2019 ANNUAL REPORT Lockwood Ash Disposal Site Facility No. 62N01 Town of Torrey, Yates County, New York

Prepared on behalf of:

Lockwood Hills LLC 590 Plant Road P.O. Box 187 Dresden, New York 14441

Prepared by:



2620 Grand Island Blvd. Grand Island, New York 14072-2131

February 2020

2019 ANNUAL REPORT Lockwood Ash Disposal Site Facility No. 62N01 Town of Torrey, Yates County, New York

Prepared on behalf of:

Lockwood Hills LLC

590 Plant Road P.O. Box 187 Dresden, New York 14441

Prepared by:



2620 Grand Island Blvd. Grand Island, New York 14072-2131

February 2020

2019 ANNUAL REPORT Lockwood Ash Disposal Site

Lockwood Hills LLC

TABLE OF CONTENTS

1	INT	RODUCTION1-	1
2	OPI	ERATIONS2-	1
	2.1	GENERAL	
	2.2	QUANTITY AND TYPES OF SOLID WASTE DISPOSED2-	2
	2.3	ASH DENSITY, CAPACITY, AND SITE LIFE	2
	2.4	LEACHATE MANAGEMENT	
	2.4.		
	2.4.2	2 Secondary Leachate	6
3	UPI	DATED CLOSURE/POST-CLOSURE COST ESTIMATE	1
J			
	3.1	CLOSURE COST	
	3.2	Post-Closure Cost	
	3.3	FINANCIAL SURETY	4
4	LEA	ACHATE AND WATER QUALITY DATA ASSESSMENT4-	1
	4.1	GENERAL	
	4.2	FOURTH QUARTER SAMPLING	
	4.3	PRIMARY LEACHATE	
	4.4	SECONDARY LEACHATE	
	4.5	GROUNDWATER	8
	4.5.	1 Samples4-	8
	4.5.2		
	4.5.		
	4.6	SURFACE WATER	6
	4.7	STATIC GROUNDWATER LEVEL MEASUREMENTS	8

List of Figures

Figure 1-1: Schematic Site Plan	
Figure 4-1: Bedrock Groundwater Potentiometric Surface	
Figure 4-2: Glacial Till Groundwater Potentiometric Surface	
Figure 4-3: Potentiometric Surfaces for Fourth Quarter 2019	

2019 ANNUAL REPORT Lockwood Ash Disposal Site

Lockwood Hills LLC

TABLE OF CONTENTS

List of Tables

Table 3-1: Post-Closure Cost Items
Table 4-1: Water Quality Parameters Established for Lockwood Ash Disposal Site's Environmental Monitoring Program
Table 4-2: 2019 First Quarter Leachate Exceedances of 6 NYCRR Part 703 GA Standards 4-4
Table 4-3: 2019 Second Quarter Leachate Exceedances of 6 NYCRR Part 703 GA Standards 4-4
Table 4-4: 2019 Third Quarter Leachate Exceedances of 6 NYCRR Part 703 GA Standards 4-5
Table 4-5: 2019 Fourth Quarter Leachate Exceedances of 6 NYCRR Part 703 GA Standards . 4-5
Table 4-6: 2019 First Quarter groundwater Exceedances of the Part 703 GA Standard 4-10
Table 4-7: 2019 SEcond Quarter groundwater Exceedances of the Part 703 GA Standard 4-10
Table 4-8: 2019 Third Quarter groundwater Exceedances of the Part 703 GA Standard 4-11
Table 4-9: 2019 Fourth Quarter groundwater Exceedances of the Part 703 GA Standard 4-11
Table 4-10: 2019 Surface Water Evaluation for the Keuka Outlet

List of Attachments:

Attachment 1	NYSDEC 2019 Annual Report Form											
Attachment 2	Inspection Logs											
Attachment 3	Leachate Flow Metering Time-Series Plot											
Attachment 4	Analytical Results & Water Quality Laboratory Analysis, Usability, and Validation Reports											
Attachment 5	Time-Series Plots											

1 INTRODUCTION

Lockwood Hills LLC (Lockwood Hills) manages the Lockwood Ash Disposal Site (Lockwood or the Landfill), a primarily coal ash monofill in the Town of Torrey, Yates County, New York. Lockwood is located on Swarthout Road, across NYS Route 14. The Landfill was placed in protective layup in the spring of 2011 in general accordance with the Layup Plan prepared by Daigler Engineering, PC (DE) and submitted to the New York State Department of Environmental Conservation (NYSDEC) in May 2011.

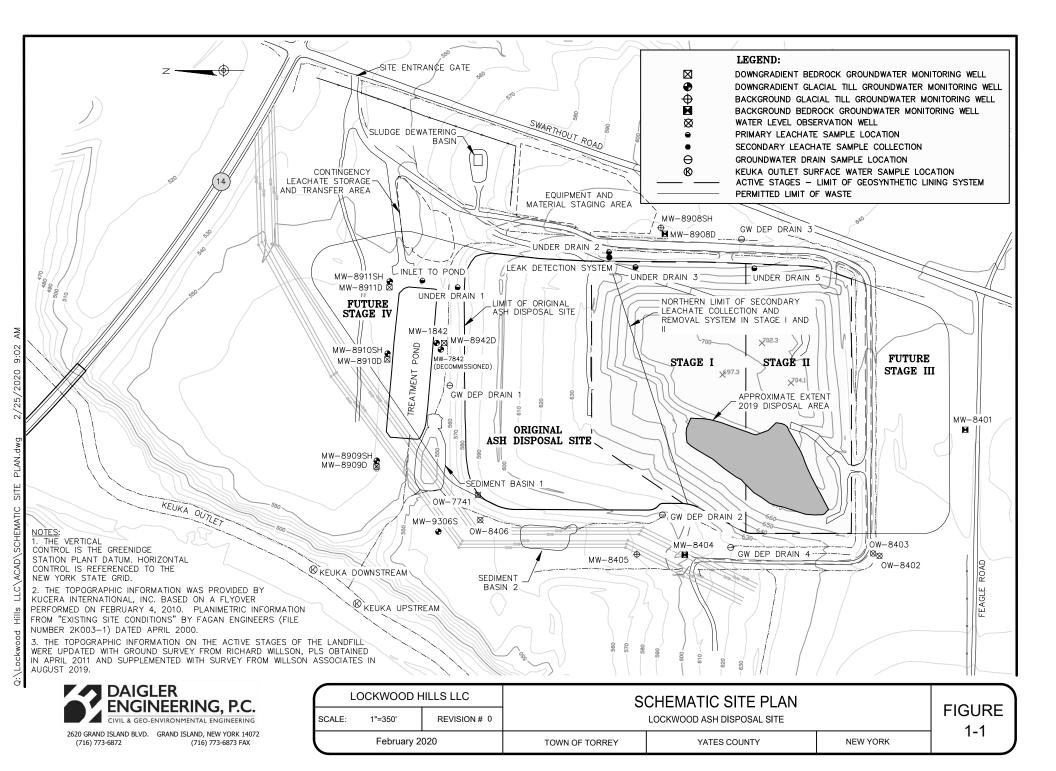
Lockwood Hills agreed to execute a Consent Order (Case No. R8-20140710-47) with the NYSDEC to, in part, segregate stormwater from leachate and treat and dispose of the leachate onsite or at an appropriate offsite facility. The effective date of the Consent Order was February 18, 2015, an amendment to the schedule was issued by the NYSDEC on February 24, 2016. As part of the Consent Order amendment, leachate flow monitoring and stormwater separation construction activities took place at the Lockwood Ash Disposal Site during 2016. Construction of the site's stormwater management system was completed in 2017. During 2018, the design for the onsite leachate treatment system was completed with submission of the Engineering Report, Revision 2: Leachate Management and Pond Remediation Plan, dated December 20, 2018 and all work was completed during 2019 as described in Section 2.

This Annual Report has been prepared in accordance with the requirements of 6 NYCRR Part 360 regulations and the facility's current NYSDEC Solid Waste Management Facility Permit No. 8-5736-00005/00003-0. Lockwood is approved by the NYSDEC for the disposal of fly ash, bottom ash, water/wastewater sludge, and mill rejects. The permitted 44.2-acre landfill, as shown in Figure 1-1, consists of the original soil-lined ash disposal site, and a four-staged, lined expansion of this original footprint. To date, ash has been placed within about 29.83 acres of the permitted acreage, including the Original Ash Disposal Site (OADS), Stage I, and Stage II. The OADS is closed with final cover and the majority of the Landfill Stages I and II have been covered with intermediate cover as defined by Lockwood's Operations & Maintenance Manual.

The regulations and the permit require Lockwood Hills to submit an annual report no later than 60 days after the first day of January of each year of operation. This report must summarize:

- The quantity and types of solid waste disposed;
- The remaining site life and capacity as allowed by the permit;
- An estimate of the actual in situ waste density for the reporting year;
- A review of water and leachate quality data;
- Total amounts of leachate managed;
- The amount of leachate collected in the secondary leachate collection and removal system;
- Changes from the approved report, plans, and specifications or permit conditions;
- Tipping fee and cost information;
- Amount of solid waste recovered from disposal; and,
- Updated closure and post-closure care cost estimates.

The following sections of this report provide the remaining required information. The 2019 NYSDEC Annual Report form has been completed and is included in Attachment 1.



2 **OPERATIONS**

2.1 GENERAL

Monthly site inspections were conducted during January, February, March, and April of 2019. Beginning the week of May 29th, 2019, Lockwood personnel began conducting weekly inspections, which shall replace monthly site inspections going forward. According to site inspection records, mowing of the landfill slopes occurred during June, July, and August 2019. All mowing was performed by Lockwood Hills personnel. According to the April 2019 monthly inspection report the casing of MW-8911SH was broken. The inspection form indicates that the well was repaired following discovery of the damage. The April 2019 inspection form also notes that soil from an access road was used for additional cover in the active area of the landfill. Through communications with the inspector, it was clarified that soft material from a small area of the dirt site access road in the roundabout near MW-9306 was removed and replaced with a more suitable road base after the field sampling crew repeatedly got stuck in that location. The quantity of soft soils placed on the landfill was minimal.

During 2019, work required by Consent Order Case No. R8-20140710-47 and detailed in the Engineering Plans and Specifications (Daigler Engineering, revised May 2019) approved by the NYSDEC on June 5, 2019 was completed by the Consent Order deadline of November 1, 2019. This included construction of a Leachate Storage and Transfer Area, temporary diversion of leachate to the Leachate Storage and Transfer Area, removal and proper disposal of sediment, installation of the Treatment Pond including a geomembrane containment liner system, and a cascade aerator inlet structure.

Beginning on August 5, 2019, leachate was temporarily diverted to the Leachate Storage and Transfer Area (LSTA), where leachate was stored in three interconnected 21,000-gallon mobile, steel, fixed-axle tanks that were staged in the LSTA for the duration of the project. A 4,200-gallon vacuum truck was utilized to transfer leachate offsite for treatment. Leachate flow was restored to the Treatment Pond on September 23, 2019.

The perimeter fence surrounding the Treatment Pond was replaced late during the fall of 2019.

Due to excessive turbidity, slow recovery, and atypical results obtained for MW-1842 throughout 2018, well redevelopment was conducted on March 21st and 22nd, 2019, which included over 20 hours of surging and pumping. Surging was accomplished using an inertial pump equipped with a surge block. When the well ran dry, reverse osmosis water from the nearby Greenidge Power Generating Station was introduced. This water was sampled for the Lockwood monitoring parameters to confirm no contaminants were being introduced into the well. Over the course of well development, conductivity, pH, turbidity, and temperature were measured at regular intervals. While variability decreased by the end of well redevelopment efforts, the target level of stabilization was not achieved for any of the parameters. It was also noted that the pH was steadily increasing over this time. Increase in pH may be attributable to the decommissioned MW-7842 which is adjacent and immediately upgradient of MW-1842. Redevelopment efforts were considered successful due to initial improvement in recovery and turbidity.

2.2 QUANTITY AND TYPES OF SOLID WASTE DISPOSED

The landfill is approved for the disposal of fly ash, bottom ash, water/wastewater treatment sludge and mill rejects from various, specified locations. During the 2019 calendar year, 7,055 tons of ash laden sludge from the Pond dredging were disposed in a confined disposal area constructed in the southwest portion of the Landfill at the boundary of Stage I and Stage II as shown on Figure 1-1. Cover soil was stripped and used to construct the containment berms of, or stockpiled adjacent to, the confined disposal area prior to the ash laden sludge being disposed in the Landfill. Disposal activity took place during August and September. After drying and stabilization of the waste by mixing in with the existing in-place ash, the stockpiled cover soil, supplemented with 140 cubic yard of imported cover material was replaced, graded, and seeded in late October 2019. Waste quantities were estimated based on truck counts and a historic waste density.

2.3 ASH DENSITY, CAPACITY, AND SITE LIFE

No field testing of ash density was completed during calendar year 2019. Historic in-place ash density testing at Lockwood indicates a typical density of 96 pounds per cubic foot (pcf), equivalent to 1.3 tons per cubic yard.

The remaining capacity for the currently constructed, synthetically-lined area has been updated based on the estimated waste disposed in 2019. As of December 31, 2019, the remaining airspace

is approximately 416,294 cubic yards. Conservatively assuming a waste disposal rate of 100,000 tons per year (or 86,957 cubic yards per year, assuming an effective waste density of 1.15 tons per cubic yard that accounts for cover soils and other materials placed in the landfill) the projected life of the remaining lined area is approximately four years and ten months.

Beyond the capacity of the currently constructed landfill, an additional 2.45 million cubic yards of permitted, but not yet constructed capacity still remains on the site.

2.4 LEACHATE MANAGEMENT

2.4.1 Primary Leachate

Leachate is collected from two separate and distinct base areas of the landfill, including the soillined OADS, and the synthetic-lined areas of Stage I and II. The total landfilled area at this time is approximately 29.83 acres, including the OADS which is closed. The portion of the landfill without final cover, but under protective layup, Stage I and II, has a synthetic liner system that encompasses an approximate 19.3-acre area.

As certified, the Treatment Pond is 155 feet wide by 576 feet long by 6 feet deep, including the one-foot burial depth of the containment liner system. Actual working depth, or the elevation difference between the invert of the pond drain and the top of the containment system is only 3.8 feet. The 2.025-acre Pond will have an operating capacity of 1,116,000 gallons with 1.5 feet of freeboard. The Treatment Pond has an inlet structure consisting of a four by four-foot prefabricated concrete structure with an internal cascade aerator formed inside on the east bank, and an outlet structure consisting of a two by two-foot prefabricated HDPE lower drain structure and a four-foot diameter prefabricated weir structure on the west bank. Discharges are controlled with a gate valve.

A time-series plot illustrating daily average flow rates between July 1, 2016, when the leachate flow monitoring system was brought online, through December 31, 2019 is presented in Attachment 3. Precipitation data presented in this chart were obtained from the National Oceanic and Atmospheric Administration (NOAA) 5.1 NNW station until December 4th, 2019. No weather data were reported for this station after this date. Precipitation data from December 5th until December 31st, 2019 were obtained from Weather Underground Station KNYPENNY16, located

approximately 1.78 miles north of Lockwood. The precipitation data from the KNYPENNY16 station does not distinguish between rain or snowfall, so any precipitation data reported after December 4th, 2019 was reported as rainfall.

Maximum flow rates recorded on July 1st, 5th, and 6th of 2016 are likely due to maintenance and calibration efforts carried out during the first week of operation. Following the initial period of historically low leachate flow corresponding with a regional historic drought condition which ended in November 2016, the recorded leachate flow rates appear to have steadily increased with typical seasonal lows in the summer months. A sharp decrease occurred in November 2018 which was associated with a maintenance cleaning event that removed accumulated sediments from the leachate flow monitoring flume. The accumulation of sediment in the flume may have caused the recorded flow meter readings in 2018 to be bias high. The daily average flow in 2019 was lower than in 2018. High flows associated with the annual leachate line cleaning on June 24, 26, 27, and 28th 2019 were excluded when evaluating the maximum daily flow.

During the third quarter of 2019, leachate flows were diverted to the temporary leachate storage and transfer area from August 5th, 2019 through September 23rd, 2019 to accommodate construction activities involving the Treatment Pond. Flow readings between August 2nd and September 23rd, 2019 were influenced by construction activities and the readings taken on these dates are not representative. The 53 days influenced by construction are excluded from data evaluations below.

The recorded average daily leachate flow rate for 2019 was 16.5 gallons per minute (\pm 4.1 std. dev.; n = 312 days) with a daily maximum and daily minimum of 109.8 and 2.4 gallons per minute, respectively. The daily minimum flow rate was recorded on August 1, 2019 and likely was influenced by construction activities. A total of 7.4 million gallons of leachate was discharged to the Treatment Pond during 2019 based on the recorded flow meter readings.

All leachate is held within the Treatment Pond until the water surface reaches a depth of approximately 3.0 feet on the staff gauge. Once this level is reached, a pre-discharge sample of the stored water is analyzed to confirm SPDES effluent limitations will not be exceeded during

pond discharge. Treated water from the Pond is directed to the Keuka Outlet via an approximate 600-foot long natural channel.

Four discharge events were authorized during 2019, beginning on February 21st, May 1st, July 1st, and July 27th. Documentation of the Pond discharge events are included with their respective months in Attachment 2. These events lasted 13, 22, 17, and 10 days, respectively. The average volume of treated leachate released during each event was 1.55 million gallons.

The volumes of primary leachate treated onsite as reported in Section 3 of the NYSDEC Annual Report Form (Attachment 1) were calculated from the total leachate per month as recorded by the leachate flow metering equipment, minus the secondary leachate volume. The volume of secondary leachate was estimated from instantaneous manual measurements of the flow rate from the Leak Detection System (LDS) as described below in Section 4.2.4.

In August and September leachate flow was diverted away from the Pond upstream of the leachate flow meter to allow for sediment removal and the construction of improvements to the pond including the installation of a step aerator inlet structure and a geosynthetic containment liner system. During this time, temporary leachate storage was accommodated using three interconnected 21,000-gallon mobile, steel, fixed-axle tanks staged within a newly constructed leachate transfer and storage area. Leachate was transferred from the tanks to a 4,200-gallon vacuum truck and hauled to the Greenidge Generation Wastewater Treatment Plant. The volumes of total leachate treated offsite were calculated using vacuum truck counts. The instantaneous manual measurements from the LDS were used to estimate the portion of the total volume that was secondary leachate. The primary leachate volume collected, approximately 8.4 million gallons in 2019, is the sum of the volume treated onsite and the volume treated offsite.

National Vacuum Environmental Services Corporation of Sanborn, New York, was hired to perform the annual primary leachate pipe cleaning which was completed in June 2019. Collection lines for all stages/locations were reported as being flushed. The daily line cleaning record can be found in Attachment 2 with the Inspection Forms for June.

2.4.2 Secondary Leachate

The Stage I and II liner system includes a secondary leachate collection and removal system or a LDS to monitor the performance of the primary geomembrane liner. The quantity of liquid removed from the LDS has historically been determined by quarterly measurement of the flow rate by the field crew from Adirondack Environmental Services, Inc. (ADK) of Albany, New York during the quarterly groundwater sampling event. Quarterly instantaneous flow measurements reported in gallons per day (gpd) were taken from the LDS as reported in the quarterly laboratory reports (see Attachment 4). These instantaneous flow rates are used to compute a secondary leakage rate by dividing by the total acreage of the double liner system. The leakage rates computed in this fashion during the first, second, third and fourth quarters of this year were 6.6, 6.0, 4.2, and 2.4 gpad, respectively.

Starting in 2015, following an unusually high quarterly measurement, instantaneous flow measurements from the LDS have been taken monthly by Lockwood personnel. This practice continued during 2019. The monthly and quarterly flow measurements were all well below the 20 gpad allowed by the regulations. The monthly and quarterly instantaneous flow measurements and water quality analysis for the LDS is discussed in more detail in Section 4.4. The monthly flow measurements were used to calculate monthly secondary leachate volumes for the year as reported in Section 4 of the NYSDEC Annual Report Form (Attachment 1). The resulting volume of secondary leachate for 2019 is approximately 28,090 gallons.

3 UPDATED CLOSURE/POST-CLOSURE COST ESTIMATE

3.1 CLOSURE COST

The site closure cost consists of the cost to install a final cover system over the largest active portion of the landfill. The final cover system incorporates various geosynthetic and overlying soil layers, as well as drainage features. The final cover system consists of the following layers in descending order:

- Six-inch topsoil layer with vegetation;
- 24-inch barrier protection layer;
- Geocomposite drainage layer;
- Geomembrane liner;
- Geosynthetic clay liner on slopes less than 25%;
- Six-inch minimum soil cover; and,
- Prepared subgrade surface.

Assuming closure of the OADS has been previously accepted by the NYSDEC, 19.3 acres of active landfill area will require final cover at this time. This area was increased by 5% for items placed on 3H:1V slopes to account for slope area adjustments. The volume of soil cover required for site closure was adjusted for areas already at final grade which received the minimum six inches of soil.

Drainage feature quantities include the construction of approximately 2,620 linear feet of geocomposite infiltration outlet drains that lead to nearly 6,100 linear feet of compacted stormwater diversion sideslope swales, which finally drain to 2,268 linear feet of rip-rap lined downchutes.

The cost of extending 44 cleanout pipes around the perimeter of the disposal site to match the final cover also is estimated, as well as third party construction quality assurance and quality control (QA/QC). General administrative costs were assumed to be 3% of the total closure cost prior to third party QA/QC.

Purchase and installation pricing on a per square foot unit basis for the geosynthetic materials was confirmed with the manufacturer in January 2018. All other unit prices including soils, subgrade preparation, extension of the cleanout risers, installation of drainage features, and establishing vegetation are from pricing received from City Hill Construction in February 2018. Third party QA/QC was also confirmed using RSMeans Site Work & Landscape Cost Data, 36th Annual Edition (2017). It was assumed that three QA/QC laborers would be required consistent with typical landfill operations, and construction of the 20.2-acre final cover system would require approximately one construction season, or five months.

The prices were adjusted to 2020 dollars using the historical cost index method for time adjustment described by RSMeans (<u>https://www.rsmeansonline.com/references/unit/refpdf/hci.pdf</u>). Based on the above, the total final cover closure cost was estimated as \$3,054,163 in 2020 dollars.

3.2 POST-CLOSURE COST

A model was developed to calculate the required funding to account for post-closure costs. The model assumes 30 years of the following post-closure costs; environmental monitoring, leachate management, repair and maintenance, and labor or personnel. The model assumes a 3% inflation rate on all of the post-closure costs and a 5% annual interest rate on allocated funds. The required funding to account for the full 30-year post-closure period was calculated as \$1,872,555 in 2020 dollars. The initial costs for each post-closure item in 2020 dollars are summarized in Table 3-1 and the rationale for the estimates is discussed below.

Item	Annual Cost in 2020
Environmental Monitoring	\$71,230
Leachate Management	\$18,838
Repair and Maintenance	\$9,007
Monthly Inspections	\$8,085
TOTAL	\$107,160

TABLE 3-1: POST-CLOSURE COST ITEMS

Post-closure environmental monitoring costs include costs associated with quarterly sampling, laboratory analysis and data validation, and reporting. Currently, sampling activities and laboratory analysis are completed by ADK. The annual cost of sampling and laboratory work, provided by ADK via e-mail on January 23, 2018, is approximately \$48,271 after adjusting to 2020 dollars using RSMeans historical cost indexes. Data validation and quarterly environmental reporting are currently provided by DE for approximately \$22,959. The total annual cost for environmental monitoring is therefore \$71,230 in 2020. For the post-closure cost estimate, it was assumed that Contingency Monitoring will not be required, and that quarterly monitoring will be reduced to semi-annual monitoring five years after the landfill closes. Semi-annual monitoring is assumed to reduce the environmental monitoring costs by half.

The cost estimate for leachate management includes SPDES permit reporting, field services and laboratory analytical costs for batch discharge events, onsite personnel costs, an annualized cost for occasional Treatment Pond dredging events, and the cost of maintenance and occasional replacement of mechanical/electrical equipment or parts for major leachate system components. The estimated cost of operating the proposed leachate management system is \$18,838 in 2020 dollars.

Post-closure repair and maintenance costs for the disposal site include annual pipe jetting of the leachate collection system, keeping the stormwater drainage system clear of debris, erosion repair, vegetation replacement, leachate and stormwater collection system repairs, occasional replacement of mechanical/electrical equipment or parts associated with the onsite leachate treatment system, and minor unforeseen problems. Maintenance and repair of landfill structures was estimated, assuming ten percent of the leachate management and environmental monitoring costs, at \$9,007 per year in 2020 dollars.

Post-closure monthly inspection costs assume a one day per month visit by a qualified individual to inspect all features of the 44.2-acre disposal site plus supporting facilities, such as the Treatment Pond, for verification of proper performance and to prepare and file a site inspection log. Labor is valued at 2019 DE technician rates. Travel costs are also included. If any features are not functioning properly the inspector must coordinate with the owner to remediate the problem. The current cost for this program is estimated at \$674 per month, or \$8,085 per year in 2020 dollars.

3.3 FINANCIAL SURETY

According to discussion above, the calculations indicate a combined closure and post-closure cost for the Lockwood Ash Disposal Site of \$4,926,718 in 2020 dollars. According to the requirements of 6 NYCRR Part 360-2.19, financial surety must be established to cover closure and post-closure costs. The parent company of Lockwood Hills possesses an active Letter of Credit issued by Silicon Valley Bank of Santa Clara, California with the Region 8, Regional Director of the NYSDEC as the beneficiary. Proof of the Letter of Credit is included at the end of Attachment 1. The current available credit is \$4,937,750, which exceeds the estimated closure and post-closure costs.

4 LEACHATE AND WATER QUALITY DATA ASSESSMENT

4.1 GENERAL

The Lockwood Ash Disposal Site's Environmental Monitoring Plan (EMP) defines the monitoring points of compliance and outlines the sampling and analysis requirements. During 2019, sampling and laboratory analysis of the environmental samples was completed by ADK.

Sampling for environmental monitoring is typically performed on a quarterly basis for site specific routine (three times per year), and baseline (annually, rotating quarter) water quality analyses. The measured parameters are summarized in Table 4-1.

Field Parameters	Wet Chemical	Metals					
рН	Alkalinity	Aluminum	Iron				
Turbidity	Ammonia	Antimony*	Magnesium				
Static Water Level	Chloride	Arsenic	Manganese				
Specific Conductivity	Color*	Barium*	Mercury				
Dissolved Oxygen**	Hardness	Boron	Nickel*				
	Total Dissolved Solids	Cadmium	Potassium				
	Total Organic Carbon*	Calcium	Selenium				
	Sulfate	Chromium*	Sodium				
		Copper	Zinc*				

TABLE 4-1: WATER QUALITY PARAMETERS ESTABLISHED FOR LOCKWOOD ASH DISPOSAL SITE'S ENVIRONMENTAL MONITORING PROGRAM

*Baseline sampling only.

**For surface water samples only.

Baseline sampling occurred during the third quarter in 2019. This baseline event was third-party validated as required by the Lockwood EMP, Section 3.3.8. No data were rejected during data validation. Routine sampling was performed during the first, second, and fourth quarters. Data from all quarterly sampling events along with their case narratives are provided in Attachment 4. The Data Validation Report for the third quarter's event is included in Attachment 4, as well.

4.2 FOURTH QUARTER SAMPLING

Results from the fourth quarter sampling event are presented herein rather than in a separate report. ADK completed sampling activities for the fourth quarter on November 20th and 21st, 2019. The locations of the facility's sampling points are illustrated on Figure 1-1. Fourth quarter samples were analyzed for the routine parameter set.

Groundwater suppression system monitoring points, Groundwater Depression Drains 2 and 4, were not sampled during the fourth quarter event; both drains were reported dry. MW-8405 and Under Drain 5 were not sampled this quarter. Each were reportedly dry as is typical for these locations. Further, no sample was taken from MW-8910SH due to poor recovery as is generally reported for this location in recent years.

As required by the Site's EMP, Section 3.3.8, the data package for this routine sampling event was reviewed internally by the laboratory. The matrix spike measurements for MW-8404 for arsenic, chloride, and selenium were below the acceptable limits. This data was still considered usable and was included in evaluating the groundwater quality in MW-8404. All other data was reported as acceptable without qualification. For simplicity, data evaluation of the fourth quarter results has been incorporated into the annual review of leachate, groundwater, and surface water data presented in the following sections.

4.3 PRIMARY LEACHATE

Primary leachate is sampled or observed at five separate locations, as follows:

- Discharge from leachate collection system under the OADS (Under Drain 1);
- Discharge from the northern overfill liner in Stage I (Under Drain 2);
- Discharge from the at grade liner system in Stage I (Under Drain 3);
- Discharge from Stage II (Under Drain 5); and,
- Treatment Pond influent, combined leachate from all Stages of the Landfill including the OADS (Inlet to Pond).

The locations of the leachate sampling points are illustrated on Figure 1-1. Parameters analyzed are the same as those for the groundwater samples, as described above with the exception that flow rate replaces static water level.

For the purpose of highlighting those compounds that can act as leachate indicators, and as a measure of leachate quality and strength, Table 4-2 through Table 4-5 summarize the leachate sample results that exceed the corresponding Part 703 GA groundwater quality standards or TOGS 1.1.1 Guidance Values. As shown on those summary tables, primary leachate consistently exceeds the standard for boron, magnesium, sodium, sulfate, and total dissolved solids (TDS) for all monitoring points. Iron, manganese, and turbidity concentrations also routinely exceed their GA Standard or TOGS 1.1.1 Guidance Value at most leachate monitoring points. Exceedances of the chloride standard occurred during all four quarters in Under Drains 2 and 3. Less frequent and/or less widespread exceedances of the arsenic and selenium standards were observed during the majority of sampling events. Under Drain 5 was not able to be sampled again in 2019 as it was reportedly dry during all four quarters.

Time-series plots for all monitored parameters in the leachate are presented in Attachment 5. Changes in the leachate sewer to accommodate the flow meter in 2016 replaced the historic 21" Inlet to Pond sampling point, which used to discharge leachate from only Stages I and II, including the overfill liner, with a single discharge including leachate from all stages of the landfill. Due to the change in composition, the Inlet to Pond data is distinguished from historic 21" Inlet to Pond data in the time-series plots by a change in the symbol. A sufficient number of data points have been collected to make intralocation statistics robust enough to exclude the historic dataset. Beginning with the fourth quarter of 2018, data for this location will only be compared to the data collected after the changes to the leachate sewer were made.

Upon review of the time-series plots for the leachate data a few observations can be made. With the exception of the third quarter, a relatively small number of intralocation maxima and minima were observed during 2019. The intralocation maxima and minima that do not appear to be associated with any trending are as follows:

Table 4-2 LOCKWOOD ASH DISPOSAL SITE LEACHATE QUALITY SUMMARY 2019 FIRST QUARTER EXCEEDANCES OF 6 NYCRR PART 703 GA STANDARDS (3/18-19/2019)												
	6 NYCRR Part 703			MONITOR	ING POINT							
Parameter	GA Standard (TOGS 1.1.1 GA Guidance Value)	Leak Detection System	Under Drain 1	Under Drain 2	Under Drain 3	Inlet to Pond	Under Drain 5 **					
Color*	< 15 C.U.											
pН	6.5 < pH < 8.5											
Turbidity	< 5 NTU	6	31	10	7	16						
Total Dissolved Solids, TDS	500 mg/L	1,940	1,140	3,160	3,940	2,500						
Ammonia, NH₃	2,000 ug/L											
Antimony*, Sb	3 ug/L											
Arsenic, As	25 ug/L		52.0									
Barium*, Ba	1,000 ug/L											
Boron, B	1,000 ug/L		3,380	32,500	17,100	17,300						
Cadmium, Cd	5 ug/L											
Chloride, Cl ₂	250,000 ug/L			440,000	746,000							
Chromium*, Cr	50 ug/L											
Copper, Cu	200 ug/L											
Iron, Fe	300 ug/L		4,550	2,570	698	2,140						
Magnesium, Mg	(35,000 ug/L)	138,000	66,200	65,500	77,100	66,500						
Manganese, Mn	300 ug/L		734	824	387	490						
Fe + Mn	500 ug/L		5,284	3,394	1,085	2,630						
Mercury, Hg	0.7 ug/L											
Nickel*,Ni	100 ug/L											
Selenium, Se	10 ug/L											
Sodium, Na	20,000 ug/L	71,100	38,600	232,000	231,000	183,000						
Sulfate, SO ₄	250,000 ug/L	1,040,000	408,000	1,480,000	1,400,000	1,050,000						
Zinc*, Zn	(5,000 ug/L)											
* Baseline only; routine parameters ** Reported as dry this quarter.	were analyzed for during	this quarter's s	ampling event	t.								

Reported as dry this quarter.		Table	4-3				
	LOCK	NOOD ASH [SITE			
	LEAC	HATE QUAL	TY SUMM	ARY			
2019 SECC	ND QUARTER EXC	EEDANCES C	OF 6 NYCR	R PART 703	GA STAND	ARDS	
		(6/19-20/2	2019)				
	6 NYCRR Part 703			MONITOR	ING POINT	n	
Parameter	GA Standard	Leak	Under	Under	Under Drain	Inlet to	Under
	(TOGS 1.1.1 GA	Detection	Drain 1	Drain 2	Under Drain 3	Pond	Drain 5 **
	Guidance Value)	System	Diami	Drain 2	3	Foliu	Dialit 5
Color*	< 15 C.U.						
рН	6.5 < pH < 8.5						
Turbidity	< 5 NTU	22	152	28	8	73	
Total Dissolved Solids, TDS	500 mg/L	2,320	1,350	3,400	4,230	2,660	
Ammonia, NH ₃	2,000 ug/L						
Antimony*, Sb	3 ug/L						
Arsenic, As	25 ug/L						
Barium*, Ba	1,000 ug/L						
Boron, B	1,000 ug/L		3,120	40,600	28,000	21,900	
Cadmium, Cd	5 ug/L						
Chloride, Cl ₂	250,000 ug/L			443,000	700,000		
Chromium*, Cr	50 ug/L						
Copper, Cu	200 ug/L						
Iron, Fe	300 ug/L		2,240	1,050		2,310	
Magnesium, Mg	(35,000 ug/L)	155,000	66,300	71,600	88,700	70,100	
Manganese, Mn	300 ug/L		695	952	389	551	
Fe + Mn	500 ug/L		2,935	2,002		2,861	
Mercury, Hg	0.7 ug/L						
Nickel*,Ni	100 ug/L						
Selenium, Se	10 ug/L		21	23	16	38	
Sodium, Na	20,000 ug/L	71,900	29,100	166,000	267,000	182,000	
Sulfate, SO ₄	250,000 ug/L	1,240,000	454,000	1,530,000	1,660,000	1,190,000	
Zinc*, Zn	(5,000 ug/L)						

* Baseline only; routine parameters were analyzed for during this quarter's sampling event. ** Reported as dry this quarter.

2019 THIF	Table 4-4 LOCKWOOD ASH DISPOSAL SITE LEACHATE QUALITY SUMMARY 2019 THIRD QUARTER EXCEEDANCES OF 6 NYCRR PART 703 GA STANDARDS (9/19-20/2019) 6 NYCRR Part 703													
	6 NYCRR Part 703			MONITOR	ING POINT									
Parameter	GA Standard (TOGS 1.1.1 GA Guidance Value)	Leak Detection System	Under Drain 1	Under Drain 2	Under Drain 3	Inlet to Pond	Under Drain 5 **							
Color*	< 15 C.U.													
pH Turbidity	6.5 < pH < 8.5 < 5 NTU		77	20	7	8								
Total Dissolved Solids, TDS	< 5 NTO 500 mg/L	0.040			-	-								
,	0	2,240	1,330	3,520	4,020	3,000								
Ammonia, NH ₃	2,000 ug/L													
Antimony*, Sb	3 ug/L		78.9			27								
Arsenic, As Barium*. Ba	25 ug/L 1,000 ug/L		70.9			21								
Boron, B	1,000 ug/L 1,000 ug/L		4,500	54,000	39,500	35,100								
Cadmium, Cd	5 ug/L		4,300	54,000	39,300	33,100								
Chloride, Cl ₂	250,000 ug/L			413,000	534,000									
Chromium [*] , Cr	50 ug/L			413,000	334,000									
Copper, Cu	200 ug/L													
Iron. Fe	300 ug/L		6,400	2,180		2,400								
Magnesium, Mg	(35,000 ug/L)	186,000	89,700	107,000	142,000	99,300								
Manganese, Mn	300 ug/L)	791	1.280	453	603								
Fe + Mn	500 ug/L		7,191	3,460	641	3,003								
Mercury, Hg	0.7 ug/L		, -	-,	-	-,								
Nickel*,Ni	100 ug/L													
Selenium, Se	10 ug/L					24								
Sodium, Na	20,000 ug/L	90,400	44,500	281,000	360,000	270,000								
Sulfate, SO4	250,000 ug/L	1,150,000	446,000	1,650,000	1,660,000	1,380,000								
Zinc*, Zn	(5,000 ug/L)													

* Baseline only; baseline parameters were analyzed for during this quarter's sampling event. ** Reported as dry this quarter.

2019 FOUF	Table 4-5 LOCKWOOD ASH DISPOSAL SITE LEACHATE QUALITY SUMMARY 2019 FOURTH QUARTER EXCEEDANCES OF 6 NYCRR PART 703 GA STANDARDS (11/20-21/2019)												
Parameter	6 NYCRR Part 703 GA Standard (TOGS 1.1.1 GA Guidance Value)	Leak Detection System	Under Drain 1	MONITOR Under Drain 2	ING POINT Under Drain 3	Inlet to Pond	Under Drain 5 **						
Color*	< 15 C.U.												
pН	6.5 < pH < 8.5												
Turbidity	< 5 NTU	24	541	152	31	610							
Total Dissolved Solids, TDS	500 mg/L	2,110	1,190	3,540	4,050	2,880							
Ammonia, NH₃	2,000 ug/L												
Antimony*, Sb	3 ug/L												
Arsenic, As	25 ug/L		55			51							
Barium*, Ba	1,000 ug/L												
Boron, B	1,000 ug/L	1,020	4,270	49,600	33,400	24,500							
Cadmium, Cd	5 ug/L												
Chloride, Cl ₂	250,000 ug/L			407,000	534,000								
Chromium*, Cr	50 ug/L												
Copper, Cu	200 ug/L												
Iron, Fe	300 ug/L		4,890	1,820		5,010							
Magnesium, Mg	(35,000 ug/L)	181,000	81,900	104,000	135,000	96,000							
Manganese, Mn	300 ug/L		625	1,210	343	599							
Fe + Mn	500 ug/L		5,515	3,030		5,609							
Mercury, Hg	0.7 ug/L												
Nickel*,Ni	100 ug/L												
Selenium, Se	10 ug/L					22							
Sodium, Na	20,000 ug/L	100,000	45,400	249,000	299,000	224,000							
Sulfate, SO ₄	250,000 ug/L	1,150,000	429,000	1,660,000	1,720,000	1,410,000							
Zinc*, Zn	(5,000 ug/L)												

* Baseline only; routine parameters were analyzed for during this quarter's sampling event. ** Reported as dry this quarter.

- Selenium in Inlet to Pond An intralocation minimum was observed during the first quarter;
- Sulfate in Inlet to Pond An intralocation minimum was observed during the first quarter;
- Alkalinity in Inlet to Pond and Under Drain 3 Intralocation maxima were observed during the second quarter and third quarter, respectively;
- Turbidity in Inlet to Pond and Under Drain 1 An intralocation minimum was observed in the Inlet to Pond during the third quarter, followed by intralocation maxima in the fourth quarter in Under Drain 1 and the Inlet to Pond;
- Magnesium in Under Drain 2, Under Drain 3, and Inlet to Pond Intralocation maxima were observed during the third quarter in all three locations;
- Hardness in Under Drain 1 and Under Drain 2– Intralocation maxima were observed during the third quarter;
- Sodium in Under Drain 3 An intralocation maximum was observed during the third quarter;
- Conductivity in Inlet to Pond An intralocation maximum was observed in the fourth quarter; and
- pH in Inlet to Pond All leachate samples had unusually low pH during the fourth quarter, resulting in an intralocation minimum in the Inlet to Pond.

The upwards trend noted for chloride in Under Drain 2 in 2018 continued for at least the first half of 2019 with consecutive intralocation maxima observed during the first and second quarters but appears to have weakened during the last quarter or two 2019. Under Drain 2 was also noted for an upward trend in potassium in 2018. This trend is also still apparent, with five consecutive intralocation maxima starting in the third quarter of 2018 finally breaking in the fourth quarter of 2019. Still the fourth quarter concentration remains elevated.

An upward trend in calcium appears to be emerging in Under Drain 2 which is supported by an intralocation maximum was observed during the third quarter of 2019, which was superseded by the fourth quarter measurement. Concentrations are highly variable, but the gradual upward trend

appears to be persistent since monitoring began. Conversely, iron in Under Drain 2 has been under a long-term downward trend that began after the first quarter of 2009. An intralocation minimum associated with this trend was observed during the second quarter of 2019. Overall, recent iron concentrations have been consistent with those measured between 2005 and 2008.

The updward trend reported in 2018 for potassium in Under Drain 3 also continued through 2019. An intralocation maximum was observed during the second quarter, which was superseded by the fourth quarter measurement. The measured concentration in the fourth quarter remained elevated at the third highest concentration of potassium measured in Under Drain 3.

Increasing trends for conductivity and TDS reported for Under Drain 3 in 2018 appear to have stagnated. There are now two years without any notable concentrations, however both parameters remain elevated. On the other hand, upward trending in conductivity and TDS in Under Drain 2 continue to be apparent. The fourth quarter concentration was the second highest value recorded for conductivity at this location.

Slight, but steady downward trends continue to be observed in Under Drain 1 for chloride, conductivity, manganese, sulfate, and TDS. Downward trends for boron, calcium, and sodium previously reported in Under Drain 1 appears to have stagnated, especially for calcium with highly variable recent concentrations including a near intralocation maximum recorded in the third quarter of 2019.

Arsenic in Under Drain 1 has been consistently elevated with respect to the leachate from other Stages of the landfill. Reflective of the fact that the Inlet to Pond includes Under Drain 1, the concentration in this monitoring location is has also been elevated recently culminating in an intralocation maximum in the fourth quarter of 2019. This is notable because arsenic concentrations at both locations typically exceed the Part 703 GA standard.

Although concentrations are highly variable within a year, concentrations of boron in Under Drain 2 and 3, have been increasing since at least the second quarter of 2014. Similarly, the Inlet to Pond location has been trending upwards since the first quarter of 2017. An intralocation maximum for boron in Under Drain 2 measured during the third quarter of 2019 is associated with this upward trend.

4.4 SECONDARY LEACHATE

The LDS sample is representative of the liquid found in the SLCRS. Flow rates in the secondary system are generally over an order of magnitude less than that of the primary system.

Secondary leachate sampling data are included in Table 4-2 through Table 4-5, as well as in the leachate quality time-series graphs presented in Attachment 5. Compared to the standards in Table 4-2 through Table 4-5, secondary leachate quality in calendar year 2019 continued to be characterized by elevated levels of TDS, magnesium, sodium, and sulfate throughout the year, as well as, turbidity and boron which were detected above their respective Part 703 GA standards for at least one quarter this year. Typically, the concentrations of these parameters are low relative to the primary leachate associated with Stages I and II of the landfill. An exception to this is magnesium which is generally higher in the secondary leachate than all other leachate sampling locations.

One intralocation maximum and one intralocation minimum were observed in the LDS this year. These included an alkalinity maximum in the second quarter and a pH minimum in quarter four. Alkalinity appears to be increasing since the fourth quarter of 2010, but pH in the LDS has been relatively constant. The minimum pH in the fourth quarter of 2019 corresponds with a depression in pH in the leachate site-wide and is unlikely to be part of a trend. While there were no notable concentrations in 2019, calcium appears to be continuing to trend downward since approximately 2014.

4.5 GROUNDWATER

4.5.1 Samples

As described by the EMP, two water bearing units identified at the site comprise the critical stratigraphic section; including a water table in the unconsolidated glacial deposits; and groundwater in the fractures of the underlying bedrock. Typically, bedrock and overburden wells that are part of a couplet are distinguished by the letters D and SH for deep and shallow, respectively. Groundwater quality monitoring at the Lockwood Ash Disposal Site is carried out through quarterly sampling of five upgradient/background and nine downgradient monitoring wells. If water is present, groundwater samples are also collected from groundwater depression

drains installed below the liner systems in the OADS and the lined Stage I and Stage II areas. The locations of the groundwater monitoring points are illustrated in Figure 1-1.

4.5.2 Exceedances of Part 703 GA Standards

Table 4-6 through Table 4-9 summarize the sample results that exceed the corresponding Part 703 GA groundwater quality standards. As shown on those summary tables, background and downgradient wells in both the overburden and bedrock routinely exceed the standards for turbidity, total dissolved solids, iron, magnesium, sodium, and sulfate. The natural groundwater at this site can be characterized as very hard (generally > 300 mg/L as CaCO₃). In addition to the high concentrations of calcium and magnesium, hard waters are typically found to have high concentrations of iron, aluminum, manganese, and sulfates. Thus, these concentrations are considered indicative of natural water quality and are consistent with previous results for groundwater monitoring activities at the site. Exceedances of the Fe + Mn Part 703 GA standard occurred in multiple wells during each quarter and are attributed to iron concentrations at these wells. No well that exceeded the Fe + Mn standard exceeded the manganese standard, but all the wells exceeded the iron standard for the quarters they exceeded the Fe + Mn standard.

Other less widespread exceedances of the groundwater standards during the 2019 calendar year include:

- pH in MW-8909D This parameter is historically elevated in MW-8909D, as it was for each quarter this year. The pH at this well averages around 9.0 S.U.;
- pH in MW-8908SH and MW-1842 pH exceeded the Part 703 GA standard in MW-8908SH and MW-1842 for the first time in quarters three and one, respectively.
- Boron in MW-8909D, MW-8910D, and MW-8911D Exceedances of the Part 703 GA standard for boron in these three downgradient bedrock wells are noteworthy since boron is a leachate indicator, but typical of the water quality normally observed at MW-8910D and MW-8911D. The concentration of boron in MW-8909D exceeded the standard during the last two quarters of 2019. The exceedances in MW-8909D are rarer.

Table 4-6 LOCKWOOD ASH DISPOSAL SITE GROUNDWATER QUALITY SUMMARY 2019 FIRST QUARTER EXCEEDANCES OF 6 NYCRR PART 703 GA STANDARDS (3/18-19/2019)																	
	6 NYCRR Part 703 GA	MONITORING POINT Background Wells Downgradient Wells													GW Dep	GW Dep	
Parameter	Standard (TOGS 1.1.1			. ·							0					Drain 1	Drain 3
	GA Guidance Value)	8401	8404	8405**	8908D	8908S	1842**	8909D	8909S	8910D	8910S ⁺	8911D	8911S	8942	9306	Brain	Braine
Color*	< 15 C.U.																
pH	6.5 < pH < 8.5	6.5					8.8	9.0									1
Turbidity	< 5 NTU				9	17	43	>999	9	14			8	26	16		
Total Dissolved Solids, TDS	500 mg/L				680	690		885		510				500		1,500	605
Ammonia, NH3	2,000 ug/l																
Antimony*, Sb	3 uq/L																
Arsenic, As	25 ug/L																
Barium*, Ba	1,000 ug/L																
Boron, B	1,000 ug/L									2,820		1,330				2,610	
Cadmium, Cd	5 ug/L																
Chloride, Cl ₂	250,000 uq/L																
Chromium*, Cr	50 ug/L																
Copper, Cu	200 ug/L																
Iron, Fe	300 ug/L				1,030		314	3,590					814	1,030			
Magnesium, Mg	(35,000 ug/L)				68,600	65,700								68,200	59,900	90,500	1 -
Manganese, Mn	300 ug/L																1
Fe + Mn	500 ug/L				1,135			3,773					902	1,233			1
Mercury, Hq	0.7 ug/L																1
Nickel*, Ni	100 ug/L																
Selenium, Se	10 ug/L																
Sodium, Na	20,000 ug/L	62,500			34,600	26,400		161,000	61,700	105,000		94,300	71,800	38,800	20,500	36,500	1
Sulfate, S0 ₄	250,000 ug/L				316,000					332,000						716,000	1
Zinc*, Zn	(5,000 ug/L)																1

*Baseline only; routine parameters were analyzed for during this quarter's sampling event.

**Dry

+Poor Recovery; no sample ++ Replacement well for 7842

Table 4-7 LOCKWOOD ASH DISPOSAL SITE GROUNDWATER QUALITY SUMMARY 2019 SECOND QUARTER EXCEEDANCES OF 6 NYCRR PART 703 GA STANDARDS (6/19-20/2019)																	
6 NYCRR Part 703 GA MONITORING POINT																	
Parameter	Standard (TOGS 1.1.1		Bac	kground V	Vells					Down	gradient W	/ells				GW Dep	GW Dep
	GA Guidance Value)	8401	8404	8405**	8908D	8908S	1842**	8909D	8909S	8910D	8910S ⁺	8911D	8911S	8942	9306	Drain 1	Drain 3
Color* pH Turbidity Total Dissolved Solids. TDS	< 15 C.U. 6.5 < pH < 8.5 < 5 NTU 500 ma/L	13	18		7 700	650	41	9.0 >999 715		7 15		510		6 575	12	1.590	785
Ammonia, NH ₃ Antimony*, Sb Arsenic, As Barium*, Ba Boron, B	2,000 uq/l 3 ug/L 25 uq/L 1,000 uq/L 1,000 uq/L				700	000		715		2.620		1.130		575		2.690	705
Cadmium, Cd Calmium, Cd Chloride, Cl ₂ Chromium*, Cr Copper, Cu Iron, Fe	5 uq/L 250,000 ug/L 50 uq/L 200 uq/L 300 ug/L				1,100			2,320		-,		.,					
Magnesium, Mg Manganese, Mn Fe + Mn Mercury, Hg Nickel*, Ni	(35.000 ug/L) 300 ug/L 500 ug/L 0.7 ug/L 100 ug/L				62,100 1,201	59,100		2,398						63,600	55,600	98,600	39,700
Selenium, Se Sodium, Na Sulfate, S0 ₄ Zinc*, Zn	10 ug/L 20,000 ug/L 250,000 ug/L (5,000 ug/L)	65,600			25,300 298,000		47,800 256,000	165,000	47,000	82,400 291,000		86,900	67,600	29,900		31,500 746,000	250000

*Baseline only; routine parameters were analyzed for during this quarter's sampling event.

**Dry

+Poor Recovery; no sample ++ Replacement well for 7842

			2019 THIF	RD QUAR	GROU	KWOOD NDWATE EEDANC	R QUALIT	POSAL SIT TY SUMMA NYCRR PA	ARY ART 703 GA	-	RDS						
	6 NYCRR Part 703 GA	MONITORING POINT												GW Dep	GW Dep		
Parameter	Standard (TOGS 1.1.1			kground V							gradient W					Drain 1	Drain 3
	GA Guidance Value)	8401	8404	8405**	8908D	8908S	1842**	8909D	8909S	8910D	8910S ⁺	8911D	8911S	8942	9306	Diami	Diamo
Color*	< 15 C.U.																
PH	6.5 < pH < 8.5					8.8		9.6									
Turbidity	< 5 NTU	6					142	>999	8				12				
Total Dissolved Solids, TDS	500 mg/L				910	990		695		710				600		1,700	1,070
Ammonia, NH3	2,000 ug/l																
Antimony*, Sb	3 uq/L																
Arsenic, As	25 ug/L																
Barium*, Ba	1,000 ug/L																
Boron, B	1,000 ug/L							1,060		3,760		1,360				3,320	
Cadmium, Cd	5 ug/L																
Chloride, Cl ₂	250,000 uq/L																
Chromium*, Cr	50 uq/L																
Copper, Cu	200 ug/L																
Iron, Fe	300 ug/L		518		1,090		3,190	4,870					979	589	770		
Magnesium, Mg	(35,000 ug/L)				70,400	74,100	56,200							71,600	63,000	119,000	66,300
Manganese, Mn	300 ug/L																
Fe + Mn	500 ug/L		741				3,432	4,997					1,082	821	822		
Mercury, Ha	0.7 ug/L																
Nickel*, Ni	100 ug/L																
Selenium, Se	10 uq/L																
Sodium, Na	20,000 ug/L	65,500	22,100		34,400			155,000	52,600	107,000		94,100	65,800	40,500	20,600		29,400
Sulfate, S0 ₄	250,000 ug/L				298,000	396,000				361,000				l		830,000	446,000
Zinc*, Zn	(5.000 ug/L)													l			

*Baseline only; baseline parameters were analyzed for during this quarter's sampling event.

**Dry, no sample

+Poor Recovery; no sample ++ Replacement well for 7842

		2	019 FOUF	RTH QUA	GROU	KWOOD NDWATE CEEDANO	R QUALIT	OSAL SIT Y SUMMA NYCRR P		A STANDA	ARDS						
	6 NYCRR Part 703 GA	MONITORING POINT															
Parameter	Standard (TOGS 1.1.1 GA Guidance Value)	Background Wells Downgradient Wells										GW Dep	GW Dep Drain 3				
		8401	8404	8405**	8908D	8908S	1842**	8909D	8909S	8910D	8910S ⁺	8911D	8911S	8942	9306	Drain 1	Drain 3
Color* pH Turbidity Total Dissolved Solids, TDS	< 15 C.U. 6.5 < pH < 8.5 < 5 NTU 500 mg/L	8 560			825	905	>999 535	9.3 >999 675		530		535		18 615	7	6.4 20 1.700	43 800
Ammonia, NH ₃ Antimony*, Sb Arsenic, As Barium*, Ba Boron, B	2,000 ug/l 3 ug/L 25 ug/L 1,000 ug/L 1,000 ug/L							1.050		2.780		1.180				3.300	
Cadmium, Cd Calmium, Cd Chloride, Cl ₂ Chromium*, Cr Copper, Cu Iron, Fe	5 ug/L 250,000 ug/L 50 ug/L 200 ug/L 300 ug/L				1.100		3.620	3,590		-,		.,	736	469			
Magnesium, Mg Magnese, Mn Fe + Mn Mercury, Hg Nickel*, Ni	(35,000 ug/L) 300 ug/L 500 ug/L 0.7 ug/L 100 ug/L				72,000	71,800	54,900 3,878	3,706					808	71,800 649	60,800	118,000	46900
Selenium, Se Sodium, Na Sulfate, S0₄ Zinc*, Zn	10 ug/L 20,000 ug/L 250,000 ug/L (5,000 ug/L)	81,700			35,200 321,000	28,000 378,000	53,900	186,000	60,300	99,700 308,000		101,000	68,400	39,800	20,500	46,900 828,000	20300 319000

*Baseline only; routine parameters were analyzed for during this quarter's sampling event.

**Dry

+Poor Recovery; no sample ++ Replacement well for 7842

Parameters in two wells were measured at the corresponding Part 703 GA standard. Although these measurements did not exceed standards they are noted below.

- pH in MW-8401 pH was measured at the lower standard of 6.5 S.U. during the first quarter of 2019, which is atypical for this well. Average pH in this well is 7.4 S.U.
- TDS in MW-8942D TDS was measured at the standard of 500 mg/L during the first quarter of 2019, but concentrations typically exceed the standard at this location.

4.5.3 Time-Series Plots

Time-series plots are used as a visual aid in evaluating trends in the data and can be found in Attachment 5. The time-series plots are updated through the end of the fourth quarter 2019. The trends are discussed below.

Groundwater quality during 2019 was mostly typical with the exception of several wells which exhibited unusual concentrations generally not associated with any trending. The most notable exception is the atypical results observed in downgradient well MW-1842, which replaced MW-7842.

Due to the excessive turbidity, slow recovery, and other atypical results found during the first four sample events from MW-1842, redevelopment was performed on March 21st and 22nd, 2019. The redevelopment was considered successful due to an improvement in recovery and turbidity which continued into the second quarter of 2019. This improvement in turbidity is likely the cause of the very low concentrations during the first quarter of 2019 for most parameters, including alkalinity, boron, calcium, conductivity, hardness, magnesium, manganese, potassium, sodium, sulfate, and TDS. Alkalinity, calcium, hardness, and conductivity measurements from the first quarter were even glacial till interwell minima. A number of these parameters remained lower in the second quarter as well, including hardness, magnesium, and manganese.

During the third quarter, turbidity increased to 142 nephelometric turbidity units (NTUs), which is lower than values recorded during the first four sample events, but greater than the quarter one and two values in 2019. In the fourth quarter turbidity was once again greater than the maximum measurable value of 999 NTUs. Despite the high turbidity, the concentrations of most other

parameters appeared to stabilize during the second half of 2019. This suggests that additional well redevelopment may not be necessary.

Two parameters in MW-1842 did not fit the pattern described above. An intrawell maximum was observed for pH in quarter one. The pH value observed, 8.8 SU exceeded the Part 703 GA standard and was a glacial till interwell maximum. Even through the pH dropped below the standard for the remainder of the year, it continues to be elevated relative to the other glacial till wells and its 2019 average fell just shy of the 8.5 SU standard at 8.4 SU. Finally, while sulfate concentrations in MW-1842 returned to typical glacial till levels in the second and third quarter similar to the other parameters, they dropped even lower in the fourth quarter.

A summary of the intrawell maxima and minima recorded in all other monitoring wells during the 2019 calendar year are as follows:

- Iron in MW-8401 An intrawell minimum was observed in the fourth quarter and was part of gradual downward trend
- pH in MW-8401 An intrawell minimum was observed during the first quarter and an intrawell maximum was observed in the third quarter. There are no apparent trends at this time.
- pH in MW-8908SH An intrawell maximum occurred in the third quarter with no apparent trend. This is the only time this well has exceeded the Part 703 GA standard for pH. This value tied the glacial till interwell maximum observed in MW-1842 in the first quarter of 2019. In the fourth quarter, pH in MW-8908SH returned to its normal, near-neutral range.
- Alkalinity in MW-8908D An intrawell maximum occurred in the fourth quarter and the concentration in the second quarter tied the 2018 fourth quarter as the second highest concentration. These data are associated with apparent upward trending that became more pronounced after 2017.
- Potassium in MW-8908D An intrawell maximum occurred during the first quarter, which was then superseded by that of the fourth quarter and are associated with slight upward trending.

- pH in MW-8909D A value that tied the intrawell maximum for pH was observed during the third quarter. The previous intrawell maximum was recorded on April 5th, 1993. This value was not associated with any trending. This value, 9.6 SU, is the current interwell maximum for pH in the bedrock groundwater.
- pH in MW-8910D An intrawell minimum was observed during the first quarter and was not associated with any trend.
- Conductivity in MW-8911SH An intrawell maximum was observed during the third quarter and is associated with upward trending discussed below.
- Hardness in MW-8911SH The highest value, since the peak value measured on April 7th, 1992, was observed during the third quarter and was associated with upward trending discussed below.
- Chloride in MW-8911D An intrawell minimum occurred during the fourth quarter and may be associated with a downward trend beginning in the second quarter of 2017; however, overall, the concentration is not significant as it is within two standard deviations from the mean.
- pH in MW-8942D An intrawell minimum occurred during the second quarter. The minimum pH of 7.0 SU has been measured in this well on five separate occasions in the past and is not thought to be associated with any trending.

In MW-8401, the downward trend for chloride observed during 2018 reversed course in 2019, with the observed concentration increasing each quarter following quarter one. However, the 2019 average chloride concentration is still less than half the average from 2015 when chloride concentration in MW-8401 were at their peak. The alkalinity in this well was elevated during the second and third quarters of 2019. The intrawell maximum of 640 mg/L recorded in 2013 appears to be an outlier. The alkalinity concentrations measured in the second and third quarters represent the second and third highest values in MW-8401, but alkalinity returned to a more typical level during the fourth quarter.

Alkalinity in the MW-8908 well couplet remains elevated and appears to be associated with upward trending and an intrawell maximum in MW-8908D in the fourth quarter. Alkalinity in

MW-8908SH was measured at its second highest level in the third quarter of 2019 and in the first, second, and fourth quarters of 2019 the measured alkalinity was tied for the third highest value.

The decreasing trend for sulfate in MW-8908SH reported during 2018 continued in the beginning of 2019, with a relatively low sulfate concentrations, below the Part 703 GA standard in the first two quarters, but its strength waned with higher values in the third and fourth quarters. Similar to a pattern observed in 2018, concentrations of calcium, hardness, sulfate, and TDS in MW-8908SH were elevated in the third quarter and decreased the following quarter.

Potassium in MW-8909SH continues to trend upwards, as noted in during the third quarter. Slight upwards trends in potassium are also present in most other background and downgradient wells, in the glacial till and bedrock alike, with the trend more pronounced in some wells (e.g., MW-8908SH) than others (MW-8401). These trends appear to have begun around 2006. The possible upward trends noted for alkalinity, calcium, and TDS in MW-8909D during 2018 were not present in 2019. TDS concentration in this well decreased during each quarter of 2019.

The upward trends for calcium, hardness, iron, magnesium, and manganese reported for MW-8911SH in 2018 are still present and were associated with the second highest hardness value observed at this well, which occurred during the third quarter. After over two decades of upward trending, the sulfate concentrations in this well appear to be trending downward since the second quarter of 2017. Magnesium concentrations in MW-8942D and MW-8908D have generally increased for the duration of monitoring, with increases being more gradual in MW-8908D. While magnesium concentrations were initially higher in the upgradient well, MW-8908D, they have been similar between the two wells since around 2006, with both exceeding the applicable groundwater guidance value.

Boron in MW-8909D appears to be creeping upward since approximately the third quarter of 2017. This slight upward trending is associated with the third and fourth quarter exceedances of the Part 703 GA standard, which represent only the third and fourth times that the standard for boron has been exceeded in this well.

4.6 SURFACE WATER

Surface water samples are collected from points in the Keuka Outlet 100 feet upstream (Keuka Upstream) and downstream (Keuka Downstream) of the Treatment Pond discharge location. Table 4-10 summarizes the surface water quality in the Keuka Outlet for the four quarters of 2019. Most parameters showed similar concentrations between the upstream and downstream during all four sampling events.

The most significant differences (greater than 25%) in the water quality between upstream and downstream samples include increases in turbidity during the first quarter, as well as color, manganese, and TDS in the third quarter. Significant decreases between up and downstream samples occurred during the second quarter for TDS and boron. Other notable differences (greater than 10%) between upstream and downstream samples during the 2019 sampling events include increases in TDS in the first quarter, alkalinity and iron in the second quarter, and alkalinity in the third quarter. Notable decreases between the upstream and downstream samples include turbidity in the second quarter, arsenic and boron in the third quarter, and TDS in the fourth quarter.

It is worth noting that the upstream TDS result from the third quarter was flagged as estimated in the data validation report. The surface water field duplicate, collected from the upstream location, resulted in a significantly higher TDS of 265 mg/L. If this result was used in place of the 145 mg/L Keuka Upstream result, the percent increase between up and downstream samples would drop to 18.9%.

Decreases in arsenic and boron during the third quarter are based on estimated values because these parameters were detected below the quantitation limit, but above the method detection limit.

The Treatment Pond was not actively discharging during any sampling event for the 2019 calendar year.

					e 4-10	E							
		2	2019 SURFACE V		H DISPOSAL SIT ATION FOR THE		ET						
			First Q			Second Quarter (6/19/2019)							
			(3/18/	2019)									
Parameter	Units	Keuka Upstream	Keuka Downstream	Difference	% Increase	Keuka Upstream	Keuka Downstream	Difference	% Increase				
Alkalinity	mg/l	210	230	20	9.5%	130	150	20	15.4%				
Aluminum	ug/l	<100	<100			<100	<100						
Ammonia	mg/l	<0.1	<0.1			<0.1	<0.1						
Antimony	ug/l	NM	NM			NM	NM						
Arsenic	ug/l	<5	<5			<5	<5						
Barium	ug/l	NM	NM			NM	NM						
Boron	ug/l	60	57	-3	-5.0%	67.5	<50	-18	-35.0%				
Cadmium	ug/l	<5	<5			<5	<5						
Calcium	ug/l	62,600	64,700	2,100	3.4%	39,800	41,500	1,700	4.3%				
Chloride	mg/l	58.7	57.5	-1.2	-2.0%	37.0	35.4	-1.6	-4.3%				
Chromium	ug/l	NM	NM			NM	NM						
Color	C.U.	NM	NM			NM	NM						
Conductivity	µmhos/cm	625	634	9	1.4%	403	400	-3	-0.7%				
Copper	ug/l	<5	<5			<5	<5						
DO	mg/l	8.9	9.3	0.4	4.5%	3.85	4	0.2	3.9%				
Hardness	mg/l	230	237	7	3.0%	148	153	5	3.4%				
Iron	ug/l	85.8	93.7	8	9.2%	83.4	102	19	22.3%				
Magnesium	ug/l	17,800	18,400	600	3.4%	11,800	12,000	200	1.7%				
Manganese	ug/l	<20	<20			<20	<20						
Mercury	ug/l	<0.2	<0.2			<0.2	<0.2						
Nickel	ug/l	NM	NM			NM	NM						
рH	รบ	8.6	8.6			8.4	8.2	-0.2	-2.4%				
Potassium	ug/l	3,980	3,970	-10	-0.3%	3,100	2,970	-130.0	-4.2%				
Selenium	ug/l	<5	<5			<5	<5						
Sodium	ug/l	31,500	30,500	-1000	-3.2%	16,700	16,000	-700	-4.2%				
Sulfate	mg/l	35.0	35.3	0.3	0.9%	24.1	23.5	-0.6	-2.5%				
TDS	mg/l	350	425	75	21.4%	285	105	-180	-63.2%				
TOC	mg/l	NM	NM	-		NM	NM						
Turbidity	NTU	4	9	5	125.0%	47	37	-10.0	-21.3%				
Zinc	ug/l	NM	NM	-		NM	NM						

NM = Not Measured, baseline only, routine parameters measured this quarter.

					-						
	:					FT					
		Third C	luarter		Fourth Quarter (11/20/2019)						
Units	Keuka Upstream	Keuka Downstream	Difference	% Increase	Keuka Upstream	Keuka Downstream	Difference	% Increase			
mg/l	116	130	14	12.1%	120	120					
ug/l		<29.4									
mg/l		<0.1			<0.1						
ug/l	26.5*	28.8*	2.3	8.7%	NM	NM					
ug/l	40.4*	36.3*	-4.1	-10.1%	<50	<50					
ug/l	<1	<1			<5	<5					
ug/l	39,300	41,700	2,400	6.1%	36,000	35,900	-100	-0.3%			
mg/l	43.1	45.7	2.6	6.0%	34.6	34.4	-0.2	-0.6%			
ug/l	<4	<4			NM	NM					
Ċ.U.	7	10	3	42.9%	NM	NM					
µmhos/cm	404	423	19	4.7%	361	361					
ug/l	2.19*	<2.1	-0.1	-4.8%	<5	<5					
mg/l	5.20	5.21	0.01	0.2%	7.15	7.34	0.2	2.7%			
	153	161	8	5.2%	135	135					
	53.4*	49.9*	-3.5	-6.6%	53.4	56.5	3	5.8%			
	13,300	13,700	400	3.0%	11,000	11,000					
			4.5								
	<0.1	<0.1			<0.2	<0.2					
	<2.7	<2.7			NM	NM					
รบ			-0.3	-3.5%	6.3	6.4	0.1	1.6%			
ua/l			200		2.440	2.410	-30	-1.2%			
						<5					
			2,000	7.0%		19,400	-100	-0.5%			
	26.3	27.5	1.2	4.6%	22.3	22.1	-0.2	-0.9%			
	145		170		175	140		-20.0%			
			-		-						
	5	5			35	37	2	5.7%			
	-	-	0.3	6.5%			-	0 /0			
	mg/l ug/l mg/l ug/l ug/l ug/l ug/l ug/l ug/l c.U. µmhos/cm ug/l mg/l ug/l ug/l ug/l ug/l ug/l ug/l ug/l u	Units Keuka Upstream mg/l 116 ug/l <29.4	2019 SURFACE W Third C Third C (9/19/2) Units Keuka Upstream Keuka Downstream mg/l 116 130 ug/l <29.4	LOCKWOOD ASI 2019 SURFACE WATER EVALU/ Third Quarter (9/19/2019) Units Keuka Upstream Keuka Downstream Difference mg/l 116 130 14 ug/l <29.4	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	LOCKWOOD ASH DISPOSAL SITE 2019 SURFACE WATER EVALUATION FOR THE KEUKA OUTL Third Quarter (9/19/2019) Units Keuka Upstream Keuka Downstream Difference % Increase Keuka Upstream mg/l 1116 130 14 12.1% 120 ug/l <0.1	LOCKWOOD ASH DISPOSAL SITE 2019 SURFACE WATER EVALUATION FOR THE KEUKA OUTLET Imit Quarter (9/19/2019) Fourth 1 (1/120) Units Keuka Upstream Keuka Downstream Difference (1/120) % Increase (1/120) Keuka Upstream Keuka Downstream mg/l 116 130 14 12.1% 120 120 ug/l <29.4	LOCKWOOD ASH DISPOSAL SITE 219 SURFACE WATER EVALUATION FOR THE KEUKA OUTLET Third Quarter (9/19/2019) Fourth Curter (11/20/2019) Fourth Curter (11/20/2019) Units Keuka Upstream Keuka Downstream Mifference 00 % Increase Upstream Keuka Upstream Keuka Downstream Difference mg/l 116 130 14 12.1% 120 120 ug/l <29.4			

NM = Not Measured, baseline only, routine parameters measured these quarters.

* Estimated value between the RPQL and MDL

4.7 STATIC GROUNDWATER LEVEL MEASUREMENTS

Static groundwater levels are taken on a quarterly basis as directed by the Site's EMP, Section 3.3.6.1. Water level data has been analyzed since the first quarter of 2003. Time-series of the depth to water measurements and their corresponding groundwater elevation data are included at the end of Attachment 5. The potentiometric surfaces of representative minimum and maximum groundwater elevations and the fourth quarter measurements are shown on Figure 4-1 and Figure 4-2 for the bedrock and glacial till water bearing units, respectively.

The groundwater elevation in MW-1842 during the first quarter of 2019 was the lowest value observed since the well was installed. This measurement was excluded from groundwater elevation analysis. The atypical groundwater elevation was believed to be due to slow recovery in the well following well redevelopment completed days before the water level was measured on March 28th, 2019. The water level returned to a more typical level during the second quarter and has since been included in the analysis. The water level in glacial till well MW-8910SH returned to a more typical level in the fourth quarter after four consecutive quarters at record high levels including an intrawell maximum during the first quarter of 2019 (elev. 552.95 feet). Conversely, the water elevation in the neighboring glacial till well, MW-8911SH, was unusually low during the same four quarters, and also returned to a typical level during the fourth quarter in 2019.

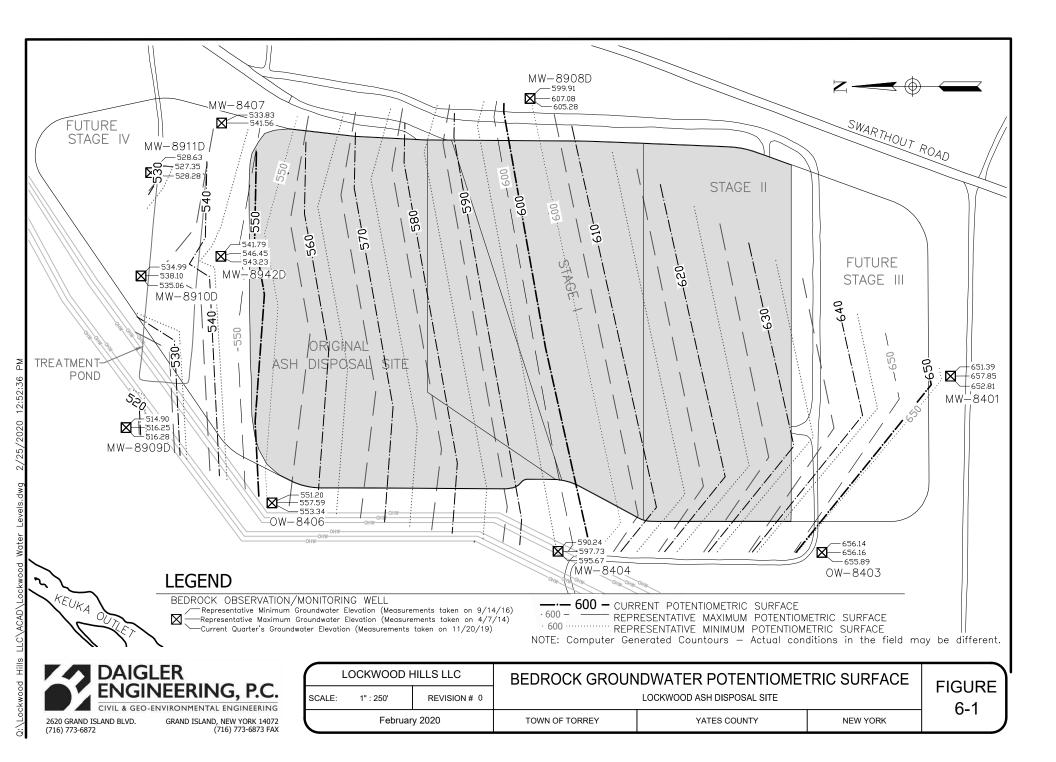
An intrawell maximum groundwater elevation was recorded in the downgradient, glacial till observation well OW-7741 during the second quarter but returned to more a normal level during the last two quarters of 2019. Upgradient of the landfill, the groundwater elevation in the glacial till observation well OW-8402 was depressed during the second half of 2019, albeit not at record levels. During the fourth quarter of 2019, its bedrock counterpart, the observation well OW-8403, was at an intrawell minimum groundwater elevation.

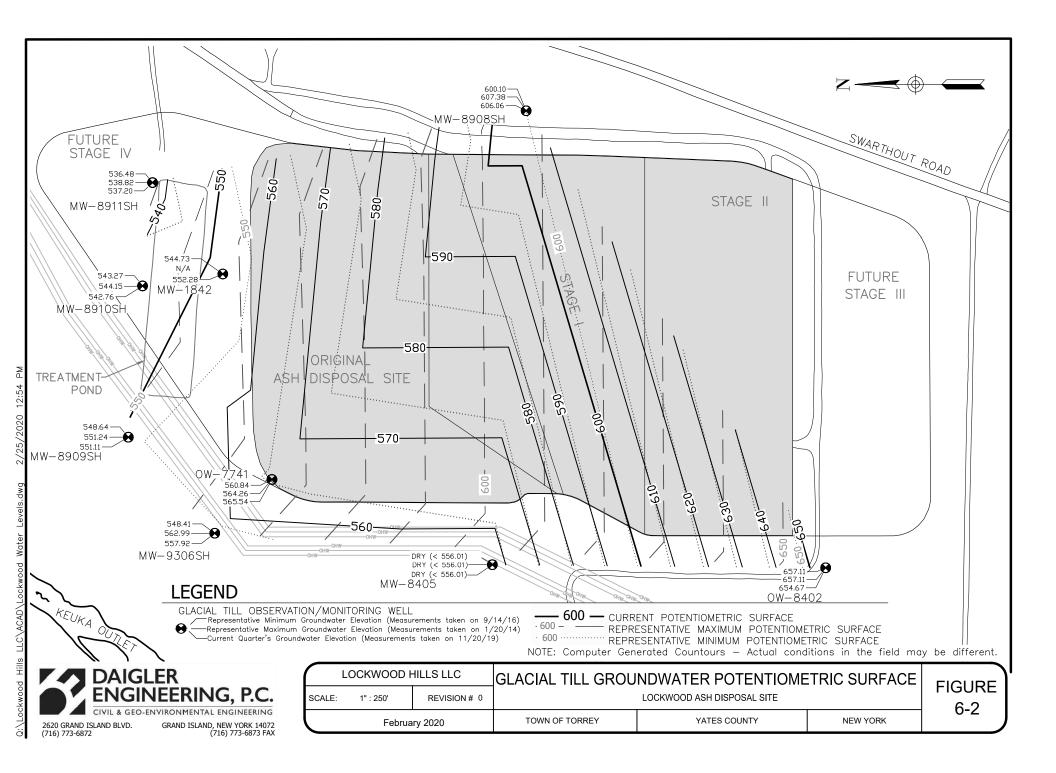
Figure 4-3 is a comparison between current bedrock and glacial till potentiometric surfaces. Groundwater flow appears to be predominately southeast to northwest in the southern half of the site. In the northern half of the site, groundwater flow takes on a stronger downward gradient and typically shows a distinct angle towards the Keuka Outlet in the northwestern corner, especially in the glacial till. Vertical gradients for the fourth quarter 2019 were generally typical for the site. This follows some notable exceptions in the MW-8908, MW-8910, and MW-8911 couplets which

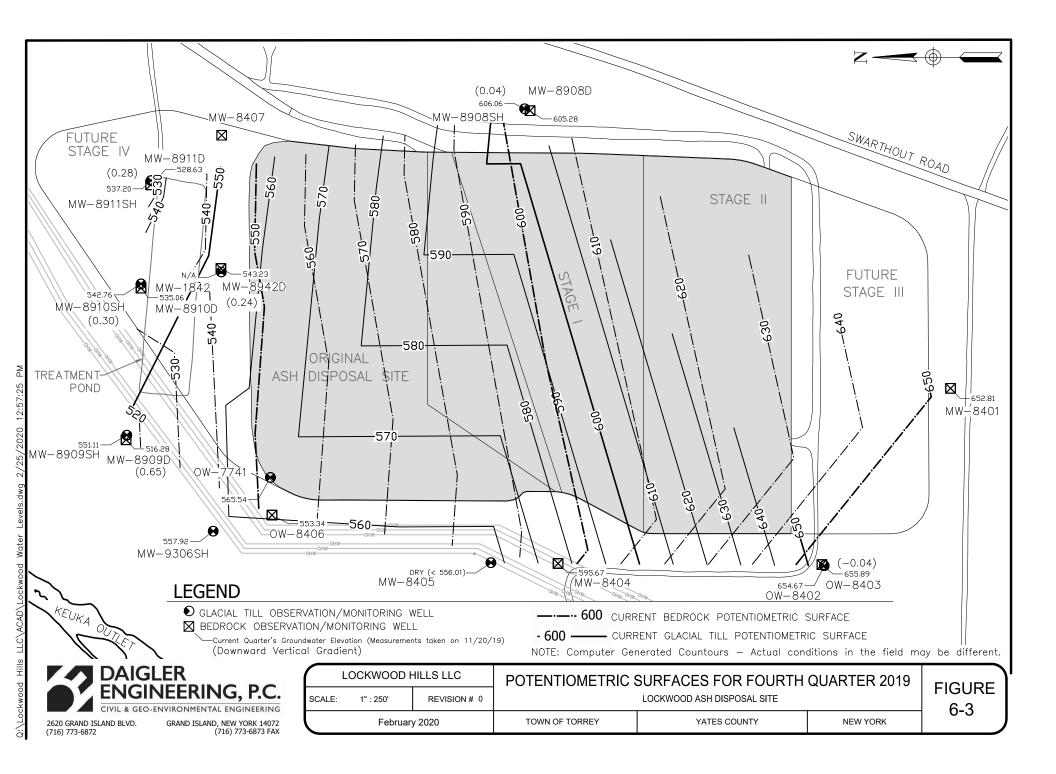
were starkly different than normal for four quarters starting with the fourth quarter of 2018. The MW-8908 couplet gradient is typically slightly downwards (average = 0.03 prior to the 2018 fourth quarter) but was upwards from the fourth quarter of 2018 through the third quarter of 2019, with an intralocation extreme of -0.13^{1} . Groundwater at the MW-8910 couplet typically has a moderately strong downward gradient of 0.23 (average prior to the 2018 fourth quarter), but the gradient was strongly downward during the four questionable quarters (average = 0.59) with an intralocation extreme of 0.64 in the third quarter of 2019. Immediately adjacent to MW-8910, the MW-8911 couplet was at an unusually low, nearly neutral gradient when it also typically has a moderately downward gradient (average of Q4 2018 to Q3 2019 = 0.05 as compared to the average prior to the fourth quarter of 2018 of 0.32). There is no clear explanation for this period of unusual water levels.

The vertical gradient for the OW-8402/8403 couplet is typically downwards but has been upwards for two consecutive quarters due to significantly lower water levels in the deep bedrock well of the couplet. This reversal does not appear to be part of a trend. Water levels in this couplet will be monitored to determine if the vertical gradient remains reversed.

¹ The negative gradient denotes an upward direction.







ATTACHMENT 1 NYSDEC 2019 Annual Report Form

MSW, INDUSTRIAL OR ASH LANDFILL ANNUAL/QUARTERLY REPORT

Submit the Annual Report no later than March 1, 2020.

A. This annual/quarterly report is for the year of operation from January 01, 2019 to December 31, 2019

B. Quarterly Report for: ___Quarter 1 ___Quarter 2 ___Quarter 3 ___Quarter 4

	SECTIO	ON 1 – FAG	CILITY INFORMATIO	Ν							
		FACILITY	INFORMATION								
FACILITY NAME:											
FACILITY LOCATION ADDRESS:		FACILITY	СІТҮ:		STATE:	ZIP CODE:					
FACILITY TOWN:		FACILITY	COUNTY:	FACI	LITY PHON	E NUMBER:					
FACILITY NYS PLANNING UNIT: (A list of NYS Planning Units can be found at the end of this report). NYSDEC REGION #:											
360 PERMIT #:	DATE IS	SUED:	DATE EXPIRES:		DEC ACTIV	ITY CODE OR NUMBER:					
FACILITY CONTACT:		□ public□ private	CONTACT PHONE NUMBER:	(CONTACT	FAX NUMBER:					
CONTACT EMAIL ADDRESS:											
		OWNER	INFORMATION	1							
OWNER NAME:		OWNER P	HONE NUMBER:	OWNER FAX NUMBER:							
OWNER ADDRESS:		OWNER C	ITY:		STATE:	ZIP CODE:					
OWNER CONTACT:		OWNER C	ONTACT EMAIL ADDRE	SS:							
		OPERATO	R INFORMATION								
OPERATOR NAME: Sam	e as owne	ər			□public □private						
			ERENCES								
Preferred address to receive corres	pondence.	: 🗆 Fa	acility location address	□ On	ner addres:	S					
Preferred email address:			acility Contact	Ои	vner Contac	t					
Preferred individual to receive corre	spondenc	e: 🗆 Fa	acility Contact	🗆 Ои	vner Contac	t					
□ No;	Did you operate in 2019? ☐ Yes; Complete this form. ☐ No; Complete and submit Sections 1 and 23. If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, also complete the "Inactive Solid										
Reprinted (12/19) * Lockwood Hi existing permit	lls submitte does not e	ed a timely and expire until the	I sufficient application for ren department has made a fina of the State Administrative P	ewal of I decisio	the permit. T	The					

SECTION 2 - SITE LIFE

a.	dfill Capacity Utilized Last Year (reporting year).	
а.	What is the estimated landfill capacity that was utilized during the re	eporting year?
		_ Cubic Yards of Airspace
b.	What is the estimated in-situ waste density for the reporting year?	Please do not repo units as pounds pe cubic yard. Tons/Cubic Yard
Rer	naining Constructed Capacity	
a.	What is the remaining capacity of the landfill that is already construe	cted?
		Cubic Yards of Airspace
b.	What is the estimated remaining life of the constructed capacity?	
	YearsMonths	
	at Tons/Year.*	
	* Please note that this tonnage rate must include all materials placed	d in the landfill, i.e., waste, soil,
	cover, alternative daily covers, etc.	
C.	The tonnage rate reported under 2.b. is based on (select one):	orting year
	The amount of materials placed in the landfill in the repo	orung year
	Estimated future disposal Permit limit	
	Other (explain):	
Per	mitted Capacity Still to be Constructed	
а.	What is the remaining but not yet constructed landfill capacity that is	s authorized by a Part 360
a.	What is the remaining but not yet constructed landfill capacity that is permit?	s authorized by a Part 360
a.		s authorized by a Part 360
a.	permit?	s authorized by a Part 360
a. b.	permit?	s authorized by a Part 360
	permit? Cubic Yards of Airspace	s authorized by a Part 360
	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?	s authorized by a Part 360
	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a? Years Months	
	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?YearsMonths atTons/Year.*	
b.	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a? Years Months at Tons/Year.* * Please note that this tonnage rate must include all materials dispose soil and alternative daily covers.	
	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?YearsMonths atTons/Year.* * Please note that this tonnage rate must include all materials dispose soil and alternative daily covers. The tonnage rate reported under 3.b. is based on (select one):	sed in the landfill, i.e., waste, and
b.	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?YearsMonths atTons/Year.* *Please note that this tonnage rate must include all materials dispose soil and alternative daily covers. The tonnage rate reported under 3.b. is based on (select one):The amount of materials placed in the landfill in the reported	sed in the landfill, i.e., waste, and
b.	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?YearsMonths atTons/Year.* * Please note that this tonnage rate must include all materials dispose soil and alternative daily covers. The tonnage rate reported under 3.b. is based on (select one):	sed in the landfill, i.e., waste, and
b.	permit? Cubic Yards of Airspace What is the projected life of capacity reported in 3.a?YearsMonths at Tons/Year.* *Please note that this tonnage rate must include all materials dispose soil and alternative daily covers. The tonnage rate reported under 3.b. is based on (select one): The amount of materials placed in the landfill in the reported Estimated future disposal	sed in the landfill, i.e., waste, and orting year

4. Capacity Proposed in a Part 360 Permit Application

What is the capacity of any expansion proposed in a Part 360 permit application that has been submitted to the Department but not authorized by a permit as of the end of the reporting period?

 Cubic Yards of Airspace
•

5. Estimated Potential Future Capacity Not Permitted or in an Application (optional)

What is the estimated capacity of any potential future expansion at the facility that is not yet authorized by a permit or proposed in a Part 360 permit application that has been submitted to the Department?

Cubic Yards of Airspace
•

SECTION 3 - PRIMARY LEACHATE

Name of off-site leachate treatment facility(s) utilized:

Does the landfill have a constructed liner and a leachate collection system? _____Yes _____No

Enter the quantity of primary leachate that was collected, removed for on-site and off-site treatment, and recirculated each month, and the corresponding Acreage, by Cell: (Note: For double-lined landfills this should not include the volume of leachate collected from secondary leachate collection and removal systems.)

For each cell, please report the
acreage and the primary
leachate amount.

		PRIMARY L	EACHATE C	OLLECTED	(GALLONS)	PRIMARY LEACHATE TREATED OFF SITE (GALLONS)						
	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres
January												
February												
March												
April												
Мау												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

	Р	RIMARY LE	ACHATE RE	CIRCULATE	D (GALLONS	S)	PRIMARY LEACHATE TREATED ON SITE (GALLONS)					
	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres
January												
February												
March												
April												
Мау												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

Submit (attached to this form) a copy of the maintenance logs which document compliance with the Operation and Maintenance Manual's schedule for the routine annual flushing and inspection of the primary leachate collection and removal system. List required submissions that have been attached to this form or the reason for not attaching a required piece of information:

Submit (attached to this form) a tabulated compilation of the semi-annual primary leachate quality data collected throughout the year including a summary comparing this year's data with the previous year's data and a summary discussion of results. This list should identify sample location(s) and method of analysis. List required submissions that have been attached to this form or the reason for not attaching a required piece of information:

SECTION 4 - SECONDARY LEACHATE

Does landfill have a double liner system with a secondary leachate collection and removal system? _____Yes _____No

Submit (attached to this form) a tabulated compilation of the semi-annual secondary leachate quality data collected throughout the year including a summary comparing this year's data with all previous years' data and a summary discussion of results. This list should identify sample location(s) and methods of analysis. List required submissions that have been attached to this form or the reason for not attaching a required piece of information:

	Please report total cost for the year, not cost/gal.
Leachate Cost: (including transportation if appropriate) during the calendar year for leachate treatment: \$	
Total quantity treated: gal	

Enter the quantity of secondary leachate that was collected, removed for on-site and off-site treatment, and recirculated each month, and the corresponding Acreage, by Cell:

For each cell, please report the acreage and the secondary leachate amount.

	S	ECONDARY	LEACHATE	COLLECTE	D (GALLON	S)	SECONDARY LEACHATE TREATED OFF SITE (GALLONS)					
	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres
January												
February												
March												
April												
Мау												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

	SE	CONDARY L	EACHATE R	ECIRCULAT	ED (GALLO	NS)	SECONDARY LEACHATE TREATED ON SITE (GALLONS)					
	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres	Cell 1 Acres	Cell 2 Acres	Cell 3 Acres	Cell 4 Acres	Cell 5 Acres	Cell 6 Acres
January												
February												
March												
April												
Мау												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

SECTION 5 - BENEFICIAL USE DETERMINATION MATERIALS AND ALTERNATIVE OPERATING COVER MATERIALS

For each type of waste material that the Department has approved for use as alternative operating cover (AOC), intermediate cover, or other landfill material, provide the annual weight in tons, use (i.e., operating cover, intermediate cover, etc.), and source of material. (If material is from a solid waste facility also provide facility name, address, NYS Planning Unit, County/ Province, and State/Country.) Refer to the list of NYS Planning Units that can be found at the end of this report.

Type of Solid Waste	Weight (tons/year)	Use	NYS Planning Unit (See Attached List of NYS Planning Units)	County or Province	State or Country	Source (Facility and Address)
Aggregate/Concrete						
Contaminated Soil						
Foundry Sand						
Glass						
Industrial Waste (specify)						
MSW Ash						
Wood Ash						
Paper Mill Sludge						
Processed C&D						
Waste Tire-Derived Aggregate /						
Waste Tires						
Other (specify)						
Total AOC						
Total Beneficial Use Determination Materials						

Percent Alternative Operating Cover (AOC) Calculation

AOC Calculations: Total Tons AOC/Total Tons Waste Disposed x 100 = _____

Please note the calculation is: Tons AOC (from table above)/Tons Solid Waste (from table in Section 6) x 100 and Not: Tons AOC / (Tons Solid Waste + AOC) x 100

SECTION 6 - SOLID WASTE DISPOSED

Provide the tonnages of solid waste disposed. Exclude Beneficial Use Material amounts reported in Section 5 and Recyclable Material amounts reported in Section 8. Specify the methods used to measure the quantities disposed and the percentages measured by each method:

_% Scale Weight

____% Estimated

_% Truck Count

____% Other (Specify: _____

Type of Solid Waste	January	February	March	April	Мау	June	July
	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)
Asbestos							
Ash (Coal)							
Ash (MSW Energy Recovery)							
Construction & Demolition Debris (mixed)							
Industrial Waste (Including Industrial Process Sludges)							
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)							
Oil/Gas Drilling Waste							
Petroleum Contaminated Soil							
Sewage Treatment Plant Sludge							
Treated Regulated Medical Waste							
Emergency Authorization Waste (Storm Debris)							
Other (specify)							
Total Tons Disposed							

SECTION 6 - SOLID WASTE DISPOSED (continued)

Type of Solid Waste	Tip Fee (\$/Ton)	August (tons)	September (tons)	October (tons)	November (tons)	December (tons)	Total Year (tons)	Daily Avg. (tons)
Asbestos								
Ash (Coal)								
Ash (MSW Energy Recovery)								
Construction & Demolition Debris (mixed)								
Industrial Waste (Including Industrial Process Sludges)								
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)								
Oil/Gas Drilling Waste								
Petroleum Contaminated Soil								
Sewage Treatment Plant Sludge								
Treated Regulated Medical Waste								
Emergency Authorization Waste (Storm Debris)								
Other (specify)*								
* Ash laden sludge from Treatment Pond dredging								
Total Tons Disposed								

** Facility is a captive landfill; no tipping fees.
 ***Daily Average (tons) reflects the 15 days of active waste disposal between 8/8/2019 and 8/22/2019.
 Reprinted (12/19)

SECTION 7 – SERVICE AREA OF SOLID WASTE RECEIVED

<u>Please identify where the waste is coming from.</u> The total tons received reported below should equal the total tons received in Section 6 (Solid Waste Disposed). DO NOT REPORT IN CUBIC YARDS!

- If the waste WAS received from another solid waste management facility, please write in the name and address of the facility along with the appropriate state, county and planning unit/municipality.
- If the waste WAS NOT received from another solid waste management facility, please write in "Direct Haul" along with the appropriate state, county and planning unit/municipality where the waste was generated.

Specify transport method and percentages of total waste transported by each:

____% Road ____% Rail ____% Water ____%

____% Other (specify:_____)

Explain which waste types and service areas below are included in these transport methods ______

SERVICE AREA OF SOLID WASTE RECEIVED							
TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul"	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECEIVED		
Asbestos							
Ash (Coal)							
Ash (MSW Energy Recovery)							
Construction & Demolition Debris (mixed)							

	SERVICE AREA OF SOLI	ID WASTE REC	EIVED		
TYPE OF SOLID WASTE	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul"	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECEIVED
Industrial Waste (Including Industrial Process Sludges)					
	<u> </u>			<u> </u>	
Mixed Municipal Solid Waste					
(Residential, Institutional &					
Commercial)					
Oil/Gas Drilling		Τ			
Waste					
Petroleum					
Contaminated Soil					
Sewage Treatment					
Plant Sludge					
Treated Regulated					
Medical Waste (TRMW)*					
Emergency					
Authorization Waste (Storm Debris)					
Other (specify)					
			тс	TAL RECEIVED (tons	s):

* List generators that provide you Certificates of Treatment forms and quantities of TRMW from each ______

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS

Is your facility <u>also</u> a	permitted or registered Recyclables Handling & Recover	y Facility?			
□ Yes; Complete Sec material received as s	ction 9 for material recovered from the mixed solid waste strea ource separated. The RHRF form is located at: <u>http://www.de</u>	am. Complete a <u>ec.ny.gov/chemi</u>	Recyclables Hanc cal/52706.html	lling & Recovery Facility	(RHRF) form for
□ No; Complete Sect	tion 9 for material recovered from the mixed solid waste stream	m and for mater	al received as sou	rce separated.	
	A. Service Area of Recycla				
_	Please identify where the recyclable materials are con				
	VERE received from another solid waste management facility, e, county and planning unit/municipality.	please write in	the name and <u>add</u>	ress of the facility along	with the
	VERE NOT received from another solid waste management fate: /municipality where the recyclables were generated.	acility, please wr	ite in " <i>Direct Haul</i>	along with the appropr	iate state, county
Specify transport metho	od, list type of material(s) and percentages of total waste trans	sported by each			
% Road: Waste	Type(s):	% Rail:	Waste Type(s):		
	Type(s):		er (specify:): Waste Type(s):	
	SERVICE AREA OF RECYCLAB	LE MATERIAL	RECEIVED		
MATERIAL	SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul"	SERVICE AREA STATE OR COUNTRY	SERVICE AREA COUNTY OR PROVINCE	SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECEIVED
Commingled Containers (metal, glass, plastic)					
Commingled Paper (all grades)					
Single Stream (total)					
Brush, Branches,					
Trees, & Stumps					
Food Scraps					
Yard Waste					
(curbside)			1		
Other (specify)					

TOTAL RECEIVED (tons):

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS B. Material Recovered

Identify the name of the destination facility to which the material was sent from your facility, the corresponding State/Country, the County/Province, the NYS Planning Unit, and the amount of material transported. **Refer to the list of NYS Planning Units that can be found at the end of this report.** DO NOT REPORT IN CUBIC YARDS!

Specify transport method and percentages of total material transported by each:

____% Road ____% Rail ____% Water ___% Other (specify: _____)

Explain which materials and destinations below are included in these transport methods

	PAPER RECOVERED							
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)			
Commingled Paper (all grades)								
Corrugated Cardboard								
Junk Mail								
Magazines								
Newspaper								
Office Paper								
Paperboard / Boxboard								
Other Paper (specify)								
			TOTAL PAPER	RECOVERED (tons):				

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

	GLASS REG	COVERED				
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)	
Container Glass						
Industrial Scrap Glass						
Other Glass (specify)						
			TOTAL GLASS R	ECOVERED (tons):		
	METAL REG	COVERED	Γ	r		
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)	
Aluminum Foil / Trays						
Bulk Metal (from MSW)						
Bulk Metal (from CD debris)						
Enameled Appliances / White Goods						
Industrial Scrap Metal						
Tin & Aluminum Containers						
Other Metal (specify)						
TOTAL METAL RECOVERED (tons):						

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

	PLASTIC F	RECOVERED				
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)	
Mixed Plastic (#1 - #7)						
PET (plastic #1)						
HDPE (plastic #2)						
Other Rigid Plastics (#3 - #7)						
Industrial Scrap Plastic						
Plastic Film & Bags						
Other Plastics (specify)						
TOTAL PLASTIC RECOVERED (tons):						

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

	MIXED MATERIAL RECOVERED								
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)				
Commingled Containers (metal, glass, plastic)									
Commingled Paper & Containers									
Single Stream (total)									
Other (specify)									
TOTAL MIXED MATERIAL RECOVERED (tons):									

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued)

B. Material Recovered

MISCELLANEOUS MATERIAL RECOVERED								
RECOVERED MATERIAL	DESTINATION (Name & Address)	DESTINATION STATE OR COUNTRY	DESTINATION COUNTY OR PROVINCE	DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units)	TONS RECOVERED (out of facility)			
Electronics								
Textiles								
Brush, Branches, Trees, & Stumps								
Food Scraps								
Yard Waste								
Other (specify)								
		TOTAL MISCELLA	NEOUS MATERIA	L RECOVERED (tons)	:			

VOLUME TO WEIGHT CONVERSION FACTORS

MATERIAL	EQUIVA	LENT	MATERIAL	EQUIVALENT		EQUIVALENT MATERIAL EQ		ALENT
GLASS – whole bottles	1 cubic yard	0.35 tons	GLASS - crushed mechanically	1 cubic yard	0.88 tons	ALUMINUM – cans – whole	1 cubic yard	0.03 tons
GLASS - semi crushed	1 cubic yard	0.70 tons	GLASS - uncrushed manually	55 gallon drum	0.16 tons	ALUMINUM – cans – flattened	1 cubic yard	0.125 tons
PAPER - high grade loose	1 cubic yard	0.18 tons	PLASTIC – PET – whole	1 cubic yard	0.015 tons			
PAPER - high grade baled	1 cubic yard	0.36 tons	PLASTIC – PET – flattened	1 cubic yard	0.04 tons			
PAPER - mixed loose	1 cubic yard	0.15 tons	PLASTIC – PET – baled	1 cubic yard	0.38 tons	WHITE GOODS - uncompacted	1 cubic yard	0.10 tons
NEWSPRINT - loose	1 cubic yard	0.29 tons	PLASTIC – styrofoam	1 cubic yard	0.02 tons	WHITE GOODS - compacted	1 cubic yard	0.5 tons
NEWSPRINT - compacted	1 cubic yard	0.43 tons	PLASTIC – HDPE – whole	1 cubic yard	0.012 tons			
CORRUGATED – loose	1 cubic yard	0.015 tons	PLASTIC – HDPE – flattened 1	1 cubic yard	0.03 tons			
CORRUGATED - baled	1 cubic yard	0.55 tons	PLASTIC – HDPE – baled	1 cubic yard	0.38 tons	FERROUS METAL - cans whole	1 cubic yard	0.08 tons
			PLASTIC – mixed (grocery bags)	45 gallon bag	0.01 tons	FERROUS METAL - cans	1 cubic yard	0.43 tons

SECTION 9 – UNAUTHORIZED SOLID WASTE

Has unauthorized solid waste been received at the facility during the reporting period?

