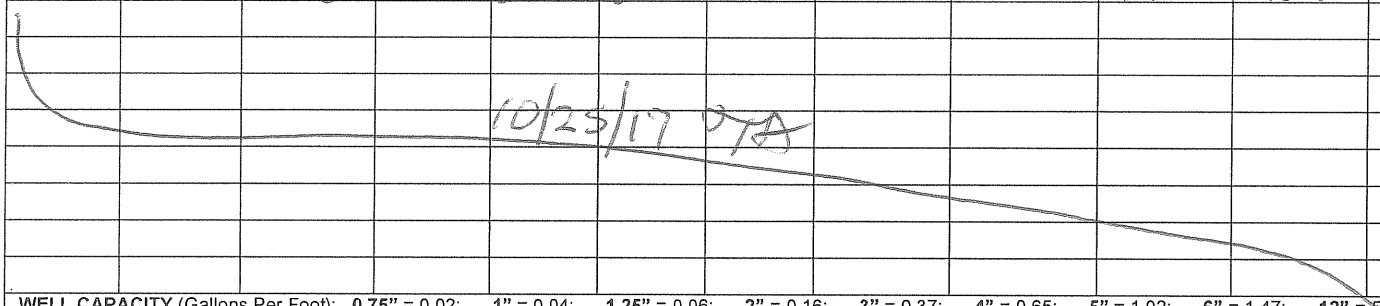
= (19.17 feet – 5.67 feet) X 0.16 gallons/foot = 2.2 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
18.17	18.17	8:42	8:52	4.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
8:48	2.4	2.4	0.4	5.85	7.00	25.93	1449	0.51	2.09	Clear	None
8:50	0.8	3.2	0.4	5.85	6.96	25.99	1454	0.74	3.29	Clear	None
8:52	0.8	4.0	0.4	5.85	6.96	26.00	1452	0.81	2.02	Clear	None



WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar & J. Fuller		8:52	8:55

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
18.17	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 8:48 (-75.3), 8:50 (-72.7), 8:52 (-71.8)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: RN-12S	SAMPLE ID: RN-12S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 7.83 ft to 17.83 ft	STATIC DEPTH TO WATER (feet): 6.19	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (17.83 feet – 6.19 feet) X 0.16 gallons/foot = 1.86 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 16.83	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 16.83	PURGING INITIATED AT: 9:01	PURGING ENDED AT: 9:10	TOTAL VOLUME PURGED (gallons): 3.78

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:06	2.1	2.1	0.42	6.89	6.95	25.54	1538	0.33	13.10	Clear	None
9:08	0.84	2.94	0.42	6.89	6.90	25.53	1558	0.50	12.90	Clear	None
9:10	0.84	3.78	0.42	6.89	6.89	2555	1576	0.74	10.99	Clear	None
				10-25-17							

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: I. Aguilar & J. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 9:10	SAMPLING ENDED AT: 9:15
PUMP OR TUBING DEPTH IN WELL (feet): 16.83	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
					10/25/17				

SEE COC FOR ANALYSIS **ORP:** ~~9:06 (-34.5)~~ 9:08 (-38.7), 9:10 (-40.0)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-8S	SAMPLE ID:	RN-8S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.28 ft to 15.28 ft	5.12	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.28 feet – 5.12 feet) X 0.16 gallons/foot = 1.63 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.28	14.28	9:32	9:43	2.86

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:39	1.82	1.82	0.26	5.71	6.99	24.57	2245	1.32	3.77	Clear	None
9:41	0.52	2.34	0.26	5.71	6.97	24.56	2266	1.43	2.48	Clear	None
9:43	0.52	2.86	0.26	5.71	6.95	24.59	2277	1.62	2.57	Clear	None

10-25-17 DTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar J. Fuller		9:43	9:47

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.28	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 9:39 (-39.0), 9:41 (-36.9), 9:43 (-34.5)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-6S	SAMPLE ID:	RN-6S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.44 ft to 15.44 ft	4.83	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.44 feet − 4.83 feet) X 0.16 gallons/foot = 1.70 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.44	14.44	10:04	10:15	3.08

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:11	1.96	1.96	0.28	5.06	7.12	26.82	868	0.24	1.40	Clear	~~Clear~~ None
10:13	0.56	2.52	0.28	5.06	7.09	26.80	868	0.30	1.39	Clear	None
10:15	0.56	3.08	0.28	5.06	7.05	26.83	869	0.40	1.32	Clear	None
				10/25/17		~~N/A~~					

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar J. Fuller		10:15	10:20

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.44	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 10:11 (-21.1), 10:13 (-23.2), 10:15 (-22.8)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-5S	SAMPLE ID:	RN-5S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.67 ft to 15.67 ft	4.45	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.67 feet − 4.45 feet) X 0.16 gallons/foot = 1.80 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.67	14.67	10:43	10:56	2.21