 \Box Yes \Box No If yes, give information below for each incident (attach additional sheets if necessary):

Date Received	Type Received	Date Disposed	Disposal Method & Location

Radiation Monitoring

Does your facility use a fixed radiation monitor?	Yes No	
Identify Manufacturer	and Model	_ of fixed unit.
Does your facility use a portable radiation monitor?	Yes No	
Identify Manufacturer	and Model	_ of portable unit.

If the radiation monitors have been triggered give information below for each incident:

Incident	Rece	ived			Truck	Reading	Disposal Status	Removed	
Number	Date	Time	Hauler	Origin	Number			Date	Time

SECTION 10 - WASTE IN PLACE

Summary by Waste Type and Year

Include all active and inactive sections of the landfill. Report waste disposed annually by type, if known, in tons per year. Report total waste disposed, if breakdown of types is not available. In the case where more than one landfill section operated in a given year identify each separately, if known. If the annual amount is not available, report the quantities for a range of years. If you include amounts from old, closed landfills then clearly identify them on the table and explain below. In each row, report quantities disposed each year (or group of years if individual years unknown) for each waste type. Report cumulative WIP at bottom (sum of annual quantities disposed). Add additional sheets as necessary.

Year	MSW (tons)	Asbestos Waste (tons)	Ash (tons)	C&D Debris (tons)	Industrial Waste (tons)	Petroleum Contaminated Soil (tons)	Sewage Treatment Plant Sludge (tons)	Other (tons)	Year(s) Total (tons)	Identify Landfill Section(s) Used
WIP Cumulative Total										

Overall in place volume ______ cubic yards

Method for determining waste composition, if known.

Explain if closed landfills are included above ______

SECTION 10 - WASTE IN PLACE

Summary by Waste Type and Year

Include all active and inactive sections of the landfill. Report waste disposed annually by type, if known, in tons per year. Report total waste disposed, if breakdown of types is not available. In the case where more than one landfill section operated in a given year identify each separately, if known. If the annual amount is not available, report the quantities for a range of years. If you include amounts from old, closed landfills then clearly identify them on the table and explain below. In each row, report quantities disposed each year (or group of years if individual years unknown) for each waste type. Report cumulative WIP at bottom (sum of annual quantities disposed). Add additional sheets as necessary.

Year	MSW (tons)	Asbestos Waste (tons)	Ash (tons)	C&D Debris (tons)	Industrial Waste (tons)	Petroleum Contaminated Soil (tons)	Sewage Treatment Plant Sludge (tons)	Other (tons)	Year(s) Total (tons)	Identify Landfill Section(s) Used
WIP Cumulative Total										

Overall in place volume ______ cubic yards

Method for determining waste composition, if known.

Explain if closed landfills are included above _____

SECTION 10 - WASTE IN PLACE

Summary by Waste Type and Year

Include all active and inactive sections of the landfill. Report waste disposed annually by type, if known, in tons per year. Report total waste disposed, if breakdown of types is not available. In the case where more than one landfill section operated in a given year identify each separately, if known. If the annual amount is not available, report the quantities for a range of years. If you include amounts from old, closed landfills then clearly identify them on the table and explain below. In each row, report quantities disposed each year (or group of years if individual years unknown) for each waste type. Report cumulative WIP at bottom (sum of annual quantities disposed). Add additional sheets as necessary.

Year	MSW (tons)	Asbestos Waste (tons)	Ash (tons)	C&D Debris (tons)	Industrial Waste (tons)	Petroleum Contaminated Soil (tons)	Sewage Treatment Plant Sludge (tons)	Other (tons)	Year(s) Total (tons)	Identify Landfill Section(s) Used
WIP Cumulative Total										

Overall in place volume ______ cubic yards

Method for determining waste composition, if known.

Explain if closed landfills are included above ______

Waste Summary by Landfill Section

Provide waste in place information for all landfill sections.

Number of landfill sections:	
Original* section used (years) from to	Next* section used (years) from to
Section Footprint acres	Section Footprint acres
Capped with approved final cover system Yes No	Capped with approved final cover system Yes No
Percent capped	Percent capped
Waste in Place: Tons Cubic Yards, if known	Waste in Place: Tons Cubic Yards, if known

* If there are additional landfill sections, phases or cells, please provide the same waste in place information on additional sheets and attach to form.

SECTION 11 - LANDFILL GAS

Does the landfill have a landfill gas collection & control system? Yes No	If Yes: Active Passive
Number of gas wells:	
Total landfill footprint acreage	
Total landfill acreage from which gas is collected	
Landfill sections from which gas is collected	-
Landfill acreage from which gas is collected for energy recovery	
Measured Methane Generation Rate*, k	
Measured Potential Methane Generation Capacity*, L_0	m³/Mg
NMOC Concentration* ppmv as hexane	
Does the landfill require a Title V Permit? Yes No	_
Name of Landfill Gas Recovery (gas to energy or other use) Fac	sility:

* Note: If Concentration NMOC, Lo and k are not known or included, default values will be used to calculate the NMOCs emissions from the Landfill.

<u>Flare</u>

Open and Enclosed Flares located at the Landfill and the Landfill Gas Recovery Facility Number of Flares:	
Type of Flare: Opened Flare Enclosed Flare	Please report units in cubic feet
Quantity of Gas Collected and Flared Annually	
Candlestick Flares: Number of Candlestick Flares Estimate of Gas Flared Candlestick Flare cubic feet	
<u>Gas To Energy</u>	Please report units
Number of Internal Combustion Engines: Quantity of Gas collected for Internal Combustion Engine Annually Methane Destruction efficiency % Methane Percentage in Landfill Gas before combustion % Utility Company Receiving Electricity	_ cubic feet
Gas Processed for Use (Other than gas to electricity) Quantity of Gas Collected for Processing cubic feet Methane Percentage in Landfill Gas before processing % On-site or Off-site User of Gas	
Facility Contact Phone # (
Contact e-mail address Fax # ()	
Operation and maintenance cost for calendar year: \$	
Does the LGRF experience shut downs:YesNo	
If yes, indicate reasons for shut downs. List required submissions that have been attached to the reasons for not attaching a required piece of information:	this form or
Year landfill opened: Anticipated landfill closure date:	
Reprinted (12/19)	

Results of Condensate Sampling

Submit (attached to this form) condensate quality monitoring results accomplished in accordance with condensate sampling. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

Landfill Gas Utilized For Energy Recovery

Provide the following information for the landfill gas recovered for energy. **DO NOT INCLUDE THE GAS FLARED!**

	Landfill Gas Collected for Energy Recovery (Cubic Feet)	Steam* Generated (Cubic Feet)	Total Electricity* Generated for onsite and offsite use (K.W.H.)	Total Gas Processed for use other than electricity generation (Cubic Feet)	Condensate Generated (Gallons)	Facility Operation (Hours)
January February						
March						
April						
May						
-						
June						
July						
August						
September						
October						
November						
December						
ANNUAL TOTAL						

* Provide where applicable.

Normal Weekdays of Operation ______ Normal Hours of Operation ______

Electricity Generated and used/marketed offsite _	KWH
Electricity Generated and used onsite	KWH
Gas Processed and used/marketed offsite	cubic feet

Gas Processed and used/marketed offsite ______ cubic feet

Describe the collection, storage, treatment and disposal techniques used in managing the condensate:

Reprinted (12/19)

SECTION 12 - COST ESTIMATES AND FINANCIAL ASSURANCE DOCUMENTS

Are there required cost estimates and financial assurance documents for closure and post-closure care?

□ Yes □ No If yes, attach additional sheets reflecting annual adjustments for inflation and any changes to the Closure Plan? See 2019 Annual Report, Section 3 and attached letter of credit.

SECTION 13 – PROBLEMS Were any problems encountered during the reporting period (e.g., specific occurrences which have to changes in facility procedures)?						
□ Yes	□ No	If yes, attach additional sheets identifying each problem and the methods for resolution of the problem.				

SECTION 14 – CHANGES

Were there any changes from approved reports, plans, specifications, and permit conditions?

 \Box Yes \Box No If yes, attach additional sheets identifying changes with a justification for each change.

SECTION 11 – LANDFILL	OPERATOR TRAINING
------------------------------	--------------------------

Name of trained landfill operator:

Name and location of training course:

Date completed: _____

SECTION 16 - ANALYTICAL RESULTS

Submit (attached to this form) tables showing the sample collection date, the analytical results [including all peaks even if below the Method Detection Limits (MDL)], designation of upgradient wells and location number for each environmental monitoring point sampled, applicable water quality standards, and groundwater protection standards if established, MDL's, and Chemical Abstracts Service (CAS) numbers on all parameters. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

SECTION 17 - COMPARING DATA

Submit (attached to this form) tables or graphical representations comparing current water quality with existing water quality and with upgradient water quality. These comparisons may include Piper diagrams, Stiff diagrams, tables, or other analyses. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

SECTION 18 - DISCUSSION OF RESULTS

Submit (attached to this form) a summary of any contraventions of State water quality standards, significant increases in concentrations above existing water quality, any exceedances of groundwater protection standards, and discussion of results, and any proposed modifications to the sampling and analysis schedule necessary to meet the Existing, Operational and Contingency water quality monitoring requirements. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

SECTION 19 - DATA QUALITY ASSESSMENT

Submit (attached to this form) any required data quality assessment reports. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

SECTION 20 - SUMMARIES OF MONITORING DATA

Submit (attached to this form) a summary of the water quality information presented in Sections 16 and 17 for the year of operation for which the Annual Report is made, noting any changes in water quality which have occurred throughout the year. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

SECTION 21 - SURFACE IMPOUNDMENTS

Does this landfill have a surface impoundment?

□ Yes □ No If yes, repeat Sections 15 through 18 above for Quarterly Reports and Section 19 above for Annual report. Attach additional submissions required by this section.

Reprinted (12/19)

SECTION 22 - PERMIT/CONSENT ORDER REPORTING REQUIREMENTS

Are there any additional permit/consent order reporting requirements not covered by the previous sections of this form?

□ Yes 🗆 No If yes, attach additional sheets identifying the reporting requirements with their respective responses.

SECTION 23 - SIGNATURE AND DATE BY OWNER OR OPERATOR

Owner or Operator must sign, date and submit one completed form to the appropriate Regional Office (See attachment for Regional Office addresses, email addresses and Materials Management Contacts).

The Owner or Operator must also submit one copy by email, fax or mail to:

New York State Department of Environmental Conservation **Division of Materials Management** Bureau of Solid Waste Management 625 Broadway Albany, New York 12233-7260 Fax 518-402-9041 Email address: SWMFannualreport@dec.ny.gov

I certify, under penalty of law, that the data and other information identified in this report have been prepared under my direction and supervision in compliance with a system designed to ensure that qualified personnel properly and accurately gather and evaluate this information. I am aware that any false statement I make in such report is punishable pursuant to section 71-2703(2) of the Environmental Conservation Law and section 210.45 of the Penal Law.

DALCARWAN Signature

Name (Print or Type)

Title (Print or Type)

Date

Email (Print or Type)

Address

State and Zip

ATTACHMENTS: ____ YES _ NO (Please check appropriate line)

Reprinted (12/19)

Citv

Phone Number



ADVICE OF CREDIT

DATE: DECEMBER 26, 2019

LETTER OF CREDIT NO.: SVBSF009520 APPLICANT: ATLAS CAPITAL RESOURCES LP BENEFICIARY: REGIONAL DIRECTOR, REGION 8, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION ISSUING BANK: SILICON VALLEY BANK AMOUNT: USD 4,937,750.00

LADIES AND GENTLEMEN:

WE CREDITED YOUR ACCOUNT NUMBER XXXXX9561 WITH US IN THE AMOUNT OF USD 8,401.03.

DETAILS ARE AS FOLLOWS:

COMMITMENT	FEE	REFUND	USD	8,401.03
TOTAL			USD	8,401.03

NOTE: PLEASE BE ADVISED THAT USD54,891.32 WAS CHARGED FOR Q4-19 COMMITMENT FEE AT 4.35%. THE REVISED FEE OF USD46,490.29 WAS CALCULATED AT 3.85% FOR PERIOD 9/30/19-10/31/19 AND 3.60% FOR PERIOD 10/31/19-12/31/19.

IF YOU HAVE ANY QUESTIONS REGARDING THIS TRANSACTION, PLEASE CONTACT THERESA GARCIA AT 408-654-5088, ALWAYS QUOTING OUR LETTER OF CREDIT NO. SVBSF009520.

THIS DOCUMENT IS COMPUTER GENERATED AND REQUIRES NO SIGNATURE.

SVB Confidential

ATTACHMENT 2

Inspection Logs

LOCKWOOD ASH LANDFILL MONTHLY ASH SITE INSPECTION

****** ***

		GEM312-ALOW	
Inspector Harald Sexten			
Date of Inspection_	1/24/19Time	45 P.m	
Weather Conditions windy cloudy			
NOTE: For any	NO = Not Observed CA = Corrective Act item marked CA, a description of the proble on should be noted in the corrective action se	m and its proposed or implemented	
OK NO CA	FACILITY MANAGEMENT		
	 Required permits and operational record permits to operate/construct, SPDES per stormwater permit, compaction tests and 	ermit, Part 364 transport permits,	
	2. Transport vehicles are marked in accord covered during transit.	lance with Part 364.6(b) and are	
OPERATION CONTROL			
<u> </u>	 Dust is effectively controlled and does no (If water from sedimentation pond is use section including quantity). 	ot constitute an off-site nuisance. ed for dust control, note in comment	
	4. Berms, dikes, and slopes are free of char potentially damaging vegetation and dar	anneling, slumping, erosion, nage caused by wildlife.	
	WATER		
<u> </u>	5. Solid waste is prevented from entering s	urface waters and/or groundwater.	
<u> </u>	Leachate collection system appears to b water on active site, no obstructions in p	e functioning properly (no ponded piping or manholes).	
<u> </u>	7. Perimeter drainage ditches are sufficient freely.	ly clear to allow water to flow	
<u> </u>	8. Sedimentation pond is free of potentially exhibit no apparent damage from wildlife		
	ACCESS		
<u> </u>	9. Access to site and sedimentation pond c controlled by means of fencing, gates, lo		
	10. Access roads are passable.		

Lockwood Ash Landfill Monthly Ash Site Inspection - Continued

*

ъ. , .

۰

.

		WASTE HANDLING
<u> </u>		 Coal combustion by-products (CCBP's) are placed in accordance with operating procedures (6-8" lifts, well-compacted, in designated areas).
at the site.	Note:	12. Only authorized material generated at Greenidge Station has been placed If authorized or permitted waste from any other source has been placed, notification to FSG and lab must be made to ensure analysis for arsenic and selenium. Please also note source and quantity in comment section.
		MONITORING
<u></u>		13. Monitoring wells are intact.
,		OTHER
<u> </u>		14. All required equipment is on-site and operational.
		 Contractual sweeping requirements appear to have been performed (roads and ash unloading areas are clear of CCBP materials and debris).
		 Compaction tests have been performed during the last month. Note: If tests have been performed, dates and results should be listed in comment section.
<u> </u>		17. There are no apparent unsafe site or operational conditions.
CORRECTIVE ACTIONS: (Note Item #'s)		

.

· .

OTHER COMMENTS:

(Include compaction test dates and results, any known complaints, incidents or violations)

Yo d 4.6 9. 00 at 20 2 p. \mathcal{O} 2) $\overline{(}$ 0 2ne San Ĩh 6.8

Signature of Inspector

cc: Dan matias, ECD, Greenidge Station Site File

3

LOCKWOOD ASH LANDFILL MONTHLY ASH SITE INSPECTION

с**. ч**

· · · ·	GEM312-ALOW
Inspector Harold Sexton	
Date of Inspection $\frac{2}{21}/19$ Time $\frac{9:50}{20}$	-
Weather Conditions Snow	-
OK = Condition Met NO = Not Observed CA = Corrective Action Requi NOTE: For any item marked CA, a description of the problem and its resolution should be noted in the corrective action section of t	proposed or implemented
OK NO CA FACILITY MANAGEMENT	
1. Required permits and operational records are filed permits to operate/construct, SPDES permit, Part stormwater permit, compaction tests and monthly	364 transport permits,
2. Transport vehicles are marked in accordance with covered during transit.	Part 364.6(b) and are
OPERATION CONTROL	
3. Dust is effectively controlled and does not constitute (If water from sedimentation pond is used for dust section including quantity).	ite an off-site nuisance. t control, note in comment
4. Berms, dikes, and slopes are free of channeling, s potentially damaging vegetation and damage cause	slumping, erosion, sed by wildlife.
WATER	
5. Solid waste is prevented from entering surface wa	iters and/or groundwater.
6. Leachate collection system appears to be function water on active site, no obstructions in piping or r	ing properly (no ponded nanholes).
7. Perimeter drainage ditches are sufficiently clear to freely.	allow water to flow
8. Sedimentation pond is free of potentially damaging exhibit no apparent damage from wildlife.	g vegetation and banks
ACCESS	
9. Access to site and sedimentation pond discharge controlled by means of fencing, gates, locks, sign	
10. Access roads are passable.	

× .

WASTE HANDLING

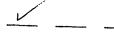
V

11. Coal combustion by-products (CCBP's) are placed in accordance with operating procedures (6-8" lifts, well-compacted, in designated areas).

at the site. Note: If authorized or permitted waste from any other source has been placed, notification to FSG and lab must be made to ensure

analysis for arsenic and selenium. Please also note source and quantity in comment section.

MONITORING



13. Monitoring wells are intact.

OTHER

14. All required equipment is on-site and operational.

- 15. Contractual sweeping requirements appear to have been performed (roads and ash unloading areas are clear of CCBP materials and debris).
- 16. Compaction tests have been performed during the last month. **Note:** If tests have been performed, dates and results should be listed in comment section.

17. There are no apparent unsafe site or operational conditions.

CORRECTIVE ACTIONS:

(Note Item #'s)

OTHER COMMENTS:

(Include compaction test dates and results, any known complaints, incidents or violations)

 \leq J < \mathbf{C} at 5.4 an level a. L Ra 21 e w O gpm

Signature of Inspector

cc: Dan matias, ECD, Greenidge Station Site File

LOCKWOOD LEACHATE COLLE DISCHARGE REPO	CTION PON	D				(Green	idge RATION
		PRE-DIS	SCHARGE P	OND WATER Q	UALITY			
SAMPLE DATE:	2/14/19	SAMPLE TYPE:	GRAÞ	SAMPLING CO NAME OF SAN		Aà Ke	irrondack oin Ambr	Environ nental
FIELD pH: (6-9) NH3:	7.4			Tot Mn: (<3.0) TSS: (<50.0)			Tot Zn: (<2.0) Tot Se: (<0.07)	ND .013
		PON	D DRAINAG	GE AUTHORIZA	TION			
NAME: Har SIGNATURE: J	old S Harold	Sexton	_		DATE: OTHER/N			
			POND DIS	CHARGE DATA				
START OF DISCUL	DCE				1			
START OF DISCHA	ARGE							
DATE:	2/21	/2019			TIME:	9;	45	
POND LEVEL (FT): 3.4		POND VO	LUN	L 1E (GAL): 2,	900,000			
FIELD pH:	7.0			/				
END OF DISCHAR	GE							
DATE: 3	16/19				TIME:	2	:15 P.M.	
POND LEVEL (FT)	: 1.4	Ft.			POND VO	LUN	IE (GAL):	600,000
FIELD pH	7.1							
COMPOSITE SAM COMPOSITE SAM		DATE: 2/ ATE: 2/	121/19 122/19	~				
				GE SUMMARY				
TOTAL DISCHARGE (GAL): 2,300,000 0 # OF DISCHARGE DAYS /3				WE	EKLY pH SUMM	1		
	177,00						Date	pH
				#DIV/0!			2/21	7.0
AVG CUFT/DAY D			6 - 0	#DIV/0!			3/4	7.2
FLOW RATE OF KEUKA OUTLET (CFS) 388,000								

LOCKWOOD ASH LANDFILL MONTHLY ASH SITE INSPECTION

•

· • *

ŵ

· · ·	GEM312-ALOW
Inspector planold Sexton	
Date of Inspection $3/18/19$ Time $11:30$	-
Weather Conditions Cloudy.	_
OK = Condition Met NO = Not Observed CA = Corrective Action Requ NOTE: For any item marked CA, a description of the problem and its resolution should be noted in the corrective action section of t	proposed or implemented
OK NO CA FACILITY MANAGEMENT	
I. Required permits and operational records are file permits to operate/construct, SPDES permit, Part stormwater permit, compaction tests and monthly	364 transport permits,
2. Transport vehicles are marked in accordance with covered during transit.	Part 364.6(b) and are
OPERATION CONTROL	
3. Dust is effectively controlled and does not constitute (If water from sedimentation pond is used for dust section including quantity).	
4. Berms, dikes, and slopes are free of channeling, potentially damaging vegetation and damage cau	slumping, erosion, sed by wildlife.
WATER	
5. Solid waste is prevented from entering surface was	aters and/or groundwater.
6. Leachate collection system appears to be function water on active site, no obstructions in piping or n	
7. Perimeter drainage ditches are sufficiently clear to freely.	o allow water to flow
 Network 8. Sedimentation pond is free of potentially damagin exhibit no apparent damage from wildlife. 	g vegetation and banks
ACCESS	
9. Access to site and sedimentation pond discharge controlled by means of fencing, gates, locks, sign	
10. Access roads are passable.	

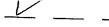
WASTE HANDLING

11. Coal combustion by-products (CCBP's) are placed in accordance with operating procedures (6-8" lifts, well-compacted, in designated areas).

12. Only authorized material generated at Greenidge Station has been placed at the site. Note: If authorized or permitted waste from any other source

has been placed, notification to FSG and lab must be made to ensure analysis for arsenic and selenium. Please also note source and quantity in comment section.

MONITORING



13. Monitoring wells are intact.

OTHER

- 14. All required equipment is on-site and operational.
- 15. Contractual sweeping requirements appear to have been performed (roads and ash unloading areas are clear of CCBP materials and debris).
- 16. Compaction tests have been performed during the last month. Note: If tests have been performed, dates and results should be listed in comment section.
- 17. There are no apparent unsafe site or operational conditions.

CORRECTIVE ACTIONS:

(Note Item #'s)

OTHER COMMENTS:

(Include compaction test dates and results, any known complaints, incidents or violations)

180 Sec. 000 m a 4 0 Ass ond de n \mathcal{O} 3 0, PH • -10 ١ *9 Ø) 逸, 12 C

Signature of Inspector

cc: Dan matias, ECD, Greenidge Station Site File

LOCKWOOD ASH LANDFILL MONTHLY ASH SITE INSPECTION

· • • •

4

GEM312-ALOW	
nspector Harcold Senting Chnic Gill	
Date of Inspection 4/17/19 Time 2:/0	
Neather Conditions Summer	
DK = Condition Met NO = Not Observed CA = Corrective Action Required NOTE: For any item marked CA, a description of the problem and its proposed or implemented resolution should be noted in the corrective action section of this form.	d
OK NO CA FACILITY MANAGEMENT	
 Required permits and operational records are filed on-site (Part 360 permits to operate/construct, SPDES permit, Part 364 transport permits, stormwater permit, compaction tests and monthly inspection records). 	
2. Transport vehicles are marked in accordance with Part 364.6(b) and are covered during transit.	
OPERATION CONTROL	
 3. Dust is effectively controlled and does not constitute an off-site nuisance. (If water from sedimentation pond is used for dust control, note in commen section including quantity). 	ıt
 4. Berms, dikes, and slopes are free of channeling, slumping, erosion, potentially damaging vegetation and damage caused by wildlife. 	
WATER	
5. Solid waste is prevented from entering surface waters and/or groundwater.	
6. Leachate collection system appears to be functioning properly (no ponded water on active site, no obstructions in piping or manholes).	
7. Perimeter drainage ditches are sufficiently clear to allow water to flow freely.	
8. Sedimentation pond is free of potentially damaging vegetation and banks exhibit no apparent damage from wildlife.	
ACCESS	
9. Access to site and sedimentation pond discharge mechanisms are controlled by means of fencing, gates, locks, signs or other suitable means	s.
10. Access roads are passable.	

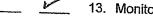
WASTE HANDLING

11. Coal combustion by-products (CCBP's) are placed in accordance with operating procedures (6-8" lifts, well-compacted, in designated areas).

at the site. Note: If authorized or permitted waste from any other source

- has been placed, notification to FSG and lab must be made to ensure
- analysis for arsenic and selenium. Please also note source and quantity in comment section.

MONITORING



13. Monitoring wells are intact.

OTHER

- 14. All required equipment is on-site and operational.
- 15. Contractual sweeping requirements appear to have been performed (roads and ash unloading areas are clear of CCBP materials and debris).
- 16. Compaction tests have been performed during the last month. **Note:** If tests have been performed, dates and results should be listed in comment section.
- 17. There are no apparent unsafe site or operational conditions.

CORRECTIVE ACTIONS:

(Note Item #'s)

Top r	cemand Snor	access Roads	
added	to activite	ana lo ba	######################################
used	far cover		
	1		
× Well	# 89-115 Casin	of broken, Repair	<u>A.R.</u>
			··

OTHER COMMENTS:

(Include compaction test dates and results, any known complaints, incidents or violations)

Å 1-4.3 Pre dias æ Ø, Gabring envel ۰

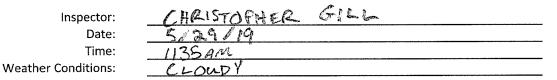
Signature of Inspector

cc: Dan matias, ECD, Greenidge Station Site File

							4
	D ASH LAN	ND				Green	
	North Margarette and Reported as	PRE-DIS	SCHARGE F	POND WATER (QUALITY		
SAMPLE DATE	:: 4/18/19	SAMPLE TYPE:	GRAB	Sampling Co Name of Sai	MPANY: AD	NIRONDACE NIRONMENTAL N AMBRA	SERVICES
FIELD pH: (6-9 NH3: 8,	105	Tot Fe: (<4.0) Tot As: (<0.1)		Tot Mn: (<3.0		Tot Zn: (<2.0)	
		PON	D DRAINA	GE AUTHORIZA	TION		
NAME: CH	PRISTOPHE	R GILL			DATE: 5/	1/19	
SIGNATURE:	Chi	Ma	C	×.	OTHER/NOTI	ES:	
			POND DIS	CHARGE DATA			
START OF DISC	HARGE	1 1			1		
START OF DISC							
DATE:	5/1/19				TIME:	9:30	
POND LEVEL (I	ET). 4 OF						
	1. 1.85				POND VOLUM	ME (GAL): 2,5	50,000
FIELD pH:	7.74						
END OF DISCH	ARGE						
DATE:	5/23/19				TIME:	11:10	
POND LEVEL (F		1940 (PA)	The longer			-	
	FT): 1.0'		15-		POND VOLUN	ME (GAL):	80,000
FIELD pH	6.79						
COMPOSITE SA	AMPLE START AMPLE END DA	DATE: 5/1/ ATE: 5/2/	19 - 5 19 - 5	115/19			
		l.	DISCHARC	SE SUMMARY			
TOTAL DISCHA		2,050,00		0	WE	EKLY pH SUMM	ARY
# OF DISCHARGE DAYS 22 MAX GAL/DAY: /90,000				Date	pН		
AVG GAL/DAY: 93,181						DLAN	
AVG CUFT/DAY	Y DISCHARGE:			#DIV/0! #DIV/0!	SHEET	5 ATTACHE	P
		ET (CFS) 50	CFS				
	8						

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)



INSPECTION ITEMS

ОК	NA	CA
X		
X		
X		

ł

×	
×	
×	

X	
×	

×	
X	

 ` ~_?	1 1
 , ²⁷⁶ ,	
\sim	
 <u> </u>	<u> </u>

X

1 Landfill Cover Con	dition
----------------------	--------

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:			NOTE:	For any item marked CA, a
ОК		Condition Met		description of the issue and its proposed or implemented
NA	l	Not Applicable (at this time)		solution must be noted on the Current Corrective Actions
CA	-	Corrective Action Requirec		portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date Time:

GILL HRISTOPHER

:e:	
~ .	

Weather Conditions:

5/19 11:00

INSPECTION ITEMS

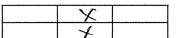
LONDY

ОК NA CA × \times X

	2
Ń	
\vdash	
X	

X	
Х.	

X	
X	



1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

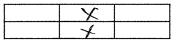
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- Stormwater Ponds in satisfactory condition с

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- Confirm no ponding of surface water around wells b



5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:	NOTE:	For any Item marked CA, a
OK = Condition Met NA = Not Applicable (at this time)		description of the "ssue and its proposed or implemented solution must be noted on the
CA = Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER	GILL	
Date:	6/12/19		
Time:	9:00AM		
er Conditions:	SINNY		

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

a Confirm presence of leachate in system b Confirm proper function of system

INSPECTION ITEMS

No surface water ponding on cover

С

	ОК	NA	CA	1 Landfill Cover Condition
ſ	X			a No sloughing of cover soils /
	*			b No erosion rills/gullies
	×			c No surface water ponding o

Weathe

	2	Stormwater Controls
Х	a	Water flows without obs
\times	b	Drainage ditches do not
Ŷ	П с	Stormwater Ponds in sat

		3	Leachate Collection System
	×	а	Confirm presence of leachate in
	X	b	Confirm proper function of syste
-			

<u>X</u> .	

	4	Environmental Monitoring
	а	Confirm monitoring well seals and casings are in good condition
	b	Confirm no ponding of surface water around wells

		4	E
X		a	
X [°]		b	

X	
×	

×.

5 Waste Placement

- Waste placed in designated operating area а
- Non-contact surface water is diverted away from active area b

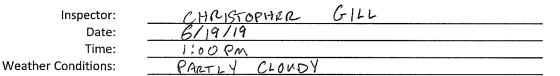
6 Dust is effectively being controlled on site

NOTE: For any Item marked CA, a	
•	
solution must be noted on the	
Current Corrective Actions portion of this form.	
	description of the ssue and its proposed or implemented solution must be noted on the Current Corrective Actions

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)



INSPECTION ITEMS

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies

CA

c No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



X

(

ОК

NA

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark	form as follows:	NOTE:	For any Item marked CA, a
	 Condition Met Not Applicable (at this time) 		description of the 'ssue and its proposed or implemented solution must be noted on the
CA	= Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Site	Location:	Dresden,	NY

Equipment: Flusher

Daily Total Gallons Water Used:

Client: Lockwood Hills LLC

Nozzle Type:____႓ာ္သ Pressure: <u>3000</u> GPM: <u>65</u>

Weather: SUNNY Company: National Hacuum Technicians: Maric Hacport

Date: 6/24/19

1

Total Linear Location Pipe **Total Length** No. of Line Segment **Pipe Diameter** Footage Comments Stage Type Linear Footage Passes Cleaned* 962 6" CO-0A PVC 962 500 Ĵ 6" CO-0 PVC 969 700 6" 3 CO-1 PVC 970 000 CO-2 6" PVC 972 500 6" CO-3 PVC 973 500 Stage II 6" CO-4 PVC 975 5 500 6" 73 CO-5 PVC 973 9 500 CO-38** ~CO-36 6" CO/21" Header PVC 100 ょう 100 CO-36** ~CO-31 6" CO/ 21" Header PVC 250 250 180 300 6" CO/ 21" Header 400 CO-31** MH I/II-1 PVC 400

**CO-38, 36, & 31 are saddled to the header pipe with two 45° wye angled in the downstream direction. Visually verify flow/hose by observing in MH II-1 for CO-38, MH II-2 for CO-36 and MH II-3 for CO-31.

Notes:

*Record approximate length if partially jetted; record "Flushed" if	if simply flushed with water without entering the	line.
---	---	-------

Site Location: Dresden, NY

Equipment: Flusher

Daily Total Gallons Water Used:

Date: 📿

Client: Lockwood Hills LLC

Nozzle Type:_____

Pressure: <u>3020</u>

GPM: 65

Weather: SUNNY Company: National Yucuum Technicians: MARK PARAGUE

Location Stage	Line Se	gment	Pipe Diameter	Ріре Туре	Total Length Linear Footage	Total Linear Footage Cleaned*	No. of Passes	Water Used Total Gallons	Total Gallons Leachate Vac.	
	CO-6		6"	PVC	973	973	1	500		
	CO-7		6"	PVC	953	953	7	200		
	CO-8		6"	PVC	958	958	1	500	6650	>
	CO-9		6"	PVC	987	987	2	1000		6/27/19
Stage I	CO-30	MH I/II-1	6" CO/ 6" Header	PVC	200	200	1	200		2.11/
	MH II-3	MH I/II-1	21″	PVC	678 6	The second	l	1700		
	MH I/II-1	MH I/II-2	21"	PVC	72	72	1	200		
	MH I/II-2	MH I/II-3	21″	PVC	45	45	(100		

Notes:

*Record approximate length if partially jetted; record "Flushed" if simply flushed with water without entering the line.

2

Site Location: Dresden, NY

Equipment: ____Flusher____

Client: Lockwood Hills LLC

Nozzle Type: Kee

Pressure: 3000

GPM: 65

Date: 6/25/19 SERVILY Weather: Company: National Nacuum Technicians: MARIL PARIL

3

Daily Total Gallons Water Used:_____

Location Stage	Line S	egment	Pipe Diameter	Ріре Туре	Total Length Linear Footage	Total Linear Footage Cleaned*	No. of Passes	Comments	
	CO-10		6″	PVC	962	962	2	700	
	CO-11		6"	PVC	63	63	2	100	
	CO-12		6"	PVC	103	103	5	601	
	CO-13		6"	PVC	146	1.46	Ĵ	200	
	CO-14		6"	PVC	190	190	pt	100	
Stage I	CO-15		6"	PVC	233	233	Ĵ	200	
Overfill	CO-17		6"	PVC	317	317	Ì	700	6/29
Liner	CO-18		6"	PVC	361	261	1	250	
	CO-19		6"	PVC	326	376	1	200	
	CO-20		6"	PVC	279	279	1	200	
	CO-21		6"	PVC	233	233	;	200	
	CO-22		6"	PVC	186	186	1	2001	
	CO-23		6"	PVC	141	VEL V	η	200	

Notes:_____

*Record approximate length if partially jetted; record "Flushed" if simply flushed with water without entering the line.

Site	Location	Dresden,	NY
------	----------	----------	----

Equipment: ______

Client: Lockwood Hills LLC

Nozzle Type: <u>Kery</u>	
Pressure: <u>300 p</u>	GPM:65
Daily Total Gallons Water	Used:

Date: 6/28/19 Company: National Vacuum Technicians: MARK PREDEE

4

Location Stage	Line Se	egment	Pipe Diameter	Ріре Туре	Total Length Linear Footage	Total Linear Footage Cleaned*	No. of Passes	Comments
	MH OADS-1	MH OADS-2	12″	PVC	299	299		BOO
OADS	MH OADS-2	MH OADS-3	12"	PVC	205	205		300
	CO-44	MH OADS-3	8"	PVC	81	81		100

Notes:

*Record approximate length if partially jetted; record "Flushed" if simply flushed with water without entering the line.

Site Location: Dresden, NY

CI.I. -

Client: Lockwood Hills LLC

Equipment: <u>Flocker</u>	
Nozzle Type: <u>Key</u>	
Pressure: <u>7000</u>	GPM: <u>65</u>
Daily Total Gallons Water U	Jsed:

Date: 6/36/19
Weather: <u>SUNNY</u>
Company: NaTign Vacify M
Technicians: MAR PADOEE

5

Total Linear Line Segment **Total Length** Pipe Pipe No. of Location Footage Comments Diameter Linear Footage Passes Stage Type Cleaned* Upstream Downstream 21" MH I/II-3 PVC 35 MH I/II-4 MH I/II-4 MH I/II-5 21" PVC 280 Downstream MH I/II/S-1 MH I/II-5 21" PVC 292 Sewer System MH I/II/S-1 8" PVC 157 CO-45 8″ 30 MH COM-1** 34 + 6' flume Inlet to Pond PVC

**This line segment includes the 6' meter pit and Large 60-Degree V-Trapezoidal Flume. Care needs to be taken not to damage the flume. Visual observation of the cleaning effectiveness should be made in the meter pit. Access through the meter pit itself could be added if necessary.

Notes:

*Record approximate length if partially jetted; record "Flushed" if simply flushed with water without entering the line.

Site Lo	cation:_	Dresden,	NY
Client:	Lockwo	ood Hills L	LC

Equipment: 1154 Flusher

Date: 68819

/

Nozzle Type: <u>Ken</u> Weather: <u>SUNNY</u>

Pressure: 3000 GPM: 65

Daily Total Gallons Water Used:_____

Company: National Vacuum Technicians: MAER PARAECE

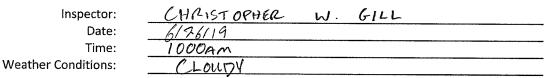
Manhole	Manhole Diameter	Total Gallons Leachate/Sediment Vacuumed	Comments
AIT		100 Gallens Leachate Water Sediment paterial 55 Dram	
		Sediment paterial 55 Gram	

Notes:

6

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)



INSPECTION ITEMS

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



(

(

ОК

NA

CA

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Ma	rk fe	orm as follows:	NOTE:	For any item marked CA, a
OK NA		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA		Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

LOCKWOOD ASH LAN LEACHATE COLLECTION POP DISCHARGE REPORT FORM				Green	dge
	PRE-DISCHARGE	POND WATER C	UALITY		
SAMPLE DATE: 6/4/19	SAMPLE TYPE: ራቢቶይ		DMPANY: 🗐	DIRONDACK NURENMENTAL JIN AMBRA	SERVICES
FIELD pH: (6-9) <i> </i>	Tot Fe: (<4.0) ひょうを Tot As: (<0.1) <i>N</i> フ	Tot Mn: (<3.0 TSS: (<50.0)		Tot Zn: (<2.0) Tot Se: (<0.07)	
	POND DRAIN	AGE AUTHORIZA	TION		
NAME: CHRISTOPHER SIGNATURE:			DATE: 7/ OTHER/NO	/1/19 TES: SUNNY 1 2.5℃ WATE	NCATHER
				25°C WATE	in.
	POND D	ISCHARGE DATA			
START OF DISCHARGE					
DATE: 7/1/19		đ	TIME:	10:SOAM	
			1		
POND LEVEL (FT): 3.59	it		POND VOL	UME (GAL):	1.9
				1,900,0	000
FIELD pH: 8,0					
<u>`</u>				-	
END OF DISCHARGE					
DATE				10175	
DATE: 7/18/19			TIME:	10:38AM	
POND LEVEL (FT): 1,3				UME (GAL): LOU	
			FOND VOL		000
FIELD pH 7.5			-		
COMPOSITE SAMPLE START DATE: $7/1/19$ COMPOSITE SAMPLE END DATE: $7/2/19$ - $7/11/19$					
	and the second	RGE SUMMARY			
TOTAL DISCHARGE (GAL): ၂, ၂၀၀,၀၀၀ 0 WEEKLY pH SUMMARY					
# OF DISCHARGE DAYS 17 MAX GAL/DAY: ブゟ ₂ 4ッ1				Date	pH
MAX GAL/DAY: 76,471	goridaz			7/3/19	8,1
					8.0
AVG CUFT/DAY DISCHARGE: 10, 22342 /day #DIV/0! 7/17/19 7.7					7.7
FLOW RATE OF KEUKA OUTLET (CFS) 175 CFS					

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time:

CA

Weather Conditions:

HRISTOPHER GILL 7/3/19

NA

ОК

ĺ

1000 AM SCATTERED CLOUDS

INSPECTION ITEMS

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

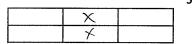
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



 \times

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Ma	rk fi	orm as follows:	NOTE:	For any item marked CA, a
		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time:

CA

HRISTOPHER GILL

Weather Conditions:

7/10/19 0:00 AM

NA

ОК

X

 \checkmark

X

INSPECTION ITEMS

SUNNY

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

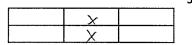
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- Confirm proper function of system b

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Ma	rk fe	orm as follows:	NOTE:	For any item marked CA, a
		Condition Met Not Applicable (at this time)		description of the "ssue and its proposed or implemented solution must be noted on the
CA	8	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:CHRISTOPHERCILLDate:7/17/19Time:10:00 AMWeather Conditions:PARTLYCLONITY

INSPECTION ITEMS

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



ОК

 $\frac{1}{2}$

NA

CA

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mar	rk form as follows:	NOTE:	For any item marked CA, a
1	 Condition Met Not Applicable (at this time) 		description of the issue and its proposed or implemented solution must be noted on the
CA	= Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions:

HRISTOPHER GILL

124/19 9:00AM SUNNY

INSPECTION ITEMS

ОК NA CA Х \checkmark

\mathbf{V}	
	 1
$\underline{\times}$	
í~	

\succ	
X	

$\boldsymbol{\times}$	
×	

	5	Waste Placement
X	а	Waste placed in desi
	h	Non-contact surface

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

- а Water flows without obstruction through ditches
- Drainage ditches do not show signs of erosion b
- Stormwater Ponds in satisfactory condition с

3 Leachate Collection System

- a Confirm presence of leachate in system
- Confirm proper function of system b

4 Environmental Monitoring

- Confirm monitoring well seals and casings are in good condition а
- b Confirm no ponding of surface water around wells

a Waste placed in designated operating area

b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:			NOTE:	For any item marked CA, a
ОК		Condition Met		description of the ssue and its proposed or implemented
NA	=	Not Applicable (at this time)		solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

OCKWOOD ASH LANDFILL EACHATE COLLECTION POND DISCHARGE REPORT FORM							
		PRE-DISCHARGE F	POND WATER C	UALITY			
SAMPLE DATE: 7	1/18/19	SAMPLE TYPE: (JQAB		DMPANY: AD MPLER: KEV	IRONDACK UVIRONMENTAL IN AMBRA	SERVICES	
FIELD pH: (6-9) 7 NH3: <i>사식</i>	7.6	Tot Fe: (<4.0) の.42.9 Tot As: (<0.1) <i>、</i> ク			Tot Zn: (<2.0) Tot Se: (<0.07)		
- <u>6</u> -		POND DRAINA	GE AUTHORIZA	TION			
NAME: CHRIS				DATE: 7/8			
SIGNATURE:	hur	lea .		OTHER/NOT	ES: SN 111 Y 30°C	WATER	
		POND DIS	SCHARGE DATA				
					•		
START OF DISCHA	RGE						
DATE:	7/29/19			TIME:	11:23AM		
POND LEVEL (FT):	1.8			POND VOLU	 ME (GAL):	800,000	
FIELD pH:	7.6					GALLONS	
END OF DISCHAR	<u>GE</u>						
DATE:	8/7/19			TIME:	3:25pn		
POND LEVEL (FT):	.7			POND VOLU	ME (GAL):	250,000	
FIELD pH	7.6					GALLONS	
	COMPOSITE SAMPLE START DATE: 7/29/19 COMPOSITE SAMPLE END DATE: 7/30/19						
		Contraction of the Annual State	GE SUMMARY				
	TOTAL DISCHARGE (GAL): SSO,000 GAL 0 WEEKLY PH SUMMARY						
# OF DISCHARGE MAX GAL/DAY:	DAYS 10	DAYS			Date	pH	
AVG GAL/DAY:	5,000			7/30/19	7.8		
		: 7352,43	#DIV/0! #DIV/0!	Sec. 3.	6/ ///7	1.0	
FLOW RATE OF K							

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

	Inspector:		
		Date:	
		Time:	
	-		

CHRISTOPHER GILL

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

a Confirm presence of leachate in system b Confirm proper function of system

7/31/19

¢

Weather Conditions:

10:00AM

SUNNY

INSPECTION ITEMS

b No erosion rills/gullies

1 Landfill Cover Condition

c No surface water ponding on cover

3 Leachate Collection System

ок NA CA X

	2	Stormwater Controls
X	а	Water flows without obs
X	b	Drainage ditches do not
X	c	Stormwater Ponds in sat

X	
X	

		4	Environmental Monitoring
X		а	Confirm monitoring well seals a
X		b	Confirm no ponding of surface

 $\boldsymbol{\chi}$

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

Confirm no ponding of surface water around wells

a Confirm monitoring well seals and casings are in good condition

6 Dust is effectively being controlled on site

Mark form as follows:			NOTE:	For any item marked CA, a
1		Condition Met Not Applicable (at this time)	• • • • • • • • • • • • • • • • • • • •	description of the issue and its proposed or implemented solution must be noted on the
СА	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: FRISTOPHER GILL

Weather Conditions:

7/19 10:00AM SUNNY

INSPECTION ITEMS

ОК NA CA X

X	
X	

X	
X	

	 -4
X	ā
X	Ł

X	а
X	b

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- с No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- Drainage ditches do not show signs of erosion b
- Stormwater Ponds in satisfactory condition ¢

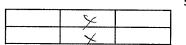
3 Leachate Collection System



- a Confirm presence of leachate in system b Confirm proper function of system

4 Environmental Monitoring

- Confirm monitoring well seals and casings are in good condition
- Confirm no ponding of surface water around wells



5 Waste Placement

- Waste placed in designated operating area а
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark	form as follows:	NOTE:	For any item marked CA, a
ОК =	Condition Met		description of the issue and its
NA =	Not Applicable (at this time)		proposed or implemented solution must be noted on the
CA =	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

<u>SMA</u>		ANTITY C	F LRA	CHATE	Re.	MAINS	IN POND.
LEA	CHATE	FLOW	DIVER	-TRO	70	STORAG	E TANKS
AS	OF	8/2/19	FOR	LONST	FRUCTI	ON PRO	TRCT.
1	ZEWATER	ING POI	ND				
·							

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	(HRISTOPHER	GILL	
Date:	8/14/19		
Time:	11:00 AM		
eather Conditions:	SUNNY		

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

INSPECTION ITEMS

b

с

1 Landfill Cover Condition

No erosion rills/gullies

No surface water ponding on cover

ОК	NA	CA
X		
X		
X		

We

	2	Stormwater Controls
X	a	Water flows without obs
\times	b	Drainage ditches do not
\downarrow	c	Stormwater Ponds in sat

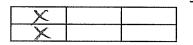
a Confirm presence of leachate in system

b Confirm proper function of system

4 Environmental Monitoring

3 Leachate Collection System

- а Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



5 Waste Placement

- a Waste placed in designated operating area
- Non-contact surface water is diverted away from active area b

6 Dust is effectively being controlled on site

Mark form as follows:	NOTE:	For any item marked CA, a
OK = Condition Met NA = Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA = Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

SEDIMENT	IS BEI	NA HANLED	TO C	ONFINED	STORA	16 E
AREA AN	-1-10 (of Landfill	. FROM	L SETT	LIPSG	POND.
DUST FROM	L HAN	ic trucks	IS BEIN			BY
SPRAYING 1	NATER	ON DIRT	ROADS	UP LANDI	FILL.	LEACHATE
IS STILL	BEING	HAULRD	FROM	FRAC	TANKS	70
GREENIDGE	WW	TP.				

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER	GILL	
Date:	8/21/19	·	
Time:	9:00 AM		
Weather Conditions:	OVERCOST / LI	GHT RAIN	

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches

Drainage ditches do not show signs of erosion Stormwater Ponds in satisfactory condition

INSPECTION ITEMS 1 Landfill Cover Condition

No erosion rills/gullies

3 Leachate Collection System

4 Environmental Monitoring

No surface water ponding on cover

a Confirm presence of leachate in system Confirm proper function of system

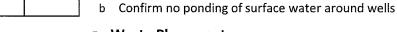
ОК NA CA \times

	2 Stormwater Controls
X	a Water flows without obs
X	b Drainage ditches do not
	c Stormwater Ponds in sat

X	
×	

X	
X	

×



b с

b

5 Waste Placement

- a Waste placed in designated operating area
- Non-contact surface water is diverted away from active area b

a Confirm monitoring well seals and casings are in good condition

6 Dust is effectively being controlled on site

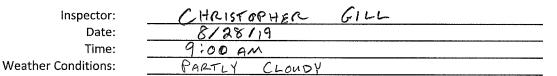
Mar	rk fe	orm as follows:	NOTE:	For any item marked CA, a
ОК	-	Condition Met		description of the issue and its proposed or implemented
NA	-	Not Applicable (at this time)		solution must be noted on the
CA		Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

SINILAN	TO PRI	LUIOUS	WEEFL	Y INSP	ECTION	REPORT	
SEDIMENT	FROM	POND	15 5	STILL	BRING	HANLED	70
TOP OF L.	ANDFILL	iN	CONFIN	URD STA	RAGE	AREA	THE LAST
TRUCKLOADS	WILL	BE F	3ROUG HT	t up	TODAY.	1 FACWA	TE 19
STILL BEI	NG HAVE			FRAC			AFENIDGE
WWTP.	DIRJ L	ANES	ARE	WATERRE) To	PRIEVENT	Dust.

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)



a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

a Confirm presence of leachate in system b Confirm proper function of system

INSPECTION ITEMS

b No erosion rills/gullies

c No surface water ponding on cover

3 Leachate Collection System

ОК NA CA 1 Landfill Cover Condition \sim \checkmark ¥

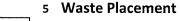
		2	Stormwater Controls
ſ	X	а	Water flows without obs
	\times	b	Drainage ditches do not
ſ	X	с	Stormwater Ponds in sat

X	
X	

	 	4	Environmental Monitoring
X		а	Confirm monitoring well seals a
×		b	Confirm no ponding of surface

X

X



С

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

a Confirm monitoring well seals and casings are in good condition

6 Dust is effectively being controlled on site

Confirm no ponding of surface water around wells

Mai	rk fi	orm as follows:	NOTE:	For any Item marked CA, a
ok Na		Condition Met Not Applicable (at this time)		description of the ssue and its proposed or implemented solution must be noted on the
CA	ŧ	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

WASTE	<u>= 15</u>	NO	LONGE	ER B	EING	HANLE	D FRO.	M SETTLING
POND	up	TO	THE	CONFIN	IED	STORAGE	AREA	ON TOP
OF LAN	IDFILL.	SET	TLING	POND	15	BEING	GRAD	ED AND
ROLLB	D FL	-AT	IN PI	REPARA	するく	FOR	LINER	INSTALLATION
LEACHATI	E 13	STIL	- Be	ING	HAUL	ED FRO	M STO	PRACE TANK
TO GI	REENID	いらき	WNT	P				

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions:

(HRISTOPHE	IL GILL	
9/4/19		
9:00 AM		
MOSTLY SI	LNNY	

INSPECTION ITEMS

1 Landfill Cover Condition

No erosion rills/gullies

c No surface water ponding on cover

ОК NA CA \mathbf{X} X X

	2	Stormwater Controls
X	а	Water flows without obs
×	b	Drainage ditches do not
\mathbf{X}	с	Stormwater Ponds in sat

X	
X	

X X

Confirm proper function of system 4 Environmental Monitoring

b

¢

b

a Confirm monitoring well seals and casings are in good condition

3 Leachate Collection System

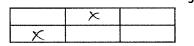
b Confirm no ponding of surface water around wells

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

a Confirm presence of leachate in system



Х

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mai	rk fe	orm as follows:	NOTE:	For any item marked CA, a
		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented
		Hor applicable (at this time)		solution must be noted on the Current Corrective Actions
CA	4	Corrective Action Requirec		portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

LINER	INSTALLAT	ION TAKI	ING PL	ACE 1	N SETTL	ING POI	ND QV
TODAY	AND T	OMORROW.	SEDIM	RAT F	FROM SR	TTLINE	POND
CONTINY	irs to	DRY L	AP IN	THE C	ONFINED	STORAG	, E
AREA	ON TOP	OF LA	NDFILL.	LEACH	ATE CON	ITINNES	TO
BE HA	ulid fo	son sto)RAGE	TANKS	TO	C-REEMIDO	2E
WNITE	UNTIL	PROSECT	18	COMPL	ete.		

* Weekly inspections must occur no more than seven (7) days apart.

37

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER GILL	
Date:	9/11/19	· · · · ·
Time:	6900	• • • • • • • • • • • • • • • • • • •
Weather Conditions:	CLOUDY / RAINY	

INSPECTION ITEMS

ОК	NA	CA
X		
X		
X		

X		
X		
X		

×	
X	

\times		ĺ
×		ł

1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- b No erosion mis/guilles
- c No surface water ponding on cover

2 Stormwater Controls

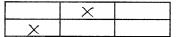
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



X

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:			NOTE:	For any Item marked CA, a
ОК		Condition Met		description of the issue and its
NA	ų	Not Applicable (at this time)		proposed or implemented solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

SETTLI	11a 80	ND F	PROJECT	CON	TINUES.	LINER	INSTALLED
AND	PASSED		SPECTION				
POND	TO	BE	RE- C	PENED			
				•			

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions:

0	H12	15	101	24	er-	C.	166
	1	-					

9/18/19 9:00AM PARTLY CLOUDY

INSPECTION ITEMS

ОК NA CA

X	
X	
X	

\times	
X	

\succ	
X	

5 Waste Placement

- Waste placed in designated operating area а
- Non-contact surface water is diverted away from active area b

6 Dust is effectively being controlled on site

Mai	rk fi	orm as follows:	NOTE:	For any item marked CA, a
OK		Condition Met		description of the issue and its
NA		Not Applicable (at this time)		proposed or implemented solution must be noted on the Current Corrective Actions
CA		Corrective Action Requirec		portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

				ILES. FILL / GRADING
ALMOST COMPL	RTE.	NAITING	ON	FINAL SURVEYS.
STRUCTURES	WORK	AND	SMALL	COMPONENTS OF
PROFECT)		

* Weekly inspections must occur no more than seven (7) days apart.

39

CA	1	Landfill Cover Condition
	а	No sloughing of cover soils /

- No erosion rills/gullies b
 - No surface water ponding on cover с

2 Stormwater Controls

- а Water flows without obstruction through ditches
- Drainage ditches do not show signs of erosion b
- Stormwater Ponds in satisfactory condition с

3 Leachate Collection System

- Confirm presence of leachate in system а
- Confirm proper function of system b

4 Environmental Monitoring

Confirm monitoring well seals and casings are in good condition а

of cover soils / No Leachate Breakouts

- Confirm no ponding of surface water around wells b

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER GILL
Date:	9/25/19
Time:	9:00AM
Weather Conditions:	PARTLY CLOUDY

INSPECTION ITEMS

CA 1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- с No surface water ponding on cover

2 Stormwater Controls

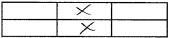
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- с Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- Confirm presence of leachate in system а
- Confirm proper function of system b

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- Confirm no ponding of surface water around wells b



NA

OK

X

 \times

 \times

X

¥

ĺ

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Ma	rk fe	orm as follows:	NOTE:	For any item marked CA, a
ok Na		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

ROND	CONSTR	LUCTION	IS	COMP	LIETE. L	EACH	HTIE H	AS
BEEN	PERM	ITTRO	TO	FLOW	BACK	70	NEWL	7
CONST	RUCTRO	POND	AS	OF	TUESDAY	EVE	NING.	
SEDI	MENT	REMOVE	5		POND	15	STILL	DRYING
NP IN	CONF	WED	5TO	DRAGE	AREA			

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: 6/2/19

Weather Conditions:

0900 AM

CLOUDY

b

INSPECTION ITEMS

1 Landfill Cover Condition

No erosion rills/gullies

c No surface water ponding on cover

OK NA CA

	2	Stormwater Controls
X	а	Water flows without obs
×	b	Drainage ditches do not
X	с	Stormwater Ponds in sat

		3	Leachate Collection System
\times		а	Confirm presence of leachate in
\mathbf{X}		b	Confirm proper function of syste

	 -
$\left \right\rangle$	a
X	t

	4		Environmental Monitoring
\times		а	Confirm monitoring well seals a
\sim		b	Confirm no ponding of surface

Confirm no ponding of surface water around wells

- 5 Waste Placement а
 - Waste placed in designated operating area

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

a Confirm presence of leachate in system

Confirm proper function of system

Non-contact surface water is diverted away from active area b

Confirm monitoring well seals and casings are in good condition

X	6	Dust i	s effect	iv

vely being controlled on site

Γ	Mai	rk fe	orm as follows:	NOTE:	For any item marked CA, a
	OK	-	Condition Met		description of the issue and its proposed or implemented
	NA	Ħ	Not Applicable (at this time)		solution must be noted on the
	CA	18	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

* Weekly inspections must occur no more than seven (7) days apart.

41

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

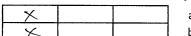
Inspector:	CHPISTOPHER GILL	
Date:	10/9/19	
Time:	5900	
Weather Conditions:	SURVINY	

INSPECTION ITEMS

ОК	NA	CA
X		
X		
X		

		2
$\overline{\times}$		
	+	
X		

\times	
X	



1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- No surface water ponding on cover С

Stormwater Controls

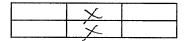
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- с Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



5 Waste Placement

- а Waste placed in designated operating area
- Non-contact surface water is diverted away from active area b

6 Dust is effectively being controlled on site

Ma	rk fi	orm as follows:	NOTE:	For any item marked CA, a
ОК		Condition Met		description of the issue and its proposed or implemented
NA	-	Not Applicable (at this time)		solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions: HOISTAPHER 1 311

 01		6
 09	0	0

b

С

а

b

RAINY

	TT	1-	- ۱	11	UX.	M	5	~	Unin
0	/	16	/1	9					

a No sloughing of cover soils / No Leachate Breakouts

Water flows without obstruction through ditches Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

Confirm presence of leachate in system

Confirm proper function of system

INSPECTION ITEMS

1 Landfill Cover Condition

No erosion rills/gullies

c No surface water ponding on cover

3 Leachate Collection System

ОК NA CA

	2	Stormwater Controls
X] a	Water flows without obs
X] b	Drainage ditches do not
\checkmark] r	Stormwater Ponds in sat

X	
X	

		4	Environmental Monitoring
X		а	Confirm monitoring well seals a
ΎΧ		b	Confirm no ponding of surface



- a Waste placed in designated operating area
- Non-contact surface water is diverted away from active area b

Confirm no ponding of surface water around wells

Confirm monitoring well seals and casings are in good condition

6 Dust is effectively being controlled on site

Mark form as follows:		NOTE:	For any item marked CA, a	
ОК		Condition Met		description of the ssue and its proposed or implemented
NA		Not Applicable (at this time)		solution must be noted on the
CA	85	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER	GILL	
Date:	10/23/19		
Time:	0900		
Weather Conditions:	SUNNY		

a No sloughing of cover soils / No Leachate Breakouts

Water flows without obstruction through ditches

Drainage ditches do not show signs of erosion

Stormwater Ponds in satisfactory condition

Confirm presence of leachate in system

Confirm proper function of system

INSPECTION ITEMS

No erosion rills/gullies

3 Leachate Collection System

No surface water ponding on cover

b

с

а

b

ОК NA CA 1 Landfill Cover Condition R

	2 Stormwater Contro		
\times	а	Water flows without obs	
\times	b	Drainage ditches do not	
4	с	Stormwater Ponds in sat	

· *	
- <u>-</u>	

		4 Environmental Monitoring		
×		а	Confirm monitoring well seals a	
~		b	Confirm no ponding of surface v	

·····

×		а
\sim		b

- Waste placed in designated operating area а
- b Non-contact surface water is diverted away from active area

Confirm no ponding of surface water around wells

Confirm monitoring well seals and casings are in good condition

6 Dust is effe	ectively being	controlled on site
----------------	----------------	--------------------

Mark form as follows:		NOTE:	For any Item marked CA, a	
		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA	-	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER	GILL	
Date:	10/30/19		
Time:	1:30pm		· · · · · · · · · · · · · · · · · · ·
Weather Conditions:	CLOUDY		

INSPECTION ITEMS

CA 1 Landfill Cover Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

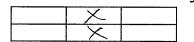
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



ОК

NA

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark fo	orm as follows:	NOTE:	For any item marked CA, a
	Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the Current Corrective Actions
CA =	Corrective Action Requirec		portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	
Date:	
Time:	
Weather Conditions:	

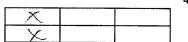
CHRISTOPHER	GILL
11/6/19	
10:06 Am	
CLOUDY	

INSPECTION ITEMS

ОК NA CA 1 Landfill Cover Condition a No sloughing of cover soils / No Leachate Breakouts b c No surface water ponding on cover

V	
$-\overline{\bigtriangledown}$	
<u> </u>	

\times	
X	



2 Stormwater Controls

No erosion rills/gullies

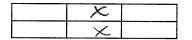
- a Water flows without obstruction through ditches b Drainage ditches do not show signs of erosion
- Stormwater Ponds in satisfactory condition с

3 Leachate Collection System

- a Confirm presence of leachate in system
- Confirm proper function of system b

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

\times	6	E
	 2	

Dust is effectively being controlled on site

Mark form as follows:		NOTE:	For any item marked CA, a	
OK NA		Condition Met Not Applicable (at this time)		description of the issue and its proposed or implemented solution must be noted on the
CA	Ð	Corrective Action Requirec		Current Corrective Actions portion of this farm.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: HRISTOPHER_ GILL

 <u> </u>	1	.a
~	0	,

b

С

Weather Conditions:

11/13/19 900 PARTLY CLOUDY

INSPECTION ITEMS

No erosion rills/gullies

OK NA CA 1 Landfill Cover Condition

	2	Stormwater Controls
X	а	Water flows without obs
\times	b	Drainage ditches do not
·×	c	Stormwater Ponds in sat

\mathbf{X}		
$\left[\times\right]$		

\times	
\times	

а	Water flows without obstruction through ditches
---	---

Drainage ditches do not show signs of erosion b

a No sloughing of cover soils / No Leachate Breakouts

Stormwater Ponds in satisfactory condition с

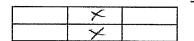
No surface water ponding on cover

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- Confirm no ponding of surface water around wells b



5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mai	rk fi	orm as foliows:	NOTE:	For any item marked CA, a
		Condition Met Not Applicable (at this time)		description of the ssue and its proposed or implemented solution must be noted on the
CA	u	Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	
Date:	
Time:	
Weather Conditions:	

{{

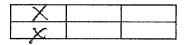
(

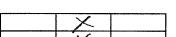
ł

CHRISTOP SHER	GILL	
11/20/19		
0930		
CLOUPY		

INSPECTION ITEMS

ОК NA CA





1 Landfill Cover Condition

- No sloughing of cover soils / No Leachate Breakouts а
- b No erosion rills/gullies
- No surface water ponding on cover с

2 Stormwater Controls

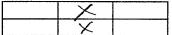
- Water flows without obstruction through ditches а
- b Drainage ditches do not show signs of erosion
- Stormwater Ponds in satisfactory condition с

3 Leachate Collection System

- а Confirm presence of leachate in system
- Confirm proper function of system b

4 Environmental Monitoring

- а Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



5 Waste Placement

- Waste placed in designated operating area а
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:	NOTE:	For any item marked CA, a
OK = Condition Met NA = Not Applicable (at this time)		description of the "ssue and its proposed or implemented solution must be noted on the
CA = Corrective Action Requirec		Current Corrective Actions portion of this form.

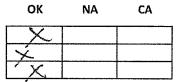
CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector:	CHRISTOPHER	Gille
Date:	11/27/19	
Time:	11:00 AM	
Weather Conditions:	CLOUDY	

INSPECTION ITEMS



({

16

\sim		
1	1	

\mathbf{x}	
	1 1
\sim	

			4
	\leq		
1			
	X		

1 Landfill Cover Condition

- а No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- с No surface water ponding on cover

2 Stormwater Controls

- Water flows without obstruction through ditches а
- b Drainage ditches do not show signs of erosion
- Stormwater Ponds in satisfactory condition С

3 Leachate Collection System

- Confirm presence of leachate in system а
- b Confirm proper function of system

4 Environmental Monitoring

- Confirm monitoring well seals and casings are in good condition а
- Confirm no ponding of surface water around wells b

5 Waste Placement

- Waste placed in designated operating area а
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mark form as follows:		NOTE:	For any item marked CA, a	
ОК		Condition Met		description of the "ssue and its proposed or implemented
NA	=	Not Applicable (at this time)		solution must be noted on the
CA	樽	Corrective Action Required		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions:

C.GILL	
12/4/19	
0900	
CLONDY	

INSPECTION ITEMS

ОК	NA	CA
X		
X		
Ύ,		

\checkmark	
$\overline{\times}$	
×	

1	Landfill	Cover	Condition

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

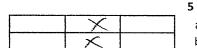
- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells



1

(

Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

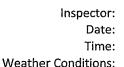
6 Dust is effectively being controlled on site

Mar	'k fi	orm as follows:	NOTE:	For any item marked CA, a
OK	19 7	Condition Met		description of the "ssue and its proposed or implemented
NA		Not Applicable (at this time)		solution must be noted on the
CA		Corrective Action Required		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)



5
2

U. OILL	
12/11/19	
6900	
CLOUDY	

INSPECTION ITEMS

ОК	NA	CA
\checkmark		
\times		
\times		

 	 	–
 	 λ	-
 	 X	
		Г

1 Lar	ndfill	Cover	Condition	
-------	--------	-------	-----------	--

- a No sloughing of cover soils / No Leachate Breakouts
- b No erosion rills/gullies
- c No surface water ponding on cover

2 Stormwater Controls

- a Water flows without obstruction through ditches
- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells

5 Waste Placement

\times	
\prec	

X

 $\{ i \}$

waste Flacement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

6 Dust is effectively being controlled on site

Mari	c form as follows:	NOTE:	For any item marked CA, a
	 Condition Met Not Applicable (at this time) 		description of the issue and its proposed or implemented solution must be noted on the
CA	= Corrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

a No sloughing of cover soils / No Leachate Breakouts

a Water flows without obstruction through ditches b Drainage ditches do not show signs of erosion Stormwater Ponds in satisfactory condition

Inspector: Date: Time: Weather Conditions:

C. GILL	
12/18/19	
0930	
_CLONDY	

INSPECTION ITEMS

1 Landfill Cover Condition

No erosion rills/gullies

2 Stormwater Controls

No surface water ponding on cover

b

с

с

b

ОК	NA	CA
X		
X		
\mathbf{X}		

1	

X	
\times	

	 4	Environmental Monitoring
\sim	а	Confirm monitoring well seals a
×.	b	Confirm no ponding of surface

5 1	W	aste	e Pl	ac	em	e
-----	---	------	------	----	----	---

X	
X	

5	Waste P	lacement
а	Waste p	laced in designated operating area

3 Leachate Collection System

a Confirm presence of leachate in system Confirm proper function of system

Non-contact surface water is diverted away from active area b

Confirm no ponding of surface water around wells

a Confirm monitoring well seals and casings are in good condition

6 Dust is effectively being controlled on site

Mark form	as follows:	NOTE:	For any Item marked CA, a
ОК и Со-	ndition Met		description of the issue and its
NA = No	t Applicable (at this time)		proposed or Implemented solution must be noted on the
CA = Co	rrective Action Requirec		Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

* Weekly inspections must occur no more than seven (7) days apart.

52

Weekly* Qualified Person Facility Inspection Form

(pursuant to 40CFR Part 257.84)

Inspector: Date: Time: Weather Conditions:

C. GILL	
12/25/19	
0800	
CLOUDY	

INSPECTION ITEMS

1 Landfill Cover Condition

No erosion rills/gullies

c No surface water ponding on cover

OK NA CA

\sim	
X	
X	

(r

2	Stormwater Controls
а	Water flows without obs

a b

a Water flows without obstruction through ditches

No sloughing of cover soils / No Leachate Breakouts

- b Drainage ditches do not show signs of erosion
- c Stormwater Ponds in satisfactory condition

3 Leachate Collection System

- a Confirm presence of leachate in system
- b Confirm proper function of system

4 Environmental Monitoring

- a Confirm monitoring well seals and casings are in good condition
- b Confirm no ponding of surface water around wells

5 Waste Placement

- a Waste placed in designated operating area
- b Non-contact surface water is diverted away from active area

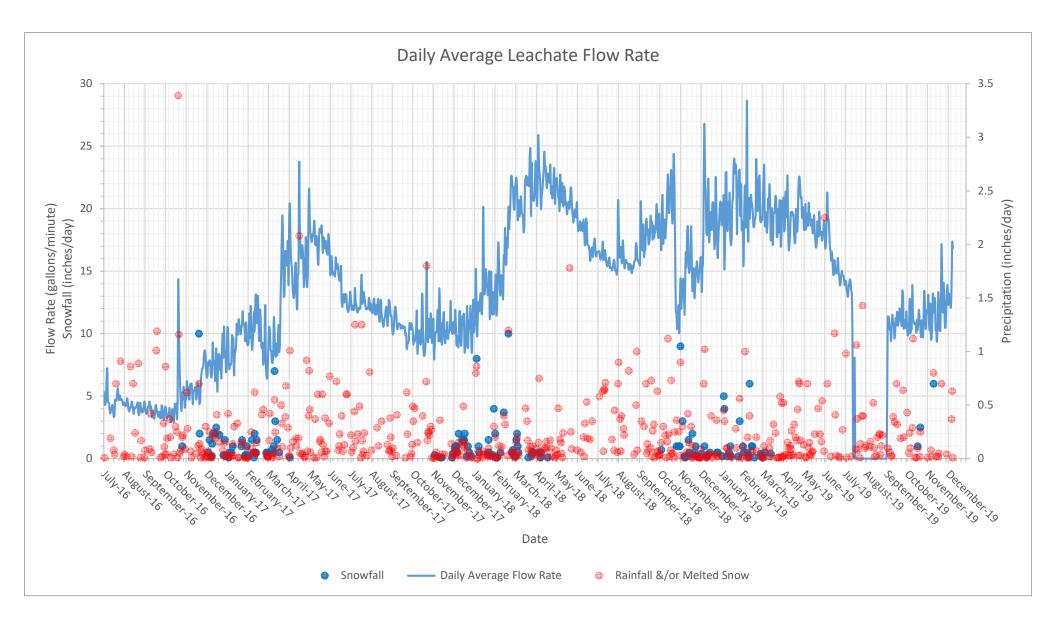
6 Dust is effectively being controlled on site

Mark form as follows:	NOTE:	For any item marked CA, a
OK = Condition Met		description of the ssue and its
NA = Not Applicable (at this time)	proposed or implemented solution must be noted on the
CA = Corrective Actio	n Requirec	Current Corrective Actions portion of this form.

CURRENT CORRECTIVE ACTIONS (Note Date, Item Number and Action To Be Taken)

ATTACHMENT 3

Leachate Flow Metering Time-Series Plot



ATTACHMENT 4

Analytical Results & Water Quality Laboratory Analysis, Usability, and Validation Reports

FIRST QUARTER



Experience is the solution 314 North Pearl Street

Albany, New York 12207 (800) 848-4983

(518) 434-4546

Fax (518) 434-0891

April 03, 2019

Dale Irwin Lockwood Hills LLC 590 Plant Road, PO Box 187 Dresden, NY 14441

Work Order No: 190319048

TEL: (315) 536-2359

RE: Lockwood Ash Landfill Quarterly

Dear Dale Irwin:

Adirondack Environmental Services, Inc received 30 samples on 3/19/2019 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Jon Daniel

ELAP#: 10709

Tara Daniels Laboratory Director

CASE NARRATIVE

CLIENT:	Lockwood Hills LLC	Date: 03-Apr-19
Project:	Lockwood Ash Landfill	
Lab Order:	190319048	

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:	ND : Not Detected at reporting limit	C: CCV below acceptable Limits
	J: Analyte detected below quantitation limit	C+: CCV above acceptable Limits
	B: Analyte detected in Blank	S: LCS Spike recovery is below acceptable limits
	X : Exceeds maximum contamination limit	S+: LCS Spike recovery is above acceptable limits
	H: Hold time exceeded	Z: Duplication outside acceptable limits
	N: Matrix Spike below acceptable limits	T : Tentatively Identified Compound-Estimated
	N+: Matrix Spike is above acceptable limits	E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: 8404 Collection Date: 3/18/2019 4:00:00 PM Lab Sample ID: 190319048-001 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.2		S.U.		3/18/2019 4:00:00 PM
Temperature (E170.1)	8		deg C		3/18/2019 4:00:00 PM
Turbidity (E180.1)	4	1.0	NTU		3/18/2019 4:00:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 2:36:00 PM
Arsenic	5.89	5.00	μg/L	1	4/1/2019 2:36:00 PM
Boron	93.7	50.0	μg/L	1	4/1/2019 2:36:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 2:36:00 PM
Calcium	112000	50.0	μg/L	1	4/1/2019 2:36:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 2:36:00 PM
Iron	51.0	50.0	μg/L	1	4/1/2019 2:36:00 PM
Magnesium	22900	50.0	μg/L	1	4/1/2019 2:36:00 PM
Manganese	ND	20.0	μg/L	1	4/1/2019 2:36:00 PM
Potassium	885	50.0	μg/L	1	4/1/2019 2:36:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 2:36:00 PM
Sodium	8540	500	µg/L	1	4/1/2019 2:36:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	374	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:08:48 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	2.62	2.00	mg/L	2	4/1/2019
Sulfate	87.6	2.00	mg/L	2	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320E					Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:10:44 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8404

 Collection Date:
 3/18/2019 4:00:00 PM

 Lab Sample ID:
 190319048-001

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	722	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	365	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8908-D

 Collection Date:
 3/18/2019 1:45:00 PM

 Lab Sample ID:
 190319048-002

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	6.9		S.U.		3/18/2019 1:45:00 PM
Temperature (E170.1)	9		deg C		3/18/2019 1:45:00 PM
Turbidity (E180.1)	9	1.0	NTU		3/18/2019 1:45:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 2:47:00 PM
Arsenic	ND	5.00	μg/L	1	4/1/2019 2:47:00 PM
Boron	236	50.0	μg/L	1	4/1/2019 2:47:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 2:47:00 PM
Calcium	153000	50.0	μg/L	1	4/1/2019 2:47:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 2:47:00 PM
Iron	1030	50.0	μg/L	1	4/1/2019 2:47:00 PM
Magnesium	68600	50.0	μg/L	1	4/1/2019 2:47:00 PM
Manganese	105	20.0	μg/L	1	4/1/2019 2:47:00 PM
Potassium	3220	50.0	μg/L	1	4/1/2019 2:47:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 2:47:00 PM
Sodium	34600	500	μg/L	1	4/1/2019 2:47:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	663	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:10:30 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	16.5	5.00	ma/l	5	4/2/2019
Sulfate	316	5.00	mg/L mg/L	5	4/2/2019
		5.00	iiig/L	0	
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	400	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	3/27/2019 12:12:21 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8908-D

 Collection Date:
 3/18/2019 1:45:00 PM

 Lab Sample ID:
 190319048-002

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1230	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	680	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8908-SH

 Collection Date:
 3/18/2019 2:40:00 PM

 Lab Sample ID:
 190319048-003

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	6.8		S.U.		3/18/2019 2:40:00 PM
Temperature (E170.1)	7		deg C		3/18/2019 2:40:00 PM
Turbidity (E180.1)	17	1.0	NTU		3/18/2019 2:40:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 2:51:00 PM
Arsenic	5.79	5.00	μg/L	1	4/1/2019 2:51:00 PM
Boron	132	50.0	μg/L	1	4/1/2019 2:51:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 2:51:00 PM
Calcium	170000	50.0	μg/L	1	4/1/2019 2:51:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 2:51:00 PM
Iron	92.4	50.0	μg/L	1	4/1/2019 2:51:00 PM
Magnesium	65700	50.0	μg/L	1	4/1/2019 2:51:00 PM
Manganese	34.8	20.0	μg/L	1	4/1/2019 2:51:00 PM
Potassium	2490	50.0	μg/L	1	4/1/2019 2:51:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 2:51:00 PM
Sodium	26400	500	μg/L	1	4/1/2019 2:51:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	695	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:12:12 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	13.5	5.00	mg/L	5	4/2/2019
Sulfate	240	5.00	mg/L	5	4/2/2019
ALKALINITY TO PH 4.5 -SM 2320E			3	-	Analyst: DAA
					-
Alkalinity, Total (As CaCO3)	430	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:13:58 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8908-SH

 Collection Date:
 3/18/2019 2:40:00 PM

 Lab Sample ID:
 190319048-003

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1220	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	690	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8909-D

 Collection Date:
 3/18/2019 11:59:00 AM

 Lab Sample ID:
 190319048-004

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	9.0		S.U.		3/18/2019 11:59:00 AM
Temperature (E170.1)	10		deg C		3/18/2019 11:59:00 AM
Turbidity (E180.1)	> 999	1.0	NTU		3/18/2019 11:59:00 AM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	/20/2019)				
Aluminum	713	100	μg/L	1	4/1/2019 2:55:00 PM
Arsenic	ND	5.00	μg/L	1	4/1/2019 2:55:00 PM
Boron	960	50.0	µg/L	1	4/1/2019 2:55:00 PM
Cadmium	ND	5.00	µg/L	1	4/1/2019 2:55:00 PM
Calcium	26300	50.0	μg/L	1	4/1/2019 2:55:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 2:55:00 PM
Iron	3590	50.0	μg/L	1	4/1/2019 2:55:00 PM
Magnesium	5380	50.0	μg/L	1	4/1/2019 2:55:00 PM
Manganese	183	20.0	μg/L	1	4/1/2019 2:55:00 PM
Potassium	1500	50.0	µg/L	1	4/1/2019 2:55:00 PM
Selenium	ND	5.00	µg/L	1	4/1/2019 2:55:00 PM
Sodium	161000	5000	μg/L	10	4/1/2019 3:04:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	88	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:13:54 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	4.59	2.00	mg/L	2	4/1/2019
Sulfate	4.59 91.1	2.00	mg/L	2	4/1/2019
		2.00	ilig/L	L	
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	330	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	3/27/2019 12:15:36 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 03-Apr-19

 Client Sample ID:
 8909-D

 Collection Date:
 3/18/2019 11:59:00 AM

 Lab Sample ID:
 190319048-004

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25 ⁷	10B-2011				Analyst: KB
Specific Conductance	779	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	885	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8909-SH

 Collection Date:
 3/18/2019 11:35:00 AM

 Lab Sample ID:
 190319048-005

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
pH (E150.1)	8.0		S.U.		3/18/2019 11:35:00 AM
Temperature (E170.1)	11		deg C		3/18/2019 11:35:00 AM
Turbidity (E180.1)	9	1.0	NTU		3/18/2019 11:35:00 AM
ICP METALS - EPA 200.7	Analyst: KH				
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:19:00 PM
Arsenic	8.84	5.00	μg/L	1	4/1/2019 3:19:00 PM
Boron	244	50.0	μg/L	1	4/1/2019 3:19:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 3:19:00 PM
Calcium	29400	50.0	μg/L	1	4/1/2019 3:19:00 PM
Copper	7.33	5.00	μg/L	1	4/1/2019 3:19:00 PM
Iron	51.8	50.0	μg/L	1	4/1/2019 3:19:00 PM
Magnesium	18700	50.0	μg/L	1	4/1/2019 3:19:00 PM
Manganese	ND	20.0	μg/L	1	4/1/2019 3:19:00 PM
Potassium	2300	50.0	μg/L	1	4/1/2019 3:19:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:19:00 PM
Sodium	61700	5000	μg/L	10	4/1/2019 3:22:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	151	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	, ND	0.0002	mg/L	1	3/20/2019 3:15:35 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: SMD
Chloride	ND	2.00	mg/L	2	4/1/2019
Sulfate	110	2.00	mg/L	2	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	170	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:20:29 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 03-Apr-19

 Client Sample ID:
 8909-SH

 Collection Date:
 3/18/2019 11:35:00 AM

 Lab Sample ID:
 190319048-005

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	546	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SN	1 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	205	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: 8910-D Collection Date: 3/18/2019 12:45:00 PM Lab Sample ID: 190319048-006 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
pH (E150.1)	7.0		S.U.		3/18/2019 12:45:00 PM
Temperature (E170.1)	11		deg C		3/18/2019 12:45:00 PM
Turbidity (E180.1)	14	1.0	NTU		3/18/2019 12:45:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	/20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:26:00 PM
Arsenic	5.01	5.00	μg/L	1	4/1/2019 3:26:00 PM
Boron	2820	50.0	μg/L	1	4/1/2019 3:26:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 3:26:00 PM
Calcium	77700	50.0	μg/L	1	4/1/2019 3:26:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 3:26:00 PM
Iron	ND	50.0	μg/L	1	4/1/2019 3:26:00 PM
Magnesium	25600	50.0	μg/L	1	4/1/2019 3:26:00 PM
Manganese	ND	20.0	μg/L	1	4/1/2019 3:26:00 PM
Potassium	3500	50.0	μg/L	1	4/1/2019 3:26:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:26:00 PM
Sodium	105000	5000	µg/L	10	4/1/2019 3:31:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	299	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:17:17 PM
ANIONS BY ION CHROMATOGRA	EV 2.1			Analyst: CS	
Chloride	27.8	5.00	mg/L	5	4/2/2019
Sulfate	332	5.00	mg/L	5	4/2/2019
		0.00	iiig/ L	0	
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	150	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:22:06 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 03-Apr-19

 Client Sample ID:
 8910-D

 Collection Date:
 3/18/2019 12:45:00 PM

 Lab Sample ID:
 190319048-006

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1020	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	510	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: 8911-D Collection Date: 3/18/2019 4:00:00 PM Lab Sample ID: 190319048-007 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
pH (E150.1)	7.2		S.U.		3/18/2019 4:00:00 PM
Temperature (E170.1)	9		deg C		3/18/2019 4:00:00 PM
Turbidity (E180.1)	< 1	1.0	NTU		3/18/2019 4:00:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	/20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:34:00 PM
Arsenic	ND	5.00	µg/L	1	4/1/2019 3:34:00 PM
Boron	1330	50.0	μg/L	1	4/1/2019 3:34:00 PM
Cadmium	ND	5.00	µg/L	1	4/1/2019 3:34:00 PM
Calcium	59500	50.0	µg/L	1	4/1/2019 3:34:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 3:34:00 PM
Iron	69.2	50.0	μg/L	1	4/1/2019 3:34:00 PM
Magnesium	20800	50.0	μg/L	1	4/1/2019 3:34:00 PM
Manganese	40.9	20.0	μg/L	1	4/1/2019 3:34:00 PM
Potassium	3520	50.0	μg/L	1	4/1/2019 3:34:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:34:00 PM
Sodium	94300	5000	μg/L	10	4/1/2019 3:38:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	234	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:18:59 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: SMD
Chloride	11.0	5.00	mg/L	5	4/1/2019
Sulfate	240	5.00	mg/L	5	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320E			3	-	Analyst: DAA
Alkalinity, Total (As CaCO3)	210	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	mg/L	1	3/27/2019 12:23:44 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8911-D

 Collection Date:
 3/18/2019 4:00:00 PM

 Lab Sample ID:
 190319048-007

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	884	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	480	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8911-SH

 Collection Date:
 3/19/2019 4:15:00 PM

 Lab Sample ID:
 190319048-008

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.7		S.U.		3/19/2019 4:15:00 PM
Temperature (E170.1)	10		deg C		3/19/2019 4:15:00 PM
Turbidity (E180.1)	8	1.0	NTU		3/19/2019 4:15:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/2	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:41:00 PM
Arsenic	16.0	5.00	μg/L	1	4/1/2019 3:41:00 PM
Boron	294	50.0	μg/L	1	4/1/2019 3:41:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 3:41:00 PM
Calcium	52300	50.0	μg/L	1	4/1/2019 3:41:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 3:41:00 PM
Iron	814	50.0	μg/L	1	4/1/2019 3:41:00 PM
Magnesium	16400	50.0	μg/L	1	4/1/2019 3:41:00 PM
Manganese	88.1	20.0	μg/L	1	4/1/2019 3:41:00 PM
Potassium	2020	50.0	μg/L	1	4/1/2019 3:41:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:41:00 PM
Sodium	71800	5000	μg/L	10	4/1/2019 3:45:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	198	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/2	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:20:41 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	9.70	5.00	mg/L	5	4/1/2019
Sulfate	9.70 217	5.00	mg/L	5	4/1/2019
		5.00	ilig/L	5	
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	104	4	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1	mg/L	1	3/27/2019 12:25:25 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8911-SH

 Collection Date:
 3/19/2019 4:15:00 PM

 Lab Sample ID:
 190319048-008

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	670	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	395	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 8942-D

 Collection Date:
 3/19/2019 8:20:00 AM

 Lab Sample ID:
 190319048-009

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A		Analyst: FLD			
pH (E150.1)	7.3		S.U.		3/19/2019 8:20:00 AM
Temperature (E170.1)	7		deg C		3/19/2019 8:20:00 AM
Turbidity (E180.1)	26	1.0	NTU		3/19/2019 8:20:00 AM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:48:00 PM
Arsenic	15.0	5.00	μg/L	1	4/1/2019 3:48:00 PM
Boron	290	50.0	μg/L	1	4/1/2019 3:48:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 3:48:00 PM
Calcium	76400	50.0	μg/L	1	4/1/2019 3:48:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 3:48:00 PM
Iron	1030	50.0	μg/L	1	4/1/2019 3:48:00 PM
Magnesium	68200	50.0	μg/L	1	4/1/2019 3:48:00 PM
Manganese	203	20.0	μg/L	1	4/1/2019 3:48:00 PM
Potassium	3000	50.0	μg/L	1	4/1/2019 3:48:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:48:00 PM
Sodium	38800	500	µg/L	1	4/1/2019 3:48:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	471	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:22:24 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: SMD
Chloride	ND	5.00	mg/L	5	4/1/2019
Sulfate	240	5.00	mg/L	5	4/1/2019
		5.00	ilig/L	0	4/1/2010
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.4	0.1	mg/L	1	3/27/2019 12:27:04 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8942-D

 Collection Date:
 3/19/2019 8:20:00 AM

 Lab Sample ID:
 190319048-009

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	948	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	500	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

 Client Sample ID:
 9306-SH

 Collection Date:
 3/19/2019 7:00:00 AM

 Lab Sample ID:
 190319048-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A		Analyst: FLD			
pH (E150.1)	6.8		S.U.		3/19/2019 7:00:00 AM
Temperature (E170.1)	8		deg C		3/19/2019 7:00:00 AM
Turbidity (E180.1)	16	1.0	NTU		3/19/2019 7:00:00 AM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	/20/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 3:52:00 PM
Arsenic	10.6	5.00	µg/L	1	4/1/2019 3:52:00 PM
Boron	85.6	50.0	μg/L	1	4/1/2019 3:52:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 3:52:00 PM
Calcium	56400	50.0	μg/L	1	4/1/2019 3:52:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 3:52:00 PM
Iron	137	50.0	μg/L	1	4/1/2019 3:52:00 PM
Magnesium	59900	50.0	μg/L	1	4/1/2019 3:52:00 PM
Manganese	ND	20.0	μg/L	1	4/1/2019 3:52:00 PM
Potassium	2980	50.0	µg/L	1	4/1/2019 3:52:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 3:52:00 PM
Sodium	20500	500	μg/L	1	4/1/2019 3:52:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	387	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:24:07 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: SMD
Chloride	ND	2.00	mg/L	2	4/1/2019
Sulfate	77.1	2.00	mg/L	2	4/1/2019
		2.00	<u>g</u> , _	-	
ALKALINITY TO PH 4.5 -SM 2320E	5-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	340	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:28:42 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 9306-SH

 Collection Date:
 3/19/2019 7:00:00 AM

 Lab Sample ID:
 190319048-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	731	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	390	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: GW-DUP 8909D Collection Date: 3/18/2019 11:59:00 AM Lab Sample ID: 190319048-011 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
pH (E150.1)	9.0		S.U.		3/18/2019 11:59:00 AM
Temperature (E170.1)	10		deg C		3/18/2019 11:59:00 AM
Turbidity (E180.1)	> 999	1.0	NTU		3/18/2019 11:59:00 AM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				
Aluminum	738	100	μg/L	1	4/1/2019 4:09:00 PM
Arsenic	ND	5.00	μg/L	1	4/1/2019 4:09:00 PM
Boron	959	50.0	μg/L	1	4/1/2019 4:09:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 4:09:00 PM
Calcium	26300	50.0	μg/L	1	4/1/2019 4:09:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 4:09:00 PM
Iron	3800	50.0	μg/L	1	4/1/2019 4:09:00 PM
Magnesium	5420	50.0	μg/L	1	4/1/2019 4:09:00 PM
Manganese	186	20.0	μg/L	1	4/1/2019 4:09:00 PM
Potassium	1480	50.0	μg/L	1	4/1/2019 4:09:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 4:09:00 PM
Sodium	126000	5000	μg/L	10	4/1/2019 4:13:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	88	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:29:12 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	4.57	2.00	mg/L	2	4/1/2019
Sulfate	92.2	2.00	mg/L	2	4/1/2019
Guilate	JZ.Z	2.00	iiig/L	2	4/1/2010
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	310	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.6	0.1	mg/L	1	3/27/2019 12:30:20 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 03-Apr-19

 Client Sample ID:
 GW-DUP 8909D

 Collection Date:
 3/18/2019 11:59:00 AM

 Lab Sample ID:
 190319048-011

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	772	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	865	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: 8401 Collection Date: 3/18/2019 3:45:00 PM Lab Sample ID: 190319048-012 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	6.5		S.U.		3/18/2019 3:45:00 PM
Temperature (E170.1)	9		deg C		3/18/2019 3:45:00 PM
Turbidity (E180.1)	< 1	1.0	NTU		3/18/2019 3:45:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/	20/2019)				-
Aluminum	ND	100	μg/L	1	4/1/2019 4:16:00 PM
Arsenic	6.11	5.00	μg/L	1	4/1/2019 4:16:00 PM
Boron	761	50.0	μg/L	1	4/1/2019 4:16:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 4:16:00 PM
Calcium	78400	50.0	μg/L	1	4/1/2019 4:16:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 4:16:00 PM
Iron	244	50.0	μg/L	1	4/1/2019 4:16:00 PM
Magnesium	22800	50.0	μg/L	1	4/1/2019 4:16:00 PM
Manganese	64.3	20.0	μg/L	1	4/1/2019 4:16:00 PM
Potassium	2440	50.0	μg/L	1	4/1/2019 4:16:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 4:16:00 PM
Sodium	62500	5000	μg/L	10	4/1/2019 4:20:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	290	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:30:54 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	25.4	2.00	mg/L	2	4/1/2019
Sulfate	57.0	2.00	mg/L	2	4/1/2019
		2.00	iiig/ L	2	
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	360	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.9	0.1	mg/L	1	3/27/2019 12:31:58 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 8401

 Collection Date:
 3/18/2019 3:45:00 PM

 Lab Sample ID:
 190319048-012

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	819	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	345	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Leak Detection Syst. Collection Date: 3/18/2019 10:55:00 AM Lab Sample ID: 190319048-013 Matrix: GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP /	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	5.6	0.10	mg/L		3/18/2019 10:55:00 AM
Flow, GPD	105		gal/day		3/18/2019 10:55:00 AM
pH (E150.1)	7.8		S.U.		3/18/2019 10:55:00 AM
Temperature (E170.1)	9		deg C		3/18/2019 10:55:00 AM
Turbidity (E180.1)	6	1.0	NTU		3/18/2019 10:55:00 AM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3	/20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	802	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	335000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	78.5	50.0	μg/L	1	3/29/2019
Magnesium	138000	500	μg/L	10	3/29/2019
Manganese	ND	20.0	μg/L	1	3/29/2019
Potassium	5100	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	71100	5000	μg/L	10	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1129	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:32:36 PM
ANIONS BY ION CHROMATOGRA		Analyst: SMD			
Chloride	34.9	20.0	mg/L	20	4/1/2019
Sulfate	1040	20.0	mg/L	20	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	460	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	Analyst: PL				

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Leak Detection Syst.

 Collection Date:
 3/18/2019 10:55:00 AM

 Lab Sample ID:
 190319048-013

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:33:36 PM
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	2320	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1940	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Under Drain 1 Collection Date: 3/18/2019 12:18:00 PM Lab Sample ID: 190319048-014 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AI	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.6	0.10	mg/L		3/18/2019 12:18:00 PM
Flow, GPD	11,404		gal/day		3/18/2019 12:18:00 PM
pH (E150.1)	7.9		S.U.		3/18/2019 12:18:00 PM
Temperature (E170.1)	10		deg C		3/18/2019 12:18:00 PM
Turbidity (E180.1)	31	1.0	NTU		3/18/2019 12:18:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/2	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	52.0	5.00	μg/L	1	3/29/2019
Boron	3380	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	281000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	4550	50.0	μg/L	1	3/29/2019
Magnesium	66200	50.0	μg/L	1	3/29/2019
Manganese	734	20.0	μg/L	1	3/29/2019
Potassium	15500	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	38600	500	μg/L	1	3/29/2019
OW LEVEL MERCURY - EPA 1631. (Prep: 1631E - 3/2					Analyst: WB
Mercury	21/2019) ND	0.5	ng/L	1	3/22/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	974	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/2			-		Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:34:19 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: SMD
Chloride	21.8	5.00	mg/L	5	4/1/2019
Sulfate	408	5.00	mg/L	5	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Under Drain 1

 Collection Date:
 3/18/2019 12:18:00 PM

 Lab Sample ID:
 190319048-014

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	670	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	mg/L	1	3/27/2019 12:35:14 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	1780	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	1140	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Under Drain 2 Collection Date: 3/18/2019 11:18:00 AM Lab Sample ID: 190319048-015 Matrix: GROUNDWATER

Dissolved Oxygen (E360.1) 7.1 0.10 mg/L 3/18/2019 11:18:00 AM Flow, GPD 6,077 gal/day 3/18/2019 11:18:00 AM PH (E150.1) 7.7 S.U. 3/18/2019 11:18:00 AM Temperature (E170.1) 11 deg C 3/18/2019 11:18:00 AM CP METALS - EPA 200.7 Analyst: SM Analyst: SM (Prep: SW3010A - 3/20/2019) Auminum ND 100 µg/L 1 3/29/2019 Auminum ND 100 µg/L 1 3/29/2019 Analyst: SM Cadmium ND 5.00 µg/L 1 3/29/2019 Maganese 824 2.00 µg/L 1 3/29/2019 Maganese 824 2.00 µg/L 1 3/29/2019 Selen	Analyses	Result	RL Qua	al Units	DF	Date Analyzed
Flow, GPD 6,077 gal/day 3/18/2019 11:18:00 AM pH (E150.1) 7.7 S.U. 3/18/2019 11:18:00 AM Temperature (E170.1) 11 deg C 3/18/2019 11:18:00 AM Turbidity (E180.1) 10 1.0 NTU 3/18/2019 11:18:00 AM CP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Analyst: SM Analyst: SM Aluminum ND 100 µg/L 1 3/29/2019 Arsenic 9.95 5.00 µg/L 1 3/29/2019 Cadimium ND 5.00 µg/L 1 3/29/2019 Cadimum ND 5.00 µg/L 1 3/29/2019 Cadicum S49000 500 µg/L 1 3/29/2019 Cadicum S49000 500 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Marganese 824 20.0 µg/L 1 3/29/2019 Marganese 824 20.0 µg/L 10 3/29/2019 Sodium ND 5.00	FIELD-PH, RES CL2, AND TEMP A	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 7.7 S.U. 3/18/2019 11:18:00 AM Temperature (E170.1) 11 deg C 3/18/2019 11:18:00 AM Turbidity (E180.1) 10 1.0 NTU 3/18/2019 11:18:00 AM CP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Aturninum ND 100 µg/L 1 3/29/2019 Aturninum ND 100 µg/L 1 3/29/2019 Atasis: SM Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium Sodium 3/29/2019 Cadmium Cadmium	Dissolved Oxygen (E360.1)	7.1	0.10	mg/L		3/18/2019 11:18:00 AM
Temperature (E170.1) 11 deg C 3/18/2019 11:18:00 AM Turbidity (E180.1) 10 1.0 NTU 3/18/2019 11:18:00 AM CP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Analyst: SM Analyst: SM Auminum ND 100 µg/L 1 3/29/2019 Auminum ND 100 µg/L 1 3/29/2019 Boron 322500 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadium 549000 500 µg/L 1 3/29/2019 Cadium 549000 500 µg/L 1 3/29/2019 Cadium 549000 50.0 µg/L 1 3/29/2019 Magneseim 655500 50.0 µg/L 1 3/29/2019 Magnese 824 20.0 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 MercOury	Flow, GPD	6,077		gal/day		3/18/2019 11:18:00 AM
Turbidity (E180.1) 10 1.0 NTU 3/18/2019 11:18:00 AM CP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Aluminum ND 100 µg/L 1 3/29/2019 Aluminum ND 100 µg/L 1 3/29/2019 Arsenic 9.95 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium S49000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Maganese 824 20.0 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L <td< td=""><td>pH (E150.1)</td><td>7.7</td><td></td><td>S.U.</td><td></td><td>3/18/2019 11:18:00 AM</td></td<>	pH (E150.1)	7.7		S.U.		3/18/2019 11:18:00 AM
Aluminum NID number of the second seco	Temperature (E170.1)	11		deg C		3/18/2019 11:18:00 AM
(Prep: SW3010A - 3/20/2019) Aluminum ND 100 µg/L 1 3/29/2019 Arsenic 9.95 5.00 µg/L 1 3/29/2019 Boron 32500 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadrium 549000 500 µg/L 1 3/29/2019 Cadrium 549000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Manganese 824 20.0 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Mercury ND 0.0002 mg/L 10 3/28/2019 Mercury ND 0.0002 mg/L	Turbidity (E180.1)	10	1.0	NTU		3/18/2019 11:18:00 AM
ND 100 µg/L 1 3/29/2019 Arsenic 9.95 5.00 µg/L 1 3/29/2019 Boron 32500 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium 549000 500 µg/L 1 3/29/2019 Calcium 549000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Maganese 824 20.0 µg/L 1 3/29/2019 Maganese 824 20.0 µg/L 1 3/29/2019 Setenium 118000 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/28/2019 Mercury ND 0.0002 mg/L 10 3/28/2019 Mercury <	ICP METALS - EPA 200.7					Analyst: SM
Arsenic 9.95 5.00 µg/L 1 3/29/2019 Boron 32500 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadium 549000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Maganesium 2570 50.0 µg/L 1 3/29/2019 Maganese 824 20.0 µg/L 1 3/29/2019 Maganese 824 20.0 µg/L 1 3/29/2019 Selenium 118000 500 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Mercury ND 0.0002 mg/L 10 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride	(Prep: SW3010A - 3	/20/2019)				
Boron 32500 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium 549000 500 µg/L 10 3/29/2019 Cadrium 549000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Magnese 824 20.0 µg/L 1 3/29/2019 Magnese 824 20.0 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L 20 Analyst: AVE (Prep: E245.1 REV 3.0	Aluminum	ND	100	μg/L	1	3/29/2019
Cadmium ND 5.00 µg/L 1 3/29/2019 Calcium 549000 500 µg/L 10 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Iron 2570 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Magnese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 MERCURY - EPA 205.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L 1 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM <td< td=""><td>Arsenic</td><td>9.95</td><td>5.00</td><td>μg/L</td><td>1</td><td>3/29/2019</td></td<>	Arsenic	9.95	5.00	μg/L	1	3/29/2019
Calcium 549000 500 µg/L 10 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Iron 2570 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Magnese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 1 3/29/2019 Selenium ND 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L 10 3/28/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVE Analyst: AVE (Prep: E245.1 - 3/20/2019) Manalyst: SM Analyst: SME ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride 4440 200 mg/L	Boron	32500	50.0	μg/L	1	3/29/2019
Copper ND 5.00 µg/L 1 3/29/2019 Iron 2570 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Manganese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVE Analyst: AVE Analyst: AVE (Prep: E245.1 - 3/20/2019) 0.0002 mg/L 1 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM	Cadmium	ND	5.00	μg/L	1	3/29/2019
Iron 2570 50.0 µg/L 1 3/29/2019 Magnesium 65500 50.0 µg/L 1 3/29/2019 Manganese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Calcium	549000	500	μg/L	10	3/29/2019
Magnesium 65500 50.0 µg/L 1 3/29/2019 Manganese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 10 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019 Analyst: AVE Analyst: AVE Manions BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Copper	ND	5.00	μg/L	1	3/29/2019
Manganese 824 20.0 µg/L 1 3/29/2019 Potassium 118000 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Iron	2570	50.0	μg/L	1	3/29/2019
Potassium 11800 500 µg/L 10 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Magnesium	65500	50.0	μg/L	1	3/29/2019
Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Manganese	824	20.0	μg/L	1	3/29/2019
Sodium 232000 5000 µg/L 10 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Frage Analyst: AVE Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Analyst: DAA	Potassium	118000	500	μg/L	10	3/29/2019
HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride Sulfate 440 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Selenium	ND	5.00	μg/L	1	3/29/2019
Total Hardness (As CaCO3) 1640 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVE Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Sodium	232000	5000	μg/L	10	3/29/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019)) Analyst: AVE Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: E245.1 - 3/20/2019) Mercury ND 0.0002 mg/L 1 3/20/2019 3:36:01 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Total Hardness (As CaCO3)	1640	5	mg/L CaCO3	1	3/28/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: SME Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3	/20/2019)				Analyst: AVB
Chloride 440 200 mg/L 200 4/1/2019 Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Mercury	ND	0.0002	mg/L	1	3/20/2019 3:36:01 PM
Sulfate 1480 200 mg/L 200 4/1/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	ANIONS BY ION CHROMATOGRA	NPHY - EPA 300.0 F	REV 2.1			Analyst: SMD
ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Chloride	440	200	mg/L	200	4/1/2019
Alkalinity, Total (As CaCO3) 340 10 mgCaCO3/L 1 3/28/2019	Sulfate	1480	200	mg/L	200	4/1/2019
	ALKALINITY TO PH 4.5 -SM 23201	B-2011				Analyst: DAA
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PI	Alkalinity, Total (As CaCO3)	340	10	mgCaCO3/L	1	3/28/2019
	AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Under Drain 2

 Collection Date:
 3/18/2019 11:18:00 AM

 Lab Sample ID:
 190319048-015

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	1.8	0.1	mg/L	1	3/27/2019 12:43:22 PM
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	3950	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	3160	5	mg/L	1	3/22/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID:Under Drain 3Collection Date:3/18/2019 9:44:00 AMLab Sample ID:190319048-016Matrix:GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AI	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	5.6	0.10	mg/L		3/18/2019 9:44:00 AM
Flow, GPD	418		gal/day		3/18/2019 9:44:00 AM
pH (E150.1)	7.3		S.U.		3/18/2019 9:44:00 AM
Temperature (E170.1)	11		deg C		3/18/2019 9:44:00 AM
Turbidity (E180.1)	7	1.0	NTU		3/18/2019 9:44:00 AM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/2	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	17100	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	595000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	698	50.0	μg/L	1	3/29/2019
Magnesium	77100	50.0	μg/L	1	3/29/2019
Manganese	387	20.0	μg/L	1	3/29/2019
Potassium	118000	500	μg/L	10	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	231000	5000	μg/L	10	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1803	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/2	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:37:43 PM
ANIONS BY ION CHROMATOGRAF	Analyst: SMD				
Chloride	746	200	mg/L	200	4/1/2019
Sulfate	1400	200	mg/L	200	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
		10	maCaCO2/I	4	0/00/0010
Alkalinity, Total (As CaCO3)	260	10	mgCaCO3/L	1	3/28/2019

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Under Drain 3

 Collection Date:
 3/18/2019 9:44:00 AM

 Lab Sample ID:
 190319048-016

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	3/27/2019 12:45:03 PM
CONDUCTANCE AT 25C - SM 257	I0B-2011				Analyst: KB
Specific Conductance	4870	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	3940	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Inlet To Pond Collection Date: 3/18/2019 12:40:00 PM Lab Sample ID: 190319048-017 Matrix: GROUNDWATER

			Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.3	0.10	mg/L		3/18/2019 12:40:00 PM
Flow, GPD	15,206		gal/day		3/18/2019 12:40:00 PM
pH (E150.1)	8.0		S.U.		3/18/2019 12:40:00 PM
Temperature (E170.1)	10		deg C		3/18/2019 12:40:00 PM
Turbidity (E180.1)	16	1.0	NTU		3/18/2019 12:40:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/2	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	23.2	5.00	μg/L	1	3/29/2019
Boron	17300	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	426000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	2140	50.0	μg/L	1	3/29/2019
Magnesium	66500	50.0	μg/L	1	3/29/2019
Manganese	490	20.0	μg/L	1	3/29/2019
Potassium	73900	500	μg/L	10	3/29/2019
Selenium	6.89	5.00	μg/L	1	3/29/2019
Sodium	183000	5000	µg/L	10	3/29/2019
OW LEVEL MERCURY - EPA 163 [.] (Prep: 1631E - 3/2					Analyst: WB
Mercury	ND	0.5	ng/L	1	3/22/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1337	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/2	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:39:26 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 R	REV 2.1			Analyst: SMD
Chloride	238	20.0	mg/L	20	4/1/2019
Sulfate	1050	20.0	mg/L	20	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Inlet To Pond

 Collection Date:
 3/18/2019 12:40:00 PM

 Lab Sample ID:
 190319048-017

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	450	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1	mg/L	1	3/27/2019 12:46:42 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	3190	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	2500	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Keuka Upstream Collection Date: 3/18/2019 2:05:00 PM Lab Sample ID: 190319048-018 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
Dissolved Oxygen (E360.1)	8.9	0.10	mg/L		3/18/2019 2:05:00 PM
pH (E150.1)	8.6		S.U.		3/18/2019 2:05:00 PM
Temperature (E170.1)	3		deg C		3/18/2019 2:05:00 PM
Turbidity (E180.1)	4	1.0	NTU		3/18/2019 2:05:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	59.7	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	62600	50.0	μg/L	1	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	85.8	50.0	μg/L	1	3/29/2019
Magnesium	17800	50.0	μg/L	1	3/29/2019
Manganese	ND	20.0	μg/L	1	3/29/2019
Potassium	3980	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	31500	500	μg/L	1	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	230	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:41:08 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: SMD
Chloride	58.7	2.00	mg/L	2	4/1/2019
Sulfate	35.0	2.00	mg/L	2	4/1/2019
Sunate	55.0	2.00	iiig/L	2	4/1/2013
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	210	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:48:19 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

Client Sample ID:Keuka UpstreamCollection Date:3/18/2019 2:05:00 PMLab Sample ID:190319048-018Matrix:GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	625	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	350	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Keuka Downstream Collection Date: 3/18/2019 1:33:00 PM Lab Sample ID: 190319048-019 Matrix: SURFACE WATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
Dissolved Oxygen (E360.1)	9.3	0.10	mg/L		3/18/2019 1:33:00 PM
pH (E150.1)	8.6		S.U.		3/18/2019 1:33:00 PM
Temperature (E170.1)	3		deg C		3/18/2019 1:33:00 PM
Turbidity (E180.1)	9	1.0	NTU		3/18/2019 1:33:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	56.7	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	64700	50.0	μg/L	1	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	93.7	50.0	μg/L	1	3/29/2019
Magnesium	18400	50.0	μg/L	1	3/29/2019
Manganese	ND	20.0	μg/L	1	3/29/2019
Potassium	3970	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	30500	500	μg/L	1	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	237	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:42:50 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: SMD
Chloride	57.5	2.00	ma/l	2	4/1/2019
Sulfate	57.5 35.3	2.00	mg/L	2 2	4/1/2019
Sunate	35.3	2.00	mg/L	2	4/1/2019
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	230	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:49:56 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Keuka Downstream

 Collection Date:
 3/18/2019 1:33:00 PM

 Lab Sample ID:
 190319048-019

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 257	I0B-2011				Analyst: KB
Specific Conductance	634	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	425	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Surface Water DUP Collection Date: 3/18/2019 2:05:00 PM Lab Sample ID: 190319048-020 Matrix: SURFACE WATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	8.9	0.10	mg/L		3/18/2019 2:05:00 PM
pH (E150.1)	8.6		S.U.		3/18/2019 2:05:00 PM
Temperature (E170.1)	3		deg C		3/18/2019 2:05:00 PM
Turbidity (E180.1)	4	1.0	NTU		3/18/2019 2:05:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	54.3	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	62600	50.0	μg/L	1	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	78.7	50.0	μg/L	1	3/29/2019
Magnesium	18100	50.0	μg/L	1	3/29/2019
Manganese	ND	20.0	μg/L	1	3/29/2019
Potassium	4120	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	30500	500	μg/L	1	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	231	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:51:20 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: SMD
Chloride	58.9	2.00	mg/L	2	4/1/2019
Sulfate	34.6	2.00	mg/L	2	4/1/2019
		2.00	mg/L	2	
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	200	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:51:33 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

Client Sample ID:Surface Water DUPCollection Date:3/18/2019 2:05:00 PMLab Sample ID:190319048-020Matrix:SURFACE WATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	615	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	395	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Pond Grab Collection Date: 3/18/2019 12:52:00 PM Lab Sample ID: 190319048-021 Matrix: SURFACE WATER

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.5	0.10	mg/L		3/18/2019 12:52:00 PM
pH (E150.1)	8.0		S.U.		3/18/2019 12:52:00 PM
Temperature (E170.1)	4		deg C		3/18/2019 12:52:00 PM
Turbidity (E180.1)	5	1.0	NTU		3/18/2019 12:52:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/	/20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	7720	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	227000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	428	50.0	μg/L	1	3/29/2019
Magnesium	32000	50.0	μg/L	1	3/29/2019
Manganese	116	20.0	μg/L	1	3/29/2019
Potassium	31100	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	81500	5000	μg/L	10	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1067	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/	/20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:53:03 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: SMD
Chloride	92.9	20.0	mg/L	20	4/1/2019
Sulfate	92.9 440	20.0	•	20 20	4/1/2019
Sunale	440	20.0	mg/L	20	4/1/2013
ALKALINITY TO PH 4.5 -SM 23208	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	220	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:53:10 PM

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 Pond Grab

 Collection Date:
 3/18/2019 12:52:00 PM

 Lab Sample ID:
 190319048-021

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1430	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	1020	5	mg/L	1	3/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: Field Blank Collection Date: 3/18/2019 12:15:00 PM Lab Sample ID: 190319048-022 Matrix: SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AR	E NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.6	0.10	mg/L		3/18/2019 12:15:00 PM
pH (E150.1)	7.1		S.U.		3/18/2019 12:15:00 PM
Temperature (E170.1)	5		deg C		3/18/2019 12:15:00 PM
Turbidity (E180.1)	< 1	1.0	NTU		3/18/2019 12:15:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 3/20)/2019)				
Aluminum	ND	100	μg/L	1	4/1/2019 4:23:00 PM
Arsenic	ND	5.00	μg/L	1	4/1/2019 4:23:00 PM
Boron	ND	50.0	μg/L	1	4/1/2019 4:23:00 PM
Cadmium	ND	5.00	μg/L	1	4/1/2019 4:23:00 PM
Calcium	ND	50.0	μg/L	1	4/1/2019 4:23:00 PM
Copper	ND	5.00	μg/L	1	4/1/2019 4:23:00 PM
Iron	ND	50.0	μg/L	1	4/1/2019 4:23:00 PM
Magnesium	ND	50.0	μg/L	1	4/1/2019 4:23:00 PM
Manganese	ND	20.0	μg/L	1	4/1/2019 4:23:00 PM
Potassium	ND	50.0	μg/L	1	4/1/2019 4:23:00 PM
Selenium	ND	5.00	μg/L	1	4/1/2019 4:23:00 PM
Sodium	ND	500	μg/L	1	4/1/2019 4:23:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	ND	5	mg/L CaCO3	1	4/1/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:54:45 PM
ANIONS BY ION CHROMATOGRAPI	HY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	ND	2.00	~~~/l	0	4/0/0010
	ND	2.00	mg/L	2 2	4/2/2019
Sulfate	ND	2.00	mg/L	2	4/2/2019
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	1	1	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:54:47 PM

Adirondack Environmental Services, Inc			Date: 03-Apr-19				r-19		
CLIENT:	Lockwood Hills LLC			С	lient Sample I	D: F	Field H	Blank	
Work Order:	190319048			Collection Date: 3/18/2019 12:15:00 PM			019 12:15:00 PM		
Reference:	Lockwood Ash Landfill / Quarterly				Lab Sample II): 1	190319048-022		
PO#:					Matri	ix: S	SURF	ACE WATER	
Analyses		Result	RL (Qual	Units		DF	Date Analyzed	
CONDUCTANC	E AT 25C - SM 2510B-20	11						Analyst: KB	
Specific Conduc	tance	2430	1		µmhos/cm	1		3/21/2019	

CLIENT:	Lockwood Hills LLC			Client Sampl	e ID: LL Hg	g Field Blank		
Work Order:	190319048	190319048			Date: 3/18/2	2019 3:00:00 PM		
Reference:	Lockwood Ash Landfill / Quarterly			Lab Sample	e ID: 19031	190319048-023		
PO#:				Ma	atrix: GROU	JNDWATER		
Analyses		Result	RL Qu	al Units	DF	Date Analyzed		
	ERCURY - EPA 1631E Prep: 1631E - 3/21/2019)				Analyst: WE		
•	-	-						

Date: 03-Apr-19

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: GW Dep Drain 3 Collection Date: 3/18/2019 9:12:00 AM Lab Sample ID: 190319048-024 Matrix: GROUNDWATER

Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 Sulfate 165 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Analyst: DAA	Analyses	Result	RL Qu	al Units	DF	Date Analyzed
Flow, GPD 988 gal/day 3/18/2019 9:12:00 AM pH (E150.1) 6.7 S.U. 3/18/2019 9:12:00 AM Temperature (E170.1) 4 deg G 3/18/2019 9:12:00 AM Turbidity (E180.1) 2 1.0 NTU 3/18/2019 9:12:00 AM ICP METALS - EPA 200.7 Analyst: SM Analyst: SM (Prep: SW3010A - 3/20/2019) Aluminum ND 100 µg/L 1 3/29/2019 Aluminum ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Calcium 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnesium 29/80 50.0 µg/L 1 3/29/2019 Magnesium 3/29/2019 Sodium 3/28/2019 Malust: SM Malust: SM Total Hardness (As CaCO3) <t< th=""><th>FIELD-PH, RES CL2, AND TEMP</th><th>ARE NOT ELAP CE</th><th>RTIFIABLE</th><th></th><th></th><th>Analyst: FLD</th></t<>	FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 6.7 S.U. 3/18/2019 9:12:00 AM Temperature (E170.1) 4 deg C 3/18/2019 9:12:00 AM Turbidity (E180.1) 2 1.0 NTU 3/18/2019 9:12:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Analyst: SM Analyst: SM Aluminum ND 100 µg/L 1 3/29/2019 Assenic ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Mercury ND 0.0002	Dissolved Oxygen (E360.1)	6.6	0.10	mg/L		3/18/2019 9:12:00 AM
Temperature (E170.1) 4 deg C 3/18/2019 9:12:00 AM Turbidity (E180.1) 2 1.0 NTU 3/18/2019 9:12:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Analyst: SM Analyst: SM Aluminum ND 100 µg/L 1 3/29/2019 Arsenic ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 10 3/29/2019 Cadmium ND 5.00 µg/L 10 3/29/2019 Cadmium 182000 500 µg/L 10 3/29/2019 Cadeum 182000 500 µg/L 1 3/29/2019 Cadeum 182000 50.0 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Marganese 20.2 20.0 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Mercury ND<	Flow, GPD	988		gal/day		3/18/2019 9:12:00 AM
Turbidity (E180.1) 2 1.0 NTU 3/18/2019 9:12:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Aluminum ND 100 µg/L 1 3/29/2019 Aluminum ND 100 µg/L 1 3/29/2019 Arsenic ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Manganese 20.2 20.0 µg/L 1 3/29/2019 Maganese 20.2 20.0 µg/L 1 3/29/2019 Sodium ND 5.00 µg/L 1	pH (E150.1)	6.7		S.U.		3/18/2019 9:12:00 AM
ICP METALS - EPA 200.7 (Prep: SW3010A - 3/20/2019) Analyst: SM Aluminum ND 100 µg/L 1 3/29/2019 Arsenic ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnesium 2980 50.0 µg/L 1 3/29/2019 Magnesium 2980 500 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Marcury ND 0.0002 mg/L 1 3/29/2019 Mercury ND	Temperature (E170.1)	4		deg C		3/18/2019 9:12:00 AM
(Prep: SW3010A - 3/20/2019) Aluminum ND 100 µg/L 1 3/29/2019 Arsenic ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Manganese 20.2 20.0 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 MERCURY - EPA 200.7 REV 4.4 Analyst: AVB Analyst: AVB Total Hardness (As CaCO3) 568 5 mg/L 1 3/2	Turbidity (E180.1)	2	1.0	NTU		3/18/2019 9:12:00 AM
Aluminum ND 100 µg/L 1 3/29/2019 Arsenic ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 1 3/29/2019 Cadnium ND 5.00 µg/L 1 3/29/2019 Cadrium ND 5.00 µg/L 1 3/29/2019 Calcium 182000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnese 20.2 20.0 µg/L 1 3/29/2019 Magneses 20.2 20.0 µg/L 1 3/29/2019 Selenium 2980 500 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Mercury ND 0.0002 mg/L 1 3/28/2019 Alioni	ICP METALS - EPA 200.7					Analyst: SM
Arsenic ND 5.00 µg/L 1 3/29/2019 Boron 141 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadrium 182000 500 µg/L 1 3/29/2019 Calcium 182000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnese 20.2 20.0 µg/L 1 3/29/2019 Magnese 20.2 20.0 µg/L 1 3/29/2019 Selenium 2980 500 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 MERCURY - EPA 200.7 REV 4.4 Analyst: AVB Analyst: AVB Analyst: AVB (Prep: E245.1 REV 3.0 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATO	(Prep: SW3010A - 3	/20/2019)				
Boron 141 50.0 µg/L 1 3/29/2019 Cadmium ND 5.00 µg/L 1 3/29/2019 Cadmium 182000 500 µg/L 10 3/29/2019 Cadmium 182000 500 µg/L 1 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnese 20.2 20.0 µg/L 1 3/29/2019 Manganese 20.2 20.0 µg/L 1 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 MERCURY - EPA 245.1 REV 3.0 ranalyst: SM Analyst: AVB Analyst: AVB (Prep: E245.1 - 3/20/2019) ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Kalistinity, Total (As CaCO3)	Aluminum	ND	100	μg/L	1	3/29/2019
Cadmium ND 5.00 µg/L 1 3/29/2019 Calcium 182000 500 µg/L 10 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Iron ND 5.00 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Magnesium 2980 50.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Sodium ND 5.00 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM	Arsenic	ND	5.00	μg/L	1	3/29/2019
Calcium 182000 500 µg/L 10 3/29/2019 Copper ND 5.00 µg/L 1 3/29/2019 Iron ND 50.0 µg/L 1 3/29/2019 Magnesium 27500 µg/L 1 3/29/2019 Magnese 20.2 20.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium 2980 50.0 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 Sodium ND 5.00 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVB Analyst: AVB Analyst: AVB (Prep: E245.1 - 3/20/2019) ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 5.00 mg/L	Boron	141	50.0	μg/L	1	3/29/2019
Copper ND 5.00 µg/L 1 3/29/2019 Iron ND 50.0 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Manganese 20.2 20.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium 2980 50.0 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVB Analyst: AVB Analyst: AVB Analyst: AVB (Prep: E245.1 - 3/20/2019) Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019	Cadmium	ND	5.00	μg/L	1	3/29/2019
Iron ND 50.0 µg/L 1 3/29/2019 Magnesium 27500 50.0 µg/L 1 3/29/2019 Marganese 20.2 20.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium 2980 50.0 µg/L 1 3/29/2019 Sodium ND 5.00 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 Sulfate 165 5.00 mg/L 5 4/2/2019 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10	Calcium	182000	500	μg/L	10	3/29/2019
Magnesium 27500 50.0 µg/L 1 3/29/2019 Manganese 20.2 20.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium ND 5.00 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Analyst: AVB ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 Sulfate 165 5.00 mg/L 5 4/2/2019 Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Copper	ND	5.00	μg/L	1	3/29/2019
Manganese 20.2 20.0 µg/L 1 3/29/2019 Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Analyst: AVB Alkelinity ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 Sulfate 165 5.00 mg/L 5 4/2/2019 Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Iron	ND	50.0	μg/L	1	3/29/2019
Potassium 2980 50.0 µg/L 1 3/29/2019 Selenium ND 5.00 µg/L 1 3/29/2019 Sodium 8780 500 µg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride Sulfate ND 5.00 165 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Magnesium	27500	50.0	μg/L	1	3/29/2019
Selenium Sodium ND 8780 5.00 500 µg/L 1 3/29/2019 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Analyst: SM Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Selenium MD 0.0002 mg/L 1 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride Sulfate ND 5.00 165 mg/L 5 4/2/2019 4/2/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 290 10 mgCaCO3/L 1 3/28/2019	Manganese	20.2	20.0	μg/L	1	3/29/2019
Sodium 8780 500 μg/L 1 3/29/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) 568 5 mg/L CaCO3 1 3/28/2019 Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 AlKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Potassium	2980	50.0	μg/L	1	3/29/2019
HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 5.00 mg/L 5 4/2/2019 Sulfate 165 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Selenium	ND	5.00	μg/L	1	3/29/2019
Total Hardness (As CaCO3) 568 5 mg/L CaCO3 1 3/28/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride Sulfate ND 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Indocession Total Market SA Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Sodium	8780	500	μg/L	1	3/29/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/20/2019)) Analyst: AVB Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride Sulfate ND 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Ind mg/L 5 4/2/2019 Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: E245.1 - 3/20/2019)) Mercury ND 0.0002 mg/L 1 3/20/2019 3:56:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride Sulfate ND 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Total Hardness (As CaCO3)	568	5	mg/L CaCO3	1	3/28/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride Sulfate ND 165 5.00 165 mg/L 5 5 4/2/2019 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3	;/20/2019)				Analyst: AVB
Chloride Sulfate ND 165 5.00 5.00 mg/L 5 4/2/2019 4/2/2019 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Mercury	ND	0.0002	mg/L	1	3/20/2019 3:56:28 PM
Sulfate 165 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	ANIONS BY ION CHROMATOGRA	Analyst: CS				
Sulfate 165 5.00 mg/L 5 4/2/2019 ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019	Chloride	ND	5.00	ma/L	5	4/2/2019
ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 290 10 mgCaCO3/L 1 3/28/2019				•		
	ALKALINITY TO PH 4.5 -SM 2320	Analyst: DAA				
	Alkalinity, Total (As CaCO3)	290	10	mgCaCO3/L	1	3/28/2019
						Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 GW Dep Drain 3

 Collection Date:
 3/18/2019 9:12:00 AM

 Lab Sample ID:
 190319048-024

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EP	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 12:59:39 PM
CONDUCTANCE AT 25C - SM 251	I0B-2011				Analyst: KB
Specific Conductance	795	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	605	5	mg/L	1	3/25/2019

Adirondack Environmental Services, Inc				Date:	03-Apr	19	
CLIENT:	Lockwood Hills LLC		С	lient Sample ID:	GW D	ep Drain 2	
Work Order:	190319048		Collection Date: 3/18/2		3/18/20	8/2019 9:01:00 AM	
Reference:	Lockwood Ash Landfill / Q	uarterly	rly Lab Sample ID: 190319			9048-025	
PO#:				Matrix:	GROU	NDWATER	
Analyses	Re	sult	RL Qual	Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NOT EL	AP CERTIFI	ABLE			Analyst: FLD	
Observation		Dry		NA		3/18/2019 9:01:00 AM	

Adirondack Environmental Services, In			IC Date	e: 03-Ap	03-Apr-19	
CLIENT:	Lockwood Hills LLC		Client Sample ID: GW Dep Drain 4			
Work Order:	190319048		Collection Date	e: 3/18/2019 9:04:00 AM		
Reference:	Lockwood Ash Landfill / Quarterly		Lab Sample ID	D: 190319048-026		
PO#:			Matrix: GROUNDWATER			
Analyses		Result	RL Qual Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NO	T ELAP CERTI	FIABLE		Analyst: FLD	
Observation		Dry	NA		3/18/2019 9:04:00 AM	

Adirondac	k Environmental Servi	ces, Inc	Date: 03-Apr-19			r-19
CLIENT:	Lockwood Hills LLC		С	lient Sample ID:	Under	Drain 5
Work Order:	190319048			Collection Date:	3/18/2	019 9:10:00 AM
Reference:	Lockwood Ash Landfill / Qua	rterly	•	Lab Sample ID:	19031	9048-027
PO#:				Matrix:	GROU	NDWATER
Analyses	Resu	lt RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD						
Observation	Dr	У		NA		3/18/2019 9:10:00 AM

Adirondac	k Environmental Services,	Inc Date:	03-Ap	3-Apr-19		
CLIENT:	Lockwood Hills LLC	Client Sample ID:	8910-	SH		
Work Order:	190319048	Collection Date:	3/18/2	019 12:08:00 PM		
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID:	19031	9048-028		
PO#:		Matrix:	GROU	JNDWATER		
Analyses	Result	RL Qual Units	DF	Date Analyzed		
FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE						
Observation	Poor Recovery	NA		3/18/2019 12:08:00 PM		

Adirondac	k Environmental Serv	vices, In	c Date:	03-Apr-19		
CLIENT:	Lockwood Hills LLC		Client Sample ID:	8405		
Work Order:	190319048		Collection Date:	3/18/2	019 3:30:00 PM	
Reference:	Lockwood Ash Landfill / Q	uarterly	Lab Sample ID:	19031	9048-029	
PO#:			Matrix:	GROU	INDWATER	
Analyses	Re	sult	RL Qual Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NOT EL	AP CERTII	FIABLE		Analyst: FLD	
Observation		Dry	NA		3/18/2019 3:30:00 PM	

CLIENT:	Lockwood Hills LLC
Work Order:	190319048
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 03-Apr-19

Client Sample ID: GW Dep Drain 1 Collection Date: 3/18/2019 12:00:00 PM Lab Sample ID: 190319048-030 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.4	0.10	mg/L		3/18/2019 12:00:00 PM
Flow, GPD	513		gal/day		3/18/2019 12:00:00 PN
pH (E150.1)	7.4		S.U.		3/18/2019 12:00:00 PN
Temperature (E170.1)	8		deg C		3/18/2019 12:00:00 PN
Turbidity (E180.1)	< 1	1.0	NTU		3/18/2019 12:00:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 3/2	20/2019)				
Aluminum	ND	100	μg/L	1	3/29/2019
Arsenic	ND	5.00	μg/L	1	3/29/2019
Boron	2610	50.0	μg/L	1	3/29/2019
Cadmium	ND	5.00	μg/L	1	3/29/2019
Calcium	332000	500	μg/L	10	3/29/2019
Copper	ND	5.00	μg/L	1	3/29/2019
Iron	ND	50.0	μg/L	1	3/29/2019
Magnesium	90500	50.0	μg/L	1	3/29/2019
Manganese	ND	20.0	μg/L	1	3/29/2019
Potassium	6910	50.0	μg/L	1	3/29/2019
Selenium	ND	5.00	μg/L	1	3/29/2019
Sodium	36500	500	μg/L	1	3/29/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1740	5	mg/L CaCO3	1	3/28/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 3/2	20/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	3/20/2019 3:58:11 PM
ANIONS BY ION CHROMATOGRAI	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	68.8	2.00	mg/L	2	4/3/2019
Sulfate	716	20.0	mg/L	20	4/3/2019
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	360	10	mgCaCO3/L	1	3/28/2019
AMMONIA (NON-DISTILLED) - EPA					Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:190319048Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 03-Apr-19

 Client Sample ID:
 GW Dep Drain 1

 Collection Date:
 3/18/2019 12:00:00 PM

 Lab Sample ID:
 190319048-030

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	3/27/2019 1:01:16 PM
CONDUCTANCE AT 25C - SM 25	I0B-2011				Analyst: KB
Specific Conductance	1890	1	µmhos/cm	1	3/21/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1500	5	mg/L	1	3/25/2019



314 North Pearl StreetAlbany, New York 12207518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 1903/9098

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Nam Lockwo	e: bod Hills LLC	Address:		. –						
Send Repor Dale Irv Client Phon	t to: vin	Project Nam Lockwo			Quarter	ly		Samplers 1	Bau	stery Kevin Amb
Client Fax	No	PO #:						Samplers S	Signature:	
AES Sample	Client Sample ID:	Date Sampled	Time A=am	.	Sample Matrix	с Тур С	e G	# of Cont's		Analysis
ID	- 1842		P=pm	Α	GW	<u> </u>	G	4	Lockw	ood Ash LF Quarterl
001	8404	3/18/19	1600	P A P	GW		G	4		pH, Temp, Turbidity
NY	8908-D	3/18/19	1345	A P	GW		G	4		
x)2	8908-SH	3/18/19	1440	A (P)	GW		G	4		
504	8909-D	21,81,9	1159	(Å) P	GW		G	4		
VICT	8909-SH	2/18/19	1135	A P	GW		G	4		
206	8910-D	3/18/19	1245	A (P)	GW		G	4		
307	8911-D	3/18/19	1600	A (P)	GW		G	4		
08	8911-SH	3/19/19	1615	A P	GW		G	4		
209	8942-D	3/19/19	0320	(Å) P	GW		G	4		
010	9306-SH	3/19/19	0700	A	GW		G	4		
011	GW Dup <u>8909 D</u>	3/18/19	1159	(A) P	GW		G	4		
FedEx Turnaro	und Time Requested:	ner:			ecial Instru age 1 of 3		<i></i>			
	hed by: (Signature)	Receive	d by: (Sign	ature)					Date	Time
Relinquis	hed by: (Signature)	Receive	d by: (Sign	ature)				Date	Time
Relinquis	hed by: (Signature)	Receive	tor Labo	orato	ry by:				Date	Time 193:36Pm
	Sample Temperature Ambient Chilled Chilling Process begun	Note	es:	Ċ	Y N					reived Within Holding Times
	es:									
										Pemo 190310040



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 1903/9048

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Na		Address:		-	_				
Lockw	ood Hills LLC								<u></u>
Send Rep	ort to:	Project Name (Location): Sample					Samplers 1	Name:	
Dale II		Lockwa	od Ash LF	Quarter	٠lv		RIGA	Kaida	y Kevin Ambra
Client Pho	one No:	PO #:		Quarter			Samplers	Simature:	9 Merrir Monton
Client Fa	x No.	PO#:						AGinarare:	
AES		Date	Time	Sample	- Tyne		# of		
Sample	Client Sample ID:	Sampled	A=am P=pm	Matrix	C	G	Cont's		Analysis
ID	8401			GW		Ğ	4	Lockwo	od Ash LF Quarterly
-n / 1	0401	31819	1545 B	0		0			H, Temp, Turbidity
012	L - 1- Detection Sugt		A	GW		G	4		I Flow Reading, DO
013	Leak Detection Syst.	3/18/19	1055 P						
014	Under Drain 1	3/18/19	1218 P	GW		G	5		I Flow Reading, DO
DIC	Under Drain 2	3/18/19	1118 P	GW		G	4		d Flow Reading, DO
016	Under Drain 3	3118/19	0944 P	GW		G	4		d Flow Reading, DO
h12	Inlet to Pond	318/19	1240 (P)	GW		G	5	+ Field	d Flow Reading, DO
hic	Keuka Upstream	2118/19	1405 A	GW		G	4	Locky	vood Quarterly +DO
hig	Keuka Downstream	3118/19	1333 @	SF		G	4	Locky	vood Quarterly +DO
120	Surface Water Dup	3118/19	A	SF		G	4	Locky	vood Quarterly +DO
DAI	Pond Grab	3/18/19	Δ	SF	1	G	4	Lockv	vood Quarterly +DO
h2]	Field Blank	2118/19	1215 A	GW		G	4	Locky	vood Quarterly +DO
010	LLHg Field Blank	3/18/19	1500 A	GW		G	1		EPA 1631
OL	<u>b</u>	12/10/1		ecial Instru		/Rem	larks:	<u> </u>	
	nt Arrived Via:		1.						
FedEx	UPS Client AES Oth	ier:	P:	age 2 of 3	3				
Turnar	ound Time Requested:								
🗌 1 Day	y 🗌 3 Day 🗌 Normal								
🗆 2 -Da			1 how (Clignothum)		<u>.</u>			Date	Time
Relinqui	ished by: (Signature)	Receive	d by: (Signature)				Date	
			d by: (Signature	<u> </u>			<u></u>	Date	Time
Relinquished by: (Signature) Received by: (Sign			a by: (Signature)				Duit	
			J Court also un to		60,00			Date	Time
Relinquished by: (Signature) Received for Labo			o for Laborato	ry by:				3/19/1	92126Pm
		$ \downarrow $	Dura	erly Presei	have		T		ved Within Holding Times
1	Sample Temperature Ambient Chilled	6	Frop	City Prese	YCU			meet	1
	Chilling Process begun		(Y N					Y N
N	otes:	Note	es:					Notes:	



314 North Pearl Street Albany, New York 12207 518-434-4546 Fax: 518-434-0891

CHAIN OF CUSTODY RECORD							
AES Work Order#:							
190319048							

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Na		Address:								
Lockv	vood Hills LLC									
Send Rep	port to:	Project Name (Location): Sample							s Name:	
Dale I	rwin							ົ	D	sley Rel
Client Ph	one No:	Lockwo	od Ash	LF	Quarte	rly			1 Bou	Sley/ Kek
		PO #:						Sampters		
Client Fa	x No:									
AES Sample	Client Sample ID:	Date	Time		Sampl	e Tvn	e	# of		
ID	Cheft Sample ID:	Sampled	A=an P=pn	-	Matrix	C	G	Cont's		Analysis
	GW Dep Drain 3		r	(A)	GW			4	Lock	wood Ash LF Quarterly
DZY		3/18/19	and the same		0.11					d pH, Temp, Turbidity
		דיומוכ	0912	Р						ield Flow Reading, DO
									+ r	
025	GW Dep Drain 2	3/18/19	0901	$\frac{A}{P}$	GW			0		Observation Only
026	GW Dep Drain 4	3/18/19	0904	A	GW			0		Observation Only
027	Under Drain 5	3/18/19	0910	A P	GW			0		Observation Only
028	8910-SH	3118/19	1208	A (P)	GW			0		Observation Only
024	8405	3/18/19	1530	A	GW			0		Observation Only
030	GW Dep Drain 1	3/18/19	1200	A O	GW			₽°	Lock	Observation Only
				Р						
				A P					Field	L plt, Temp, Turb T Flow Reading, DO
				A						
				Α						1. a. a.
				P						
				A P						
Shinmen	t Arrived Via:				ecial Instruc	tions	/Rem	arks:		
	\sim									
FedEx	UPS Client AES Othe	er:		Pa	ge 3 of 3					
Turnard	ound Time Requested:			1						
🗆 1 Day	-									
2 -Day	- (
	hed by: (Signature)	Received	l by: (Signa	ature)					Date	Time
Relinquis	hed by: (Signature)	Received	l by: (Signa	ature)					Date	Time
liniquis)						
Relinquist	hed by: (Signature)	Donoire	for Labo	rator	v hv•				Date	Time
- A -		Received for Laboratory by:			, . .				3/19	10 22
<u> </u>		1 2 12-							11	19336Pm
	Sample Temperature Ambient Chilled	Pr Pr			rly Preserv	ved			Re	ceived Within Holding Times
	Chilling Process begun			()	() N					Y N
	4%			~					NT-4	
Not	es:	Notes	i:		•				Notes:	
L										



Experience is the solution 314 North Pearl Street ◆ Albany, New York 12207 (800) 848-4983 ◆ (518) 434-4546 ◆ Fax (518) 434-0891

April 19, 2019

Dale Irwin Lockwood Hills LLC 590 Plant Road, PO Box 187 Dresden, NY 14441

Work Order No: 190329054

TEL: (315) 536-2359

RE: EPA-CCR Lockwood Quarterly

Dear Dale Irwin:

Adirondack Environmental Services, Inc received 1 sample on 3/29/2019 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Town Wariel

ELAP#: 10709

Tara Daniels Laboratory Director

CASE NARRATIVE

CLIENT:	Lockwood Hills LLC	Date: 19-Apr-19
Project:	EPA-CCR	
Lab Order:	190329054	

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:	ND : Not Detected at reporting limit	C: CCV below acceptable Limits		
	J: Analyte detected below quantitation limit	C+: CCV above acceptable Limits		
	B: Analyte detected in Blank	S: LCS Spike recovery is below acceptable limits		
	X : Exceeds maximum contamination limit	S+: LCS Spike recovery is above acceptable limits		
	H: Hold time exceeded	Z: Duplication outside acceptable limits		
	N: Matrix Spike below acceptable limits	T : Tentatively Identified Compound-Estimated		
	N+: Matrix Spike is above acceptable limits	E : Above quantitation range-Estimated		

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

CLIENT:Lockwood Hills LLCWork Order:190329054Reference:EPA-CCR / Lockwood QuarterlyPO#:Contemporation

Date: 19-Apr-19

 Client Sample ID:
 MW-1842

 Collection Date:
 3/28/2019

 Lab Sample ID:
 190329054-001

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE	NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	8.8		S.U.		3/28/2019
Temperature (E170.1) Turbidity (E180.1)	11 43	1.0	deg C NTU		3/28/2019 3/28/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: - 4/1/2	019)				
Total Hardness (As CaCO3)	72	5	mg/L CaCO3	1	4/9/2019
ICP METALS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: - 4/1/2	019)				
Aluminum	0.241	0.100	mg/L	1	4/9/2019 3:57:58 PM
Arsenic	ND	0.005	mg/L	1	4/9/2019 3:57:58 PM
Boron	ND	0.050	mg/L	1	4/9/2019 3:57:58 PM
Cadmium	ND	0.005	mg/L	1	4/9/2019 3:57:58 PM
Calcium	16.7	0.050	mg/L	1	4/9/2019 3:57:58 PM
Chromium	ND	0.005	mg/L	1	4/9/2019 3:57:58 PM
Copper	ND	0.005	mg/L	1	4/9/2019 3:57:58 PM
Iron	0.314	0.050	mg/L	1	4/9/2019 3:57:58 PM
Magnesium	7.22	0.050	mg/L	1	4/9/2019 3:57:58 PM
Magaese	0.021	0.020	mg/L	1	4/9/2019 3:57:58 PM
Potassium		0.020	-	1	4/9/2019 3:57:58 PM
Selenium	5.75		mg/L	1	
Sodium	ND 8,38	0.005 0.050	mg/L mg/L	1	4/9/2019 3:57:58 PM 4/9/2019 3:57:58 PM
	0.00		g ,		
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 4/1/2	019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	4/1/2019 12:09:22 PM
ANIONS BY ION CHROMATOGRAPH	Y - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	4/10/2019 5:55:17 AM
Sulfate	36.3	2.00	mg/L	2	4/10/2019 5:55:17 AM
		2.00	ilig/L	2	
ALKALINITY TO PH 4.5 -SM 2320B-2	011				Analyst: JW
Alkalinity, Total (As CaCO3)	100	4	mgCaCO3/L	1	4/3/2019
AMMONIA (NON-DISTILLED) - EPA 3	50.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	mg/L	1	4/5/2019 2:05:25 PM

CLIENT:Lockwood Hills LLCWork Order:190329054Reference:EPA-CCR / Lockwood QuarterlyPO#:Contemporation

Date: 19-Apr-19

Client Sample ID: MW-1842 Collection Date: 3/28/2019 Lab Sample ID: 190329054-001 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	156	1	µmhos/cm	1	4/16/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	60	5	mg/L	1	4/2/2019



314 North Pearl Street Albany, New York 12207 518-434-4546 Fax: 518-434-0891

CHAIN OF CUSTO	DDY RECORD
AES Work Order#:	
190320	1054

EXPERIENCE IS THE SOLUTION

	A full service analytic	al researc	h labora	tory	y offeri	ng s	olut	tions to	environm	iental conce	ms
Client Na		Address:									
Send Rep		Project Nam	e (Location)	:		#		Samplers	Name:	Λ	
Pal	e Rown / Robert Hant	Code	avel	6	Just	12			K	ah.	
Client Ph	one No: / g /	PO #:						Samplers	Signature.	T	·····
Client Fa	x No:	10 ".							$\underline{/}$	T	
AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm	-	Sample <u>Matrix</u>	: Турс <u>С</u>	e <u>G</u>	# of Cont's		Analys	is
	MW-1842	3/28/19	1210	A P	2W			6	Alkalm	h Fac	\$
				A P					Z.Se	Mo Fe	C. Cl
				A P			Ξ¢.		B'A.	AI Sb	C. Cl Ba, Cr
				A P					NK	.Ca.Na.	, Ha
				A P					Hordne	M.	9
				A P					Sulfide	, Chlorel	Fluand
				A P					TOS	NHS	
				A P					Rilow	- 226 Ro	lm 208
				A P							
				A P					1		,**
				A							
	<u>></u>			P A							
	and any sector of the	a Card Management (Martin Statistics of Statistics		р		1	/D				
1	nt Arrived Via:			Spe	cial Instru	cuons	/Kem	arks.			
FedEx		ler:									
1	ound Time Requested:	and the second									
2 Da											
	ished by: (Signature)		d Vy: (Signer	UIC	T				Date	1	Time
1 0	145	Alt	$l \neq l$	7					3 7 9/18 Date	74:5	
Relinqui	ished by: (Signature)	Receive	d by: (Signat	tylre)					Date		Time
Relipent	shed hy: (Signature)	Receive	u for Labor	ator	y by:				Date		Time
Att		- Ka	itlin	ſ	DOF	017	bo	0		PI	438am_
010	Sample l'emperature		<u>p</u>	rope	rly Prese	ved			Rec	eived Within Ho	Iding Times
	Ambrent miled Chilling Process begun			6	N G					M N	į
N	otes:3~	Note	s:						Notes:		
-										<u>.</u>	
								!			
								i		19032	905 <i>4</i>

Collection Date	Sample ID	Depth	Elevation	Units
3/18/2019	8908-D	6.59	606.38	feet
3/18/2019	8909-D	45.10	516.80	feet
3/18/2019	8910-D	20.08	538.26	feet
3/18/2019	8911-D	27.18	529.73	feet
3/18/2019	8942-D	14.68	544.27	feet
3/18/2019	8908-SH	7.98	604.79	feet
3/18/2019	8909-SH	10.82	550.81	feet
3/18/2019	8910-SH	5.60	552.95	feet
3/18/2019	8911-SH	25.84	531.08	feet
3/18/2019	9306-SH	4.48	561.74	feet
3/18/2019	7741	22.69	565.36	feet
3/28/2019	1842	20.27	539.93	feet
3/18/2019	8406	14.15	555.40	feet
3/18/2019	8407	13.68	551.99	feet
3/18/2019	8401	5.36	654.93	feet
3/18/2019	8402	7.04	657.05	feet
3/18/2019	8403	8.00	656.07	feet
3/18/2019	8404	6.24	596.49	feet
3/18/2019	8405	DRY	DRY	feet

Lockwood Ash Disposal Site First Quarter 2018

SECOND QUARTER



Experience is the solution 314 North Pearl Street

Albany, New York 12207 (800) 848-4983

(518) 434-4546

Fax (518) 434-0891

July 11, 2019

Dale Irwin Lockwood Hills LLC 590 Plant Road, PO Box 187 Dresden, NY 14441

Work Order No: 190621004

TEL: (315) 536-2359

RE: Lockwood Ash Landfill Quarterly

Dear Dale Irwin:

Adirondack Environmental Services, Inc received 31 samples on 6/21/2019 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Jon David

ELAP#: 10709

Tara Daniels Laboratory Director

CASE NARRATIVE

CLIENT:	Lockwood Hills LLC	Date: 11-Jul-19
Project:	Lockwood Ash Landfill	
Lab Order:	190621004	

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:	ND : Not Detected at reporting limit	C: CCV below acceptable Limits
	J: Analyte detected below quantitation limit	C+: CCV above acceptable Limits
	B: Analyte detected in Blank	S: LCS Spike recovery is below acceptable limits
	X : Exceeds maximum contamination limit	S+: LCS Spike recovery is above acceptable limits
	H: Hold time exceeded	Z: Duplication outside acceptable limits
	N: Matrix Spike below acceptable limits	T : Tentatively Identified Compound-Estimated
	N+: Matrix Spike is above acceptable limits	E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: 1842 Collection Date: 6/20/2019 7:15:00 AM Lab Sample ID: 190621004-001 Matrix: GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	8.4		S.U.		6/20/2019 7:15:00 AM
Temperature (E170.1)	12		deg C		6/20/2019 7:15:00 AM
Turbidity (E180.1)	41	1.0	NTU		6/20/2019 7:15:00 AM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	132	100	μg/L	1	7/2/2019 2:50:46 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 2:50:46 PM
Boron	161	50.0	μg/L	1	7/2/2019 2:50:46 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 2:50:46 PM
Calcium	32800	50.0	μg/L	1	7/2/2019 2:50:46 PM
Copper	5.08	5.00	μg/L	1	7/2/2019 2:50:46 PM
Iron	280	50.0	μg/L	1	7/2/2019 2:50:46 PM
Magnesium	31400	50.0	μg/L	1	7/2/2019 2:50:46 PM
Manganese	35.9	20.0	μg/L	1	7/2/2019 2:50:46 PM
Potassium	31500	50.0	μg/L	1	7/2/2019 2:50:46 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 2:50:46 PM
Sodium	47800	500	μg/L	1	7/2/2019 2:50:46 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	211	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/	21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:10:15 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	2.21	2.00	mg/L	2	7/10/2019 7:31:06 AM
Sulfate	2.21	10.0	mg/L	10	7/10/2019 7:50:19 AM
		10.0	g, E	10	
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	150	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	6/25/2019 10:02:33 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 1842

 Collection Date:
 6/20/2019 7:15:00 AM

 Lab Sample ID:
 190621004-001

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	758	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	/ 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	435	5	mg/L	1	6/27/2019

Lockwood Ash Landfill / Quarterly Lab Sample ID: 190621004-002

Adirondack Environmental Services, Inc

Lockwood Hills LLC

190621004

CLIENT:

Reference:

PO#:

Work Order:

Date: 11-Jul-19

Collection Date: 6/19/2019 5:00:00 PM

Matrix: GROUNDWATER

Client Sample ID: 8404

Analyses	Result	RL	Qual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AI	RE NOT ELAP CE	RTIFIABLE			Analyst: FLI
pH (E150.1)	8.1		S.U.		6/19/2019 5:00:00 PM
Temperature (E170.1)	12		deg C		6/19/2019 5:00:00 PM
Turbidity (E180.1)	18	1.0	NTU		6/19/2019 5:00:00 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 6/2	21/2019)				Analyst: SM
Aluminum	ND	100	μg/L	1	7/2/2019 3:01:01 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 3:01:01 PM
Boron	124	50.0	μg/L	1	7/2/2019 3:01:01 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 3:01:01 PM
Calcium	109000	500	μg/L	10	7/2/2019 3:06:04 PM
Copper	7.92	5.00	μg/L	1	7/2/2019 3:01:01 PM
Iron	65.5	50.0	μg/L	1	7/2/2019 3:01:01 PM
Magnesium	23100	50.0	μg/L	1	7/2/2019 3:01:01 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 3:01:01 PM
Potassium	1370	50.0	μg/L	1	7/2/2019 3:01:01 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 3:01:01 PM
Sodium	8730	500	μg/L	1	7/2/2019 3:01:01 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	368	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/2	21/2019)				Analyst: AV I
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:11:54 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 R	REV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	7/10/2019 8:09:22 AM
Sulfate	99.5	2.00	mg/L	2	7/10/2019 8:09:22 AM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DA
Alkalinity, Total (As CaCO3)	330	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
()					

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8404

 Collection Date:
 6/19/2019 5:00:00 PM

 Lab Sample ID:
 190621004-002

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	732	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	395	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8908-D Collection Date: 6/19/2019 2:30:00 PM Lab Sample ID: 190621004-003 Matrix: GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.2		S.U.		6/19/2019 2:30:00 PM
Temperature (E170.1)	18		deg C		6/19/2019 2:30:00 PM
Turbidity (E180.1)	7	1.0	NTU		6/19/2019 2:30:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 3:11:04 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 3:11:04 PM
Boron	210	50.0	μg/L	1	7/2/2019 3:11:04 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 3:11:04 PM
Calcium	165000	500	μg/L	10	7/2/2019 3:16:14 PM
Copper	ND	5.00	μg/L	1	7/2/2019 3:11:04 PM
Iron	1100	50.0	μg/L	1	7/2/2019 3:11:04 PM
Magnesium	62100	50.0	μg/L	1	7/2/2019 3:11:04 PM
Manganese	101	20.0	μg/L	1	7/2/2019 3:11:04 PM
Potassium	3190	50.0	μg/L	1	7/2/2019 3:11:04 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 3:11:04 PM
Sodium	25300	500	μg/L	1	7/2/2019 3:11:04 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	668	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/	21/2019)				Analyst: AVE
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:13:35 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	16.3	2.00	mg/L	2	7/9/2019 6:32:57 PM
Sulfate	298	10.0	mg/L	10	7/9/2019 6:51:58 PM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	410	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.4	0.1	mg/L	1	6/25/2019 10:09:08 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8908-D

 Collection Date:
 6/19/2019 2:30:00 PM

 Lab Sample ID:
 190621004-003

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1200	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	700	5	mg/L	1	6/26/2019

 Date:
 11-Jul-19

 Client Sample ID:
 8908-SH

 Collection Date:
 6/19/2019 2:45:00 PM

 Lab Sample ID:
 190621004-004

ab Sample ID: 190621004-004 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.8		S.U.		6/19/2019 2:45:00 PM
Temperature (E170.1)	12		deg C		6/19/2019 2:45:00 PM
Turbidity (E180.1)	4	1.0	NTU		6/19/2019 2:45:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6	/21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 3:21:20 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 3:21:20 PM
Boron	115	50.0	μg/L	1	7/2/2019 3:21:20 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 3:21:20 PM
Calcium	191000	500	μg/L	10	7/2/2019 3:26:34 PM
Copper	19.4	5.00	μg/L	1	7/2/2019 3:21:20 PM
Iron	98.9	50.0	μg/L	1	7/2/2019 3:21:20 PM
Magnesium	59100	50.0	μg/L	1	7/2/2019 3:21:20 PM
Manganese	22.6	20.0	μg/L	1	7/2/2019 3:21:20 PM
Potassium	2810	50.0	μg/L	1	7/2/2019 3:21:20 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 3:21:20 PM
Sodium	18800	500	μg/L	1	7/2/2019 3:21:20 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	721	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6	/21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:15:15 PM
ANIONS BY ION CHROMATOGRA	VPHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	9.27	2.00	mg/L	2	7/9/2019 7:11:00 PM
Sulfate	188	10.0	mg/L	10	7/9/2019 7:30:02 PM
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	430	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:10:46 AM

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8908-SH

 Collection Date:
 6/19/2019 2:45:00 PM

 Lab Sample ID:
 190621004-004

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1030	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	650	5	mg/L	1	6/26/2019

Lockwood Hills LLC	Client Sample ID:	8909-D
190621004	Collection Date:	6/19/2019 4:20:00 PM
Lockwood Ash Landfill / Quarterly	Lab Sample ID:	190621004-005

PO#: Matrix: GROUNDWATER Analyses Result **RL** Qual Units DF **Date Analyzed** FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD pH (E150.1) 9.0 S.U. 6/19/2019 4:20:00 PM Temperature (E170.1) 6/19/2019 4:20:00 PM deg C 13 Turbidity (E180.1) > 999 1.0 NTU 6/19/2019 4:20:00 PM **ICP METALS - EPA 200.7** Analyst: SM (Prep: SW3010A - 6/21/2019)

Aluminum 703 100 μg/L 1 7/2/2019 3:47:25 PM Arsenic ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Boron 896 50.0 μg/L 1 7/2/2019 3:47:25 PM Cadmium ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Cadmium 10500 50.0 μg/L 1 7/2/2019 3:47:25 PM Cadper ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 μg/L 1 7/2/2019 3:47:25 PM Magnesium 1340 50.0 μg/L 1 7/2/2019 3:47:25 PM Manganese 78.2 20.0 μg/L 1 7/2/2019 3:47:25 PM Soleinium ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Soldum 1340 5.00 μg/L 10 7/2/2019 3:47:25 PM Soldum 165000	(Prep: SW3010A - 6)/21/2019)				
Boron 896 50.0 µg/L 1 7/2/2019 3:47:25 PM Cadmium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Cadcium 10500 50.0 µg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnese 78.2 20.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Mercury RD 200.7	Aluminum	703	100	μg/L	1	7/2/2019 3:47:25 PM
Cadmium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Catcium 10500 5.00 µg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Manganese 78.2 20.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Mercury	Arsenic	ND	5.00	μg/L	1	7/2/2019 3:47:25 PM
Calcium 10500 50.0 µg/L 1 7/2/2019 3:47:25 PM Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Iron 2320 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnese 78.2 20.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Macros ND 5.00 µg/L 10 7/2/2019 3:47:25 PM Macros As CaCO3) 35 5 mg/L 10 Analyst: AVB <	Boron	896	50.0	μg/L	1	7/2/2019 3:47:25 PM
Copper ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Iron 2320 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Marceury ND 5.00 µg/L 10 7/2/2019 3:47:25 PM Mercury PA 245.1 REV 3.0 Analyst: AVB Analyst: AVB Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate <t< td=""><td>Cadmium</td><td>ND</td><td>5.00</td><td>μg/L</td><td>1</td><td>7/2/2019 3:47:25 PM</td></t<>	Cadmium	ND	5.00	μg/L	1	7/2/2019 3:47:25 PM
Iron 2320 50.0 µg/L 1 7/2/2019 3:47:25 PM Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Manganese 78.2 20.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 50.0 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Marcury . EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 35 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVB (Prep: E245.1 - 6/21/2019) Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Calcium	10500	50.0	μg/L	1	7/2/2019 3:47:25 PM
Magnesium 2230 50.0 µg/L 1 7/2/2019 3:47:25 PM Manganese 78.2 20.0 µg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 500 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM Magnesium ND 5.00 µg/L 10 7/2/2019 3:47:25 PM Magnesium ND 5.00 µg/L 10 7/2/2019 3:47:25 PM Maccury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM Anions BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00	Copper	ND	5.00	μg/L	1	7/2/2019 3:47:25 PM
Marganese 78.2 20.0 μg/L 1 7/2/2019 3:47:25 PM Potassium 1340 50.0 μg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 μg/L 10 7/2/2019 3:47:25 PM Marganese (Ar Caccoa) 35 5 mg/L CacCoa 1 7/2/2019 Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 4.18 2.00 mg/L 2 7/9/201	Iron	2320	50.0	μg/L	1	7/2/2019 3:47:25 PM
Potassium 1340 50.0 μg/L 1 7/2/2019 3:47:25 PM Selenium ND 5.00 μg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 μg/L 10 7/2/2019 3:47:25 PM Sodium 165000 5000 μg/L 10 7/2/2019 3:47:25 PM HARDNESS - EPA 200.7 REV 4.4 Analyst SM Analyst: SM Total Hardness (As CaCO3) 35 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst: AVB Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 Amalyst: PL 2<	Magnesium	2230	50.0	μg/L	1	7/2/2019 3:47:25 PM
ND 5.00 µg/L 1 7/2/2019 3:47:25 PM Sodium 165000 5000 µg/L 10 7/2/2019 3:47:25 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 35 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Manganese	78.2	20.0	μg/L	1	7/2/2019 3:47:25 PM
Sodium 165000 5000 μg/L 10 7/2/2019 3:52:38 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: SM Total Hardness (As CaCO3) 35 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) 35 5 mg/L CaCO3 1 7/2/2019 Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 44.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL Analyst: PL	Potassium	1340	50.0	μg/L	1	7/2/2019 3:47:25 PM
HARDNESS - EPA 200.7 REV 4.4Ánalyst: SMTotal Hardness (As CaCO3)355mg/L CaCO317/2/2019MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019)ND0.0002mg/L16/21/2019 2:20:20 PMMercuryND0.0002mg/L16/21/2019 2:20:20 PMAnalyst: CSANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1Kalassi and analysti and analysti an	Selenium	ND	5.00	μg/L	1	7/2/2019 3:47:25 PM
Total Hardness (As CaCO3) 35 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL	Sodium	165000	5000	μg/L	10	7/2/2019 3:52:38 PM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst: AVB Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL Analyst: PL	HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: E245.1 - 6/21/2019) Mercury ND 0.0002 mg/L 1 6/21/2019 2:20:20 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL	Total Hardness (As CaCO3)	35	5	mg/L CaCO3	1	7/2/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL		6/21/2019)				Analyst: AVB
Chloride 4.18 2.00 mg/L 2 7/9/2019 7:49:04 PM Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Mercury	ND	0.0002	mg/L	1	6/21/2019 2:20:20 PM
Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	ANIONS BY ION CHROMATOGRA	APHY - EPA 300.0 R	EV 2.1			Analyst: CS
Sulfate 84.4 2.00 mg/L 2 7/9/2019 7:49:04 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL Analyst: PL	Chloride	4.18	2.00	mg/L	2	7/9/2019 7:49:04 PM
Alkalinity, Total (As CaCO3) 310 10 mgCaCO3/L 1 6/26/2019 AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	0. // .			-		
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Sulfate	84.4	2.00	mg/L	2	7/9/2019 7:49:04 PM
			2.00	mg/L	2	
Nitrogen, Ammonia (As N) 0.4 0.1 mg/L 1 6/25/2019 10:12:23 AM	ALKALINITY TO PH 4.5 -SM 2320	B-2011		Ĵ		Analyst: DAA
	ALKALINITY TO PH 4.5 -SM 2320 Alkalinity, Total (As CaCO3)	B-2011 310		Ĵ		Analyst: DAA 6/26/2019

Adirondack Environmental Services, Inc

CLIENT:

Reference:

Work Order:

Date: 11-Jul-19

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8909-D

 Collection Date:
 6/19/2019 4:20:00 PM

 Lab Sample ID:
 190621004-005

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	751	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	715	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8909-SH **Collection Date:** 6/19/2019 11:35:00 AM Lab Sample ID: 190621004-006

Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AR	E NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.7		S.U.		6/19/2019 11:35:00 AM
Temperature (E170.1)	21		deg C		6/19/2019 11:35:00 AM
Turbidity (E180.1)	5	1.0	NTU		6/19/2019 11:35:00 AM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/2	1/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 3:57:34 PM
Arsenic	6.38	5.00	μg/L	1	7/2/2019 3:57:34 PM
Boron	224	50.0	µg/L	1	7/2/2019 3:57:34 PM
Cadmium	ND	5.00	µg/L	1	7/2/2019 3:57:34 PM
Calcium	26100	50.0	µg/L	1	7/2/2019 3:57:34 PM
Copper	ND	5.00	μg/L	1	7/2/2019 3:57:34 PM
Iron	112	50.0	μg/L	1	7/2/2019 3:57:34 PM
Magnesium	18200	50.0	μg/L	1	7/2/2019 3:57:34 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 3:57:34 PM
Potassium	2440	50.0	μg/L	1	7/2/2019 3:57:34 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 3:57:34 PM
Sodium	47000	500	μg/L	1	7/2/2019 3:57:34 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	140	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/2	1/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:22:00 PM
ANIONS BY ION CHROMATOGRAP	HY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	7/9/2019 9:25:02 PM
Sulfate	105	2.00	mg/L	2	7/9/2019 9:25:02 PM
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	170	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:14:01 AM

Date: 11-Jul-19

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8909-SH

 Collection Date:
 6/19/2019 11:35:00 AM

 Lab Sample ID:
 190621004-006

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	532	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	285	5	mg/L	1	6/26/2019

FIELD-PH, RES CL2, AND TEMP ARI	E NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) Temperature (E170.1) Turbidity (E180.1)	8.0 15 7	1.0	S.U. deg C NTU		6/19/2019 12:40:00 PM 6/19/2019 12:40:00 PM 6/19/2019 12:40:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/21	/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 4:07:46 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 4:07:46 PM
Boron	2620	50.0	μg/L	1	7/2/2019 4:07:46 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 4:07:46 PM
Calcium	67000	50.0	μg/L	1	7/2/2019 4:07:46 PM
Copper	ND	5.00	μg/L	1	7/2/2019 4:07:46 PM
Iron	ND	50.0	μg/L	1	7/2/2019 4:07:46 PM
Magnesium	22200	50.0	μg/L	1	7/2/2019 4:07:46 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 4:07:46 PM
Potassium	3550	50.0	μg/L	1	7/2/2019 4:07:46 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 4:07:46 PM
Sodium	82400	5000	μg/L	10	7/2/2019 4:12:58 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	259	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21	/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:23:40 PM
ANIONS BY ION CHROMATOGRAPH	IY - EPA 300.0 R	REV 2.1			Analyst: CS
Chloride Sulfate	24.8 291	2.00 10.0	mg/L mg/L	2 10	7/9/2019 10:03:08 PM 7/9/2019 10:22:10 PM
ALKALINITY TO PH 4.5 -SM 2320B-2	011				Analyst: DAA
Alkalinity, Total (As CaCO3)	170	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA 3	50.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:15:39 AM

Result

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

Date: 11-Jul-19

Collection Date: 6/19/2019 12:40:00 PM

DF

Matrix: GROUNDWATER

Date Analyzed

Lab Sample ID: 190621004-007

Client Sample ID: 8910-D

RL Qual Units

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8910-D

 Collection Date:
 6/19/2019 12:40:00 PM

 Lab Sample ID:
 190621004-007

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	939	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	515	5	mg/L	1	6/26/2019

Page 17 of 58	

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8911-D Collection Date: 6/19/2019 1:50:00 PM Lab Sample ID: 190621004-008 Matrix: GROUNDWATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.6		S.U.		6/19/2019 1:50:00 PM
Temperature (E170.1)	14		deg C		6/19/2019 1:50:00 PM
Turbidity (E180.1)	4	1.0	NTU		6/19/2019 1:50:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/2	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 4:18:03 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 4:18:03 PM
Boron	1130	50.0	μg/L	1	7/2/2019 4:18:03 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 4:18:03 PM
Calcium	52000	50.0	μg/L	1	7/2/2019 4:18:03 PM
Copper	ND	5.00	μg/L	1	7/2/2019 4:18:03 PM
Iron	84.2	50.0	μg/L	1	7/2/2019 4:18:03 PM
Magnesium	17800	50.0	μg/L	1	7/2/2019 4:18:03 PM
Manganese	41.4	20.0	μg/L	1	7/2/2019 4:18:03 PM
Potassium	3890	50.0	μg/L	1	7/2/2019 4:18:03 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 4:18:03 PM
Sodium	86900	5000	μg/L	10	7/2/2019 4:23:12 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	203	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6//	21/2019)				Analyst: AVE
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:25:22 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV					Analyst: CS
Chloride	9.44	2.00	mg/L	2	7/9/2019 10:41:11 PM
Sulfate	226	10.0	mg/L	10	7/9/2019 11:00:13 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	210	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:20:34 AN

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8911-D

 Collection Date:
 6/19/2019 1:50:00 PM

 Lab Sample ID:
 190621004-008

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	857	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	510	5	mg/L	1	6/26/2019

Lockwood Ash Landfill / Quarterly

Reference:

PO#:

Adirondack Environmental Services, Inc

Client Sample ID: 8911-SH **Collection Date:** 6/20/2019 7:40:00 AM Lab Sample ID: 190621004-009 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.5		S.U.		6/20/2019 7:40:00 AM
Temperature (E170.1)	12		deg C		6/20/2019 7:40:00 AM
Turbidity (E180.1)	5	1.0	NTU		6/20/2019 7:40:00 AM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 4:28:18 PM
Arsenic	11.2	5.00	μg/L	1	7/2/2019 4:28:18 PM
Boron	282	50.0	μg/L	1	7/2/2019 4:28:18 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 4:28:18 PM
Calcium	43900	50.0	μg/L	1	7/2/2019 4:28:18 PM
Copper	ND	5.00	μg/L	1	7/2/2019 4:28:18 PM
Iron	360	50.0	μg/L	1	7/2/2019 4:28:18 PM
Magnesium	14300	50.0	μg/L	1	7/2/2019 4:28:18 PM
Manganese	57.3	20.0	μg/L	1	7/2/2019 4:28:18 PM
Potassium	2090	50.0	μg/L	1	7/2/2019 4:28:18 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 4:28:18 PM
Sodium	67600	5000	μg/L	10	7/2/2019 4:33:30 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	169	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/	21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:27:03 PM
ANIONS BY ION CHROMATOGRAI	REV 2.1			Analyst: CS	
Chloride	10.0	2.00	mg/L	2	7/9/2019 11:19:15 PM
Sulfate	226	10.0	mg/L	10	7/9/2019 11:38:17 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	100	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	6/25/2019 10:22:11 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8911-SH

 Collection Date:
 6/20/2019 7:40:00 AM

 Lab Sample ID:
 190621004-009

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	691	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	480	5	mg/L	1	6/27/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8942-D Collection Date: 6/20/2019 7:25:00 AM Lab Sample ID: 190621004-010 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.6		S.U.		6/20/2019 7:25:00 AM
Temperature (E170.1)	14		deg C		6/20/2019 7:25:00 AM
Turbidity (E180.1)	6	1.0	NTU		6/20/2019 7:25:00 AM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 4:54:29 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 4:54:29 PM
Boron	263	50.0	μg/L	1	7/2/2019 4:54:29 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 4:54:29 PM
Calcium	69400	50.0	μg/L	1	7/2/2019 4:54:29 PM
Copper	ND	5.00	μg/L	1	7/2/2019 4:54:29 PM
Iron	180	50.0	μg/L	1	7/2/2019 4:54:29 PM
Magnesium	63300	50.0	μg/L	1	7/2/2019 4:54:29 PM
Manganese	176	20.0	μg/L	1	7/2/2019 4:54:29 PM
Potassium	3240	50.0	μg/L	1	7/2/2019 4:54:29 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 4:54:29 PM
Sodium	29900	500	μg/L	1	7/2/2019 4:54:29 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	434	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/	21/2019)				Analyst: AVE
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:28:45 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	3.34	2.00	mg/L	2	7/10/2019 1:15:05 AM
Sulfate	230	10.0	mg/L	10	7/10/2019 1:34:18 AM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	mg/L	1	6/25/2019 10:23:49 AM

Date: 11-Jul-19

Page 21 of 58

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8942-D

 Collection Date:
 6/20/2019 7:25:00 AM

 Lab Sample ID:
 190621004-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	946	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	1 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	575	5	mg/L	1	6/27/2019

pH (E150.1)	7.5		S.U.		6/20/2019 7:00:00 AM
Temperature (E170.1)	13		deg C		6/20/2019 7:00:00 AM
Turbidity (E180.1)	12	1.0	NTU		6/20/2019 7:00:00 AM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/21/20	019)				
Aluminum	ND	100	μg/L	1	7/2/2019 5:04:51 PM
Arsenic	10.3	5.00	μg/L	1	7/2/2019 5:04:51 PM
Boron	78.9	50.0	μg/L	1	7/2/2019 5:04:51 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 5:04:51 PM
Calcium	48300	50.0	μg/L	1	7/2/2019 5:04:51 PM
Copper	ND	5.00	μg/L	1	7/2/2019 5:04:51 PM
Iron	148	50.0	μg/L	1	7/2/2019 5:04:51 PM
Magnesium	55600	50.0	μg/L	1	7/2/2019 5:04:51 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 5:04:51 PM
Potassium	3000	50.0	μg/L	1	7/2/2019 5:04:51 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 5:04:51 PM
Sodium	15100	500	μg/L	1	7/2/2019 5:04:51 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	350	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0					Analyst: AVB
(Prep: E245.1 - 6/21/20	019)				
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:30:26 PM
ANIONS BY ION CHROMATOGRAPHY	- EPA 300.0 R	EV 2.1			Analyst: CS
Chloride		2.00	~~~ /l	0	7/10/0010 1.50.01 444
	ND	2.00	mg/L	2 2	7/10/2019 1:53:21 AM
Sulfate	69.3	2.00	mg/L	2	7/10/2019 1:53:21 AM
ALKALINITY TO PH 4.5 -SM 2320B-201	1				Analyst: DAA
Alkalinity, Total (As CaCO3)	340	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA 350	0.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:25:30 AM

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Result

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

Date: 11-Jul-19

Collection Date: 6/20/2019 7:00:00 AM

DF

Matrix: GROUNDWATER

Date Analyzed

Analyst: FLD

Lab Sample ID: 190621004-011

Client Sample ID: 9306-SH

RL Qual Units

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 11-Jul-19

 Client Sample ID:
 9306-SH

 Collection Date:
 6/20/2019 7:00:00 AM

 Lab Sample ID:
 190621004-011

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	707	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	275	5	mg/L	1	6/27/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: GW DUP 8909D Collection Date: 6/19/2019 4:20:00 PM Lab Sample ID: 190621004-012 Matrix: GROUNDWATER

Analyses	Result	RL Qua	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	9.0		S.U.		6/19/2019 4:20:00 PM
Temperature (E170.1)	13		deg C		6/19/2019 4:20:00 PM
Turbidity (E180.1)	> 999	1.0	NTU		6/19/2019 4:20:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	674	100	μg/L	1	7/2/2019 5:15:15 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 5:15:15 PM
Boron	904	50.0	μg/L	1	7/2/2019 5:15:15 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 5:15:15 PM
Calcium	10900	50.0	μg/L	1	7/2/2019 5:15:15 PM
Copper	ND	5.00	μg/L	1	7/2/2019 5:15:15 PM
Iron	2260	50.0	μg/L	1	7/2/2019 5:15:15 PM
Magnesium	2290	50.0	μg/L	1	7/2/2019 5:15:15 PM
Manganese	79.6	20.0	μg/L	1	7/2/2019 5:15:15 PM
Potassium	1320	50.0	μg/L	1	7/2/2019 5:15:15 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 5:15:15 PM
Sodium	144000	5000	μg/L	10	7/2/2019 5:20:27 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	37	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/	21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:32:08 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: CS
Chloride	4.19	2.00	mg/L	2	7/10/2019 2:12:23 AM
Sulfate	87.6	2.00	mg/L	2	7/10/2019 2:12:23 AM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	310	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.4	0.1	mg/L	1	6/25/2019 10:27:09 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 11-Jul-19

 Client Sample ID:
 GW DUP 8909D

 Collection Date:
 6/19/2019 4:20:00 PM

 Lab Sample ID:
 190621004-012

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	743	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	745	5	mg/L	1	6/26/2019

pH (E150.1)	7.4		S.U.		6/19/2019 3:10:00 PM
Temperature (E170.1)	14		deg C		6/19/2019 3:10:00 PM
Turbidity (E180.1)	5	1.0	NTU		6/19/2019 3:10:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	/21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 5:25:22 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 5:25:22 PM
Boron	739	50.0	μg/L	1	7/2/2019 5:25:22 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 5:25:22 PM
Calcium	74400	50.0	μg/L	1	7/2/2019 5:25:22 PM
Copper	ND	5.00	μg/L	1	7/2/2019 5:25:22 PM
Iron	252	50.0	μg/L	1	7/2/2019 5:25:22 PM
Magnesium	21800	50.0	μg/L	1	7/2/2019 5:25:22 PM
Manganese	65.4	20.0	μg/L	1	7/2/2019 5:25:22 PM
Potassium	2630	50.0	μg/L	1	7/2/2019 5:25:22 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 5:25:22 PM
Sodium	65600	5000	μg/L	10	7/2/2019 5:30:31 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	276	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0					Analyst: AVB
(Prep: E245.1 - 6/	/21/2019)				.,
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:33:50 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	31.7	2.00	mg/L	2	7/10/2019 2:50:26 AM
Sulfate	72.0	2.00	mg/L	2	7/10/2019 2:50:26 AM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
			0.000		
Alkalinity, Total (As CaCO3)	410	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.7	0.1	mg/L	1	6/25/2019 10:28:47 AM

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Result

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

Date: 11-Jul-19

Collection Date: 6/19/2019 3:10:00 PM

DF

Matrix: GROUNDWATER

Date Analyzed

Analyst: FLD

Lab Sample ID: 190621004-013

Client Sample ID: 8401

RL Qual Units

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 8401

 Collection Date:
 6/19/2019 3:10:00 PM

 Lab Sample ID:
 190621004-013

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	889	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	480	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Leak Detection Syst. Collection Date: 6/19/2019 12:40:00 PM Lab Sample ID: 190621004-014 Matrix: GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	5.10	0.10	mg/L		6/19/2019 12:40:00 PM
Flow, GPD	95		gal/day		6/19/2019 12:40:00 PM
pH (E150.1)	7.6		S.U.		6/19/2019 12:40:00 PM
Temperature (E170.1)	14		deg C		6/19/2019 12:40:00 PM
Turbidity (E180.1)	22	1.0	NTU		6/19/2019 12:40:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6	/21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 5:35:38 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 5:35:38 PM
Boron	623	50.0	μg/L	1	7/2/2019 5:35:38 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 5:35:38 PM
Calcium	338000	500	μg/L	10	7/2/2019 5:40:53 PM
Copper	ND	5.00	μg/L	1	7/2/2019 5:35:38 PM
Iron	ND	50.0	μg/L	1	7/2/2019 5:35:38 PM
Magnesium	155000	500	μg/L	10	7/2/2019 5:40:53 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 5:35:38 PM
Potassium	5540	50.0	μg/L	1	7/2/2019 5:35:38 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 5:35:38 PM
Sodium	71900	5000	μg/L	10	7/2/2019 5:40:53 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1483	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6	/21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:35:31 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	29.4	2.00	mg/L	2	7/10/2019 4:19:49 PM
Sulfate	1240	50.0	mg/L	50	7/10/2019 4:38:52 PM
ALKALINITY TO PH 4.5 -SM 2320	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	580	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Leak Detection Syst.

 Collection Date:
 6/19/2019 12:40:00 PM

 Lab Sample ID:
 190621004-014

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:30:24 AM
CONDUCTANCE AT 25C - SM 2510B-2011					Analyst: KB
Specific Conductance	2610	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	2320	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID:Under Drain 1Collection Date:6/19/2019 1:37:00 PMLab Sample ID:190621004-015Matrix:GROUNDWATER

FIELD-PH, RES CL2, AND TEMP ARI Dissolved Oxygen (E360.1) Flow, GPD pH (E150.1) Temperature (E170.1) Turbidity (E180.1) CP METALS - EPA 200.7 (Prep: SW3010A - 6/21	E NOT ELAP CE 6.10 9511 7.7	RTIFIABLE 0.10	mg/L		Analyst: FLD
Flow, GPD pH (E150.1) Temperature (E170.1) Turbidity (E180.1) CP METALS - EPA 200.7	9511	0.10	ma/l		
pH (E150.1) Temperature (E170.1) Turbidity (E180.1) CP METALS - EPA 200.7			iiig/ L		6/19/2019 1:37:00 PM
Temperature (E170.1) Turbidity (E180.1) CP METALS - EPA 200.7	7.7		gal/day		6/19/2019 1:37:00 PM
Turbidity (E180.1) CP METALS - EPA 200.7			S.U.		6/19/2019 1:37:00 PM
CP METALS - EPA 200.7	14		deg C		6/19/2019 1:37:00 PM
	152	1.0	NTU		6/19/2019 1:37:00 PM
$(\text{Prop}, \mathbb{S} \mathbb{W}/2010 \mathbb{A} = 6/21$					Analyst: SM
(FIEP. SWSUIDA - 0/21	/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 6:01:51 PM
Arsenic	22.8	5.00	μg/L	1	7/2/2019 6:01:51 PM
Boron	3210	50.0	μg/L	1	7/2/2019 6:01:51 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 6:01:51 PM
Calcium	334000	500	μg/L	10	7/2/2019 6:07:03 PM
Copper	ND	5.00	μg/L	1	7/2/2019 6:01:51 PM
Iron	2240	50.0	μg/L	1	7/2/2019 6:01:51 PM
Magnesium	66300	50.0	μg/L	1	7/2/2019 6:01:51 PM
Manganese	695	20.0	μg/L	1	7/2/2019 6:01:51 PM
Potassium	15000	50.0	μg/L	1	7/2/2019 6:01:51 PM
Selenium	20.9	5.00	μg/L	1	7/2/2019 6:01:51 PM
Sodium	29100	500	μg/L	1	7/2/2019 6:01:51 PM
OW LEVEL MERCURY - EPA 1631E					Analyst: SM
(Prep: 1631E - 6/21	/2019)				
Mercury	ND	0.5	ng/L	1	6/24/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1108	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21	/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:40:33 PM
ANIONS BY ION CHROMATOGRAPH	IY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	23.2	2.00	mg/L	2	7/10/2019 4:57:54 PM
Sulfate	454	50.0	mg/L	50	7/10/2019 5:16:57 PM
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Under Drain 1

 Collection Date:
 6/19/2019 1:37:00 PM

 Lab Sample ID:
 190621004-015

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	690	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:32:02 AM
CONDUCTANCE AT 25C - SM 2510	B-2011				Analyst: KB
Specific Conductance	1800	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	1350	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Under Drain 2 Collection Date: 6/19/2019 1:08:00 PM Lab Sample ID: 190621004-016 Matrix: GROUNDWATER

Dissolved Oxygen (E360.1) 5.80 0.10 mg/L 6/19/2019 1:08:0 Flow, GPD 5707 gal/day 6/19/2019 1:08:0 6/19/2019 1:08:0 pH (E150.1) 7.6 S.U. 6/19/2019 1:08:0 6/19/2019 1:08:0 Temperature (E170.1) 14 deg C 6/19/2019 1:08:0 6/19/2019 1:08:0 Temperature (E170.1) 14 deg C 6/19/2019 1:08:0 6/19/2019 1:08:0 ICP METALS - EPA 200.7 Analyst Analyst Analyst (Prep: SW3010A - 6/21/2019) Analyst Analyst adminum ND 100 µg/L 1 7//2/019 6:12:11 Boron 406600 500 µg/L 1 7//2/019 6:12:11 Cadmium ND 5.00 µg/L 1 7//2/019 6:12:11 Calcium 570000 500 µg/L 1 7//2/2019 6:12:11 Margnessium 71600 50.0 µg/L 1 7//2/2019 6:12:11 Margnessium 120000 500 µg/L 1 7//2/20	Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
Flow, GPD 5707 gal/day 6/19/2019 1:08:C pH (E150.1) 7.6 S.U. 6/19/2019 1:08:C Temperature (E170.1) 14 deg C 6/19/2019 1:08:C Turbidity (E180.1) 28 1.0 NTU 6/19/2019 1:08:C ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019) Analyst Analyst Cadmium ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Selenium 120000	FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 7.6 S.U. 6/19/2019 1:08:0 Temperature (E170.1) 14 deg C 6/19/2019 1:08:0 Turbidity (E180.1) 28 1.0 NTU 6/19/2019 1:08:0 ICP METALS - EPA 200.7 Analyst Analyst (Prep: SW3010A - 6/21/2019) Analyst 1 7/2/2019 6:12:11 Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 10 7/2/2019 6:12:11 Boron 406000 500 µg/L 10 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 1 7/2/2019 6:17:32 Cadrium 570000 500 µg/L 1 7/2/2019 6:17:32 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 120000 500 µg/L 1 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 10 7/2/2019 6:17:32 Selenium 120000	Dissolved Oxygen (E360.1)	5.80	0.10	mg/L		6/19/2019 1:08:00 PM
Temperature (E170.1) 14 deg C 6/19/2019 1:08:0 Turbidity (E180.1) 28 1.0 NTU 6/19/2019 1:08:0 ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019) Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 1 7/2/2019 6:12:32 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:31 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:31 Cadmium S70000 500 µg/L 1 7/2/2019 6:12:11 Ion 1050 5.00 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Marganese 952 20.0 µg/L 1 7/2/2019 6:12:11 Marganese 952 20.0 µg/L 1 7/2/2019 6:12:11 Marganese 952 <t< td=""><td>Flow, GPD</td><td>5707</td><td></td><td>gal/day</td><td></td><td>6/19/2019 1:08:00 PM</td></t<>	Flow, GPD	5707		gal/day		6/19/2019 1:08:00 PM
Turbidity (E180.1) 28 1.0 NTU 6/19/2019 1:08:0 ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019) Analyst Analyst Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 1200000 500 µg/L 10 7/2/2019 6:12:11 Magnesium 120000 500 µg/L 10 7/2/2019 6:12:11 Selenium 120000 500 µg/L 10 7/2/2019 6:12:11 Sodium 166000 5000 µg/L	pH (E150.1)	7.6		S.U.		6/19/2019 1:08:00 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019)) Analyst Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 1 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:17:32 Cadrium S70000 500 µg/L 1 7/2/2019 6:17:32 Cadrium 570000 500 µg/L 1 7/2/2019 6:12:11 Calcium 570000 50.0 µg/L 1 7/2/2019 6:12:11 Iton 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnessium 716000 50.0 µg/L 1 7/2/2019 6:12:11 Magnessium 120000 5000 µg/L 10 7/2/2019 6:12:11 Magnessium 120000 5000 µg/L 10 7/2/2019 6:12:11 Sodium 166000 5000 µg/L 10 7/2/2019 6:12:12 Mercury ND 0.0002 mg/L <	Temperature (E170.1)	14		deg C		6/19/2019 1:08:00 PM
(Prep: SW3010A - 6/21/2019) Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 10 7/2/2019 6:12:11 Boron 40600 500 µg/L 10 7/2/2019 6:12:11 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Cadmium 570000 500 µg/L 1 7/2/2019 6:12:11 Calcium 570000 500 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 500 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Selenium 22.6 5.00 µg/L 1 7/2/2019 6:17:32 Sodium 166000 5000 µg/L 10 7/2/2019 6:17:32	Turbidity (E180.1)	28	1.0	NTU		6/19/2019 1:08:00 PM
Aluminum ND 100 µg/L 1 7/2/2019 6:12:11 Arsenic 6.13 5.00 µg/L 10 7/2/2019 6:12:11 Boron 40600 500 µg/L 10 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 10 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 10 7/2/2019 6:17:32 Cadium 570000 500 µg/L 10 7/2/2019 6:17:32 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 10 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 10 7/2/2019 6:12:11 Selenium 120000 500 µg/L 10 7/2/2019 6:17:32 Selenium 120000 5000 µg/L 10 7/2/2019 6:17:33 MERCURY - EPA 200.7 REV 4.4 Analyst<	CP METALS - EPA 200.7					Analyst: SM
Arsenic 6.13 5.00 µg/L 1 7/2/2019 6:12:11 Boron 40600 500 µg/L 10 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 1 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Calcium 570000 500 µg/L 1 7/2/2019 6:12:11 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Soleinium 120000 500 µg/L 1 7/2/2019 6:12:11 Solum 166000 5000 µg/L 1 7/2/2019 6:12:11 Solum 166000 5000 µg/L 10 7/2/2019 6:12:11 MERCURY - EPA 200.7 REV 4.4 Analyst	(Prep: SW3010A - 6	/21/2019)				
Boron 40600 500 µg/L 10 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 1 7/2/2019 6:17:32 Cadmium ND 5.00 µg/L 10 7/2/2019 6:17:32 Copper ND 5.00 µg/L 10 7/2/2019 6:17:32 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 120000 500 µg/L 10 7/2/2019 6:12:11 Potassium 120000 500 µg/L 10 7/2/2019 6:12:11 Selenium 22.6 5.00 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst	Aluminum	ND	100	μg/L	1	7/2/2019 6:12:11 PM
Cadmium ND 5.00 µg/L 1 7/2/2019 6:12:11 Calcium 570000 500 µg/L 10 7/2/2019 6:17:32 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnese 952 20.0 µg/L 1 7/2/2019 6:12:11 Potassium 120000 500 µg/L 10 7/2/2019 6:12:11 Selenium 22.6 5.00 µg/L 10 7/2/2019 6:12:11 Sodium 166000 5000 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 Analyst (Prep: E245.1 - 6/21/2019) Analyst ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 </td <td>Arsenic</td> <td>6.13</td> <td>5.00</td> <td>μg/L</td> <td>1</td> <td>7/2/2019 6:12:11 PM</td>	Arsenic	6.13	5.00	μg/L	1	7/2/2019 6:12:11 PM
Calcium 57000 500 µ/L 10 7/2/2019 6:17:32 Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Magnesse 952 20.0 µg/L 10 7/2/2019 6:12:11 Potassium 120000 500 µg/L 10 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 10 7/2/2019 6:17:32 Sodium 166000 5000 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Analyst Analyst Total Hardness (As CaCO3) 1720 5 mg/L analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analys	Boron	40600	500	μg/L	10	7/2/2019 6:17:32 PM
Copper ND 5.00 µg/L 1 7/2/2019 6:12:11 Iron 1050 50.0 µg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Manganese 952 20.0 µg/L 1 7/2/2019 6:12:11 Potassium 120000 500 µg/L 1 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 1 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 1 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 Analyst Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5	Cadmium	ND	5.00	μg/L	1	7/2/2019 6:12:11 PM
Iron 1050 50.0 μg/L 1 7/2/2019 6:12:11 Magnesium 71600 50.0 μg/L 1 7/2/2019 6:12:11 Manganese 952 20.0 μg/L 1 7/2/2019 6:12:11 Potassium 120000 500 μg/L 10 7/2/2019 6:17:32 Selenium 22.6 5.00 μg/L 1 7/2/2019 6:17:32 Sodium 166000 5000 μg/L 1 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 1530 50.0 mg/L 50 7/10/2019 5:35:5	Calcium	570000	500	μg/L	10	7/2/2019 6:17:32 PM
Magnesium 71600 50.0 µg/L 1 7/2/2019 6:12:11 Manganese 952 20.0 µg/L 1 7/2/2019 6:12:11 Potassium 120000 500 µg/L 10 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 1 7/2/2019 6:17:32 Solium 166000 5000 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst Analyst Analyst	Copper	ND	5.00	μg/L	1	7/2/2019 6:12:11 PM
Manganese 952 20.0 µg/L 1 7/2/2019 6:12:11 Potassium 120000 500 µg/L 10 7/2/2019 6:17:32 Selenium 22.6 5.00 µg/L 1 7/2/2019 6:17:32 Sodium 166000 5000 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst Analyst Analyst	Iron	1050	50.0	μg/L	1	7/2/2019 6:12:11 PM
Potassium 120000 500 μg/L 10 7/2/2019 6:17:32 Selenium 22.6 5.00 μg/L 1 7/2/2019 6:17:32 Sodium 166000 5000 μg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Magnesium	71600	50.0	μg/L	1	7/2/2019 6:12:11 PM
Selenium 22.6 5.00 µg/L 1 7/2/2019 6:12:11 Sodium 166000 5000 µg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 Analyst Analyst Analyst (Prep: E245.1 - 6/21/2019)) Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst Analyst	Manganese	952	20.0	μg/L	1	7/2/2019 6:12:11 PM
Sodium 166000 5000 μg/L 10 7/2/2019 6:17:32 HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst Analyst	Potassium	120000	500	μg/L	10	7/2/2019 6:17:32 PM
HARDNESS - EPA 200.7 REV 4.4 Analyst Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Selenium	22.6	5.00	μg/L	1	7/2/2019 6:12:11 PM
Total Hardness (As CaCO3) 1720 5 mg/L CaCO3 1 7/2/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Sodium	166000	5000	μg/L	10	7/2/2019 6:17:32 PM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019) Analyst Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
(Prep: E245.1 - 6/21/2019) Mercury ND 0.0002 mg/L 1 6/21/2019 2:42:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Total Hardness (As CaCO3)	1720	5	mg/L CaCO3	1	7/2/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst		/21/2019)				Analyst: AVB
Chloride 443 50.0 mg/L 50 7/10/2019 5:35:5 Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Mercury	ND	0.0002	mg/L	1	6/21/2019 2:42:14 PM
Sulfate 1530 50.0 mg/L 50 7/10/2019 5:35:5 ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst Analyst	ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst	Chloride	443	50.0	mg/L	50	7/10/2019 5:35:58 PM
	Sulfate	1530	50.0	mg/L	50	7/10/2019 5:35:58 PM
Alkalinity, Total (As CaCO3) 360 10 mgCaCO3/L 1 6/26/2019	ALKALINITY TO PH 4.5 -SM 23208	3-2011				Analyst: DAA
	Alkalinity, Total (As CaCO3)	360	10	mgCaCO3/L	1	6/26/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst	AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Under Drain 2

 Collection Date:
 6/19/2019 1:08:00 PM

 Lab Sample ID:
 190621004-016

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N) CONDUCTANCE AT 25C - SM 25	1.8 10B-2011	0.1	mg/L	1	6/25/2019 10:33:39 AM Analyst: KB
Specific Conductance TOTAL DISSOLVED SOLIDS - SN	4020 1 2540C-2011	1	µmhos/cm	1	6/21/2019 Analyst: CC
TDS (Residue, Filterable)	3400	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Under Drain 3 Collection Date: 6/19/2019 12:20:00 PM Lab Sample ID: 190621004-017 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	4.29	0.10	mg/L		6/19/2019 12:20:00 PM
Flow, GPD	608		gal/day		6/19/2019 12:20:00 PM
pH (E150.1)	6.9		S.U.		6/19/2019 12:20:00 PM
Temperature (E170.1)	16		deg C		6/19/2019 12:20:00 PM
Turbidity (E180.1)	8	1.0	NTU		6/19/2019 12:20:00 PM
ICP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/2	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 6:22:45 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 6:22:45 PM
Boron	28000	500	μg/L	10	7/2/2019 6:28:06 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 6:22:45 PM
Calcium	626000	500	μg/L	10	7/2/2019 6:28:06 PM
Copper	ND	5.00	μg/L	1	7/2/2019 6:22:45 PM
Iron	63.6	50.0	μg/L	1	7/2/2019 6:22:45 PM
Magnesium	88700	50.0	μg/L	1	7/2/2019 6:22:45 PM
Manganese	389	20.0	μg/L	1	7/2/2019 6:22:45 PM
Potassium	137000	500	μg/L	10	7/2/2019 6:28:06 PM
Selenium	16.0	5.00	μg/L	1	7/2/2019 6:22:45 PM
Sodium	267000	5000	μg/L	10	7/2/2019 6:28:06 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1930	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/2	21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:43:55 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	700	50.0	mg/L	50	7/10/2019 7:11:48 PM
Sulfate	1660	50.0	mg/L	50	7/10/2019 7:11:48 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	370	10	mgCaCO3/L	1	6/26/2019

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Under Drain 3

 Collection Date:
 6/19/2019 12:20:00 PM

 Lab Sample ID:
 190621004-017

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N) CONDUCTANCE AT 25C - SM 257	ND 10B-2011	0.1	mg/L	1	6/25/2019 10:35:17 AM Analyst: KB
Specific Conductance TOTAL DISSOLVED SOLIDS - SN	4860 1 2540C-2011	1	µmhos/cm	1	6/21/2019 Analyst: CC
TDS (Residue, Filterable)	4230	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID:Inlet To PondCollection Date:6/19/2019 3:10:00 PMLab Sample ID:190621004-018Matrix:GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	5.14	0.10	mg/L		6/19/2019 3:10:00 PM
Flow, GPD	26631		gal/day		6/19/2019 3:10:00 PM
pH (E150.1)	8.1		S.U.		6/19/2019 3:10:00 PM
Temperature (E170.1)	12		deg C		6/19/2019 3:10:00 PM
Turbidity (E180.1)	73	1.0	NTU		6/19/2019 3:10:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6	6/21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 6:33:21 PM
Arsenic	23.0	5.00	μg/L	1	7/2/2019 6:33:21 PM
Boron	21900	500	μg/L	10	7/2/2019 6:38:42 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 6:33:21 PM
Calcium	465000	500	μg/L	10	7/2/2019 6:38:42 PM
Copper	ND	5.00	μg/L	1	7/2/2019 6:33:21 PM
Iron	2310	50.0	μg/L	1	7/2/2019 6:33:21 PM
Magnesium	70100	50.0	μg/L	1	7/2/2019 6:33:21 PM
Manganese	551	20.0	μg/L	1	7/2/2019 6:33:21 PM
Potassium	84000	500	μg/L	10	7/2/2019 6:38:42 PM
Selenium	37.5	5.00	μg/L	1	7/2/2019 6:33:21 PM
Sodium	182000	5000	μg/L	10	7/2/2019 6:38:42 PM
OW LEVEL MERCURY - EPA 16. (Prep: 1631E - 6					Analyst: SM
Mercury	ND	0.5	ng/L	1	6/24/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	1451	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6	6/21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:45:36 PM
NIONS BY ION CHROMATOGRA	APHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	243	20.0	mg/L	20	7/10/2019 7:30:56 PM
Sulfate	1190	20.0	mg/L	20	7/10/2019 7:30:56 PM
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Inlet To Pond

 Collection Date:
 6/19/2019 3:10:00 PM

 Lab Sample ID:
 190621004-018

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-201	1				Analyst: DAA
Alkalinity, Total (As CaCO3)	520	10	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EPA 350	0.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	6/25/2019 10:41:45 AM
CONDUCTANCE AT 25C - SM 2510B-2	011				Analyst: KB
Specific Conductance	3250	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540	C-2011				Analyst: CC
TDS (Residue, Filterable)	2660	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Keuka Upstream Collection Date: 6/19/2019 2:45:00 PM Lab Sample ID: 190621004-019 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	3.85	0.10	mg/L		6/19/2019 2:45:00 PM
pH (E150.1)	8.4		S.U.		6/19/2019 2:45:00 PM
Temperature (E170.1)	22		deg C		6/19/2019 2:45:00 PM
Turbidity (E180.1)	47	1.0	NTU		6/19/2019 2:45:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 6:43:56 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 6:43:56 PM
Boron	67.5	50.0	μg/L	1	7/2/2019 6:43:56 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 6:43:56 PM
Calcium	39800	50.0	μg/L	1	7/2/2019 6:43:56 PM
Copper	ND	5.00	μg/L	1	7/2/2019 6:43:56 PM
Iron	83.4	50.0	μg/L	1	7/2/2019 6:43:56 PM
Magnesium	11800	50.0	μg/L	1	7/2/2019 6:43:56 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 6:43:56 PM
Potassium	3100	50.0	μg/L	1	7/2/2019 6:43:56 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 6:43:56 PM
Sodium	16700	500	μg/L	1	7/2/2019 6:43:56 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	148	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:50:37 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	37.0	2.00	mg/L	2	7/10/2019 7:49:57 PM
Sulfate	24.1	2.00	mg/L	2	7/10/2019 7:49:57 PM
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	130	10	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:46:42 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Keuka Upstream

 Collection Date:
 6/19/2019 2:45:00 PM

 Lab Sample ID:
 190621004-019

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	403	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	285	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Keuka Downstream Collection Date: 6/19/2019 2:17:00 PM Lab Sample ID: 190621004-020 Matrix: SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	4.00	0.10	mg/L		6/19/2019 2:17:00 PM
pH (E150.1)	8.2		S.U.		6/19/2019 2:17:00 PM
Temperature (E170.1)	22		deg C		6/19/2019 2:17:00 PM
Turbidity (E180.1)	37	1.0	NTU		6/19/2019 2:17:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 7:10:00 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 7:10:00 PM
Boron	ND	50.0	μg/L	1	7/2/2019 7:10:00 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 7:10:00 PM
Calcium	41500	50.0	μg/L	1	7/2/2019 7:10:00 PM
Copper	ND	5.00	μg/L	1	7/2/2019 7:10:00 PM
Iron	102	50.0	μg/L	1	7/2/2019 7:10:00 PM
Magnesium	12000	50.0	μg/L	1	7/2/2019 7:10:00 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 7:10:00 PM
Potassium	2970	50.0	μg/L	1	7/2/2019 7:10:00 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 7:10:00 PM
Sodium	16000	500	μg/L	1	7/2/2019 7:10:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	153	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:52:18 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	35.4	2.00	mg/L	2	7/10/2019 8:08:59 PM
Sulfate	23.5	2.00	mg/L	2	7/10/2019 8:08:59 PM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	150	10	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:48:18 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:Comparison of the second sec