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:52	1.89	1.89	0.21	4.75	6.84	24.65	2806	0.47	3.04	Clear	None
10:54	0.42	2.31	0.21	4.75	6.82	24.66	2796	0.64	3.71	Clear	None
10:56	0.42	2.73	2.21	4.75	6.80	24.67	2780	0.54	4.49	Clear	None

10/25/17 OTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar J. Fuller		10:56	11:00

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.67	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 10:52 (-80.1), 10:54 (-80.6), 10:56 (-81.2)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-11S	SAMPLE ID:	RN-11S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.29 ft to 15.29 ft	4.62	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.29 feet − 4.62 feet) X 0.16 gallons/foot = 1.71 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.29	14.29	11:26	11:37	2.86

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
11:33	1.82	1.82	0.26	4.71	6.80	26.22	3422	0.81	11.40	Clear	None
11:35	0.52	2.34	0.26	4.71	6.79	26.20	3384	0.91	12.20	Clear	None
11:37	0.52	2.86	0.26	4.71	6.78	26.19	3372	1.07	10.37	Clear	None

10/25/17 DTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguila & J. Fuller		11:37	11:42

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.29	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 11:33 (-86.3), 11:35 (-86.9), 11:37 (-87.3)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: RN-4S	SAMPLE ID: RN-4S	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 5.23 ft to 15.23 ft	STATIC DEPTH TO WATER (feet): 4.84	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.23 feet – 4.84 feet) X 0.16 gallons/foot = 1.66 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.23	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.23	PURGING INITIATED AT: 12:41	PURGING ENDED AT: 12:58	TOTAL VOLUME PURGED (gallons): 4.42

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:48	1.82	1.82	0.26	5.13	7.69	25.16	1003	0.50	19.0	Clear	None
12:50	0.52	2.34	0.26	5.13	7.52	25.18	1049	0.39	13.8	↓	↓
12:52	0.52	2.86	0.26	5.13	7.43	25.14	1122	0.35	12.2		
12:54	0.52	3.38	0.26	5.13	7.33	25.16	1204	0.73	7.51		
12:56	0.52	3.90	0.26	5.13	7.29	25.17	1219	0.42	6.39		
12:58	0.52	4.42	0.26	5.13	7.27	25.19	1224	0.35	5.69	↓	↓

10/25/17

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar & Josh Fulk	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 12:56	SAMPLING ENDED AT: 1:05
PUMP OR TUBING DEPTH IN WELL (feet): 14.23	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
							ORP: 12:54 (-85.4)		
							12:56 (-88.0)		
							12:58 (-88.1)		

SEE COC FOR ANALYSIS **ORP:** 12:48 (-81.2), 12:50 (-85.4), 12:52 (-83.9)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: Duplicate	SAMPLE ID: Duplicate	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

Duplicate 10-25-17 QA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar & T. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: N/A	SAMPLING ENDED AT: N/A
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N (Dedicated)	TUBING Y N (Dedicated)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP: N/A**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: RN-3S	SAMPLE ID: RN-3S	DATE: 10/26/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 5.21 ft to 15.21 ft	STATIC DEPTH TO WATER (feet): 4.84	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

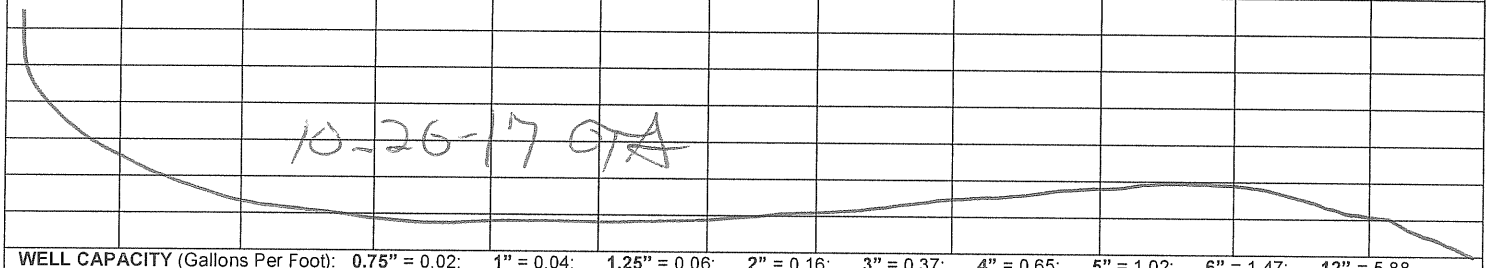
= (15.21 feet – 4.84 feet) X 0.16 gallons/foot = 1.66 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.21	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.21	PURGING INITIATED AT: 8:34	PURGING ENDED AT: 8:47	TOTAL VOLUME PURGED (gallons): 3.38