Date: 11-Jul-19

 Client Sample ID:
 Keuka Downstream

 Collection Date:
 6/19/2019 2:17:00 PM

 Lab Sample ID:
 190621004-020

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	400	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	105	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: Surface Water Dup Collection Date: 6/19/2019 2:47:00 PM Lab Sample ID: 190621004-021 Matrix: SURFACE WATER

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	3.85	0.10	mg/L		6/19/2019 2:47:00 PM
pH (E150.1)	8.4		S.U.		6/19/2019 2:47:00 PM
Temperature (E170.1)	22		deg C		6/19/2019 2:47:00 PM
Turbidity (E180.1)	43	1.0	NTU		6/19/2019 2:47:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/2	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 8:01:15 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 8:01:15 PM
Boron	ND	50.0	μg/L	1	7/2/2019 8:01:15 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 8:01:15 PM
Calcium	40000	50.0	μg/L	1	7/2/2019 8:01:15 PM
Copper	ND	5.00	μg/L	1	7/2/2019 8:01:15 PM
Iron	67.0	50.0	μg/L	1	7/2/2019 8:01:15 PM
Magnesium	11900	50.0	μg/L	1	7/2/2019 8:01:15 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 8:01:15 PM
Potassium	2960	50.0	μg/L	1	7/2/2019 8:01:15 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 8:01:15 PM
Sodium	16500	500	μg/L	1	7/2/2019 8:01:15 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	149	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:54:00 PM
ANIONS BY ION CHROMATOGRAI	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	37.0	2.00	mg/L	2	7/10/2019 8:47:04 PM
Sulfate	24.2	2.00		2	7/10/2019 8:47:04 PM
Sunale	24.2	2.00	mg/L	2	
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	140	10	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:49:59 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Surface Water Dup

 Collection Date:
 6/19/2019 2:47:00 PM

 Lab Sample ID:
 190621004-021

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	405	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	255	5	mg/L	1	6/26/2019

Lockwood Hills LLC

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Adirondack Environmental Services, Inc

Date: 11-Jul-19

Client Sample ID: Pond Grab Collection Date: 6/19/2019 3:35:00 PM Lab Sample ID: 190621004-022 Matrix: SURFACE WATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	10.51	0.10	mg/L		6/19/2019 3:35:00 PM
pH (E150.1)	8.6		S.U.		6/19/2019 3:35:00 PM
Temperature (E170.1)	29		deg C		6/19/2019 3:35:00 PM
Turbidity (E180.1)	34	1.0	NTU		6/19/2019 3:35:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6	/21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 8:11:29 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 8:11:29 PM
Boron	16600	50.0	μg/L	1	7/2/2019 8:11:29 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 8:11:29 PM
Calcium	265000	500	μg/L	10	7/2/2019 8:32:47 PM
Copper	ND	5.00	μg/L	1	7/2/2019 8:11:29 PM
Iron	91.9	50.0	μg/L	1	7/2/2019 8:11:29 PM
Magnesium	65300	50.0	μg/L	1	7/2/2019 8:11:29 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 8:11:29 PM
Potassium	69500	500	μg/L	10	7/2/2019 8:32:47 PM
Selenium	7.18	5.00	μg/L	1	7/2/2019 8:11:29 PM
Sodium	129000	5000	μg/L	10	7/2/2019 8:32:47 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	931	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6	/21/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	6/21/2019 2:55:42 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 R	REV 2.1			Analyst: CS
Chloride	241	20.0	mg/L	20	7/10/2019 9:06:06 PM
Sulfate	1060	20.0	mg/L	20	7/10/2019 9:06:06 PM
ALKALINITY TO PH 4.5 -SM 23201	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	84	4	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:51:38 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Pond Grab

 Collection Date:
 6/19/2019 3:35:00 PM

 Lab Sample ID:
 190621004-022

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	2590	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SI				Analyst: CC	
TDS (Residue, Filterable)	2030	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID:Field BlankCollection Date:6/19/2019 12:30:00 PMLab Sample ID:190621004-023Matrix:GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.42	0.10	mg/L		6/19/2019 12:30:00 PM
pH (E150.1)	7.7		S.U.		6/19/2019 12:30:00 PM
Temperature (E170.1)	21		deg C		6/19/2019 12:30:00 PM
Turbidity (E180.1)	< 1	1.0	NTU		6/19/2019 12:30:00 PM
CP METALS - EPA 200.7					Analyst: SM
(Prep: SW3010A - 6/	21/2019)				
Aluminum	ND	100	μg/L	1	7/2/2019 8:38:02 PM
Arsenic	ND	5.00	μg/L	1	7/2/2019 8:38:02 PM
Boron	ND	50.0	μg/L	1	7/2/2019 8:38:02 PM
Cadmium	ND	5.00	μg/L	1	7/2/2019 8:38:02 PM
Calcium	74.9	50.0	μg/L	1	7/2/2019 8:38:02 PM
Copper	ND	5.00	μg/L	1	7/2/2019 8:38:02 PM
Iron	ND	50.0	μg/L	1	7/2/2019 8:38:02 PM
Magnesium	ND	50.0	μg/L	1	7/2/2019 8:38:02 PM
Manganese	ND	20.0	μg/L	1	7/2/2019 8:38:02 PM
Potassium	ND	50.0	μg/L	1	7/2/2019 8:38:02 PM
Selenium	ND	5.00	μg/L	1	7/2/2019 8:38:02 PM
Sodium	1040	500	μg/L	1	7/2/2019 8:38:02 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: SM
Total Hardness (As CaCO3)	ND	5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/				Analyst: AVB	
Mercury	ND	0.0002	mg/L	1	6/21/2019 3:00:48 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	7/10/2019 9:44:09 PM
Sulfate	ND	2.00	mg/L	2	7/10/2019 9:44:09 PM
ALKALINITY TO PH 4.5 -SM 2320B	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	8	1	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:53:14 AM

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 Field Blank

 Collection Date:
 6/19/2019 12:30:00 PM

 Lab Sample ID:
 190621004-023

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011				Analyst: CC	
TDS (Residue, Filterable)	ND	5	mg/L	1	6/26/2019

CLIENT:	Lockwood Hills LLC 190621004 Lockwood Ash Landfill / Quarterly		C	lient Sample l	D: LLHg	Field Blank
Work Order:				Collection Da	te: 6/19/2	019 3:25:00 PM
Reference:				Lab Sample I	D: 19062	190621004-024
PO#:				Matr	ix: GROU	INDWATER
Analyses		Result	RL Qual	Units	DF	Date Analyzed
	ERCURY - EPA 1631E Prep: 1631E - 6/21/2019		RL Qual	Units	DF	Date Analyzed Analyst: SN

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: GW Dep Drain 3 Collection Date: 6/19/2019 12:03:00 PM Lab Sample ID: 190621004-025 Matrix: GROUNDWATER

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AF	RE NOT ELAP CE	RTIFIABLE				Analyst: FLD
Dissolved Oxygen (E360.1)	5.10	0.10		mg/L		6/19/2019 12:03:00 PM
Flow, GPD	342			gal/day		6/19/2019 12:03:00 PM
pH (E150.1)	7.5			S.U.		6/19/2019 12:03:00 PM
Temperature (E170.1)	13			deg C		6/19/2019 12:03:00 PM
Turbidity (E180.1)	< 1	1.0		NTU		6/19/2019 12:03:00 PM
ICP METALS - EPA 200.7	1/2010					Analyst: SM
(Prep: SW3010A - 6/2	1/2019)					
Aluminum	ND	100		μg/L	1	7/2/2019 8:47:57 PM
Arsenic	ND	5.00		μg/L	1	7/2/2019 8:47:57 PM
Boron	212	50.0		μg/L	1	7/2/2019 8:47:57 PM
Cadmium	ND	5.00		μg/L	1	7/2/2019 8:47:57 PM
Calcium	255000	50000		μg/L	10	7/2/2019 8:53:08 PM
Copper	ND	5.00		μg/L	1	7/2/2019 8:47:57 PM
Iron	ND	50.0		μg/L	1	7/2/2019 8:47:57 PM
Magnesium	39700	50.0		μg/L	1	7/2/2019 8:47:57 PM
Manganese	ND	20.0		μg/L	1	7/2/2019 8:47:57 PM
Potassium	3680	50.0	J	μg/L	1	7/2/2019 8:47:57 PM
Selenium	ND	5.00		μg/L	1	7/2/2019 8:47:57 PM
Sodium	14100	500		µg/L	1	7/2/2019 8:47:57 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: SM
Total Hardness (As CaCO3)	801	5		mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/2	1/2019)					Analyst: AVB
Mercury	ND	0.0002		mg/L	1	6/21/2019 3:02:29 PM
ANIONS BY ION CHROMATOGRAP	HY - EPA 300.0 R	REV 2.1				Analyst: CS
Chloride	5.15	2.00		mg/L	2	7/10/2019 11:21:00 PM
Sulfate	250	10.0		mg/L	10	7/10/2019 11:59:14 PM
ALKALINITY TO PH 4.5 -SM 2320B-	2011					Analyst: DAA
Alkolinity, Total (Ac Cacco)	480	10		mgCaCO3/L	1	6/28/2019
Alkalinity, Total (As CaCO3)						

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 GW Dep Drain 3

 Collection Date:
 6/19/2019 12:03:00 PM

 Lab Sample ID:
 190621004-025

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N) CONDUCTANCE AT 25C - SM 251	ND	0.1	mg/L	1	6/25/2019 10:54:46 AM Analyst: KB
Specific Conductance	1100	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	785	5	mg/L	1	6/26/2019

Aunonuaci	K Elivii olillelitai Sel vices, li			-	
CLIENT:	Lockwood Hills LLC	Client Sample II): GW D	ep Drain 2	
Work Order:	190621004	Collection Dat	e: 6/19/2	/19/2019 11:30:00 AM	
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID	1004-026		
PO#:		Matri	x: GROU	INDWATER	
Analyses	Result	RL Qual Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CERTI	FIABLE		Analyst: FLD	
Observation	Dry	NA		6/19/2019 11:30:00 AM	

Aunonuaci	k Elivii olillelitai Sei vices, li				
CLIENT:	Lockwood Hills LLC	Client Sample ID: GW Dep Drain 4			
Work Order:	190621004	Collection Dat	e: 6/19/2	5/19/2019 11:34:00 AM	
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID	1004-027		
PO#:		Matri	K: GROU	JNDWATER	
Analyses	Result	RL Qual Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CERT	FIABLE		Analyst: FLD	
Observation	Dry	NA		6/19/2019 11:34:00 AM	

Aunonuaci	K Elivii olillelitai Sei vices, li					
CLIENT: Lockwood Hills LLC		Client Sample II	Drain 5			
Work Order:	190621004	Collection Date	e: 6/19/2	6/19/2019 3:45:00 PM		
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID	1004-028			
PO#:		Matrix	K: GROU	JNDWATER		
Analyses	Result	RL Qual Units	DF	Date Analyzed		
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CERTI	FIABLE		Analyst: FLD		
Observation	Dry	NA		6/19/2019 3:45:00 PM		

Page 54 of 58

Adirondac	k Environmental Services, 1	c Date: <i>11-Jul-19</i>		-19
CLIENT:	Lockwood Hills LLC	Client Sample ID:	8910-8	SH
Work Order:	190621004	Collection Date: 6/20/2019 7		019 7:50:00 AM
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID:	190621004-029	
PO#:		Matrix: GROUNDWATER		
Analyses	Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CER	TIFIABLE		Analyst: FLD
Observation	Poor Recovery	NA		6/20/2019 7:50:00 AM

Aunonuaci	k Environmentai Sei vices, mo			
CLIENT: Lockwood Hills LLC Work Order: 190621004		Client Sample ID: 8405		
		Collection Date	6/19/2019 4:45:00 PM	
Reference:	Lockwood Ash Landfill / Quarterly	Lab Sample ID:	190621004-030	
PO#:		Matrix: GROUNDWATER		
Analyses	Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CERTIF	IABLE		Analyst: FLD
Observation	Dry	NA		6/19/2019 4:45:00 PM

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC
Work Order:	190621004
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 11-Jul-19

Client Sample ID: GW Dep Drain 1 Collection Date: 6/19/2019 3:25:00 PM Lab Sample ID: 190621004-031 Matrix: GROUNDWATER

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Dissolved Oxygen (E360.1) 5.15 0.10 Flow, GPD 608 008 pH (E150.1) 7.5 13 Turbidity (E180.1) <1 1.0 ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019) Aluminum ND 100 Arsenic ND 5.00 Boron 2690 50.0 Cadmium ND 5.00 Copper ND 5.00 Iron ND 5.00 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	mg/L gal/day S.U. deg C NTU μg/L μg/L		Analyst: FLD 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM Analyst: SM
Flow, GPD 608 pH (E150.1) 7.5 Temperature (E170.1) 13 Turbidity (E180.1) < 1 1.0 ICP METALS - EPA 200.7 (Prep: SW3010A - 6/21/2019) Aluminum ND 100 Arsenic ND 5.00 Boron 2690 50.0 Cadmium ND 5.00 Cadmium ND 5.00 Calcium 344000 50000 Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00	gal/day S.U. deg C NTU μg/L		6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM
pH (E150.1) 7.5 Temperature (E170.1) 13 Turbidity (E180.1) < 1	S.U. deg C NTU μg/L		6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM
Temperature (E170.1) 13 Turbidity (E180.1) < 1	deg C NTU μg/L		6/19/2019 3:25:00 PM 6/19/2019 3:25:00 PM
Turbidity (E180.1) < 1	NTU μg/L		6/19/2019 3:25:00 PM
Aluminum ND 100 Arsenic ND 5.00 Boron 2690 50.0 Cadmium ND 5.00 Cadmium ND 5.00 Calcium 344000 50000 Copper ND 5.00 Iron ND 5.00 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L		
(Prep: SW3010A - 6/21/2019)AluminumNDArsenicNDBoron2690Boron2690CadmiumNDCalcium344000CopperNDIronNDMagnesium98600Potassium6620SeleniumNDSodium31500			Analyst: SM
Aluminum ND 100 Arsenic ND 5.00 Boron 2690 50.0 Cadmium ND 5.00 Calcium 344000 50000 Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500			
Arsenic ND 5.00 Boron 2690 50.0 Cadmium ND 5.00 Calcium 344000 50000 Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500			7/0/0040 0.50 47 DM
Boron 2690 50.0 Cadmium ND 5.00 Calcium 344000 50000 Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	µg/L	1	7/2/2019 8:58:17 PM
CadmiumND5.00Calcium34400050000CopperND5.00IronND50.0Magnesium9860050.0ManganeseND20.0Potassium662050.0SeleniumND5.00Sodium31500500		1	7/2/2019 8:58:17 PM
Calcium 344000 50000 Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L	1	7/2/2019 8:58:17 PM
Copper ND 5.00 Iron ND 50.0 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L	1	7/2/2019 8:58:17 PM
Iron ND 50.0 Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L α/l	10	7/2/2019 9:03:30 PM
Magnesium 98600 50.0 Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L α/l	1	7/2/2019 8:58:17 PM 7/2/2019 8:58:17 PM
Manganese ND 20.0 Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L α/l	1	7/2/2019 8:58:17 PM
Potassium 6620 50.0 Selenium ND 5.00 Sodium 31500 500	μg/L α/l	1	7/2/2019 8:58:17 PM
Selenium ND 5.00 Sodium 31500 500	μg/L α/l	1	7/2/2019 8:58:17 PM
Sodium 31500 500	μg/L α/l	1	7/2/2019 8:58:17 PM
	μg/L	1 1	7/2/2019 8:58:17 PM
HARDNESS - EPA 200.7 REV 4.4	μg/L	I	
			Analyst: SM
Total Hardness (As CaCO3) 1266 5	mg/L CaCO3	1	7/2/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 6/21/2019)			Analyst: AVE
Mercury ND 0.0002	mg/L	1	6/21/2019 3:04:11 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1			Analyst: CS
Chloride 69.8 10.0	mg/L	10	7/11/2019 12:18:17 AM
Sulfate 746 10.0	mg/L	10	7/11/2019 12:18:17 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011			Analyst: DAA
Alkalinity, Total (As CaCO3) 420 10	mgCaCO3/L	1	6/28/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0			Analyst: PL

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:190621004Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 11-Jul-19

 Client Sample ID:
 GW Dep Drain 1

 Collection Date:
 6/19/2019 3:25:00 PM

 Lab Sample ID:
 190621004-031

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	6/25/2019 10:59:22 AM
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	2010	1	µmhos/cm	1	6/21/2019
TOTAL DISSOLVED SOLIDS - SM	1 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1590	5	mg/L	1	6/26/2019



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891 CHAIN OF CUSTODY RECORD

AES Work Order#: 9062 100

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns Client Name: Address: Lockwood Hills LLC Samplers Name: Project Name (Location): Send Report to: Dale Irwin van Kals Lockwood Ash LF Quarterly Client Phone No: PO #: Samplers Signature: Client Fax No: Time AES # of Date Sample Type Analysis Sample Client Sample ID: A=am Cont's Sampled <u>Matrix</u> $\underline{\mathbf{C}} \mid \underline{\mathbf{G}}$ P=pm ID A 1842 Lockwood Ash LF Quarterly GW G 4 0715 0C Р A P G Field pH, Temp, Turbidity GW 4 8404 9 19 1700 Уð A 4 GW G 8908-D 19 Ŷ 1430 A GW G 4 8908-SH 1445 iq. P Α GW G 4 8909-D PJ. 1620)() c_i P 8909-SH A GW G 4 1135 206 Ρ A GW G 4 8910-D 240 P Α GW G 4 8911-D XC) 1350 4 P (<u>A</u> P GW G 8911-SH 4 09 15740 19 A P 8942-D GW G 4 0725 10 (A)9306-SH 0700 GW G 4 1/ R 26 GW Dup 9991 G 1620 GW 4 P R Special Instructions/Remarks: **Shipment Arrived Via:** AES Other: FedEx UPS Client Page 1 of 3 **Turnaround Time Requested:** ④ Normal ④ 1 Day ④ 3 Day ④ 2 -Day ④ 5 Day Time Relinquished by: (Signature) Received by: (Signature) Date Received by: (Signature) Date Time Relinquished by: (Signature) Time Relinguished by: (Signature) **Received for Laboratory by:** Date 9B1 **Received Within Holding Times** Sample Temperature Properly Preserved Ambient Chilled N Chilling Process begun Ν Y Notes: Notes: Notes:



314 North Pearl StreetAlbany, New York 12207518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#:

190621004

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Nam		Address:	11 10010		y onon	<u>16 0</u>	014				
	ood Hills LLC										
Send Report): Samplers N			Samplers 1	Name:	1 LAA		
Dale Ir	Lockwo	Lockwood Ash LF Quarterly					Ryan Baisley/K. Ambaz				
		PO #:	PO #: Sar			Samplers ?	Signature:				
Client Fax AES	No:		Time					# of	(<i>L</i>		
Sample ID	Client Sample ID:	Date Sampled	A=am P=pm		Sample <u>Matrix</u>	e Type C	<u>G</u>	Cont's		Ánalysis	
13	8401	6/19/19	1510	A P	GW		G	4		vood Ash LF Quarterly pH, Temp, Turbidity	
114	Leak Detection Syst.	6/19/19	1240	A P	GW		G	4		eld Flow Reading, DO	
211	Under Drain 1	6/19/19	1337	A P	GW		G	5		eld Flow Reading, DO	
)16	Under Drain 2	6/9/19	1308	A P	GW		G	4		eld Flow Reading, DO	
) (7	Under Drain 3	6/19/19	1220	A P	GW		G	4		eld Flow Reading, DO	
18	Inlet to Pond	6/19/19	1510	A P	GW		G	5		eld Flow Reading, DO	
19	Keuka Upstream	6/19/19	1445	A P	GW		G	4	Lockwood Quarterly +DO Lockwood Quarterly +DO		
220	Keuka Downstream	6/19/19	1417	A P	SF		G	4			
16	Surface Water Dup	6/9/9	1447	A P	SF		G	4	Lockwood Quarterly +DO Lockwood Quarterly +DO Lockwood Quarterly +DO EPA 1631		
797	Pond Grab	6/19/19	1535	A P	SF		G	4			
793	Field Blank	6/19/19	1230	A	GW		G	4			
DAY	LLHg Field Blank	6/19	1525	P	GW		G	1			
Shipment	Arrived Via:			Sp	ecial Instru	ctions	/Rem	arks:			
FedEx	UPS Client AES Oth	ier:		Page 2 of 3							
Turnaro ④ 1 Day	und Time Requested: 9 ④ 3 Day ④ Normal										
④ 2 -Da			11 . (0)	L					Date	Time	
Relinquish	hed by: (Signature)	Receive	d by: (Signa	mre)					Date	Time	
Relinquished by: (Signature) Received by: (Signa			ture)	1				Date	Time		
Relinquished by: (Signature) Received for Labor			ratory by: Date Time					Time G Cisto II a			
			612/119 8:55					eived Within Holding Times			
Sample Temperature Ambient Chilled Chilling Process begun			rope	erTy Preser	veu	d Received Within Holding Times			$\langle \gamma \rangle$		
Notes: Notes:			1 mg					Notes:			



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#:

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns Client Name: Address: Lockwood Hills LLC Send Report to: Project Name (Location): Samplers Name: Dale Irwin Lockwood Ash LF Quarterly Client Phone No: an basile PO #: Samplers Signature Client Fax No: AES Time Date # of Sample Type Sample Client Sample ID: A=am Analysis Sampled Cont's Matrix C G Ю P=pm **GW Dep Drain 3** A GW Lockwood Ash LF Quarterly 4 0a5 Field pH, Temp, Turbidity 1203 Ρ + Field Flow Reading, DO **GW Dep Drain 2** А GW 0 1130 **Observation Only**)a(Р A P **GW Dep Drain 4** GW 0 **Observation Only** 124 **Under Drain 5** А 0aGW 0 **Observation Only** 545 q Ρ 8910-SH A GW 0 **Observation Only** 790 Р 8405 А GW 0 **Observation Only** 645 **GW Dep Drain 1** GW **Observation Only** ØW ASh LF Field Sty M, TUIS, + Field 12 Р Flow reading, 10 A Р A Ρ Α Р Α р **Shipment Arrived Via:** Special Instructions/Remarks: FedEx UPS Client (AES Other: Page 3 of 3 **Turnaround Time Requested:** ④ 3 Day ④ 1 Day ④ Normal 4 2 - Day 4 5 Day Relinquished by: (Signature) Received by: (Signature) Date Time Relinquished by: (Signature) Received by: (Signature) Date Time Relinquished by: (Signature) Received for Laboratory by: Date Time Sample Temperature **Properly Preserved Received Within Holding Times** Ambient Chilled Chilling Process begun Y N Y Ν Notes: Notes: Notes:

Collection Date	Sample ID	Depth	Elevation	Units
6/19/2019	8908-D	6.40	606.57	feet
6/19/2019	8909-D	44.89	517.01	feet
6/19/2019	8910-D	21.35	536.99	feet
6/19/2019	8911-D	26.94	529.97	feet
6/19/2019	8942-D	14.75	544.20	feet
6/19/2019	8908-SH	8.45	604.32	feet
6/19/2019	8909-SH	11.92	549.71	feet
6/19/2019	8910-SH	6.29	532.26	feet
6/19/2019	8911-SH	25.72	531.20	feet
6/19/2019	9306-SH	5.80	560.42	feet
6/19/2019	7741	17.25	570.80	feet
6/19/2019	1842	6.41	552.79	feet
6/19/2019	8406	14.22	555.33	feet
6/19/2019	8407	OBSTRUCTED		feet
6/19/2019	8401	6.31	653.98	feet
6/19/2019	8402	7.00	657.09	feet
6/19/2019	8403	7.96	656.11	feet
6/19/2019	8404	6.26	596.47	feet
6/19/2019	8405	DRY		feet

Lockwood Ash Disposal Site Second Quarter 2019

THIRD QUARTER

DATA VALIDATION REPORT

Review of Baseline Parameter Analytical Data

LOCKWOOD ASH DISPOSAL SITE

Prepared on behalf of:

Lockwood Hills LLC 590 Plant Road Dresden, New York 14441

Prepared by:

2620 Grand Island, New York 14072-2131

December 2019

DATA VALIDATION REPORT

Review of Baseline Parameter Analytical Data

LOCKWOOD ASH DISPOSAL SITE

Prepared on behalf of:

Lockwood Hills LLC

590 Plant Road Dresden, New York 14441

Prepared by:



Grand Island, New York 14072-2131

December 2019

Site Name: Lockwood Ash Disposal Site

Laboratory Receipt Date: <u>9/20/19 and 10/1/19</u>

Sample Data Group: <u>1842</u>

Client Sample ID	Laboratory Sample ID	Sample Matrix	Analyte Types
1842	190920022-001	Water	Total Metals, Field Parameters, Conventional Parameters
8401	190920022-002	Water	Total Metals, Field Parameters, Conventional Parameters
8404	190920022-003	Water	Total Metals, Field Parameters, Conventional Parameters
8908-D	190920022-004	Water	Total Metals, Field Parameters, Conventional Parameters
8908-SH	190920022-005	Water	Total Metals, Field Parameters, Conventional Parameters
8909-D	190920022-006	Water	Total Metals, Field Parameters, Conventional Parameters
8909-SH	190920022-007	Water	Total Metals, Field Parameters, Conventional Parameters
8910-D	190920022-008	Water	Total Metals, Field Parameters, Conventional Parameters
8911-D	190920022-010	Water	Total Metals, Field Parameters, Conventional Parameters
8911-SH	190920022-011	Water	Total Metals, Field Parameters, Conventional Parameters
8942-D	190920022-012	Water	Total Metals, Field Parameters, Conventional Parameters
9306-SH	190920022-013	Water	Total Metals, Field Parameters, Conventional Parameters
GW Dup 8909D	190920022-014	Water	Total Metals, Field Parameters, Conventional Parameters
GW Dep Drain 1	190920022-015	Water	Total Metals, Field Parameters, Conventional Parameters
Leak Detection System	190920022-016	Water	Total Metals, Field Parameters, Conventional Parameters
Under Drain 1	190920022-017	Water	Total Metals, Field Parameters, Conventional Parameters
Under Drain 2	190920022-018	Water	Total Metals, Field Parameters, Conventional Parameters
Under Drain 3	190920022-019	Water	Total Metals, Field Parameters, Conventional Parameters
Keuka Upstream	190920022-021	Water	Total Metals, Field Parameters, Conventional Parameters
Keuka Downstream	190920022-022	Water	Total Metals, Field Parameters, Conventional Parameters
Surface Water Dup	190920022-023	Water	Total Metals, Field Parameters, Conventional Parameters
Field Blank	190920022-025	Water	Total Metals, Field Parameters, Conventional Parameters
GW Dep Drain 3	190920022-026	Water	Total Metals, Field Parameters, Conventional Parameters

LLHG Field Blank	190920022-027	Water	Total Mercury
Inlet to Pond	190920022-032	Water	Total Metals, Field Parameters, Conventional Parameters
Pond Grab	190920022-033	Water	Total Metals, Field Parameters, Conventional Parameters
LLHG FB	190920022-034	Water	Total Mercury

DATA VALIDATION REPORT Review of Baseline Parameter Analytical Data

Lockwood Ash Disposal Site

TABLE OF CONTENTS

1	D	DATA PACKAGE ASSESSMENT	1-1
2	F	FIELD MEASUREMENTS	2-1
3	N	METALS	
	3.1	CALIBRATIONS	
	3.	1.1 Initial Instrument Calibration	
	3.	1.2 Initial and Continuing Calibration Verification	
	3.2	BLANKS	
	3.3	INTERFERENCE CHECK SAMPLES	
	3.4	MATRIX SPIKES	
	3.5	DUPLICATE SAMPLES	
	3.6	LABORATORY CONTROL SAMPLE	
	3.7	SERIAL DILUTIONS	
	3.8	INSTRUMENT DETECTION LIMITS AND LINEAR RANGES	
4	V	VET CHEMISTRY	4-1
	4.1	Alkalinity	
	4.2	Ammonia	
	4.3	COLOR	
	4.4	CONDUCTIVITY	
	4.5	CHLORIDE AND SULFATE	
	4.6	TOTAL DISSOLVED SOLIDS	
	4.7	TOTAL ORGANIC CARBON	
5	C	CORRECTNESS AND USABILITY SUMMARY	5-1

List of Tables

Table 3-1: Concentrations of Select Metals in the Instrument Calibration Standards	
Table 5-1: Summary of Qualified Data for Lockwood Ash Disposal Site September 20)19
Baseline Event(f	ollows) 5-1

List of Attachments

- Attachment 1 Field Data Report & Chain of Custody
- Attachment 2 Sample Results
- Attachment 3 Quality Control Documentation

1 DATA PACKAGE ASSESSMENT

One data package containing the results for a total of 26 samples, including two field blanks¹ and two duplicate samples, were prepared by Adirondack Environmental Services, Inc. (ADK) of Albany, New York for a sampling event that took place at the Lockwood Ash Disposal Site in the Town of Torrey, New York on September 18, 19, and 30, 2019. The sampling event was for an abbreviated set of 6 NYCRR Part 360 baseline parameters as specified in the site's approved Environmental Monitoring Program (Daigler Associates, February 2007). The site's baseline parameters include standard field measurements, conventional wet chemistry parameters, and select total metals. Data from the field measurements and wet chemistry parameters are here within reviewed using data quality objectives laid out in the Lockwood Ash Disposal Site's Site Analytical Plan (SAP) prepared by KR Applin & Associates in March 2007. The SAP specifies the use of the US EPA Region 2 Standard Operating Procedure (SOP) # HW-2, Evaluation of Metals for the Contract Laboratory Program (Version 11, January 1992). This document has since been revised and separated by method into three documents. The metals data have been reviewed using the two most recent and appropriate guidance protocols, US EPA SOP #HW-3a, ICP-AES Data Validation (Revision 1, September 2016) and US EPA SOP #HW-3c, Mercury and Cyanide Data Validation (Revision 1, September 2016). These documents are referred to as HW-3a and HW-3c, respectively, herein.

According to the Chain of Custody forms, presented in Attachment 1, the sampling event started with 19 environmental samples taken on September 18th and four samples taken on September 19th. The samples include groundwater monitoring wells, a field blank, up and downstream surface water samples from the Keuka Outlet, and a surface water field duplicate. The remaining three samples (Inlet to Pond, Pond Grab, and LLHG FB) were taken on September 30th, 2019 due to being obstructed by construction activities during the first sampling event. One field blank for each analytical method and one field duplicate per matrix type is required by the SAP per sampling event. These quality control requirements were met. No quality control samples were missing. Four required client sampling locations were observed to be dry and one required client sample location was listed as having poor recovery. Dry locations were not counted against completeness,

¹ The field blank and low-level mercury field blank collected on 9/18/19 were counted as separate samples on the Chain of Custody form, but are considered one sample for the purpose of this report.

thereby the 85% completeness requirement for sample collection per the SAP was exceeded; 29 samples were collected or observed dry out of 30 required samples.

The samples collected on September 18th and19th were shipped together and received by the laboratory on September 20th, 2019. The samples collected on September 30th were received by the laboratory on October 1st, 2019. Proper cooler temperatures and sample preservation was confirmed upon receipt as indicated on the Chain of Custody forms. Cover pages, case narratives, formal data summary reports, chain of custody forms, raw data printouts, and all necessary quality control and other supporting information was present in the laboratory data package. However, the raw data did not include the actual negative results for total metals, only listing the results as less than zero. The laboratory reported that the instrument print out for metals does not provide the negative results. Otherwise, client samples and associated quality control samples were easily trackable through the package.

All samples were received and analyzed within the proper holding times. The accuracy of the summary data sheets was evaluated by examination of all data values against raw data printouts for the following samples; 1842, GW Dep Drain 1, and GW Dep Drain 3 for the October 31, 2019 analytical run, and the Pond Grab for the November 1, 2019 run. Data were examined for completeness, computation and transcriptional errors, and application of program QA/QC data.

One omission of data was noted. The field logs show that the required field measurements for the groundwater and surface water duplicates were not independently collected. Rather the data reported for these samples in Attachment 2 are the same as those reported for the original sample. The field data log is included in Attachment 1.

Application of program QA/QC data is discussed by parameter group in the following Sections.

2 FIELD MEASUREMENTS

Field measurements were made for pH, temperature, and turbidity for all samples. Flowrate measurements were taken in the groundwater drain and leachate sampling locations. Dissolved oxygen measurements were obtained in the surface water samples per the SAP and in the field blank, the groundwater drains, the leachate sampling locations, as requested by the Chain of Custody.

The pH meter, dissolved oxygen meter, and turbidimeter were calibrated daily and recorded on Field Meter Calibration Data sheets as required by the SAP. The pH meter is to be calibrated within the limits of 6.95 and 7.05 for the 7.0 standard solution. The field observation sheets reported a calibration above this range up to 7.09 on September 18, 2019. No pH data were qualified based on this observation.

According to the SAP, one check standard or reference should be run and documented before initial use for the day and at a continuing frequency of one for every ten client samples for the turbidity and pH meters. Since reference check information was not provided, proper meter performance and accuracy cannot be verified and check standard results have not been validated for the field measurements.

Duplicate field measurements are to be taken at a frequency of one in every twenty samples or once per day whichever is greater according to the SAP. Field duplicate samples were taken on September 18th but not September 19th or September 30th. While duplicate measurements and duplicate samples are not technically equivalent, in the absence of duplicate field measurements, the field duplicate samples could provide data for this QC analysis. In the future, field duplicates should be collected on separate days and field measurements on the duplicate samples should be performed to comply with this requirement.

Due to the missing check standards and missing duplicate measurements, all field measurements are flagged as usable estimates. A sample event trip report and/or field sampling sheets, including all required QC measurements, should be prepared for all future sampling events under this contract.

No field measurements were rejected. Independent field measurements for the GW Dup and Surface Water Dup samples were not obtained, therefore, the percent completeness for this sampling event for field measurements is 92%. This exceeds the 85% completeness requirement.

3 METALS

Metals were analyzed using inductively-coupled plasma, atomic emission spectroscopy (ICP-AES), with the exception of mercury which was analyzed using cold vapor atomic adsorption (AA) and, in the case of low-level mercury analysis, cold vapor atomic fluorescence spectroscopy (CVAFS). Two ICP-AES runs over two days, two AA runs, and one CVAFS run were included in the data package. The ICP-AES runs occurred on October 31st and November 1st, 2019, while the AA runs occurred on September 21st, and October 22nd, 2018 and the CVAFS run occurred on October 4th, 2019. The CVAFS run only consisted of the low-level mercury field blank, the Inlet to Pond, Pond Grab, and the Under Drain 1 samples. No raw data for the CVAFS run was included in the package, and QC data also was incomplete. The metals data were evaluated against the associated quality control checks as defined by HW-3a, HW-3c, and the SAP. The majority of data were validated without any qualification. Deficiencies are discussed below.

3.1 CALIBRATIONS

3.1.1 Initial Instrument Calibration

Revision 1 of HW-3a directs the validator to verify that the instrument is calibrated at the start of each run using one blank and at least five standards. One of these five standards should be at or below the analyte's Contract Required Detection Limit (CRDL). According to the site's SAP these standards are to be prepared fresh the day of the analysis. Should less than five standards per analyte be used, the validator is to use professional judgment on whether to qualify the data. However, if the second criteria (i.e., one standard must be at or below the CRDL) is not met, then the validator is to qualify all results greater than or equal to the Instrument Detection Limit (IDL), but less than two times the CRDL as J and non-detects as UJ, plus note the deficiency in the data review narrative. Further, according to HW-3a the validator must verify the correlation coefficient of the instrument's calibration curve. Qualification of the data is required for correlation coefficients that are less than 0.995, percent differences on any individual point of greater than 30%, and a y-intercept on a calibration curve that is greater than or equal to the CRDL.

From the information provided, it appears the ICP-AES instrument calibration was based on a blank and one standard per analyte. Information on when the standards were prepared and the true concentrations of the standards was not provided with the data package. Since the curve is only a

line between two points the correlation coefficient is exactly one and the y-intercept of the calibration curve is simply the measured concentration in the calibration blank. In no case was the measured concentration of the calibration blank equal to or greater than the CRDL. The percent differences on any individual point will all be zero since the calibration curve is simply a line between the blank and the concentration of the one standard. Without knowing the true concentrations of the standards, whether or not the concentration of the standard was at or below the CRDL could not be positively assessed. However, upon review of the raw data sheet from the instrument calibration standards, it was noted that a number of the analyte concentrations likely or possibly do not meet this requirement as shown in Table 3-1.

Analyte	Measured Concentration (µg/L) *	CRDL (µg/L)
Antimony	109.05 / 106.90	60
Arsenic	13.154 / 13.295	10
Barium	945.12 / 957.21	200
Cadmium	119.24 / 117.34	5
Chromium	21.237 / 21.615	10
Copper	37.017 / 37.467	25
Iron	3,542.1 / 3,562.7	100
Manganese	887.67 / 881.48	15
Nickel	434.95 / 429.85	40
Selenium	10.881 / 11.048	5
Zinc	1,136.5 / 1,122.8	20

TABLE 3-1: CONCENTRATIONS OF SELECT METALSIN THE INSTRUMENT CALIBRATION STANDARDS

*October 31/Nov. 1 Analytical Run Results.

According to the laboratory, the initial instrument calibration procedure followed is in compliance with the actual method (EPA 200.7) as required by New York State Analytical Services Protocol (NYS ASP) which was not updated to conform with the revised federal guidelines. Therefore, while the initial instrument calibration for the ICP-AES run was not fully in compliance with HW-3a, the data was accepted unqualified.

The initial instrument calibration protocols in HW-3c for mercury are the same as that in HW-3a. All initial instrument calibration information was provided for the AA instrument and all criteria were met. No calibration information was included in the data package for the CVAFS run.

3.1.2 Initial and Continuing Calibration Verification

Initial and continuing calibration verification (ICV and CCV) standards are required to verify the calibration curve of the instrument and check for drift in the calibration. ICV standards are run immediately after constructing the calibration curve and CCV standards must be run after every ten analytical samples or every two hours, whichever is more frequent, and at the end of the sample analysis run. The federal mercury guidance, HW-3c, calls for an additional CCV to be run immediately after the initial calibration blank (ICB). Further, according to the Lockwood SAP, the ICV and CCV true concentrations should not be at a concentration used during the construction of the calibration curve.

ICV and CCV samples were run at the proper position in the analysis run sequences and at the proper frequencies for the ICP-AES run. The concentrations used were not the same as the standards used to generate the calibration curves. The concentration used for the ICV/CCVs was 2,000 μ g/L for all analytes, except for potassium which was 10,000 μ g/L as specified by the method used (EPA 200.7). The ICV/CCV recoveries for arsenic for CCV-5 in the October 31st, 2019 run and aluminum in CCV-2 for the November 1st run were greater than the acceptable limits (90% - 110%) at 122% and 112% respectively. Sample results greater than the IDL associated with these failing calibration verification standards are to be qualified as estimated high (J+). Arsenic concentrations for Leak Detection System, Under Drain 1, Under Drain 2, Under Drain 3, Keuka Upstream, Keuka Downstream, and GW Dep Drain 3 met that criteria.

The mercury analysis used 2.0 μ g/L as one of the six points in the calibration curve and for the ICV/CCV samples. According to the site's SAP, the ICV and CCVs should be independently prepared and at a concentration not used to construct the calibration curve for AA analysis. No sample data were flagged as a result, but this practice of using the same concentration for the ICV and CCVs as was used to construct the calibration curve should be discontinued, especially since doing so will not disrupt construction of a proper calibration curve because HW-3c requires only five points not six. All ICV/CCV recoveries were within acceptable limits (85-115%) for mercury during the AA run. ICV/CCV data are not required, nor provided for the CVAFS run.

A CRDL check standard (CRI or CRA sample) is no longer required by the EPA as indicated by its absence from HW-3a and HW-3c, respectively. However, the site's SAP calls for the CRI

check sample to be run at the beginning and end of every sample analysis run and after every 20 analytical samples or every eight hours, whichever is more frequent, to verify linearity of the instrument at the low end of its range. The CRI sample is to include every analyte with the exception of aluminum, barium, calcium, iron, magnesium, potassium, and sodium. CRI samples were included at the proper position in the run and at the proper frequency; however, one non-excluded analyte, boron, was missing from the CRI check sample. Boron results greater than the IDL but less than two times the CRDL were flagged as useable estimates as a result of this deficiency, including client samples 9306-SH, Keuka Upstream, Keuka downstream, and the Surface Water Duplicate.

The *New York State Department of Environmental Conservation's Analytical Services Protocol* (ASP, September 1989, Rev 7/2005) calls for analyte concentrations in the CRDL check standard to be near the CRDL. The concentrations used for the CRI samples were two times the CRDL. To accurately test the CRDL as is the purpose of this sample, the concentrations should be decreased to reflect each analyte's CRDL.

The recovery criteria are rather loose for the CRDL check standard. Per the site's SAP, the percent recoveries must be "reasonable". During this analysis "reasonable" was taken to be between 85% and 115%. Four failing results were observed in the CRDL check standards prepared for this SDG. The results for chromium in the initial CRI and selenium in the final CRI were above the acceptable percent recovery range at 120 and 116% respectively for the October 31, 2019 run. The results for zinc were greater than the acceptable percent recovery range in the final CRI for the November 1, 2019 run at 119%. The 84.8% recovery for arsenic for the initial CRI for the October 31, 2019 run was considered acceptable. Sample results associated with these failing CRI results are to be qualified if they fall within the applicable range of greater than the IDL but less than five times the CRDL. Sample results that meet these criteria include:

- Selenium concentrations in Under Drain 2 and Under Drain 3; which were qualified as bias high (J+); and,
- Chromium concentrations in 8404, 8909-D, and GW Dep Drain 3, which were qualified as bias high (J+).

None of the associated zinc results fell within the applicable range.

The site's SAP calls for the mercury CRA check standard to be run at the beginning of every sample analysis run and after every eight hours. The proper concentration for the CRA standard according to the method used (EPA 245.1) is greater than 10 times the IDL but less than the midpoint of the curve, i.e., between 1.4 and 5.0 μ g/L. A CRA check standard is not required per EPA Method 1631 nor provided for the CVAFS run.

A CRA check standard for mercury was reported with the quality control data summary for each AA run, but at a true concentration of less than the proper range at 0.2 μ g/L. However, a review of the raw data shows that two additional standards were run immediately following the ICB; one at 0.2 μ g/L and one at 2.0 μ g/L. The reported standards and the unidentified standards run at 2.0 μ g/L, which was not reported in the quality control data summary had a percent recovery within the acceptable limits.

3.2 BLANKS

Initial and continuing calibration blanks (ICBs and CCBs) were run during the ICP-AES analyses at the proper positions in the analysis run sequence (after ICV and each CCVs, before the first analytical sample, and after the last analytical sample) and at the correct frequencies of after every ten analytical samples or every two hours, whichever is more frequent. The federal mercury guidance, HW-3c, calls for an additional CCV/CCB set to be run immediately after the ICB during AA analysis. A number of QC samples and several client samples were analyzed in between the ICB and first CCV/CCB set. This sequencing failure should be corrected prior to the next event analyzed under this contract. The concentrations of the mercury ICBs and CCBs during both runs were all acceptable. EPA Method 1631 does not require ICBs and CCBs and none were provided with the CVAFS QC summary data set.

In the ICP-AES analytical run on October 31, 2019, CCB-3 had chromium and copper concentrations greater than the IDL but less than the CRDL. CCB-3 was repeated immediately with no intervening samples and passing results. Therefore, only sample results between the passing CCB-2 and the failing CCB-3 were associated with this failing blank. For the November 1, 2019 run, concentrations greater than the IDL, but less than the CRDL were reported for calcium, iron, and magnesium in CCB-1, boron and barium in CCB-2, and barium in CCB-4. Per HW-3a, client sample results associated with these failing blanks with measured concentrations

greater than or equal to the IDL, but less than the CRDL must be reported as the CRDL concentration with a qualification of "U". The requirement to adjust the reported concentrations of samples with measured concentrations between the CRDL and the IDL when the concentration of an associated blank is within the same range is not present in the state protocol. However, since the EPA protocol is specified in the site's SAP, this more stringent requirement is followed herein.

The were no affected results for chromium, calcium, magnesium, iron, and boron as the associated results were non-detect or greater than the CRDL. The Inlet to Pond result was affected by the failing CCB for barium, while the 8909-D and 8909-SH results were affected by the failing CCB for copper.

Criteria for evaluation of negative bias using negative results found in the raw data for ICB and CCB samples are detailed in HW-3a. The raw data included in the laboratory data package did not report the negative results, only listing such result as less than zero. Therefore, this criterion could not be evaluated.

One preparation blank or method blank was prepared for each run/day. Aluminum, calcium, and iron were reported at concentrations greater than the IDL but less than the CRDL the preparation blank for the November 1, 2019 run. Per HW-3a results associated with the method blank shall be reported as the CRDL value with a "U" qualification if the result is greater than the IDL but less than the CRDL. The were no affected results for aluminum, calcium, and iron as the associated results were either non-detect or greater than two times the CRDL. All other method blanks were acceptable.

3.3 INTERFERENCE CHECK SAMPLES

One set of interference check samples (ICSs) consisting of an interferent solution (ICS-A) and analyte-interferent mix solution (ICS-AB) was run at the start and end of both ICP-AES sample analysis runs as required. The ICS-A and ICS-AB solutions contain known concentrations of four proven interfering compounds, aluminum, calcium, iron, and magnesium. It is of note that the composition of the ICS-AB solution is not inclusive of the analytes measured as part of this sampling program. The ICS-AB solution should be expanded to include antimony, arsenic, boron, potassium, selenium, and sodium in future cases under this contract.

Results of the four analytes in the ICS-A sample should be within \pm CRDL of the true concentration according to HW-3a or within $\pm 2 \times$ CRDL according to the NYS ASP. None of the ICS-A results for the four interfering compounds met the state or federal criterion. It is noted by the laboratory in the case narrative that the true concentrations for these compounds in both solutions are double the maximum concentration of the instrument's linear range. Therefore, while noted, no results are qualified base on these failing QC results.

Analytical results for the ICS solution results for iron were outside the acceptable percent recoveries (80% - 120%) in all eight ICS samples over both analytical runs, with reported percent recoveries between 60.9% and 63.4%.

Nine client samples in the SDG (8908-SH, GW Dep Drain 1, Leak Detection System, Under Drain 1, Under Drain 2, Under Drain 3, GW Dep Drain 3, Inlet to Pond, and Pond Grab) were reported as having an interferent concentration, specifically calcium, at similar interfering levels (i.e., 250 mg/L for aluminum, calcium, magnesium, and 100 mg/L for iron). Therefore, the iron results were qualified as estimated low (J-) in 8908-SH, Under Drain 1, Under Drain 2, Under Drain 3, GW Dep Drain 3, and Inlet to Pond, and as a usable estimate (UJ) for GW Dep Drain 1 and the Leak Detection System as these iron results were non-detect.

In addition to the percent recovery analysis, the EPA guidance in HW-3a includes steps for reviewing the ICS-A and ICS-AB raw data for analytes *not* present in the true solutions. Any analyte not present in the true solution that produces an instrument reading greater than its IDL indicates the possibility of a false positive created by the presence of interferents. Conversely, any analyte not present in the true solution that produces an instrument reading lower than its negative IDL indicates the possibility of a false negative due to the presence of interferents. Since the raw data included in the laboratory data package did not report the negative results, the presence of false negatives could not be assessed.

The Barium concentration in the final ICS-A sample for the November 1, 2019 run was greater than the IDL. The associated barium Pond Grab result greater than or equal to the IDL were qualified as bias high (J+) for a possible false positive effect due to calcium interference.

3.4 MATRIX SPIKES

Two pre-digestion matrix spikes were performed for the October 31, 2019 analytical run, and one pre-digestion matrix spike was performed for the November 1, 2019 analytical run. Matrix spikes are not required for calcium, magnesium, potassium, and sodium and these analytes were excluded from the matrix spike. Boron was also excluded from the matrix spike, yet this analyte is required for this quality assurance check and should be added to future analyses. The 9306-SH sample and Leak Detection System samples were used to prepare the matrix spikes for the October 31, 2019 run and the Pond Grab sample was used for the November 1, 2019 run. Qualifications based on matrix spikes that do not meet technical criteria are only to be applied to the sample used to prepare the matrix spike per HW-3a protocol.

According to the ICP-AES method, EPA 200.7, the spike is to be made at a concentration equal to 0.2 mg/L for all analytes, or 100 times the IDL, whichever is greater. The spike concentrations for arsenic (0.04 mg/L), cadmium (0.05 mg/L), and selenium (0.01 mg/L) were made too low. While spike concentrations for aluminum (2.0 mg/L), antinomy (0.5 mg/L), barium (2.0 mg/L), copper (0.25 mg/L), iron (1.0 mg/L), manganese (0.5 mg/L), nickel (0.5 mg/L), and zinc (0.5 mg/L) were too high. No qualifications were made based on this observation, but spike concentrations should be adjusted for future work under this contract.

Boron concentrations in 9306-SH, the Leak Detection System, and the Pond Grab client sample results were qualified as usable estimates due to the omitted matrix spikes. The matrix spike recoveries for the 9306-SH were greater than the acceptable limits (75-125%) for aluminum and iron at 126% and 161% respectively, and less than the acceptable limits for selenium at 65%. The matrix spike recoveries for the Leak Detection System were less than the acceptable limits for barium, and selenium at 31.1% and 71% respectively. The matrix spike recoveries for the Pond Grab were less than the acceptable limits for barium, and selenium, copper, selenium, and zinc at 129, 127, 128, 197, and 137% respectively. Post-digestion spikes were performed with acceptable results for 9306-SH and the Leak Detection System. The results of the post-digestion spike for the Pond Grab were greater than the acceptable limits for cadmium, copper, iron, nickel, selenium, and zinc at 136, 128, 128, 131, 205, and 143% respectively.

For matrix spike recoveries below 30 percent or between 30 and 74%, with a post-digestion spike greater or equal to 75% the affected results greater than the IDL are qualified as estimated J. Therefore, the barium results for the Leak Detection System and the Pond Grab were qualified as J. For matrix spike recoveries between 30 to 74% with an acceptable post-digestion spike, non-detect affected results are qualified as estimated. Therefore, the selenium result for the Leak Detection System and 9306-SH are qualified as UJ. For matrix spike recoveries greater than 125%, with an acceptable post-digestion spike result, the affected results greater than the IDL are qualified as estimated while the non-detect results are not qualified. Therefore, the iron result for 9306-SH is qualified as J.

For pre and post-digestion matrix spike recoveries above 125% results greater than the IDL are qualified as estimated high, while non detect results are not qualified. Therefore, the Pond Grab result for selenium are qualified as J+.

The 9306-SH, GW Dep Drain 3, and Inlet to Pond client samples were used for the AA matrix spikes. The GW Dep Drain 3 matrix spike percent recovery of 79.6% was flagged for being outside of the laboratories acceptable range of 80.8 to 119% but was within the HW-3C acceptable range of 75-125%, therefore no data was qualified based on this result. The Inlet to Pond percent recovery was reported as 45.2%, below the acceptable range. The Inlet to Pond mercury result for the AA analysis was non-detect and per HW-3C was classified as estimated (UJ). Under Drain 1 was used for the CVAFS matrix spike and the percent recovery was in the acceptable range.

3.5 DUPLICATE SAMPLES

Two duplicates were prepared in the laboratory for the October 31, 2019 analytical run, and one duplicate was prepared for the November 1, 2019 run. For the October 31, 2019 run, 9306-SH and the Leak Detection System client samples were used for the ICP-AES laboratory duplicate sample and the Pond Grab sample was used for the November 1, 2019 run. The acceptable criteria with respect to the duplicate samples were met.

Client samples 9306-SH, GW Dep Drain 3, and Inlet to Pond were used for the AA laboratory duplicates. Duplicate sample analysis was not performed on a client sample for the CVAFS run,

but a matrix spike duplicate was provided. All AA laboratory duplicates and the CVAFS matrix spike duplicate resulted in acceptable RDPs.

In addition to the laboratory duplicate, the Lockwood SAP stipulates a field duplicate be taken at a frequency of one duplicate per sampling event per matrix. A form (A.4) evaluating the field duplicates was appended to the quality control documentation for metals in Attachment 3. For the groundwater matrix a duplicate was performed for 8909-D, for the surface water matrix a duplicate was performed for 8909-D, for the surface water matrix a duplicate was performed for 8909-D, the RPD was greater than the acceptable percentage of 20% and the sample and field duplicate were greater than five times the CRDL for iron. Based on HW-3a the sample and the duplicate iron results are qualified as estimated (J). Also for 8909-D, for aluminum and zinc the sample and duplicate results were less than five times the CRDL and the absolute difference was greater than the CRDL. Therefore, the aluminum and zinc results for 8909-D and its duplicate were qualified as estimated (J). For the surface water sample and duplicate all of the results were acceptable.

3.6 LABORATORY CONTROL SAMPLE

One ICP-AES laboratory control sample (LCS) was analyzed with each day/run at proper concentrations. Three mercury LCS were ran as well, two with the AA analysis and one with the CVAFS analysis. All percent recoveries were within acceptable limits.

3.7 SERIAL DILUTIONS

Serial dilutions were made at a 1:5 ratio to reduce concentrations of interfering analytes within the matrix to evaluate possible matrix effects. Two serial dilutions were prepared for the October 31, 2019 analytical run, and one serial dilution was prepared for the November 1, 2019 run. The data must be qualified as usable estimates if the diluted sample is not within 10% of the original sample for all analytes with initial concentrations greater than 50 times the IDL. If the diluted concentration is greater than 100% different than the original concentration, all associated data must be rejected. Analytes with initial concentrations less than 50 times their IDL are not evaluated.

For the October 31, 2019 run, the client sample 9306-SH and the Leak Detection System were subject to serial dilution. For the November 1, 2019 run, the client sample Pond Grab was subject

to serial dilution. The laboratory narrative stated that potassium and sodium for 9306-SH, calcium, potassium and sodium for Leak Detection System, and boron, calcium, potassium, and sodium for Pond Grab did not meet the 10% RPD criteria. The QC summary sheets for serial dilution only reported an RPD greater than 10% for calcium and sodium in the Leak Detection System and boron, calcium, potassium and sodium for Pond Grab. The laboratory narrative correctly stated the failing serial dilution results and the QC Summary sheets provided in Attachment 3 were corrected.

Based on the HW-3a protocol, analytes failing the technical criteria result in the qualification of that analyte only in the sample from which the serial dilution was made. Thus, the potassium and sodium results in 9306-SH; the calcium, potassium, and sodium results in the Leak Detection System; and the boron, calcium, potassium, and sodium results in the Pond Grab were flagged as estimated (J) based on these failing serial dilution results. Other serial dilution results that were flagged in the QC Summary sheets were determined to be acceptable because the sample concentrations were less than 50 times the IDL, so no qualifications were made. These results include: arsenic, barium, and iron in the Pond Grab; arsenic and manganese in the Leak Detection System; and barium, boron, copper, and manganese in 9306-SH.

3.8 INSTRUMENT DETECTION LIMITS AND LINEAR RANGES

Instrument detection limits are to be verified on a regular basis. The frequency with which the laboratory is to verify the IDLs is unclear. The state guidance stipulates IDLs be verified annually. The Lockwood Ash Disposal Site's SAP indicates that the IDLs be determined within six months of the analysis. The federal guidance, neither HW-3a nor HW-3c, has guidance on the frequency with which IDLs should be verified. The ICP-AES Method Detection/ Reporting Limits (updated 9/3/19) provided with the data package was updated approximately two weeks prior to the sampling event and, therefore, is acceptable per state guidance and the SAP. The date of IDL certification for AA, dated 2/12/19 and updated 12/12/2018, is acceptable per state guidance and but not the SAP.

Another non-compliance issue of note is the IDLs for selenium and arsenic are not less than half their corresponding CRDL. This is a requirement of both the state and EPA guidance documents. No data are flagged as a result of this observation.

ICP-AES linear range determinations were not provided with the data package. The federal guidance, HW-3a, does not specify the frequency at which the instrument's linear ranges should be verified. The linear range determination is to be made within six months of the analysis according to the SAP. Again, while no data have been flagged due to this oversight, it should be corrected for future data packages under this contract.

4 WET CHEMISTRY

Wet chemistry results for alkalinity, ammonia, color, conductivity, chloride, sulfate, total dissolved solids (TDS), and total organic carbon (TOC) were included in the data package. There was one field duplicate analyzed per matrix (surface water and groundwater) with this event. Data from the field duplicate and its sample results were compared using Form A.4. Unlike metals, CRQLs are not established for conventional parameters, therefore, RPD is calculated for all comparisons where at least one of the results is greater than the reporting limit. The absolute difference is not calculated for any comparison. The completed Form A.4s are appended to the quality control documentation for wet chemistry in Attachment 3. All field duplicate comparisons for the groundwater matrix were acceptable. The surface water duplicate (Keuka Upstream) result for conductivity had an RPD of 20.8% and the result for TDS had an RPD of 58.5%. The conductivity and TDS results for Keuka Upstream and its duplicate Surface Water Dup were qualified as J.

The majority of quality control checks were within acceptable limits for the wet chemistry analytical data. The exceptions are detailed in the subsections below.

4.1 ALKALINITY

The site's SAP calls for one reference standard and one duplicate in every ten client samples for alkalinity analyses. The laboratory performed three LCS, or reference standard, on September 23, 2019 for 23 samples, and two on October 4, 2019 for the remaining 2 samples. The laboratory performed one matrix spike and matrix spike duplicate pair on September 23, 2019, and two on October 4, 2019. Two laboratory duplicates were performed for September 23, 2019 (one on a client sample) but none for October 4, 2019. One method blank was performed with each run. All quality control samples were within acceptable limits, the method blank results were listed at the detection limit. No qualifications were necessary.

4.2 Ammonia

All samples for this event were analyzed in two ammonia runs, one on September 30, 2019 and one on October 2, 2019. The site's SAP calls for one duplicate per SDG for ammonia analyses. EPA method 350.1 for ammonia also requires initial and continuing calibration verifications and blanks at the beginning and end of each run, as well as, after every tenth client sample for

instrument calibration quality control checks. Additionally, one method blank, one LCS, and one reference sample are required per batch of samples and one matrix spike on a minimum of 10% of client samples per EPA method 350.1. All required quality control checks were performed; however, the two reported duplicate results (one with the September 30, 2019 run and one with the October 2, 2019 run) were for samples from a different data package. Matrix spike/matrix spike duplicate pairs were performed on samples from the data package. The SAP is not specific whether it is an acceptable practice to use a matrix spike/matrix spike duplicate pair to meet this criterion in lieu of duplicate analysis on an unspiked client sample. No data were flagged based on this observation.

Reported quality control results were acceptable except for one failing CCV during the October 2, 2019 run. The failing CCV result was not associated with any client samples. The percent recoveries on the September 30, 2019 samples were less than the acceptable range of 80 - 115% with a percent recovery of 66.6% and 72.7%, respectively. The October 2, 2019 CRI samples were also less than the acceptable range at 54.4% and 57.3% respectively. All ammonia results greater than the IDL (0.1 mg/L), but less than five times the IDL (0.5 mg/L), were qualified as estimated low (J-) based on this failing QC result. This includes the results for 1842, 8404, 8911-SH, 8942-D, Under Drain 1, Under Drain 3, Inlet to Pond, and Pond Grab.

4.3 COLOR

All samples for this event were analyzed in two runs one on September 20, 2019 and one on October 1, 2019. Three duplicate samples and two method blanks were performed on September 20, 2019, and one duplicate and one method blank on October 1, 2019. The reported QC results were acceptable and the duplicate frequency was as required. Color blanks are to be run after every ten samples according to the site's SAP. Therefore, the frequency of blanks was low. No qualifications were made based on this observation.

4.4 CONDUCTIVITY

Client samples were analyzed for conductivity in two runs performed on September 20, 2019 and one on October 4, 2019. The site's SAP requires an LCS to be analyzed every ten client samples, but only one LCS was analyzed per run. Three duplicates were performed for the entire data

package of 26 client samples, meeting the one in 20 client samples as required per the site's SAP. The percent recoveries of the LCS sample and the RPD of the duplicate analysis were acceptable.

No blank was reported for conductivity measurements. The site's SAP stipulates one blank be analyzed daily with a resulting concentration of less than 2 μ mhos/cm. No results were flagged based on this observation, but a conductivity blank should be analyzed and reported in the future.

4.5 CHLORIDE AND SULFATE

Chloride and sulfate were measured using ion chromatography EPA method 300.0. The event's samples were analyzed in two analytical runs beginning on October 4, 2019 and October 7, 2019. The instrument calibration, initial and continuing calibration verifications, initial and continuing calibration blanks, and method blanks were performed as required. It was observed that the concentration of the ICV/CCVs used, 10 mg/L, was not mid-range of the calibration curve (0 to 100 mg/L) as required by EPA method 300.0. In the future, the concentration of the ICV/CCVs should be closer to 50 mg/L. No qualifications were made based on this observation.

The site's SAP calls for one duplicate in every 20 client samples for chloride and sulfate analyses while the EPA method used specifies one matrix spike for a minimum of 10% of client samples. The laboratory performed five matrix spike and matrix spike duplicate pairs on client samples. No laboratory duplicates were performed on client samples, but acceptable results for two duplicates for chloride only in separate client samples were provided in the data package. The EPA method 300.0 stipulates that the concentration of the spike added be the same as that used for the LCS. The laboratory used different concentrations for these quality control samples. No data were flagged based on these observations.

The percent recovery for the all five matrix spikes were within the acceptable range. The matrix spike percent recovery for Pond Grab was 87.6% and was flagged by the laboratory as less than the laboratory's acceptable limit of 90%. However, the percent recovery is within the SAP's acceptable limit of 75% - 100%. Further, the SAP states that the results of a matrix spike for chloride and sulfate are only applicable when the added concentration is at least 25% of the sample concentration. In this case it was not, therefore no data was qualified based on the Pond Grab matrix spike result.

4.6 TOTAL DISSOLVED SOLIDS

Similar to conductivity, no blank was reported for TDS measurements. The site's SAP stipulates one blank be analyzed daily with a result less than the reporting limit. No results were flagged based on this observation, but a TDS blank should be analyzed and reported in the future.

The site's SAP calls for one duplicate sample analysis to be performed on a minimum of one sample per SDG. The event's samples were analyzed on two different days, one passing duplicate analysis was performed for each day. The Site's SAP also calls for one reference sample in ten client samples. Three passing reference sample (LCS) were reported in the data package over the two days.

4.7 TOTAL ORGANIC CARBON

The client samples were analyzed in one run beginning on October 1, 2019. Per the Lockwood Ash Disposal Site's SAP, a matrix spike sample, a LCS, and a duplicate sample is to be performed at the frequency of one per ten samples. Two matrix spike and matrix spike duplicate pairs were performed, one LCS, and no laboratory duplicates were included the laboratory data package, which did not meet the frequency requirements. No data were flagged based on these observations.

The percent recoveries and RPDs of the matrix spike and matrix spike duplicate pairs, respectively, and were all within acceptable limits. The LCS percent recovery was within the acceptable limit.

An initial and a mid-run CRI check standard were performed during the run. The initial and midrun CRI check standard resulted in a percent recovery of 129% and 120% respectively, which was within the laboratory's acceptable range of 50-150%. However, the acceptable range per the Site's SAP is between 85 and 115%. As a result, all total organic carbon sample results above, but less than five times the reporting limit are qualified as estimated high (J+). These samples include 1842, 8404, 8908-SH, 8909-D, 8942-D, GW Dup 8909-D, Leak Detection System, Keuka Upstream, Keuka Downstream, and the Surface Water Dup.

5 CORRECTNESS AND USABILITY SUMMARY

A summary of all qualified data is presented in Table 5-1. Most data for this SDG are considered usable in their current form. Data flagged with a J or UJ are considered usable with caution. Rejected data are considered unreliable and should not be used in any data tables or data analyses. No data was rejected.

Completeness of the laboratory analysis as defined by the Lockwood SAP is the percentage of baseline data that have not been rejected as a result of validation. Therefore, the completeness for laboratory analyses is 100% for this sample event. This exceeds the completeness goal stated in the SAP of 85% of the required laboratory analyses.

Table 5-1: Summary of Qualified Data for Lockwood Ash Disposal Site September 2019 Baseline Event

Client Sample ID	Field Measurements ¹	AI	As	в	Ba	Ca	Cd	Cr	Cu	Fe]	Hg	К	Mg	Mn	Na	Ni	Sb	Se	Zn	CON	NH ₄]	TOC	TDS
UNITS		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L u	ug/L u	ug/L u	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		mg/L r	mg/L	
1842	All J ²																					1.8J+ ¹⁷	
8401	All J ²																						
8404	All J ²						4.	4.23J+ ¹⁷													0.2J- ¹⁶ 1.	1.5J+ ¹⁷	
G-8068	All J^2																						
8908-SH	All J ²								68	89.7J- ⁵											1.	$1.4J+^{17}$	
8909-D	All J ²	1,530J ¹⁵					10	$10.3J+^{17}$ 25	25.0U ⁴ 4,8	4,870J ¹⁴									119J ¹⁵		2.	2.5J+ ¹⁷	
HS-6068	All J ²																						
8910-D	All J ²																						
8911-D	All J ²																						
8911-SH	All J ²																				0.2J- ¹⁶		
8942-D	All J ²																				0.3J- ¹⁶ 2.	2.8J+ ¹⁷	
9306-SH	All J ²			95.8J ^{7,18}					77	770J ¹¹	3	3,230J ¹³			20,600J ¹³			5.0UJ^9					
GW Dep Drain 1	All J ²								10	100UJ ⁵													
GW Dup (8909-D)	All J ²	978J ¹⁵							3,6	3,620J ¹⁴									35.6J ¹⁵		2.	$2.6J^{+17}$	
Leak Detect Syst	All J ²		$7.26J+^{3}$	915J ⁷	18.7J ⁹ 4-	448,000J ¹³			10	100UJ ⁵	5	5,740J ¹³			$90,400$ J 13			$5.0 \mathrm{UJ}^9$			2.	2.6J+ ¹⁷	
Under Drain 1	All J ²		78.9 J + 3						6,4	6,400J- ⁵											$0.1 J^{-16}$		
Under Drain 2	All J ²		18.3 J + 3						2,1	2,180J- ⁵								$7.16J+^{17}$					
Under Drain 3	All J ²		$8.42J+^{3}$						18	188J- ⁵								7.16J + 17			$0.2J^{-16}$		
GW Dep Drain 3	All J ²		$7.78J+^{3}$				4.	$4.68 J + {}^{17}$	12	12.4J- ⁵													
Inlet to Pond	All J ²				$200U^4$				2,4		$0.20 \mathrm{UJ}^{12}$										$0.3 J_{-}^{16}$		
Keuka Downstream	All J ²		5.60 J + 3	$36.3J^{18}$																		3.1J + 17	
Keuka Upstream	All J ²		6.65J+ ³	40.4J ¹⁸																$404 J^{14}$	3.		$145J^{14}$
Surface Water Dup	All J ²			$30.3J^{18}$																$498 J^{14}$	3.		$265 J^{14}$
Pond Grab	All J ²		(1)	3	225J+ ^{6,8} 58	584,000J ¹³			21	217J- ⁵	79	79,300J ¹³		2	$298,000 J^{13}$			$35.3 J^{+10}$			0.2J- ¹⁶		
Field Blank/LLHG	All J^2																						

FOOTNOTES: (When more than one qualification applies, the most stringent qualification or combination of qualifications is used, as shown.) Includes temperature, pH, & turbidity %ICS-A or ICS-AB Indicates False Positive 11 Matrix Spike Recovery > 125%, Post Spike Recovery < 125%, Post S

 2 No Reference Standard Measurements
 7 No Matrix Spike

 3 CCV between 111-125% Recovery
 8 Matrix Spike Recovery < 30%, Post Spike Recovery \geq 75%

 4 ICB or Associated CCB \geq IDL, but < CRDL</td>
 9 Matrix Spike Recovery \leq 30 -74%, Post Spike Recovery \geq 75%

 4 ICB between 50 - 79% Recovery
 10 Matrix Spike Recovery > 125%, Post Spike Recovery > 125%

¹¹Matrix Spike Recovery > 125%, Post Sp ¹²Matrix Spike Recovery ≤ 30 -74% ¹³Serial Dilution > 10%, but < 100% ¹⁴Field Duplicate RDP > 20% ¹⁵Field Duplicate Difference > CRDL

> ¹⁶CRI/CRA Check Standard Recovery < 80% ¹⁷CRI Check Standard Recovery > 115% ¹⁸No CRI Check Standard

Rev.0
<u> </u>
N
~
<u> </u>
<u> </u>
~
\sim
0
Ē
2
_

ATTACHMENT 1

Field Data Report & Chain of Custody

		Loc	kwood As	sh Landfill		4/min		Date: 9	hslig	
Well ID	SWL	рН	Temp	Turbidity	D.O.	Flow	Time	Comments		SE Dup
7741	22.43	NA	NA	NA	NA	NA	1451		on Dup	or Dup
1842	7.32	8.0	11	142	NA	NA	0925	0725		
8401	7.71	8.2	15	6	NA	NA	1445	CIRS		
8402	9.69	NA	NA	NA	NA	NA	1503			
8403	8.00	NA	NA	NA	NA	NA	1505			
8404	10.40	7.2	15	5	NA	NA	1645			
8405	Dry	-			NA	NA	1459	Dry		
8406	12.89	NA	NA	NA	NA	NA	1445	Vig		
8407	17.23	NA	NA	NA	NA	NA	1512	Dry/Dost	anded	
8908-D	6.42	7.8	17	4)	NA	NA	1350	Digrowin	UCTEEN	
8908-SH	8.01	8.8	15	3	NA	NA	1340			-
8909-D	45.74	9.6	16	7999	NA	NA	1500			
8909-SH	11.18	7.8	18	8	NA	NA	1105			
8910-D	22.91	7.6	16	4	NA	NA	1155			
8910-SH	6.48		A	ecorery	NA	NA	0700			
8911-D	26.89	7.5	14	210	NA	NA	1205			
8911-SH	25.61	8.1	11	12	NA	NA	0745	· · · · · ·		
8942-D	15.84	7.5	10	<1	NA	NA	0715			
9306-SH	9.81	7.6	11	4	NA	NA	0700	080700		-
GW DD 1	NA	7.3	15	3.21	5.12	1.275	1240	00000		
GW DD 2	NA				0111	1.015	1005	Dry		
GW DD 3	NA	7,5	20	4.45	3.67	0.200	1030	29		
GW DD 4	NA				-	01000	1007	De		
Leak Det.	NA	8.0	16	5.71	5.90	0.175	1148	Dry		
UnDr. 1	NA	7.8	14	76.9	6.89	17.25	1315			
UnDr. 2	NA	7.5	15	20.0	6.28	6.75	1223			
UnDr. 3	NA	7.5	15	16.8	4.12	0.650	1125			
Inlet to Pond	NA					0.000		Not Flowing		
UnDr. 5	NA				/		1440	Not Flawing		
Keuka US	NA	8.5	19	4.82	5.20	NA	1410	Nry		10
Keuka DS	NA	8.2	18	15,55,56		NA	1345			X
Pond Grab	NA				3101	NA	13-13	O.F.I		
Field Blank	NA	7.4	10	4	4.18		1425	Dry/Empty		



314 North Pearl Street Albany, New York 12207 518-434-4545 ♦ Fax: 518-434-0891

CHAIN (OF	CUSTC)DY	RECORD

AES Work Order#:

190920072

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Lockwood Hills LLCSampler Shame:Sampler Shame:Date IrwinLockwood Ash LF Annual $Project Name (Location)$:Sampler Shame:Client Phone No:PO #:Lockwood Ash LF Annual $Project Name (Location)$:Sampler Shame:AES SampleClient Sample ID:Date SampledTime Project Name (Location):# of Cont'sAnalysisD11842 $q/ P 9$ $O25$ P GWG5Lockwood Ash LF AnnualD28401 h/ls $ 19 9 $ $O25$ P GWGWG5D38404 $\eta 18 9 $ $ 1445$ P GWGWG5D48908-D $q 18 9 $ $ 155$ P GWGWG5D58908-SH $q 18 9 $ $ 1500$ P GWGWG5D58909-D $q 18 9 $ $ 1550$ P GWGWG5D58910-D $q 18 9 $ $ 155$ P GWGWG5D58910-SH $q 16 9 $ $Q = P$ GWGWG5D78991-SH $q 16 9 $ $Q = P$ GWGWG5D78910-SH $q 16 9 $ $Q = P$ GWGWG5D78910-SH $q 16 9 $ $Q = P$ GWGWG5D78910-SH $q 16 9 $ $Q = P$ GWGWG5D78911-SH $q 16 9 $ $Q = P$ GWGWG5D7	Client Na		Address:							
Dale IrwinLockwood Ash LF AnnualCyan Backley K AmbraClient Phone No:DateSampled Arann PermSample TypeMatrix C GCont'sAnalysisDateSample DateSample TypeMatrix C GCont'sAnalysisDateSample TypeGot Cont'sAnalysisDateSample TypeGot Cont'sAnalysisDateSample TypeGot Cont'sAnalysisDateSample SignatureGot Cont'sAnalysisDateSample SignatureSample SignatureDateSample SignatureGot Cont's	Lockw	ood Hills LLC								
Client Phone No:Lockwood Ash LF AnnualLockwood Ash LF AnnualClient Fax No:DateTime Arran P-pmSamples Signature:AnalysisDI1842 $q/ q/ q$ $O725$ P GW G S Lockwood Ash LF AnnualDI8401 $\eta_{18} 1q$ 1445 Φ GW G S Lockwood Ash LF AnnualD8401 $\eta_{18} 1q$ 1445 Φ GW G S Lockwood Ash LF AnnualD8404 $\eta_{18} 1q$ 1445 Φ GW G S D Y 8908-D $\eta_{18} 1q$ 1550 Φ GW G S D Y 8908-SH $\eta_{18} 1q$ 1340 Φ GW G S D Y 8909-D $\eta_{18} 1q$ 1500 Φ GW G S D Y 8909-SH $\eta_{18} 1q$ 11550 Φ GW G S D Y 8910-D $q_{18} 1q$ 1155 Φ GW G S D S 8910-D $q_{18} 1q$ 1255 Φ GW G S D G 8910-SH $\eta_{19} 1q$ 1255 Φ GW G S D G 8910-SH $\eta_{19} 1q$ 1255 Φ GW G S D G 8910-SH $\eta_{19} 1q$ 1255 Φ GW G S D G G	Send Rep	ort to:	Project Nam	e (Location):				Samplers	Name:	
PO f:Sample's Signature:Client Sample ID:Date SampleSample's Signature: $AES \\ SampleClient Sample ID:Sample Po f:Matrix C G Gf of Con'sAnalysisD 1842q/ q qO/CGW GSample's Signature:Matrix C G Gf of Con'sAnalysisD 1842q/ q qO/CGW GSLockwood Ash LF AnnualD 8404 s q s q GW GSSomple's Signature:h' of Con'sAnalysisD 8404 s q $	Dale II	rwin		1 4 1 7 7	. 1			2	2.1	NZ A .
PO f:Sample's Signature:Client Sample ID:Date SampleSample's Signature: $AES \\ SampleClient Sample ID:Sample Po f:Matrix C G Gf of Con'sAnalysisD 1842q/ q qO/CGW GSample's Signature:Matrix C G Gf of Con'sAnalysisD 1842q/ q qO/CGW GSLockwood Ash LF AnnualD 8404 s q s q GW GSSomple's Signature:h' of Con'sAnalysisD 8404 s q $	Client Pho	one No:	☐ Lockwo	od Ash LF	Annual			Hyar	1 Isausie	M. K. Amba
AES Sample IDClient Sample ID:Date Sample SampleTime Arran ParmSample Type Matrix \mathcal{H} of Cont'sAnalysisD 1842 $Q/ Q/ Q$ $Q/ ZS/ Q $ $Q/ Q $ <			PO #:					Samplers	Signature:	TAN
Sample IDClient Sample ID: SampledSampled P=pmSample Type Matrix C <b< td=""><td></td><td>x No:</td><td></td><td>·</td><td></td><td></td><td></td><td></td><td>10</td><td></td></b<>		x No:		·					10	
Sample IDChelit Satisfie ID.Sampled P=pmMatrix Matrix Matrix CCGControl ControlAntifysisD11842 $q /q /q /q$ $O225$ P GWG5Lockwood Ash LF AnnualD8401 $\eta _{16} _{19} _{19} _{1445}$ A GWG5Field pH, Temp, TurbidityD8404 $\eta _{18} _{19} _{19} _{1445}$ A GWG5Field pH, Temp, TurbidityD8404 $\eta _{18} _{19} _{19} _{1445}$ A GWG5Field pH, Temp, TurbidityD8908-D $\eta _{18} _{19} _{1350}$ A GWG5Field pH, Temp, TurbidityD8908-SH $\eta _{18} _{19} _{1350}$ A GWG5Field pH, Temp, TurbidityD8908-SH $\eta _{18} _{19} _{1300}$ A GWG5Field pH, Temp, TurbidityD8908-SH $\eta _{18} _{19} _{1300}$ A GWG5Field pH, Temp, TurbidityD8908-SH $\eta _{18} _{19} _{1300}$ A GWG5Field pH, Temp, TurbidityD8908-SH $\eta _{18} _{19} _{1155}$ B GWG5Field pH, Temp, TurbidityD8909-SH $\eta _{18} _{19} _{1155}$ B GWG5Field pH, Temp, TurbidityD8910-SH $\eta _{18} _{19} _{1205}$ B GWG5Field pH, Temp, TurbidityD8911-SH $\eta _{18} _{19} _{1205}$ A GWG5		Oliant Coursels ID:			Sample	e Type	;			Amalyzaia
Image: Constraint of the second s		Cheffit Sample ID.	Sampled	1	<u>Matrix</u>	C	G	Cont's		Analysis
$0 \ge 1$ 8401 $ 1 _8 19$ 1445 $A \boxdot$ GW G 5 Field pH, Temp, Turbidity $0 \ge 3$ 8404 $ 1 _8 19$ 1645 GW G 5 $0 \ge 4$ 8908 -D $ 1 _8 19$ 1350 $A \bigcirc$ GW G 5 $0 \le 4$ 8908 -D $1 _8 19$ 1340 $A \bigcirc$ GW G 5 $0 \le 5$ 8909 -D $1 _8 19$ 1340 $A \bigcirc$ GW G 5 $0 \le 6$ 8909 -D $9 _18 19$ 1300 $A \bigcirc$ GW G 5 $0 \le 6$ 8909 -SH $9 _18 19$ 1500 $A \bigcirc$ GW G 5 $0 \le 7$ 8909 -SH $9 _18 19$ $155 \bigcirc$ GW G 5 $0 \le 7$ 8910 -D $9 _18 19$ $155 \bigcirc$ GW G 5 $0 = 9$ 8910 -D $9 _18 19$ $1205 ~$ $A \odot$ GW G 5 $0 = 7$ 8911 -D $9 _18 19$ $1205 ~$ <td>001</td> <td>1842</td> <td>9/19/19</td> <td>0725 P</td> <td>GW</td> <td></td> <td>G</td> <td>5</td> <td>Lockw</td> <td>ood Ash LF Annual</td>	001	1842	9/19/19	0725 P	GW		G	5	Lockw	ood Ash LF Annual
0.94 8908-D 118/19 1350 A GW G 5 0.5 8908-SH 9/18/19 1340 A GW G 5 0.6 8909-D 9/18/19 1340 A GW G 5 0.6 8909-SH 9/18/19 1340 A GW G 5 0.7 8909-SH 9/18/19 1105 A GW G 5 0.5 8910-D 9/18/19 1105 A GW G 5 0.6 8910-SH 9/18/19 1155 A GW G 5 0.7 8910-SH 9/18/19 1255 A GW G 5 0.7 8910-SH 9/18/19 1255 A GW G 5 0.7 8910-SH 9/18/19 1255 A GW G 5 0.10 8911-D 9/18/19 1205 A GW G 5 1.1 8942-D 9/19/19 0745 A GW	002	8401	9/18/19	A	GW		G	5	Field p	H, Temp, Turbidity
399 3908 -SH $9 18 19$ 1340 $\overline{0}$ <	223	8404	9/18/19		GW		G			
11617 340 5 11617 340 5 1617 1500 6 $6W$ G 1617 1500 $6W$ G 5 11617 1500 $6W$ G 5 11617 11617 1500 $6W$ G 5 11617 11617 1500 $6W$ G 5 11617 11617 1105 P GW G 5 11617 11617 1105 P GW G 5 11617 11617 1150 P GW G 5 110817 911617 0800 P GW G 5 110817 911617 1205 A GW G 5 111817 911617 9715 A GW G 5 111817 9715 B GW G 5 63 1102 3204	0.54	8908-D	9/18/19	1550 0						
O_{1} O_{1} O_{1} O_{1} O_{1} O_{1} O_{1} O_{1} O_{2}	20		9/18/19	1340 D						
OS 8910-D $9 _{18} _{9} _{155}$ P GW G 5 O 9 8910-SH $9 _{19} _{19}$ 0800 P GW G 5 O 9 8911-D $9 _{18} _{19} _{1205}$ A GW G 5 O 8911 -SH $9 _{19} _{19}$ 0745 A GW G 5 O 8942 -D $9 _{19} _{19}$ 0745 A GW G 5 O 8942 -D $9 _{19} _{19}$ 0745 P GW G 5 $Shipment Arrived Via:FedExSpecial Instructions/Remarks:Page 1 of 3Special Instructions/Remarks:Page 1 of 3I10ay3 DayNormal2 -Day5 DaySpecial by: (Signature)DateRelinquished by: (Signature)Received by: (Signature)DateTime$	006		9/18/19	1500 P						
G 8910-SH $\eta q q$ $0 \otimes vol$ \overline{P} GW G -5_0 $observation$ $only$ $0/0$ 8911-D $q 8 q$ 1205 \overline{P} GW G 5 $0/1$ 8911-SH $q q q$ 0745 \overline{P} GW G 5 $0/1$ 8942-D $q q q$ 0745 \overline{P} GW G 5 $0/1$ 8942-D $q q q$ 0745 \overline{P} GW G 5 Shipment Arrived Via: FedEx $FedEx$ UPSClient \overline{AES} $Other:$ $Peidein$ $Special Instructions/Remarks:Page 1 of 3Turnaround Time Requested: 1 Day 3 Day Normal 2 - Day 5 Day Received by: (Signature)DateTime$	<u>buj</u>									
10 $8911-D$ $1/8 19$ 1205 A GW G 5 11 $8911-SH$ $9 19 19$ 0745 A GW G 5 12 $8942-D$ $9 19 19$ 0715 A GW G 5 12 $8942-D$ $9 19 19$ 0715 A FP GW G 5 $Shipment Arrived Via:FedExASpecial Instructions/Remarks:Page 1 of 3PGWG5I1Day3DayNormalPSpecial Instructions/Remarks:Page 1 of 3PDateTimeI1DaySSpecial Instructions/Remarks:Page 1 of 3PDateTime$	208		9/18/19							
110 1205	209		9/19/19	0800 P				-50	observa	tion only
8942-D 1919 9 0715 P Shipment Arrived Via: FedEx UPS Client AES Other: FedEx UPS Client AES Other: Page 1 of 3 Turnaround Time Requested: Page 1 of 3 1 Day 3 Day Normal 2 - Day 5 Day Relinquished by: (Signature) Received by: (Signature) Date Time	010_		9/18/19	1205 D						
Shipment Arrived Via: FedEx P Client FedEx UPS Client AES Other: Page 1 of 3 Turnaround Time Requested: Page 1 of 3 1 Day 3 Day 2 -Day 5 Day Relinquished by: (Signature) Received by: (Signature)	<u>)//</u>			0145 P						
FedEx UPS Client AES Other: Page 1 of 3 Turnaround Time Requested: 1 Day 3 Day Normal 2 -Day 5 Day Relinquished by: (Signature) Received by: (Signature) Date Time	P12		9.119/19	0715 P						
Turnaround Time Requested: 1 Day 3 Day 2 -Day 5 Day Received by: (Signature) Date Time	1	(start and star		p			Kem	aiks.		
I Day 3 Day Normal 2 - Day 5 Day Relinquished by: (Signature) Received by: (Signature) Date Time			her:	Pa	ige 1 of 3					
Day 5 Day Relinquished by: (Signature) Received by: (Signature) Date Time	Turnar	ound Time Requested:								
Relinquished by: (Signature) Received by: (Signature) Date Time	🗌 🗌 1 Day	🖞 🗌 3 Day 🗌 Normal								
	🗆 2 -Da	y 🗌 5 Day								
Relinquished by: (Signature) Received by: (Signature) Date Time	Relinquis	shed by: (Signature)	Received	1 by: (Signature)					Date	Time
	Relinquis	shed by: (Signature)	Received	1 by: (Signature)	<u>.</u>				Date	Time
Relinquished by: (Signature) Received for Laboratory by: Date Time	Relinquis	shed by: (Signature)	Receive	d for Laborator	y by:				Date	Time
9/20/19 10:09A~			- 2	11-		1			110011	10.0 /11/2
Sample Temperature Properly Preserved Received Within Holding Times Ambient Chilled Y N Chilling Process begun Y N		Ambient Chilled	Ì	Prope	_	ea			Kecelv	
Notes:	No	, ,0	Notes	s:					Notes:	



314 North Pearl StreetAlbany, New York 12207518-434-4546 ♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD
AES Work Order#:
190920022

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

,	A full service analytic		in laboral	lory of	lern	ng s	oiu	tions to	environine	
Client Na	^{ame:} vood Hills LLC	Address:								
Send Rep		Droject Man	ne (Location):				1	Samplers 1	Name'	
Dale I		1 TOJECE INALI	ie (Location).						~ ^ i	1/ A 1
Client Ph		Lockwo	od Ash I	LF Anr	nual			Kyar	n Baisk	y K. Amba
		PO #:						Samplers	Signature:	Dit
Client Fa	x No:		- m'							1 am AF-
AES Sample ID	Client Sample ID:	Date Sampled	Time A=am P=pm	S: <u>Mat</u>	ample <u>rix</u>	Туре <u>С</u>	<u>G</u>	# of Cont's		Analysis
9313	9306-SH	9/19/19	0 700	$\frac{A}{P}$ G	W		G	5		vood Ash LF Annual
9014	GW Dup <u>8909 - D</u>	9/18/19	1500 (A D G	W		G	5	Field	pH, Temp, Turbidity
015	GW Dep Drain 1	9/18/19	1240	$\frac{A}{P}$ G	W		G	5	+ Fiel	d Flow Reading, DO
016	Leak Detection Syst.	9/18/19	1148-	$\frac{A}{P}$ G	W		G	5	+ Fiel	d Flow Reading, DO
017	Under Drain 1	9/18/19		$\frac{A}{P}$ G	W		G	6		d Flow Reading, DO
018	Under Drain 2	9/18/19		$\frac{A}{P}$ G	W		G	5		d Flow Reading, DO
DIG	Under Drain 3	9/18/19	1125-	$\frac{A}{P}$ G	W		G	5		d Flow Reading, DO
220	Inlet to Pond	9/19/19	0730	$\frac{\mathbf{B}}{\mathbf{P}}$ G	W		G	X60		d Flow Reading, DO
PAI	Keuka Upstream	9/18/14		$\frac{A}{P}$ S	F		G	5		wood Annual + DO '
QZZ	Keuka Downstream	9/18/19		$\frac{A}{P}$ S	F		G	5	Locl	kwood Annual +DO
Qaz'	Surface Water Dup	91.8/19	11412	$\frac{A}{P}$ S	F		G	5		kwood Annual +DO
024	Pond Grab	9/17/19	6730	$\frac{\mathcal{R}}{\mathcal{P}}$ G	W		G	760	Loc	kwood Annual +DO
Shipmen	nt Arrived Via:			Special I	nstruc	tions/	Rem	arks: 🤇		-290-00-0
FedEx	UPS Client AES Oth	ier:		Page 2	of 3					
	ound Time Requested:									
🗌 🛛 1 Day	· •									
	ay 🗌 5 Day	Danairra	d by: (Signatu						Date	Time
Relinqui	shed by: (Signature)	Received	u by: (Signatu	ire)					Date	1 1110
Relinqui	shed by: (Signature)	Received	d by: (Signatu	ire)					Date	Time
Deliner	ahert hum (Cionatura)	Pagaire	d for Labora	tory by					Date	Time
Kelinqui	shed by: (Signature)	Keceive	u tor Ladofa ()	y by:	γ			and the state of the	F1/20/19	10:09Am
					· Laws					ved Within Holding Times
	Sample Temperature		Pro	operly Pr	eserv	ed			Recei	ved within Holding Thes
	Sample Temperature Ambient Chilled Chilling Process begun		Pro	operly Pr		ed			Kecer	\overrightarrow{Y} N
	Sample Temperature Ambient Chilled Chilling Process begun otes: 4 ² C		S:	Y	N					4



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891

-	CHAIN OF	CUSTOD	Y RECORD
	AES Work	Order#:	
	1909	7007	2

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Na		Address:								
Lockw	vood Hills LLC									
Send Rep	ort to:	Project Nam	e (Location	ı):				Samplers	Name:	1
Dale In								V A	8	Buran Baisle
Client Pho		Lockwo	od Ash	LF	Annual	L		K./	wha.	Julan Davs or
		PO #:						Samplers	Signature:	06
Client Fay	x No:	-					ł		14	1100
AES		Date	Time		Gammi	- T		₩of	$\Gamma \sim$	
Sample	Client Sample ID:	Sampled	A=am		Sampl			Cont's		/ Analysis
ID			Ppm		<u>Matrix</u>	<u>C</u>	<u>G</u>			
	Field Blank	1 1		A'						wood Ash LF Annual
art		9 18 19	1425	P	GW		G	5	Field	pH, Temp, Turbidity,
022			1-12)	U						D.O.
				A	GW		G	5	LTC	Field Flow Reading
624	GW Dep Drain 3	9/18/19	1030	P	GW		U	3		Telu Flow Reading
077	LLHG Field Blank	1		A	GW		G	1		EPA 1631
121		9/18/19	1210	P						
698	GW Dep Drain 2	9/18/19	1005	A P	GW			0		Observation Only
		1 1 1		A	CIVI			0		Observation Only
021	GW Dep Drain 4	9/18/19	1007	P	GW			0	ų	Observation Only
	Under Drain 5			A	GW			0	(Observation Only
p30	Under Drain 5	91819	1440	Р				Ŭ		-
231	8405	2/18/19	1459	A	GW			0		Observation Only
		MIDICI_	1-1.51	P A						
				P	-					
				A						
				P	1					
				A	-					
				P A						
				P	4					
	· · · · · · · · · · · · · · · · · · ·			Â		<u> </u>	<u> </u>			······
				Р	1				· .	
Shipmen	t Arrived Via:			Sp	ecial Instru	ctions	/Rem	arks:		
FedEx	UPS Client AES Oth	er								
FEUEX	UTS CHEM ALS UM			Pa	ige 3 of 3					
Turnar	ound Time Requested:			1						
1 Day	-									
1	y \Box 5 Day									
	shed by: (Signature)	Received	l by: (Signa	1 (ture)					Date	Time
iconiquiz	sie of (organize)									
										D !
Relinquis	shed by: (Signature)	Received	i by: (Signa	ture)					Date	Time
Relinquis	shed by. (Signature)	Receive	d for Labo	rator	y by:				Date	Time
1	11/1-	- (7 ,	'n					ginal	9 10:09Am
\square			<u> </u>		rly Preser	und				eived Within Holding Times
V	Sample Temperature Ambient Chilled	0	ľ	rope	Treser	veu			nece	(h)
	Chilling Process-begun			6	Y) N					(x) N
	ix o-			L	and the second se				. .	
No	tes:	Notes	s:						Notes:	
								[



314 North Pearl Street Albany, New York 12207 518-434-4546 Fax: 518-434-0891

CHAIN OF	CUSTODY	RECORD

AES Work Order#:

190920022

© EXPERIENCE IS THE SOLUTION

	A full service analytic	cal researd	ch labor	ato	ry offeri	ing	solu	tions to	environmental concerns
Client Na	me:	Address:			v				
Send Rep	Wood Hills ort to: Earm Chrs (all	Project Nar		*		n.		Samplers	Name:
Client Ph	one No:	Locku	iood f	-13	Lond	h			K. Hmba
Client Fa:	x No:	PO #:						Samplers	Signature
AES Sample ID	Client Sample ID:	Date Sampled	Time A=an P=pm	1	Sampl <u>Matrix</u>	e Typ	e G	# of Cont's	Analysis
032	Inlet to Pard	9/30/19	1240	A P	WW		X	6	Lockwood AshLF Annual
	-			A P				-	Field pH Temp, Turbidity+ Field Flow Reading, DO
	0			A P					Field Flow Reading, DO
033	Von Cab	9/30/19	1307	A P A	WW		X	6	Lockwood annual + DO
0.00	LLH6 FB	alecto		P A					K Q A start
031	LLH6 FB	V/30/9	1235	P A	ωA				EPA 1631
				P A					
				P A					
		-		P A					
				P A					
				P A					
Chiumant	· · · · · · · · · · · · · · · · · · ·			Р					
FedEx	Arrived Via: UPS Client AES Othe	er:		Spe	ecial Instruc	tions	/Rema	rks:	
	und Time Requested:								
[] Norma									
Relinquist	ned by: (Signature)	Received	by: (Signat	ure)	12	Λ			Date Time
					& Ch	1	•		10/1/19 12:55P
Reiniquisi	red by: (Signalure)	Received	by: (Signal	ure)	\sim	and the second			$\frac{\text{Dale}}{ \partial ($
Relinquist	ed by: (Signature)	Received	for Labor	atory	by:				Date Time
	Sample Temperature		J. PI	<u>//</u>	y Preserve	ed		/	2/1/19 4:04 Pm Received Within Holding Times
	Ambient (<u>thilled</u>) Chilling Process begun			(Y) n				(Y) N
Note	s: <u> </u>	Notes:		Sector and					Notes:

Attachment 2 Sample Data Group 1842

Sample Results

CLIENT:	Lockwood Hills LLC	Client Sample ID:	1842
Work Order:	190920022	Collection Date:	9/19/2019 7:25:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-001
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qua	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLI	1		. 1	Analyst: FLD
pH (E150.1) Temperature (E170.1) Turbidity (E180.1)	8.0 11 142	1.0	リリコ	S.U. deg C NTU	112119	9/19/2019 7:25:00 AM 9/19/2019 7:25:00 AM 9/19/2019 7:25:00 AM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9	9/20/2019)					Analyst: AVB
Mercury	0.10	0.20	J	μg/L	1	9/21/2019 1:40:40 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 5	9/20/2019)					Analyst: KH
Aluminum	978	200		μg/L	1	10/31/2019 12:01:00 PM
Antimony	ND	60.0		μg/L	1	10/31/2019 12:01:00 PM
Arsenic	5.98	10.0	J	μg/L	1	10/31/2019 12:01:00 PM
Barium	74.7	200	J	μg/L	1	10/31/2019 12:01:00 PM
Boron	284	50.0		μg/L	1	10/31/2019 12:01:00 PM
Cadmium	ND	5.00		μg/L	1	10/31/2019 12:01:00 PM
Calcium	81900	5000		μg/L	1	10/31/2019 12:01:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 12:01:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 12:01:00 PM
Iron	3190	100		µg/L	1	10/31/2019 12:01:00 PM
Magnesium	56200	5000		μg/L	1	10/31/2019 12:01:00 PM
Manganese	242	15.0		µg/L	1	10/31/2019 12:01:00 PM
Nickel	2.84	40.0	J	μg/L	1	10/31/2019 12:01:00 PM
Potassium	25900	5000		μg/L	1	10/31/2019 12:01:00 PM
Selenium	ND	5.00		μg/L	1	10/31/2019 12:01:00 PM
Sodium	43800	50000	J	μg/L	10	10/31/2019 12:05:00 PM
Zinc	10.4	20.0	J	μg/L	1	10/31/2019 12:01:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	436	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRA	APHY - EPA 300.0 RE	EV 2.1				Analyst: CS
Chloride	ND	2.00		mg/L	2	10/4/2019 1:27:00 PM
Sulfate	238	20.0		mg/L	10	10/7/2019 5:26:45 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondac	k Environmental Services, Inc	Date:	04-Nov-19
CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfill / Annual	Lab Sample ID:	9/19/2019 7:25:00 AM
PU#:			

Analyses	Result	RL Qual Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320E	3-2011			Analyst: DAA
Alkalinity, Total (As CaCO3) AMMONIA (NON-DISTILLED) - EPA	140 A 350.1 REV 2.0	10 mgCaCO3/L	1	9/23/2019 Analyst: PL
Nitrogen, Ammonia (As N) CONDUCTANCE AT 25C - SM 251	<i>0.4</i> 0B-2011	0.1 J- mg/L	1	9/30/2019 1:46:59 PM Analyst: KB
Specific Conductance TOTAL DISSOLVED SOLIDS - SM	755 2540C-2011	1 μmhos/cm	1	9/20/2019 Analyst: CC
TDS (Residue, Filterable)	405 5310C-2011	5 mg/L	1	9/25/2019 Analyst: NK
Total Organic Carbon COLOR (PLATINUM-COBALT) - S	1.8	1.0 Jf " mg/L	1	10/1/2019 2:44:00 PM Analyst: PL
Color	7	5 cpu@pH7	1	9/20/2019 3:25:00 PM

BAMA 12/10/19

Qualifiers:

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate
- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

Date: 04-Nov-19

Work Order: 190920022 Collection Date: 9/18/2019 2:45:00 PM Reference: Lockwood Ash Landfill / Annual Lab Sample ID: 190920022-002	CLIENT:	Lockwood Hills LLC	Client Sample ID:	8401
•	Work Order:	190920022	Collection Date:	9/18/2019 2:45:00 PM
	Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-002
PO#: Matrix: GROUNDWATER	PO#:		Matrix:	GROUNDWATER

pH (E150.1) Temporature (E170.1) 8.2 15 (Prep: E245.1 + 9/20/2019 J 5 (Prep: E245.1 + 9/20/2019 J 6 (Prep: E245.1 + 9/20/2019 J 75 (Prep: SW3010A + 9/20/2019 J	Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Temperature (E170.1) 15 J J deg C NTU 9/18/2019 2:45:00 PA MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019) ND 0.20 µg/L 1 9/21/2019 1:42:23 PA Mercury ND 0.20 µg/L 1 9/21/2019 1:42:23 PA ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) Analyst: KH Analyst: KH Alumium ND 200 µg/L 1 10/31/2019 12:17:00 PA Antimony ND 60.0 µg/L 1 10/31/2019 12:17:00 PA Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 PA Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 PA Cadrium 88700 5000 µg/L 1 10/31/2019 12:17:00 PA Cadrium ND 10.0 µg/L 1 10/31/2019 12:17:00 PA 10/31/2019 12:17:00 PA Chromlum ND 10.0 µg/L 1 10/31/2019 12:17:00 PA 10/31/2019 12:17:00 PA Chromlum	FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLI	E			Analyst: FLD
(Prep: E245.1 - 9/20/2019) V V Mercury ND 0.20 µg/L 1 9/21/2019 1:42:23 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) Analyst: KH Aluminum ND 200 µg/L 1 10/31/2019 12:17:00 I Arisenic ND 10.0 µg/L 1 10/31/2019 12:17:00 I Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 I Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 I Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 I Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 I Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 I Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 I Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 I ND 5.00 µg/L	Temperature (E170.1)	15	1.0	555		Mtig	9/18/2019 2:45:00 PM 9/18/2019 2:45:00 PM 9/18/2019 2:45:00 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019)) Analyst: KH Aluminum ND 200 µg/L 1 10/31/2019 12:17:00 I Antimony ND 60.0 µg/L 1 10/31/2019 12:17:00 I Arsenic ND 10.0 µg/L 1 10/31/2019 12:17:00 I Barlum 63.3 200 J µg/L 1 10/31/2019 12:17:00 I Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 10.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 10.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 25.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 25.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 228 100 µg/L 1 10/31/2019 12:17:00 I Iron 22500		9/20/2019)			6	11.91.	Analyst: AVB
(Prep: SW3010A - 9/20/2019) Aluminum ND 200 µg/L 1 10/31/2019 12:17:00 I Antimony ND 60.0 µg/L 1 10/31/2019 12:17:00 I Arsenic ND 10.0 µg/L 1 10/31/2019 12:17:00 I Barlum 63.3 200 J µg/L 1 10/31/2019 12:17:00 I Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 10.0 µg/L 1 10/31/2019 12:17:00 I Cadmium ND 10.0 µg/L 1 10/31/2019 12:17:00 I Chromium ND 228 100 µg/L 1 10/31/2019 12:17:00 I Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 I Magnesium 2700 5000 J µg/L 1 10/31/2019 12:17:00 I Nckel ND 40.	Mercury	ND	0.20		µg/L	1	9/21/2019 1:42:23 PM
Antimony ND 60.0 µg/L 1 10/31/2019 12:17:00 Arsenic ND 10.0 µg/L 1 10/31/2019 12:17:00 Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 Cadomium ND 5.00 µg/L 1 10/31/2019 12:17:00 Cadomium ND 5.00 µg/L 1 10/31/2019 12:17:00 Calcium 88700 5000 µg/L 1 10/31/2019 12:17:00 Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 Iron 228 100 µg/L 1 10/31/2019 12:17:00 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 ND <td></td> <td>9/20/2019)</td> <td></td> <td></td> <td></td> <td></td> <td>Analyst: KH</td>		9/20/2019)					Analyst: KH
Arsenic ND 10.0 µg/L 1 10/31/2019 12:17:00 Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 Calcium 88700 5000 µg/L 1 10/31/2019 12:17:00 Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 Iron 228 100 µg/L 1 10/31/2019 12:17:00 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 Marganese 65.6 15.0 µg/L 1 10/31/2019 12:17:00 Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 Sodium	Aluminum	ND	200		μg/L	1	10/31/2019 12:17:00 PM
Barium 63.3 200 J µg/L 1 10/31/2019 12:17:00 Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 1 Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 1 Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 1 Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 1 Calcium 88700 5000 µg/L 1 10/31/2019 12:17:00 1 Choronium ND 10.0 µg/L 1 10/31/2019 12:17:00 1 Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 1 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 1 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 1 Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 1 <t< td=""><td>Antimony</td><td>ND</td><td>60.0</td><td></td><td></td><td>1</td><td>10/31/2019 12:17:00 PM</td></t<>	Antimony	ND	60.0			1	10/31/2019 12:17:00 PM
Boron 817 50.0 µg/L 1 10/31/2019 12:17:00 f Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 f Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 f Cadrium 88700 5000 µg/L 1 10/31/2019 12:17:00 f Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 f Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 f Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 f Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 f Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 f Masgnesium 2700 5000 J µg/L 1 10/31/2019 12:17:00 f Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 f Solution 65500 50000 µg/L 1 10/31/2019 12:17:00 f Soluu	Arsenic	ND	10.0		μg/L	1	10/31/2019 12:17:00 PM
Cadmium ND 5.00 µg/L 1 10/31/2019 12:17:00 F Calcium 88700 5000 µg/L 1 10/31/2019 12:17:00 F Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 F Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 F Iron 228 100 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Manganese 65.6 15.0 µg/L 1 10/31/2019 12:17:00 F Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 F Solium 655500 50000 µg/L 1 10/31/2019 12:17:00 F Inc ND 20.0 µg/L 1 10/31/2019 12:17:00 F ARRDNESS - EP	Barium	63.3	200	J	μg/L	1	10/31/2019 12:17:00 PM
Calcium 88700 5000 µg/L 1 10/31/2019 12:17:00 Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 Iron 228 100 µg/L 1 10/31/2019 12:17:00 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 Magnese 65.6 15.0 µg/L 1 10/31/2019 12:17:00 Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 Sodium 65500 50000 µg/L 1 10/31/2019 12:17:00 F	Boron	817	50.0		μg/L	1	10/31/2019 12:17:00 PM
Chromium ND 10.0 µg/L 1 10/31/2019 12:17:00 F Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 F Iron 228 100 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 2700 5000 µg/L 1 10/31/2019 12:17:00 F ND 5.00 µg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 µg/L 1 10/31/2019 12:17:00 F Zinc ND 20.0 µg/L 1 10/31/2019 12:17:00 F AND 5.00	Cadmium	ND	5.00		µg/L	1	10/31/2019 12:17:00 PM
Copper ND 25.0 µg/L 1 10/31/2019 12:17:00 F Iron 228 100 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Magnesee 65.6 15.0 µg/L 1 10/31/2019 12:17:00 F Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 F Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 µg/L 10 10/31/2019 12:24:00 F Zinc ND 20.0 µg/L 1 10/31/2019 12:17:00 F <tr< td=""><td>Calcium</td><td>88700</td><td>5000</td><td></td><td>μg/L</td><td>1</td><td>10/31/2019 12:17:00 PM</td></tr<>	Calcium	88700	5000		μg/L	1	10/31/2019 12:17:00 PM
Iron 228 100 μg/L 1 10/31/2019 12:17:00 F Magnesium 25300 5000 μg/L 1 10/31/2019 12:17:00 F Manganese 65.6 15.0 μg/L 1 10/31/2019 12:17:00 F Nickel ND 40.0 μg/L 1 10/31/2019 12:17:00 F Potassium 2700 5000 J μg/L 1 10/31/2019 12:17:00 F Selenium ND 5.00 μg/L 1 10/31/2019 12:17:00 F Sodium 65500 5000 J μg/L 1 10/31/2019 12:17:00 F Zinc ND 5.00 μg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 μg/L 1 10/31/2019 12:17:00 F ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Chromium	ND	10.0		µg/L	1	10/31/2019 12:17:00 PM
Magnesium 25300 5000 µg/L 1 10/31/2019 12:17:00 F Manganese 65.6 15.0 µg/L 1 10/31/2019 12:17:00 F Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 F Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 F Selenium ND 5.00 µg/L 1 10/31/2019 12:17:00 F Sodium 65500 5000 µg/L 1 10/31/2019 12:17:00 F Zinc ND 5.00 µg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:17:00 F ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: KH Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 P	Copper	ND	25.0		μg/L	1	10/31/2019 12:17:00 PM
Manganese 65.6 15.0 µg/L 1 10/31/2019 12:17:00 F Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 F Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 F Selenium 2700 5000 J µg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 µg/L 1 10/31/2019 12:17:00 F Zinc ND 5.00 µg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:17:00 F Analyst: KH Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Iron	228	100		µg/L	1	10/31/2019 12:17:00 PM
Nickel ND 40.0 µg/L 1 10/31/2019 12:17:00 F Potassium 2700 5000 J µg/L 1 10/31/2019 12:17:00 F Selenium ND 5.00 µg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 µg/L 1 10/31/2019 12:17:00 F Zinc ND 20.0 µg/L 10 10/31/2019 12:24:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 Analyst: KH KH Analyst: CS Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Magnesium	25300	5000		μg/L	1	10/31/2019 12:17:00 PM
Potassium 2700 5000 J μg/L 1 10/31/2019 12:17:00 F Selenium ND 5.00 μg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 μg/L 10 10/31/2019 12:17:00 F Zinc ND 20.0 μg/L 1 10/31/2019 12:24:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 μg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 ND 20.0 μg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: CS Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Manganese	65.6	15.0		μg/L	1	10/31/2019 12:17:00 PM
Selenium ND 5.00 μg/L 1 10/31/2019 12:17:00 F Sodium 65500 50000 μg/L 10 10/31/2019 12:24:00 F Zinc ND 20.0 μg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Nickel	ND	40.0		μg/L	1	10/31/2019 12:17:00 PM
Sodium 65500 5000 μg/L 10 10/31/2019 12:24:00 F Zinc ND 20.0 μg/L 1 10/31/2019 12:24:00 F HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Potassium	2700	5000	J	µg/L	1	10/31/2019 12:17:00 PM
Zinc ND 20.0 μg/L 1 10/31/2019 12:17:00 F HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Selenium	ND	5.00		μg/L	1	10/31/2019 12:17:00 PM
HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Sodium	65500	50000		μg/L	10	10/31/2019 12:24:00 PM
Total Hardness (As CaCO3) 326 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Zinc	ND	20.0		μg/L	1	10/31/2019 12:17:00 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Chloride 45.4 2.00 mg/L 2 10/4/2019 10:41:33 PM	Total Hardness (As CaCO3)	326	5		mg/L CaCO3	1	10/31/2019
	ANIONS BY ION CHROMATOGRA	APHY - EPA 300.0 RI	EV 2.1				Analyst: CS
Sulfate 74.8 4.00 mg/L 2 10/4/2019 10:41:33 PM	Chloride	45.4	2.00		mg/L	2	10/4/2019 10:41:33 PM
	Sulfate	74.8	4.00		mg/L	2	10/4/2019 10:41:33 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

 ${\bf B}$ - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8401
Work Order:	190920022	Collection Date: 9/18/2019 2:45:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-002
PO#:		Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	390	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EF	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.9	0.1	mg/L	1	9/30/2019 1:48:40 PM
CONDUCTANCE AT 25C - SM 25 ⁻	10B-2011				Analyst: KB
Specific Conductance	911	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SN	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	450	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM	5310C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 3:00:00 PM
COLOR (PLATINUM-COBALT) - S	SM 2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits B - Analyte detected in the associated Method Blank
- b Analyte delected in the associated Method Dian
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	8404
Work Order:	190920022	Collection Date:	9/18/2019 4:45:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-003
PO#:		Matrix:	GROUNDWATER

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD pH (£150.1) 7.2 J J g S.U. g	Analyses	Result	RL	Qua	l Units	DF	Date Analyzed
Temperature (E170.1) 15 J J deg C 9/18/2019 4:45:00 PM MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019) M J	FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLI	E			Analyst: FLD
(Prep: E245.1 - 9/20/2019) MD 0.20 μg/L 1 9/21/2019 1:44:03 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) Analyst: KH Analyst: KH 1 10/31/2019 12:29:00 PM Aluminum ND 200 μg/L 1 10/31/2019 12:29:00 PM Arsenic 6.95 10.0 J μg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J μg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J μg/L 1 10/31/2019 12:29:00 PM Cadmium 823 50.0 μg/L 1 10/31/2019 12:29:00 PM Cadcium 121000 5000 μg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J↓ μg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J↓ μg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 μg/L 1 10/31/2019 12:29:00 PM ND 5.0 μg/L 1 10/31/2019 12:29:00 PM Nd No 7.85 <td>Temperature (E170.1)</td> <td>15</td> <td>1.0</td> <td>555</td> <td>deg C</td> <td>7</td> <td>9/18/2019 4:45:00 PM</td>	Temperature (E170.1)	15	1.0	555	deg C	7	9/18/2019 4:45:00 PM
Mercury ND 0.20 µg/L 1 9/21/2019 1:44:03 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) Analyst: KH Analyst: KH Aluminum ND 200 µg/L 1 10/31/2019 12:29:00 PM Antimony ND 60.0 µg/L 1 10/31/2019 12:29:00 PM Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadmium 12/1000 5000 µg/L 1 10/31/2019 12:29:00 PM Cadmium 12/2000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 µg/L 1 10/31/2019 12:29:00 PM	MERCURY - EPA 245.1 REV 3.0			-	RAM.	2119	Analyst: AVB
ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) Analyst: KH Aluminum ND 200 µg/L 1 10/31/2019 12:29:00 PM Antimony ND 60.0 µg/L 1 10/31/2019 12:29:00 PM Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadeium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Cadrinum 4.23 10.0 J ⊕ µg/L 1 10/31/2019 12:29:00 PM Chromium 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM	(Prep: E245.1 -	9/20/2019)			Chal	121	
(Prep: SW3010A - 9/20/2019) Aluminum ND 200 µg/L 1 10/31/2019 12:29:00 PM Antimony ND 60.0 µg/L 1 10/31/2019 12:29:00 PM Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J Φ µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 500 µg/L 1 10/31/2019 12:29:00 PM Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.	Mercury	ND	0.20		μg/L	1	9/21/2019 1:44:03 PM
Antimony ND 60.0 µg/L 1 10/31/2019 12:29:00 PM Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barlum 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J + µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 1		9/20/2019)					Analyst: KH
Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J+µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Maganesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 1	Aluminum	ND	200		μg/L	1	10/31/2019 12:29:00 PM
Arsenic 6.95 10.0 J µg/L 1 10/31/2019 12:29:00 PM Barium 67.3 200 J µg/L 1 10/31/2019 12:29:00 PM Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Cadium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Cadium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J+µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L	Antimony	ND	60.0		μg/L	1	10/31/2019 12:29:00 PM
Boron 323 50.0 µg/L 1 10/31/2019 12:29:00 PM Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J ➡ µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Marganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:	Arsenic	6.95	10.0	J		1	10/31/2019 12:29:00 PM
Cadmium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J++ µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Marganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM <	Barium	67.3	200	J	μg/L	1	10/31/2019 12:29:00 PM
Calcium 121000 5000 µg/L 1 10/31/2019 12:29:00 PM Chromium 4.23 10.0 J→+ µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Soleinium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 500 µg/L 1 10/31/2019 12:29:00 PM Inc ND 20.0 µg/L 1	Boron	323	50.0		μg/L	1	10/31/2019 12:29:00 PM
Chromium 4.23 10.0 J → µg/L 1 10/31/2019 12:29:00 PM Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride	Cadmium	ND	5.00		μg/L	1	10/31/2019 12:29:00 PM
Copper ND 25.0 µg/L 1 10/31/2019 12:29:00 PM Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Magnese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: KH Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Calcium	121000	5000		μg/L	1	10/31/2019 12:29:00 PM
Iron 518 100 µg/L 1 10/31/2019 12:29:00 PM Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Chromium	4.23	10.0	J 4	● μg/L	1	10/31/2019 12:29:00 PM
Magnesium 25000 5000 µg/L 1 10/31/2019 12:29:00 PM Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Copper	ND	25.0		μg/L	1	10/31/2019 12:29:00 PM
Manganese 223 15.0 µg/L 1 10/31/2019 12:29:00 PM Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:29:00 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Mg/L 1 10/31/2019 12:29:00 PM Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Iron	518	100		μg/L	1	10/31/2019 12:29:00 PM
Nickel 7.85 40.0 J µg/L 1 10/31/2019 12:29:00 PM Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:29:00 PM Analyst: KH Malyst: KH Analyst: KH Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Magnesium	25000	5000		μg/L	1	10/31/2019 12:29:00 PM
Potassium 1600 5000 J µg/L 1 10/31/2019 12:29:00 PM Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:29:00 PM Analyst: KH Analyst: S Analyst: CS Analyst: CS Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Manganese	223	15.0		μg/L	1	10/31/2019 12:29:00 PM
Selenium ND 5.00 µg/L 1 10/31/2019 12:29:00 PM Sodium 22100 5000 µg/L 1 10/31/2019 12:29:00 PM Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Nickel	7.85	40.0	J	µg/L	1	10/31/2019 12:29:00 PM
Sodium 22100 ND 5000 20.0 μg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 20.0 μg/L 1 10/31/2019 12:29:00 PM Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Mg/L 2 10/4/2019 1:46:03 PM	Potassium	1600	5000	J	μg/L	1	10/31/2019 12:29:00 PM
Zinc ND 20.0 µg/L 1 10/31/2019 12:29:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 MD 2.00 mg/L 2 10/4/2019 1:46:03 PM	Selenium	ND	5.00		μg/L	1	10/31/2019 12:29:00 PM
HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Sodium	22100	5000		μg/L	1	10/31/2019 12:29:00 PM
Total Hardness (As CaCO3) 405 5 mg/L CaCO3 1 10/31/2019 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Zinc	ND	20.0		μg/L	1	10/31/2019 12:29:00 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Chloride ND 2.00 mg/L 2 10/4/2019 1:46:03 PM	Total Hardness (As CaCO3)	405	5		mg/L CaCO3	1	10/31/2019
	ANIONS BY ION CHROMATOGR	APHY - EPA 300.0 RE	EV 2.1				Analyst: CS
Sulfate 85.1 4.00 mg/L 2 10/4/2019 1:46:03 PM	Chloride	ND	2.00		mg/L	2	10/4/2019 1:46:03 PM
	Sulfate	85.1	4.00		mg/L	2	10/4/2019 1:46:03 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8404	
Work Order:	190920022	Collection Date: 9/18/2019 4:45:00 PM	
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-003	
PO#:		Matrix: GROUNDWATER	

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	360	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1 🕽	mg/L	1	9/30/2019 1:53:34 PM
CONDUCTANCE AT 25C - SM 2510	B-2011		v		Analyst: KB
Specific Conductance	744	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	395	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	310C-2011				Analyst: NK
Total Organic Carbon	1.5	1.0 J	+ mg/L	1	10/1/2019 3:51:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

BANA 12/12/19

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfil	l / Annual		(Lab Sample II	te: 9/18/2 D: 19092	019 1:50:00 PM
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE N	OT ELAP CER	TIFIABL	E			Analyst: FLD
pH (E150.1) Temperature (E1 Turbidity (E180.1		7.8 17 < 1	1.0	ナンナ	S.U. deg C NTU	W. a	9/18/2019 1:50:00 PM 9/18/2019 1:50:00 PM 9/18/2019 1:50:00 PM
MERCURY - EPA (F	A 245.1 REV 3.0 Prep: E245.1 - 9/20/20	19)		•		12/19	Analyst: AVB
Mercury		ND	0.20		μg/L	1	9/21/2019 1:45:43 PM
ICP METALS - E	PA 200.7 p: SW3010A - 9/20/20 ⁻	19)					Analyst: KH
Aluminum Antimony Arsenic Barium Boron Cadmium Calcium Chromium Chromium Copper Iron Magnesium Manganese Nickel Potassium Selenium Sodium Zinc		ND ND 6.83 15.8 244 ND 163000 ND 163000 ND 1090 70400 107 ND 3170 ND 3170 ND 34400 ND	200 60.0 10.0 200 50.0 5000 10.0 25.0 100 5000 15.0 40.0 5000 5.00 5.000 20.0	J	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	1 1 1 1 1 1 1 1 1 1 1 1 1 1	10/31/2019 12:32:00 PM 10/31/2019 12:32:00 PM
HARDNESS - EP	A 200.7 REV 4.4						Analyst: KH
Total Hardness (A	s CaCO3)	697	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION	CHROMATOGRAPHY -	EPA 300.0 RE	V 2.1				Analyst: CS
Chloride Sulfate		16.1 298	2.00 20.0		mg/L mg/L	2 10	10/4/2019 2:05:05 PM 10/4/2019 2:24:07 PM

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quanititation limits

- Analyte detected below quantitation mints

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8908-D	
Work Order:	190920022	Collection Date: 9/18/2019 1:50:00 PM	
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-004	
PO#:		Matrix: GROUNDWATER	

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320E	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	380	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EP/	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	9/30/2019 1:55:11 PM
CONDUCTANCE AT 25C - SM 251)B-2011				Analyst: KB
Specific Conductance	1200	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	910	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	310C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 4:07:00 PM
COLOR (PLATINUM-COBALT) - SI	A 2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Lockwood Hills LLC Client Sample ID: 8908-SH **CLIENT:** Work Order: Collection Date: 9/18/2019 1:40:00 PM 190920022 **Reference:** Lockwood Ash Landfill / Annual Lab Sample ID: 190920022-005 PO#: Matrix: GROUNDWATER **RL** Qual Units DF **Date Analyzed** Analyses Result FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE Analyst: FLD S.U. 9/18/2019 1:40:00 PM pH (E150.1) 8.8 J 9/18/2019 1:40:00 PM deg C Temperature (E170.1) 15 NTU Turbidity (E180.1) 3 1.0 9/18/2019 1:40:00 PM **MERCURY - EPA 245.1 REV 3.0** Analyst: AVB (Prep: E245.1 - 9/20/2019) Mercury ND 0.20 μg/L 9/21/2019 1:47:23 PM **ICP METALS - EPA 200.7** Analyst: KH (Prep: SW3010A - 9/20/2019) 200 10/31/2019 12:37:00 PM Aluminum ND μg/L 1 10/31/2019 12:37:00 PM Antimony ND 60.0 μg/L 1 10/31/2019 12:37:00 PM Arsenic 5.85 10.0 J μg/L 1 Barium 48.0 200 J μg/L 1 10/31/2019 12:37:00 PM Boron 188 50.0 μg/L 1 10/31/2019 12:37:00 PM Cadmium ND 5.00 μg/L 1 10/31/2019 12:37:00 PM Calcium 229000 50000 μg/L 10 10/31/2019 12:41:00 PM 10.0 10/31/2019 12:37:00 PM Chromium ND μg/L 1 ND 25.0 μg/L 1 10/31/2019 12:37:00 PM Copper Iron 89.7 100 J 🤝 μg/L 1 10/31/2019 12:37:00 PM 5000 74100 10/31/2019 12:37:00 PM Magnesium μg/L 1 15.0 10/31/2019 12:37:00 PM Manganese 121 μg/L 1 40.0 10/31/2019 12:37:00 PM Nickel μg/L 1 3.67 Л 10/31/2019 12:37:00 PM 5000 Potassium 3000 J μg/L 1 10/31/2019 12:37:00 PM Selenium ND 5.00 μg/L 1 50000 Sodium 21400 J μg/L 10 10/31/2019 12:41:00 PM Zinc 11.1 20.0 J μg/L 1 10/31/2019 12:37:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH 10/31/2019 Total Hardness (As CaCO3) 878 5 mg/L CaCO3 1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 15.8 2.00 mg/L 2 10/4/2019 2:43:09 PM Sulfate 396 20.0 mg/L 10 10/4/2019 3:02:11 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

Adirondack Environmental Services, Inc

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC
Work Order:	190920022
Reference:	Lockwood Ash Landfill / Annual
PO#:	

 Client Sample ID:
 8908-SH

 Collection Date:
 9/18/2019 1:40:00 PM

 Lab Sample ID:
 190920022-005

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	440	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 1:56:48 PM
CONDUCTANCE AT 25C - SM 2510)B-2011				Analyst: KB
Specific Conductance	1370	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	990	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	310C-2011				Analyst: NK
Total Organic Carbon	1.4	1.0 J	+ €mg/L	1	10/1/2019 4:23:00 PM
COLOR (PLATINUM-COBALT) - SM	M 2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quantitation limitsB Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfill	/ Annual		(Lab Sample II	te: 9/18/2 D: 19092	019 3:00:00 PM
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
and the second second	CL2, AND TEMP ARE NO		RTIFIARI	F			Analyst: FLD
11220111,1120		0.		-			,
pH (E150.1)		9.6		J	S.U.		9/18/2019 3:00:00 PM
Temperature (E	170.1)	16		3	deg C		9/18/2019 3:00:00 PM
Turbidity (E180.	1)	> 999	1.0	J	NTU		9/18/2019 3:00:00 PM
MERCURY - EP	A 245.1 REV 3.0 Prep: E245.1 - 9/20/2019	, ,					Analyst: AVB
	Prep: E245.1 - 9/20/2018						
Mercury		ND	0.20		μg/L M		9/21/2019 1:49:04 PM
ICP METALS - E	PA 200.7				B	119	Analyst: KH
(Pre	p: SW3010A - 9/20/2019)			0,2110	4	
Aluminum		1530	200	J	μg/L \0 ·	1	10/31/2019 12:56:00 PM
Antimony		ND	60.0		μg/L	1	10/31/2019 12:56:00 PM
Arsenic		ND	10.0		μg/L	1	10/31/2019 12:56:00 PM
Barium		113	200	J	μg/L	1	10/31/2019 12:56:00 PM
Boron		1060	50.0		μg/L	1	10/31/2019 12:56:00 PM
Cadmium		ND	5.00		μg/L	1	10/31/2019 12:56:00 PM
Calcium		16000	5000		μg/L	1	10/31/2019 12:56:00 PM
Chromium		10.3	10.0	J+	μg/L	1	10/31/2019 12:56:00 PM
Copper		6.16 2	5.0 25.0	Utt	μg/L	1	10/31/2019 12:56:00 PM
Iron		4870	100	To	μg/L	1	10/31/2019 12:56:00 PM
Magnesium		3560	5000	J	µg/L	1	10/31/2019 12:56:00 PM
Manganese		127	15.0		μg/L	1	10/31/2019 12:56:00 PM
Nickel		13.4	40.0	J	μg/L	1	10/31/2019 12:56:00 PM
Potassium		1470	5000	J	μg/L	1	10/31/2019 12:56:00 PM
Selenium		ND	5.00		µg/L	1	10/31/2019 12:56:00 PN
Sodium		155000	50000		μg/L	10	10/31/2019 1:01:00 PM
Zinc		119	20.0	J	μg/L	1	10/31/2019 12:56:00 PN
HARDNESS - EF	PA 200.7 REV 4.4						Analyst: KH
Total Hardness (/	As CaCO3)	54	5		mg/L CaCO3	1	10/31/2019
	CHROMATOGRAPHY - E				-		Analyst: CS
Chloride		1 10	2.00		mg/L	2	10/4/2019 4:18:58 PM
Sulfate		4.18 101	2.00		mg/L	2 10	10/4/2019 4:18:58 PM
Cunato			20.0				

Qualifiers:

ND - Not Detected at the Reporting Limit

Adirondack Environmental Services, Inc

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8909-D
Work Order:	190920022	Collection Date: 9/18/2019 3:00:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-006
PO#:		Matrix: GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	300	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	9/30/2019 1:58:25 PM
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	747	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	695	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM	5310C-2011				Analyst: NK
Total Organic Carbon	2.5	1.0 Jt	❤ mg/L	1	10/1/2019 4:39:00 PM
COLOR (PLATINUM-COBALT) - S	M 2120B-2011				Analyst: PL
Color	7	5	cpu@pH7	1	9/20/2019 4:00:00 PM

BANJA 12/12/19

Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

CLIENT:Lockwood Hills LWork Order:190920022Reference:Lockwood Ash LaPO#:				(Lab Sample II	e: 9/18	8909-SH 9/18/2019 11:05:00 AM 190920022-007 GROUNDWATER	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NO	T ELAP	CERTIFIABLI	E			Analyst: FLD	
pH (E150.1)		7.8		ጌ	S.U.		9/18/2019 11:05:00 AM	
Temperature (E Turbidity (E180.		18 8	1.0	ጋ ፓ	deg C NTU		9/18/2019 11:05:00 AM 9/18/2019 11:05:00 AM	
	A 245.1 REV 3.0 Prep: E245.1 - 9/20/2019	9)			BAM9 1211	5/19	Analyst: AVE	
Mercury		ND	0.20		μg/L	1	9/21/2019 1:54:07 PM	
CP METALS - E (Pre	PA 200.7 p: SW3010A - 9/20/2019	9)					Analyst: KH	
Aluminum		ND	200		μg/L	1	10/31/2019 1:07:00 PM	
Antimony		ND	60.0		μg/L	1	10/31/2019 1:07:00 PN	
Arsenic		9.06	10.0	J	μg/L	1	10/31/2019 1:07:00 PM	
Barium		25.6	200	J	μg/L	1	10/31/2019 1:07:00 PM	
Boron		253	50.0		µg/L	1	10/31/2019 1:07:00 PM	
Cadmium		ND	5.00		μg/L	1	10/31/2019 1:07:00 PM	
Calcium		29300	5000		μg/L	1	10/31/2019 1:07:00 PM	
Chromium		ND	10.0		µg/L	1	10/31/2019 1:07:00 PM	
Copper			25.0 25.0	U-	μg/L	1	10/31/2019 1:07:00 PM	
Iron		47.7	100	J	μg/L	1	10/31/2019 1:07:00 PM	
Magnesium		20200	5000		μg/L	1	10/31/2019 1:07:00 PM	
Manganese		3.25	15.0	J	μg/L	1	10/31/2019 1:07:00 PM	
Nickel		ND	40.0		µg/L	1	10/31/2019 1:07:00 PM	
Potassium		2260	5000	J	μg/L	1	10/31/2019 1:07:00 PM	
Selenium		ND	5.00		μg/L	1	10/31/2019 1:07:00 PM	
Sodium Zinc		52600 5.02	50000 20.0	J	μg/L μg/L	10 1	10/31/2019 1:15:00 PM 10/31/2019 1:07:00 PM	
	A 200.7 REV 4.4	3.02	20.0	J	ња, с	I	Analyst: KH	
			~					
Total Hardness (A	,	157	5		mg/L CaCO3	1	10/31/2019	
NIONS BY ION	CHROMATOGRAPHY - E	PA 300.0	REV 2.1				Analyst: CS	
Chloride		ND	2.00		mg/L	2	10/4/2019 4:57:09 PM	
Sulfate		103	4.00		mg/L	2	10/4/2019 4:57:09 PM	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client S
Work Order:	190920022	Colle
Reference:	Lockwood Ash Landfill / Annual	Lab S
PO#:		

 Client Sample ID:
 8909-SH

 Collection Date:
 9/18/2019 11:05:00 AM

 Lab Sample ID:
 190920022-007

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	180	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:03:18 PM
CONDUCTANCE AT 25C - SM 2510)B-2011				Analyst: KB
Specific Conductance	507	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	345	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	310C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 5:48:00 PM
COLOR (PLATINUM-COBALT) - SM	A 2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	8910-D
Work Order:	190920022	Collection Date:	9/18/2019 11:55:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-008
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEI	IP ARE NOT ELAP CE	RTIFIABLE	Ξ			Analyst: FLD
pH (E150.1) Temperature (E170.1) Turbidity (E180.1)	7.6 16 4	1.0	555	S.U. deg C NTU	Mt.	9/18/2019 11:55:00 AM 9/18/2019 11:55:00 AM 9/18/2019 11:55:00 AM
MERCURY - EPA 245.1 REV 3 (Prep: E245.1				12	12/19	Analyst: AVB
Mercury	ND	0.20		μg/L	1	9/21/2019 1:55:48 PM
ICP METALS - EPA 200.7 (Prep: SW3010A	- 9/20/2019)					Analyst: KH
Aluminum Antimony Arsenic Barium Boron Cadmium Calcium Chromium Copper Iron Magnesium Manganese Nickel Potassium Selenium	ND ND 24.7 3760 ND 98300 ND ND 25.2 30500 8.80 ND 3720 ND	200 60.0 10.0 200 50.0 5000 10.0 25.0 100 5000 15.0 40.0 5000 5.00	L L	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	1 1 1 1 1 1 1 1 1 1 1 1	10/31/2019 1:21:00 PM 10/31/2019 1:21:00 PM
Sodium	107000	50000		μg/L	10	10/31/2019 1:26:00 PM
Zinc	ND	20.0		μg/L	1	10/31/2019 1:21:00 PM
HARDNESS - EPA 200.7 REV 4	1.4					Analyst: KH
Total Hardness (As CaCO3)	371	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOG	RAPHY - EPA 300.0 RE	EV 2.1				Analyst: CS
Chloride Sulfate	33.4 361	2.00 20.0		mg/L mg/L	2 10	10/4/2019 5:54:15 PM 10/4/2019 6:13:18 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8910-D
Work Order:	190920022	Collection Date: 9/18/2019 11:55:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-008
PO#:		Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2011					Analyst: DAA
Alkalinity, Total (As CaCO3)	170	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 350.1	1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:04:56 PM
CONDUCTANCE AT 25C - SM 2510B-201	11				Analyst: KB
Specific Conductance	1050	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2540C	-2011				Analyst: CC
TDS (Residue, Filterable)	710	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5310C-	2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 6:05:00 PM
COLOR (PLATINUM-COBALT) - SM 2120) B-20 11				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondac	k Environmental Services, I	Inc Date:	04-No	v-19
CLIENT:	Lockwood Hills LLC	Client Sample ID:	8910-	SH
Work Order:	190920022	Collection Date:	9/19/2	019 8:00:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	19092	0022-009
PO#:		Matrix:	GROU	JNDWATER
Analyses	Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CER	TIFIABLE		Analyst: FLD
Observation	Poor Recovery	NA		9/19/2019 8:00:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID:	8911-D
Work Order:	190920022	Collection Date:	9/18/2019 12:05:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-010
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CEP	RTIFIABLE	3			Analyst: FLD
pH (E150.1)	7.5		J	S.U.		9/18/2019 12:05:00 PM
Temperature (E170.1)	14		5 L L	deg C		9/18/2019 12:05:00 PM
Turbidity (E180.1)	< 1	1.0	J	NTU	. NK	9/18/2019 12:05:00 PM
MERCURY - EPA 245.1 REV 3.0				RX	113/19	Analyst: AVB
(Prep: E245.1 - 9	9/20/2019)			ر لال م	1191.1	
Mercury	ND	0.20		μg/L \	1	9/21/2019 1:57:30 PM
						Analyst: KH
ICP METALS - EPA 200.7 (Prep: SW3010A - S	9/20/2019)					
Aluminum	ND	200		μg/L	1	10/31/2019 1:31:00 PM
Antimony	ND	60.0		μg/L	1	10/31/2019 1:31:00 PM
Arsenic	6.24	10.0	J	μg/L	1	10/31/2019 1:31:00 PM
Barium	20.1	200	J	μg/L	1	10/31/2019 1:31:00 PM
Boron	1360	50.0		μg/L	1	10/31/2019 1:31:00 PM
Cadmium	ND	5.00		μg/L	1	10/31/2019 1:31:00 PM
Calcium	60800	5000		μg/L	1	10/31/2019 1:31:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 1:31:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 1:31:00 PM
Iron	127	100		µg/L	1	10/31/2019 1:31:00 PM
Magnesium	19300	5000		μg/L	1	10/31/2019 1:31:00 PM
Manganese	46.0	15.0		μg/L	1	10/31/2019 1:31:00 PM
Nickel	ND	40.0		μg/L	1	10/31/2019 1:31:00 PM
Potassium	3610	5000	J	μg/L	1	10/31/2019 1:31:00 PM
Selenium	ND	5.00		μg/L	1	10/31/2019 1:31:00 PM
Sodium	94100	50000		μg/L	10	10/31/2019 1:37:00 PM
Zinc	ND	20.0		μg/L	1	10/31/2019 1:31:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	231	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGR		EV 2.1		_		Analyst: CS
Chloride	9.79	2.00		mg/L	2	10/4/2019 6:32:20 PM
Sulfate	9.79 228	2.00		mg/L	10	10/7/2019 5:45:47 PM
Sundle	220	20.0				· -····

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample
Work Order:	190920022	Collection Da
Reference:	Lockwood Ash Landfill / Annual	Lab Sample I
PO#:		Matr

 Client Sample ID:
 8911-D

 Collection Date:
 9/18/2019 12:05:00 PM

 Lab Sample ID:
 190920022-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	220	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 3	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:06:33 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	852	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	470	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 6:21:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- ${\bf B}$ Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

CLIENT:	Lockwood Hills LLC	Client Sample ID:	8911-SH
Work Order:	190920022	Collection Date:	9/19/2019 7:45:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-011
PO#:		Matrix:	GROUNDWATER

Adirondack Environmental Services, Inc

Important (E170.1) 11 11 10 J deg C 9/19/20 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019)) J J J J J 9/19/20 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019)) J J J J 9/19/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019)) J <td< th=""><th>Analyzed</th><th>Date Ana</th><th>DF</th><th></th><th>Units</th><th>Qual</th><th>RL</th><th>Result</th><th>/ses I</th><th>Analyses</th></td<>	Analyzed	Date Ana	DF		Units	Qual	RL	Result	/ses I	Analyses
Image: Construct (E170.1) 11 Image: Construct (E170.1) 11 Turbidity (E180.1) 12 1.0 Image: Construct (E170.1) 9/19/20 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019) Image: Construct (Prep: E245.1 - 9/20/2019) Image: Construct (Prep: SW3010A - 9/20/2019) Aluminum ND 200 µg/L 1 10/31/2 Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Calcium 62200 5000 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900	Analyst: FLD	Aı					IFIABLE	T ELAP CERT	D-PH, RES CL2, AND TEMP ARE NOT	FIELD-PH, RES CL2, A
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019) Build for an analysis Mercury ND 0.20 µg/L 1 9/21/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) ND 200 µg/L 1 10/31/2 Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadeium ND 5.00 µg/L 1 10/31/2 Cadeium 62200 5000 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Manganese 103 15.0 µg/L 1 10/31/2 Nickel ND 4.00 µg/L 1 10/31/2 Potassium 2030 5000 µg/L 1 10/31/2 Sod)19 7:45:00 AM					J		8.1		
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20/2019) Build for an analysis Mercury ND 0.20 µg/L 1 9/21/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019) ND 200 µg/L 1 10/31/2 Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadeium ND 5.00 µg/L 1 10/31/2 Cadeium 62200 5000 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Manganese 103 15.0 µg/L 1 10/31/2 Nickel ND 4.00 µg/L 1 10/31/2 Potassium 2030 5000 µg/L 1 10/31/2 Sod)19 7:45:00 AM].		-	J			• • •	
Mercury ND 0.20 μg/L 1 9/21/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019)) 1 10/31/2 Aluminum ND 200 μg/L 1 10/31/2 Antimony ND 60.0 μg/L 1 10/31/2 Arsenic 17.9 10.0 μg/L 1 10/31/2 Barium 29.9 200 J μg/L 1 10/31/2 Boron 336 50.0 μg/L 1 10/31/2 Cadmium ND 5.00 μg/L 1 10/31/2 Catoium 62200 5000 μg/L 1 10/31/2 Catoium ND 10.0 μg/L 1 10/31/2 Chromium ND 10.0 μg/L 1 10/31/2 Iron 979 100 μg/L 1 10/31/2 Magnesium 17900 5000 μg/L 1 10/31/2 Magnesium)19 7:45:00 AM	9/19/2019	9×	лM	NTU _	J	1.0	12	idity (E180.1)	Turbidity (E180.1)
Mercury ND 0.20 μg/L 1 9/21/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019)) 1 10/31/2 Aluminum ND 200 μg/L 1 10/31/2 Antimony ND 60.0 μg/L 1 10/31/2 Arsenic 17.9 10.0 μg/L 1 10/31/2 Barium 29.9 200 J μg/L 1 10/31/2 Boron 336 50.0 μg/L 1 10/31/2 Cadmium ND 5.00 μg/L 1 10/31/2 Calcium 62200 5000 μg/L 1 10/31/2 Calcium ND 10.0 μg/L 1 10/31/2 Chromium ND 25.0 μg/L 1 10/31/2 Iron 979 100 μg/L 1 10/31/2 Magnesium 17900 5000 μg/L 1 10/31/2 Magnesium	Analyst: AVB	A	119	X.	B				CURY - EPA 245.1 REV 3.0	MERCURY - EPA 245.1
Mercury ND 0.20 μg/L 1 9/21/20 ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20/2019)) 1 10/31/2 Aluminum ND 200 μg/L 1 10/31/2 Antimony ND 60.0 μg/L 1 10/31/2 Arsenic 17.9 10.0 μg/L 1 10/31/2 Barium 29.9 200 J μg/L 1 10/31/2 Boron 336 50.0 μg/L 1 10/31/2 Cadmium ND 5.00 μg/L 1 10/31/2 Calcium 62200 5000 μg/L 1 10/31/2 Calcium ND 10.0 μg/L 1 10/31/2 Chromium ND 25.0 μg/L 1 10/31/2 Iron 979 100 μg/L 1 10/31/2 Magnesium 17900 5000 μg/L 1 10/31/2 Magnesium			<u>д</u> ,	12/19	0			9)	(Prep: E245.1 - 9/20/2019	(Prep: I
(Prep: SW3010A - 9/20/2019) Aluminum ND 200 µg/L 1 10/31/2 Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Calum 62200 5000 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium ND 5.00 µg/L 1 10/31/2 Stelenium ND 5.00 µg/L 1 10/31)19 1:59:11 PM	9/21/2019		104	µg/L		0.20	ND	cury	Mercury
(Prep: SW3010A - 9/20/2019) Aluminum ND 200 µg/L 1 10/31/2 Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Calum 62200 5000 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Maganesium 17900 5000 µg/L 1 10/31/2 Maganesium 17900 5000 µg/L 1 10/31/2 Maganesium 033 15.0 µg/L 1 10/31/2 ND 5.00 µg/L 1 10/31/2 10/	Analyst: KH	A								
Antimony ND 60.0 µg/L 1 10/31/2 Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Catcium 62200 5000 µg/L 1 10/31/2 Catcium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium ND 5.00 µg/L 1 10/31/2 Notkel ND 5.00 µg/L 1 10/31/2 Sodium <t< td=""><td></td><td>7.</td><td></td><td></td><td></td><td></td><td></td><td>9)</td><td></td><td>••••••••••••</td></t<>		7.						9)		••••••••••••
Arsenic 17.9 10.0 µg/L 1 10/31/2 Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Calcium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Maganese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Notassium 2030 5000 J µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 10/31/2	2019 1:43:00 PM	10/31/201	1		μg/L		200	ND	ninum	Aluminum
Barium 29.9 200 J µg/L 1 10/31/2 Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Manganese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 10/31/2 HARDNESS - EPA 200.7 REV 4.4 I 10/31/2 In/31/2 1 1	2019 1:43:00 PM	10/31/201	1		µg/L		60.0	ND	nony	Antimony
Boron 336 50.0 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium ND 5.00 µg/L 1 10/31/2 Cadrium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Maganese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 Total Hardness	2019 1:43:00 PM	10/31/201	1		µg/L		10.0	17.9	nic	Arsenic
Cadmium ND 5.00 µg/L 1 10/31/2 Cadmium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnesium 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 HARDN	2019 1:43:00 PM	10/31/201	1		μg/L	J	200		Jm	Barium
Calcium 62200 5000 µg/L 1 10/31/2 Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Selenium ND 5.00 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 KHARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2	2019 1:43:00 PM	10/31/201	1		µg/L		50.0	336	n	Boron
Other ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Selenium ND 5.00 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 I 10/31/2 1 10/31/2 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 I 10/31/2 I <t< td=""><td>2019 1:43:00 PM</td><td>10/31/201</td><td>1</td><td></td><td>μg/L</td><td></td><td>5.00</td><td>ND</td><td>mium</td><td>Cadmium</td></t<>	2019 1:43:00 PM	10/31/201	1		μg/L		5.00	ND	mium	Cadmium
Chromium ND 10.0 µg/L 1 10/31/2 Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Magnese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Selenium ND 5.00 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 10 10/31/2 Jinc 4.89 20.0 J µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 I 10/31/2 I 10/31/2 I 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 I 10/31/2 I I 10/31/2	2019 1:43:00 PM	10/31/201	1		μg/L		5000	62200	ium	Calcium
Copper ND 25.0 µg/L 1 10/31/2 Iron 979 100 µg/L 1 10/31/2 Magnesium 17900 5000 µg/L 1 10/31/2 Manganese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Selenium ND 5.00 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 10 10/31/2 Jinc 4.89 20.0 J µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 I 10/31/2 I 10/31/2	2019 1:43:00 PM	10/31/201	1		μg/L		10.0			Chromium
Iron 979 100 μg/L 1 10/31/2 Magnesium 17900 5000 μg/L 1 10/31/2 Manganese 103 15.0 μg/L 1 10/31/2 Nickel ND 40.0 μg/L 1 10/31/2 Potassium 2030 5000 J μg/L 1 10/31/2 Selenium ND 5.00 μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 Jinc 4.89 20.0 J μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 HARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 1 10/31/2	2019 1:43:00 PM	10/31/201	1				25.0	ND	ber	Copper
Manganese 103 15.0 μg/L 1 10/31/2 Nickel ND 40.0 μg/L 1 10/31/2 Potassium 2030 5000 J μg/L 1 10/31/2 Selenium ND 5.00 μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 HARDNESS - EPA 200.7 REV 4.4 4.89 20.0 J μg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 1 10/31/2 1 10/31/2	019 1:43:00 PM	10/31/201	1		μg/L		100	979		••
Maganese 103 15.0 µg/L 1 10/31/2 Nickel ND 40.0 µg/L 1 10/31/2 Potassium 2030 5000 J µg/L 1 10/31/2 Selenium ND 5.00 µg/L 1 10/31/2 Sodium 65800 50000 µg/L 10 10/31/2 Zinc 4.89 20.0 J µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 20.0 1 10/31/2 1	2019 1:43:00 PM	10/31/201	1		μg/L		5000	17900	nesium	Magnesium
Nickel ND 40.0 μg/L 1 10/31/2 Potassium 2030 5000 J μg/L 1 10/31/2 Selenium ND 5.00 μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 Zinc 4.89 20.0 J μg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 1 10/31/2 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 1 10/31/2	2019 1:43:00 PM	10/31/201	1				15.0			•
Potassium 2030 5000 J μg/L 1 10/31/2 Selenium ND 5.00 μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 Zinc 4.89 20.0 J μg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 20.0 1 10/31/2 1 10/31/2	2019 1:43:00 PM	10/31/201	1				40.0	ND	-	-
Selenium ND 5.00 μg/L 1 10/31/2 Sodium 65800 50000 μg/L 10 10/31/2 Zinc 4.89 20.0 J μg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 20.0 1 10/31/2 1	019 1:43:00 PM	10/31/201	1			J	5000		ssium	Potassium
Sodium 65800 5000 μg/L 10 10/31/2 Zinc 4.89 20.0 J μg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 20.0 J μg/L 1 10/31/2	2019 1:43:00 PM	10/31/201	1		μg/L		5.00		nium	Selenium
Zinc 4.89 20.0 J µg/L 1 10/31/2 HARDNESS - EPA 200.7 REV 4.4 Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 20.0 J µg/L 1 10/31/2	019 1:48:00 PM	10/31/201	10				50000			
Total Hardness (As CaCO3) 229 5 mg/L CaCO3 1 10/31/2 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1	2019 1:43:00 PM	10/31/201	1			J	20.0	4.89		Zinc
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1	Analyst: KH	Aı							DNESS - EPA 200.7 REV 4.4	HARDNESS - EPA 200.
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1	2019	10/31/201	1	aCO3	mg/L Ca		5	229	l Hardness (As CaCO3)	Total Hardness (As CaC
Chloride 9.22 2.00 mg/L 2 10/4/20	Analyst: CS	Aı			Ŭ.					
Gnioriae 9.22 2.00 mg/L 2 10/4/20)19 6:51:22 PM	10/4/2010	0		ma/		0.00	0.00		
Sulfate 215 20.0 mg/L 10 10/7/20)19 6:04:49 PM				-					
Sulfate 215 20.0 mg/L 10 10/7/20	130.04.43 FIV	10/7/2019	IU		ing/L		20.0	215	are	Sulfate

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

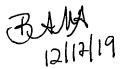
T - Tentitively Identified Compound-Estimated Conc.

Page 20 of 59

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8911-SH	
Work Order:	190920022	Collection Date: 9/19/2019 7:45:00 AM	1
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-011	
PO#:		Matrix: GROUNDWATER	

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	110	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 3	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1 J-	–● mg/L	1	9/30/2019 2:08:14 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	1080	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	460	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 6:37:00 PM
COLOR (PLATINUM-COBALT) - SM 2	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM



Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

CLIENT:	Lockwood Hills LLC	Client Sample ID:	8942-D
Work Order:	190920022	Collection Date:	9/19/2019 7:15:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-012
PO#:		Matrix:	GROUNDWATER

Adirondack Environmental Services, Inc

FIELD-PH, RES CL2, AND TEMP ARE	E NOT ELAP CER					
all (E150.1)						Analyst: FLD
Temperature (E170.1) Turbidity (E180.1)	7.5 10 < 1	1.0	775	S.U. deg C NTU	H	9/19/2019 7:15:00 AM 9/19/2019 7:15:00 AM 9/19/2019 7:15:00 AM
	< 1	1.0	J	BA	119	
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/20	/2019)			512	ויאון	Analyst: AVB
Mercury	ND	0.20		μg/L	1	9/21/2019 2:00:53 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20	/2019)					Analyst: KH
Aluminum	ND	200		μg/L	1	10/31/2019 2:17:00 PM
Antimony	ND	60.0		µg/L	1	10/31/2019 2:17:00 PM
Arsenic	13.7	10.0		μg/L	1	10/31/2019 2:17:00 PM
Barium	40.2	200	J	μg/L	1	10/31/2019 2:17:00 PM
Boron	314	50.0		μg/L	1	10/31/2019 2:17:00 PM
Cadmium	ND	5.00		µg/L	1	10/31/2019 2:17:00 PM
Calcium	86700	5000		μg/L	1	10/31/2019 2:17:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 2:17:00 PM
Copper	2.53	25.0	J	μg/L	1	10/31/2019 2:17:00 PM
Iron	589	100		μg/L	1	10/31/2019 2:17:00 PM
Magnesium	71600	5000		μg/L	1	10/31/2019 2:17:00 PM
Manganese	232	15.0		μg/L	1	10/31/2019 2:17:00 PM
Nickel	ND	40.0		μg/L	1	10/31/2019 2:17:00 PM
Potassium	3120	5000	J	μg/L	1	10/31/2019 2:17:00 PM
Selenium	ND	5.00		µg/L	1	10/31/2019 2:17:00 PM
Sodium	40500	5000		µg/L	1	10/31/2019 2:17:00 PM
Zinc	ND	20.0		µg/L	1	10/31/2019 2:17:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	511	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRAPH	IY - EPA 300.0 RE	EV 2.1				Analyst: CS
Chloride	3.28	2.00		mg/L	2	10/4/2019 8:28:10 PM
Sulfate	234	20.0		mg/L	10	10/4/2019 8:47:21 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID: 8942-D
Work Order:	190920022	Collection Date: 9/19/2019 7:15:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-012
PO#:		Matrix: GROUNDWATER

Analyses	Result	RL Qua	ıl Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	290	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 3	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1 J-	⊷ mg/L	1	9/30/2019 2:09:53 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	923	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	600	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	2.8	1.0 J-	mg/L	1	10/1/2019 6:53:00 PM
COLOR (PLATINUM-COBALT) - SM 2	2120 B-2 011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM



Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate
- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc				Date:			04-Nov-19		
CLIENT:	Lockwood Hills LLC		Client Sample ID: 9306-S			6-SH			
Work Order:	190920022	Collection Date: 9/1				/19/2019 7:00:00 AM			
Reference:	Lockwood Ash Landfill	/ Annual	Lab Sample ID: 190920			920022-013			
PO#:					M	atrix: GR	OUNDWATER		
Analyses		Result	RL	Qual	Units	DF	Date Analyzed		
FIELD-PH, RES	CL2, AND TEMP ARE NOT	T ELAP CERTI	FIABLI	E			Analyst: FLD		
pH (E150.1)		7.6		J	S.U.		9/19/2019 7:00:00 AM		
Temperature (E	170.1)	11		J	deg C	. 1	9/19/2019 7:00:00 AM		
Turbidity (E180.	1)	4	1.0	ਹੈ	NTU n	IMA	9/19/2019 7:00:00 AM		
	A 245.1 REV 3.0 Prep: E245.1 - 9/20/2019)			B		Analyst: AVB		
Mercury		ND	0.20		μg/L	1	9/21/2019 2:02:35 PM		
ICP METALS - E	EPA 200.7						Analyst: KH		
(Pre	ep: SW3010A - 9/20/2019)							
Aluminum		ND	200		μg/L	1	10/31/2019 2:22:00 PM		
Antimony		ND	60.0		µg/L	1	10/31/2019 2:22:00 PM		
Arsenic		13.2	10.0		µg/L	1	10/31/2019 2:22:00 PM		
Barium		48.3	200	J	μg/L	1	10/31/2019 2:22:00 PM		

Aluminum	ND	200	μg/L	1	10/31/2019 2:22:00 PM
Antimony	ND	60.0	μg/L	1	10/31/2019 2:22:00 PM
Arsenic	13.2	10.0	μg/L	1	10/31/2019 2:22:00 PM
Barium	48.3	200	J μg/L	1	10/31/2019 2:22:00 PM
Boron	95.8	50.0	J μg/L	1	10/31/2019 2:22:00 PM
Cadmium	ND	5.00	μg/L	1	10/31/2019 2:22:00 PM
Calcium	73200	5000	μg/L	1	10/31/2019 2:22:00 PM
Chromium	ND	10.0	μg/L	1	10/31/2019 2:22:00 PM
Copper	7.18	25.0	J μg/L	1	10/31/2019 2:22:00 PM
Iron	770	100 J	μg/L	1	10/31/2019 2:22:00 PM
Magnesium	63000	5000	μg/L	1	10/31/2019 2:22:00 PM
Manganese	51.9	15.0	· μg/L	1	10/31/2019 2:22:00 PM
Nickel	ND	40.0	μg/L	1	10/31/2019 2:22:00 PM
Potassium	3230	5000	J μg/L	1	10/31/2019 2:22:00 PM
Selenium	ND	5.00	μg/L	1	10/31/2019 2:22:00 PM
Sodium	20600	5000	J ^Φ μg/L	1	10/31/2019 2:22:00 PM
Zinc	11.4	20.0	J μg/L	1	10/31/2019 2:22:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH

Total Hardness (As CaCO3)	442	5	mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRAF	Analyst: CS				
Chloride	ND	2.00	mg/L	2	10/4/2019 9:06:23 PM
Sulfate	71.7	4.00	mg/L	2	10/4/2019 9:06:23 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above) Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

ΡM ΡМ ΡM ΡM ΡM ΡM ΡM ΡM ΡM ΡM ΡM PМ ΡM

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	C
Work Order:	190920022	
Reference:	Lockwood Ash Landfill / Annual	
PO#:		

Client Sample ID: 9306-SH Collection Date: 9/19/2019 7:00:00 AM Lab Sample ID: 190920022-013 Matrix: GROUNDWATER

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	011				Analyst: DAA
Alkalinity, Total (As CaCO3)	380	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 3	50.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:11:31 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	700	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	365	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 7:10:00 PM
COLOR (PLATINUM-COBALT) - SM 2	120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:	ND - Not Detected at the Reporting Limit	S - LCS Spike below accepted limits (+ above)
•	J - Analyte detected below quanititation limits	Z - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	N - Matrix Spike below accepted limits (+ above)
	X - Value exceeds Maximum Contaminant Level	T - Tentitively Identified Compound-Estimated Conc.
	E - Value above quantitation range-Estimate	Page 25 of

Date: 04-Nov-19

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID:	GW-Dup 8909-D
Work Order:	190920022	Collection Date:	9/18/2019 3:00:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-014
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CEP					Analyst: FLD
pH (E150.1)	9.6		-	S.U.		9/18/2019 3:00:00 PM
Temperature (E170.1)	16		J	deg C		9/18/2019 3:00:00 PM
Turbidity (E180.1)	> 999	1.0	J	NTU		9/18/2019 3:00:00 PM
MERCURY - EPA 245.1 REV 3.0				DAN	Ma	Analyst: AVB
(Prep: E245.1 - 9/	/20/2019)					
Mercury	ND	0.20		hàl thể	1	9/21/2019 2:07:41 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 9	(20/2019)					
Aluminum	978	200	J.	μg/L	1	10/31/2019 2:58:00 PM
Antimony	ND	60.0	- •	μg/L	1	10/31/2019 2:58:00 PM
Arsenic	ND	10.0		μg/L	1	10/31/2019 2:58:00 PM
Barium	118	200	J	μg/L	1	10/31/2019 2:58:00 PM
Boron	1130	50.0		μg/L	1	10/31/2019 2:58:00 PM
Cadmium	ND	5.00		μg/L	1	10/31/2019 2:58:00 PM
Calcium	18200	5000		μg/L	1	10/31/2019 2:58:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 2:58:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 2:58:00 PM
Iron	3620	100	5	μg/L	1	10/31/2019 2:58:00 PM
Magnesium	3650	5000	J	μg/L	1	10/31/2019 2:58:00 PM
Manganese	137	15.0		μg/L	1	10/31/2019 2:58:00 PM
Nickel	8.58	40.0	J	μg/L	1	10/31/2019 2:58:00 PM
Potassium	1430	5000	J	μg/L	1	10/31/2019 2:58:00 PM
Selenium	ND	5.00		μg/L	1	10/31/2019 2:58:00 PM
Sodium	164000	50000		μg/L	10	10/31/2019 3:03:00 PM
Zinc	35.6	20.0	J¥	µg/L	1	10/31/2019 2:58:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	61	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRA	VPHY - EPA 300.0 R	EV 2.1				Analyst: CS
		0.00		mall	2	10/4/2019 10:03:30 PM
Chloride	4.19	2.00		mg/L	2	10/4/2019 10:03:30 PM
Sulfate	104	4.00		mg/L	2	1014/2013 10:00:00110

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

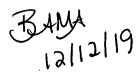
Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	GW-Dup 8909-D
Work Order:	190920022	Collection Date:	9/18/2019 3:00:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-014
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL Qua	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	9/30/2019 2:13:09 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	752	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	695	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	2.6	1.0 Jt .	mg/L	1	10/1/2019 7:26:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	10	5	cpu@pH7	1	9/20/2019 4:00:00 PM



Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC	Client Sample ID:	GW Dep Drain 1
Work Order:	190920022	Collection Date:	9/18/2019 12:40:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-015
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE				Analyst: FLD
Dissolved Oxygen (E360.1) Flow, GPD	5.12 485.1 7.3	0.10	J	mg/L gal/day S.U.		9/18/2019 12:40:00 PM 9/18/2019 12:40:00 PM 9/18/2019 12:40:00 PM
pH (E150.1)	7.5 15		Ğ	deg C		9/18/2019 12:40:00 PM
Temperature (E170.1) Turbidity (E180.1)	75 3	1.0	Ť	NTU	1	9/18/2019 12:40:00 PM
	-		-		MA. ICI	Analyst: AVB
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9	(20/2019)			(BA	2111	,
Mercury	ND	0.20		μg/L J		9/21/2019 2:09:22 PM
•	112					Analyst: KH
ICP METALS - EPA 200.7	(00/0010					Analysi. NH
(Prep: SW3010A - 9	/20/2019)					
Aluminum	ND	200		μg/L	1	10/31/2019 3:07:00 PM
Antimony	ND	60.0		µg/L	1	10/31/2019 3:07:00 PM
Arsenic	ND	10.0		µg/L	1	10/31/2019 3:07:00 PM
Barium	25.1	200	J	µg/L	1	10/31/2019 3:07:00 PM
Boron	3320	50.0		µg/L	1	10/31/2019 3:07:00 PM
Cadmium	ND	5.00		μg/L	1	10/31/2019 3:07:00 PM
Calcium	361000	50000		μg/L	10	10/31/2019 3:10:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 3:07:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 3:07:00 PM
Iron	ND	100	UT	μg/L	1	10/31/2019 3:07:00 PM
Magnesium	119000	5000	- 0	μg/L	1	10/31/2019 3:07:00 PM
Manganese	ND	15.0		μg/L	1	10/31/2019 3:07:00 PM
Nickel	5.05	40.0	J	μg/L	1	10/31/2019 3:07:00 PM
Potassium	7710	5000		μg/L	1	10/31/2019 3:07:00 PM
Selenium	ND	5.00		μg/L	1	10/31/2019 3:07:00 PM
Sodium	39000	50000	J	μg/L	10	10/31/2019 3:10:00 PM
Zinc	ND	20.0		μg/L	1	10/31/2019 3:07:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	1390	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRA	VPHY - EPA 300.0 R	EV 2.1				Analyst: CS
Chloride	75.4	2.00		mg/L	2	10/4/2019 11:59:06 PM
Sulfate	830	40.0		mg/L	20	10/5/2019 12:18:26 AM
Oualifiers: ND - Not Detected at			S - LC	CS Spike below a	ccepted limits (-	+ above)

ND - Not Detected at the Reporting Limit J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

N - Matrix Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	(
Work Order:	190920022	
Reference:	Lockwood Ash Landfill / Annual	
PO#:		

Client Sample ID: GW Dep Drain 1 Collection Date: 9/18/2019 12:40:00 PM Lab Sample ID: 190920022-015 Matrix: GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	380	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 3	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:14:47 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	1830	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	1700	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 7:42:00 PM
COLOR (PLATINUM-COBALT) - SM 2	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- ${\bf B}$ Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondac	k Environmental Services, Inc	Date:	04-Nov-19	
CLIENT:	Lockwood Hills LLC	Client Sample ID:	Leak Detection Syst.	
Work Order:	190920022	Collection Date:	9/18/2019 11:48:00 AM	
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-016	
PO#:		Matrix:	GROUNDWATER	

Analyses	Result	RL (Qual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE		CHOISE DISCOM	Analyst: FLD
Dissolved Oxygen (E360.1)	5.9	0.10	mg/L		9/18/2019 11:48:00 AM
Flow, GPD	66.6		gal/day		9/18/2019 11:48:00 AM
pH (E150.1)	8.0		J S.U.		9/18/2019 11:48:00 AM
Temperature (E170.1)	16		J deg C		9/18/2019 11:48:00 AN
Turbidity (E180.1)	5	1.0	J deg C J NTU	1	9/18/2019 11:48:00 AM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 -	9/20/2019)		B	AMA 19	Analyst: AVB
Mercury	ND	0.20	μg/L	12/10/1	9/21/2019 2:14:25 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A -	9/20/2019)				
Aluminum	ND	200	μg/L	1	10/31/2019 3:33:00 PM
Antimony	ND	60.0	μg/L	the state of	10/31/2019 3:33:00 PM
Arsenic	7.26	10.0	J <mark>∉</mark> μg/L	1	10/31/2019 3:33:00 PM
Barium	18.7	200	JM μg/L	1	10/31/2019 3:33:00 PM
Boron	915		J μg/L	1	10/31/2019 3:33:00 PM
Cadmium	ND	5.00	μg/L	1	10/31/2019 3:33:00 PM
Calcium	448000		J μg/L	10	10/31/2019 3:38:00 PM
Chromium	ND	10.0	μg/L	1	10/31/2019 3:33:00 PM
Copper	ND	25.0	μg/L	1	10/31/2019 3:33:00 PM
Iron	ND		ΛT μg/L	1	10/31/2019 3:33:00 PM
Magnesium	186000	5000	μg/L	1	10/31/2019 3:33:00 PM
Manganese	22.4	15.0	μg/L	1	10/31/2019 3:33:00 PM
Nickel	ND	40.0	μg/L	1	10/31/2019 3:33:00 PM
Potassium	5740	5000 J	-	1	10/31/2019 3:33:00 PM
Selenium	ND	5.00 🗸		1	10/31/2019 3:33:00 PM
Sodium	90400	50000 3		10	10/31/2019 3:38:00 PM
Zinc	ND	20.0	μg/L	1	10/31/2019 3:33:00 PN
HARDNESS - EPA 200.7 REV 4.4	•				Analyst: KH
Total Hardness (As CaCO3)	1883	5	mg/L CaC	03 1	10/31/2019
ANIONS BY ION CHROMATOGR	APHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	31.2	2.00	mg/L	2	10/5/2019 12:37:28 AN
Sulfate	1150	100	mg/L	50	10/5/2019 12:56:31 AM
Qualifiers: ND - Not Detected a	at the Reporting Limit		S - LCS Spike belo	ow accepted limits (+ above)
	below quanititation limits		Z - RPD outside ad	ccepted recovery lin	nits

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT: Lockwood Hills LLC	Client Sample
Work Order: 190920022	Collection Da
Reference: Lockwood Ash Landfill / Annual	Lab Sample 1
PO#:	Mat

 Client Sample ID:
 Leak Detection Syst.

 Collection Date:
 9/18/2019 11:48:00 AM

 Lab Sample ID:
 190920022-016

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	550	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:16:25 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	2580	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	2240	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	2.6	1.0 J +	mg/L	1	10/1/2019 7:58:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM

BANK 12/12/19

Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Under Drain 1
Work Order:	190920022	Collection Date:	9/18/2019 1:15:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-017
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AF	E NOT ELAP CE	RTIFIABLI	E		-09203529	Analyst: FLD
Dissolved Oxygen (E360.1)	6.89	0.10		mg/L		9/18/2019 1:15:00 PM
Flow, GPD	6563			gal/day		9/18/2019 1:15:00 PM
pH (E150.1)	7.8		J	S.U.		9/18/2019 1:15:00 PM
Temperature (E170.1)	14		J	deg C		9/18/2019 1:15:00 PM
Turbidity (E180.1)	77	1.0	J	NTU	1	9/18/2019 1:15:00 PM
MERCURY - EPA 245.1 REV 3.0				RJ	112/19	Analyst: AVE
(Prep: E245.1 - 9/2	0/2019)			D	11211	
Mercury	ND	0.20		µg/L		9/21/2019 2:16:05 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 9/2	0/2019)					
Aluminum	ND	200		µg/L	1	10/31/2019 4:09:00 PM
Antimony	ND	60.0		µg/L	1	10/31/2019 4:09:00 PM
Arsenic	78.9	10.0	Jf	µg/L	1	10/31/2019 4:09:00 PM
Barium	68.6	200	J,	µg/L	1	10/31/2019 4:09:00 PM
Boron	4500	50.0		µg/L	- 1	10/31/2019 4:09:00 PM
Cadmium	ND	5.00		µg/L	1.1.1	10/31/2019 4:09:00 PM
Calcium	448000	50000		μg/L	10	10/31/2019 4:14:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 4:09:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 4:09:00 PM
Iron	6400	100	J-•	μg/L	1	10/31/2019 4:09:00 PN
Magnesium	89700	5000	0.	μg/L	1	10/31/2019 4:09:00 PM
Magnese	791	15.0		μg/L	1	10/31/2019 4:09:00 PM
Nickel	7.09	40.0	J	μg/L	1	10/31/2019 4:09:00 PM
Potassium	18700	5000		μg/L	1	10/31/2019 4:09:00 PN
Selenium	ND	5.00		μg/L	1	10/31/2019 4:09:00 PM
Sodium	44500	50000	J	μg/L	10	10/31/2019 4:14:00 PN
Zinc	ND	20.0		μg/L	1	10/31/2019 4:09:00 PM
LOW LEVEL MERCURY - EPA 1631	E					Analyst: WB
(Prep: 1631E - 10/	3/2019)					
Mercury	0.5	0.5		ng/L	1	10/4/2019
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	1487	5		mg/L CaCO	3 1	10/31/2019
Qualifiers: ND - Not Detected at th	e Reporting Limit		S - LC	S Spike below	accepted limits	(+ above)

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

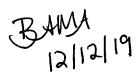
N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC
Work Order:	190920022
Reference:	Lockwood Ash Landfill / Annual
PO#:	

Client Sample ID:Under Drain 1Collection Date:9/18/2019 1:15:00 PMLab Sample ID:190920022-017Matrix:GROUNDWATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY -	EPA 300.0 R	EV 2.1			Analyst: CS
Chloride Sulfate	26.4 446	2.00 40.0	mg/L mg/L	2 20	10/5/2019 1:15:34 AM 10/5/2019 1:34:37 AM
ALKALINITY TO PH 4.5 -SM 2320B-2011	l				Analyst: DAA
Alkalinity, Total (As CaCO3)	650	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA 350.	1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	J-♥ mg/L	1	9/30/2019 2:18:03 PM
CONDUCTANCE AT 25C - SM 2510B-20	11				Analyst: KB
Specific Conductance	1750	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25400	2-2011				Analyst: CC
TDS (Residue, Filterable)	1330	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5310C	-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 8:14:00 PM
COLOR (PLATINUM-COBALT) - SM 212	0B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 3:25:00 PM



Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quanititation limits

- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Reference: PO#:	190920022 Lockwood Ash Landfill	/ Annual			Lab Sample ID	e: 9/18/2 : 19092	019 12:23:00 PM
Analyses	The Alexandra and the second se	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES (CL2, AND TEMP ARE NO	DT ELAP CEF	RTIFIABL	E	SKUC KHE - KHE	ANE OF	Analyst: FLD
Dissolved Oxyger	n (E360.1)	6.28	0.10		mg/L		9/18/2019 12:23:00 PM
Flow, GPD		2568			gal/day		9/18/2019 12:23:00 PM
pH (E150.1)		7.5		J	S.U.		9/18/2019 12:23:00 PM
Temperature (E1	70.1)	15		J	deg C		9/18/2019 12:23:00 PM
Turbidity (E180.1)	20	1.0	J	NTU . NA		9/18/2019 12:23:00 PM
MERCURY - EPA	4 245.1 BEV 3.0				BAM	119	Analyst: AVB
	Prep: E245.1 - 9/20/201	9)			الديني	21	
Mercury		ND	0.20		μg/L	1	9/21/2019 2:17:46 PM
ICP METALS - E	PA 200.7						Analyst: KH
	p: SW3010A - 9/20/201	9)					
Aluminum		ND	200		μg/L	1	10/31/2019 4:27:00 PM
Antimony		ND	60.0		μg/L	1	10/31/2019 4:27:00 PM
Arsenic		18.3	10.0	J+		1	10/31/2019 4:27:00 PM
Barium		24.6	200	J	μg/L	1	10/31/2019 4:27:00 PM
Boron		54000	500	Ū	μg/L	10	10/31/2019 4:32:00 PM
Cadmium		ND	5.00		μg/L	1	10/31/2019 4:27:00 PM
Calcium		670000	50000		μg/L	10	10/31/2019 4:32:00 PM
Chromium		ND	10.0		μg/L	1	10/31/2019 4:27:00 PM
Copper		ND	25.0		μg/L	1	10/31/2019 4:27:00 PM
Iron		2180	100	J		1	10/31/2019 4:27:00 PM
Magnesium		107000	5000	J	μg/L		10/31/2019 4:27:00 PM
Manganese		1280	15.0		μg/L	1	10/31/2019 4:27:00 PM
Nickel		4.72	40.0	J	μg/L	1	10/31/2019 4:27:00 PM
Potassium		4.72	50000	U	μg/L	10	10/31/2019 4:32:00 PM
Selenium		7.16	5.00		μg/L μg/L	1	10/31/2019 4:27:00 PM
Sodium			50000	04	μg/L	10	10/31/2019 4:32:00 PM
Zinc		281000 6.97	20.0	J	μg/L μg/L	1	10/31/2019 4:27:00 PM
		0.37	20.0		₩9' ⊢		
HARDNESS - EP	A 200.7 REV 4.4						Analyst: KH
Total Hardness (A	As CaCO3)	2112	5		mg/L CaCO3	1	10/31/2019
	CHROMATOGRAPHY - I		EV 2.1				Analyst: CS
Chloride		440	EQ.0		ma/l	50	10/5/2019 2:12:41 AM
Unioride		413	50.0		mg/L	50	10/3/2019 2.12.41 AM

Date: 04-Nov-19

X - Value exceeds Maximum Contaminant Level E - Value above quantitation range-Estimate

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

ND - Not Detected at the Reporting Limit

Qualifiers:

S - LCS Spike below accepted limits (+ above)Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Clie
Work Order:	190920022	С
Reference:	Lockwood Ash Landfill / Annual	$\mathbf{L}_{\mathbf{c}}$
PO#:		

Client Sample ID: Under Drain 2 Collection Date: 9/18/2019 12:23:00 PM Lab Sample ID: 190920022-018 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	340	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	2.0	0.1	mg/L	1	9/30/2019 2:26:11 PM
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	4100	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	3520	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	5310C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 9:39:00 PM
COLOR (PLATINUM-COBALT) - SI	M 2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 4:00:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

	Adirondack	Environmental	Services, Inc
--	------------	---------------	---------------

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Under Drain 3	
Work Order:	190920022	Collection Date:	9/18/2019 11:25:00 AM	
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-019	
PO#:		Matrix:	GROUNDWATER	

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2,	AND TEMP ARE NOT ELAP C	ERTIFIABLE	I			Analyst: FLD
Dissolved Oxygen (E3	360.1) 4.12	0.10		mg/L		9/18/2019 11:25:00 AM
Flow, GPD	247			gal/day		9/18/2019 11:25:00 AN
pH (E150.1)	7.5		J	S.U.		9/18/2019 11:25:00 AN
Temperature (E170.1) 15		J	deg C		9/18/2019 11:25:00 AM
Turbidity (E180.1)	7	1.0	J	NTU	nA -	9/18/2019 11:25:00 AM
MERCURY - EPA 24	5.1 REV 3.0 : E245.1 - 9/20/2019)			BH	12/19	Analyst: AVB
Mercury	ND	0.20		µg/L \₽	1	9/21/2019 2:19:27 PM
CP METALS - EPA 2	200 7					Analyst: KH
	W3010A - 9/20/2019)					
Aluminum	ND	200		μg/L	1	10/31/2019 4:35:00 PM
	ND	60.0		μg/L	1	10/31/2019 4:35:00 PM
Antimony Arsenic	8.42	10.0	-	μg/L	1	10/31/2019 4:35:00 PM
Barium	22.0	200	J	μg/L	1	10/31/2019 4:35:00 PM
Boron	39500	500	U	μg/L	10	10/31/2019 4:39:00 PM
Cadmium	59500 ND	5.00		μg/L	10	10/31/2019 4:35:00 PM
Calcium	758000	50000		μg/L	10	10/31/2019 4:39:00 PM
Chromium	ND	10.0		μg/L	1	10/31/2019 4:35:00 PM
Copper	ND	25.0		μg/L	1	10/31/2019 4:35:00 PM
Iron	188	100	J-		1	10/31/2019 4:35:00 PM
Magnesium	142000	5000	0	μg/L	1	10/31/2019 4:35:00 PM
Manganese	453	15.0		μg/L	1	10/31/2019 4:35:00 PM
Nickel	3.12	40.0	J	μg/L	1	10/31/2019 4:35:00 PM
Potassium	180000	50000		μg/L	10	10/31/2019 4:39:00 PM
Selenium	7.16	5.00	J+		1	10/31/2019 4:35:00 PM
Sodium	360000	50000	••	μg/L	10	10/31/2019 4:39:00 PM
Zinc	ND	20.0		μg/L	1	10/31/2019 4:35:00 PM
ARDNESS - EPA 20	00.7 REV 4.4					Analyst: KH
Total Hardness (As Ca	aCO3) 2476	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CH	ROMATOGRAPHY - EPA 300.0	REV 2.1				Analyst: CS
Obleside	534	50.0		mg/L	50	10/5/2019 4:48:11 AM
Chloride						

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

Z - RPD outside accepted recovery limits N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID: Under Drain 3
Work Order:	190920022	Collection Date: 9/18/2019 11:25:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-019
PO#:		Matrix: GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	510	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1 J	mg/L	1	9/30/2019 2:27:52 PM
CONDUCTANCE AT 25C - SM 2510	B-2011				Analyst: KB
Specific Conductance	4670	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	4020	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/1/2019 9:56:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 4:00:00 PM



Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc Date:			04-Nov-19		
CLIENT:	Lockwood Hills LLC	Client Sample ID:	Inlet to Pond		
Work Order:	190920022	Collection Date:	9/19/2019 7:30:00 AM		
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-020		
PO#:		Matrix:	GROUNDWATER		
Analyses	Result	RL Qual Units	DF Date Analyzed		

Observation	Construction	NA	9/19/2019 7:30:00 AM

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

CLIENT:Lockwood Hills LLCWork Order:190920022Reference:Lockwood Ash Landfill / AnnualPO#:			C	Collection Da Lab Sample II	te: 9/18/2 D: 19092	Keuka Upstream 9/18/2019 2:10:00 PM 190920022-021 SURFACE WATER	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP A	RE NOT ELAP CER	TIFIABLE	Ξ			Analyst: FLD
Dissolved Oxyg	en (E360.1)	5.20	0.10		mg/L		9/18/2019 2:10:00 PM
pH (E150.1)		8.5		J	S.U.		9/18/2019 2:10:00 PM
Temperature (E	170.1)	19		J	deg C		9/18/2019 2:10:00 PM
Turbidity (E180	.1)	5	1.0	J	NTU	•	9/18/2019 2:10:00 PM
	PA 245.1 REV 3.0 Prep: E245.1 - 9/2	0/2019)			BAM	×119	Analyst: AVB
Mercury		ND	0.20		μg/L]2/		9/21/2019 2:21:08 PM
ICP METALS -	ΕΡΔ 200 7						Analyst: KH
	ep: SW3010A - 9/2	0/2019)					
Aluminum		ND	200		μg/L	1	10/31/2019 4:43:00 PM
Antimony		ND	60.0		μg/L	1	10/31/2019 4:43:00 PM
Arsenic		6.65	10.0	J -† (■µg/L	1	10/31/2019 4:43:00 PM
Barium		26.5	200	J	μg/L	1	10/31/2019 4:43:00 PM
Boron		40.4	50.0	J	μg/L	1	10/31/2019 4:43:00 PM
Cadmium		ND	5.00		μg/L	1	10/31/2019 4:43:00 PM
Calcium		39300	5000		µg/L	1	10/31/2019 4:43:00 PM
Chromium		ND	10.0		μg/L	1	10/31/2019 4:43:00 PM
Copper		2.19	25.0	J	μg/L	1	10/31/2019 4:43:00 PM
Iron		53.4	100	J	μg/L	1	10/31/2019 4:43:00 PM
Magnesium		13300	5000		μg/L	1	10/31/2019 4:43:00 PM
Manganese		ND	15.0		μg/L	1	10/31/2019 4:43:00 PM
Nickel		ND	40.0		μg/L	1	10/31/2019 4:43:00 PM
Potassium		3220	5000	J	µg/L	1	10/31/2019 4:43:00 PM
Selenium		ND	5.00		μg/L	1	10/31/2019 4:43:00 PM
Sodium		28400	5000		µg/L	1	10/31/2019 4:43:00 PM
Zinc		ND	20.0		μg/L	1	10/31/2019 4:43:00 PM
HARDNESS - E	PA 200.7 REV 4.4						Analyst: KH
Total Hardness	(As CaCO3)	153	5		mg/L CaCO3	1	10/31/2019
ANIONS BY IO	N CHROMATOGRAP	HY - EPA 300.0 RE	V 2.1				Analyst: CS
Chlorida		10 1	2.00		mg/L	2	10/4/2019 8:18:24 PM
Chloride Sulfate		43.1 26.3	4.00		mg/L	2	10/4/2019 8:18:24 PM
Qualifiers:	26.34.00ND - Not Detected at the Reporting LimitJ - Analyte detected below quanititation limitsB - Analyte detected in the associated Method Blank			Z - RP N - Ma	S Spike below acce D outside accepted atrix Spike below a	recovery lir ccepted limi	nits

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Keuka Upstream
Work Order:	190920022	Collection Date: 9	9/18/2019 2:10:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-021
PO#:		Matrix: S	SURFACE WATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011	H.MARF	UTHEO ALLS TONS	ITA SIQUE	Analyst: DAA
Alkalinity, Total (As CaCO3)	116	4	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:29:31 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	404	1	J <i>●</i> μmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	145.	5	J_ mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	3.2	1.0	J+ ℓ mg/L	1	10/1/2019 10:12:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	7	5	cpu@pH7	1	9/20/2019 4:00:00 PM

BAMA 12/12/19

Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method BlankX Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate
- S LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

Analyses FIELD-PH, RES (ACE WATER
FIELD-PH, RES (Result	RL	Qual	Units	DF	Date Analyzed
	CL2, AND TEMP ARE NO	OT ELAP CEF	TIFIABLE	Ξ			Analyst: FLD
Dissolved Oxygen	(E360.1)	5.21	0.10		mg/L		9/18/2019 1:45:00 PM
pH (E150.1)		8.2		J	S.U.		9/18/2019 1:45:00 PM
Temperature (E1	70.1)	18		Ĵ	deg C		9/18/2019 1:45:00 PM
Turbidity (E180.1)	5	1.0	J	NTU		9/18/2019 1:45:00 PM
MERCURY - EPA	245.1 REV 3.0 rep: E245.1 - 9/20/201	9)			BANA	2/19	Analyst: AVB
Mercury	····	ND	0.20		μg/L Jal	1	9/21/2019 2:22:50 PM
ICP METALS - EF	PA 200.7						Analyst: KH
): SW3010A - 9/20/201	9)					,
Aluminum		ND	200		μg/L	1	10/31/2019 4:47:00 PM
Antimony		ND	60.0		μg/L	1	10/31/2019 4:47:00 PM
Arsenic		5.60	10.0	J	μg/L	1	10/31/2019 4:47:00 PM
Barium		28.8	200	J	μg/L	1	10/31/2019 4:47:00 PM
Boron		36.3	50.0	J	μg/L	1	10/31/2019 4:47:00 PM
Cadmium		ND	5.00		μg/L	1	10/31/2019 4:47:00 PM
Calcium		41700	5000		μg/L	1	10/31/2019 4:47:00 PM
Chromium		ND	10.0		μg/L	1	10/31/2019 4:47:00 PM
Copper		ND	25.0		µg/L	1	10/31/2019 4:47:00 PM
Iron		49.9	100	J	µg/L	1	10/31/2019 4:47:00 PM
Magnesium		13700	5000		μg/L	1	10/31/2019 4:47:00 PM
Manganese		7.50	15.0	J	µg/L	1	10/31/2019 4:47:00 PM
Nickel		ND	40.0		µg/L	1	10/31/2019 4:47:00 PM
Potassium		3420	5000	J	μg/L	1	10/31/2019 4:47:00 PM
Selenium		ND	5.00		μg/L	1	10/31/2019 4:47:00 PM
Sodium		30400	5000		µg/L	1	10/31/2019 4:47:00 PM
Zinc		4.90	20.0	J	µg/L	1	10/31/2019 4:47:00 PM
HARDNESS - EP	A 200.7 REV 4.4						Analyst: KH
Total Hardness (A	s CaCO3)	161	5		mg/L CaCO3	1	10/31/2019
	CHROMATOGRAPHY -		V 2 1				Analyst: CS
ANIUNS BTION		LPA 300.0 NE	. V 2.1				Analyst. 00
Chloride		45.7	2.00		mg/L	2	10/4/2019 8:37:26 PM
Sulfate		45.7 27.5	4.00		mg/L	2	10/4/2019 8:37:26 PM
Sullate		27.5	4.00		ing/E	2	1014/2010 0.01.201 M
Qualifiers:	ND - Not Detected at the Repo	rting Limit		S - LC	S Spike below accep	ted limits (·	+ above)

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Keuka Downstream
Work Order:	190920022	Collection Date:	9/18/2019 1:45:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-022
PO#:		Matrix:	SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	130	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:31:09 PM
CONDUCTANCE AT 25C - SM 251	0B-2011				Analyst: KB
Specific Conductance	423	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	315	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	310C-2011				Analyst: NK
Total Organic Carbon	3.1	1.0 J	mg/L	1	10/1/2019 10:29:00 PM
COLOR (PLATINUM-COBALT) - SI	W 2120B-2011		-		Analyst: PL
Color	10	5	cpu@pH7	1	9/20/2019 4:00:00 PM



Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID: Surface Water Dup
Work Order:	190920022	Collection Date: 9/18/2019 2:12:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-023
PO#:		Matrix: SURFACE WATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AR	E NOT ELAP CEF	RTIFIABLE				Analyst: FLD
Dissolved Oxygen (E360.1) pH (E150.1)	5.24 8.3	0.10	J	mg/L S.U.		9/18/2019 2:12:00 PM 9/18/2019 2:12:00 PM
Temperature (E170.1) Turbidity (E180.1)	19 5	1.0	J J	deg C NTU	. 1	9/18/2019 2:12:00 PM 9/18/2019 2:12:00 PM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 9/2()/2019)			BA	MA 119	Analyst: AVB
Mercury	ND	0.20		μg/L \		9/21/2019 2:24:32 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 9/20)/2019)					Analyst: KH
Aluminum	ND	200		μg/L	1	10/31/2019 4:51:00 PM
Antimony	ND	60.0		µg/L	1	10/31/2019 4:51:00 PM
Arsenic	ND	10.0		μg/L	1	10/31/2019 4:51:00 PM
Barium	26.0	200	J	µg/L	1	10/31/2019 4:51:00 PM
Boron	30.3	50.0	J	µg/L	1	10/31/2019 4:51:00 PM
Cadmium	ND	5.00		μg/L	1	10/31/2019 4:51:00 PM
Calcium	39500	5000		µg/L	1	10/31/2019 4:51:00 PM
Chromium	ND	10.0		µg/L	1	10/31/2019 4:51:00 PM
Copper	ND	25.0		µg/L	1	10/31/2019 4:51:00 PM
Iron	52.5	100	J	μg/L	1	10/31/2019 4:51:00 PM
Magnesium	13300	5000		µg/L	1	10/31/2019 4:51:00 PM
Manganese	ND	15.0		µg/L	1	10/31/2019 4:51:00 PM
Nickel	ND	40.0		µg/L	1	10/31/2019 4:51:00 PM
Potassium	3210	5000	J	µg/L	1	10/31/2019 4:51:00 PM
Selenium	ND	5.00		μg/L	1	10/31/2019 4:51:00 PM
Sodium	28200	5000		µg/L	1	10/31/2019 4:51:00 PM
Zinc	ND	20.0		µg/L	1	10/31/2019 4:51:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	153	5		mg/L CaCO3	1	10/31/2019
ANIONS BY ION CHROMATOGRAPI	HY - EPA 300.0 RI	EV 2.1				Analyst: CS
Chloride	43.2	2.00		mg/L	2	10/4/2019 8:56:28 PM
Sulfate	25.8	4.00		mg/L	2	10/4/2019 8:56:28 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quanititation limits B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Surface Water Dup
Work Order:	190920022	Collection Date:	9/18/2019 2:12:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-023
PO#:		Matrix:	SURFACE WATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-	2011	17 <u>-</u> 11 111 <u>-</u> 1			Analyst: DAA
Alkalinity, Total (As CaCO3)	110	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:36:00 PM
CONDUCTANCE AT 25C - SM 2510	3-2011				Analyst: KB
Specific Conductance	498	1 J	 μmhos/cm 	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	265	5 J	●mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	3.2	1.0 J	r ● mg/L	1	10/1/2019 11:19:00 PM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	7	5	cpu@pH7	1	9/20/2019 4:00:00 PM



Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Adirondac	k Environmental Services,	Inc Dat	e: 04-No	v-19
CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfill / Annual	Lab Sample II	te: 9/19/2 D: 19092	019 7:30:00 AM
Analyses	Result	RL Qual Units	DF	Date Analyzed
Analyses FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP CEF			Analyst: FL
Observation	Construction	NA		9/19/2019 7:30:00 AM

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services,	Inc
------------------------------------	-----

. _

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID: Field Blank
Work Order:	190920022	Collection Date: 9/18/2019 2:25:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID: 190920022-025
PO#:		Matrix: SURFACE WATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP ARE NO	T ELAP CE	RTIFIABLE			Analyst: FLC
Dissolved Oxygen (E360.1)	4.18	0.10	mg/L		9/18/2019 2:25:00 PM
pH (E150.1)	7.4		J S.U.		9/18/2019 2:25:00 PM
Temperature (E170.1)	10		J deg C		9/18/2019 2:25:00 PM
Turbidity (E180.1)	< 1	1.0	J NTU IN	M.	9/18/2019 2:25:00 PM
MERCURY - EPA 245.1 REV 3.0			BH	119	Applyot: AVE
(Prep: E245.1 - 9/20/2019)		121	101	Analyst: AVE
Mercury	ND	0.20	• µg/L	1	9/21/2019 2:26:14 PM
ICP METALS - EPA 200.7					
(Prep: SW3010A - 9/20/2019)				Analyst: KH
Aluminum	ND	200	μg/Ľ	1	10/31/2019 4:54:00 PM
Antimony	ND	60.0	μg/L	1	10/31/2019 4:54:00 PM
Arsenic	ND	10.0	μg/L	1	10/31/2019 4:54:00 PM
Barium	4.86	200	J μg/L	1	10/31/2019 4:54:00 PM
Boron	ND	50.0	μg/L	1	10/31/2019 4:54:00 PN
Cadmium	ND	5.00	μg/L	1	10/31/2019 4:54:00 PN
Calcium	ND	5000	μg/L	1	10/31/2019 4:54:00 PM
Chromium	ND	10.0	μg/L	1	10/31/2019 4:54:00 PM
Copper	ND	25.0	μg/L	1	10/31/2019 4:54:00 PM
Iron	ND	100	μg/L	1	10/31/2019 4:54:00 PM
Magnesium	ND	5000	μg/L	1	10/31/2019 4:54:00 PM
Manganese	ND	15.0	μg/L	1	10/31/2019 4:54:00 PM
Nickel	ND	40.0	μg/L	1	10/31/2019 4:54:00 PM
Potassium	ND	5000	μg/L	1	10/31/2019 4:54:00 PM
Selenium	ND	5.00	µg/L	1	10/31/2019 4:54:00 PM
Sodium	ND	5000	μg/L	1	10/31/2019 4:54:00 PM
Zinc	ND	20.0	μg/L	1	10/31/2019 4:54:00 PM
ARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	ND	5	mg/L CaCO3	1	10/31/2019
NIONS BY ION CHROMATOGRAPHY - EP	A 300.0 RE	V 2.1			Analyst: CS
Chloride	ND	0.00		2	
Sulfate	ND	2.00	mg/L	2	10/4/2019 11:00:35 PM
	ND	4.00	mg/L	2	10/4/2019 11:00:35 PM
ualifiers: ND - Not Detected at the Reportin	g Limit	S	- LCS Spike below acc	epted limits (+	above)
J - Analyte detected below quantit			- RPD outside accepted		

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

N - Matrix Spike below accepted limits (+ above)

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Samp
Work Order:	190920022	Collection
Reference:	Lockwood Ash Landfill / Annual	Lab Sampl
PO#:		Μ

Client Sample ID:Field BlankCollection Date:9/18/2019 2:25:00 PMLab Sample ID:190920022-025Matrix:SURFACE WATER

Analyses	Result	RL Qua	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-2	2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	2	1	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA (350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:37:37 PM
CONDUCTANCE AT 25C - SM 2510B	8-2011				Analyst: KB
Specific Conductance	< 1	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM 25	540C-2011				Analyst: CC
TDS (Residue, Filterable)	ND	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 531	10C-2011				Analyst: NK
Total Organic Carbon	ND	1.0	mg/L	1	10/2/2019 12:44:00 AM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: PL
Color	ND	5	cpu@pH7	1	9/20/2019 4:00:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	GW Dep Drain 3
Work Order:	190920022	Collection Date:	9/18/2019 10:30:00 AM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-026
PO#:		Matrix:	SURFACE WATER

Adirondack Environmental Services, Inc

_

Result	RL	Qual	Units	DF	Date Analyzed
RE NOT ELAP CEI	RTIFIABLE				Analyst: FLD
5.12	0.10		mg/L		9/18/2019 10:30:00 AM
76.1			gal/day		9/18/2019 10:30:00 AM
7.5		J	S.U.		9/18/2019 10:30:00 AM
20		J	deg C		9/18/2019 10:30:00 AM
4	1.0	J	NTU	1	9/18/2019 10:30:00 AM
20/2019 \			BAM	119	Analyst: AVB
	0.00		J2	llai	9/21/2019 2:27:57 PM
ND	0.20		µg/∟ •	I	
					Analyst: KH
20/2019)					
ND	200		μg/L	1	10/31/2019 4:58:00 PM
ND	60.0		μg/Ľ	1	10/31/2019 4:58:00 PM
7.78	10.0	J	μg/L	1	10/31/2019 4:58:00 PM
66.4	200	J	μg/L	1	10/31/2019 4:58:00 PM
231	50.0		μg/L	1	10/31/2019 4:58:00 PM
ND	5.00		μg/L	1	10/31/2019 4:58:00 PM
247000	50000		μg/L	10	10/31/2019 5:03:00 PM
4.68	10.0	J † 3 9	μg/L	1	10/31/2019 4:58:00 PM
ND	25.0		μg/L	1	10/31/2019 4:58:00 PM
12.4	100	J -A	μg/L	1	10/31/2019 4:58:00 PM
66300	5000		µg/L	1	10/31/2019 4:58:00 PM
ND	15.0		μg/L	1	10/31/2019 4:58:00 PM
ND	40.0		µg/L	1	10/31/2019 4:58:00 PM
3960	5000	J		1	10/31/2019 4:58:00 PM
ND	5.00		μg/L	1	10/31/2019 4:58:00 PM
29400	5000		μg/L	1	10/31/2019 4:58:00 PM
ND	20.0		μg/L	1	10/31/2019 4:58:00 PM
					Analyst: KH
890	5		mg/L CaCO3	1	10/31/2019
PHY - EPA 300.0 R	EV 2.1				Analyst: CS
9.32	2.00		mg/L	2	10/4/2019 9:15:30 PM
	ARE NOT ELAP CEI 5.12 76.1 7.5 20 4 20/2019) ND 20/2019 ND 247000 4.68 ND 12.4 66300 ND 3960 ND 29400 ND 29400 ND 29400 ND 29400 ND 29400 ND 29400 ND 29400 ND 29400 ND	SRE NOT ELAP CERTIFIABLE 5.12 0.10 76.1 7.5 20 4 20/2019) 20/2019) 20/2019) 20/2019) 20/2019) ND 200 ND 5.00 231 50.0 247000 50000 ND 25.0 12.4 100 66300 5000 ND 15.0 ND 40.0 3960 5000 ND 5.00 29400 5000 ND 20.0	SRE NOT ELAP CERTIFIABLE 5.12 0.10 76.1 7.5 20 4 1.0 J 20/2019) ND 0.20 20/2019) ND 200 ND 5.00 247000 50000 4.68 10.0 ND 25.0 12.4 100 ND 40.0 3960 5000 ND 40.0 3960 5000 ND 20.0 ND 20.0 ND 20.0	SRE NOT ELAP CERTIFIABLE 5.12 0.10 mg/L 76.1 J S.U. 20 J J 20 J J.U. 20 J NTU 20/2019) J J.U. 20/2019) J.U. J.U. 20/2019) U.U. J.U. 20/2019) U.U. J.U. 20/2019 ND 200 J.U. 231 50.0 J.U. J.U. 231 50.0 J.U. J.U. 247000 5000 J.U. J.U. 3	ARE NOT ELAP CERTIFIABLE 5.12 0.10 mg/L 76.1 gal/day 7.5 J 20 J 20/2019) ND 0.20 ND 0.20 ND 60.0 µg/L 1 ND 60.0 µg/L 1 66.4 200 µg/L 1 66.4 200 µg/L 1 ND 5.00 µg/L 1 ND 25.0 µg/L 1 ND 10 4.68 10.0 12.4 100 ND 40.0 µg/L 1 ND 5.00

J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

N - Matrix Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

Date: 04-Nov-19

CLIENT: Lockwood	Hills LLC	Client Sample ID:	GW Dep Drain 3
Work Order: 1909200	122	Collection Date:	9/18/2019 10:30:00 AM
1,0,200	l Ash Landfill / Annual	Lab Sample ID:	190920022-026
PO#:		Matrix:	SURFACE WATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	430	10	mgCaCO3/L	1	9/23/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	9/30/2019 2:42:28 PM
CONDUCTANCE AT 25C - SM 2510)B-2011				Analyst: KB
Specific Conductance	1410	1	µmhos/cm	1	9/20/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1070	5	mg/L	1	9/25/2019
TOTAL ORGANIC CARBON - SM 5	310C-2011				Analyst: NK
Total Organic Carbon	2.4	1.0	mg/L	1	10/2/2019 1:00:00 AM
COLOR (PLATINUM-COBALT) - SI	M 2120B-2011				Analyst: PL
Color	7	5	cpu@pH7	1	9/20/2019 4:00:00 PM

Qualifiers:

- ND Not Detected at the Reporting Limit J - Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondac	k Environmental Services, I	Inc Date:	04-Nov-19
CLIENT:	Lockwood Hills LLC	Client Sample ID:	LLHG Field Blank
Work Order:	190920022	Collection Date:	9/18/2019 12:10:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-027
PO#:		Matrix:	GROUNDWATER
Analyses	Result	RL Qual Units	DF Date Analyzed

Mercury	1.2	0.5	ng/L	1	10/4/2019
,			··· g· =		10/1/2010

- ND Not Detected at the Reporting Limit
 - J Analyte detected below quanititation limits
 - $\ensuremath{\boldsymbol{B}}$ Analyte detected in the associated Method Blank
 - X Value exceeds Maximum Contaminant Level
 - E Value above quantitation range-Estimate
- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondac	k Environmental S	ervices, In	C Date	: 04-No	v-19
CLIENT: Work Order:	Lockwood Hills LLC 190920022 Lockwood Ash Landfill / Annual		Client Sample ID: GW Dep Drain 2 Collection Date: 9/18/2019 10:05:00 AM		
Reference: PO#:			Lab Sample ID: 190920022-028 Matrix: GROUNDWATER		
Analyses		Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NO	T ELAP CERTI	TABLE		Analyst: FLD
Observation		Dry	NA		9/18/2019 10:05:00 AM

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondack Environmental Services, Inc			c	Date:	04-Nov-19		
CLIENT:	Lockwood Hills LLC		(lient Sample ID:	GW E	Dep Drain 4	
Work Order:	190920022			Collection Date:	9/18/2	2019 10:07:00 AM	
Reference:	Lockwood Ash Landfill /	Annual	Lab Sample ID: 190920022-029		0022-029		
PO#:	PO#:		Matrix:		GROUNDWATER		
Analyses		Result	RL Qual	Units	DF	Date Analyzed	

Observation	Dry	NA	9/18/2019 10:07:00 AM
-------------	-----	----	-----------------------

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

Z - RPD outside accepted recovery limits

- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

S - LCS Spike below accepted limits (+ above)

Adirondack Environmental Services, Inc			Date: 04-Nov-19			
CLIENT:	Lockwood Hills LLC		Client Sample ID:	Under	Drain 5	
Work Order:	: 190920022 Lockwood Ash Landfill / Annual		Collection Date: 9/18/2019 2:40:00 PM Lab Sample ID: 190920022-030			
Reference:						
PO#:			Matrix:	JNDWATER		
Analyses		Result	RL Qual Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE NO		FIABLE		Analyst: FLC	
Observation		Dry	NA		9/18/2019 2:40:00 PM	

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Adirondac	k Environmental Service	s, Inc Date:	04-Nov-19		
CLIENT:	Lockwood Hills LLC	Client Sample ID:	: 8405		
Work Order:	190920022	Collection Date:	: 9/18/2019 2:59:00 PM		
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-031		
PO#:		Matrix	GROUNDWATER		
Analyses	Result	RL Qual Units	DF Date Analyzed		

Observation	Dry	NA	9/18/2019 2:59:00 PM
-------------	-----	----	----------------------

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate
- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfi	11 / Annual			Lab Sample	Date: 9/30/2 ID: 19092	019 12:40:00 PM
Analyses		Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE N	OT ELAP CERTI	FIABLE	Ξ			Analyst: FLD
Dissolved Oxyge	en (E360.1)	6.94	0.10		mg/L gal/day		9/30/2019 12:40:00 PM 9/30/2019 12:40:00 PM
Flow, GPD		12,174					9/30/2019 12:40:00 PM
pH (E150.1)		7.8		<u>J</u>	S.U.		9/30/2019 12:40:00 PM
Temperature (E		14		<u>o</u>	deg C		9/30/2019 12:40:00 PM
Turbidity (E180	.1)	8	1.0	0	NTU	int	3/30/2013 12:10:001 11
MERCURY - EP	A 245.1 REV 3.0 Prep: E245.1 - 10/22/2	2019)			BA	112/19	Analyst: AVB
	Prep: E245.1 - 10/22/2	ND	0.20	USX	, _{µg/L} V∂	1	10/22/2019 4:13:31 PM
Mercury		ND	0.20		P.0		Analyst: KH
ICP METALS - I	EPA 200.7 ep: SW3010A - 10/4/20)					,,
Aluminum		ND	200		μg/L	1	11/1/2019 10:53:00 AM
Antimony		ND	60.0		µg/L	1	11/1/2019 10:53:00 AM
Arsenic		26.8	10.0		μg/L	1	11/1/2019 10:53:00 AM
Barium		34.3 200	200	ut	μg/L	1	11/1/2019 10:53:00 AM
Boron		35100	500	•	µg/L	10	11/1/2019 10:59:00 AM
Cadmium		ND	5.00		μg/L	1	11/1/2019 10:53:00 AM
Calcium		613000	50000		µg/L	10	11/1/2019 10:59:00 AM
Chromium		ND	10.0		µg/L	1	11/1/2019 10:53:00 AM
Copper		ND	25.0		μg/L	1	11/1/2019 10:53:00 AM
Iron		2400	100	J +	µg/L	1	11/1/2019 10:53:00 AM
Magnesium		99300	5000	••	µg/L	1	11/1/2019 10:53:00 AM
Manganese		603	15.0		μg/L	1	11/1/2019 10:53:00 AM
Nickel		3.95	40.0	J	µg/L	1	11/1/2019 10:53:00 AN
Potassium		89500	50000		μg/L	10	11/1/2019 10:59:00 AN
Selenium		23.6	5.00		µg/L	1	11/1/2019 10:53:00 AM
Sodium		270000	50000		µg/L	10	11/1/2019 10:59:00 AN
Zinc		ND	20.0		μg/L	1	11/1/2019 10:53:00 AN
LOW LEVEL M	ERCURY - EPA 1631E	010 \					Analyst: WB
	Prep: 1631E - 10/3/2	019) <i>0.7</i>	0.5		ng/L	1	10/4/2019
Mercury		.	0.0		···· 3· —		Analyst: KH
HARDNESS - E	EPA 200.7 REV 4.4						, maryon Mr
Total Hardness	(As CaCO3)	1939	5		mg/L CaCO	3 1	11/1/2019
Qualifiers:	ND - Not Detected at the Re J - Analyte detected below o B - Analyte detected in the	juanititation limits	ank	Z - R N - M	CS Spike below PD outside acce fatrix Spike belo entitively Identi	pted recovery li ow accepted lim	mits its (+ above)

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

Adirondack Environmental Services, Inc

,

T - Tentitively Identified Compound-Estimated Conc.