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
8:41	1.82	1.82	0.26	5.02	7.20	24.84	1152	0.58	7.05	Clear	None
8:43	0.52	2.34	0.26	5.02	7.01	24.89	1168	0.40	4.81	Clear	None
8:45	0.52	2.86	0.26	5.02	6.91	24.94	1176	0.39	3.78	Clear	None
8:47	0.52	3.38	0.26	5.02	6.90	24.95	1179	0.42	3.30	Clear	None



WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar & J. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 8:47	SAMPLING ENDED AT: 8:52
PUMP OR TUBING DEPTH IN WELL (feet): 14.21	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N (Dedicated)	TUBING Y N (Dedicated)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 8:41 (68.1), 8:43 (16.0), 8:45 (-16.1) 8:47 (-22.9)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Ruskin New Landfill	SITE LOCATION:	Ruskin, FL	
WELL NO:	RN-1S	SAMPLE ID:	RN-1S	DATE: 10/26/17

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2"	1/2"	5.36 ft to 15.36 ft	6.91	BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.36 feet – 6.91 feet) X 0.16 gallons/foot = 1.35 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
14.36	14.36	9:01	9:18	4.26

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:07	1.56	1.56	0.26	7.1	6.73	29.54	3321	0.43	33.9	Cloudy	None
9:14	1.56	3.12	0.26	7.1	6.69	29.64	3328	0.38	17.4	Clear	None
9:16	0.52	3.74	0.26	7.1	6.69	29.60	3325	0.43	15.1	Clear	None
9:18	0.52	4.26	0.26	7.1	6.68	29.55	3322	0.49	12.5	Clear	None
				10-26-17	N/A						

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
T. Aguilar J. Fuller		9:18	2:23

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
14.36	T		

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS **ORP:** 9:07 (-90.3) 9:14 (-95.7) 9:16 (-95.9) 9:18 (-95.5)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: MW-3	SAMPLE ID: MW-3	DATE: 10/26/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 16.20 ft to 26.20 ft	STATIC DEPTH TO WATER (feet): 4.87	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (26.20 feet – 4.87 feet) X 0.16 gallons/foot = 3.41 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 25.20	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 25.20	PURGING INITIATED AT: 9:28	PURGING ENDED AT: 9:49	TOTAL VOLUME PURGED (gallons): 4.41

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
9:45	3.57	3.57	0.21	4.98	6.81	25.08	3223	0.32	8.96	Clear	None
9:47	0.42	3.99	0.21	4.98	6.81	25.03	3213	0.65	8.92	Clear	None
9:49	0.42	4.41	0.21	4.98	6.80	25.02	3206	0.39	8.80	Clear	None

10/26/17 OTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar & J. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 9:49	SAMPLING ENDED AT: 9:55
PUMP OR TUBING DEPTH IN WELL (feet): 25.20	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 9:45 (-89.3), 9:47 (-88.6), 9:49 (-89.2)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: RN-9S	SAMPLE ID: RN-9S	DATE: 10/26/17

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 5.50 ft to 15.50 ft	STATIC DEPTH TO WATER (feet): 5.12	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (15.50 feet – 5.12 feet) X 0.16 gallons/foot = 1.66 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.50	PURGING INITIATED AT: 10:02	PURGING ENDED AT: 10:13	TOTAL VOLUME PURGED (gallons): 2.86

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:09	1.82	1.82	0.26	5.30	6.82	24.51	1429	0.40	1.67	Clear	None
10:11	0.52	2.34	0.26	5.30	6.77	24.55	1425	0.33	1.53	Clear	None
10:13	0.52	2.86	0.26	5.30	6.74	25.58	1424	0.27	1.15	Clear	None

10/26/17 OTA

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar J. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 10:13	SAMPLING ENDED AT: 10:18
PUMP OR TUBING DEPTH IN WELL (feet): 14.50	TUBING MATERIAL CODE: T	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N (Dedicated) TUBING Y N (Dedicated) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP:** 10:09 (-35.9), 10:11 (-38.8), 10:13 (-38.5)

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Revision Date: February 2009Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ruskin New Landfill	SITE LOCATION: Ruskin, FL	
WELL NO: Field Blank	SAMPLE ID: Field Blank	DATE: 10/25/17

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: -- feet to -- feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

= (N/A feet – N/A feet) X N/A gallons/foot = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= N/A gallons + (N/A gallons/foot X N/A feet) + N/A gallons = N/A gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

Field Blank 10/25/17

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: T. Aguilar & J. Fuller	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 8:12	SAMPLING ENDED AT: 8:15
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N (Dedicated)	TUBING Y N (Dedicated)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)

SEE COC FOR ANALYSIS **ORP: N/A**

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)