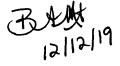
Date: 04-Nov-19

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Cli
Work Order:	190920022	C
Reference: PO#:	Lockwood Ash Landfill / Annual	L

Client Sample ID: Inlet To Pond Collection Date: 9/30/2019 12:40:00 PM Lab Sample ID: 190920022-032 Matrix: GROUNDWATER

Analyses	Result	RL	Qual Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 RI	EV 2.1			Analyst: CS
Chloride Sulfate	245 1380	20.0 40.0	mg/L mg/L	20 20	10/4/2019 11:11:12 PM 10/4/2019 11:11:12 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	440	10	mgCaCO3/L	1	10/4/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1	JP mg/L	1	10/2/2019 1:02:34 PM
CONDUCTANCE AT 25C - SM 2510	B-2011				Analyst: KB
Specific Conductance	3460	1	µmhos/cm	1	10/4/2019
TOTAL DISSOLVED SOLIDS - SM 2	540C-2011				Analyst: CC
TDS (Residue, Filterable)	3000	5	mg/L	1	10/2/2019
TOTAL ORGANIC CARBON - SM 53	10C-2011				Analyst: NK
Total Organic Carbon	1.1	1.0	mg/L	1	10/2/2019 2:41:00 AM
COLOR (PLATINUM-COBALT) - SM	2120B-2011				Analyst: NK
Color	ND	5	cpu@pH6	1	10/1/2019 5:20:00 PM



Qualifiers:

- ND Not Detected at the Reporting Limit
- J Analyte detected below quanititation limits B - Analyte detected in the associated Method Blank
- X Value exceeds Maximum Contaminant Level
- A value exceeds maximum containmant Level

- S LCS Spike below accepted limits (+ above)
- Z RPD outside accepted recovery limits
- N Matrix Spike below accepted limits (+ above)
- T Tentitively Identified Compound-Estimated Conc.

Date: 04-Nov-19

CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfil			Lab Sample ID:			9/30/2019 1:07:00 PM	
Analyses	de vez tai	Result	RL	Qual	Units	DF	Date Analyzed	
FIELD-PH, RES	CL2, AND TEMP ARE N	OT ELAP CEF	RTIFIABLE		and a second		Analyst: FLD	
Dissolved Oxyge pH (E150.1) Temperature (E Turbidity (E180.	170.1)	7.44 7.9 19 11	0.10	444	mg/L S.U. deg C NTU	X	9/30/2019 1:07:00 PM 9/30/2019 1:07:00 PM 9/30/2019 1:07:00 PM 9/30/2019 1:07:00 PM	
MERCURY - EP	A 245.1 REV 3.0 Prep: E245.1 - 10/22/2	019)			BAL	119	Analyst: AVB	
Mercury		ND	0.20		µg/L (ar	1	10/22/2019 4:18:33 PM	
ICP METALS - E	EPA 200.7 p: SW3010A - 10/4/20	19)					Analyst: KH	
Aluminum		ND ND	200 60.0		μg/L μg/L	1	11/1/2019 11:03:00 AM 11/1/2019 11:03:00 AM	
Antimony Arsenic		6.98	10.0	J	μg/L	1	11/1/2019 11:03:00 AM	
Barium		225	200	JYJ	₩µg/L	1	11/1/2019 11:03:00 AM	
Boron		39100	500	J	μg/L	10	11/1/2019 11:09:00 AM	
Cadmium		ND	5.00	_	μg/L	1	11/1/2019 11:03:00 AM	
Calcium		584000	50000	J	μg/L	10	11/1/2019 11:09:00 AM	
Chromium		ND	10.0		µg/L	1	11/1/2019 11:03:00 AM	
Copper		ND	25.0	-	μg/L	1	11/1/2019 11:03:00 AM 11/1/2019 11:03:00 AM	
Iron		217	100	J-(1 1	11/1/2019 11:03:00 AM	
Magnesium		126000	5000		μg/L ug/l	1	11/1/2019 11:03:00 AM	
Manganese		132	15.0 40.0		μg/L μg/L	1	11/1/2019 11:03:00 AM	
Nickel		ND		J •	μg/L	10	11/1/2019 11:09:00 AM	
Potassium		79300 35.3		JW	μg/L	1	11/1/2019 11:03:00 AM	
Selenium		298000	50000	-		10	11/1/2019 11:09:00 AM	
Sodium Zinc		298000 ND	20.0	0 -	μg/L	1	11/1/2019 11:03:00 AM	
LOW LEVEL ME	ERCURY - EPA 1631E Prep: 1631E - 10/3/20						Analyst: WB	
Mercury		5.1	0.5		ng/L	1	10/4/2019	
	PA 200.7 REV 4.4						Analyst: KH	
Total Hardness ((As CaCO3)	1977	5		mg/L CaCO3	1	11/1/2019	

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quanititation limits

B - Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

T - Tentitively Identified Compound-Estimated Conc.

Page 57 of 59

Date: 04-Nov-19

CLIENT:	Lockwood Hills LLC	Client Sample ID:	Pond Grab
Work Order:	190920022	Collection Date:	9/30/2019 1:07:00 PM
Reference:	Lockwood Ash Landfill / Annual	Lab Sample ID:	190920022-033
PO#:		Matrix:	GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPH	Analyst: CS				
Chloride Sulfate	301 1680	20.0 40.0	mg/L mg/L	20 20	10/4/2019 11:30:23 PM 10/4/2019 11:30:23 PM
ALKALINITY TO PH 4.5 -SM 2320B-2	011				Analyst: DAA
Alkalinity, Total (As CaCO3)	210	10	mgCaCO3/L	1	10/4/2019
AMMONIA (NON-DISTILLED) - EPA 3				Analyst: PL	
Nitrogen, Ammonia (As N)	0.2	0.1 J	→ mg/L	1	10/2/2019 1:07:31 PM
CONDUCTANCE AT 25C - SM 2510B	-2011				Analyst: KB
Specific Conductance	3700	1	µmhos/cm	1	10/4/2019
TOTAL DISSOLVED SOLIDS - SM 25	40C-2011				Analyst: CC
TDS (Residue, Filterable)	3280	5	mg/L	1	10/2/2019
TOTAL ORGANIC CARBON - SM 531	0C-2011				Analyst: NK
Total Organic Carbon	2.6	1.0	mg/L	1	10/2/2019 2:58:00 AM
COLOR (PLATINUM-COBALT) - SM 2120B-2011					Analyst: NK
Color	5	5	cpu@pH7	1	10/1/2019 5:20:00 PM

BAMA 19

Qualifiers:

- ND Not Detected at the Reporting Limit
 - J Analyte detected below quanititation limits B - Analyte detected in the associated Method Blank
 - X Value exceeds Maximum Contaminant Level
- E Value above quantitation range-Estimate
- Z RPD outside accepted recovery limits
 - N Matrix Spike below accepted limits (+ above)

S - LCS Spike below accepted limits (+ above)

Adirondac	k Environmental Services	s, Inc Date	: 04-No	04-Nov-19		
CLIENT: Work Order: Reference: PO#:	Lockwood Hills LLC 190920022 Lockwood Ash Landfill / Annual	Collection Date Lab Sample ID	Client Sample ID: LLHG FB Collection Date: 9/30/2019 12:35:00 PM Lab Sample ID: 190920022-034 Matrix: FIELD BLANK			
Analyses	Result	RL Qual Units	DF	Date Analyzed		
	ERCURY - EPA 1631E Prep: 1631E - 10/3/2019)			Analyst: WB		
Mercury	0.4	0.5 J ng/L	1	10/4/2019		

ND - Not Detected at the Reporting Limit

- J Analyte detected below quanititation limits
- B Analyte detected in the associated Method Blank

X - Value exceeds Maximum Contaminant Level

E - Value above quantitation range-Estimate

S - LCS Spike below accepted limits (+ above)

Z - RPD outside accepted recovery limits

N - Matrix Spike below accepted limits (+ above)

Attachment 3 Sample Data Group 1842

Quality Control Documentation

Metals

Preplate: Preplate: <t< th=""><th>rvices, Inc. SPI Propertification SPI Propertification SPI Propertification SPI SPI SPI SPI Propertification SPI Proprefication SPI Pro</th></t<>	rvices, Inc. SPI Propertification SPI Propertification SPI Propertification SPI SPI SPI SPI Propertification SPI Proprefication SPI Pro
PQL SPKv 200 60.0 10.0 5.00 10.0 15.0 100 10.0 5.00 100 100 15.0 20.0 25.0 1000 25.0 1000 25.0 1000 25.0 25.0 200 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	Indack Envices, Inc. Trip Lockwood Hills LLC Drader: 10020022 Drader: 10020022 Drader: 10020022 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 200<
POL SPK Nature SPK Ret Val Second 2000 2000 0 1007 200 2000 4000 0 1007 200	Indack Envices, Inc. Trip Lockwood Hills LLC Drader: 10020022 Drader: 10020022 Drader: 10020022 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 200<
POL SPK Nature SPK Ret Val Second 2000 2000 0 1007 200 2000 4000 0 1007 200	Indack Envices, Inc. Trip Lockwood Hills LLC Drader: 10020022 Drader: 10020022 Drader: 10020022 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 200<
POL SPK Nature SPK Ret Val Second 2000 2000 0 1007 200 2000 4000 0 1007 200	Indack Envices, Inc. Trip Lockwood Hills LLC Drader: 10020022 Drader: 10020022 Drader: 10020022 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273159 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 273150 Praphat: 200 SeqNo: 200<
POL SPK Nature SPK Nature SPK Ret Val 200 200 0 107 200 4000 0 107 200 4000 0 107 200 1000 0 107 200 1000 8 13.19 81.9 200 1000 7.178 102 25.00 1000 7.178 102 25.00 1000 7.178 102 25.00 1000 11.4 114 1000 21.86 102 102 25.00 1000 11.4 114 1000 21.86 102 102 250 500 0 0 102 250 250 0 0 103 250 250 0 0 0 250 0 0 0 0 250 0 0 0 0 250 0	Indack Envices, Inc. Trip Lockwood Hills LLC Order: 190020022 Drephote: 190020022 Drephote: 190020022 SeqNo: 273159 Prephote: 200 SeqNo: 273159 Prephote: 200 SeqNo: 273159 SeqNo: 273159 SeqNo: 273159 Prephote: 200 SeqNo: 273159 Prephote: 273159 SeqNo: 273159 SeqNo: 273159 Prephote: 273159 Prephote: 273150 Mathematic Protocols 1000 SeqNo: 2731560 Mathematic Protocol 1000 Mathematic Protocol 1000 SeqNo: 2731560 Mathematic Protocol 1000 Mathematic Protocol 1000 SeqNo: 2731560 Mathematic Protocol 1000 Mathematic Protocol 1000 SeqNo: 2731560 Mathematic Protocol 1000 SeqNo: 2731560 Mathematic Protocol 1000 SeqNo: 2731560 Mathematic Protocol 1000 </td
PQL SPKv 200 60.0 10.0 5.00 10.0 15.0 100 10.0 5.00 100 100 15.0 20.0 25.0 1000 25.0 1000 25.0 1000 25.0 25.0 200 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	Indack Environmental Services, Inc T: Lockwood Hills LLC Drder: J90920022 Drder: J90920022 E: Lockwood Ash Landfill E: Lockwood Ash Landfill SeqNo: 2731559 Samp ID: 190920022-013 9306-SHJ SeqNo: 2731559 Samp ID: 190920022-013 9306-SHJ Mm 4171 200 Mm 2016 SPKJ Mm 2015 5.00 Mm 2016 5.00 Mm 2015 5.00 Mm 2016 5.00 Mm 2016 500 Mm 2016 500 Mm 2010 500 Mm 2010 500 Mm 2010 500 Mm 2010 500 Mm 2020 500 Mm 20300
PQL SPKv 200 60.0 10.0 5.00 10.0 15.0 100 10.0 5.00 100 100 15.0 20.0 25.0 1000 25.0 1000 25.0 1000 25.0 25.0 200 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	Indack Environmental Services, Inc T: Lockwood Hills LLC Drder: J90920022 Drder: J90920022 E: Lockwood Ash Landfill E: Lockwood Ash Landfill SeqNo: 2731559 Samp ID: 190920022-013 9306-SHJ SeqNo: 2731559 Samp ID: 190920022-013 9306-SHJ Mm 4171 200 Mm 2016 SPKJ Mm 2015 5.00 Mm 2016 5.00 Mm 2015 5.00 Mm 2016 5.00 Mm 2016 500 Mm 2016 500 Mm 2010 500 Mm 2010 500 Mm 2010 500 Mm 2010 500 Mm 2020 500 Mm 20300
	Indack Environmental Services, Inc Urder: 190920022 Drder: 190920022 Lockwood Hills LLC Order: 190920022-013 (3306-SH) SeqNo: 2731560 N A270
Environmental Services, Ir Lockwood Hills LLC 190920022 Lockwood Ash Landfill Cockwood Ash Landfill 2731569 2.190920022-013 (9306-SH) 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 1054 2.052 11148 2.052 1054 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.052 11148 2.055 11148	Ondack Environmental Services, Ir VT: Lockwood Hills LLC Order: 190920022 t: Lockwood Ash Landfill t: Lockwood Ash Landfill seqNo: 2731569 seqNo: 2731569 seqNo: 2731560 seqNo: 2731560 seqNo: 2731560 sealth m 4121 M 106.4 M 106.4 ND ND ND Samp D
Environment Lockwood Hills I 190920022 Lockwood Ash L 2731560 190920022-013 190920022-013	ondack Environment MT: Lockwood Hills I Order: 190920022 t: Lockwood Ash L SeqNo: 2731560 Samp ID: 190920022-013 J Samp ID: 190920022-013 J M L L L L L L L L L L L L L
	Ondack T: Samp II Samp II Samp II Samp II Samp II

t: Lockwood Ash Lá SeqNo: 2731574 Samp ID: 190920022-016	;				,				
SeqNo: 2731574 Samp ID: 190920022-016 te	П					BatchID: 75	75727		
	ll ook Detection Su		PrepDate: DmoRof./SW2010A)		TestNo: E200.7		RunNo: 176921 Analysis Data: 10/21/0010		
<u>Analyte</u> Copper Iron	A Delection of		(MOLOCALC) Judei J		UIIIS. Hg/L	Анац	SIS Date: 10/31/2019		
Copper Iron	Result	POL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	<u>%RPD</u> <u>RPDLimit</u>	Qual	
Iron	DN	120	0	0	0	0	0		
	DN	500	0	0	0	0	0		
Magnesium	192300	25000	0	0		185700			4.
Manganese	24.59	75.0	0	0		22.41		7	~ 80× MU-
Nickel	DN	200	0	0	0	0	0		
Potassium	4372	25000	0 0	0		5741	-	C	
Selenium	DN	25.0	0	0	0	0)	
Sodium	99710	25000	0	0	0	87730	12.8	(h)	
Zinc	DN	100	0	0	0	0	0)	
MBLK SeqNo: 2731530			PrepDate:9/20/2019		TestNo: E200.7		BunNo: 176921		
Samp ID: MB-75727			PrepRef:(SW3010A)		Units: µg/L	Analy			
Analyte	Result	PQL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD RPDI imit	laiO	
Aluminum	QN	200							
Antimony	ND	60.09							
Arsenic	ND	10.0							
Barium	ND	200							
Boron	ND	50.0							
Cadmium	ND	5.00							
Calcium	ND	5000							
Chromium	ND	10.0							
Copper	ND	25.0							
Iron	ND	100							
Magnesium	ND	5000							
Manganese	QN	15.0							
Nickel	QN	40.0							
Potassium	ND	5000							
Selenium	ND	5.00							
Sodium	QN	5000							
Zinc	QN	20.0							
Qualifiers: ND - Not Detected at the Reporting Limit	orting Limit		S - Spike Recovery outside accepted recovery limits	accepted recov		B - Analyte detected	B - Analyte detected in the associated Method Blank	lank	
J - Analyte detected below quantitation limits	antitation limits		R - RPD outside accented recovery limits	ecovery limits			1 u	C 2 7	

LCS SeaNo: 2731531
-
Samp ID: LCS-75727
Analyte
Antimony
Arsenic
Barium
Boron
Cadmium
Calcium
Chromium
Copper
Magnesium
Manganese
Nickel
Potassium
Selenium
Sodium
SeqNo: 2731558
Samp ID: 190920022-013
Analyte
Aluminum
Arsenic
Barium
Cadmium
Chromium
Copper
Manganese
Nickel
Selenium

CLIENT: Work Order:	 Lockwood Hills LLC Inder: 190920022 	LLC					ANAL	'YTICA	ANALYTICAL QC SUMMARY REPORT	MMAR	Y REPO	RT
Project:		Landfill						B	BatchID: 7	75727		
WS	SeqNo: 2731558 Samp ID: 190920022-013	(HS-90E6)		PrepDate:9/20/2019 PrepRef:(SW3010A)	9/20/2019 \$W3010A)		Tes	TestNo: E200.7 Units: µg/L	Ani	RunNo: 1 Analysis Date: 1	176921 10/31/2019	
<u>Analyte</u> Zinc		<u>Result</u> 602.4	<u>POL</u> 20.0	SPK value SPK 500	<u>SPK Ref Val</u> 11.4	<u>%REC</u> 118	LowLimit 78.5	<u>HighLimit</u> 123	<u>RPD Ref Val</u> 0	<u>%RPD</u> 0	RPDLimit	Qual
WS	SeqNo: 2731572 Samp ID: 190920022-016	(Leak Detection Sy		PrepDate:9/20/2019 PrepRef:(SW3010A)	9/20/2019 \$W3010A)		Tes	TestNo: E200.7 Units: µg/L	An	RunNo: 1 Analvsis Date: 1	1 76921 10/31/2019	
Analyte		Result	Par		SPK Ref Val	<u>%REC</u>	LowLimit	HighLimit	RPD Ref Val		<u>RPDLimit</u>	<u>Qual</u>
Antimony	u /	1938 554.9	200 60.0	2000 500		96.9	75	125	00	00		
Arsenic		44.84	10.0	40	7.263	93.9	75		0 0	0 0		
Barium		641.1	200	2000	18.74	31.1	75		0	0		S
Chromium	- F	226.7 226.7	00.c	200		112	75	114	0 0	0 0		
Copper		290.1	25.0	250	0	116	75			0 0		
Iron		1100	100	1000	0	110	75		0	0		
Manganese	ese	507.5	15.0	500	22.41	67	75		0	0		
Nickel		506.9	40.0	500	0	101	75	120	0	0		
Selenium		7.104	5.00	10	0	11	75	125	0	0		S
Zinc		617	20.0	500	0	123	78.5	123	0	0		a
DUP	SeqNo: 2731557			PrepDate:9/20/2019	9/20/2019		Tes	TestNo: E200.7		BunNo.	176921	
	Samp ID: 190920022-013			PrepRef:			Un	Units: µg/L	An.		10/31/2019	
Analyte		Result	Pal	SPK value SPK	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	E	43.86	200	0	0	0	0	0	0	0		
Antimony		QN	60.0	0	0	0	0	0	0	0	20	
Arsenic		13.07	10.0	0	0	0	0	0	13.19	0.975	20	
Barium		49.85	200	0	0	0	0	0	48.33	0	20	
Boron		95.22	50.0	0	0	0	0	0	95.76	0.568	20	
Cadmium	F	0.0496	5.00	0	0	0	0	0	0	0	20	
Calcium		73490	5000	0	0	0	0	0	73220	0.374	20	
Chromium	E	Q	10.0	0	0	0	0	0	0	0	20	
Copper		8.153	25.0	0	0	0	0	0	7.178	0	20	
Iron		891.6	100	0	0	0	0	0	769.8	14.7	20	
Qualifiers:	s: ND - Not Detected at the Reporting Limit	the Reporting Limit		S - Spike Re	S - Spike Recovery outside accepted recovery limits	accepted reco	wery limits	I	B - Analyte detected in the associated Method Blank	ted in the associ	ated Method B	ank
	J - Analyte detected b	J - Analyte detected below quantitation limits		R - RPD out	R - RPD outside accepted recovery limits	ecovery limits					Page 5 of 52	of 52

	Lockwood fills LLC Ier: 190920022 Lockwood Ash Landfill SeqNo: 2731557 Samp ID: 190920022-013		2	3 0	201							ANALYTICAL QC SUMMARY BatchID: 75727 TestNo: E200.7 RunNo: 17 Units: µg/L Analysis Date: 10
Analvte		Result		SPK value SPK Ref Val	Val %REC	5	$\frac{1}{2}$	LowLimit HiahLin	HiahLimit	HiahLimit RPD Ref V	HighLimit RPD Ref Val %RPD	HighLimit RPD Ref Val %RPC
Magnesium		63260	5000	<u> </u>	0	0		<u> </u>	0	0	0 62950 0.494	0 62950 0.494
Manganese		52.58	15.0	0	0	~	U		0	0 0	0 0	0 0 51.86 1.39
Nickel		1.171	40.0	0	O		0		0	0	0 0 0	0 0 0 0
Potassium		3273	5000	0	0		0		0	0	0 0 3231	0 0 3231 0
Selenium		ND	5.00	0	0		0	0	0	0 0	0 0 0	0 0 0
Sodium		20760	5000	0	0		0		0	0 0 2060	0 0 20600 0.77	0 0 20600 0.778
Zinc		11.78	20.0	0	0		0		0	0	0 0 11.4	0 0 11.4
DUP	SeqNo: 2731570			PrepDate:9/20/2019	2019			TestNo: E2	TestNo: E200.7		RunNo:	
	Samp ID: 190920022-016			PrepRef:				Units: µg/l	Units: µg/L		Analysis Date:	Analysis Date:
Analyte		Result	POL	SPK value SPK Ref Val	,	Ť		LowLimit	LowLimit HighLimit	LowLimit HighLimit RPD Ref V	LowLimit HighLimit RPD Ref Val %RPD	LowLimit HighLimit RPD Ref Val %RPD RPDLin
Aluminum		ND	200	0 0	> 0		0 0		0 0			
Anumony		896 b	10.0							D C		0 0 7.263
Barium		19.05	200	0	0		0		0	0 0	0 0 18.74	0 0 18.74 0
Boron		914.2	50.0	0	0	0		0	0 0		0	0 915.3
Cadmium		ND	5.00	0	0	0			0	0	0	0 0 0
Chromium		ND	10.0	0	0	0				0	0	0 0 0 0
Copper		3.267	25.0	0	0	0		0			0	0 0 0
lron .		ND	100	0 0	; 0	0			0 0	0		
Magnesium		0.00	170								0 100/00	
Manganese		1 536	15.0 40.0	00	. 0			0 0		0 0	0 0 22.2	
Potassium		5652	5000	0	0	0		0			0	0 5741 1.57
Selenium		ND	5.00	0	0	0	U	0	_	0	0	0 0 0
Zinc		ND	20.0	0	0		0			0	0	0 0 0
DUP	SeqNo: 2731571			PrepDate:9/20/2019	/2019			TestNo: E2	TestNo: E200.7	TestNo: E200.7	RunNo:	
	Samp ID: 190920022-016			PrepRef:				Units: µg/	Units: µg/L		Analysis Date:	
<u>Analyte</u> Calcium		<u>Result</u> 463300	<u> </u>	<u>SPK value</u> <u>SPK Ref Val</u> 0 (<u>f Val %REC</u> 0 0		-	<u>LowLimit</u> 0	LowLimit HighLimit 0 0	<u>LowLimit</u> <u>HighLimi</u> i 0	L <u>owLimit</u> <u>HighLimit</u> <u>RPD</u> 0 0	L <u>owLimit HighLimit RPD Ref Val</u> 0 0 447900
Qualifiers:	ND - Not Detected at the Reporting Limit	Reporting Limit		S - Spike Recov	Spike Recovery outside accepted recovery limits	dre	cover	covery limits				covery limits B - Analyte detected in the associated Method Blank

Project: DUP							ANALI IILAL QU SUMMARI KEVUKI	1				TYT
	Lockwood Ash Landfill	Itil						بطم	BatchID:	75727		
	SeqNo: 2731571 Samp ID: 190920022-016			PrepDate:9/20/2019 PrepRef:	9/20/2019		Test	TestNo: E200.7 Units: ua/L		RunNo: Analvsis Date: 1	176921 10/31/2019	
		<u>Result</u> 89640	POL	SPK value SPK	SPK Ref Val	<u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Val	니민원	<u>RPDLimit</u>	Qual
CCB	SeaNo: 2731529			DranDate.						3		
	Samp ID: CCB-1			PrepRef:			Uni	TestNo: E200.7 Units: µg/L		RunNo: - Analysis Date: -	176921 10/31/2019	
Analyte		Result	Pal	SPK value SPK	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum		ND	200	0	0	0	0	0	0	0		
Antimony		QN	60.0	0	0	0	0	0	0	0		
Arsenic		0.00055	10.0	0	0	0	0	0	0	0		
Barium		QN	200	0	0	0	0	0	0	0		
Beryllium		0.02075	5.00	0	0	0	0	0	0	0		
Boron		1.437	50.0	0	0	0	0	0	0	0		
Cadmium		0.03109	5.00	0	0	0	0	0	0	0		
Calcium		ND	5000	0	0	0	0	0	0	0		
Chromium		QN	10.0	0	0	0	0	0	0	0		
Cobalt		0.03073	50.0	0	0	0	0	0	0	0		
Copper		0.4252	25.0	0	0	0	0	0	0	0		
ron		0.3025	100	0	0	0	0	0	0	0		
Lead		1.268	3.00	0	0	0	0	0	0	0		
Lithium		14.3	100	0	0	0	0	0	0	0		
Magnesium		13.58	5000	0	0	0	0	0	0	0		
Manganese	¢.	0.00979	15.0	0	0	0	0	0	0	0		
Molybdenum	ш	DN	50.0	0	0	0	0	0	0	0		
Nickel		DN	40.0	0	0	0	0	0	0	0		
Potassium		5.067	5000	0	0	0	0	0	0	0		
Selenium		0.4918	5.00	0	0	0	0	0	0	0		
Silver		QN	10.0	0	0	0	0	0	0	0		
Sodium		7.194	5000	0	0	0	0	0	0	0	_	
Strontium		DN	20.0	0	0	0	0	0	0	0		
Thallium		0.06229	10.0	0	0	0	0	0	0	0		
Цп		0.9752	50.0	0	0	0	0	0	0	0		
Titanium		QN	50.0	0	0	0	0	0	0	0		
Vanadium		5.152	50.0	0	0	0	0	0	0	0		
Qualifiers:	ND - Not Detected at the Reporting Limit	ceporting Limit		S - Spike Re	S - Spike Recovery outside accepted recovery limits	accepted rect	overy limits		B - Analyte detected in the associated Method Blank	sted in the assoc	iated Method I	3lank
	J - Analyte detected below quantitation limits	quantitation limits		R - RPD out	- RPD outside accepted recovery limits	ecoverv limit	s				, <i>u</i>	C3 J - L Q

Aethod Blank Page 8 of 52	- Analyte detected in the associated Method Blank $Page \ 8 \ of 5$	B - Analyte detecte		covery limits ts	le accepted rec recovery limi	S - Spike Recovery outside accepted recovery limi R - RPD outside accepted recovery limits	S - Spike F R - RPD o		oorting Limit vantitation limits	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits	Qualifiers:
	0	0	0	0	0	0	0	50.0	ND		Vanadium
	0	0	0	0	0	0	0	50.0	ND		Titanium
	0	0	0	0	0	0	0	50.0	0.3883		Tin
	0	0	0	0	0	0	0	10.0	ND		Thallium
	0	0	0	0	0	0	0	20.0	ND		Strontium
	0	0	0	0	0	0	0	5000	ND		Sodium
	0	0	0	0	0	0	0	10.0	0.9874		Silver
	0	0	0	0	0	0	0	5.00	0.7871		Selenium
	0	0	0	0	0	0	0	5000	5.962		Potassium
	0	0	0	0	0	0	0	40.0	ND		Nickel
	0	0	0	0	0	0	0	50.0	ND		Molybdenum
	0	0	0	0	0	0	0	15.0	0.03486		Manganese
	0	0	0	0	0	0	0	5000	19.51		Magnesium
	0	0	0	0	0	0	0	100	67.51		Lithium
	0	0	0	0	0	0	0	3.00	0.945		Lead
	0	0	0	0	0	0	0	100	0.1153		Iron
	0	0	0	0	0	0	0	25.0	0.05451		Copper
	0	0	0	0	0	0	0	50.0	ND		Cobalt
	0	0	0	0	0	0	0	10.0	ND		Chromium
	0	0	0	0	0	0	0	5000	ND		Calcium
	0	0	0	0	0	0	0	5.00	0.01735		Cadmium
	0	0	0	0	0	0	0	50.0	1.315		Boron
	0	0	0	0	0	0	0	5.00	0.02539		Beryllium
	0	0	0	0	0	0	0	200	1.542		Barium
	0	0	0	0	0	0	0	10.0	ND		Arsenic
	0	0	0	0	0	0	0	60.0	ND		Antimony
	0	0	0	0	0	0	0	200	ND		Aluminum
<u>nit</u> <u>Qual</u>	<u>%RPD</u> RPDLimit	<u> RPD Ref Val</u>	<u>HighLimit</u>	<u>LowLimit</u>	%REC	SPK Ref Val	<u>SPK value</u> <u>SPI</u>	<u>PQL</u>	<u>Result</u>		<u>Analyte</u>
	Analysis Date: 10/31/2019	Analy	Units: µg/L	Unit			PrepRef:			Samp ID: CCB-2	Sam
	RunNo: 176921		TestNo: E200.7	Testh			PrepDate:			SeqNo: 2731541	CCB SeqN
	0	0	0	0	0	0	0	20.0	ND		Zinc
<u>nit</u> Qual	<u>%RPD</u> RPDLimit	<u>RPD Ref Val</u>	<u>HighLimit</u>	<u>LowLimit</u>	%REC	SPK Ref Val	<u>SPK value</u> <u>SP</u> I	<u>PQL</u>	<u>Result</u>		<u>Analyte</u>
	Analysis Date: 10/31/2019	Analy	Units: µg/L	Unit			PrepRef:			Samp ID: CCB-1	Samp
	RunNo: 176921		TestNo: E200.7	Testh			PrepDate:			SeqNo: 2731529	CCB SeqN
	75727	BatchID: 75	В						1	Lockwood Ash Landfill	Project:
				ANAL						190920022	Work Order:
TAU	TICAL OC SUMMA BY BEDOPT		VTTCA							Lockwood Hills LLC	CLIENT:

CLIENT:	:	I ockwood Uille LI O											
Work Order:	rder:	190920022	۲ ۲					ANAT					1
Project:		Lockwood Ash Landfill	dfill					ANAL	TILCA	5	MMAR	Y REP(DRT
CCB	SeaNo.	SeaNo: 2731541							B	BatchID: 75	75727		
	Samp ID	Samp ID: CCB-2			PrepDate:	ä		Test	TestNo: E200.7				
Analyte					PrepRef:			Unit	Units: µg/L	Analy	Analvsis Date: 1	176921	
Zinc			<u>Hesult</u> ND	<u>POL</u> 20.0	<u>SPK value</u> <u>SP</u> 0	<u>SPK Ref Val</u> 0	%REC	LowLimit <u>F</u>		RPD Ref Val		RPDLimit	Qual
CCB	SeqNo: 2731553	2731553			DmnDate			5	0	0	0		
	Samp ID: CCB-3	CCB-3			PrepRef:			Testh	TestNo: E200.7		RunNo: 1	176921	
Analyte			Result					Unit	Units: µg/L	Analy	Analysis Date: 10	10/31/2019	
Aluminum	_		ND	200		<u>SPK Ref Val</u>	<u>%REC</u>	LowLimit F	<u>HighLimit</u>	RPD Ref Val	MAPN		
Antimony			QN	60.0		0 0	0		0	0	0		Qual
Dorium			1.335	10.0) C		0 0	0	0	0	0		
Donali			ND	200) C		0 0	0	0	0	0		
Boron			0.09921	5.00			0 0	0	0	0	0		
Codmin			1.193	50.0	C		5 0	0	0	0	0		
Caloine			0.09798	5.00	0		5 0	0	0	0	0		
Chromium			2	5000	0			0 (0	0	0		
Cobalt	h		7.92	10.0	0	0 0		0 0	0	0	0		
Conner			0.07685	50.0	0	C		0 0	0	0	0		
Iron			2.157	25.0	0	0 0		5 0	0 0	0	0		
ead			0.346	100	0	0		5 0	0	0	0		
Lithium			0.5585	3.00	0	0 0		> 0	0	0	0		
Magnesium	-		87.4	100	0	0		D 0	0	0	0		
Mandanese			6.418	5000	0	0		- 0	0	0	0		
Molvbdenum	, F		0.05324	15.0	0	0		5 0	0 0	0	0		
Nickel			QN	50.0	0	0			0 0	0	0		
Potassium			0.09581	40.0	0	0	0			0	0		
Selenium			2.363	5000	0	0	0		-	0	0		
Silver			UN UN	5.00	0	0	0			0	0		
Sodium			3.091	10.0	0	0			> 0	0	0		
Strontium			ON .	5000	0	0	- C		- 0	0	0		
Thallium			QN	20.0	0	0			0 0	0	0		
Tin			0.9422	10.0	0	0			0	0	0		
Titanium			0.719	50.0	0	0		5 0	о (0	0		
Vanadium			QN	50.0	0	0		5 0	0	0	0		
			DN	50.0	0	C		0	0	0	0		
Qualifiers:	Ŋ	ND - Not Detected at the Reporting 1 imit	Ortino I imit			>	>	0	0	0	0		
	J - A	J - Analyte detected below quantitation limits	antitation limits		5 - Spike Rec	5 - Spike Recovery outside accepted recovery limits	scepted recover	ry limits	B - <i>k</i>	B - Analyte detected in the associated Method Blank	the associated	Method Blan	4
					KPU OULSI	K - KPD outside accepted recovery limits	overy limits						4

Page 9 of 52

Page 10 of 52	Ŧ		SCOVERY IIIIIIII	utside accepted re	S - Spike Recovery outside accepted recovery muns		~ Danortino I imit	in the Detected at the Reporting Limit	
Method Blank	B - Analyte detected in the associated Method Blank	B - Analyte detec	limite			00.0	Ē		Vanadium
			0	0	0	50.0			Titanium
	0			0	0	50.0	ND		lin
	0	0			0	50.0	0.595		Induin
	0	0				10.0	0.879		Thelfing
	0	0	0			20.0	ND		Ctroptium
		0 0	0			5000	ND		Sodium
	o c	0	0			10.0	0.5928		Silver
	5 0	0	0			100	2.040		Selenium
	0		0	0	0 0	5 00	0.001		Potassium
	0		, c		0 0	5000	2 220		Nickel
	0				0 0	40.0	ND		Molybaenutti
	0				0 0	50.0	ND		Manganese
	0				0	15.0	0.03139		Magnesium
	0	0		5 0		5000	12.59		Manapolium
	0	0	0	0		100	97.56		l ithium
		0	0 0	0		3.00	0.4078		l ead
	o		0 0	0			0.03599		Iron
			0	0		100	1.000		Copper
	0			0	0	25.0	1 006		Cobalt
	0			0	0 0	50.0	n 1032		Chromium
	0			, c	0	10.0	ND		Calcium
	0				0	5000	ND		Cadminum
	0	0				5.00	0.00719		
	0	0		יכ		50.0	ND		Boron
	0	0	0 0			5.00	0.1867		Bandlium
	0	0	0 0	0		200	2.224		Barium
		C	0 0	0		10.0	ND		Arsenic
	.	o C	0	0		100	į		Antimony
	0	5 (0	0	60.0			Aluminum
	0 0			0	0	0	UN <u>IIDSƏLI</u>		Analyte
			LowLimit HighLimit	%REC	SPK value SPK Ref Val	POI SF			
mit Qual	41		1 2		PrepRef:			Samp ID: CCB-3	
Q	Analysis Date: 10/31/2019	Analys	TestNo: E200.7		PrepDate:			SeaNo: 2731554	CCB SegNo
	DupNo: 176021					20.0	ND		Zinc
		0	0 0	<u>%REC</u>	<u>SPK Ref Va</u>		Result		Ē
nit Qual	%RPD RPDLimit	BDD Bef Val	- 1 - 3		PrepRet:			Samp ID: CCB-3	
9	Hunno: 7/09/1 Analysis Date: 10/31/2019	Analys	TestNo: E200.7 Units: ua/L		PrepDate:			: 2731553	CCB SeqNo:
							1	Lockwood Ash Landfill	Project:
	27	BatchID: 75727	B					190920022	Work Order:
		l						LUCKWOOD IIII PPO	

CLIENT: Work Order:	Lockwood Hills LLC rder: 190920022						ANALY'	TICA	r qc sur	ANALYTICAL QC SUMMARY REPORT	RT
Project:		I						ä	BatchID: 75	75727	
CCB	SeqNo: 2731554 Samp ID: CCB-3			PrepDate: PrepRef:			TestNo: E20 Units: µg/L	TestNo: E200.7 Units: µg/L	Anal	RunNo: 176921 Analysis Date: 10/31/2019	
<u>Analyte</u> Zinc		<u>Result</u> ND	<u>PQL</u> 20.0	SPK value SPK Ref Val 0	0	<u>%REC</u> L	LowLimit Hig 0	<u>HighLimit</u> 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
CCB	SeqNo: 2731566			PrepDate:			TestNo:	TestNo: E200.7			
	Samp ID: CCB-4			гернег:			Ouits: hg/r	µg/L	Anal	Analysis Date: 10/31/2019	
<u>Analyte</u> Aluminum	F	<u>Result</u> ND	POL	<u>SPK value</u> <u>SPK Ref Val</u>	C	<u>%REC</u> I	LowLimit <u>Hig</u>	<u>HighLimit</u>	<u>RPD Ref Val</u>	<u>%RPD</u> RPDLimit	Qual
Antimony		D N	60.0	0 0	0 0	00	0 0	0 0	0	00	
Arsenic		1.027	10.0	0	0	0	0	0	0	0	
Barium		0.83	200	0	0	0	0	0	0	0	
Beryllium	-	0.2448	5.00	0	0	0	0	0	0	0	
Boron		2.537	50.0	0	0	0	0	0	0	0	
Cadmium	Я	0.08784	5.00	0	0	0	0	0	0	0	
Calcium		QN	5000	0	0	0	0	0	0	0	
Chromium	ш.	ND	10.0	0	0	0	0	0	0	0	
Cobalt		0.1515	50.0	0	0	0	0	0	0	0	
Copper		0.2644	25.0	0	0	0	0	0	0	0	
lron		0.3309	100	0	0	0	0	0	0	0	
Lead		1.438	3.00	0	0	0	0	0	0	0	
Lithium		113.6	100	0	0	0	0	0	0	0	
Magnesium	ium	20	5000	0	0	0	0	0	0	0	
Manganese	ese	0.03192	15.0	0	0	0	0	0	0	0	
Molybdenum	արս։	0.2517	50.0	0	0	0	0	0	0	0	
Nickel		0.3382	40.0	0	0	0	0	0	0	0	
Potassium	ш	1.305	5000	0	0	0	0	0	0	0	
Selenium	Д	1.967	5.00	0	0	0	0	0	0	0	
Silver		3.749	10.0	0	0	0	0	0	0	0	
Sodium		QN	5000	0	0	0	0	0	0	0	
Strontium	E	QN	20.0	0	0	0	0	0	0	0	
Thallium	_	2.508	10.0	o	0	0	0	0	0	0	
Ti,		0.6804	50.0	0	0	0	0	0	0	0	
Titanium	_	QN	50.0	0	0	0	0	0	0	0	
Vanadium	E	QN	50.0	0	0	0	0	0	0	0	
Qualifiers:	rs: ND - Not Detected at the Reporting Limit	oorting Limit		S - Spike Recovery outside accepted recovery limits	ry outside acc	spted recov	very limits		B - Analyte detecte	- Analyte detected in the associated Method Blank	Blank
	J - Analyte detected below oughtigation limits	iantitation limits		R - RPD outside accepted recovery limits	accepted recov	/erv limits					1 25 57
										rage 11 ages	7C lo I

rder:					ANALYTIC.	AL QC SUN	LYTICAL QC SUMMARY REPORT
Project: Lockwood Ash Landfill	ndfill					BatchID: 75	75727
CCB SeqNo: 2731566			PrepDate:		TestNo: E200.7	7	RunNo: 176921
Samp ID: CCB-4			PrepRef:		Units: µg/L		
Analyte	Result	POL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	<u>%RPD</u> RPDLimit
Zinc	ND	20.0	_	0	0		
CCB SeqNo: 2731578			PrepDate:		TestNo: F200 7	7	RunNo: 176921
Samp ID: CCB-5			PrepRef:		Units: µg/L		
Analyte	Result	POL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	<u>%RPD</u> RPDLimit
Aluminum	ND	200	-	0	0		
Antimony	0.1464	60.0		0			0
Arsenic	0.02616	10.0		0			0
Barium	3.19	200	0	0	0 0		0
Beryllium	2.048	5.00	0 0	0			0
Boron	1.834	50.0	0 0	0			0
Cadmium	0.02003	5.00	0 0	0			0
Calcium	ND	5000	0	0			0
Chromium	DN	10.0	0 0	0			0
Cobalt	0.07719	50.0	0	0			0
Copper	ND	25.0	0 0	0			0
Iron	0.5922	100	0 0	0	0 0		0
Lead	0.4972	3.00	0	0		0	0
Lithium	54.54	100	0	0			0
Magnesium	11.58	5000	0	0	0 0	0	0
Manganese	0.08059	15.0	0 0	0			0
Molybdenum	0.1119	50.0	0	0			0
Nickel	0.1136	40.0	0 0	0			0
Potassium	4.102	5000	0 0	0	0 0		0
Selenium	0.5667	5.00	0 0	0			0
Silver	1.594	10.0	0 0	0			0
Sodium	ND	5000	0 0	0			0
Strontium	ND	20.0	0 0	0		0	0
Thallium	1.541	10.0	0 0	0			0
Tin	0.8416	50.0	0	0	0 0	0	0
Titanium	ND	50.0	0	0	0 0	0	0
Vanadium	ND	50.0	0 0	0		0	0
Qualifiers: ND - Not Detected at the Reporting Limit	e Reporting Limit		S - Spike Recovery outside accepted recovery limits	le accepted reco	very limits	B - Analyte detecte	Analyte detected in the associated Method Blank
	ow quantitation limits		R - RPD outside accepted recovery limits	l recovery limits			Page 12 of 52

Project: Lockwood Ash Landfill CCB SeqNo: 2731578 Samp ID: CCB-5 Re Analyte Samp ID: CCB-6 Zinc SeqNo: 2731590 Zinc SeqNo: 2731590 Zinc SeqNo: 2731590 Analyte Re Re Antimomy Auminum Auminum Arsenic Barium Beryltium Beryltium Cober O.00 Magnesium Magnesium Magnesium	Result PQL ND 20.0 ND 20.0 ND 20.0 ND 20.0 10.0 20.0 1.891 5.00 1.891 5.00 ND 5.00 ND 5.00 ND 5.00 ND 5.00		K Ref Val	REC %		а	BatchID: 7	75727	
SeqNo: 2731578 Samp ID: CCB-5 Samp ID: CCB-5 Samp ID: CCB-6 Samp ID: CCB-6 Samp ID: CCB-6 Samp ID: CCB-6 Samp ID: CCB-6 Samp ID: CCB-6 Samp ID: CCB-5 Samp ID: CCB-6 Samp ID: CCB-5 Samp I		A A A A A A A A A A A A A A A A A A A	<pre>< Ref Va</pre>	1 1					
Samp ID: CCB-6 Samp ID: CCB-6 New Sium nese		A A A A A A A A A A A A A A A A A A A	ok Ref Va	1	Test	TestNo: E200.7			
SeqNo: 2731590 Samp ID: CCB-6 Samp ID: CCB-6 sium nese		SPK SPK	K Ref Va			Units: hg/L	Ana	Analysis Date: 10/31/2019	
SeqNo: 2731590 SeqNo: 2731590 Samp ID: CCB-6 Lum Lum Lum Lum Lum Sium Dese		SPK	K Ref Va	_	LowLimit I 0	<u>HighLimit</u> 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	Qual
Samp ID: CCB-6 in sium ase		SPK	K Ref Va		4°°CF				
		SPK value	SPK Ref Va		Unit:	Units: Jug/L	Ana	Analysis Date: 10/31/2019	
E %				%REC I	LowLimit I	<u>HighLimit</u>	RPD Ref Val	%RPD RPDLimit	Qual
<u> </u>				0		0	0		
<u>.</u>			0	0	0	0	0	0	
<u> </u>			0	0	0	0	0	0	
<u>с</u> Е %				0 0	0 0	0 0	0 0	0 0	
<u> </u>									
с <u>Е</u> %				0 0	0	0 0		0	
um sium nese			0	0	0	0	0	, 0	
0. sium nese		0	0 0	0	0	0	0	0	
iu ese	0.00774 50.	0	0 0	0	0	0	0	0	
ium ese	0.5288 25.	0	0 0	0	0	0	0	0	
lum ese	0.3452 10	0	0 0	0	0	0	0	0	
lum ese 0.	1.453 3.0	0		0	0	0	0	0	
.0		0	0 0	0	0	0	0	0	
		0		0	0	0	0	0	
		0		0	0	0	0	0	
Molybdenum		0		0	0	0	0	0	
				0	0	0	0	0	
c				0	0	0	0	0	
ш				0	0	0	0	0	
				0	0	0	0	0	
Sodium				0	0	0	0	0	
				0	0	0	0	0	
ltum				0	0	0	0	0	
				0	0	0	0	0	
Titanium		0	0	0	0	0	0	0	
Vanadium	ND 50.	0	0	0	0	0	0	0	
Qualifiers: ND - Not Detected at the Reporting Limit	orting Limit	S - S	S - Spike Recovery outside accepted recovery limits	accepted recov	'ery limits		B - Analyte detect	- Analyte detected in the associated Method Blank	Blank
J - Analyte detected below quantitation limits	ntitation limits	R - F	R - RPD outside accepted recovery limits	covery limits				Page I	Page 13 of 52

Page 14 of 52	D=== 14								•		
lank	sociated Method B	- Analyte detected in the associated Method Blank	В -	overy limits	e accepted rec	S - Spike Recovery outside accepted recovery limits	S - Spike F		porting Limit	ND - Not Detected at the Reporting Limit	Qualifiers:
	0	0	0	0	0	0	0	50.0	ND		Vanadium
	0	0	0	0	0	0	0	50.0	0.7977		Titanium
	0	0	0	0	0	0	0	50.0	0.7342		Tin
	0	0	0	0	0	0	0	10.0	1.519		Thallium
	0	0	0	0	0	0	0	20.0	ND		Strontium
	0	0	0	0	0	0	0	5000	ND		Sodium
	0	0	0	0	0	0	0	10.0	0.1315		Silver
	0	0	0	0	0	0	0	5.00	1.883		Selenium
	0	0	0	0	0	0	0	5000	2.425		Potassium
	0	0	0	0	0	0	0	40.0	0.1209		Nickel
	0	0	0	0	0	0	0	50.0	0.1081		Molybdenum
	0	0	0	0	0	0	0	15.0	0.1032		Manganese
	0	0	0	0	0	0	0	5000	12.1		Magnesium
	0	0	0	0	0	0	0	100	48.52		Lithium
	0	0	0	0	0	0	0	3.00	1.691		Lead
	0	0	0	0	0	0	0	100	0.8554		Iron
	0	0	0	0	0	0	0	25.0	ND		Copper
	0	0	0	0	0	0	0	50.0	0.1015		Cobalt
	0	0	0	0	0	0	0	10.0	ND		Chromium
	0	0	0	0	0	0	0	5000	ND		Calcium
	0	0	0	0	0	0	0	5.00	0.02908		Cadmium
	0	0	0	0	0	0	0	50.0	2.49		Boron
	0	0	0	0	0	0	0	5.00	1.91		Beryllium
	0	0	0	0	0	0	0	200	2.748		Barium
	0	0	0	0	0	0	0	10.0	1.703		Arsenic
	0	0	0	0	0	0	0	60.0	ND		Antimony
	0	0	0	0	0	0	0	200	ND		Aluminum
Qual	<u>PD</u> <u>RPDLimit</u>	RPD Ref Val <u>%RPD</u>	<u>HighLimit</u> <u>E</u>	LowLimit H	%REC	<u>SPK Ref Val</u>	<u>SPK value</u> SPI	<u>PQL</u>	<u>Result</u>		Analyte
	: 10/31/2019	Analysis Date:	μg/L	Units:			PrepRef:			Samp ID: CCB -7	Samp
	176921	RunNo:	TestNo: E200.7	TestN			PrepDate:		:	SeqNo: 2731595	CCB SeqNo
			0	-	0	0		20.0	ND		Zinc
Qual	PD RPDLimit	RPD Ref Val %RPD		lowlimit H	%RFC	SPK Ref Val	SPK value SPI	PO	Result		Analvte
	: 10/31/2019	Analysis Date:	∶µg/L	Units:			PrepRef:			Samp ID: CCB-6	Samp
	176921	RunNo:	estNo: E200.7	TestN		-•	PrepDate:			SeqNo: 2731590	CCB SeqNo
		BatchID: 75727	Ba						11	Lockwood Ash Landfill	Project:
		LI IICAL QC SUMIMANI NEI ONI		ANALI						190920022	Work Order:
		OC CTIVINA .									

CLIENT:		G		-			ANAI	YTICA	L OC SU	ANALYTICAL OC SUMMARY REPORT	REPO	RT
Work Order:	rder:							1	,			
Project:	: Lockwood Ash Landfill	dfill						Ð	BatchID: 7	75727		
CCB	SeqNo: 2731595			PrepDate	e:		Tes	TestNo: E200.7		RunNo: 17	176921	
	Samp ID: CCB -7			PrepRef:	f:		n	Units: µg/L	Ane		10/31/2019	
<u>Analyte</u> Zinc		<u>Result</u> ND	<u>PQL</u> 20.0	<u>SPK value</u> 0	<u>SPK Ref Val</u> 0	<u>%REC</u> 0	<u>LowLimit</u> 0	<u>HighLimit</u> 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> 0	RPDLimit	Qual
cc	SeqNo: 2731528			PrepDate:	te:		Tes	TestNo: E200.7		BunNo: 17	176921	
	Samp ID: CCV-1			PrepRef:	4		'n	Units: µg/L	Ana		10/31/2019	
Analyte		Result	POL	SPK value S	SPK Ref Val	%REC	LowLimit	<u>HighLimit</u>	RPD Ref Val	%RPD	RPDLimit	<u>Qua</u> f
Aluminum	u	1960	200	2000	0	86	06	110	0	0		
Antimony	۷۲	1942	60.0	2000	0	97.1	06	110	0	0		
Arsenic		2010	10.0	2000	0	100	06	110	0	0		
Barium		2059	200	2000	0	103	06	-	0	0		
Beryllium	E	2057	5.00	2000	0	103	06		0	0		
Boron		2073	50.0	2000	0	104	06	110	0	0		
Cadmium	в	2026	5.00	2000	0	101	66	•	0	0		
Calcium	-	2001	5000	2000	0	100	6		0	0		
Chromium	m	1971	10.0	2000	0	98.6	06	110	0	0		
Cobalt		1992	50.0	2000	0	9.66	06	110	0	0		
Copper		2086	25.0	2000	0	104	06	110	0	0		
lron		2053	100	2000	0	103	06	110	0	0		
Lead		2021	3.00	2000	0	101	06	110	0	0		
Lithium		1972	100	2000	0	98.6	06	110	0	0		
Magnesium	ium	1965	5000	2000	0	98.3	06	110	0	0		
Manganese	lese	1978	15.0	2000	0	98.9	06	110	0	0		
Molybdenum	อทนท	2032	50.0	2000	0	102	06	110	0	0		
Nickel		2082	40.0	2000	0	104	06	110	0	0		
Potassium	m	10400	5000	10000	0	104	06	110	0	0		
Selenium	Ξ	2022	5.00	2000	0	101	06	110	0	0		
Silver		511.3	10.0	500	0	102	06	110	0	0		
Sodium		1936	5000	2000	0	96.8	06	0 110	0	0		
Strontium	ui,	2077	20.0	2000	0	104	06	110	0	0		
Thallium	F	2031	10.0	2000	0	102	06	110	0	0		
Tin		2052	50.0	2000	0	103	06	0 110	0	0		
Titanium	Ľ	QN	50.0	0	0	0	06	0 110	0	0		
Vanadium	ш	1976	50.0	2000	0	98.8	06	0 110	0	0		
Qualifiers:	ers: ND - Not Detected at the Reporting Limit	Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	e accepted rec	overy limits		B - Analyte detec	B - Analyte detected in the associated Method Blank	ated Method E	slank
	I - Analyte detected below anantitation limits	w mantitation limits		Uda - a	R - RPD autside accented recovery limits	recovery limit	,				31 U	
	· · · · · · · · · · · · · · · · · · ·				daaan antonno		3				re lo ci agea	TC lo

Page 16 of 52			ts	l recovery limi	R - RPD outside accepted recovery limits	R - RP	Ū.	quantitation limit	J - Analyte detected below quantitation limits	
B - Analyte detected in the associated Method Blank	B - Analyte detec		overy limits	le accepted rec	S - Spike Recovery outside accepted recovery limits	S - Spi		eporting Limit	ND - Not Detected at the Reporting Limit	Qualifiers:
0	0	110	06	103	0	2000	50.0	2053		Vanadium
0	0	110	06	0	0	0	50.0	ND		Titanium
0	0	110	06	109	0	2000	50.0	2174		Tin
0	0	110	06	106	0	2000	10.0	2120		Thallium
0	0	110	06	109	0	2000	20.0	2171		Strontium
0	0	110	06	94.9	0	2000	5000	1897		Sodium
0	0	110	06	104	0	500	10.0	519.3		Silver
0	0	110	06	106	0	2000	5.00	2117		Selenium
0	0	110	06	92.7	0	10000	5000	9266		Potassium
0	0	110	06	109	0	2000	40.0	2187		Nickel
0	0	110	06	106	0	2000	50.0	2114		Molybdenum
0	0	110	06	104	0	2000	15.0	2078		Manganese
0	0	110	06	99.8	0	2000	5000	1996		Magnesium
0	0	110	06	100	0	2000	100	2008		Lithium
0	0	110	06	107	0	2000	3.00	2148		Lead
0	0	110	06	106	0	2000	100	2128		Iron
0	0	110	06	104	0	2000	25.0	2089		Copper
0	0	110	06	105	0	2000	50.0	2099		Cobalt
0	0	110	06	97.8	0	2000	10.0	1957		Chromium
0	0	110	06	107	0	2000	5000	2134		Calcium
0	0	110	06	104	0	2000	5.00	2087		Cadmium
0	0	110	06	107	0	2000	50.0	2135		Boron
0	0	110	06	107	0	2000	5.00	2139		Beryllium
0	0	110	06	103	0	2000	200	2061		Barium
0	0	110	06	105	0	2000	10.0	2101		Arsenic
0	0	110	06	101	0	2000	60.0	2024		Antimony
0	0	110	06	100	0	2000	200	2003		Aluminum
<u>%RPD</u> <u>RPDLimit</u> <u>Qual</u>	RPD Ref Val	<u>HighLimit</u>	<u>LowLimit</u>	%REC	SPK Ref Val	<u>SPK value</u>	POL	<u>Result</u>		<u>Analyte</u>
Analysis Date: 10/31/2019	An	Units: µg/L	Uni		ef:	PrepRef:			Samp ID: CCV-2	
RunNo: 176921		TestNo: E200.7	Test		ate:	PrepDate:			SeqNo: 2731540	CCV s
0	0	110	06	104	0	2000	20.0	2072		Zinc
<u>%RPD RPDLimit Qual</u>	RPD Ref Val	<u>HighLimit</u>	LowLimit	%REC	SPK Ref Val	<u>SPK value</u>	POL	<u>Result</u>		<u>Analyte</u>
Analysis Date: 10/31/2019	An	Units: µg/L	Uni		ef:	PrepRef:		-	Samp ID: CCV-1	S
RunNo: 176921		TestNo: E200.7	Test		ate:	PrepDate:	1		SeqNo: 2731528	CCV s
75727	BatchID:	H						511	Lockwood Ash Landfill	Project:
LYTICAL QC SUMMARY REPORT	LQCSU	YTICA	ANAL							Work Order:
	()))								Lockwood Hills LLC	CLIENT:

CLIENT: Work Ordon	C: Lockwood Hills LLC	LLC					ANAL	YTICA	T QC SL	ANALYTICAL QC SUMMARY REPORT	V REPO	RT
Project:	· m	andfill						Ð	BatchID:	75727		
CCV	SeqNo: 2731552			PrepDate:			Tes	TestNo: E200.7		RunNo: 13	176921	
	Samp ID: CCV-3			PrepRef:			η	Units: µg/L	An	Analysis Date: 10	10/31/2019	
<u>Analyte</u> Zinc		<u>Result</u> 2176	<u>POL</u> 20.0	<u>SPK value</u> <u>SP</u> 2000	<u>SPK Ref Val</u> 0	<u>%REC</u> 109	LowLimit 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> 0	<u>RPDLimit</u>	Qual
CCV	SeqNo: 2731565			PrepDate:			Tes	TestNo: E200.7		RunNo: 1	176921	
	Samp ID: CCV-4			PrepRef:			Nn	Units: µg/L	An	Analysis Date: 10	10/31/2019	
Analyte		Result	POL		SPK Ref Val	<u>%REC</u>	<u>LowLimit</u>	HighLir	RPD Ref Val	%RPD	<u>RPDLimit</u>	Qual
Aluminum	Ē	7202	200	2000		101			0 0	0 0		
Arsenic		2156	10.0	2000		108	06 Ub	110				
Barium		2047	200	2000	0	102						
Beryllium		2200	5.00	2000	0	-110			0	0		S
Boron		2188	50.0	2000	0	109	06	110	0	0		
Cadmium	F	2149	5.00	2000	0	107	06	110	0	0		
Calcium		2171	5000	2000	0	109	96	110	0	0		
Chromium	Е	1947	10.0	2000	0	97.3	06	110	0	0		
Cobalt		2131	50.0	2000	0	107	06	110	0	0		
Copper		2070	25.0	2000	0	104			0	0		
Iron		2166	100	2000	0	108			0	0		
Lead		1939	3.00	2000	0	96.9			0	0		
Lithium		1956	100	2000	0	97.8			0	0		
Magnesium	- MU	2003	15.0	2000		100	06	110	00	0 0		
Molvhdenum		0202	50.0	2000		2.16						
Nickel		2099	40.0	2000	0 0	105			00			
Potassium	E	9252	5000	10000	0	92.5	06	110	0	0		
Selenium	F	2172	5.00	2000	0	109	06	110	0	0		
Silver		531.2	10.0	500	0	106	06	110	0	0		
Sodium		1848	5000	2000	0	92.4	90	110	0	0		
Strontium	E	2116	20.0	2000	0	106		110	0	0		
Thallium		2107	10.0	2000	0	105	06	110	0	0		
Tin		1848	50.0	2000	0	92.4	06	110	0	0		
Titanium		QN	50.0	0	0	0	06	110	0	0		
Vanadium	Ш	2109	50.0	2000	0	105	06	110	0	0		
Qualifiers:	rs: ND - Not Detected at the Reporting Limit	the Reporting Limit		S - Spike F	Recovery out.	S - Spike Recovery outside accepted recovery limits	sovery limits		B - Analyte detec	B - Analyte detected in the associated Method Blank	ated Method B	lank
	J - Analyte detected b	J - Analyte detected below quantitation limits		R - RPD o	utside accept	R - RPD outside accepted recovery limits	ts				Page 18 of 52	of 52

Strontium Strontium Thallium Tin Titanium Vanadium	Strontium Thallium Tin Titanium	Strontium Thallium Tin	Strontium Thallium	Strontium	SUDIUM	Ondium	Silver	Selenium	Potassium	Nickel	Molybdenum	Manganese	Magnesium	Lithium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Beryllium	Barium	Arsenic	Antimony	Aluminum	Analyte	Samp ID	CCV SeqNo:	<u>Analyte</u> Zinc	Samp ID: CCV-2	CCV SeqNo:	Project:	Work Order:	CLIENT:
																											ľ	Ŗ	Samp ID: CCV-3	SeqNo: 2731552	Ŗ	CCV-2	SeqNo: 2731540	Lockwood Ash Landfill	190920022	Lockwood Hills LLC
2067		ND	2082	2171	2154	1867	527.2	2153	9218	2010	2165	2141	2002	1946	2121	2166	2078	2148	1949	2186	2125	2170	2160	2052	2127	2073	2012	Result			<u>Result</u> 2178					
	50.0	50.0	50.0	10.0	20.0	5000	10.0	5.00	5000	40.0	50.0	15.0	5000	100	3.00	100	25.0	50.0	10.0	5000	5.00	50.0	5.00	200	10.0	60.0	200	Por			<u>PQL</u> 20.0					
	2000	0	2000	2000	2000	2000	500	2000	10000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	0	SPK value SPK Ref Val	PrepRef:	PrepDate:	<u>SPK value</u> <u>SPK Ref Val</u> 2000 (PrepRef:	PrepDate:			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ref Val			<u>lef Val</u> 0					
	103	0	104	109	108	93.3	105	108	92.2	100	108	107	100	97.3	106	108	104	107	97.4	109	106	108	108	103	106	104	101	%REC			<u>%REC</u> 109					
	90	06	90	06	06	06	06	06	06	06	06	06	06	06	06	06	06	90	06	90	06	06	06	06	06	06	<u> </u>	LowLimit High	Units: µg/L	TestNo: E200.7	<u>LowLimit</u> <u>Hig</u> t 90	Units: µg/L	TestNo: E200.7			NIAT VT
	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	0	HiahLimit R	lg/L	E200.7	<u>HighLimit</u> <u>B</u> 110	lg/L	E200.7	Bat		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RPD Ref Val	Analys		<u>RPD Ref Val</u> 0	Analysi		BatchID: 75727	R	8
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		%RPD RPDLimit		RunNo: 176921	<u>%RPD</u> RPDLimit 0	Analysis Date: 10/31/2019	RunNo: 176921	127	OUNING INDI ON I	
																												Qual			Qual					קו

CLIENT: Work Order:	Lockwood Hills LLC 190920072					ANALYTICAL QC SUMMARY REPORT	FICA	r qc su	MMAR	Y REPO	RT
Project:	Lockwood Ash Landfill						Ba	BatchID: 7	75727		
CCV SeqNo	SeqNo: 2731565		PrepDate:	e:	0	TestNo:	TestNo: E200.7		RunNo:	176921	
Samp	Samp ID: CCV-4		PrepRef:			Units: µg/L	hg/L	Ana	Analysis Date:	10/31/2019	
<u>Analyte</u> Zinc	<u>Result</u> 1888	<u>POL</u> 20.0	<u>SPK value</u> <u>S</u> 2000	<u>SPK Ref Val</u> 0	<u>%REC</u> 94.4	LowLimit <u>Hig</u> 90	<u>HighLimit</u> 110	RPD Ref Val	<u>0</u> 0	RPDLimit	Qual
							-	>			
	SeqNo: 2/315//		PrepDate:	e:		TestNo:	TestNo: E200.7		RunNo:	176921	
Samp	Samp ID: CCV-5		PrepRef:			Units: µg/L	hg/L	Ana	Analysis Date:	10/31/2019	
Analyte	Result	POL	<u>SPK value</u> <u>S</u>	SPK Ref Val	%REC	LowLimit Hig	HighLimit	RPD Ref Val	%RPD	BPDLimit	Qual
Aluminum	2148	200	2000	0	107	06	110	0	0		
Antimony	1838	60.0	2000	0	91.9	06	110	0	0		
Arsenic	2441	10.0	2000	0	122	06	110	0	0		S
Barium	2172	200	2000	0	109	06	110	0	0		
Beryllium	2010	5.00	2000	0	100	06	110	0	0		
Boron	1993	50.0	2000	0 0	9.66 	06	110	0	0		
Caamium	2009	5.00	2000	0 0	100	06	110	0	0		
Calcium	1958	0005	2000	0 0	97.9	06	110	0	0		
Coholt	2046	10.0	2000	0 0	102	06	110	0 0	0		
Conner	1081	0.00	0002	5 0	CA T	06	011	0 0			
lron	1967		0000		101	06					
Lead	2191	3 00	2000		110	0e Ub					
Lithium	2042	100	2000		102	06	110				
Magnesium	2129	5000	2000	0	106	06	110	0	, 0		
Manganese	2125	15.0	2000	0	106	06	110	0	U		
Molybdenum	1949	50.0	2000	0	97.4	06	110	0	0		
Nickel	2040	40.0	2000	0	102	06	110	0	U		
Potassium	9684	5000	10000	0	96.8	06	110	0	0	0	
Selenium	2186	5.00	2000	0	109	06	110	0	U	0	
Silver	474.4	10.0	500	0	94.9	06	110	0	0	0	
Sodium	1999	5000	2000	0	100	06	110	0	0	0	
Strontium	2146	20.0	2000	0	107	06	110	0	0	0	
Thallium	2016	10.0	2000	0	101	06	110	0	0	0	
Tin	2089	50.0	2000	0	104	06	110	0	0	0	
Titanium	QN	50.0	0	0	0	06	110	0	0	0	
Vanadium	1860	50.0	2000	0	93	06	110	0	0	0	
Qualifiers:	ND - Not Detected at the Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	accepted reco	very limits	B	- Analyte detec	ted in the asso	B - Analyte detected in the associated Method Blank	lank
	J - Analyte detected below quantitation limits		R - RPD	R - RPD outside accepted recovery limits	scovery limits					Page 19 of 52	of 52
										2	\$

Titanium Vanadium	Titanium		T'n	Thallium	Strontium	Sodium	Silver	Selenium	Potassium	Nickel	Molybdenum	Manganese	Magnesium	Lithium	Lead	Iron	Copper	Cobalt	Chromium	Calcium	Cadmium	Boron	Beryllium	Barium	Arsenic	Antimony	Aluminum	Analvte	San	CCV Seq	<u>Analyte</u> Zinc	Sarr	CCV SeqNo:	Project:	Work Order:	CLIENT:
																													Samp ID: CCV-6	SeqNo: 2731589		Samp ID: CCV-5	No: 2731577	Lockwood Ash Landfill	190920022	Lockwood Hills LLC
	1845	ND	1926	2090	2125	1946	479.6	2108	9575	2132	2016	2152	2133	2061	2100	2028	2153	1965	1996	2020	2078	2037	2048	2129	2170	1882	 2141	Result			<u>Result</u> 1960			Ĭ		
	50.0	50.0	50.0	10.0	20.0	5000	10.0	5.00	5000	40.0	50.0	15.0	5000	100	3.00	100	25.0	50.0	10.0	5000	5.00	50.0	5.00	200	10.0	60.0	200	PQL			<u>PQL</u> 20.0					
, , ,	2000	0	2000	2000	2000	2000	500	2000	10000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	Ŭ .	SPK value SPK F	PrepRef:	PrepDate:	<u>SPK value</u> <u>SPK F</u> 2000	PrepRef:	PrepDate:			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	SPK Ref Val			<u>SPK Ref Val</u> 0					
c Chile Decrease outside accented recovers limits	92.3	0	96.3	104	106	97.3	95.9	105	95.8	107	101	108	107	103	105	101	108	98.3	99.8	101	104	102	102	106	108	94.1	107	%REC			<u>%REC</u> 98					
	90	06	06	06	06	06	06	90	06	06	06	06	06	90	06	06	90	06	06	90	06	06	06	90	06	06	-	LowLimit Hic	Units: µg/L	TestNo	<u>LowLimit Hiç</u> 90	Units: µg/L	TestNo		ANALY	
_	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	HiahLimit	µg/L	TestNo: E200.7	<u>HighLimit</u> 110	µg/L	TestNo: E200.7	в	LICA	
D Amolista datasta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	RPD Ref Val	Analy		<u>RPD Ref Val</u> 0	Analy		BatchID: 75	LY LICAL QUSUN	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		%RPD RPDLimit	Analysis Date: 10/31/2019	RunNo: 176921	<u>%RPD</u> RPDLimit 0	Analysis Date: 10/31/2019	RunNo: 176921	75727	SUMMARY REPORT	
ni - 1																												Qual			Qual				JKI	

CLIENT:	T: Lockwood Hills LLC	(۲)					ANAL	YTICA	T QC SU	ANALYTICAL QC SUMMARY REPORT	RT
work Oraer: Project:	raer:	Iffil						B	BatchID: 7	75727	
ccv	SeqNo: 2731589 Samp ID: CCV-6			PrepDate: PreoRef:	ä.		Test	TestNo: E200.7 Units: ua/L	Ana	RunNo: 176921 Analvsis Date: 10/31/2019	
Analyte		Result	Bal	SPK value SF	K Ref Va	<u>%REC</u>		HighLimit	RPD Ref Val		<u>Qual</u>
		CSUZ	20.0	2000	Ð	201	06	011	0	0	
S C C	SeqNo: 2731594			PrepDate:			Test	TestNo: E200.7		RunNo: 176921	
_	Samp ID: CCV-7			PrepRef:			Unit	Units: µg/L	Ana	Analysis Date: 10/31/2019	
Analyte		Result	POL		SPK Ref Val	<u>%REC</u>		<u>HighLimit</u>	RPD Ref Val	<u>%RPD</u> RPDLimit	<u>Qual</u>
Aluminum	E:	2160	2007	2000	0 0	108	06 8	110	0 0	0 0	
Arsenic	9	2176 2176	10.0	2000		90.5 100	0.00				
Barium		2130	200	2000	0	107	6	110	00	0 0	
Beryllium	ц	2057	5.00	2000	0	103	06	110	0	0	
Boron		2038	50.0	2000	0	102	06	110	0	0	
Cadmium	Ε	2082	5.00	2000	0	104	06	110	0	0	
Calcium		2046	5000	2000	0	102	66	110	0	0	
Chromium	Щ	2001	10.0	2000	0	100	06	110	0	0	
Cobalt		1971	50.0	2000	0	98.5	06	110	0	0	
Copper		2142	25.0	2000	0	107	06	110	0	0	
lron		2041	100	2000	0	102	06	110	0	0	
Lead		2104	3.00	2000	0	105	06	110	0	0	
Lithium		2056	100	2000	0	103	06	110	0	0	
Magnesium	ium	2124	5000	2000	0	106	06	110	0	0	
Manganese	ese	2155	15.0	2000	0	108	06	110	0	0	
Molybdenum	muté	2019	50.0	2000	0	101	06	110	0	0	
Nickel		2139	40.0	2000	0	107	06	110	0	0	
Potassium	шr	9555	5000	10000	0	92.6	06	110	0	0	
Selenium	E	2184	5.00	2000	0	109	06	110	0	0	
Silver		482.8	10.0	500	0	96.6	06	110	0	0	
Sodium		1924	5000	2000	0	96.2	06	110	0	0	
Strontium	E	2132	20.0	2000	0	107	06	110	0	0	
Thallium		2094	10.0	2000	0	105	06	110	0	0	
Цп		2063	50.0	2000	0	103	06	110	0	0	
Titanium	F	ND	50.0	0	0	0	06	110	0	0	
Vanadium	W	1863	50.0	2000	0	93.2	96	110	0	0	
Qualifiers:	rrs: ND - Not Detected at the Reporting Limit	Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	accepted rect	overy limits		B - Analyte detect	B - Analyte detected in the associated Method Blank	3lank
	I - Analyte detected below quantitation limits	v quantitation limits		RPD.	R - RPD outside accented recovery limits	recovery limits	U				C3 J - 1
					Jaaan antman		2			rc lo 17 aged	TC TO 1

Project:	Lockwood Ash Landfill	lfill					BatchID: 75727	727
CCV	SeqNo: 2731594 Samp ID: CCV-7			PrepDate: PreoRef:		TestNo: E200.7 Units: ua/L		RunNo: 176921 Analysis Date: 10/31/2019
<u>Analyte</u> Zinc		<u>Result</u> 2039	<u>PQL</u> 20.0	<u>SPK value</u> <u>SPK Ref Val</u> 2000 0	<u>%REC</u> 102	<u>LowLimit</u> 90 110	<u>RPD Ref V</u>	o
CR	SeqNo: 2731525			PrepDate:		TestNo: E200.7).7	RunNo: 176921
	Samp ID: CRI-1			PrepRef:		Units: µg/L		
Analyte		<u>Result</u>	<u>PQL</u>	SPK value SPK Ref Val	%REC	LowLimit HighLimit	it RPD Ref Val	<u>%RPD RPDLimit Qual</u>
Aluminum		4.674	200	0 0	0		150 0	0
Antimony		119.4	60.0		99.5	50		0
Arsenic		16.97	200	n 20	84.8	50	150 0 150 0	
Boron		0.8482	50.0		0			0
Cadmium		10.47	5.00		105			0
Calcium		ND	5000		0	50	150 0	0
Conner		23.95	10.0	50 0	120	л 50	150 0	0 0
Iron		ND	100	0	0			0
Magnesium	н	5.925	5000		0			0
Manganese	õ	29.08	15.0	30 0	96.9		150 0	0
Nickel		83.46	40.0		104			0
Potassium		7.584	5000		0		150 0	0
Selenium		10.15 ND	5.00	10 0	102	50 1	150 0 150 0	
Zinc		45.29	20.0		113	0		0
CRI	SeqNo: 2731591			PrepDate:		TestNo: E200.7	0.7	RunNo: 176921
	Samp ID: CRI-2			PrepRef:		Units: µg/L		
Analyte		<u>Result</u>	PQL	SPK value SPK Ref Val	<u>%REC</u>	LowLimit HighLimit	lit RPD Ref Val	<u>%RPD RPDLimit Qual</u>
Aluminum		ND	200		0	50		0
Anumony		20.84	10.0	00	94.3	л c	150 0	
Barium		2.205	200		0	50		0
		1.682	50.0	0 0	0		150 0	0

	WOLK OF UCC: 190920022										
Project:							Ð	BatchID:	75727		
CRI Se	SeqNo: 2731591		PrepDate:			Test	TestNo: E200 7		BunNo.	176921	
Se	Samp ID: CRI-2		PrepRef:			Unit	Units: µg/L	A	Analysis Date:		
Analyte	Result	POL	SPK value SP	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	RPD	PD RPDLimit	t Qual
Cadmium	10.79	5.00	10	0	108	0	150	0			
Calcium	0.1494	5000	0	0	0	50	150	0		0	
Chromium	21.1	10.0	20	0	105	50	150	0		0	
Copper	48.42	25.0	50	0	96.8	50	150	0		0	
Iron	0.5366	100	0	0	0	50	150	0		0	
Magnesium	ΩN	5000	0	0	0	50	150	0		0	
Manganese	32.34	15.0	30	0	108	50	150	0		0	
Nickel	86.58	40.0	80	0	108	50	150	0		0	
Potassium	5.874	5000	0	0	0	50	150	0		0	
Selenium	11.64	5.00	10	0	116	50	150	0		0	
Sodium	ND	5000	0	0	0	50	150	0	_	0	
Zinc	44.49	20.0	40	0	111	50	150	0	-	0	
ICB S	SeqNo: 2731524		PrepDate:			Test	TestNo: E200.7		RunNo:	176921	
Ň	Samp ID: ICB-1		PrepRef:			Uni	Units: µg/L		Analysis Date:		
Analyte	Result	POL	SPK value SP	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	I %RPD	RPDLimit	it Qual
Aluminum	ND	200	0	0	0	0	0	0		0	
Antimony	QN	60.0	0	0	0	0	0	0	-	0	
Arsenic	DN	10.0	0	0	0	0	0	0	6	0	
Barium	0.5178	200	0	0	0	0	0	0	6	0	
Boron	1.79	50.0	0	0	0	0	0	0	6	0	
Cadmium	0.03885	5.00	0	0	0	0	0	0	6	0	
Calcium	ND	5000	0	0	0	0	0	0	6	0	
Chromium	0.5842	10.0	0	0	0	0	0	0	6	0	
Copper	ND	25.0	0	0	0	0	0	0	6	0	
Iron	ND	100	0	0	0	0	0	0	6	0	
Magnesium	26.66	5000	0	0	0	0	0	0	6	0	
Manganese	QN	15.0	0	0	0	0	0	0	6	0	
Nickel	ND	40.0	0	0	0	0	0	0	6	0	
Potassium	5.128	5000	0	0	0	0	0	0	6	0	
Selenium	0.5772	5.00	0	0	0	0	0	0	0	0	
Sodium	QN	5000	0	0	0	0	0	0	6	0	
Qualifiers:	ND - Not Detected at the Reporting Limit		C Cultury	Lintus monoco	Suite Bernvery outside accented recovery limite	war limite		B Andlite detected in the accordent Mathed Dlank	and in the second	1. 3. E	1 101
				DISTOVETV OULSIO	- ALALANDUL LOUIS	OVELY THILLS		R - ABAIVIC UCIT		OUTELN NETRO	A RIANK

ICB SeqNo: 2731524 PrepDate: ND PrepDate: PrepPat: Test Analyze SeqNo: 2731523 Rsult ND POL ND SEK value ND SEK relival ND <	1524									
Result POL ND SPK value 200 SPK Mail ND SPK Mail 200 SPK Mail 200 <th< th=""><th>3B-1</th><th></th><th>PrepDate PrepRef:</th><th></th><th></th><th>TestNo Units:</th><th>TestNo: E200.7 Units: μg/L</th><th></th><th>Ar</th><th>RunNo: Analysis Date:</th></th<>	3B-1		PrepDate PrepRef:			TestNo Units:	TestNo: E200.7 Units: μg/L		Ar	RunNo: Analysis Date:
SeqNo: 2731523 PrepDate: PrepDate: PrepDate: PrepDate: PrepAre: um 1956 200 SPK Heft Value SPK Heft Value SREC LowAin um 1956 200 2000 0 97.8 SREC LowAin um 1956 200 2000 0 97.8 SREC LowAin um 1956 10.0 2000 0 97.8 SREC LowAin um 1956 10.0 2000 0 97.8 SREC LowAin um 1957 50.0 2000 0 97.8 SREC LowAin um 1956 10.0 2000 0 10.2 98.9 97.8 98.9	Res	<u>PQL</u> 20.0	~	<u>rk Ref Val</u> 0	<u>%REC</u> 0	<u>LowLimit</u> <u>H</u>	<u>ighLimit</u> 0		<u>RPD Ref Val</u> 0	<u>RPD Ref Val %RPD</u> 0 0
Image: Normal system Ensult Heault 1956 CL 200 SPK Natue 2000 SPK Ref Val 2000 Mather 2000 Mather 2000 SPK Ref Val 2000 Mather 2000 SPK Ref Val 2000 Mathr 20002000 Mathr 20002000	H523 IV-1		PrepDate PrenRef:	."		TestN	o: E200.7		Ar	RunNo: Analysis Date:
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	₩-1		PrepRef:			Units	¦µg/∟	1	Ar	Analysis Date:
Intri 1956 200 2000 0 97.8 Ty 1982 60.0 2000 0 99.4 1988 10.0 2000 0 99.4 2005 2005 50.0 2000 0 102 2007 1978 50.0 2000 0 102 2009 5.00 2000 0 102 2031 100 2000 0 102 um 1978 5000 2000 0 103 2031 100 2000 0 103 um 1962 5000 2000 0 102 2031 100 2000 0 102 um 1927 5000 2000 0 103	Result	POL		⁹ K Ref Val	<u>%REC</u>		ighLimi	, - I	t RPD Ref Val	
192 60.0 2000 0 96.1 1988 10.0 2000 0 99.4 2057 50.0 2000 0 102 2067 50.0 2000 0 102 2097 50.0 2000 0 102 2097 50.0 2000 0 102 1978 5000 2000 0 103 2031 100 2000 0 103 1962 5000 2000 0 103 1962 2000 100 2000 0 103 1962 2000 100 2000 0 103 1962 2000 1000 0 103 103 1962 2000 1000 0 103 103 1963 2006 5000 1000 103 103 1978 2057 20.0 2000 0 103 103 <	1956	200	2000	0	97.8	90	-	10	10 0	
1988 10.0 2000 0 99.4 2057 50.0 2000 0 102 2057 50.0 2000 0 102 2094 2057 50.0 2000 0 102 2095 50.0 2000 0 103 102 2097 50.0 2000 0 103 103 2097 50.0 2000 0 103 103 201 1956 10.0 2000 0 98.9 1962 5000 2000 0 102 1956 15.0 2000 0 103 1927 5000 2000 0 103 20057 20.0 2000 0 103 1927 5000 2000 0 103 103 2057 20.0 2000 0 103 103 2057 20.0 2000 0 103 <	1922	60.0	2000	0	96.1	90		10	10 0	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1988	10.0	2000	0	99.4	06		110	110 0	
Imm 2057 50.0 2000 0 103 1 1978 50.0 2000 0 100 1978 50.0 2000 0 100 100 1978 50.0 2000 0 98.9 100 2000 0 98.9 1978 2079 25.0 2000 0 97.8 201 2000 0 97.8 2079 25.0 2000 0 104 205 40.0 2000 0 102 um 1956 15.0 2000 0 97.8 2057 20.0 2000 0 102 um 1927 5000 2000 0 103 103 100 103 2057 20.0 2000 0 103 100 103 103 100 103 103 103 103 103 103 103 103 103 103 103 103 103	2046	200	2000	0	102	06		110		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2057	50.0	2000	0	103	06		110		
1 1 1978 5000 2000 0 98.9 1956 10.0 2000 0 98.9 1956 10.0 2000 0 97.8 2079 25.0 2000 0 97.8 2031 100 2000 0 102 1962 5000 2000 0 102 1956 15.0 2000 0 98.1 1956 15.0 2000 0 98.1 10280 5000 10000 0 97.8 2057 20.0 2000 0 103 103 SeqNo: 2731526 Figure Sector 103 SeqNo: 2731526 Figure Sector 103 SeqNo: 2731526 Figure Sector 103 ND 60.0 0 0 0 98.5 ND 60.0 0 0 0 0 ND 50.0 0 0 0 103 104 102 100 100 103 103 104 104 102 100 100 103 103 103 103 103 103 103	2009	5.00	2000	0	100	06		110	110 0	0
um 1956 10.0 2000 0 97.8 2079 25.0 2000 0 104 2031 100 2000 0 104 2031 100 2000 0 104 2031 100 2000 0 102 2000 0 102 2000 0 102 2000 0 102 2000 0 102 2000 0 102 2000 0 102 2000 102 2000 102 2000 102 2000 102 2000 102 103	1978	5000	2000	0	98.9	06		110		0
	1956	10.0	2000	0	97.8	06		110	110 0	
sium 2031 100 2000 0 102 nese 1962 5000 2000 0 98.1 nese 1956 15.0 2000 0 98.1 nese 10280 5000 10000 0 98.1 nm 10280 5000 10000 0 97.8 nm 2006 5.00 20000 0 103 nm 2057 20.0 2000 0 103 SeqNo: 2731526 PrepDate: PrepDate: PrepDate: PrepDate: Samp ID: ICSA-1 POL SPK value SPK Ref Val %REC LowLir MD 0.2002 0	2079	25.0	2000	0	104	90		110	110 0	
ilum 1962 1956 1956 1956 1956 1956 10280 102 102 102 102 102 102 102 10	2031	100	2000	0	102	06		110		0
rese 1956 15.0 2000 0 97.8 um 10280 5000 10000 0 103 m 10280 5000 10000 0 103 m 2006 5.00 2000 0 103 m 2006 5.00 2000 0 103 m 2057 20.0 2000 0 103 SeqNo: 2731526 FrepDate: FrepDate: FrepDate: 103 Samp ID: ICSA-1 Forut PrepDate: FrepDate: V Mm 492300 200 0 0 98.5 ND 60.0 0 0 0 0 ND 10.0 0 0 0 0 0 ND 50.0 0 0 0 0 0 0 ND 50.0 0 0 0 0 0 0 0 0	1962	5000	2000	0	98.1	06		110		0
um 10280 5000 10000 0 103 m 10280 5000 10000 0 103 m 2006 5.00 2000 0 103 m 2006 5.00 2000 0 103 seqNo: 2731526 FrepDate: FrepDate: FrepDate: Samp ID: ICSA-1 FrepDate: FrepDate: FrepDate: Mm 492300 200 0 98.5 500000 98.5 ND 60.0 0 0 0 0 0 0 ND 10.0 0 0 0 0 0 0 0 ND 50.0 0	1956	15.0	2000	0	97.8	06		10		0 0
um 10280 5000 10000 0 103 mm 2006 5.00 2000 0 100 0 100 seqNo: 2731526 2057 20.0 2000 0 96.4 103 SeqNo: 2731526 PrepDate: PrepDate: PrepDate: PrepDate: Unit Model	2055	40.0	2000	0	103	00		10		> 0
2006 5.00 2000 0 100 1927 5000 2000 0 96.4 2057 20.0 2000 0 103 SeqNo: 2731526 PrepDate: PrepDate: 103 Samp ID: ICSA-1 Pesult PepDate: PrepRef: 103 Mm 492300 200 0 98.5 0 98.5 ND 60.0 0 0 0 0 0 ND 60.0 0 0 0 0 0 ND 10.0 0 0 0 0 0 0 ND 50.0 0 0 0 0 0 0 0 ND 50.0 0	10280	0000	10000		103	06		5		• c
SeqNo: 2731526 2057 20.0 2000 0 103 Samp ID: ICSA-1 Hesult PQL SPK Value SPK Ref Val %REC LowLir Mm 492300 0.0 0 0 98.5 0	2006	5.00	2000	0 0	100	80		110		0 0
SeqNo: 2731526 PrepDate: PrepDate: PrepDate: PrepRef: Item Samp ID: ICSA-1 Hesult PQL SPK value SPK Ref Val %REC LowLir Mm 492300 200 0 0 98.5 0 0 98.5 0	761	0000	2000		96.4	UE DE				, c
SeqNo: 2731526 PrepDate: PrepDate: Samp ID: ICSA-1 Result POL SPK Ref Val %REC LowLir ny 492300 200 500000 0 98.5 0 ny ND 66.0 0	2057	20.0	2000	0	103	06		110	110 0	110 0 0
Samp ID: ICSA-1 Result PQL SPK value SPK Ref Val %REC LowLin um 492300 200 500000 0 98.5 98.5 ny ND 60.0 0	31526		PrepDate	×		TestN		200.7	200.7	
Result PQL SPK value SPK Ref Val %REC LowLimit 492300 200 500000 0 98.5 80 ny ND 60.0 0 0 98.5 80 ND 10.0 0 0 0 0 80 ND 10.0 0 0 0 80 ND 10.0 0 0 80 ND 10.0 0 0 80 0.2082 200 0 0 80 ND 50.0 0 0 0 80	CSA-1		PrepRef:	-		Units	ъ	g/F		J/L Analysis Date:
AP2300 200 500000 0 98.5 ND 60.0 0 0 98.5 ND 10.0 0 0 0 0.2082 200 0 0 0 ND 50.0 0 0 0 0 0	<u>Result</u>	<u>PQL</u>		PK Ref Val	<u>%REC</u>		igh	Limit	Limit RPD Ref Val	
ND 60.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	492300	200	500000	0	98.5			120	120 0	0
ND 10.0 0 0 0 0.2082 200 0 0 0 ND 50.0 0 0 0 0 0	ND	60.0	0	0	0	80		120		
0.2082 200 0 0 0 ND 50.0 0 0 0	ND	10.0	0	0	0	80		120		0
ND 50.0 0 0 0	0.2082	200	0	0	0	80		120		
	ND	50.0	0	0	0	80		20	20 0	
Qualifiers: ND		1 6 3 Detected at the Repo 1 1	Result Result ND 3 Result 1956 1922 1988 2045 2009 1978 1956 2011 1956 2057 20279 2031 1956 2031 1956 2055 10280 2006 1927 2005 10280 2057 1927 2057 2057 1928 1927 2057 1920 0.2082 ND ND ND ND <td>Result PQL SPK value 20.0 O 3 PQL SPK value 20.0 0 3 Result PQL SPK value PrepDa 1956 200 2000 1956 200 2000 2009 5.00 2000 1956 10.0 2000 20079 25.0 2000 2006 10.0 2000 1956 10.0 2000 2031 100 2000 1956 15.0 2000 2057 50.00 2000 2055 40.0 2000 1956 15.0 2000 2057 20.0 2000 2057 20.0 2000 2057 20.0 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000</td> <td>Result ND PQL 20.0 SPK value 0 SPK Per/Value PrepDate: PrepDat</td> <td>$\begin{array}{ c c c c c c c c c c c c c c c c c c c$</td> <td>$\begin{array}{ c c c c c c c c c } \hline Result & PQL & SPK value & SPK Ref Val & &$</td> <td></td> <td>Result ND POL 200 SPK Ref Val 200 SPK Ref Val 7 SREC 0 Low 10 Completion 0 Rep Def Val 7 Rep Val 7 Rep</td> <td>$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$</td>	Result PQL SPK value 20.0 O 3 PQL SPK value 20.0 0 3 Result PQL SPK value PrepDa 1956 200 2000 1956 200 2000 2009 5.00 2000 1956 10.0 2000 20079 25.0 2000 2006 10.0 2000 1956 10.0 2000 2031 100 2000 1956 15.0 2000 2057 50.00 2000 2055 40.0 2000 1956 15.0 2000 2057 20.0 2000 2057 20.0 2000 2057 20.0 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000	Result ND PQL 20.0 SPK value 0 SPK Per/Value PrepDate: PrepDat	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c } \hline Result & PQL & SPK value & SPK Ref Val & & & & & & & & & & & & & & & & & & &$		Result ND POL 200 SPK Ref Val 200 SPK Ref Val 7 SREC 0 Low 10 Completion 0 Rep Def Val 7 Rep Val 7 Rep	$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

CLIENT: Work Order:	Lockwood Hills LLC 190920022					ANAI	YTICA	ANALYTICAL QC SUMMARY REPORT	MMAR	Y REPO	RT
Project:	Lockwood Ash Landfill						H	BatchID: 7	75727		
ICSA SeqNo	SeqNo: 2731526 Samp ID: ICSA-1		PrepDate: PrepRef:	ate: tef:		Tes	TestNo: E200.7 Units: µg/L	Ana	RunNo: 1 Analysis Date: 1	176921 10/31/2019	
Analyte	Result	POL	SPK value	SPK Ref Val	<u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	ND	5.00	0	0	0	80		0	0		
Calcium	429700	5000	500000	0	85.9	80		0	0		
Chromium	ND	10.0	0	0	0	80		0	0		
Copper	QN	25.0	0	0	0	80		0	0		(
Iron	123600	100	200000	0	61.8	80	120	0	0		S
Magnesium	510800	5000	50000	0	102	80	120	0	0		
Manganese	ND	15.0	0	0	0	80	120	0	0		
Nickel	ND	40.0	0	0	0	80	120	0	0		
Potassium	QN	5000	0	0	0	80	120	0	0		
Selenium	ND	5.00	0	0	0	80	120	0	0		
Sodium	ND	5000	0	0	0	80	120	0	0		
Zinc	ND	20.0	0	0	0	80	120	0	0		
ICSA SeqNo	SeqNo: 2731592		PrepDate:	Date:		Tes	TestNo: E200.7		BunNo:	176921	
Samp	Samp ID: ICSA-2		PrepRef:	Ref:		Ū	Units: µg/L	Ana		10/31/2019	
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	526100	200	500000	0	105	80		0	0		
Antimony	ND	60.0	0	0	0	80	120	0	0		
Arsenic	DN	10.0	0	0	0	80	120	0	0		
Barium	3.368	200	0	0	0	80	120	0	0		
Boron	ND	50.0	0	0	0	80		0	0		
Cadmium	ND	5.00	0	0	0	80	120	0	0		
Calcium	426700	5000	500000	0	85.3	80	120	0	0		
Chromium	QN	10.0	0	0	0	80	120	0	0		
Copper	ND	25.0	0	0	0			0	0		í
Iron	125200	100	200000	0	62.6	\cap	120	0	0		S
Magnesium	539500	5000	500000	0	108	80		0	0		
Manganese	DN	15.0	0	0	0	80	120	0	0		
Nickel	ND	40.0	0	0	0	80		0	0		
Potassium	ND	5000	0	0	0	80	120	0	0		
Selenium	ND	5.00	0	0	0	80		0	0		
Sodium	ND	5000	0	0	0	80	120	0	0		
Qualifiers:	ND - Not Detected at the Reporting Limit		S - Sp	- Spike Recovery outside accepted recovery limits	le accepted rec	overy limits		B - Analyte detected in the associated Method Blank	ted in the assoc	iated Method I	31ank
	J - Analyte detected below quantitation limits	ts	R - RF	R - RPD outside accepted recovery limits	l recovery limi	s				Page 25 of 52	of 52
										0	6-

Work Order: 190920022 Project: Lockwood Ash Landi	fill				ANALYTIC	AL QC SUM. BatchID: 7572	MANT J
SeqNo: 2731592	8.0		PrepDate:		TestNo: E200.7		
Samp ID: ICSA-2			PrepRef:		Units: µg/L		
	<u>Result</u> ND	<u>PQL</u> 20.0	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC</u> 0	<u>LowLimit</u> 80 120	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0
SeqNo: 2731527			PrepDate:		TestNo: E200.7		RunNo: 176921
Samp ID: ICSAB-1			PrepRef:		Units: µg/L	Analys	
	<u>Result</u>	POL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	<u>RPD Ref Val</u>	<u>%RPD</u> RPDLimit
	490600	200	-	98.1	0		
	1.286	60.0		0			0
	ND	10.0	0	0	80 120		0
	518	200	500 0	104	80 120	0	0
	ND	50.0	0	0	80 120		0
	926.6	5.00	1000 0	92.7	80 120		0
	428200	5000	500000 0	85.6	80 120	0	0
	599	10.0	500 0	120	80 120	0	0
	566.1	25.0	500 0	113	80 120		0
	123500	100	200000 0	61.7	80 120	0	0
Magnesium	506100	5000		101	80 120		0
Manganese	465.5	15.0		93.1	80 120		0
	964.2	40.0	1000 0	96.4	80	0	0
	0.746	5000	0 0	0	80	0	0
	ND	5.00	0 0	0	80	0	0
	ND	5000	0 0	0	80	0	0
	919.8	20.0	1000 0	92	80	0	0
SeqNo: 2731593			PrepDate:		TestNo: E200.7		RunNo: 176921
Samp ID: ICSAB-2			PrepRef:		Units: µg/L		
	<u>Result</u>	PQL	SPK value SPK Ref Val	%REC	LowLimit HighLimit	<u>RPD Ref Val</u>	<u>%RPD</u> RPDLimit
	528100	200	500000 0	106	80	0	0
	ND	60.0		0	80		0
	ND	10.0		0	80		0
	542.4	200		108	80		0
	ND	50.0	0 0	0		0	0
		190920022 Lockwood Ash Landfill pi D: ICSA-2 pi D: ICSA-2 pi D: ICSAB-1 pi D: ICSAB-1 pi D: ICSAB-1 pi D: ICSAB-2	190920022 Lockwood Ash Landfill piD: ICSA-2 Result NO: 2731527 ND ND: ICSAB-1 PiD: ICSAB-1 Result 430600 1.286 ND 518 ND 528 0.123500 506100 506100 506100 465.5 964.2 0.746 919.8	190920022 Propulate: Propu	I pigo20022 I cockwood Ash Landfill Pig II: ICSA-2 Pig II: ICSA-2 <t< td=""><td></td><td></td></t<>		

CLIENT:		Lockwood Hills LLC		ANALVTICAL OC SUMMADY DEDOPT
Work Order:	-	90920022		ANALI HCAL UC SUMMANI NELUNI
Project:		Lockwood Ash Landfill		BatchID: 75727
ICSAB	ICSAB SeqNo: 2731593	31593	PrepDate:	TestNo: E200.7 RunNo: 176921
	Samp ID: ICSAB-2	CSAB-2	PrepRef:	Analy
Analyte		Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
C				

ICSAB	ICSAB SeqNo: 2731593			PrepDate	ate:		Test	TestNo: E200.7		RunNo: 176921	
	Samp ID: ICSAB-2			PrepRef:	ef:		Uni	Units: µg/L	Analy	Analysis Date: 10/31/2019	
Analyte		<u>Result</u>	POL	SPK value	SPK Ref Val	<u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Val	%RPD RPDLimit	Qual
Cadmium		963.4	5.00	1000	0	96.3	80	120	0	0	
Calcium		427900	5000	500000	0	85.6	80	120	0	0	
Chromiui	F	511.5	10.0	500	0	102	80	120	0	0	
Copper		577.5	25.0	500	0	115	80	120	0	0	1
Iron		125200	100	200000	0	62.6	80	120	0	0	S
Magnesium	m	540800	5000	500000	0	108	80	120	0	0	
Manganese	sse	409.5	15.0	500	0	81.9	80	120	0	0	
Nickel		819	40.0	1000	0	81.9	80	120	0	0	
Potassium	Ш	QN	5000	0	0	0	80	120	0	0	
Selenium		QN	5.00	0	0	0	80	120	0	0	
Sodium		ND	5000	0	0	0	80	120	0	0	
Zinc		922.7	20.0	1000	0	92.3	80	120	0	0	

B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit Qualifiers:

J - Analyte detected below quantitation limits

Page 27 of 52

Page 28 o	B - Analyte detected in the associated Method Blan
8 of 52	Blank

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits

<u>Anaiyte</u> Mercury	dup	<u>Analyte</u> Mercury	dup	<u>Analyte</u> Mercury	ms	<u>Analyte</u> Mercury	ms	<u>Analyte</u> Mercury	lcs	<u>Analyte</u> Mercury	mblk
	SeqNo: 2704536 Samp ID: 190920022-026		SeqNo: 2704521 Samp ID: 190920022-013		SeqNo: 2704539 Samp ID: 190920022-026		SeqNo: 2704522 Samp ID: 190920022-013		SeqNo: 2704506 Samp ID: LCS-75728		SeqNo: 2704505 Samp ID: MB-75728
<u>Result</u> -0.0321		<u>Result</u> -0.0075		<u>Result</u> 1.592	(GW Dep Drain 3)	<u>Result</u> 1.951	(9306-SH)	<u>Result</u> 1.974		<u>Result</u> ND	
P <u>OL</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>POL</u> 0.200	
<u>SPK value</u> <u>SPK Ref Val</u> 0 0	PrepDate:9/20/2019 PrepRef:	<u>SPK value SPK Ref Val</u> 0 0	PrepDate:9/20/2019 PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate:9/20/2019 PrepRef:(E245.1)	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate:9/20/2019 PrepRef:(E245.1)	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate:9/20/2019 PrepRef:(E245.1)	SPK value SPK Ref Val	PrepDate:9/20/2019 PrepRef:(E245.1)
<u>%REC</u> 0		<u>%REC</u> 0		<u>%REC</u> 79.6		<u>%REC</u> 97.6		<u>%REC</u> 98.7		%REC	
<u>LowLimit</u> 0 0 0	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> 0 0	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> 80.8 119	TestNo: E245.1 Units: μg/L	<u>LowLimit</u> 80.8 119	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> 85 115	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> HighLimit	TestNo: E245.1 Units: µg/L
<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0	Analys	<u>RPD Ref Val</u> 0	Analys	<u>RPD Ref Val</u> 0	Analys	<u>RPD Ref Val</u> 0	Analys	<u> RPD Ref Val</u>	Analys
<u>%RPD</u> <u>RPDLimit</u> 0 16.5	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 016.5	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit	RunNo: 175596 Analysis Date: 9/21/2019
Qual		Qual		<u>Qual</u> S		<u>Qual</u>		Qual		Qual	

ANALYTICAL QC SUMMARY REPORT

CLIENT:

Work Order: Project:

Lockwood Ash Landfill

190920022

Lockwood Hills LLC

×

-

BatchID: 75728

-

Work Order: 1909200 Project: Lockwo CCB SeqNo: 2704514 Samp ID: CCB Analyte SeqNo: 2704526 Analyte SeqNo: 2704526 Mercury SeqNo: 2704526 Mercury SeqNo: 2704526 Analyte Samp ID: CCB Mercury SeqNo: 2704538 Mercury SeqNo: 2704538 Mercury SeqNo: 2704538 Mercury SeqNo: 2704531 Mercury SeqNo: 2704541 Mercury SeqNo: 2704513 Mercury SeqNo: 2704513 Mercury SeqNo: 2704513				AINALLL			I Y
SeqNo: Samp ID: Samp	190920022						
	Lockwood Ash Landfill				BatchID: 7.	75728	
	14		PrepDate:	TestNo: E245.1	245.1	RunNo: 175596	
			PrepRef:	Units: µg/L			
	Result -0.1014	PQL 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC LowLimit HighLimit</u> 0 0	imit RPD Ref Val 0 0	<u>%RPD</u> RPDLimit 0	Qual
	26		PrepDate:	TestNo: E245.1		RunNo: 175596	
			PrepRef:	Units: µg/L		Analysis Date: 9/21/2019	
	Result -0.1029	<u>PQL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC</u> LowLimit HighLimit 0 0	imit RPD Ref Val 0 0	<u>%RPD</u> RPDLimit 0	<u>Qual</u>
	38		PrepDate:	TestNo: E245.1	245.1	RunNo: 175596	
			PrepRef:	Units: µg/L		Analysis Date: 9/21/2019	
	Result -0.0979	<u>PQL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC LowLimit HighLimit</u> 0 0	<u>imit RPD Ref Val</u> 0 0	<u>%RPD</u> <u>RPDLimit</u> 0	Qual
	41		PrepDate:	TestNo: E245.1	245.1	RunNo: 175596	
			PrepRef:	Units: µg/L			
	Result -0.0972	<u>PQL</u> 0.200	<u>SPK value SPK Ref Val</u> 0 0	<u>% REC LowLimit HighLimit</u> 0 0	<u>imit RPD Ref Val</u> 0 0	<u>%RPD</u> RPDLimit 0	Qual
	13		PrepDate:	TestNo: E245.1	245.1	RunNo: 175596	
Analyte			PrepRef:	Units: µg/L		Analysis Date: 9/21/2019	
Mercury	Result 1.974	<u>PQL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	%REC LowLimit HighLimit 98.7 85 11:	imit RPD Ref Val 115 0	<u>%RPD</u> BPDLimit 0	Qual
CCV SeqNo: 2704525	25		PrepDate:	TestNo: E245.1	245.1	RunNo: 175596	
Samp ID: CCV			PrepRef:	Units: µg/L		Analysis Date: 9/21/2019	
<u>Analyte</u> Mercury	<u>Result</u> 1.938	<u>PQL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	<u>%REC LowLimit HighLimit</u> 96.9 85 11	imit RPD Ref Val 115 0	<u>%RPD</u> RPDLimit 0	Qual

Page 29 of 52 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit

Qualifiers:

Ρ
ag
e G
30
of
52

covery limits B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits

<u>Analyte</u> Mercury	ICV	<u>Analyte</u> Mercury	ICB	<u>Analyte</u> Mercury	cra	<u>Analyte</u> Mercury	CCV	<u>Analyte</u> Mercury	CCV
	SeqNo: 2704501 Samp ID: ICV		SeqNo: 2704502 Samp ID: ICB		SeqNo: 2704503 Samp ID: 0.2ppb		SeqNo: 2704540 Samp ID: CCV		SeqNo: 2704537 Samp ID: CCV
<u>Result</u> 1.993		<u>Result</u> -0.0998		<u>Result</u> 0.1774		<u>Result</u> 2.041		<u>Result</u> 1.945	
<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>Рог</u> 0.200		<u>PQL</u> 0.200		<u>Рог</u> 0.200	
<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 0.2 0	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate: PrepRef:
<u>%REC</u> 99.7		<u>%REC</u> 0		<u>%REC</u> 88.7		<u>%REC</u> 102		<u>%REC</u> 97.2	
<u>LowLimit</u> 90 110	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> 0 0 0	TestNo: E245.1 Units: μg/L	<u>LowLimit</u> 70 130	TestNo: E245.1 Units: µg/L	<u>LowLimit HighLimit</u> 85 115	TestNo: E245.1 Units: µg/L	<u>LowLimit</u> 85 115	TestNo: E245.1 Units: µg/L
<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0		RPD Ref Val 0		<u>RPD Ref Val</u> 0	
<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175596 Analysis Date: 9/21/2019	<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 175596 Analysis Date: 9/21/2019
Qual		Qual		Qual		<u>Qual</u>		Qual	

ANALYTICAL QC SUMMARY REPORT

BatchID: 75728

CLIENT: Work Order: Project:

Lockwood Ash Landfill

190920022

Lockwood Hills LLC

=

PQL SPK 200 5.00 60.0 10.0 70.0 200 5.00 10.0 10.0 25.0 1000 25.0 1000 20.0 2000 5.00 1000 20.0 2000 5.00 2000 20.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 2500 25.0 255.0 2500 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	SeqNo: Seamp ID: Samp	ockwood Ash Landfill									
	L E E C						BatchII				
Cardinal Distribution Fond Gate Parality in the interval of the inte	<u> </u>	32045		PrepDate:		TestNo: E2	00.7	Bun			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	<u>Analyte</u> Aluminum Antimony Arsenic Bartium			PrepRef:(SW3010A)		Units: µg/I		Analysis Da			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Aluminum Antimony Arsenic Barium	Result	POL		%REC					Qual	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Antimony Arsenic Barium	4904	200		123		125	0	0		
	Arsenic	1244	60.09		124		125	0	0		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Barium	98.78	10.0		115	75	125	0	0		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Daiwii	4688	200		112	75	125	0	0	(
Image: bit is the state of the st	Cadmium	135.8	5.00		136	75	125	0	0	S	
Constraine Constraine <thconstraine< th=""> Constraine Constra</thconstraine<>	Chromium	501.4	10.0		125	75	125	0	0	6	
Total 100 210 200 216 75 125 10 0 <th0< th=""> <th0< th=""></th0<></th0<>	Copper	638.8	25.0		128	75	125	0	0	G	
Test 1343 15.0 1000 13.18 173 75 125 125 10 0 </td <td>Iron</td> <td>2772</td> <td>100</td> <td></td> <td>128</td> <td>75</td> <td>125</td> <td>0</td> <td>0</td> <td>S</td> <td></td>	Iron	2772	100		128	75	125	0	0	S	
100 100 <td>Manganese</td> <td>1343</td> <td>15.0</td> <td></td> <td>121</td> <td></td> <td>125</td> <td>0</td> <td>0</td> <td>)</td> <td></td>	Manganese	1343	15.0		121		125	0	0)	
Total Total <t< td=""><td>Nickel</td><td>1308</td><td>40.0</td><td></td><td>131</td><td>75</td><td>125</td><td>0</td><td>0</td><td>S</td><td></td></t<>	Nickel	1308	40.0		131	75	125	0	0	S	
131 2.0.0 100 0 $\overline{43}$ 75 125 0 0 $\overline{66}$ </td <td>Selenium</td> <td>76.32</td> <td>5.00</td> <td></td> <td>205</td> <td>75</td> <td>125</td> <td>0</td> <td>0</td> <td>(v)</td> <td></td>	Selenium	76.32	5.00		205	75	125	0	0	(v)	
SeqNo: Tage Date: TestNo: E2007 RunNo: TestNo: E2007 RunNo: TestNo: TestNo: E2007 RunNo: TestNo: TestNo: E2007 RunNo: TestNo: TestNo: E2007 RunNo: TestNo: TestNo: <td>Zinc</td> <td>1431</td> <td>20.0</td> <td></td> <td>143</td> <td>75</td> <td>125</td> <td>0</td> <td>0</td> <td>6</td> <td></td>	Zinc	1431	20.0		143	75	125	0	0	6	
SedNo: Tasho: Tasho: Tesho:											
Samp ID: 10020022-033 Pond Gray Penpher/SW20104 Units: Ig/L Analysis Date: I11/2019 Mm ND ND 1000 0		32048		PrepDate:		TestNo: E2	7.00	Run			
Image: Mark of the second of the s	Samp ID: 1			PrepRef:(SW3010A)		Units: µg/I		Analysis Da			
M 1000 0 <th0< th=""></th0<>	Analyte	Result	POL	ne	%REC		RPD			Qual	
V ND 300 0 <td>Aluminum</td> <td>ND</td> <td>1000</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td> <td></td>	Aluminum	ND	1000		0	0	0	0			
37.26 50.0 0 <th0<< td=""><td>Antimony</td><td>ND</td><td>300</td><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td></td><td></td><td></td></th0<<>	Antimony	ND	300		0	0	0	0			
255.3 1000 0 0 0 224.8 0 MD 2500 0 0 0 0 37210 $(5,7)$ 0 0 MD 2500 0 <th0< th=""> 0 <th0< th=""></th0<></th0<>	Arsenic	37.26	50.0		0	0		6.982		V	TAWX0
$ \begin{array}{c ccccc} & & & & & & & & & & & & & & & & &$	Barium	255.3	1000		0	0		224.8		N	- MAC
n ND 25.0 0 <td>Boron</td> <td>43540</td> <td>250</td> <td></td> <td>0</td> <td>0</td> <td></td> <td>37210</td> <td>-</td> <td>5</td> <td></td>	Boron	43540	250		0	0		37210	-	5	
435200 25000 0 0 0 516100 (17.0) 10 (20.0) 0 0	Cadmium	ND	25.0		0	0		0	0) (
Image: ND 50.0 <	Calcium	435200	25000		0	0		16100	-	Б	
ND 120 0 <th0< th=""> <th0< th=""></th0<></th0<>	Chromium	ND	50.0		0	0	0	0			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Copper	ND	120		0	0	0	0			ADL WDL
sium121200250000001260003.840nese130.875.00000131.80.7350neseND2000000131.80.7350nm38520250000000000nm34.2325.000000000nm3128002500000000000nm3128002500000000000nm312800250000000011210012.910nm312800250000000011210012.910nm3128002500000000011210012.910nm31280025000000000118220052.810nm3128002500000000018220052.810nm31280035.835.835.835.835.835.835.8nm31280035.935.835.835.835.835.8nm31280035.935.835.835.835.8nm35.935.835.835.835.835.8 <td>Iron</td> <td>197.3</td> <td>500</td> <td></td> <td>0</td> <td>0</td> <td></td> <td>216.8</td> <td></td> <td>N</td> <td></td>	Iron	197.3	500		0	0		216.8		N	
nese 130.8 75.0 0 0 131.8 0.735 0 ND 200 0<	Magnesium	121200	25000		0	0		56000			
ND 200 35.26 2.34 0 <t< td=""><td>Manganese</td><td>130.8</td><td>75.0</td><td></td><td>0</td><td>0</td><td></td><td></td><td></td><td></td><td></td></t<>	Manganese	130.8	75.0		0	0					
98520 2500 0 0 0 112100 129 0 34.23 25.0 0 0 0 0 0 294 0 312800 25000 0 0 0 0 182200 52.8 2.94 0 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank	Nickel	ND	200		0	0	0	0	0	(
n 34.23 25.0 0 0 0 35.26 2.94 0 n 312800 25000 0 0 0 0 35.26 2.94 0 rs: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank	Potassium	98520	25000		0	0		12100		5	
312800 25000 0 0 0 0 182200 rs: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank	Selenium	34.23	25.0		0	0		35.26		1	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated	Sodium	312800	25000		0	0		32200		6	
D DDD outside constant instance		- Not Detected at the Reporting Limit			e accepted recov	/ery limits	B - Analy	te detected in the	associated Method B	lank	
	/ I	I Analytic detected helow quantitation limite	te	DDD anteide accented	recovery limits				ç		

Order: 190920022 Perplate: Proplate: T SeqNo: 2732048 Pond Grab Proplate: T SeqNo: 2732048 Pond Grab Proplate: T SeqNo: 2732036 Pond Grab Proplate: T ND 100 SEX.Value SEX.Valuue SEX.Valuue<	A CONTRACTOR OF A CONTRACT OF		R Analyte detected in the associated Method Rlank		in limite	mantad terr	C Snike Decovery outside accented recovery limits	e enite		I- Danadina Timit	. ND Not Detected at the Deporting Limit	Analifiare.
Order: 190920022 PrepDate: T SeqNo: 2732048 Pond Grab PrepDate: T SeqNo: 2732048 Pond Grab PrepDate: T SeqNo: 2732048 Pond Grab PrepDate: T SeqNo: 2732036 Pond Grab PrepDate: T SeqNo: 2732036 Pond Grab PrepDate: T SeqNo: 2732036 PrepDate: PrepDate: T SeqNo: 2732036 PrepDate: PrepDate: T SeqNo: 2732037 Pond PrepDate: T ND 14.51 10.0 50.0 T ND 50.0 14.51 10.0 T ND 50.0 14.50 50.0 T ND 50.0 14.50 50.0 T ND 50.0 T PrepDate: T SeqNo: 2732037 PrepDate: T T ND 20.0<		0	0	120	80	107	0	2000	50.0	2131		Boron
Order: 190920022 Propose: T SeqNo: 2732048 Peoplate: T SeqNo: 2732048 Peoplate: T SeqNo: 2732038 Peoplate: T Result Pool SEK value SEK Ref Val SEK Ref Val SER Ref Val T SeqNo: 2732038 Peoplate: 100 SEK Ref Val SEK Ref Val SEK Ref Val SEK Ref Val Set		0	0	120	80	103	0	2000	200	2053		Barium
Order: 190920022 Proplate: 1 SteqNo: 2732048 Proplate: 1 SteqNo: 2732048 Proplate: 1 SteqNo: 2732048 Proplate: 1 SteqNo: 2732048 Proplate: 1 SteqNo: 2732038 (Pond Grab) Proplate:104/2019 0 </td <td></td> <td>0</td> <td>0</td> <td>120</td> <td>80</td> <td>104</td> <td>0</td> <td>2000</td> <td>10.0</td> <td>2082</td> <td></td> <td>Arsenic</td>		0	0	120	80	104	0	2000	10.0	2082		Arsenic
Order: 190920022 Proplate: 1 SeqNo: 2732046 PepLatit PepDate: 1 SeqNo: 2732046 PepLatit PepDate: 1 SeqNo: 2732046 PepLatit PepDate: 1 SeqNo: 2732036 (Pond Grab) PepLatit PepDate:10/4/2019 0<		0	0	120	80	98.5	0	2000	60.0	1970		Antimony
Order: 190920022 Prepbate: T SeqNo: 2732043 (Pond Grab) Prepbate: 1 SeqNo: 2732033 (Pond Grab) Prepbate: 1 SeqNo: 2732033 (Pond Grab) Prepbate: 1 SeqNo: 2732036 Prepbate: 1 1 SeqNo: 2732036 Prepbate: 1 1 SeqNo: 2732036 Prepbate: 1 1 0		0	0	120	80	101	0	2000	200	2024		Aluminum
Order: 199220022 Prepbate: Prepbate: 1 SeqNo: 2732048 Prepbate: 1 <td< td=""><td><u>RPDLimit</u></td><td>%RPD</td><td>RPD Ref Val</td><td><u>-lighLimit</u></td><td></td><td>%REC</td><td><u> SPK Ref Val</u></td><td></td><td>POL</td><td><u>Result</u></td><td></td><td>Analyte</td></td<>	<u>RPDLimit</u>	%RPD	RPD Ref Val	<u>-lighLimit</u>		%REC	<u> SPK Ref Val</u>		POL	<u>Result</u>		Analyte
Order: 199920022 PrepDate: T SeqNo: 2732048 PerpDate: T Samp ID: 190920022-033 (Pond Grab) PrepDate: T ND ND 100 SPRPetr(SW3010A) T T SeqNo: 2732036 PrepDate: T PrepDate: T T SeqNo: 2732036 PrepDate: PrepDate: T T T SeqNo: 2732036 PrepDate: PrepDate: T T T SeqNo: 2732036 PrepDate: PrepDate: T T T Samp ID: MB-75961 PrepDate: PrepDate: T T T Samp ID: MB-75961 PrepDate: PrepDate: T T T ND 50.0 ND 50.0 ND E LowLim ND 50.0 ND 50.0 T T T ND 50.0 ND 50.0 <tdt< td=""><td>1/1/2019</td><td></td><td>Ana</td><td>∷µg/L</td><td>Units</td><td></td><td>f:(SW3010A)</td><td>PrepRe</td><td></td><td></td><td>Samp ID: LCS-75961</td><td></td></tdt<>	1/1/2019		Ana	∷µg/L	Units		f:(SW3010A)	PrepRe			Samp ID: LCS-75961	
Order: 199920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 199920022-033 (Pond Grab) PrepDate: T ND POL SPK value SPK Ref Val In T SeqNo: 2732036 PrepDate: T T In	76944			lo: E200.7	TestN		te:10/4/2019	PrepDa			SeqNo: 2732037	LCS
Order: 190920022 PrepDate: PrepDate: T SeqNo: 2732048 $PrepDate:$ T $PrepPate:$ T Samp ID: 190920022-033 (Pond Grab) $Pold$ SPK value SPK Ref Val $SPK Ref Val SPK SPK SPK Ref Val SPK $								đan").	20.0	ND		Zinc
Order: 190920022 SeqNo: 2732048 PrepDate: PrepDet(SW3010A) T Samp ID: 190920022-033 (Pond Grab) PrepPet/(SW3010A) T SeqNo: 2732036 Poll SPK value SPK Nalue SPK Nalue SPK Nalue SPK Nalue SPK Nalue SPRepPet/(SW3010A) T SeqNo: 2732036 Fesult POL SPK value SPK Nalue SPK Nalue SPK Nalue SPK Nalue SPK Nalue SPK Nalue SPRepPet/(SW3010A) T Samp ID: MB-75961 Poll SPK value SPK Nalue									5000	ND		Sodium
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepDate: T ND 100 SPK Nalue SPK Ref Val %REC LowLim SeqNo: 2732036 PrepDate: 100 0									5.00	ND		Selenium
Order: 190920022 Preplate: T SeqNo: 2732048 Preplate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Result PQL SPK value SPK Ref Val value ND 100 0 0 0 0 SeqNo: 2732036 Preplate: T T SeqNo: 2732036 Poll SPK Ref Val value SPK Ref Val value Value SPK Ref Val value Value SPK Ref Val value									5000	ND	1	Potassium
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRet:(SW3010A) T ND 100 SPK value SPK Ref Val %REC LowLim ND 100 SPK value SPK Ref Val %REC LowLim ND 100 SPK value SPK Ref Val %REC LowLim ND 114 200 ND Solo ND ND ND ND 500 ND 500 ND Solo ND ND ND 500 14.51 100 500 ND 500 ND 14.51 100 500 14.51 100 500<									40.0	ND		Nickel
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepDate: T ND 100 0 0 0 0 ND 100 0 0 0 0 0 SeqNo: 2732036 PrepDate: PrepDate:10/4/2019 T T SeqNo: 2732036 PrepDate:10/4/2019 0									15.0	ND	ö	Manganese
Order: 190920022 SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepDate: T ND PQL SPK value SPK Ref Val %REC LowLim SeqNo: 2732036 Passult PQL SPK Value SPK Ref Val %REC LowLim ND 100 POL SPK Value SPK Ref Val %REC LowLim SeqNo: 2732036 Passult PQL SPK Value SPK Ref Val %REC LowLim ND 100 0 0 0 0 0 1 Samp ID: MB-75961 Passult PQL SPK Nalue SPK Ref Val %REC LowLim ND 31.44 200 ND 50.0 1 1 ND 50.0 10.0 50.0 1 2 1 1 ND 33.3 5000 25.0 25.0 25.0 25.0 1 1 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5000</td> <td>ND</td> <td>Э</td> <td>Magnesium</td>									5000	ND	Э	Magnesium
Order: 190920022 SeqNo: 2732048 PrepDate: T SeqNo: 2732038 Prophet: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T SeqNo: 2732036 Pond Grab Pond Grab PrepRef:(SW3010A) T SeqNo: 2732036 Pond Grab POL SPK Ref Val %REC LowLim SeqNo: 2732036 Pond Grab POL SPK Value SPK Ref Val %REC LowLim SeqNo: 2732036 Result POL SPK value SPK Ref Val %GRC LowLim Samp ID: MB-75961 Pond Second Second Second T ND ND Solution Second Second Second Second T ND ND Solution Second Secon									100	14.51		Iron
Order: 190920022 I: Lockwood Ash Landfill SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T SeqNo: 2732036 Poll SPK Nalue SPK Ref Val %REC LowLim SeqNo: 2732036 Feplate: T PrepDate:10/4/2019 T SeqNo: 2732036 Feplate:10/4/2019 PrepDate:10/4/2019 T Samp ID: MB-75961 Poll SeqNo: PrepDate:10/4/2019 T ND ND ND 60.0 ND PrepDate:10/4/2019 T MD ND Solo ND Solo ND Solo ND ND Solo Solo Serk Ref Val %REC LowLim ND ND Solo Solo Solo Serk Ref Val %REC LowLim ND Solo Solo Solo Solo Solo Sere C LowLim									25.0	ND		Copper
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepDate: T ND 100 0 0 0 0 SeqNo: 2732036 POL SPK value SPK Ref Val % REC LowLim ND 100 0 0 0 0 0 0 SeqNo: 2732036 PrepDate:10/4/2019 T 100 0									10.0	ND		Chromium
Order: 190920022 t: Lockwood Ash Landfill SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRetr(SW3010A) T Result PQL SPK value SPK Ref Val %AREC LowLim Samp ID: MB-75961 For Pate: T PrepRetr(SW3010A) T Samp ID: MB-75961 PAL SeqNo: 2732036 T Result PQL SeqNo: 2732036 T MB-75961 Pate PrepDate:10/4/2019 T ND 80.0 SeqNo: 2732036 T ND Pol SeqNo: 2732036 T ND SeqNo: SeqNo: SeqNo: SeqNo: T ND									5000	33.3		Calcium
Order: 19020022 PrepDate: T SeqNo: 2732048 Pond Grab) PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T SeqNo: 2732036 Pagnef:(SW3010A) T T SeqNo: 2732036 PCL SPK value SPK Ref Val SeqNo: 2732036 T SeqNo: 2732036 PrepDate:10/4/2019 0 0 0 0 0 SeqNo: 2732036 PrepDate:10/4/2019 T PrepRef:(SW3010A) T 10 0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5.00</td> <td>ND</td> <td></td> <td>Cadmium</td>									5.00	ND		Cadmium
Order: 190920022 PrepDate: PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pond Grab) Pol_L SPK value SPK Ref Val %REC LowLim ND 100 0 0 0 0 0 1 SeqNo: 2732036 FrepDate::10/4/2019 T ME SeqNo: %REC LowLim Samp ID: MB-75961 Feault POL SeqNo: SeqNo: SeqNo: 200 1 ND 31.44 200 ND 60.0 10.0 10.0 10.0 ND 10.0 ND ND 10.0 200 10.0 200 10.0 10.0 10.0 10.0									50.0	ND		Boron
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pond Grab) POL SPK value SPK Ref Val Multime ND 100 0 0 0 0 0 10 SeqNo: 2732036 FrepDate: 100 0 0 0 10 SeqNo: 2732036 FrepDate: PrepDate: 10/1/2019 T 10 10 10 10 0 10									200	ND		Barium
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pord Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pord Grab) PQL SPK value SPK Ref Val %REC LowLim ND 100 0 0 0 0 0 0 SeqNo: 2732036 PrepDate: PrepDate:10/4/2019 T T Samp ID: MB-75961 Pasult PQL SPK value SPK Ref Val %REC LowLim ND 811.44 200 ND 60.0 0 0 0									10.0	ND		Arsenic
Order: 190920022 t: Lockwood Ash Landfill SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pond Grab) PQL SPK value SPK Ref Val %REC LowLim ND 100 0 0 0 0 0 T SeqNo: 2732036 Passit PQL SPK value SPK N2010/2019 T Samp ID: MB-75961 Result PQL SPK Value SPK Ref Val %REC LowLim Result PQL SPK value SPK Ref Val %REC LowLim 31.44 200 SPK value SPK Ref Val %REC LowLim									60.0	ND		ntimonv
Order: 190920022 PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T Samp ID: 100 0 0 0 0 0 10 SeqNo: 2732036 PrepDate:10/4/2019 T T T T Samp ID: MB-75961 PrepDate:10/4/2019 T T		<u>%RPD</u>	HPU Het Val	<u>HighLimit</u>		<u>%HEC</u>	SPK Ret Val		200	<u>Result</u> 31 44		Analyte
Order: 190920022 190920022 t: Lockwood Ash Landfill PrepDate: 1 SeqNo: 2732048 PrepDate: 1 Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) 1 1 ND 100 0 0 0 0 1 SeqNo: 2732036 PrepDate:10/4/2019 1 1	1/1/2019		Ana	∷µg/L	1 2		f:(SW3010A)	PrepRe			Samp ID: MB-75961	
Order: 190920022 190920022 t: Lockwood Ash Landfill PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) U ND 100 0 0 0 0	76944			lo: E200.7	TestN		te:10/4/2019	PrepDa			SeqNo: 2732036	MBLK
rder: 190920022 190920022 Lockwood Ash Landfill PrepDate: T SeqNo: 2732048 PrepDate: T Samp ID: 190920022-033 (Pond Grab) PrepRef:(SW3010A) T	<u>RPDLimit</u> 0	<u>%RPD</u> 0	<u>RPD Ref Val</u> 0	<u>HighLimit</u> 0		<u>%REC</u> 0	<u>SPK Ref Val</u> 0		100	<u>Result</u> ND		<u>Analyte</u> Zinc
rder: 190920022 BatchID: 75961 Lockwood Ash Landfill PrepDate: TestNo: E200.7 RunNo:	1/1/2019		Ana	∷µg/L	Units		f:(SW3010A)	PrepRe		(Pond Grab)	Samp ID: 190920022-033	
rder: 190920022 Lockwood Ash Landfill	76944	11.1		lo: E200.7	TestN		te:	PrepDa			SeqNo: 2732048	SD
190920022		5961		в						andfill		Project:
			KODO									ork Or

CLIENT:	Lockwood Hills LLC	
Work Order:	190920022	
Project:	Lockwood Ash Landfill	

ANALYTICAL QC SUMMARY REPORT

BatchID: 75961

rcs	SeqNo: 2732037			PrepDat	PrepDate:10/4/2019		Test	TestNo: E200.7		RunNo:	176944	
	Samp ID: LCS-75961			PrepRet	PrepRef:(SW3010A)		Uni	Units: µg/L	An		11/1/2019	
Analyte		<u>Result</u>	POL	SPK value S	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cadmium	н	2100	5.00	2000	0	105	80	120	0	0		
Calcium		2052	5000	2000	0	103	80	120	0	0		J
Chromium	m	2001	10.0	2000	0	100	80	120	0	0		
Copper		2138	25.0	2000	0	107	80	120	0	0		
lron		2066	100	2000	0	103	80	120	0	0		
Magnesium	ium	2042	5000	2000	0	102	80	120	0	0		J
Manganese	ese	1960	15.0	2000	0	98	80	120	0	0		
Nickel		2091	40.0	2000	0	105	80	120	0	0		
Potassium	m	9538	5000	10000	0	95.4	80	120	0	0		
Selenium	ц	2087	5.00	2000	0	104	80	120	0	0		
Sodium		1978	5000	2000	0	98.9	80	120	0	0		J
Zinc		2126	20.0	2000	0	106	80	120	0	0		
MS	SeqNo: 2732044			PrepDa	PrepDate:10/4/2019		Tes	TestNo: E200.7		RunNo:	176944	
	Samp ID: 190920022-033	(Pond Grab)		PrepRe:	PrepRef:(SW3010A)		Un	Units: µg/L	An		11/1/2019	
Analyte		Result	PQL	<u>SPK value</u> <u>S</u>	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ш	2237	200	2000	0	112	75	125	0	0		
Antimony	Ŋ	591.3	60.0	500	0	118	75	125	0	0		
Arsenic		53.22	10.0	40	6.982	116	75	125	0	0		
Barium		643.4	200	2000	224.8	20.9	75	121	0	0		S
Cadmium	Y	64.46	5.00	50	0	129	75	114	0	0		S
Chromium	E	253.6	10.0	200	0	127	75	125	0	0		S
Copper		319.3	25.0	250	0	128	75	123	0	0		S
Iron		1454	100	1000	216.8	124	75	125	0	0		
Manganese	ese	716.4	15.0	500	131.8	117	75	125	0	0		
Nickel	(616.4	40.0	500	0	123	75	120	0	0		æ
Selenium	F	54.94	5.00	10	35.26	197	2 75	125	0	0		S
Zind		682.8	20.0	500	0	137	78.5	123	0	0		b

Page 33 of 52

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limitsR - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

Qualifiers:

CLIENT: Work Order:		(,				ANAL	YTICA	\sim	MMAR	Y R
Project:		1611					в	BatchID: 75	75961	
DUP	SeqNo: 2732042			PrepDate:10/4/2019	/2019	Tes	TestNo: E200.7		RunNo: 1	176944
<u></u>	Samp ID: 190920022-033			PrepRef:		Un	Units: µg/L	Analy		11/1/2019
Analyte		<u>Result</u>	<u>PQL</u>	SPK value SPK Ref Val	f Val %REC	C LowLimit	HighLimit	RPD Ref Val	<u>%RPD</u>	<u>RPDLimit</u>
Aluminum		ND	200	-	0	0 0	0	0	0	
Antimony		ND	60.0	0	0	000	0	0	0	
Arsenic		9.344	10.0	0	0		0	6.982	0	
Barium		231.8	200	0	0		0	224.8	3.07	
Cadmium		ND	5.00	0	0		0	0	0	
Chromium		ND	10.0	0	0		0	0	0	
Copper		ND	25.0	0	0	0	0	0	0	
Iron		232.7	100	0	0		0	216.8	7.10	
Magnesium		130600	5000	0	0	0	0	126000	3.60	
Manganese		141.6	15.0	0	0		0	131.8	7.17	
Nickel		2.115	40.0	0	0		0	0	0	
Selenium		35.54	5.00	0	0		0	35.26	0.802	
Zinc		ND	20.0	0	0		0	0	0	
	SeqNo: 2732043			PrepDate:10/4/2019	/2019	Tes	estNo: E200.7		RunNo:	176944
0	Samp ID: 190920022-033			PrepRef:		Un	Units: µg/L	Analy		11/1/2019
Analyte		Result	PQL	SPK value SPK Ref Val	f Val <u>%REC</u>	<u>EC</u> LowLimit	HighLimit	RPD Ref Val	<u>%RPD</u>	<u>RPDLimit</u>
Boron		40310	500	0	0	-	0	39110	3.01	
Calcium		006809	50000	0	0	0 0	0	584300	4.13	
Potassium		78790	50000	0	0		0	79330	0.683	
Sodium		300600	50000	0	0		0	297700	0.983	
ССВ	SeqNo: 2732035			PrepDate:		Tes	TestNo: E200.7		RunNo:	176944
	Samp ID: CCB-1			PrepRef:		Un	Units: µg/L	Anal	Analysis Date:	11/1/2019
Analyte		Result		SPK value SPK Ref Val	f Val %REC	<u>=C</u> LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Aluminum		3.592	200	0	0	-	0	0	0	
Antimony		ND	60.0	0	0		0	0	0	
Arsenic		0.3304	10.0	0	0	0	0	0	0	
Barium		0.1469	200	0	0		0	0	0	
Beryllium		ND	5.00	0	0		0	0	0	
Boron		ND	50.0	0	0	0 0	0	0	0	
Qualifiers:	ND - Not Detected at the Reporting Limit	Reporting Limit	:	S - Spike Recov	S - Spike Recovery outside accepted recovery limits	d recovery limits	н	B - Analyte detected in the associated Method Blank	d in the associ	ated Me

	CLIENT: Work Order:	Lockwood Hills LLC 190920022					ANAL	YTICA	ANALYTICAL QC SUMMARY REPORT	MMAR	Y REPC	RT
Service: Targoban: Targoban: <t< th=""><th>Project:</th><th>Lockwood Ash Landfill</th><th></th><th></th><th></th><th></th><th></th><th>В</th><th></th><th>15961</th><th></th><th></th></t<>	Project:	Lockwood Ash Landfill						В		15961		
Same ID: Cash II: Analysis Date: Harboar Analysis Date: Harboar International internatinternatine international internatine international internatine i		0: 2732035		PrepDat	.ie		Tes	tNo: E200.7			176944	
Item Item Result Rol SKK ratike SKK ratike Sector Rob Limit Rep Limit	Samp	ID: CCB-1		PrepRet			Π	its: µg/L	An		11/1/2019	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Analyte	Result	POL		PK Ref Val	<u>%REC</u>	LowLimit	HighLimit	RPD Ref Val	%RPD		Qual
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Cadmium	0.07349	5.00	0	0	0	0	0	0	0		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Calcium	27.19	$\overline{)}$	0	0	0	0	0	0	0		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Chromium	0.07386		0	0	0	0	0	0	0		
1.138 250 0<	Cobalt	0.03072	50.0	0	0	0	0	0	0	0		
1138 100 0 </td <td>Copper</td> <td>2.084</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td>	Copper	2.084		0	0	0	0	0	0	0		
1 3.00 0.0 0 </td <td>Iron</td> <td>17.68</td> <td>\cap</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td>	Iron	17.68	\cap	0	0	0	0	0	0	0		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Lead	1.138	(,)	0	0	0	0	0	0	0		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Lithium	QN		0	0	0	0	0	0	0		
measure 002665 150 0	Magnesium	35.92	\wedge	0	0	0	0	0	0	0		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Manganese	0.02665	15.0	0	0	0	0	0	0	0	-	
$ \begin{array}{c cccccc} \mbox{in \mathbb{N}} & \mbox{in \mathbb{N}} $	Molybdenum	ND		0	0	0	0	0	0	0	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Nickel	ND		0	0	0	0	0	0	0	0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Potassium	0.158		0	0	0	0	0	0	0	0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Selenium	QN		0	0	0	0	0	0	0	0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Silver	ND	-	0	0	0	0	0	0	0	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sodium	7.243		0	0	0	0	0	0	0	0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Strontium	ND		0	0	0	0	0	0	0	0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Thallium	1.609		0	0	0	0	0	0	0	0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Tin	N		0	0	0	0	0	0	0	0	
um ND 50.0 0 </td <td>Titanium</td> <td>N</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Titanium	N		0	0	0	0	0	0	0	0	
NDZ0.00 <td>Vanadium</td> <td>N</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Vanadium	N		0	0	0	0	0	0	0	0	
SeqNo: 2732047FrepDate:TestNo: E200.7RuNNo:Totalia: <td>Zinc</td> <td>ND</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>	Zinc	ND		0	0	0	0	0	0	0	0	
Samp ID: CCB-2PrepRet:Init:I		Vo: 2732047		PrepDa	te:		Tes	stNo: E200.7		RunNo:	176944	
Image:	Sam	o ID: CCB-2		PrepRe	f:		Ur	its: µg/L	Ar	alysis Date:	11/1/2019	
m ND 200 0 <td>Analyte</td> <td>Result</td> <td>₽1</td> <td>2</td> <td>SPK Ref Val</td> <td><u>%REC</u></td> <td><u>LowLimit</u></td> <td><u>HighLimit</u></td> <td>RPD Ref Val</td> <td><u>%RP</u></td> <td></td> <td>Qual</td>	Analyte	Result	₽ 1	2	SPK Ref Val	<u>%REC</u>	<u>LowLimit</u>	<u>HighLimit</u>	RPD Ref Val	<u>%RP</u>		Qual
y ND 60.0 0 0<	Aluminum	ND		0	0	0	0		0	0	0	
1.448 10.0 0	Antimony	ND		0	0	0			0	0	0	
(5.375) (200) (0) </td <td>Arsenic</td> <td>1.448</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td> <td>0</td> <td>U</td> <td>0</td> <td></td>	Arsenic	1.448		0	0	0			0	U	0	
Jm 1.878 5.00 0 0 0 0 0 0 0 16.47 50.0 0 0 0 0 0 0 0 0 0 iers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Bárium	5.375	_	0	0	0			0	0	0	
J - Analyte detected below quantitation limits 0 <td>Benyllium</td> <td>1.878</td> <td>(</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>U</td> <td>0</td> <td></td>	Benyllium	1.878	(0	0	0	0		0	U	0	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Boron	16.47		0	0	0	0		0		0	
R - RPD outside accepted recovery limits	Qualifiers:	ND - Not Detected at the Reporting Lin	nit	S - Spike	Recovery outsi	de accepted rec	overy limits		B - Analyte dete	cted in the asso	ciated Method]	Blank
		J - Analyte detected below quantitation	limits	R - RPD	outside accepte	d recovery limit	ts				Page 3	5 of 52

1 0 0 1 .	11.25						7/1
Project: Lockwood Ash Landfill	ldfill				_	BatchID: 75	75961
CCB SeqNo: 2732047			PrepDate:		TestNo: E200.7		RunNo: 176944
Samp ID: CCB-2			PrepRef:		Units: µg/L	Analy	
Analyte	Result	PQL	SPK value SPK Ref Val	%REC Lov	LowLimit HighLimit	RPD Ref Val	<u>%RPD</u> RPDLimit
Cadmium	ND	5.00	0 0	-	0	0	
Calcium	2.324	5000		0		0	0
Chromium	ND	10.0		0		0	0
Cobalt	ND	50.0		0		0	0
Copper	ND	25.0		0		0	0
Iron	0.1393	100		0		0	0
Lead	ND	3.00		0		0	0
Lithium	ND	100		0		0	0
Magnesium	2.878	5000		0		0	0
Manganese	ND	15.0		0		0	0
Molybdenum	ND	50.0		0		0	0
Nickel	ND	40.0		0		0	0
Potassium	15.77	5000		0	0 0	0	0
Selenium	2.429	5.00	0 0	0	0	0	0
Silver	ND	10.0	0 0	0	0	0	0
Sodium	ND	5000		0	0 0	0	0
Strontium	ND	20.0		0	0	0	0
Thallium	1.634	10.0	0 0	0	0 0	0	0
Tin	0.1362	50.0	0 0	0	000	0	0
Titanium	ND	50.0	0	0	0	0	0
Vanadium	2.678	50.0	0 0	0	0	0	0
Zinc	ND	20.0	0 0	0	0 0	0	0
CCB SeqNo: 2732056			PrepDate:		TestNo: E200.7		RunNo: 176944
Samp ID: CCB-3			PrepRef:		Units: µg/L	Analy	
Analyte	<u>Result</u>	POL	SPK value SPK Ref Val	<u>%REC Lov</u>	_owLimit HighLimit	RPD Ref Val	%RPD RPDLimit
Aluminum	ND	200	0 0	0	0	0	0
Antimony	ND	60.0	0 0	0		0	0
Arsenic	1.884	10.0		0	0	0	0
Barium	4.351	200	0 0	0		0	0
Beryllium	3.117	5.00		0	0	0	0
Boron	2.905	50.0		0		0	0
Onalifiers: ND - Not Detected at the Reporting Limit						•	

World Ordon	World Ordon 10000000						AINAL	'X IICA	AL CUS	ANALY II CAL UC SUMMARY KEYUKI	I NEL	INU
Project:		Landfill						Ð	BatchID:	75961		
CCB	SeqNo: 2732056			PrepDate:			Tes	TestNo: E200.7		RunNo:	176944	
	Samp ID: CCB-3			PrepRef:			ηU	Units: µg/L	A	Analysis Date:	11/1/2019	
Analyte		Result	POL	SPK value SPK F	SPK Ref Val	%REC	<u>LowLimit</u>	<u>HighLimit</u>	RPD Ref Val	U %RPD	D RPDLimit	Qual
Cadmium	E	QN	5.00	0	0	0	0	0)	0	0	
Calcium		8.971	5000	0	0	0	0	0	5	0	0	
Chromium	Ē	ND	10.0	0	0	0	0	0)	0	0	
Cobalt		ND	50.0	0	0	0	0	0)	0	0	
Copper		ND	25.0	0	0	0	0	0)	0	0	
Iron		ND	100	0	0	0	0)	0	0	
Lead		ND	3.00	0	0	0	0	0)	0	0	
Lithium		3.129	100	0	0	0	0	0	1	0	0	
Magnesium	tium	DN	5000	0	0	0	0	0	1	0	0	
Manganese	lese	QN	15.0	0	0	0	0		-	0	0	
Molybdenum	anum	QN	50.0	0	0	0	0			0	0	
Nickel		QN	40.0	0	0	0	0	0		0	0	
Potassium	m	6.546	5000	0	0	0	0	0		0	0	
Selenium	ш	1.959	5.00	0	0	0	0			0	0	
Silver		4.992	10.0	0	0	0	0			0	0	
Sodium		DN	5000	0	0	0	0			0	0	
Strontium	Ш	QN	20.0	0	0	0	0			0	0	
Thallium	Ц	QN	10.0	0	0	0	0	0		0	0	
Tin		0.2766	50.0	0	0	0	0			0	0	
Titanium	۳	QN	50.0	0	0	0	0			0	0	
Vanadium	m	ND	50.0	0	0	0	0			0	0	
Zinc		ND	20.0	0	0	0	0	0		0	0	
CCB	SeqNo: 2732064			PrepDate:			Te	TestNo: E200.7	~	RunNo:	176944	
	Samp ID: CCB-4			PrepRef:			D	Units: µg/L		Analysis Date:	11/1/2019	
Analyte		Result	PQL	SPK value SPK	SPK Ref Val	%REC	LowLimit	<u>HighLimit</u>	RPD Ref Val	al <u>%RPD</u>	PD RPDLimit	<u>it</u> <u>Qual</u>
Aluminum	m	QN	200	0	0	0	0	0		0	0	
Antimony	ny	QN	60.0	0	0	0)	0 0		0	0	
Arsenic		3.9	10.0	0	0	0	5	•	-	0	0	
Barium	\land	5.29	200	0	0	0)	0 0	-	0	0	
Beryllium	III	3.046	5.00	0	0	0)	0 0	-	0	0	
Boron		0.6755	50.0	0	0	0)	0	-	0	0	
Oualifiers:		ND - Not Detected at the Reporting Limit		S - Spike Rec	covery outsid	- Spike Recovery outside accepted recovery limits	overy limits		B - Analyte de	B - Analyte detected in the associated Method Blank	sociated Metho	d Blank
,						:						
	T Analytic datacto	I Andrea datasted helow superitation limits		D _ RPD onte	R _ RPD mitside accented recovery limits	TECOVERV 11mit	0,				DAAA	Daga 27 of 57

		ad in the acco	R - Analyte detected in the accordated Mathod Blank	Ŧ	verv limite	accepted reco	coverv outside	S - Spike Recovery outside accepted recovery limits		eporting Limit	ND - Not Detected at the Reporting Limit	Qualifiers:
	0		0	110	06	105	0	2000	50.0	7602		DUIOT
	0		0	110	90	102	0	2000	5.00	2040		Derp
	0		0	110	06	102	0	2000	200	2046		Danillium
	0		0	110	90	100	0	2000	10.0	2005		Arsenic
	0		0	110	90	96.4	0	2000	60.0	1928		Anumony
			0	110	06	102	0	2000	200	2034		Aluminum
Qual	D RPDLimit	%RPD	<u> RPD Ref Val</u>	<u>HighLimit</u>	<u>LowLimit</u>	• <u>%REC</u>	SPK Ref Val -	<u>SPK value</u> <u>SPh</u>	<u>PQL</u>	<u>Result</u>		<u>Analyte</u>
	11/1/2019	Analysis Date:	Ani	Units: µg/L	Unit			PrepRef:			Samp ID: CCV-1	Samp
	176944	RunNo:		TestNo: E200.7	Test			PrepDate:			SeqNo: 2732034	CCV SeqN
	0		0	0	0	0	0	0	20.0	ND		
	0		0	0	0	0	0	0	50.0	4.236		Vanadium
	0		0	0	0	0	0	0	50.0	ND		litanium
	0		0	0	0	0	0	0	50.0	0.01373		
	0		0	0	0	0	0	0	10.0	ND		Thallium
	0		0	0	0	0	0	0	20.0	ND		Strontium
	0		0	0	0	0	0	0	5000	ND		Sodium
	0		0	0	0	0	0	0	10.0	7.358		Silver
	0		0	0	0	0	0	0	5.00	1.008		Selenium
	0		0	0	0	0	0	0	5000	1.652		Potassium
	0		0	0	0	0	0	0	40.0	ND		Nickel
	0		0	0	0	0	0	0	50.0	ND		Molybdenum
	0		0	0	0	0	0	0	15.0	ND		Manganese
	0		0	0	0	0	0	0	5000	ND		Magnesium
	0		0	0	0	0	0	0	100	ND		Lithium
	0		0	0	0	0	0	0	3.00	0.4232		Lead
	0		0	0	0	0	0	0	100	0.3401		Iron
	0 0		0 0	0	0	0	0	0	25.0	ND		Copper
	0 0		0 0	0	0	0	0	0	50.0	ND		Cobalt
	0 0		0 0	0	0	0	0	0	10.0	1.211		Chromium
	0 0		0 0	0 0	0 0	0	0	0	5000	9.244		Calcium
Qua		ח <u>חשאיי</u>	neu vai				0	0	5.00	ND		Cadmium
	5						SDK Baf Val	SPK value SPI		Result		Analyte
		Analvsis Date:	An	Units: ua/l	Unit			PrepRef:			Samp ID: CCB-4	Samp
	176044	RunNo-		TestNo: E200.7	Test			PrepDate:			SeqNo: 2732064	CCB SeqN
		75961	BatchID:	, , ,						Ifill	Lockwood Ash Landfill	Project:
JKT	ICAL QU SUMMARY REPORT	JMIMA	T QUSU		ANAL						190920022	Work Order:
\$												

=

Dispet: Lockmod Abl Landfill Barch ID: TSA CV Serve: x72004 Serve: x72004 Monte ID: M	CLIENT: Work Order:	Lockwood Hills LLC 190920022						ANAL	YTICA	ANALYTICAL QC SUMMARY REPORT	UMMAI	RY REF	ORT
	Project:	Lockwood Ash Landfi	П						Ħ	satchID:	75961		
Image: constraint of the stand of		o: 2732034			PrepDa	ite:		Tes	tNo: E200.7		RunNo:	176944	
$ \ \ \ \ \ \ \ \ \ \ \ \ \ $	Samp	ID: CCV-1			PrepRe	st:		Π	its: µg/L	A	nalysis Date:		
In 2016 500 2000 0 102 00 110 0 0 1 1947 100 2000 0 97.3 90 110 0 0 1947 100 2000 0 97.3 90 110 0 0 2041 100 2000 0 102 90 110 0 0 2041 100 2000 0 102 90 110 0 0 2041 100 2000 0 102 90 110 0 0 001 100 2000 0 102 90 110 0 0 001 100 2000 0 100 100 100 <	Analyte		Result	POL	4	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val			
1 2071 500 2000 0 714 60 710 0 100 0 100 0 100 0 100 0 100 0 100 0 100 0 100 0 0 100 100 100 100 100 100 100	Cadmium		2048	5.00	2000	0	102	06		0			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Calcium		2071	5000	2000	0	104	06		0		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Chromium		1947	10.0	2000	0	97.3	06		0		0	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Cobalt		1943	50.0	2000	0	97.1	06		0		0	
Eq. 1 100 2000 0 102 90 110 0 0 time 2043 300 2000 0 102 90 110 0 0 time 2010 500 2000 0 102 90 110 0 0 time 2035 510 2000 0 102 90 110 0 0 time 2036 500 2000 0 102 90 110 0 0 time 2044 100 500 1000 0 102 90 110 0 0 time 2042 100 500 100 0 100 0	Copper		2079	25.0	2000	0	104	66		0		0	
im 2010 2000 200 100 200 100 0 100 0 <th0< th=""> <th0< th=""> <th0< th=""></th0<></th0<></th0<>	Iron		2041	100	2000	0	102	96		0		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Lead		2049	3.00	2000	0	102	06		0		0	
	Lithium		2010	100	2000	0	101	06		0		0	
ete 1919 150 2000 0 950 110 0 0 0 etum 2035 500 2000 0 102 90 110 0 0 0 etum 2044 400 2000 0 102 90 110 0 0 0 etum 2044 100 500 2000 0 102 90 110 0 0 0 m 1984 200 2000 0 100 90 110 0 0 0 0 m 1984 200 2000 0 100 90 110 0 0 0 m ND 600 2000 0 100 0 0 0 0 0 0 0 0 0 0 m ND 600 2000 2000 0 100 0 0 0 0	Magnesium		2040	5000	2000	0	102	06		0		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Manganese		1919	15.0	2000	0	95.9	06		J		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Molybdenum		2035	50.0	2000	0	102	06		J		0	
$ \mbox{mm} \mb$	Nickel		2044	40.0	2000	0	102	06		J		0	
$ \mbox{mm} \mb$	Potassium		9368	5000	10000	0	93.7	06		C		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Selenium		2010	5.00	2000	0	100	06		C		0	
$ \label{eq:logical relation} 10 10 $200 $0 $10 $0 $10 $0 $0 $10 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 $0 0	Silver		508.4	10.0	500	0	102	06		C		0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Sodium		1922	5000	2000	0	96.1	06		0		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Strontium		1994	20.0	2000	0	99.7	06		J		0	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Thallium		2042	10.0	2000	0	102	06		J		0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Tin		2007	50.0	2000	0	100	06		J		0	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Titanium		QN	50.0	0	0	0	66		0		0	
2061 20.0 2000 0 103 90 110 0 0 0 SeqNo: 2732046 TestNo: Escn. TestNo: Escn. FlanNo: TestNo: TestNo: TestNo: TestNo: TestNo: Test	Vanadium		1944	50.0	2000	0	97.2	06		0		0	
SeqNo: Z732046 FrepDate: TestNo: E200.7 RunNo: 176944 Samp ID: CCV-2 Difts: Units: Log/L Analysis Date: 11/12019 Samp ID: CCV-3 PrepRef: Dofts: Low/Limit HichLimit RPD Ret Val Served Prominit Ret Val Served Prominit Ret Ret Val Served Se	Zinc		2061	20.0	2000	0	103	06		J		0	
Samp ID: CCV-2PrepRet:Units: Ig/L Analysis Date:11/1/2019Image: CCV-2EscultPOLSPK NatlyNatlysis Date:11/1/2019Image: CCV-222362002000011000Image: CCV-2203360.0200001029011000Image: CCV-2204510.02000010290110000Image: CCV-210.02000010290110000Image: CCV-221275.00200001069011000Image: CCV-221275.00200001069011000Image: CCV-210.02000010690110000Image: CCV-210.02000010690110000Image: CCV-210.02000106901100000Image: CCV-210.0200010990110000Image: CCV-210.0109901100000Image: CCV-210.010990110000Image: CCV-210.010990110000Image: CCV-210.010990110000Image: CCV-210.0109901		o: 2732046			PrepDa	ate:		Tes	stNo: E200.7		RunNo:		
Image: Different conditionEase of the condition <thease condition<="" of="" th="" the="">Ease of the con</thease>	Samp	ID: CCV-2-			PrepR	ef:		Ur	nits: µg/L		nalysis Date:		
2236 200 2000 0 110 0 0 100 0 0 100 0 0 0 100 0	Analyte		Result	POL		SPK Ref Val	%REC	LowLimit		RPD Ref Va			
Ny 2033 60.0 2000 0 102 90 110 0 0 2045 10.0 2000 0 102 90 110 0 0 1888 200 2000 0 94.4 90 110 0 0 2127 5.00 2000 0 106 90 110 0 0 2187 5.00 2000 0 106 90 110 0 0 2187 5.00 2000 0 106 90 110 0 0 2187 50.0 2000 0 109 90 110 0 0 0	Aluminum		2236	200	2000	0	112	\sim)		0	S
: 2045 10.0 2000 0 102 90 110 0 0 m 1888 200 2000 0 94.4 90 110 0 0 m 2127 5.00 2000 0 106 90 110 0 0 m 2187 5.00 2000 0 106 90 110 0 0 ers: ND - Not Detected at the Reporting Limit 5-500 2000 0 109 90 110 0 0 J - Analyte detected below onantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Antimony		2033	60.0	2000	0	102	06				0	
1888 200 2000 0 94.4 90 110 0 0 m 2127 5.00 2000 0 106 90 110 0 0 0 2187 50.0 2000 0 106 90 110 0 0 0 ers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below onantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Arsenic		2045	10.0	2000	0	102	06			-	0	
m 2127 5.00 2000 0 106 90 110 0 0 2187 50.0 2000 0 109 90 110 0 0 ers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below onantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Barium		1888	200	2000	0	94.4	06				0	
ers: ND - Not Detected at the Reporting Limit 50.0 2000 0 109 90 110 0 0 ers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below onantitation limits R - RPD outside accepted recovery limits B - Analyte detected in the associated	Beryllium		2127	5.00	2000	0	106	06			-	0	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated J - Analyte detected below onantitation limits RPD outside accented recovery limits	Boron		2187	50.0	2000	0	109	06			-	0	
R - RPD outside accented recovery limits	Qualifiers:	ND - Not Detected at the Re	porting Limit		S - Spik	te Recovery outsid	e accepted rect	overy limits		B - Analyte det	ected in the ass	sociated Metho	od Blank
		.I - Analyte detected helow o	mantitation limits		R - RPI) outside accented	recovery limit						01-15

0000											
000	0		110	06	94.7	0	2000	50.0	1894		Boron
00	0		110	06	96.5	0	2000	5.00	1931		Beryllium
0	0		110	06	106	0	2000	200	2119		Barium
	0		110	06	101	0	2000	10.0	2014		Arsenic
0	0		110	06	91	0	2000	60.0	1820		Antimony
0	0		110	06	105	0	2000	200	2092		Aluminum
PD RPDLimit Qual	Val <u>%RPD</u>	RPD Ref Val	<u>HighLimit</u>	<u>LowLimit</u>	%REC	<u>SPK Ref Val</u>	SPK value	<u>PQL</u>	<u>Result</u>		Analyte
: 11/1/2019	Analysis Date:		Units: µg/L	Un			PrepRef:			Samp ID: CCV-3	Sam
176944	RunNo:		TestNo: E200.7	Tes		ite:	PrepDate:			SeqNo: 2732055	CCV Seq
0	0		110	06	109	0	2000	20.0	2176		Zinc
0	0		110	06	102	0	2000	50.0	2031		Vanadium
0	0		110	06	0	0	0	50.0	ND		Titanium
0	0		110	06	95.2	0	2000	50.0	1904		Tin
0	0		110	06	109	0	2000	10.0	2189		Thallium
0	0		110	06	96.9	0	2000	20.0	1937		Strontium
0	0		110	06	109	0	2000	5000	2179		Sodium
0	0		110	06	109	0	500	10.0	542.7		Silver
0	0		110	06	94.2	0	2000	5.00	1884		Selenium
0	0		110	06	101	0	10000	5000	10090		Potassium
0	0		110	06	93.6	0	2000	40.0	1871		Nickel
0	0		110	06	108	0	2000	50.0	2161		Molybdenum
0	0		110	06	108	0	2000	15.0	2158		Manganese
0	0		110	06	104	0	2000	5000	2072		Magnesium
0	0		110	06	109	0	2000	100	2181		Lithium
0	0		110	06	97	0	2000	3.00	1940		Lead
0	0		110	06	102	0	2000	100	2044		Iron
0	0		110	06	99.5	0	2000	25.0	1990		Copper
0	0		110	06	108	0	2000	50.0	2156		Cobalt
0	0		110	06	101	0	2000	10.0	2018		Chromium
0	0		110	06	92.7	0	2000	5000	1854		Calcium
	0		110	06	86	0	2000	5.00	1960		Cadmium
P <u>D</u> RPDLimit <u>Qual</u>	Val <u>%RPD</u>	<u>RPD Ref Val</u>	<u>HighLimit</u>	<u>LowLimit</u>	%REC	SPK Ref Val	SPK value	PQL	Result		Analyte
: 11/1/2019	Analysis Date:		Units: µg/L	Uni		ıf:	PrepRef:			Samp ID: CCV-2	Sam
176944	RunNo:	-	TestNo: E200.7	Test		te:	PrepDate:			SeqNo: 2732046	CCV Seqt
	75961	BatchID:	I						lfill	Lockwood Ash Landfill	Project:
LYTICAL QC SUMMARY REPORT	SUMMA	AL QC	YTICA	ANAL					ſ	190920022	Work Order:

....

PrepBate: PrepBate: PrepRef: SPK value SPK Ref Val 2000 2000 <	PrepDate: PrepDate: <th< th=""><th>TestNo: E200.7 LowLimit Units: Junits: Jug/L 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110</th><th>75961 Run alysis [</th><th>No: 176944 Date: 11/1/2019 24(4) 24(4) 20 20 20 20 20 20 20 20 20 20 20 20 20</th></th<>	TestNo: E200.7 LowLimit Units: Junits: Jug/L 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110 90 110	75961 Run alysis [No: 176944 Date: 11/1/2019 24(4) 24(4) 20 20 20 20 20 20 20 20 20 20 20 20 20
SeqNo: Z732055 PrepDate: Samp ID: CV-3 Peesuit POL Samp ID: CV-3 Peesuit POL Samp ID: CV-3 Peesuit POL Samp ID: CV-3 2000 2000 Image: 2005 500 2000 Image: 2110 100 2000 Sium 1855 50.0 2000 Sium 1973 50.0 2000 Sium 1940 15.0 2000 Image: 1940 15.0 2000 Image: 1940 15.0 2000 Image: 1943 50.0 2000 Image: 1944 10.0 2000 Image: 1111 20.0 2000 Image: 1884 50.0 2000 Image: 1884 50.0 2000 Image: 1884 50.0 2000 Image: 1884 50.0 2	PrepDate: PrepDate: PrepDate: PrepDate: SPK value SPK Ref Val 0 2000 0 2 2000 0 2 0 2000 2 2000 0 2 0 0 2 2000 0 2 0 0 2 2 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0 2 0 0	stNo: E20	Rur nalysis [
Samp ID: CCV-3 Preprint. Image: CCV-3 Image: CCV-3 Preprint. Image: CCV-3 1966 5.00 2000 Image: CCV-4 1973 500 2000 Image: CCV-4 1943 500 2000 Image: CCV-4 1980 500 2000 Image: CCV-4 1984 50.0 2000 Im	PrepRef: SPK value SPK Ref Val %F SPK value SPK Ref Val 0 2000 0	HighLin HighLin	alysis [
Mesult PQL SPK ratue SPK Ret Val 1966 5.00 2000 2000 2000 2000 1000 1985 50.00 2000	SPK value SPK Ref Val 2000 0 2000 2000 0 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000	HighLin		
	2000 2000 2000 2000 2000 2000 2000 200			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	2000 2000 2000 2000 2000 2000 2000 200			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2000 2000 2000 2000 2000 2000 2000 200			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	2000 2000 2000 2000 2000 2000 2000 200			
	2000 2000 2000 2000 2000 2000 2000 200			0 0 0 0 0 0 0 0 0 0 C
	2000 2000 2000 2000 2000 2000 2000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0 0 0 0 0 0 0 0 0 C
	2000 2000 2000 2000 2000 2000 0 0 0 0 0			0 0 0 0 0 0 0 0 C
tim 2110 100 2000 tese 1979 5000 2000 tese 1940 15.0 2000 tese 1940 15.0 2000 term 1943 50.0 2000 term 2000 1999 40.0 2000 term 2111 20.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1948 20.0 2000 1948	2000 2000 2000 2000 2000 0 0 0 0 0			0 0 0 0 0 0 0 C
tim 1979 5000 2000 lese 1940 15.0 2000 enum 1943 50.0 2000 enum 1943 50.0 2000 1999 40.0 2000 1999 5000 10000 1980 5000 2000 1825 10.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1948 20.0 2000 1948 2000 1948 2000 1000 2000 1948 2000 1000 2000	2000 2000 2000 2000 0 0 0 0			0 0 0 0 0 0 C
tese 1940 15.0 2000 num 1943 50.0 2000 um 9529 5000 10000 4.5.6 10.0 2000 4.5.6 2000 10000 1.980 5000 2000 1.980 5000 2000 1.825 10.0 2000 1.825 10.0 2000 1.826 50.0 2000 1.824 50.0 2000 1.948 20.0 2000 1.948 2000 1.948 2000 1.948 20.0 2000 1.948 2000 1.948 20.0 2000 1.948 2000 1.949 10.000 1.949 10.000 1.948 2000 1.949 10.000 1.948 2000 1.949 10.000 1.949 10.0000 1.949 1	2000 2000 2000 0 0			0 0 0 0 0 C
	2000 0 2000 0		00000	0 0 0 0 C
	2000 10000		0000	0 0 0 C
	10000		000	000
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			0 0	0 0
452.6 10.0 500 1980 5000 2000 1980 5000 2000 111 20.0 2000 1825 10.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 100 1948 2000 26qNo: 2732062 2000 SeqNo: 2732062 2000 Samp ID: CV-4 PrepRef: Lm 2042 200 2000 0 2136 10.0 2000 2136 200 2000 2000	2000		0	0
1980 5000 2000 111 20.0 2000 1825 10.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 50.0 2000 1958 20.0 2000 1958 20.0 2000 100 2000 2000 100 2000 2000 100 2000 2000	0 500			,
m 2111 20.0 2000 n 1825 10.0 2000 n 1958 50.0 2000 n 1948 50.0 2000 n 1894 50.0 2000 n 1948 20.0 2000 n 1948 20.0 2000 SeqNo: 2732062 1948 20.0 2000 Samp ID: CCV-4 Result Pol PrepDate: Im 2042 200 2000 ny 2156 60.0 2000 ny 2136 10.0 2000	0 2000	90 110	0	0
n 1825 10.0 2000 n ND 50.0 2000 n ND 50.0 2000 1958 50.0 2000 1948 20.0 2000 1948 20.0 2000 1948 20.0 2000 Samp ID: CCV-4 POL SPK value SPK Ret Va n 2042 200 2000 N 2136 60.0 2000 10.0 2000 2136 2000 2136 2000 2000 200	2000	90 110	0	0
1958 50.0 2000 m ND 50.0 0 m 1894 50.0 2000 seqNo: 2732062 2000 2000 Imm 2042 200 2000 ny 2166 60.0 2000 ny 2166 60.0 2000 10.0 2000 2000	2000	90 110	0	0
Immunication ND 50.0 0 Immunication 1894 50.0 2000 Immunication 1948 20.0 2000 SeqNo: 2732062 2000 2000 SeqNo: 2732062 2000 2000 SeqNo: 2732062 2000 2000 Semplification 2042 200 2000 Immunication 2042 200 2000 Immunication 2166 60.0 2000 Immunication 2049 10.0 2000	2000	90 110	0	0
Im 1894 50.0 2000 1948 20.0 2000 SeqNo: 2732062 1948 20.0 2000 SeqNo: 2732062 Implant PrepDate: PrepDate: Samp ID: CCV-4 Implant PrepDate: PrepDate: Imm 2042 200 2000 Imm 2042 200 2000 Imm 2166 60.0 2000 Imm 2156 10.0 2000	0 0	90 110	0	0
1948 20.0 2000 SeqNo: 2732062 PrepDate: PrepDate: Samp ID: CCV-4 PrepInt: PrepRef: Im 2042 2000 2000 Im 2049 10.0 2000 In 2136 2000 2000	2000	90 110		0
SeqNo: 2732062 PrepDate: Samp ID: CCV-4 PrepRef: Samp ID: CCV-4 PrepRef: Im 2042 2000 2000 Im 2166 60.0 2000 N 2049 10.0 2000	2000	90 110	0	0
Samp ID: CCV-4 PrepRef: Im POL PNK value PNK hef Value Im 2042 2000 2000 Im 2166 60.0 2000 Im 2049 10.0 2000	PrepDate:	TestNo: E200.7	RunNo:	No: 176944
Result POL SPK value SPK Ref Value Jm 2042 200 2000 ny 2166 60.0 2000 ny 2049 10.0 2000	PrepRef:	Units: µg/L	Analys	
2042 200 2000 2166 60.0 2000 2049 10.0 2000 2136 200	<u>SPK value</u>	LowLimit HighLimit	RPD Ref Val	<u>%RPD</u> RPDLimit
2166 60.0 2000 2049 10.0 2000 2136 200 2000	2000	90 110		0
2049 10.0 2000 2136 200 2000	2000	90 110	0	0
2136 200 2000	2000	90 110	0	0
	200 2000 0 107	90 110	0	0
	2000	90 110	0	0
Boron 2020 50.0 2000 0		90 110		0
Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outsic	S - Spike Recovery outside accepted recovery limits	overy limits	B - Analyte detected in the associated Method Blank	te associated Method Bl
I Analyte detected helow anontriction limite D DDD anteride accenter	D DDD outside accented recovery limits	<u>د</u>		

			D Analyta datastad in the appointed Mathed Diral		war limite	accented rec	Chile Decouver entride econted measure limite	S - Snike		Renorting Limit	ND - Not Detected at the Reporting Limit	Oualifiers:
	0		0	150	50	105	0	10	5.00	10.51		Cadmium
	0		0	150	50	0	0	0	50.0	ND		Boron
	0		0	150	50	0	0	0	200	ND		Barium
	0		0	150	50	92.2	0	20	10.0	18.44		Arsenic
	0		0	150	50	100	0	120	60.0	120.4		Antimony
			0	150	50	0	0	0	200	3.413		Aluminum
<u>iit Qual</u>	PD RPDLimit	I <u>%RPD</u>	RPD Ref Val	<u>HighLimit</u>	<u>LowLimit</u>	%REC	SPK Ref Val	<u>SPK value</u> S	POL	<u>Result</u>		<u>Analyte</u>
	: 11/1/2019	Analysis Date:	A	ts: µg/L	Units:			PrepRef:			Samp ID: CRI-1	Sam
	: 176944	RunNo:		TestNo: E200.7	Test		9.	PrepDate:			SeqNo: 2732031	CRI Seq
	0		0	110	06	107	0	2000	20.0	2145		Zinc
	0		0	110	90	100	0	2000	50.0	2002		Vanadium
	0		0	110	06	0	0	0	50.0	ND		Titanium
	0		0	110	06	97.3	0	2000	50.0	1945		Tin
	0		0	110	06	98.5	0	2000	10.0	1971		Thallium
	0		0	110	06	104	0	2000	20.0	2073		Strontium
	0		0	110	06	106	0	2000	5000	2115		Sodium
	0		0	110	06	93.4	0	500	10.0	467.2		Silver
	0		0	110	06	102	0	2000	5.00	2044		Selenium
	0		0	110	06	86	0	10000	5000	9804		Potassium
	0		0	110	06	105	0	2000	40.0	2108		Nickel
	0		0	110	90	105	0	2000	50.0	2095		Molybdenum
	0		0	110	90	105	0	2000	15.0	2092		Manganese
	0		0	110	06	100	0	2000	5000	2005		Magnesium
	0		0	110	90	103	0	2000	100	2057		Lithium
	0		0	110	90	105	0	2000	3.00	2108		Lead
	0		0	110	06	101	0	2000	100	2014		Iron
	0		0	110	90	109	0	2000	25.0	2179		Copper
	0		0	110	90	102	0	2000	50.0	2040		Cobalt
	0		0	110	90	97.5	0	2000	10.0	1950		Chromium
	0		0	110	06	109	0	2000	5000	2182		Calcium
	0		0	110	90	106	0	2000	5.00	2129		Cadmium
lit Qual	PD RPDLimit	%RPD	RPD Ref Val	<u>HighLimit</u>	LowLimit	<u>%REC</u>	SPK Ref Val	<u>SPK value</u> S	PQL	Result		Analyte
		Analysis Date:	A	Units: µg/L	Uni		- •	PrepRef:			Samp ID: CCV-4	Sam
	: 176944	RunNo:		TestNo: E200.7	Test		24	PrepDate:			SeqNo: 2732062	CCV Seq
		75961	BatchID:	_						dfill	Lockwood Ash Landfill	Project:
	LI IICAL VC SUMMANI NEI UNI										190920022	Work Order:
				<								

¥

CLIENT:	Lockwood Hills LLC				TATAA					E
Work Order:	190920022				AINAL	I TICA	ANALY IICAL UC SUMMARY KEPUKI	MIMAK	Y KEPU	KI
Project:	Lockwood Ash Landfill					B	BatchID: 7	75961		
CRI SeqNo	SeqNo: 2732031		PrepDate:		Te	TestNo: E200.7			176944	
Samp	Samp ID: CRI-1		PrepRef:		Ū	Units: µg/L	Ana	Analysis Date: 1	11/1/2019	
Analyte	Result	POL	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	3.546	5000	0 0	0	50	150	0	0		
Chromium	22.48	10.0	20 0	112	50	150	0	0		
Copper	48.25	25.0	50 0	96.5		150	0	0		
Iron	0.06344	100	0 0	0	50	150	0	0		
Magnesium	ND	5000	0	0	50	150	0	0		
Manganese	28.97	15.0	30 0	96.6	50	150	0	0		
Nickel	83.54	40.0	80 0	104	50	150	0	0		
Potassium	7.046	5000	0	0	50	150	0	0		
Selenium	9.402	5.00	10 0	94	50	150	0	0		
Sodium	QN	5000	0	0	50	150	0	0		
Zinc	45.58	20.0	40 0	114	50	150	0	0		
CRI SeqN	SeqNo: 2732059		PrepDate:		Te	TestNo: E200.7		RunNo: 1	176944	
Samp	Samp ID: CBI-2		Prangaf.		=	l Inite: 10/1			0100/1/11	
_	,				ō			1		
Analyte	Result	POL	SPK value SPK Ref Val	<u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Val	%RPD	<u>RPDLimit</u>	Qual
Aluminum	7.544	200	0	0	50		0	0		
Antimony	136	60.0	120 0	113	50	150	0	0		
Arsenic	21.56	10.0	20 0	108	50	150	0	0		
Barium	4.513	200	0 0	0	50	150	0	0		
Boron	1.386	50.0	0	0	50	150	0	0		
Cadmium	11.19	5.00	10 0	112	50	150	0	0		
Calcium	9.244	5000	0	0			0	0		
Chromium	21.97	10.0	20 0	110			0	0		
Copper	47.51	25.0	50 0	95	50	150	0	0		
Iron	0.03066	100	0	0	50	150	0	0		
Magnesium	ND	5000	0	0	50	150	0	0		
Manganese	31.96	15.0	30 0	107	50	150	0	0		
Nickel	91.83	40.0	80 0	115		150	0	0		
Potassium	11.47	5000	0	0		150	0	0		
Selenium	10.87	5.00	10 0	109	50	150	0	0		
Sodium	62.55	5000	0		(150	0	0		
Zinc	47.62	20.0	40 0	119	50	150	0	0		
Qualifiers:	ND - Not Detected at the Reporting Limit		S - Spike Recovery outside accepted recovery limits	tside accepted rec	covery limits		B - Analyte detected in the associated Method Blank	cted in the associ	iated Method B	lank
	J - Analyte detected below quantitation limits		R - RPD outside accepted recovery limits	ted recovery limi	its				Dage 13 of 57	of 57
			4						1 480 +7	70 60

	90 110	66	0	2000	5000	1981		Magnesium
	90 110	100	0	2000	100	1999		Iron
	90 110	104	0	2000	25.0	2076		Copper
	90 110	96.8	0	2000	10.0	1937		Chromium
	90 110	99.4	0	2000	5000	1988		Calcium
	90 110	102	0	2000	5.00	2031		Cadmium
	90 110	104	0	2000	50.0	2088		Boron
	90 110	102	0	2000	200	2039		Barium
	90 110	66	0	2000	10.0	1980		Arsenic
	90 110	96.5	0	2000	60.0	1929		Antimony
	90 110	98.8	0	2000	200	1976		Aluminum
<u>RPD Ref Val</u>	<u>nit</u> <u>HighLimit</u>	<u>%REC</u> LowLi	<u>K Ref Val</u>	<u>SPK value</u> <u>SPF</u>	POL	<u>Result</u>		<u>Analyte</u>
	Units: µg/L			PrepRef:			Samp ID: ICV-1	Sam
	TestNo: E200.7			PrepDate:			SeqNo: 2732029	ICV Seq
	0	0	0	0	20.0	ND		Zinc
	0 0	0	0	0	5000	5.516		Sodium
	0 0	0	0	0	5.00	0.1294		Selenium
	000	0	0	0	5000	0.9362		Potassium
	0 0	0	0	0	40.0	ND		Nickel
		0	0	0	15.0	ND		Manganese
		0	0	0	5000	ND		Magnesium
		0	0	0	100	ND		Iron
		0	0	0	25.0	1.331		Copper
		0	0	0	10.0	0.8921		Chromium
		0	0	0	5000	ND		Calcium
		0	0	0	5.00	0.04799		Cadmium
		0	0	0	50.0	ND		Boron
		0	0	0	200	ND		Barium
		0	0	0	10.0	ND		Arsenic
		0	0	0	60.0	ND		Antimony
	0000	0	0	0	200	DN		Aluminum
RPD Ref Val	<u>nit HighLimit</u>	%REC LowLin	< Ref Val	SPK value SPF	POL	<u>Result</u>		Analyte
	Units: µg/L			PrepRef:			Samp ID: ICB-1	Sam
	TestNo: E200.7	c		PrepDate:			No: 2732030	ICB SeqNo:
BatchID:	_					h Landfill	Lockwood As	Project:
							190920022	Work Order:
						lls LLC	Lockwood Hil	CLIENT:
	RPD Re	LYTICA B: B: B: B: B: B: B: B: B: B: CO CO CO CO CO CO CO CO CO CO CO CO CO			Date: Te Ref: U Ref: U 0 0 0 98.8 9 9 0 98.5	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{tabular}{ c c c c } \hline & & & & & & & & & & & & & & & & & & $	OVOC Hills LLC PrepDate: Te PrepDate: Te O Result POL SPK Value SPK Ref Val 200 0

Project:									,			
	Lockwood Ash Landfill	Landfill						B	BatchID:	75961		
0,	SeqNo: 2732029			PrepDate:	e:		Tes	TestNo: E200.7		BunNo: 1	176944	
	Samp ID: ICV-1			PrepRef:			Ч	Units: µg/L	An		11/1/2019	
Analyte		Result	POL	SPK value SI	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Manganese		1926	15.0	2000	0	96.3	06		0	0		
Nickel		2037	40.0	2000	0	102	06	110	0	0		
Potassium		10330	5000	10000	0	103	06		0	0		
Selenium		1982	5.00	2000	0	99.1	06		0	0		
Sodium		1963	5000	2000	0	98.1	06		0	0		
Zinc		2055	20.0	2000	0	103	06	110	0	0		
ICSA	SeqNo: 2732032			PrepDate:	e:		Tes	TestNo: E200.7		BunNo: 1	176944	
	Samp ID: ICSA-1			PrepRef:			n	Units: µg/L	An	1	11/1/2019	
Analyte		Result	POL	SPK value S	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum		492800	200	_	0	98.6	80	120	0	0		
Antimony		QN	60.0	0	0	0	80	120	0	0		
Arsenic		QN	10.0	0	0	0	80	120	0	0		
Barium		0.0689	200	0	0	0	80	120	0	0		
Boron		QN	50.0	0	0	0	80	120	0	0		
Cadmium		QN	5.00	0	0	0	80		0	0		
Calcium		430400	5000	500000	0	86.1	80		0	0		
Chromium		QN	10.0	0	0	0	80		0	0		
Copper		QN	25.0	0	0	0	80		0	0		(
Iron		121800	100	200000	0	60.9	80		0	0		S
Magnesium		520600	5000	500000	0	104	80		0	0		
Manganese		DN	15.0	0	0	0	80		0	0		
Nickel		QN	40.0	0	0	0	80		0	0		
Potassium		DN	5000	0	0	0	80		0	0		
Selenium		ND	5.00	0	0	0	80		0	0		
Sodium		0.6339	5000	0	0	0	80		0	0		
Zinc		QN	20.0	0	0	0	80	120	0	0		
ICSA	SeqNo: 2732060			PrepDate:	te:		Tes	TestNo: E200.7		RunNo:	176944	
.,	Samp ID: ICSA-2			PrepRef:	f:		U	Units: µg/L		Analysis Date: 1	11/1/2019	
Analyte		Result	POL	<u>SPK value</u> S	SPK Ref Val	<u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Val	%RPD	RPDLimit	<u>Qual</u>

CLIENT: Work Order: Project: ICSA Seab	Lockwood Hills LLC 190920022 Lockwood Ash Landfill 40: 2732060	ndfill		PrepDate:			ANALYT	ANALYTICAI Ba	LYTICAL QC SUN BatchID: 759
	SeqNo: 2732060 Samp ID: I<u>CSA-2</u>			PrepDate: PrepRef:			TestNo: E Units: µ	TestNo: E200.7 Units: μg/L	TestNo: E200.7 RunNo: Units: µg/L Analysis Date:
<u>Analyte</u> Aluminum		<u>Result</u> 534400	200	SPK value SPK Ref Val	0 (<u>al</u>	/ <u>al %REC</u> 0 107	MEC LowLimit) <u>%REC LowLimit HighLimit</u>	MREC LowLimit HighLin
Antimony		ND	60.0	0	0		0	0 80	0 80 120
Arsenic		ND	10.0	0	0		0	0 80	0 80 120
Boron		6.001	200	0 0	0		0 0	0 0 80	0 80 120
Cadmium		ND	5.00	0 0	0 0	0 0		0 0	080
Calcium		468400	5000	500000	0	93	93.7	93.7 80	93.7 80
Chromium		ND	10.0	0	0	0 0		0	0 80
Copper		126800	100	0	0 0		RJ	634	634 0 80
Magnesium		517800	5000	500000	0 0		104	104 80	104 80 120
Manganese		ND	15.0	0	0		0	0 80	0 80
Nickel		ND	40.0	0	0			0	0 80
Potassium		11.39	5000	0	0	0	0	0 80	0 80
Sodium		193	5.00						00 00
Zinc		ND	20.0	0	0		0	0 80	0 80 120
ICSAB Seqt	SeqNo: 2732033			PrepDate:			TestNo: I	TestNo: E200.7	TestNo: E200.7 RunNo:
Sam	Samp ID: ICSAB-1			PrepRef:			Units: µ	Units: µg/L	Analys
<u>Analyte</u>		<u>Result</u>	<u>POL</u>	SPK value SPK Ref Val	<u></u>	<u>%</u>	<u>%REC</u> LowLimit	<u>%REC</u> LowLimit HighLimit	%REC LowLimit HighLimit RPD Ref V
Antimony		ND	60.0	0	0 0	0 0	0	0 80	0 80
Arsenic		ND	10.0	0	0		0	0 80	0 80 120
Barium		520.4	200	500	0	_	104	104 80	104 80 120
Cadmium		941	5.00	1000 Ŭ	0 0	0 94.1		94.1	94.1 80
Calcium		430600	5000	500000	0		86.1	86.1 80	86.1 80
Copper		571.6	25.0	500	0 0	0 114		114	114 80
Iron		121800	100	200000	0	\cap	60.9	<u>60.9</u> 80	08
Onalifiare.	ND Not Datastad at the Deporting Limit	Deporting Limit		S Spille Decom					
	I - Analyte detected below quantitation limits			1				S - Spike Recovery outside accepted recovery limits B -	

Project: ICSAB SeqNo: Analyte Samp ID Samp ID Samp ID Samp ID Selenium Selenium Selenium Sodium Zinc IIICSAB SeqNo: Zinc Zinc Aluminum Aluminum	Lockwood Ash Landfill										
							B	BatchID:	75961		
	SeqNo: 2732033		PrepDate:	ä		Test	TestNo: E200.7		RunNo:	176944	
	Samp ID: ICSAB-1		PrepRef:			Unit	Units: µg/L	Aı	Analysis Date:		
	Result	POL	SPK value SF	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	PD RPDLimit	Qual
	465.1	15.0	500	0	63	0	120	0		0	
	934.6	40.0	1000	0	93.5	80	120	0		0	
	3.212	5000	0	C	C	80	120	C		C	
	QN	5.00	0	0	0	80	120	0		0 0	
	ΔN	5000	0	0	0	80	120	0		0	
	916.7	20.0	1000	0	91.7	80	120	0		0	
§	SeqNo: 2732061		PrepDate:	ie:		Tect	TestNo: E200 7		BunMo.	176044	
alyte Inminum	Samp ID: ICSAB-2		PrepRef:			Uni	Units: µg/L	A	Analysis Date:		
Inminim	Result	PQL	SPK value SI	SPK Ref Val	%REC	LowLimit	Hiahl imit	RPD Ref Val	RPD	PD RPDI imit	Oual
	534100	200	-	0	107	80	120	0			
Antimony	ND	60.09	0	0	0	80	120	0		0	
Arsenic	ND	10.0	0	0	0	80	120	0		0	
Barium	541	200	500	0	108	80	120	0		0	
Boron	ND	50.0	0	0	0	80	120	0		0	
Cadmium	974.1	5.00	1000	0	97.4	80	120	0		0	
Calcium	462600	5000	50000	0	92.5	80	120	0		0	
Chromium	583.9	10.0	500	0	117	80	120	0		0	
Copper	580.5	25.0	500	0	116	80	120	0		0	(
fron	126900	100	20000	0	63.4	80	120	0		0	S
Magnesium	516100	5000	50000	0	103	80	120	0		0)
Manganese	475.1	15.0	500	0	95	80	120	0		0	
Nickel	838.9	40.0	1000	0	83.9	80	120	0		0	
Potassium	4.802	5000	0	0	0	80	120	0		0	
Selenium	ND	5.00	0	0	0	80	120	0		0	
Sodium	18.56	5000	0	0	0	80	120	0		0	
Zinc	963.3	20.0	1000	0	96.3	80	120	0	-	0	
Qualifiers:	ND - Not Detected at the Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	e accepted reco	very limits		B - Analyte det	scted in the as	B - Analyte detected in the associated Method Blank	Blank

S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank R - RPD outside accepted recovery limits $Page \ 48 \ of ^{4}$
<u>LowLimit</u> <u>HighLimit</u> 7112500
FestNo: E1631 Units: ng/L
LowLimit HighLimit RPD Ref Val 71 125 0
ΓestNo: E1631 Units: ng/L
LowLimit HighLimit RPD Ref Val 77 123 0
TestNo: E1631 Units: ng/L
LowLimit HighLimit RPD Ref Val 77 123 0
TestNo: E1631 Units: ng/L
LowLimit HighLimit RPD Ref Val
TestNo: E1631 Units: ng/L
LowLimit HighLimit RPD Ref Val
TestNo: E1631 Units: ng/L
ANALYTICAL QC SUMMARY REPORT BatchID: 75970

. .

1

- --

CLIENT: Work Order: Project:	 C: Lockwood Hills LLC rder: 190920022 Lockwood Ash Landfill 	LC ndfill					ANA	LYTICA	ANALYTICAL QC SUMMARY REPORT BatchID: 75970	MMAR) 5970	Z REPO	RT
MSD	SeqNo: 2714065 Samp ID: 190920022-017F (Under Drain 1)	Under Drain 1)		lerep Prep	PrepDate:10/3/2019 PrepRef:(1631E)	19		TestNo: E1631 Units: ng/L	Ana	RunNo: 176062 Analysis Date: 10/4/2019	76062 0/4/2019	
<u>Analyte</u> Mercury		<u>Result</u> 13.4	<u>PQL</u> 0.500	SPK value 12.5	SPK value SPK Ref Val 12.5 0.541		3 LowLim	Select LowLimit HighLimit RPD Ref Val 103 71 125 13.4	<u>RPD Ref Val</u> 13.4	<u>%RPD</u> 0	%RPD RPDLimit 0 24	<u>Qual</u>
MSD	SeqNo: 2715276 Samp ID: 191001026-009			Prep Prep	PrepDate:10/3/2019 PrepRef:(1631E))19	- -	TestNo: E1631 Units: ng/L	Ana	RunNo: 176062 Analysis Date: 10/4/2019	76062 0/4/2019	
<u>Analyte</u> Mercury		<u>Result</u> 9.49	<u>PQL</u> 0.500	<u>SPK value</u> 12.5	SPK Ref	. 10	- TowLim	<u>%REC</u> LowLimit HighLimit (71.5) 71 125	<u>RPD Ref Val</u> 9.62	<u>%RPD</u> 1.36	<u>%RPD RPDLimit</u> 1.36 24	<u>Qual</u>

 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

Page 49 of 52

B - Analyte detected in the associated Method Blank

Qualifiers:	<u>Analyte</u> Mercury	CCB Seqt Sam	_ < T	CCB SeqN Sam	<u>Analyte</u> Mercury	dup SeqN	Analyte Mercury	ms SeqN	<u>Analyte</u> Mercury	ICS SeqN	<u>Analyte</u> Mercury	mblk SeqN	CLIENT: Work Order: Project:
ND - Not Detected at the Reporting Limit		SeqNo: 2724422 Samp ID: CCB		SeqNo: 2724408 Samp ID: CCB		SeqNo: 2724402 Samp ID: 190920022-032		SeqNo: 2724403 Samp ID: 190920022-032		SeqNo: 2724400 Samp ID: LCS-76252		SeqNo: 2724399 Samp ID: MB-76252	Lockwood Hills LLC 190920022 Lockwood Ash Landfill
the Reporting Limit	<u>Result</u> -0.0613		<u>Result</u> -0.0418		<u>Result</u> -0.0409		<u>Result</u> 0.9049	(Inlet To Pond)	<u>Result</u> 1.987		<u>Result</u> ND		LLC
	<u>PQL</u> 0.200		<u>РОГ</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		<u>PQL</u> 0.200		
S - Spike Recovery outside accepted recovery limits	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 000	PrepDate: PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	PrepDate:10/22/2019 PrepRef:	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate:10/22/2019 PrepRef:(E245.1)	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	PrepDate:10/22/2019 PrepRef:(E245.1)	SPK value SPK Ref Val	PrepDate:10/22/2019 PrepRef:(E245.1)	
accepted recovery limits	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: E245.1 Units: µg/L	<u>%REC LowLimit HighLimit</u> 0 0 0	TestNo: E245.1 Units: µg/L	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: E245.1 Units: μg/L	<u>%REC LowLimit HighLimit</u> 45.2 80.8 119	TestNo: E245.1 Units: μg/L	<u>%REC LowLimit HighLimit</u> 99.4 85 115	TestNo: E245.1 Units: µg/L	<u>%REC</u> LowLimit HighLimit	TestNo: E245.1 Units: μg/L	ANALYTICA
B - Analyte detected in the associated Method Blank	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176599 Analysis Date: 10/22/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0 0	RunNo: 176599 Analysis Date: 10/22/2019	<u>RPD Ref Val %RPD RPDLimit</u> 0 0 16.5	RunNo: 176599 Analysis Date: 10/22/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176599 Analysis Date: 10/22/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176599 Analysis Date: 10/22/2019	RPD Ref Val %RPD RPDLimit	RunNo: 176599 Analysis Date: 10/22/2019	LYTICAL QC SUMMARY REPORT BatchID: 76252
Blank	Qual		Qual		<u>Qual</u>		S		Qual		Qual		ORT

CLIENT: Work Order:	F: Lockwood Hills LLC Irder: 190920022	TC			7	ANALYTICA	L QC SUI	ANALYTICAL QC SUMMARY REPORT	DRT
Project:		andfill				B	BatchID: 76	76252	
ccv	SeqNo: 2724407 Samp ID: CCV			PrepDate: PreDRef:		TestNo: E245.1 Units: ua/L	Anal	RunNo: 176599 Analvsis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> 2.081	<u>PQL</u> 0.200	SPK value SPK Ref Val 2 0	<u>%REC</u> L 104	LowLimit HighLimit 85 115	RPD Ref Val 0		Qual
CCV	SeqNo: 2724421 Samp ID: CCV			PrepDate: PrepRef:		TestNo: E245.1 Units: μg/L	Anal	RunNo: 176599 Analysis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> 2.092	<u>PQL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	<u>%REC</u> 1 105	LowLimit HighLimit 85 115	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
cra	SeqNo: 2724397 Samp ID: 0.2ppb			PrepDate: PrepRef:		TestNo: E245.1 Units: µg/L	Anal	RunNo: 176599 Analysis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> 0.1581	<u>PQL</u> 0.200	SPK value SPK Ref Val 0.2 0.2	<u>%REC</u> [79.1	LowLimit HighLimit 70 130	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ICB	SeqNo: 2724396 Samp ID: ICB			PrepDate: PrepRef:		TestNo: E245.1 Units: µg/L	Anal	RunNo: 176599 Analysis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> -0.0989	<u>PQL</u> 0.200	SPK value SPK Ref Val 0 0	<u>%REC</u>	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ICB	SeqNo: 2724410 Samp ID: ICB			PrepDate: PrepRef:		TestNo: E245.1 Units: µg/L	Anal	RunNo: 176599 Analysis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> -0.0501	<u>PQL</u> 0.200	SPK value SPK Ref Val 0 0	<u>%REC</u> <u>1</u> 0	LowLimit <u>HighLimit</u> 0 0	RPD Ref Val 0	<u>%RPD</u> <u>RPDLimit</u> 0	<u>Qual</u>
<u>C</u>	SeqNo: 2724395 Samp ID: ICV			PrepDate: PrepRef:		TestNo: E245.1 Units: µg/L	Anal	RunNo: 176599 Analysis Date: 10/22/2019	
<u>Analyte</u> Mercury		<u>Result</u> 2.053	<u>POL</u> 0.200	<u>SPK value</u> <u>SPK Ref Val</u> 2 0	<u>%REC</u> 103	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual

S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

B - Analyte detected in the associated Method Blank

Page 51 of 52

Qualifiers:		<u>Analyte</u> Mercury	ICV	CLIENT: Work Order: Project:
rs:			SeqNo Samp I	r: Prder:
ND - Not Detected at the Reporting Limit			SeqNo: 2724409 Samp ID: ICV	Lockwood Hills LLC 190920022 Lockwood Ash Landfill
orting Limit		<u>Result</u> 2.087		
5 		0.200		
S - Spike Recovery outside accepted recovery limits		<u>SPK value</u> 2 0	PrepDate: PrepRef:	
e accepted recovery limits		<u>%REC</u> <u>LowLimit</u> 104 90 110	TestNo: E245.1 Units: µg/L	ANALYTICA
B - Analyte detected		<u> PPD Ref Val</u> 0	Analys	AL QC SUMM BatchID: 76252
B - Analyte detected in the associated Method Blank		<u>%RPD</u> 0 0	RunNo: 176599 Analysis Date: 10/22/2019	LYTICAL QC SUMMARY REPORT BatchID: 76252
nk		<u>Qua</u>		RT

в

-

-

Date: 20-Sep-19

Adirondack Environmental Services, Inc

_

Test C Test N	ode: umber:	CLPW E200.7			OD DETECTION /
Test N		ICP Metals	Water	KEPU	ORTING LIMITS
Matrix	:	Water	Units: µg/L		Updated: 03-Sep-19
Туре	Analyte			MDL	PQL
	A.1			29.4	200
A	Aluminun			29.4 6.7	200 60
A	Antimony Arsenic			5.3	10
A A	Barium			4.8	200
	Beryllium			4.0	5
A A	Boron			8.6	50
A	Cadmium			1	5
A	Calcium			24.5	5000
A	Chromiun	ı		4	10
A	Cobalt	•		1	50
A	Copper			2.1	25
Ā	Iron		• •	11.1	100
А	Lead			2.8	3
А	Lithium			40.7	100
А	Magnesiu	m		34.7	5000
А	Manganes	e		3	15
А	Molybden	um		3.5	50
А	Nickel			2.7	40
А	Potassium			19	5000
А	Selenium			3.5	5
А	Silver			8	10
А	Sodium			185	5000
А	Strontium			10.2	20
	Thallium			5.1	10
А	Tin			2.6	50
А	Titanium			0	50
А	Vanadium			8	50
А	Zinc			4.6	20

A.4 FIELD DUPLICATES

Sample No. 190920022-006

Field Duplicate No. 190920022-014

Run date: <u>10/31/2019</u>

Lab Code: AES

Case No. <u>190920022</u>

Sample Matrix: Groundwater

% Solids Duplicate: NA

% Solids Sample: NA

Concentration Units (ug/l or mg/kg dry weight): ug/L

Analyte	CRQL	Action Limit (5xCRQL)	Sample Concentration	С	Duplicate Concentration	с	RPD, %	Absolute Difference	Q	М
Aluminum	200	1,000	1,530		978			552	J	Р
Antimony	60	300	60	U	60	U				Р
Arsenic	10	50	10	U	10	U				Р
Barium	200	1,000	113	В	118	В		5		Р
Boron	50	250	1060		1130		6.39			Р
Cadmium	5	25	5	U	5	U				Р
Calcium	5,000	25,000	16,000		18,200			2,200		Р
Chromium	10	50	10.3		10	U		0.3		Р
Copper	25	125	6.16	В	25	U				Р
Iron	100	500	4,870		3,620		29.45		J	Р
Magnesium	5,000	25,000	3,560		3,650			90		Р
Manganese	15	75	127		137		7.58			Р
Mercury	0.2	1.0	0.2	U	0.2	U				CV
Nickel	40	200	13.4	В	8.58	В		4.8		Р
Potassium	5,000	25,000	1,470	В	1,430	В		40		Р
Selenium	5	25	5	U	5	U				Р
Sodium	5,000	25,000	155,000		164,000		5.64			Р
Zinc	20	100	119.00		35.6			83.4	J	Р

A.4 FIELD DUPLICATES

Sample No. 190920022-021

Field Duplicate No. 190920022-023

Run Date: <u>10/31/2019</u>

% Solids Duplicate: NA

Lab Code: AES

Case No. 190920022

Sample Matrix: Surface Water

% Solids Sample: NA

Concentration Units (ug/l or mg/kg dry weight): ug/L

Analyte	CRQL	Action Limit (5xCRQL)	Sample Concentration	с	Duplicate Concentration	С	RPD, %	Absolute Difference	Q	М
Aluminum	200	1,000	200	U	200	U				Р
Antimony	60	300	60	U	60	U				Р
Arsenic	10	50	6.65	В	10	U				Р
Barium	200	1,000	26.5	В	26.0	В		0.5		Р
Boron	50	250	40.4	В	30.3	В		10.1		Р
Cadmium	5	25	5	U	5	U				Р
Calcium	5,000	25,000	39,300		39,500		0.51			Р
Chromium	10	50	10	U	10	U				Р
Copper	25	125	2.19	В	25	U		22.8		Р
Iron	100	500	53.4	В	52.5	В		1		Р
Magnesium	5,000	25,000	13,300		13,300			0		Р
Manganese	15	75	15.0	U	15.0	U		0.0		Р
Mercury	0.2	1.0	0.20	U	0.20	U				CV
Nickel	40	200	40.0	U	40.0	U		0.0		Р
Potassium	5,000	25,000	3,220	В	3,210	В				Р
Selenium	5	25	5	U	5	U				Р
Sodium	5,000	25,000	28,400		28,200		0.71			Р
Zinc	20	100	20.0	U	20.0	U				Р

Wet Chemistry

CLIENT:	T: Lockwood Hills LLC	LLC					ANAL VTIC		ANAL VTICAL OC SUMMARY BEDORT	TaOa
Work Order:)rder: 190920022									
Project:	: Lockwood Ash Landfill	Candfill						BatchID:	R175615	
MBLK	SeqNo: 2705065						TestNo: SM2320B	320B	BunNo: 175615	
	Samp ID: MB-R175615						Units: mgCaCO3/L	Ļ		61
<u>Analyte</u> Alkalinity	<u>unalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u>	<u>POL</u> 1.00	SPK value S	SPK Ref Val	<u>%REC</u>	LowLimit HighLimit	it RPD Ref Val	I <u>%RPD</u> RPDLimit	<u>imit</u> Qual
rcs	SeqNo: 2705066						TestNo: SM2320B	320B	BunNo: 175615	
	Samp ID: LCS-R175615						Units: mgCaCO3/L	Į		19
<u>Analyte</u> Alkalinity	<u>unalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u> -325	<u>POL</u> 1.00	SPK value S 313	SPK Ref Val 0	<u>%REC</u> 104	LowLimit HighLimit 88.6 115	RPD Ref V	al <u>%RPD</u> <u>RPDLimit</u> 0 0	Limit Qual
rcs	SeqNo: 2705709				· · · · · · · · · · · · · · · · · · ·		TestNo: SM2320B	2320B	RunNo: 175615	
	Samp ID: LCS-R175615						Units: mgCaCO3/L		Analysis Date: 9/23/2019	19
<u>Analyte</u> Alkalinity	<u>unalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u> 320	<u>PQL</u> 5.00	<u>SPK value</u> 313	SPK Ref Val 0	<u>%REC</u> 102	LowLimit <u>HighLimit</u> 88.6 11	RPD Ref V	al <u>%RPD</u> RPDLimit 0 0	Limit Qual
rcs	SeqNo: 2705730						TestNo: SM2320B	2320B	RunNo: 175615	
	Samp ID: LCS-R175615						Units: mgCaCO3/L	Ļ		19
<u>Analyte</u> Alkalinity	<u>\nalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u> 320	<u>PQL</u> 5.00	<u>SPK value</u> 313	SPK Ref Val 0	<u>%REC</u> 102	LowLimit HighLimit 88.6 115	RPD Ref V	al <u>%RPD RPDLimit</u> 0 0	Limit Qual
SM	SedNo: 2705723									
	Samp ID: 190920022-001	(1842)					l estNo: SM2320B Units: mgCaCO3/L	Ļ	RunNo: 175615 Analysis Date: 9/23/2019	19
<u>Analyte</u> Alkalinity	<u>\nalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u> 650	<u>PQL</u> 10.0	SPK value 500	<u>SPK Ref Val</u> 140	<u>%REC</u> 102	LowLimit HighLimit 80 120	RPD Ref V	al <u>%RPD RPDLimit</u> 0 0	Limit Qual
U SM	Cocho: 070E704									
	Samp ID: 190920022-001	(1842)					TestNo: SM2320B Units: mgCaCO3/L	Ļ	RunNo: 175615 Analysis Date: 9/23/2019	19
<u>Analyte</u> Alkalinit	<u>\nalyte</u> Alkalinity, Total (As CaCO3)	<u>Result</u> 650	<u>PQL</u> 10.0	<u>SPK value</u> 500	<u>SPK Ref Val</u> 140	<u>%REC</u> 102	<u>LowLimit</u> <u>HighLimit</u> 80 12(<u>mit RPD Ref Val</u> 120 650	I <u>%RPD</u> RPDLimit 0 15	Limit Qual 15
Qualifiers:		ND - Not Detected at the Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	accepted reco	very limits	B - Analyte det	B - Analyte detected in the associated Method Blank	ethod Blank
		:		5						

Date: 04-Nov-19

Adirondack Environmental Services, Inc

R - RPD outside accepted recovery limits

Page I of 37

-A 2

J - Analyte detected below quantitation limits

...

-

--

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 2 of 37

R - RPD outside accepted recovery limits

Project: LCS	Project:							いって	ANALI IICAL VU JUMMAKI KEYUKI	KEFU	KI
č		Lockwood Ash Landfill	fill				Bat	BatchID: H	R175653		
		SeqNo: 2705997					TestNo: SM 2510B		Bundo:	176669	
	Samp IC	Samp ID: LCS-R175653					Units: pumhos/cm			9/20/2019	
<u>Analyte</u> Specific	<u>Analyte</u> Specific Conductance	lce	<u>Result</u> 242	<u>PQL</u> 1.00	SPK value SPK Ref Val 244 0	<u>%REC</u> 99.2	LowLimit HighLimit 95 109	<u>RPD Ref Val</u> 0	<u>%RPD</u> 0	<u>RPDLimit</u>	Qual
DUP		SeqNo: 2706008					TestNo: SM 2510B		Dundo:	176660	
	Samp IC	Samp ID: 190920022-010					Units: Jumhos/cm			9/20/2019	
<u>Analyte</u> Specific	<u>Analyte</u> Specific Conductance	JCe	<u>Result</u> 842	<u>PQL</u> 1.00	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	<u>LowLimit HighLimit R</u> 0 0	<u>RPD Ref Val</u> 852	<u>%RPD</u> 1.18	<u>RPDLimit</u> 5.5	Qual
DUP		SeqNo: 2706020 Samp ID: 190920022-021					TestNo: SM 2510B Units: umbos/cm		Analveis Date: 0/	175653 9/20/2019	
<u>Analyte</u> Specifii	Analyte Specific Conductance	Ce	<u>Result</u> 397	POL	SPK value SPK Ref Val	<u>%REC</u>	LowLimit HighLimit R	PD Ref V		<u>RPDLimit</u>	Qual
Qual	Qualifiers:	ND - Not Detected at the Reporting Limit	eporting Limit		S - Spike Recovery outside accepted recovery limits	e accepted rec	very limits	Analyte detect	B - Analyte detected in the associated Method Blank	ted Method B	lank
		T A Late				-					

Qualifiers:	<u>Analyte</u> TDS (Re	DUP	<u>Analyte</u> TDS (Re	DUP	<u>Analyte</u> TDS (Ret	LCS	<u>Analyte</u> TDS (Res	LCS	CLIENT: Work Order: Project:
rs: • ND - Not Detected at the Reporting Limit	<u>unalyte</u> TDS (Residue, Filterable)	SeqNo: 2709151 Samp ID: 190920022-005	<u>unalyte</u> TDS (Residue, Filterable)	SeqNo: 2709131 Samp ID: 190918014-008	<u>rnalvte</u> TDS (Residue, Filterable)	SeqNo: 2709152 Samp ID: LCS-R175807	<u>vnalvte</u> TDS (Residue, Filterable)	SeqNo: 2709129 Samp ID: LCS-R175807	1: Lockwood Hills LLC rder: 190920022 Lockwood Ash Landfill
Reporting Limit	<u>Result</u> 960		<u>Result</u> 580		<u>Result</u> 630		<u>Result</u> 650		IA
	<u>PQL</u> 5.00		<u>PQL</u> 5.00		<u>POL</u> 5.00		<u>PQL</u> 5.00		
S - Spike Recovery outsid	<u>SPK value</u> <u>SPK Ref Val</u> 0 0		<u>SPK value SPK Ref Val</u> 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 639 0		<u>SPK value</u> <u>SPK Ref Val</u> 639 0		
S - Spike Recovery outside accepted recovery limits	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: SM2540C Units: mg/L	<u>%REC LowLimit HighLimit</u> 0 0 0	TestNo: SM2540C Units: mg/L	<u>%REC LowLimit HighLimit</u> 98.6 85.4 114	TestNo: SM2540C Units: mg/L	<u>%REC LowLimit HighLimit</u> 102 85.4 114	TestNo: SM2540C Units: mg/L	ANALYTIC
B - Analyte detected in the associated Method Blank	<u>nit RPD Ref Val %RPD RPDLimit Qual</u> 0 990 3.08 10	2540C RunNo: 175807 L Analysis Date: 9/25/2019	It RPD Ref Val %RPD RPDLimit Qual 0 550 5.31 10	2540C RunNo: 175807 Analysis Date: 9/25/2019	mit <u>RPD Ref Val</u> <u>%RPD RPDLimit Qual</u> 114 0 0 0	2540C RunNo: 175807 Analysis Date: 9/25/2019	mit <u>RPD Ref Val</u> <u>%RPD RPDLimit Qual</u> 114 0 0 0	2540C RunNo: 175807 Analysis Date: 9/25/2019	ALYTICAL QC SUMMARY REPORT BatchID: R175807

-

-

Page 4 of 37

R - RPD outside accepted recovery limits S - Spike Recovery outside accepted recovery limits

		LLC				ANALY	TICA		ANALYTICAL OC SUMMARY BEPORT	Tac
Work Order:	Jrder: 190920022							いたいたい		
Project:	: Lockwood Ash Landfill	andfill					B	BatchID: R	R175873	
MBLK	SeqNo: 2710597					TastNo.	TactNo: F250 1		BunNo: 476879	
	Samp ID: MBLK					Units: mg/L	. cuuu. mg/L	Anal		
<u>Analyte</u> Nitroger	<u>hnalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> ND	<u>PQL</u> 0.100	SPK value SPK Ref Val	ef Val <u>%REC</u>	LowLimit	<u>HighLimit</u>	RPD Ref Vai	%RPD RPDLimit	Qual
lcs	SeqNo: 2710440 Samp ID: Ics WC7-111-J					TestNo: E350	TestNo: E350.1		RunNo: 175873 Analycie Doto: 0/20/2010	
<u>Analyte</u> Nitroger	Analyte Nitrogen, Ammonia (As N)	<u>Result</u> 8.933	<u>POL</u> 1.00	SPK value SPK Ref Val 9.44 (LowLin	<u>ahLimit</u> 110	<u>RPD Ref Val</u> 0		Qual
<u>cs</u>	SeqNo: 2710464 Samp ID: Ics WC7-111-J					TestNo: E35 0 Units: mg/L	TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	Result 8.873	POL 1.00	SPK value SPK Ref Val 9.44 (<u>%RE</u>	LowLin	ahLimit 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
<u>cs</u>	SeqNo: 2710487 Samp ID: Ics WC7-111-J					TestNo: E350 Units: mg/L	TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 8.875	POL 1.00	SPK value SPK Ref Val 9.44 (<u>%RE</u>	LowLimit 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
sm	SeqNo: 2710444 Samp ID: 190920022-002	(8401)				TestNo: E350 Units: mg/L	TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 1.854	POL 0.100	SPK value SPK Ref Val 1 0.8881	1%	LowLimit 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD RPDLimit</u> 0	Qual
sm	SeqNo: 2710470 Samp ID: 190920022-022	(Keuka Downstrea				TestNo: E350 Units: mg/L	TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9769	<u>POL</u> 0.100	SPK value SPK Ref Val 1 (8	<u>LowLimit</u> 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual

ND - Not Detected at the Reporting Limit S. J - Analyte detected below quantitation limits

Qualifiers:

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 5 of 37

CLIENT: Work Order:	Lockwood Hills LLC	LTC			ANALYTIC	AL QC SUN	ANALYTICAL QC SUMMARY REPORT
Work Or Project:		andfill				BatchID: R1	R175873
ms	SeqNo: 2710496 Samp ID: 190927003-001				TestNo: E350.1 Units: mg/L	Analy	RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen,	A <u>nalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 1.037	<u>PQL</u> 0.100	<u>SPK value SPK Ref Val</u> 1 0	<u>%REC LowLimit HighLimit</u> 104 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0
msd	SeqNo: 2710445 Samp ID: 190920022-002	(8401)			TestNo: E350.1 Units: mg/L	Analy	RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen,	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 1.878	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 1 0.8881	<u>%REC</u> LowLimit HighLimit 99 90 110	<u>RPD Ref Val</u> 1.854	<u>%RPD</u> <u>RPDLimit</u> 1.29 20
msd	SeqNo: 2710471 Samp ID: 190920022-022	(Keuka Downstrea			TestNo: E350.1 Units: mg/ L		RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen,	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.961	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>%REC LowLimit HighLimit</u> 96.1 90 110	<u>RPD Ref Val</u> 0.9769	<u>%RPD</u> RPDLimit 1.6420
dup	SeqNo: 2710495 Samp ID: 190927003-001				TestNo: E350.1 Units: mg/L		RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen,	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.035	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC LowLimit HighLimit</u> 0 0 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 011.1
ccb	SeqNo: 2710451 Samp ID: CCB				TestNo: E350.1 Units: mg/L		RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0233	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC LowLimit HighLimit</u> 0 0 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0
ccb	SeqNo: 2710463 Samp ID: CCB				TestNo: E350.1 Units: mg/L		RunNo: 175873 Analysis Date: 9/30/2019
<u>Analyte</u> Nitrogen	<u>Analvte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0226	<u>PQL</u> 0.100	<u>SPK value SPK Ref Val</u> 0 0	<u>%REC LowLimit HighLimit</u> 0 0 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0
Qualifiers:	rs: ND - Not Detected at the Reporting Limit	t the Reporting Limit		S - Spike Recovery outsid	S - Spike Recovery outside accepted recovery limits	B - Analyte detecte	B - Analyte detected in the associated Method Blank

. =.,.

-

-

.

Page 6 of 37

R - RPD outside accepted recovery limits

CLIENT:						ANALYTICA	T OC SU	ANALYTICAL OC SUMMARY REPORT	RT
Work Urder: Project:	Jrder: 190920022 : Lockwood Ash Landfill	andfill				Ē	BatchID: R	R175873	
ccb	SeqNo: 2710475					TestNo: E350.1	-	RunNo: 175873	
	Samp ID: CCB					Units: mg/L			
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0236	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ccb	SeqNo: 2710486					TestNo: E350.1			
	Samp ID: CCB					Units: mg/L	Ana	Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.023	<u>PQL</u> 0.100	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ccb	SeqNo: 2710498					TestNo: E350.1		BunNo: 175873	
	Samp ID: CCB					Units: mg/L			
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	Result -0.0225	<u>PQL</u> 0.100	SPK value SPK Ref Val 0 0	%REC 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ccb	SeqNo: 2710504					TestNo [.] E350 1	-	BunNo: 175873	
	Samp ID: CCB					Units: mg/L			
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0232	<u>PQL</u> 0.100	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	<u>LowLimit</u> <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
ccb	SeqNo: 2710506 Samp ID: CCB					TestNo: E350.1 Units: ma/L		RunNo: 175873 Analvsis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0232	<u>PQL</u> 0.100	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref V</u>		Qual
ccb	SeqNo: 2710512 Samp ID: CCB					TestNo: E350.1 Units: mg/L		RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitroger	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0238	<u>POL</u> 0.100	<u>SPK value</u> <u>SPK Ref Val</u> 0 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual

Qualifiers: ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 7 of 37

ank	B - Analyte detected in the associated Method Blank	B - Analyte detected		ide accepted rec	S - Spike Recovery outside accepted recovery limits		eporting Limit	s: ND - Not Detected at the Reporting Limit	Qualifiers:
Qual	<u>%RPD</u> RPDLimit 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 90.9	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9089	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen,
	RunNo: 175873 Analysis Date: 9/30/2019	Analy	TestNo: E350.1 Units: mg/L					SeqNo: 2710503 Samp ID: CCV	CCV
Qual	<u>%RPD</u> RPDLimit 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 94.5	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9449	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen,
	RunNo: 175873 Analysis Date: 9/30/2019	Analy	TestNo: E350.1 Units: mg/L					SeqNo: 2710497 Samp ID: CCV	CCV
<u>Qual</u>	<u>%RPD</u> RPDLimit 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 91.6	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9161	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen,
	RunNo: 175873 Analysis Date: 9/30/2019	Analys	TestNo: E350.1 Units: mg/L					SeqNo: 2710485 Samp ID: CCV	CCV
Qual	<u>%RPD</u> RPDLimit 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 92.5	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9247	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen,
	RunNo: 175873 Analysis Date: 9/30/2019	Analys	TestNo: E350.1 Units: mg/L					SeqNo: 2710474 Samp ID: CCV	CCV
Qual	<u>%RPD</u> RPDLimit 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 92.2	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9222	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen,
	RunNo: 175873 Analysis Date: 9/30/2019	Analys	TestNo: E350.1 Units: mg/L					SeqNo: 2710462 Samp ID: CCV	CCV
<u>Qual</u>	<u>%RPD</u> <u>RPDLimit</u> 0	<u>RPD Ref Val</u> 0	<u>LowLimit</u> 90 110	<u>%REC</u> 93.9	<u>SPK value</u> <u>SPK Ref Val</u> 1 0	<u>PQL</u> 0.100	<u>Result</u> 0.9393	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Analyte</u> Nitrogen, .
	RunNo: 175873 Analysis Date: 9/30/2019	Analys	TestNo: E350.1 Units: mg/L					SeqNo: 2710450 Samp ID: CCV	CCV
RT	LYTICAL QC SUMMARY REPORT BatchID: R175873	AL QC SUM BatchID: RI	ANALYTICA B				E	: Lockwood Hills LLC der: 190920022 Lockwood Ash Landfill	CLIENT: Work Order: Project:

÷...

-

R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits

,

Page 8 of 37

Project: Ccv Seq Analyte Nitrogen, Amm Nitrogen, Amm Analyte Nitrogen, Amm	Project: Lockwood Ash Landfill Ccv SeqNo: 2710505 Samp ID: Ccv Analyte Nitrogen, Ammonia (As N) Ccv SeqNo: 2710511 Samp ID: Ccv Analyte Analyte Samp ID: Ccv	II							
u, A	ieqNo: 2710505 amp ID: CCV nmonia (As N) SeqNo: 2710511 samp ID: CCV					B	BatchID: R	6/86/1X	
an, A	nmonia (As N) SeqNo: 2710511 Samp ID: CCV					TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
, A	3eqNo: 2710511 3amp ID: CCV	<u>Result</u> 0.9046	<u>POL</u> 0.100	SPK value SPK Ref Val	<u>al %REC</u> 0 90.5	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
A						TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
	Nitrogen, Ammonia (As N)	<u>Result</u> 0.925	<u>PQL</u> 0.100	SPK value SPK Ref Val	al <u>%REC</u> 0 92.5	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
<u></u>	SeqNo: 2710441 Samp ID: cri 9-30-19					TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: <u>9/30/2019</u>	
<u>Analyte</u> Nitrogen, Arr	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.0666	<u>PQL</u> 0.100	SPK value SPK Ref Val 0.1	al %REC 0 66.6	LowLimit HighLimit 50 150	RPD Ref Val	<u>%RPD</u> RPDLimit 0	Qual
cri S	SeqNo: 2710465 Samp ID: <mark>cri 9-30-19</mark>					TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitrogen, Arr	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.0727	<u>PQL</u> 0.100	SPK value SPK Ref Val 0.1	al <u>%REC</u> 0 72.7	LowLimit HighLimit 50 150	RPD Ref Val	<u>%RPD</u> RPDLimit 0	Qual
icb S	SeqNo: 2710439 Samp ID: ICB					TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitrogen, An	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0229	<u>PQL</u> 0.100	SPK value SPK Ref Val 0	al <u>%REC</u> 0 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
icv	SeqNo: 2710438 Samp ID: ICV					TestNo: E350.1 Units: mg/L	Anal	RunNo: 175873 Analysis Date: 9/30/2019	
<u>Analyte</u> Nitrogen, An	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9337	<u>PQL</u> 0.100	SPK value SPK Ref Val 1 (al <u>%REC</u> 0 93.4	LowLimit <u>HighLimit</u> 1 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual

Page 9 of 37

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limitsR - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

Qualifiers:

Qualifiers:	<u>Analyte</u> Total Organic Carbon	MSD (a	<u>Analyte</u> Total Organic Carbon	MSD S	<u>Analyte</u> Total Organic Carbon	S S N	<u>Analyte</u> Total Organic Carbon	S N	<u>Analvte</u> Total Organic Carbon	LCS S S	<u>Analyte</u> Total Organic Carbon	MBLK S	CLIENT: Work Order: Project:
ND - Not Detected at the Reporting Limit	ic Carbon	SeqNo: 2711863 Samp ID: 190920022-023	c Carbon	SeqNo: 2711837 Samp ID: 190920022-002	c Carbon	SeqNo: 2711862 Samp ID: 190920022-023	c Carbon	SeqNo: 2711836 Samp ID: 190920022-002	c Carbon	SeqNo: 2711833 Samp ID: LCS	c Carbon	SeqNo: 2711898 Samp ID: MBLK	Lockwood Hills LLC r: 190920022 Lockwood Ash Landfill
ND - Not Detected at the Reporting Limit	<u>Result</u> 27.68	(Surface Water Du	<u>Result</u> 24.48	(8401)	<u>Result</u> 27.59	(Surface Water Du	<u>Result</u> 24.85	(8401)	<u>Result</u> 32.83		<u>Result</u> ND		LLC _andfill
	<u>Рог</u> 1.00		1.00		<u>PQL</u> 1.00		<u>PQL</u> 1.00		<u>PQL</u> 1.00		1.00		
S - Spike Recovery outside accepted reco	<u>SPK value</u> 25 3.176		<u>SPK value</u> <u>SPK Ref Val</u> 25 0		<u>SPK value</u> <u>SPK Ref Val</u> 25 3.176		<u>SPK value</u> <u>SPK Ref Val</u> 25 0		<u>SPK value</u> <u>SPK Ref Val</u> 30 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		
S - Spike Recovery outside accepted recovery limits	<u>%REC LowLimit HighLimit</u> 98 82 120	TestNo: SM5310C Units: mg/L	<u>%REC LowLimit HighLimit</u> 97.9 82 120	TestNo: SM5310C Units: mg/L	<u>%REC LowLimit HighLimit</u> 97.6 82 120	TestNo: SM5310C Units: mg/L	<u>%REC LowLimit HighLimit</u> 99.4 82 120	TestNo: SM5310C Units: mg/L	<u>%REC LowLimit HighLimit</u> 109 88.7 115	TestNo: SM5310C Units: mg/L	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: SM5310C Units: mg/L	ANALYTIC
B - Analyte detected	<u> </u>		<u>RPD Ref Val</u> 24.85		<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0		AL QC SUN BatchID: RI
B - Analyte detected in the associated Method Blank	<u>%RPD</u> <u>RPDLimit</u> 0.335 21.2	RunNo: 175946 Analysis Date: 10/1/2019	<u>%RPD</u> RPDLimit 1.4921.2	RunNo: 175946 Analysis Date: 10/1/2019	<u>%RPD</u> RPDLimit	RunNo: 175946 Analysis Date: 10/1/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175946 Analysis Date: 10 /1/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175946 Analysis Date: 10/1/2019	<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 175946 Analysis Date: 10/1/2019	LYTICAL QC SUMMARY REPORT BatchID: R175946
3lank	Qual		Qual		Qual		<u>Qual</u>		Qual		Qual)RT

-

-

CI IFNT.	T. I orbuiched Hills II C	r									
Work Order:	ler:	,					ANALYTICAL QC SUMMARY REPORT	L QC SU	MMARY R	EPOI	Z
Project:		[fill					B	BatchID: R	R175946		
CCB	SeqNo: 2711843 Samp ID: CCB						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/1/2019	6 019	
<u>Analyte</u> Total Or	<u>unalyte</u> Total Organic Carbon	<u>Result</u> 0.3775	<u>POL</u> 1.00	<u>SPK value</u>	SPK Ref Val 0	%REC 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPC	RPDLimit	Qual
ССВ	SeqNo: 2711855 Samp ID: CCB						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/1/2019	6 019	
<u>Analyte</u> Total Or	<u>unalyte</u> Total Organic Carbon	<u>Result</u> 0.3095	<u>POL</u> 1.00	SPK value 0	SPK Ref Val 0	<u>%REC</u> 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPI 0	<u>RPDLimit</u>	Qual
CCB	SeqNo: 2711865 Samp ID: CCB						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/2/2019	6 019	
<u>Analyte</u> Total Or	<u>Analyte</u> Total Organic Carbon	<u>Result</u> 0.4758	<u>PQL</u> 1.00	<u>SPK value</u> 0	<u>SPK Ref Val</u> 0	%REC 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD RPI</u> 0	<u> RPDLimit</u>	Qual
CCB	SeqNo: 2711876 Samp ID: CCB						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/2/2019	6 019	
<u>Analyte</u> Total Or	<u>Inalyte</u> Total Organic Carbon	<u>Result</u> 0.2345	POL 1.00	SPK value 0	SPK Ref Val 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RP</u> 1 0	RPDLimit	Qual
CCV	SeqNo: 2711842 Samp ID: CCV						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/1/2019	6 019	
<u>Analyte</u> Total Or	<u>Analyte</u> Total Organic Carbon	<u>Besult</u> 54.11	<u>POL</u> 1.00	SPK value 50	SPK Ref Val 0	<u>%REC</u> 108	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPI 0	RPDLimit	Qual
CCV	SeqNo: 2711854 Samp ID: CCV						TestNo: SM5310C Units: mg/L		RunNo: 175946 Analysis Date: 10/1/2019	6 019	
<u>Analyte</u> Total Or	<u>Analyte</u> Total Organic Carbon	<u>Result</u> 54.29	<u>PQL</u> 1.00	SPK value 50	<u>SPK Ref Val</u> 0	<u>%REC</u> 109	LowLimit <u>HighLimit</u> 90 110	RPD Ref Val 0	0 0	RPDLimit	Qual

Page 11 of 37 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Qualifiers:

S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank R - RPD outside accepted recovery limits Page 12 of 2	S - Spike Recover R - RPD outside a	eporting Limit	Qualifiers: ND - Not Detected at the Reporting Limit
V <u>al %REC LowLimit</u> HighLimit 0 109 90 110	P <u>QL</u> <u>SPK value</u> <u>SPK Ref Val</u> 1.00 50 (<u>Result</u> <u>PQL</u> 54.58 1.00	<u>Analvte</u> Total Organic Carbon
Units: mg/L			Samp ID: ICV
TestNo: SM5310C			ICV SeqNo: 2711830
00000	1.00 0	0.2569 1.	Total Organic Carbon
Val <u>%REC LowLimit HighLimit</u>	<u>NL SPK value SPK Ref Val</u>	Result PQL	Analyte
Units: mg/L			Samp ID: ICB
TestNo: SM5310C			ICB SeqNo: 2711831
Val <u>%REC LowLimit</u> <u>HighLimit</u> 0 <u>120</u> 50 150	<u>NL SPK value SPK Ref Val</u> 00 1 (<u>Result</u> <u>PQL</u> 1.199 1.00	Analyte Total Organic Carbon
Units: mg/L			Samp ID: CRL
TestNo: SM5310C			CRI SeqNo: 2711860
Val %REC LowLimit HighLimit 0 129 50 150	00 1 CONTRACT OF CONTRACT.	<u>Result</u> 1.288 1.00	<u>Analyte</u> Total Organic Carbon
TestNo: SM5310C Units: mg/L			CRI SeqNo: 2711832 Samp ID: CRI
<u>Val %REC LowLimit HighLimit</u> 0 107 90 110	I <u>L SPK value SPK Ref Val</u> 00 50 (<u>Result</u> <u>PQL</u> 53.58 1.00	Analyte Total Organic Carbon
Lestivo: SM531UC Units: mg/L			Samp ID: CCV
109	50		Drgar
Val %REC LowLimit HighLimit	L SPK value SPK Ref Val	Result PQL	Analyte
TestNo: SM5310C Units: mg/L			CCV SeqNo: 2711864 Samp ID: CCV
			Project: Lockwood Ash Landfill
ANALYTICAL QC SUMMARY REPORT			der:
			CLIENT: Lockwood Hills LLC

CLIENT:		LC				ANALYTICA	T OC SUI	ANALYTICAL OC SUMMARY REPORT)RT
Work Order:									
Project:	: Lockwood Ash Landfill	ındfill				g	BatchID: R	R175965	
MBLK	SeqNo: 2712302			-		TestNo: E350.1		BunNo: 175965	
	Samp ID: MBLK					Units: mg/L	Anal		
Analyte		Result	POL	SPK Ref Va	<u>%REC</u>	LowLimit <u>HighLimit</u>	RPD Ref Val	<u>%RPD</u> RPDLimit	Qual
Nitroger	Nitrogen, Ammonia (As N)	DN	0.100	0	0	0	0	0	
lcs	SeqNo: 2712216					TestNo: E350.1		RunNo: 175965	
	Samp ID: Ics WC7-111-J					Units: mg/L	Anal		
<u>Analyte</u> Nitrogen	<u>unalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 8.651	<u>POL</u> 1.00	SPK value SPK Ref Val 9.44 0	<u>%REC</u> 91.6	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
lcs	SeqNo: 2712240					TectNo: E350 1		Bundo: 175065	
	Samp ID: Ics WC7-111-J					Units: mg/L	Anal		
<u>Analyte</u> Nitrogen	<u>unalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 8.606	<u>PQL</u> 1.00	SPK value SPK Ref Val 9.44 0	<u>%REC</u> 91.2	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
lcs	SeqNo: 2712259					TestNo: E350.1		BunNo: 175965	
	Samp ID: Ics WC7-111-J					Units: mg/L	Anal		
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 8.689	<u>PQL</u> 1.00	SPK value SPK Ref Val 9.44 0	<u>%REC</u> 92	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Oual
sm	SeqNo: 2712219					TestNo: E350.1		RunNo: 175965	
	Samp ID: 190920022-032	(Inlet To Pond)				Units: mg/L	Anal		
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 1.316	<u>PQL</u> 0.100	SPK value SPK Ref Val 1 0.2619	<u>%REC</u> 105	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
sm	SeqNo: 2712245					TestNo: E350.1		RunNo: 175965	
	Samp ID: 190925032-006					Units: mg/L	Anal		
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	Result 0.9302	<u>POL</u> 0.100	SPK value SPK Ref Val 1 0	<u>%REC</u> 93	LowLimit HighLimit 90 110	<u>RPD Ref Val</u>	<u>%RPD</u> <u>RPDLimit</u>	<u>Qual</u>
)					}		b	D	

 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit

Qualifiers:

B - Analyte detected in the associated Method Blank

Page 13 of 37

<u>Analyte</u> Nitrogen, Ammonia (As N)	ccb Sec	<u>Analyte</u> Nitrogen, Ammonia (As N)	ccb Sec	<u>Analyte</u> Nitrogen, Ammonia (As N)	dup Sec	<u>Analyte</u> Nitrogen, Ammonia (As N)	msd Seq	<u>Analyte</u> Nitrogen, Ammonia (As N)	msd Seq	<u>Analyte</u> Nitrogen, Ammonia (As N)	ms Seq Sam	CLIENT: Work Order: Project:
nonia (As N)	SeqNo: 2712239 Samp ID: CCB	nonia (As N)	SeqNo: 2712227 Samp ID: CCB	ionia (As N)	SeqNo: 2712264 Samp ID: 190926047-002	ionia (As N)	SeqNo: 2712246 Samp ID: 190925032-006	onia (As N)	SeqNo: 2712220 Samp ID: 190920022-032 (/	onia (As N)	SeqNo: 2712261 Samp ID: 190926012-002	Lockwood Hills LLC 190920022 Lockwood Ash Landfill
<u>Result</u> -0.028		<u>Result</u> -0.0252		<u>Result</u> 3.464		<u>Result</u> 0.9407		<u>Result</u> 1.292	(Inlet To Pond)	<u>Result</u> 1.046		JC
<u>PQL</u> 0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.500		<u>POL</u> 0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.100	- - - - -	
<u>SPK value</u> <u>SPK Ref Val</u> 0 0		<u>SPK value SPK Ref Val</u> 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0.2619		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		
<u>%REC</u> 0		<u>%REC</u> 0		<u>%REC</u> 0		<u>%REC</u> 94.1		<u>%REC</u> 103		<u>%REC</u> 105		
<u>LowLimit</u> 0 0 0	TestNo: E350.1 Units: mg/L	<u>LowLimit</u> 0 0	TestNo: E350.1 Units: mg/L	<u>LowLimit</u> 0 0	TestNo: E350.1 Units: mg/L	<u>LowLimit</u> 90 110	TestNo: E350.1 Units: mg/L	<u>LowLimit</u> 90 110	TestNo: E350.1 Units: mg/L	<u>LowLimit</u> 90 110	TestNo: E350.1 Units: mg/L	ANALYTIC
<u>RPD Ref Val</u> 0		<u>RPD Ref Val</u> 0	Anal	RPD Ref Val 3.516	Anal	<u>RPD Ref Val</u> 0.9302	Anal	<u>RPD Ref Val</u> 1.316	Anal	<u>RPD Ref Val</u> 0	Anal	AL QC SUT BatchID: R
<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 175965 Analysis Date: 10 /2/2019	<u>%RPD</u> RPDLimit	RunNo: 175965 Analysis Date: 10/2/2019	<u>%RPD</u> <u>RPDLimit</u> 1.50 11.1	RunNo: 175965 Analysis Date: 10/2/2019	<u>%RPD</u> <u>RPDLimit</u> 1.12 20	RunNo: 175965 Analysis Date: 10/2/2019	<u>%RPD</u> <u>RPDLimit</u> 1.82 <u>2</u> 0	RunNo: 175965 Analysis Date: 10/2/2019	<u>%RPD</u> RPDLimit 0	RunNo: 175965 Analysis Date: 10/2/2019	ANALYTICAL QC SUMMARY REPORT BatchID: R175965
Qual		Qual		Qual		<u>Qual</u>		Qual		Qual		PRT

. _____

-

Project: ccb Sed							ALALL TUCAL OUTWIND THE ALAL	シンソ		
L	Lockwood Ash Landfill	Π					B	BatchID: R1	R175965	
	SeqNo: 2712251 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, Arr	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0267	<u>PQL</u> 0.100	SPK value SPK 0	<u>SPK Ref Val</u> 0	%REC 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	<u>it</u> Qual
o o ccp	SeqNo: 2712258 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, Arr	<u>vnalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0282	<u>PQL</u> 0.100	SPK value SPK 0	<u>SPK Ref Val</u> 0	%REC 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	iit Qual
ccb CCb	SeqNo: 2712269 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, An	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0277	<u>PQL</u> 0.100	SPK value SPK 0	SPK Ref Val 0	%REC 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	iit <u>Qual</u>
o o ccp	SeqNo: 2712275 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, An	<u>vnalyte</u> Nitrogen, Armmonia (As N)	<u>Result</u> -0.0258	<u>POL</u> 0.100	SPK value SPK 0	<u>SPK Ref Val</u> 0	<u>%REC</u> 0	LowLimit <u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD_RPDLimit</u> 0	<u>iit</u> <u>Qual</u>
o o cp	SeqNo: 2712277 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, An	<u>unalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0294	<u>POL</u> 0.100	<u>SPK value</u> <u>SPK</u> 0	SPK Ref Val 0	<u>%REC</u> 0	LowLimit HighLimit 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> BPDLimit 0	<u>iit</u> <u>Qual</u>
o o q c	SeqNo: 2712285 Samp ID: CCB						TestNo: E350.1 Units: mg/L	Analy	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen, An	<u>analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> -0.0272	<u>PQL</u> 0.100	<u>SPK value</u> <u>SPK</u> 0	<u>SPK Ref Val</u> 0	<u>%REC</u> 0	<u>LowLimit</u> 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	<u>iit</u> <u>Qual</u>

 Qualifiers:
 ND - Not Detected at the Reporting Limit
 S - SF

 J - Analyte detected below quantitation limits
 R - R

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 15 of 37

Analyte Nitrogen, Ammonia (As N) CCV SeqNo: 27122 Samp ID: CCV			CCV SeqN	<u>Analyte</u> Nitrogen, Ammonia (As N)	CCV SeqN	<u>Analyte</u> Nitrogen, Ammonia (As N)	CCV SeqNo Samp	<u>Analyte</u> Nitrogen, Ammonia (As N)	CCV SeqNo Samp	<u>Analyte</u> Nitrogen, Ammonia (As N)	ccb SeqNo: Samp ID	CLIENT: Work Order: Project:
<u>Analyte</u> Nitrogen, Ammonia (As N)	SeqNo: 2712268 Samp ID: CCV	nia (As N)	SeqNo: 2712257 Samp ID: CCV	nia (As N)	SeqNo: 2712250 Samp ID: CCV	iia (As N)	SeqNo: 2712238 Samp ID: CCV	ia (As N)	SeqNo: 2712226 Samp ID: CCV	iia (As N)	SeqNo: 2712288 Samp ID: ccb man	Lockwood Hills LLC 190920022 Lockwood Ash Landfill
<u>Result</u> 0.8977		<u>Result</u> 0.9109		<u>Result</u> 0.9226		<u>Result</u> 0.9164		<u>Result</u> 0.9381		<u>Result</u> -0.0381		E
0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.100		<u>PQL</u> 0.100		
<u>SPK value</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 1 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		
89.8 90 110	TestNo: E350.1 Units: mg/L	<u>%REC</u> LowLimit HighLimit 91.1 90 110	TestNo: E350.1 Units: mg/L	<u>%REC</u> <u>LowLimit</u> <u>HighLimit</u> 92.3 90 110	TestNo: E350.1 Units: mg/L	<u>%REC LowLimit HighLimit</u> 91.6 90 110	TestNo: E350.1 Units: mg/L	<u>%REC</u> <u>LowLimit</u> <u>HighLimit</u> 93.8 90 110	TestNo: E350.1 Units: mg/L	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: E350.1 Units: mg/L	ANALYTIC
0 <u>RPD Ref Val</u> 0 0 0 0	.1 RunNo: 175965 Analysis Date: 10/2/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0 0	1 RunNo: 175965 Analysis Date: 10/2/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0	1 RunNo: 175965 Analysis Date: 10/2/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0	1 RunNo: <i>175965</i> Analysis Date: 10/2/2019	<u>RPD Ref Val</u> <u>%RPD</u> <u>RPDLimit</u> 0 0 0	1 RunNo: 175965 Analysis Date: 10/2/2019	RPD Ref Val <u>%RPD</u> RPDLimit 0 0	1 RunNo: <i>175965</i> Analysis Date: 10/2/2019	LYTICAL QC SUMMARY REPORT BatchID: R175965
(v)		Qual		Qual		Qual		Qual		Qual		RT

CLIENT: Work Order:	Lockwood Hills LLC Ider: 190920022						ANALYTICAL QC SUMMARY REPORT	T QC SU	MMARY REP	ORT
Project:		fill					B	BatchID: R	R175965	
ccv	SeqNo: 2712274 Samp ID: CCV						TestNo: E350.1 Units: mg/L	Anal	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9119	<u>PQL</u> 0.100	<u>SPK value</u> SI	SPK Ref Val 0	<u>%REC</u> 91.2	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	iit Qual
CCV	SeqNo: 2712276 Samp ID: CCV						TestNo: E350.1 Units: mg/L	Ana	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9186	<u>PQL</u> 0.100	SPK value S	SPK Ref Val 0	<u>%REC</u> 91.9	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	<u>nit</u> <u>Qual</u>
сси	SeqNo: 2712284 Samp ID: CCV						TestNo: E350.1 Units: mg/L	Ana	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9263	<u>PQL</u> 0.100	<u>SPK value</u>	SPK Ref Val 0	<u>%REC</u> 92.6	LowLimit <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	<u>nit</u> Qual
CCV	SeqNo: 2712287 Samp ID: ccv man						TestNo: E350.1 Units: mg/L	Ana	RunNo: 175965 Analysis Date: 10 /2/2019	
<u>Analyte</u> Nitrogen	<u>unalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.9086	<u>PQL</u> 0.100	<u>SPK value</u> 1	<u>SPK Ref Val</u> 0	<u>%REC</u> 90.9	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	<u>nit</u> Qual
cri	SeqNo: 2712217 Samp ID: cri 10-2-19						TestNo: E350.1 Units: mg/L	Ana	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen	<u>unalyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.0544	<u>PQL</u> 0.100	<u>SPK value</u> 0.1	<u>SPK Ref Val</u> 0	<u>%REC</u> 54.4	LowLimit <u>HighLimit</u> 50 150	RPD Ref Val	<u>%RPD</u> RPDLimit 0	<u>nit</u> Qual
cri	SeqNo: 2712241 Samp ID: cri 10-2-19						TestNo: E350.1 Units: mg/L	Ana	RunNo: 175965 Analysis Date: 10/2/2019	
<u>Analyte</u> Nitrogen	<u>Analyte</u> Nitrogen, Ammonia (As N)	<u>Result</u> 0.0573	<u>POL</u> 0.100	SPK value 0.1	<u>SPK Ref Val</u> 0	<u>%REC</u> 57.3	LowLimit HighLimit 50 150	RPD Ref Val	<u>%RPD</u> RPDLimit 0	nit Qual

Page 17 of 37

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Qualifiers:

Qualifiers:		<u>Analyte</u> Nitrogen, A	icv	<u>Analyte</u> Nitrogen, A	icb	CLIENT: Work Order: Project:
ND - Not Detected at the Reporting Limit		<u>Analyte</u> Nitrogen, Ammonia (As N)	SeqNo: 2712214 Samp ID: ICV	<u>Analyte</u> Nitrogen, Ammonia (As N)	SeqNo: 2712215 Samp ID: ICB	Lockwood Hills LLC er: 190920022 Lockwood Ash Landfill
sporting Limit		<u>Result</u> 0.9215		<u>Result</u> -0.0253		E
		<u>PQL</u> 0.100		0.100		
S - Spike Recovery outside accepted recovery limits		<u>SPK value</u> 10		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		
accepted recovery limits		<u>%REC</u> LowLimit HighLimit 92.2 90 110	TestNo: E350.1 Units: mg/L	<u>%REC LowLimit HighLimit</u> 0 0 0 0	TestNo: E350.1 Units: mg/L	ANALYTIC
B - Analyte detected ir		<u>RPD Ref Val</u> 0	RunNo: Analysis Date:	<u>RPD Ref Val</u> 0	R Analysis	AL QC SUMMA BatchID: R175965
B - Analyte detected in the associated Method Blank		0 0 <u>8</u> 0	RunNo: 175965 sis Date: 10/2/2019	<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 175965 Analysis Date: 10 /2/2019	ANALYTICAL QC SUMMARY REPORT BatchID: R175965
Blank		Qual		Qual)RT

-

-

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Page 18 of 37

CLIENT: Work Order:	 Lockwood Hills LLC rder: 190920022 					ANALYTICA	AL QC SU	ANALYTICAL QC SUMMARY REPORT	JRT
Project:		EII EI				ł	BatchID: R176023	176023	
rcs	SeqNo: 2713287 Samp ID: LCS-R176023					TestNo: SM2540C Units: mg/L		RunNo: 176023 Analysis Date: 10/2/2019	
<u>Analyte</u> TDS (Re	<u>nalyte</u> TDS (Residue, Filterable)	Result P	<u>PQL</u> 5.00	<u>SPK value</u> <u>SPK Ref Val</u> 639 0	<u>%REC</u> 103	<u>%REC LowLimit HighLimit RPD Ref Val</u> 103 85.4 114 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	Qual
DUP	SeqNo: 2713641 Samp ID: 190920022-033					TestNo: SM2540C Units: mg/L		RunNo: 176023 Analysis Date: 10/2/2019	
<u>Analyte</u> TDS (Re	<u>\analyte</u> TDS (Residue, Filterable)	Result P	<u>POL</u> 5.00	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	<u>%REC LowLimit HighLimit</u> 0 0 0	<u>RPD Ref Val</u> 3275	<u>%RPD</u> RPDLimit 0.305 10	Oual
DUP	SeqNo: 2713647 Samp ID: 190925031-001					TestNo: SM2540C Units: mg/L		RunNo: 176023 Analysis Date: 10/2/2019	
<u>Analyte</u> TDS (Re	<u>nalyte</u> TDS (Residue, Filterable)	Acount Ac	<u> 5.00</u>	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	<u>%REC LowLimit HighLimit</u> 0 0 0	RPD Ref Val 435	<u>%RPD</u> RPDLimit 8.38 10	Qual

B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

Page 19 of 37

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Qualifiers:	Color		<u>Analyte</u> Color	MBLK S	Project:	CLIENT: Work Order:
ND - Not Detected at the Reporting Limit	Samp ID: 190920022-032	SeqNo: 2713633		SeqNo: 2713622 Samp ID: MB-R176050	Lockwood Ash Landfill	Lockwood Hills LLC r: 190920022
porting Limit	ND ND		<u>Result</u> ND		Ш	
	5.0 5.0		<u>PQL</u> 5.0			
S - S	o SPK value		<u>SPK value</u>			
S - Spike Recovery outside accepted recovery limits	o o		<u>SPK Ref Val</u>			
accepted re	S C C		%REC			
	Units: cpu@pH6 0 0 0 0	TestNo: SM2120 B	LowLimit HighLimit	TestNo: SM2120 B Units: cpu@pH6	В	ANALYTICAL QC SUMMARY REPORT
3 - Analyte detec	אףD <u>Ref</u> ע		<u>RPD Ref Val</u>		BatchID: H	L QC SU
B - Analyte detected in the associated Method Blank	al <u>%RPD</u> 0 0 0 0	I	<u>%RPD</u>	RunNo: 176 Analysis Date: 10 /-	R176050	MMARY
:d Method B	10 <u>RPDLimit</u> 10	176050	<u>RPDLimit</u>	176050 10/1/2019		REPO
lank			Qual			IRT

-

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Page 20 of 37

CLIENT: Work Order:	C: Lockwood Hills LLC rder: 190920022						ANALYTICA	r oc sur	ANALYTICAL QC SUMMARY REPORT	DRT
Project:	Lockwood Ash Landfill	lfill					B	BatchID: R176059	.76059	
rcs	SeqNo: 2713875 Samp ID: LCS-R176059						TestNo: SM 2510B Units: µmhos/cm		RunNo: 176059 Analysis Date: 10/4/2019	
<u>Analyte</u> Specific (<u>unalyte</u> Specific Conductance	<u>Result</u> 248	<u>PQL</u> 1.00	<u>SPK value</u> 244	SPK value SPK Ref Val 244 0	<u>%REC</u> 102	<u>%REC LowLimit HighLimit RPD Ref Val</u> 102 95 109 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit Qual 0	Qual
DUP	SeqNo: 2713878 Samp ID: 190920022-033						TestNo: SM 2510B Units: µmhos/cm		RunNo: 176059 Analysis Date: 10/4/2019	
<u>Analyte</u> Specific (<u>Analyte</u> Specific Conductance	<u>Result</u> 3743	<u>POL</u> 1.00	<u>SPK value</u> 0	SPK value SPK Ref Val 0 0	<u>%REC</u> 0	<u>%REC LowLimit HighLimit RPD Ref Val</u> 0 0 0 3704	<u>RPD Ref Val</u> 3704	<u>%RPD</u> RPDLimit Qual 1.05 5.5	Qual

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit

Qualifiers:

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

Page 21 of 37

Qualifiers:	<u>Analyte</u> Alkalinity, Tot	MSD Se	<u>Analyte</u> Alkalinity, Total (As CaCO3)	MS Se	<u>Analyte</u> Alkalinity, Total (As CaCO3)	MS Se	<u>Analyte</u> Alkalinity, Total (As CaCO3)	LCS Se	<u>Analyte</u> Alkalinity, Total (As CaCO3)	LCS Se	<u>Analyte</u> Alkalinity, Total (As CaCO3)	MBLK Se	CLIENT: Work Order: Project:
ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation lir	<u>Analyte</u> Alkalinity, Total (As CaCO3)	SeqNo: 2714105 Samp ID: 190920022-032	al (As CaCO3)	SeqNo: 2714129 Samp ID: 191002049-012	al (As CaCO3)	SeqNo: 2714104 Samp ID: 190920022-032	al (As CaCO3)	SeqNo: 2714127 Samp ID: LCS-R176073	il (As CaCO3)	SeqNo: 2714102 Samp ID: LCS-R176073	il (As CaCO3)	SeqNo: 2714101 Samp ID: MB-R176073	Lockwood Hills LLC : 190920022 Lockwood Ash Landfill
ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits	<u>Result</u> 920	(Inlet To Pond)	<u>Result</u> 880		<u>Result</u> 930	(Inlet To Pond)	<u>Result</u> 325		<u>Result</u> 315		<u>Result</u> 1		LLC andfill
	<u>PQL</u> 10.0		<u>PQL</u> 10.0		<u>PQL</u> 10.0		<u>POL</u> 10.0		<u> </u>		1.00	- -	
S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits	<u>SPK value</u> <u>SPK Ref Val</u> 500 440		<u>SPK value</u> <u>SPK Ref Val</u> 500 390		<u>SPK value</u> <u>SPK Ref Val</u> 500 440		<u>SPK value SPK Ref Val</u> 313 0		<u>SPK value</u> <u>SPK Ref Val</u> 313 0		<u>SPK value</u> <u>SPK Ref Val</u>		
e accepted recove recovery limits	<u>% REC</u> <u>9</u> 6		<u> ※REC</u> 년 98		<u>※REC L</u> 98		<u>%REC</u> <u>L</u> 104		<u>%REC</u> 101		<u>%REC</u>		A
σ	<u>LowLimit</u> . 80 120	TestNo: SM2320B Units: mgCaCO3/L	<u>LowLimit</u> <u>HighLimit</u> <u>1</u> 80 120	TestNo: SM2320B Units: mgCaCO3/L	<u>LowLimit</u> <u>HighLimit</u> 80 120	TestNo: SM2320B Units: mgCaCO3/L	<u>LowLimit</u> <u>HighLimit</u> 88.6 115	TestNo: SM2320B Units: mgCaCO3/L	<u>LowLimit HighLimit F</u> 88.6 115	TestNo: SM2320B Units: mgCaCO3/L	<u>LowLimit</u> <u>HighLimit</u>	TestNo: SM2320B Units: mgCaCO3/L	ANALYTICAI Ba
- Analyte detected	<u> RPD Ref Val</u> 930	ŕ	<u>RPD Ref Val</u> 0	Γ	<u>RPD Ref Val</u> 0	Γ	<u>RPD Ref Val</u> 0	ŕ	<u>RPD Ref Val</u> 0	ŕ	RPD Ref Val	F	AL QC SUN BatchID: RI
- Analyte detected in the associated Method Blank $Page \ 22 \ of \ 37$	<u>%RPD</u> <u>RPDLimit</u> 1.08 15	RunNo: 176073 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit	RunNo: 176073 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit 0	RunNo: 176073 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit 0	RunNo: 176073 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit 0	RunNo: 176073 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit	RunNo: 176073 Analysis Date: 10 /4/2019	LYTICAL QC SUMMARY REPORT BatchID: R176073
Blank ? of 37	Qual		Qual		Qual		<u>Qual</u>		Qual		Qual)RT

_

- -

-

CLIENT: Work Order:		Lockwood Hills LLC 190920022						ANAL	YTICA	AL QC S	ANALYTICAL QC SUMMARY REPORT	Y REP	ORT
Project:		Lockwood Ash Landfill	fill						Ð	BatchID: R176073	R176073		
MSD		SeqNo: 2714130 Samp ID: 191002049-012						Test	TestNo: SM2320B Units: mgCaCO3/L	_	RunNo: 176073 Analysis Date: 10/4/2019	176073 10/4/2019	
<u>Analyte</u> Alkalinity	<u>nalyte</u> Alkalinity, Total (As CaCO3)	(acO3)	<u>Result</u> 890	<u>POL</u> 10.0	<u>SPK value</u> 500	SPK value SPK Ref Val 500 390	<u>%REC</u> 100	LowLimit <u>1</u> 80	<u>HighLimit</u> 120	0 Ref V		<u>%RPD</u> RPDLimit Qual 1.13 15	

 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

Page 23 of 37

B - Analyte detected in the associated Method Blank

Qualifiers:	<u>Analyte</u> Color	ССВ	<u>Analyte</u> Color		<u>Analyte</u> Color	DUP	<u>Analyte</u> Color	DUP	<u>Analyte</u> Color	MBLK	<u>Analyte</u> Color	MBLK	CLIENT: Work Order: Project:
ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits		SeqNo: 2714508 Samp ID: CCB		SeqNo: 2714521 Samp ID: 190920022-021		SeqNo: 2714514 Samp ID: 190920022-017		SeqNo: 2714499 Samp ID: 190920022-001		SeqNo: 2714519 Samp ID: MB-R176096		SeqNo: 2714497 Samp ID: MB-R176096	Lockwood Hills LLC er: 190920022 Lockwood Ash Landfill
Reporting Limit quantitation limits	ND		<u>Result</u> 7		<u>Result</u> ND		<u>Result</u> 7		<u>Result</u> ND		<u>Result</u> ND		fill
	5.0 5.0		<u>PQL</u> 5.0		<u>PQL</u> 5.0		<u>PQL</u> 5.0		<u>PQL</u> 5.0		<u>PQL</u> 5.0		
S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits	<u>SPK value</u> 000000000000000000000000000000000000		<u>SPK value SPK Ref Val</u> 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		SPK value SPK Ref Val		<u>SPK value</u> <u>SPK Ref Val</u> 0 0		
	<u>%REC</u> <u>LowLimit</u> <u>HighLimit</u> <u>RPD Ref Val</u> 000000000000000000000000000000000000	TestNo: SM2120 B Units: cpu@pH6	<u>%REC LowLimit HighLimit RPD Ref Val</u> 0 0 0 7	TestNo: SM2120 B Units: cpu@pH7	<u>%REC LowLimit HighLimit RPD Ref Val</u> 0 0 0 0 0 0	TestNo: SM2120 B Units: cpu@pH7	<u>%REC LowLimit HighLimit RPD Ref Val</u> 0 0 0 7	TestNo: SM2120 B Units: cpu@pH7	<u>%REC LowLimit HighLimit RPD Ref Val</u>	TestNo: SM2120 B Units: cpu@pH6	<u>%REC LowLimit HighLimit RPD Ref Val</u> 0 0 0 0 0 0	TestNo: SM2120 B Units: cpu@pH6	ANALYTICAL QC BatchID:
B - Analyte detected in the associated Method Blank Page 24 of 37	ef Val <u>%RPD</u> <u>RPDLimit</u> <u>Qual</u> 0 0	RunNo: 176096 Analysis Date: 9/20/2019	<u>ef Val %RPD RPDLimit Qual</u> 7 0 10	RunNo: 176096 Analysis Date: 9/20/2019	ef Val <u>%RPD RPDLimit Qual</u> 0 0 10	RunNo: 176096 Analysis Date: 9/20/2019	<u>af Val %RPD RPDLimit Qual</u> 7 0 10	RunNo: 176096 Analysis Date: 9/20/2019	<u>sf Val %RPD RPDLimit Qual</u>	RunNo: 176096 Analysis Date: 9/20/2019	<u>sf Val %RPD RPDLimit Qual</u> 0 0	RunNo: 176096 Analysis Date: 9/20/2019	LYTICAL QC SUMMARY REPORT BatchID: R176096

z_

RT		Ola
REPO	176096 9/20/2019	RPDLimit
UMMARY R176096	RunNo: 176096 Analysis Date: 9/20/201	
ANALYTICAL QC SUMMARY REPORT BatchID: R176096	Analysi	RPD Ref Val 0
TICAL (Bate	TestNo: SM2120 B Units: cpu@pH6	
ANALY	TestNo Units:	LowLimit HighLimit O
		Rec
		SPK Ref Val
		SPK value SPK value SPK value
		Result
Lockwood Hills LLC 190920022 Lockwood Ash Landfill		
Lockwood I 190920022 Lockwood /	SeqNo: 2714527 Samp ID: CCB	
T: Drder: :	SeqNo Samp I	
CLIENT: Work Order: Project:	ССВ	Color

Page 25 of 37

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

Qualifiers:

Sulfate MS	Sulfate	<u>Analyte</u> Chloride	MS	<u>Analyte</u> Sulfate	MS	<u>Analyte</u> Chloride Sulfate	LCS	<u>Analyte</u> Chloride Sulfate	LCS	<u>Analyte</u> Chloride Sulfate	MBLK	CLIENT: Work Order: Project:
	SeqNo: 2714577 Samp ID: 190926049-004a		SeqNo: 2714565 Samp ID: 190920022-033a (Pond Grab)		SeqNo: 2714552 Samp ID: 190926068-001c		SeqNo: 2714562 Samp ID: LCS		SeqNo: 2714540 Samp ID: LCS ICA-82-B		SeqNo: 2714539 Samp ID: MBLK 3449 DI	Lockwood Hills LLC ler: 190920022 Lockwood Ash Landfill
<u>Result</u> 882.2		<u>Result</u> 502.2 1859	ond Grab)	<u>Result</u> 1237		<u>Result</u> 203.6 415.2		<u>Result</u> 201.9 415.2		<u>Result</u> ND ND		IfII
<u>PQL</u> 20.0		40.0 20.0		<u>PQL</u> 20.0		<u>PQL</u> 100 100		<u>PQL</u> 100 100		<u>PQL</u> 1.00		
<u>SPK value</u> <u>SPK Ref Val</u> 200 691.7		<u>SPK value</u> <u>SPK Ref Val</u> 200 301.3 200 <i>X</i> 12.0f →1683		<u>SPK value</u> <u>SPK Ref Val</u> 200 1046		<u>SPK value</u> <u>SPK Ref Val</u> 200 0 400 0		<u>SPK value</u> <u>SPK Ref Val</u> 200 0 400 0		<u>SPK value</u> <u>SPK Ref Val</u>		
<u>%REC</u> 95.2		<u>%REC</u> 100 87.6		<u>%REC</u> 95.5		<u>%REC</u> 102 104		<u>%REC</u> 101 104		<u>%REC</u>		
<u>LowLimit</u> <u>HighLimit</u> 90 110	TestNo: E300 Units: mg/L	LowLimit 90 110 90 110	TestNo: E300 Units: mg/L	<u>LowLimit</u> 90 110	TestNo: E300 Units: mg/L	<u>LowLimit</u> 90 110 90 110	TestNo: E300 Units: mg/L	LowLimit 90 110 90 110	TestNo: E300 Units: mg/L	LowLimit HighLimit	TestNo: E300 Units: mg/L	ANALYTIC
<u>RPD Ref Val</u> 0	Analy	0 0 0 0	Analys	RPD Ref Val 0	Analys	<u>RPD Ref Val</u> 0 0	Analys	<u>RPD Ref Val</u> 0 0	Analys	<u> RPD Ref Val</u>	Analys	AL QC SUN BatchID: RI
<u>%RPD</u> RPDLimit	RunNo: 176097 Analysis Date: 10/5/2019	<u>%RPD</u> 0 0 0	RunNo: 176097 Analysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u> 0	RunNo: 176097 Analysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176097 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit 0 0	RunNo: 176097 Analysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u>	RunNo: 176097 Analysis Date: 10/4/2019	LYTICAL QC SUMMARY REPORT BatchID: R176097
Qual		Qual		Qual		Qual		Qual		Qual		ORT

CLIENT:		U					ANALYTICAL OC SUMMARY REPORT	ICAL	OC SUI	MMARY	Z REPO	RT
Work Order: Proiset:	brder: 190920022 I ockwood Ash I andfill	4fill						Ra	RatchID. R	B176007		
LIUJECI		IIID						Da		1600/1		
MSD							TestNo: E300	300			176097	
	Samp ID: 190920022-033a (F	(Pond Grab)					Units: mg/L	g/L	Anal	Analysis Date: 10	10/5/2019	
<u>Analyte</u> Chloride Sulfate		<u>Result</u> 501.7 1864	<u>PQL</u> 20.0 40.0	SPK value SPK Ref Val 200 301.3 200 1683	<u>tef Val</u> 301.3 1683	<u>%REC</u> 100 90.4	LowLimit HighLimit 90 11 90 11	00	<u>RPD Ref Val</u> 502.2 1859	<u>%RPD</u> 0.0916 0.294	<u>RPDLimit</u> 20 20	Qual
DUP	SeqNo: 2714548						TestNo: E300	300		RunNo: 1	176097	
	Samp ID: 190926025-002a						Units: mg/L	g/L	Anal	Analysis Date: 10	10/4/2019	
<u>Analyte</u> Chloride		<u>Result</u> 52.52	<u>PQL</u> 2.00	SPK value SPK Ref Val 0	<u>lef Val</u> 0	<u>%REC</u> 0	<u>LowLimit</u> <u>HighLimit</u> 0	. 0	RPD Ref Val 52.78	<u>%RPD</u> 0.505	<u>RPDLimit</u> 19.6	Qual
DUP	SeqNo: 2714575						TestNo: E300	008		BunNo.	176007	
	Samp ID: 190926049-003a						Units: mg/L	g/L	Anal		10/5/2019	
<u>Analyte</u> Chloride		<u>Result</u> 263.8	<u>PQL</u> 5.00	SPK value SPK Ref Val 0	<u>lef Val</u> 0	%REC 0	<u>LowLimit</u> <u>HighLimit</u> 0	0	RPD Ref Val 264.7	<u>%RPD</u> 0.373	<u>RPDLimit</u> 19.6	Qual
CCB	SeqNo: 2714550						TestNo: F300	300		BunNo: 1	176097	
	Samp ID: CCB						Units: mg/L	g/L	Anal		10/4/2019	
Analyte		Result	POL	SPK value SPK Ref Val	Ref Val	<u>%REC</u>	LowLimit HighLimit		RPD Ref Val	%RPD	RPDLimit	<u>Qual</u>
Chloride		Q I	1.00	0	0	0	0	0	0	0		
Fluoride	:		0.100	0	0	0	0	0	0	0		
Nitrate, Sulfate	Nitrate, Nitrogen (As N) Sulfate		0.0200 1.00	00	00	00	0 0	00	00	00		
CCB	SeqNo: 2714561						TestNo: E300	300		RunNo: 1	176097	
	Samp ID: CCB						Units: mg/L	g/L	Anal		10/4/2019	
<u>Analyte</u>		<u>Result</u>	POL		SPK Ref Val	<u>%REC</u>	LowLimit HighLimit		RPD Ref Val	%RPD	RPDLimit	Qual
			00100		5 0	-	- 0	5 0				
Nitrate.	Nitrate. Nitrogen (As N)	ON ON	0.0200									
Sulfate	- -	ND	1.00	0	0	0	0	0	00	0		
Qualifiers:	rs: ND - Not Detected at the Reporting Limit	Reporting Limit		S - Spike Recovery outside accepted recovery limits	very outside a	ccepted reco	very limits	B	B - Analyte detected in the associated Method Blank	d in the associa	ated Method E	slank
	J - Analyte detected below quantitation limits	w quantitation limits		R - RPD outside accepted recovery limits	de accepted re	covery limits					Page 27 of 37	of 37
											1	•

Besult FOL SEK Rei Value SEK Rei Value SEK Rei Value SER Value SER Rei Value <t< th=""><th>Qualifiers:</th><th><u>Analyte</u> Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate</th><th>Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCV SeqNo: 277 Samp ID: C</th><th>Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCV SeqNo: 271 Samp ID: C</th><th>Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCB SeqNo: 271 Samp ID: C</th><th>Work Order: Project: CCB SeqN</th></t<>	Qualifiers:	<u>Analyte</u> Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate	Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCV SeqNo: 277 Samp ID: C	Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCV SeqNo: 271 Samp ID: C	Analyte Chloride Fluoride Nitrate, Nitrogen (As N) Sulfate CCB SeqNo: 271 Samp ID: C	Work Order: Project: CCB SeqN
POL 1.00 SPK Value 0.100 SPK Ref Val 0.0200 SPK Ref Val 0.0200 SPK Ref Val 0.0200 SPK Ref Val 0.00200 SPK Re	ND Not Detected at the D	(As N)	(As N) o: 2714560 D: CCV	(As N) o: 2714549 ID: CCV	(As N) o: 2714581 ID: CCB	190920022 Lockwood Ash Landf c: 2714572 ID: CCB
SPK value SPK Ref Val %REC LowLin 0 101 0 101 10	noting I in it	<u>Result</u> 10.03 1.027 1.038 10.16	<u>Result</u> 9.949 1.007 1.034 10.12	<u>Result</u> ND ND ND	Result ND ND ND	
SPK Ref Val %REC LowLim 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1		<u>PQL</u> 1.00 0.100 0.0200 1.00	<u>PQL</u> 1.00 0.100 0.0200 1.00	<u>PQL</u> 1.00 0.100 1.00	<u>PQL</u> 1.00 0.100 0.0200 1.00	
ANALYTICAL QC SUMMARY BatchID: R176097 BatchID: R176097 BatchID: R176097 TestNo: E300 RunNo: 176 O O O O Analysis Date: 102 SPK Ref Val %REC LowLinnit HighLimit RPD Ref Val %RPP B O		<u>SPK value</u> 10 1 1 10	<u>SPK value</u> 10 1 10	0000	0000	
ANALYTICAL OC SUMMARY Batch D: R176097 TestNo: E300 RunNo: 776 Units: mg/L Analysis Date: 103 %REC LowLimit HighLimit RPD Ref Val %RPD %REC LowLimit HighLimit RPD Ref Val %RPD RunNo: 776 %REC LowLimit HighLimit RPD Ref Val %RPD RunNo: 776 %REC LowLimit HighLimit RPD Ref Val %RPD RunNo: 776 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 100 0 100 0 0 0 0 0 0 101 90 110 0 <t< td=""><td>re Recovery outsid</td><td><u>SPK Ref Val</u> 0 0 0 0</td><td><u>SPK Ref Val</u> 0 0 0</td><td><u>SPK Ref Val</u> 0 0 0</td><td>SPK Ref Val 0 0 0</td><td></td></t<>	re Recovery outsid	<u>SPK Ref Val</u> 0 0 0 0	<u>SPK Ref Val</u> 0 0 0	<u>SPK Ref Val</u> 0 0 0	SPK Ref Val 0 0 0	
ANALYTICAL QC SUMMARY BatchID: R176097 BatchID: R176097 TestNo: E300 RunNo: f76 Units: mg/L Analysis Date: 10/5 LowLimit HighLimit RPD Ref Val %RPD 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 0 10 0 0 0 0 0 0 10 0 0 0 0 0 0 10 0 0 0 0 0 0 10 10 0 0 </td <td>de accented reco</td> <td><u>%REC</u> 100 103 104 102</td> <td><u>%REC</u> 99.5 101 103 101</td> <td><u>※REC</u> 0 0</td> <td><u>%REC</u> 0 0</td> <td></td>	de accented reco	<u>%REC</u> 100 103 104 102	<u>%REC</u> 99.5 101 103 101	<u>※REC</u> 0 0	<u>%REC</u> 0 0	
BatchID: R176097 E300 RunNo: 176 mg/L Analysis Date: 105 qhLimit RPD Ref Val %RPD 76 0 0 0 0 0 0 0 0 0 0 0 0 0 0 RPD Ref Val %RPD 76 76 mg/L Analysis Date: 105 on 0 0 0 0 0 RPD Ref Val %RPD R 0 0 0 0 0 0 RPD Ref Val %RPD R mg/L Analysis Date: 105 110 0 0 0 0 0 0 0 0 110 RPD Ref Val %RPD R 110 RPD Ref Val %RPD 0 110 0 0 0 0 110 0 0 0 0 110 0 0 0 0	werv limits			nii st	unit Unit	ANALY TestNo Units:
L QC SUMMARY atchID: R176097 $\operatorname{RunNo:} 176$ Analysis Date: 10/5 $\operatorname{RPD}\operatorname{Ref}\operatorname{Val}$ $\operatorname{NunNo:} 176$ Analysis Date: 10/5 $\operatorname{RPD}\operatorname{Ref}\operatorname{Val}$ $\operatorname{NunNo:} 176$ Analysis Date: 10/4 0		<u>ighLimit</u> 110 110 110	<u>ighLimit</u> 110 110 110 110 5: E300 5: E300	<u>ighLimit</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<u>ghLimit</u> 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TTCA B :: E300 mg/L
176097 RunNo: 176 Yeis Date: 10/5 RunNo: 176 NunNo: 176 RunNo: 176 RunNo: 176 NunNo: 176 RunNo: 176 RunNo: 176 RunNo: 176 NunNo: 176 RunNo: 10/4 0 0 0 0 0 0 0	3 - Analyte detecte	<u>PPD Ref Val</u> 0 0 0 0	<u>RPD Ref Val</u> 0 0 0 Ana	RPD Ref Val 0 0 0	<u>RPD Ref Val</u> 0 0 0 0 Anal	L QC SUI atchID: R
	d in the associated	<u>%RPD</u> 0 0 0 0	<u>%RPD</u> <u>RPDLimit</u> 0 0 0 0 RunNo: 176097 Nysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u> 0 0 0 0 0 RunNo: 176097 Iysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u> 0 0 0 RunNo: 176097 ysis Date: 10/5/2019	MMARY RE) 176097 RunNo: 176097 ysis Date: 10/5/2019
	ank	Qua	Qual	Qual	Qual	RT

-

--

CLIENT:		rc					ANALY	TICA]	L QC SUI	ANALYTICAL QC SUMMARY REPORT	EPOR	L
WOFK Uraer: Proiect:	raer: 190920022 I ockwood Ash I andfill	ndfill						ß	BatchID- R	R176097		
								5				
CCV	SeqNo: 2714571						TestNo	TestNo: E300		RunNo: 176097	×	
	Samp ID: CCV						Units:	Units: mg/L	Anal		019	
Analyte		<u>Result</u>	Pol	SPK value	<u>SPK Ref Val</u>	<u>%REC</u>	LowLimit H	HighLimit	RPD Ref Val	<u>%RPD</u> RPD	RPDLimit 0	Qual
Chloride		10.04	1.00	10	0	100	06	110	0			
Fluoride		1.022	0.100	-	0	102	06	110	0	0		
Nitrate, N	Nitrate, Nitrogen (As N)	1.036	0.0200		0	104	06	110	0	0		
Sulfate		10.17	1.00	10	0	102	66	110	0	0		
S	SeqNo: 2714580						TestNo	TestNo: E300		BunNo: 176097		
	Samp ID: CCV						Units:	Units: mg/L	Anal		019	
Analyte		Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit H	HighLimit	RPD Ref Val	<u>%RPD</u> RPC	RPDLimit 0	Qual
Chloride		10.08	1.00	10	0	101	06	110	0	0		
Fluoride		0.981	0.100	-	0	98.1	06	110	0	0		
Nitrate, h	Nitrate, Nitrogen (As N)	1.039	0.0200	-	0	104	06	110	0	0		
Sulfate		10.22	1.00	10	0	102	06	110	0	0		
ICB	SeqNo: 2714538						TestN	TestNo: E300		RunNo: 176097	2	
	Samp ID: ICB 3449 DI						Units	Units: mg/L	Ana		019	
Analyte		Result	POL	SPK value	SPK Ref Val	%REC	<u>LowLimit</u> <u>H</u>	<u>HighLimit</u>	RPD Ref Val	%RPD RPC	RPDLimit (Qual
Chloride		DN	1.00	0	0	0	0	0	0	0		
Sulfate		QN	1.00	0	0	0	0	0	0	0		
<u>c</u>	SeqNo: 2714537						TestN	TestNo: E300		RunNo: 176097	2	
	Samp ID: ICV IC100319C						Units	Units: mg/L	Ana		019	
<u>Analyte</u> Chloride		<u>Result</u> 9.965	<u>POL</u> 1.00	<u>SPK value</u> 10	<u>SPK Ref Val</u> 0	<u>%REC</u> 99.7	<u>LowLimit</u> <u>H</u> 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD_RPI</u> 0	RPDLimit (<u>Qual</u>
Sulfate		10.19	1.00	10	0	102	06	110	0	0		

Page 29 of 37 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit

Qualifiers:

Qualifiers:	<u>Analyte</u> Chloride	MS Seq	<u>Analyte</u> Sulfate	Sam	MS Seq	Sulfate	<u>Analyte</u> Chloride	Sam	LCS Seqt	Sulfate	<u>Analyte</u> Chloride		LCS Seq	Sulfate	<u>Analyte</u> Chloride	Sam	LCS SeqN	Sulfate	<u>Analyte</u> Chloride	MBLK SeqN	Project:	CLIENT: Work Order:
ND - Not Detected at the Reporting Limit		SeqNo: 2714657 Samp ID: 190920022-007a <i>(8909-SH</i>)		Samp ID: 190920022-018a (Under Drain 2)	SeqNo: 2714637			Samp ID: LCS	SeqNo: 2714642			Samp ID: LCS	SeqNo: 2714617			Samp ID: LCS ICA-82-B	SeqNo: 2714596			SeqNo: 2714595 Samp ID: MBLK 3449 DI	Lockwood Ash Landfill	Lockwood Hills LLC 190920022
orting Limit	<u>Result</u> 21.16	.SH)	<u>Result</u> 2133	r Drain 2)		403.3	<u>Result</u> 194.6			403.4	<u>Hesult</u> 194.1			405.9	<u>Result</u> 194.9			ND	<u>Result</u> ND			
	<u>PQL</u> 2.00		<u>PQL</u> 50.0			100	100			100	100			100	100			1.00	1.00			
S - Spi	<u>SPK value</u> 20		<u>SPK value</u> 500			400	<u>SPK value</u> 200			400	<u>SPK value</u> 200			400	<u>SPK value</u> 200				<u>SPK value</u>			
S - Spike Recovery outside accepted recovery limits	<u>SPK Ref Val</u> 0		<u>SPK Ref Val</u> 1649			0	<u>SPK Ref Val</u> 0			0	<u>SPK Het Val</u> 0			0	<u>SPK Ref Val</u> 0		:		SPK Ref Val			
le accepted rec	<u>%REC</u> 106		<u>%REC</u> 96.9			101	<u>%REC</u> 97.3			101	<u>%нес</u> 97.1			101	<u>%REC</u> 97.4				<u>%REC</u>			
overy limits	<u>LowLimit</u> <u>Hi</u> 90	TestNo: E300 Units: mg/L	<u>LowLimit</u> Hi 90	Units: mg/L	TestNo: E300	06	<u>LowLimit</u> <u>Hi</u> g 90	Units: mg/L	TestNo	06	<u>LowLimit</u> <u>Hi</u> g	_ <u>⊒</u> .	TestNo: E300	06	<u>LowLimit Hiç</u> 90	Units: mg/L	TestNo: E300		<u>LowLimit</u> <u>Hi</u> ç	TestNo: E300 Units: mg/L		ANALY
	<u>HighLimit</u> 110	: E300 mg/L	<u>HighLimit</u> 110	mg/L	: E300	110	<u>HighLimit</u> 110	mg/L	: E300	110	<u>HighLimit</u> 110	mg/L	: E300	110	<u>HighLimit</u> 110	mg/L	: E300		<u>HighLimit</u>	: E300 mg/L	Ш	TICA
B - Analyte detected in the associated Method Blank	<u>RPD Ref Val</u> 0	Ana	<u>RPD Ref Val</u> 0	Ana		0	<u>RPD Ref Val</u> 0	Ana		0	<u>אי אפר עמו</u> 0	Ana		0	<u>RPD Ref Val</u> 0	Ana			RPD Ref Val	Ana	BatchID: F	LYTICAL QC SUMMARY REPORT
ted in the associ	0 0	RunNo: Analysis Date: 1	<u>%RPD</u> 0	Analysis Date: 1	RunNo:	0	<u>%RPD</u> 0		RunNo: 1	0	0 <u>ПАН%</u>	Analysis Date: 1	RunNo: 1	0	0 <u>88%</u>		RunNo: 1		<u>%RPD</u>	RunNo: 1 Analysis Date: 1	R176099	IMMAR)
iated Method B	<u> RPDLimit</u>	176099 10/4/2019	<u>RPDLimit</u>	10/5/2019	176099		RPDLimit	10/5/2019	176099		RPDLimit	10	176099		<u>RPDLimit</u>	10/4/2019	176099		<u> RPDLimit</u>	176099 10/4/2019		Y REPO
lank	<u>Qual</u>		Qual				Qual				Qual				Qual				Qual			RT

Vouls O		Lockwood Hills LLC					ANALY	TICA	L QC SUI	ANALYTICAL QC SUMMARY REPORT	REPO	RT
work U Project:	raer:	190920022 Lockwood Ash Landfill						â	BatchID: R	R176099		
SM	SeqNo: 2714657 Samp ID: 190920	SeqNo: 2714657 Samp ID: 190920022-007a <i>(8909-SH)</i>					TestNo Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10 /4	176099 10/4/2019	
<u>Analyte</u> Sulfate		Result 122.1	<u>POL</u> 4.00	SPK value SPK Ref Val 20 102.9		<u>%REC</u> 95.8	<u>LowLimit Hi</u> 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> B	RPDLimit	Qual
MS	SeqNo: 2714666 Samp ID: 190920	SeqNo: 2714666 Samp ID: 190920022-013a (9306-SH)					TestNo Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10/4	176099 10/4/2019	
<u>Analyte</u> Chloride Sulfate		<u>Result</u> 21.09 92.51	<u>POL</u> 2.00 4.00	SPK value SPK Ref Val 20 20 71.7	0 -	<u>%REC</u> 105 104	LowLimit Hi 90 90	<u>HighLimit</u> 110 110	<u>RPD Ref Val</u> 0 0	<u>8.8PD</u> 0 0	RPDLimit	Qual
MSD	SeqNo: 271 Samp ID: 19	SeqNo: 2714643 Samp ID: 190920022-018a <i>(Under Drain 2)</i>					TestNc Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10/5	176099 10/5/2019	
<u>Analyte</u> Sulfate		<u>Result</u> 2132	<u>PQL</u> 50.0	SPK value SPK Ref Val 500 164	. ന	<u>%REC</u> 96.7	<u>LowLimit</u> <u>Hi</u> 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 2133	<u>%RPD</u> <u>P</u> 0.0417	<u>RPDLimit</u> 20	Qual
MSD	SeqNo: 2714658 Samp ID: 190920	SeqNo: 2714658 Samp ID: 190920022-007a <i>(8909-SH)</i>					TestNo Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10/4	1 76099 10/4/2019	
<u>Analyte</u> Chloride Sulfate	o	<u>Result</u> 21.32 121.8	<u>POL</u> 2.00 4.00	SPK value SPK Ref Val 20 20 102.9		<u>%REC</u> 107 94.4	LowLimit HighLimit 90 110 90 111	<u>ighLimit</u> 110 110	<u>RPD Ref Val</u> 21.16 122.1	<u>%RPD</u> <u>F</u> 0.772 0.231	<u>RPDLimit</u> 20 20	Qual
MSD		SeqNo: 2714667 Samp ID: 190920022-013a <i>(9306-SH)</i>					TestNo Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10/4	176099 10/4/2019	
<u>Analyte</u> Chloride Sulfate	ά	<u>Result</u> 21.14 91.94	<u>POL</u> 2.00 4.00	SPK value SPK Ref Val 20 71.7 20 71.7		<u>%REC</u> 106 101	LowLimit Hi 90 90	HighLimit 110 110	<u>RPD Ref Val</u> 21.09 92.51	<u>%RPD</u> E 0.214 0.614	RPDLimit 20 20	Qual
CCB	SeqNo: 2714605 Samp ID: CCB	2714605 CCB					TestNo	TestNo: E300 Units: mg/L	Anal	RunNo: 176 Analysis Date: 10/4	176099 10/4/2019	
<u>Analyte</u> Chloride Fluoride		<u>Result</u> 0.04721 0.02597	<u>PQL</u> 1.00 0.100	SPK value SPK Ref Val 0 0		<u>%REC</u> 0 0	LowLimit H 0	<u>HighLimit</u> 0 0	RPD Ref Val 0 0	<u>%RPD</u> E 0 0	RPDLimit	Qual
Qualifiers:		ND - Not Detected at the Reporting Limit		S - Spike Recovery outside accepted recovery limits	S - Spike Recovery outside accepted reco	cepted reco	very limits	I	3 - Analyte detecte	B - Analyte detected in the associated Method Blank	d Method Bl	Method Blank

Qualifiers:	<u>Analyte</u> Chloride Fluoride Sulfate	ССВ	<u>Analyte</u> Chloride Fluoride Sulfate	ССВ	<u>Analyte</u> Chloride Fluoride Sulfate	ССВ	<u>Analyte</u> Chloride Fluoride Sulfate	ССВ	<u>Analyte</u> Sulfate	ССВ	CLIENT: Work Order: Project:
: ND - Not Detected at the Reporting Limit		SeqNo: 2714647 Samp ID: CCB		SeqNo: 2714641 Samp ID: CCB		SeqNo: 2714628 Samp ID: CCB		SeqNo: 2714616 Samp ID: CCB		SeqNo: 2714605 Samp ID: CCB	der: 190920022 Lockwood Ash Landfill
e Reporting Limit	<u>Result</u> 0.05739 0.02657 0.006693		<u>Result</u> 0.05069 0.02488 ND		<u>Result</u> 0.0506 0.02657 ND		<u>Hesult</u> 0.05438 0.02749 0.008728		<u>Result</u> ND		dfill
	<u>PQL</u> 1.00 1.00		<u>PQL</u> 1.00 0.100 1.00		<u>PQL</u> 1.00 0.100 1.00		<u>PQL</u> 1.00 0.100 1.00		<u>PQL</u> 1.00		
S - Spike Recov	<u>SPK value</u> <u>SPK Ref Val</u> 0 0 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 0 0 0		<u>SPK value</u> <u>SPK Ref Val</u> 0 (0 (0 (<u>SPK value</u> SPK Ref Val 0 0 0		<u>SPK value SPK Ref Val</u> 0 (
ery outside ac	o 0 0		<u>if Val</u> 0 0		<u>rf Va</u> l 0 0		<u>if Va</u> l 0 0		<u>f Val</u> 0		
S - Spike Recovery outside accepted recovery limits	<u>%REC</u> 0 0 0		<u>%REC LowLimit</u> 0 c 0 c		<u>%REC</u> LowLimit 0 0 0 0		<u>%REC</u> LowLimit 0		<u>%REC LowLimi</u> 0		ANA
lmits	LowLimit HighLimit 0 0 0 0 0 0	TestNo: E300 Units: mg/L	<u>.imit</u> <u>HighLimit</u> 0000 00000000000000000000000000000000	TestNo: E300 Units: mg/L	<u>.imit</u> <u>HighLimit</u> 0	TestNo: E300 Units: mg/L	imit HighLimit 0 0 0 0 0 0	TestNo: E300 Units: mg/L	<u>imit HighLimit</u> 0 0	TestNo: E300 Units: mg/L	ALYTICA
B - Analyte detect	<u> </u>	Ana	<u>RPD Ref Val</u> 0 0 0	Ana	<u>RPD Ref Val</u> 0 0	Ana	<u>RPD Ref Val</u> 0 0	Anal	<u>RPD Ref Val</u> 0	Anal	AL QC SU BatchID: R
B - Analyte detected in the associated Method Blank	<u>%RPD</u> 0 0 0	RunNo: 176099 Analysis Date: 10/5/2019	<u>%RPD</u> 0 0 0	RunNo: 176099 Analysis Date: 10/5/2019	<u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176099 Analysis Date: 10/4/2019	<u>%RPD</u> <u>RPDLimit</u> 0 0	RunNo: 176099 Analysis Date: 10/4/2019	<u>%RPD</u> RPDLimit 0	RunNo: 176099 Analysis Date: 10/4/2019	LYTICAL QC SUMMARY REPORT BatchID: R176099
lank	Qual		Qual		Qual		Qual		Qual		IRT

. — = .

-

-

Ider: 190920022 Lockwood Ash Landfill Eeseuft SeqNo: 2714604 Samp ID: Eresult Samp ID: Eresult Samp ID: Eresult SeqNo: 2714615 SeqNo: 2714627 SeqNo: 2714628 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714648 SeqNo: 2714648 SeqNo: <th></th> <th></th> <th>ANALYTIC</th> <th>AL UCSU</th> <th>ANALY HUCAL UC SUMMARY KEPUKI</th> <th>Y</th>			ANALYTIC	AL UCSU	ANALY HUCAL UC SUMMARY KEPUKI	Y
: Lockwood Ash Landfill SeqNo: 2714604 Samp ID: CCV Samp ID: CCV SeqNo: 2714615 SeqNo: 2714615 Samp ID: CCV SeqNo: 2714615 Samp ID: CCV SeqNo: 2714627 Samp ID: CCV SeqNo: 2714627 Samp ID: CCV SeqNo: 2714627 Samp ID: CCV SeqNo: 2714627 SeqNo: 2714627 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714648 SeqNo: 27148 SeqNo: 27148 SeqNo: 271488 S						
SeqNo: 2714604 SeqNo: 2714604 Samp ID: CCV 9.775 Samp ID: CCV 9.991 SeqNo: 2714615 0.9813 SeqNo: 2714615 9.76 Samp ID: CCV 9.76 SeqNo: 2714627 9.957 SeqNo: 2714627 9.9563 SeqNo: 2714627 9.9563 SeqNo: 2714628 0.9913 SeqNo: 2714638 9.9663 SeqNo: 2714638 0.9913 SeqNo: 2714638 9.9663 SeqNo: 2714648 9.998 SeqNo: 2714646 9.998				BatchID: R	R176099	
Samp ID: CCV Result 9.775 9.775 9.775 9.991 9.991 9.991 SeqNo: 2714615 9.991 Samp ID: CCV Result Samp ID: CCV 9.957 SeqNo: 2714615 9.957 SeqNo: 2714615 9.957 SeqNo: 2714627 9.957 SeqNo: 2714628 0.9813 SeqNo: 2714638 0.9813 SeqNo: 2714638 0.9913 SeqNo: 2714638 0.9918 SeqNo: 2714638 0.9913 SeqNo: 2714638 0.9918 SeqNo: 2714648 9.963 SeqNo: 2714648 9.9938 SeqNo: 2714646 9.9938 SeqNo: 2714646 9.9938			TestNo: E300		RunNo: 176099	
Besult 9.775 9.991 9.991 SeqNo: 2714615 9.991 Samp ID: CCV 9.775 Samp ID: CCV 9.766 Samp ID: CCV 9.777 SeqNo: 2714627 9.957 SeqNo: 2714627 9.957 SeqNo: 2714628 0.9813 SeqNo: 2714628 0.9913 SeqNo: 2714638 0.9918 SeqNo: 2714646 9.832 SeqNo: 2714646 9.832 SeqNo: 2714646 9.832 SeqNo: 2714646 9.832			Units: mg/L	Anal		
9.775 9.775 9.991 9.991 SeqNo: 2714615 9.961 Samp ID: CCV 9.957 Samp ID: CCV 9.957 Samp ID: CCV 9.957 SeqNo: 2714615 9.957 SeqNo: 2714627 9.957 Samp ID: CCV 0.9813 SeqNo: 2714628 0.9813 Samp ID: CCV 9.963 SeqNo: 2714638 0.9918 SeqNo: 2714638 0.9918 SeqNo: 2714638 0.9918 SeqNo: 2714638 0.9918 SeqNo: 2714648 9.9938 SeqNo: 2714646 9.9938 SeqNo: 2714646 9.9938	<u>SPK Ref Va</u>	<u>%REC</u>	HighLir	RPD Ref V	<u>%RPD</u> RPDLimit	Qual
0.9813 9.991 SeqNo: 2714615 9.991 Samp ID: CCV 9.957 Samp ID: CCV 9.957 Samp ID: CCV 9.957 SeqNo: 2714627 9.957 Samp ID: CCV 9.957 SeqNo: 2714627 9.957 Samp ID: CCV 9.957 SeqNo: 2714638 0.9813 SeqNo: 2714638 0.9913 SeqNo: 2714638 0.9918 SeqNo: 2714648 9.9938 SeqNo: 2714646 9.9938	10	97.7	90 110		0	
9.991 SeqNo: 2714615 Samp ID: CCV Besult 9.776 SeqNo: 2714627 SeqNo: 2714627 SeqNo: 2714627 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714638 SeqNo: 2714646 Samp ID: CCV SeqNo: 2714646 SeqNo: 2714646 SeqNo<	0.100 1 0	98.1	90 110		0	
SeqNo: 2714615 Samp ID: CCV SeqNo: 2714627 Samp ID: CCV SeqNo: 2714638 Samp ID: CCV Samp ID: CCV Samp ID: CCV	10	6.99.9	90 110	0	0	
Samp ID: CCV SeqNo: 2714627 Samp ID: CCV Samp ID: CCV Samp ID: CCV SeqNo: 2714638 Samp ID: CCV SeqNo: 2714646 Samp ID: CCV			TestNo: F300		RunNo: 176000	i
e SeqNo: 2714627 Samp ID: CCV SeqNo: 2714638 Samp ID: CCV Samp ID: CCV SeqNo: 2714646 Samp ID: CCV			Units: mg/L	Ana		
SeqNo: 2714627 Samp ID: CCV Samp ID: CCV Samp ID: CCV Samp ID: CCV Samp ID: CCV	POL SPK value SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
SeqNo: 2714627 Samp ID: CCV Samp ID: CCV Samp ID: CCV Samp ID: CCV SeqNo: 2714638 Samp ID: CCV	_	97.6	6	-		
SeqNo: 2714627 Samp ID: CCV SeqNo: 2714638 Samp ID: CCV Samp ID: CCV SeqNo: 2714646 Samp ID: CCV	-				0	
SeqNo: 2714627 Samp ID: CCV SeqNo: 2714638 Samp ID: CCV Samp ID: CCV Samp ID: CCV	1.00 10 0	9.66			0	
Samp ID: CCV SeqNo: 2714638 Samp ID: CCV SeqNo: 2714646 Samp ID: CCV			TootNo: E200			
e SeqNo: 2714638 Samp ID: CCV SeqNo: 2714646 Samp ID: CCV			Units: mg/L	Ana	Analysis Date: 10/4/2019	
e SeqNo: 2714638 Samp ID: CCV SeqNo: 2714646 Samp ID: CCV	PQL SPK value SPK Ref Val	1%	LowLimit HighLir	RPD Ref V	<u>%RPD_RPDLimit</u>	Qual
SeqNo: 2714638 Samp ID: CCV e e SeqNo: 2714646 Samp ID: CCV		97.0	90 110 90 110		5 0	
SeqNo: 2714638 Samp ID: CCV e e SeqNo: 2714646 Samp ID: CCV	10		6		0 0	
Samp ID: CCV SeqNo: 2714646 Samp ID: CCV						
e SeqNo: 2714646 Samp ID: CCV			TestNo: E300 Units: ma/L	Ana	RunNo: 176099 Analvsis Date: 10/5/2019	
e SeqNo: 2714646 Samp ID: CCV					2	
e SeqNo: 2714646 Samp ID: CCV	POL SPK value SPK Ref Val 1.00 10 0	<u>%REC</u> 98.3	LowLimit HighLimit	BPD Ref Val	<u>%RPD</u> <u>RPDLimit</u> 0	Qual
SeqNo: 2714646 Samp ID: CCV	·		06			
SeqNo: 2714646 Samp ID: CCV	1.00 10 0		06		. 0	
Samp ID: CCV			TestNo: E300		BunNo: 176099	
			Units: mg/L	Ana		
	POL SPK value SPK Ref Val	<u>%REC</u>	LowLimit HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Chloride 9.828	10	98.3	90 110		0	
Fluoride 0.9529	0.100 1 0	95.3	90 110	0	0	
Qualifiers: ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	tside accepted rec	covery limits	B - Analyte detect	B - Analyte detected in the associated Method Blank	lank
J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	ted recovery limi	ts		Dagan 33 of 37	7f 27

CLIENT: Work Order:	der:					ANALYTICA	AL QC SUM	ANALYTICAL QC SUMMARY REPORT	RT
Project:	Lockwood Ash Landfill						BatchID: R17	R176099	
CCV	SeqNo: 2714646 Samp ID: CCV					TestNo: E300 Units: mg/L	Analys	RunNo: 176099 Analysis Date: 10/5/2019	
<u>Analyte</u> Sulfate		<u>Result</u> 9.986	<u>Рог</u> 1.00	<u>SPK value</u> <u>SPK Ref Val</u> 10 0	<u>%REC</u> 99.9	LowLimit HighLimit 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit	Qual
CRI	SeqNo: 2714597 Samp ID: CRI ICA-81-D					TestNo: E300 Units: mg/L	Analys	RunNo: 176099 Analysis Date: 10/4/2019	
Analyte		<u>Result</u>	POL	<u>SPK Ref Va</u>	<u>%REC</u>	HighLi	<u>RPD Ref Val</u>	<u>%RPD</u> RPDLimit	Qual
Sulfate		2.028	1.00	N -	101	50 150	0 0	0 0	
ICB	SeqNo: 2714594					TestNo: E300			
							milaiya	milalysis Date. 10/1/2013	
<u>Analyte</u> Chloride		<u>Result</u> 0.05196	1.00	<u>SPK value SPK Ref Val</u> 0 0	0 0	<u>LowLimit</u> <u>HighLimit</u> 0 0 0	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	Qual
Sulfate		0.01207	1.00		0		0	0	
R	SeqNo: 2714593					TestNo: E300		RunNo: 176099	
	Samp ID: ICV IC100319C					Units: mg/L	Analys		
<u>Analyte</u> Chloride		<u> Result</u> 9.805	1.00	<u>SPK value</u> <u>SPK Ref Val</u> 10 0	<u>%REC</u> 98.1	<u>LowLimit</u> <u>HighLimit</u> 90 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit	Qual
Sulfate		10.08	1.00		101			0	

~

- -

. _

Qualifiers:

ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 34 of 37

R - RPD outside accepted recovery limits

CLIENT:	T:	Lockwood Hills LLC										8
Work Order:	Order:	190920022					ANALY	IICA	r ac so	ANALY IICAL QU SUMMARY KEPUKI	EFOR	
Project:	. .	Lockwood Ash Landfill						â	BatchID: R	R176134		
MBLK		SeqNo: 2715324 Samp ID: MBLK 3449 DI					TestNc Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10/7/2019	1 019	
<u>Analyte</u> Chloride Sulfate		Result ND ND	POL 1.00	SPK value	SPK Ref Val	%REC	LowLimit <u>Hi</u>	HighLimit	RPD Ref Val	RPD RPI	<u>RPDLimit</u>	Qual
rcs	SeqNo: Samp II	SeqNo: 2715325 Samp ID: LCS ICA-82-B					TestNc Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10/7/2019	14 019	
<u>Analyte</u> Chloride Sulfate		<u>Result</u> 200.9 414	100 100	<u>SPK value</u> 200 400	<u>SPK Ref Val</u> 0 0	<u>%REC</u> 100 104	LowLimit Hi 90	HighLimit 110 110	RPD Ref Val 0 0	<u>%RPD</u> RP 0 0	RPDLimit 0	Qual
rcs	SeqNo: Samp II	SeqNo: 2715347 Samp ID: LCS					TestNc Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10 /8/2019	34 (019	
<u>Analyte</u> Chloride Sulfate	a a	<u>Result</u> 202.6 414.9	<u>POL</u> 100	SPK value 200 400	<u>SPK Ref Val</u> 0 0	<u>%REC</u> 101 104	LowLimit Hi 90 90	<u>HighLimit</u> 110 110	<u>RPD Ref Val</u> 0 0	<u>%RPD</u> RP 0 0	RPDLimit	Quai
WS	SeqNo. Samp II	SeqNo: 2715330 Samp ID: 190920022-011a <i>(8911-SH)</i>					TestNc Units:	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10/7/2019	34 2019	
<u>Analyte</u> Sulfate		<u>Result</u> 312.4	<u>PQL</u> 20.0	<u>SPK value</u> 100	<u>SPK Ref Val</u> 214.7	<u>%REC</u> 97.7	<u>LowLimit</u> <u>Hi</u> 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>APD RP</u> 0	RPDLimit 0	Qual
MS	SeqNo: Samp ID:	SeqNo: 2715344 Samp ID: 190930032-001a					TestNc Units:	TestNo: E300 Units: mg/L	Ana	RunNo: 176134 Analysis Date: 10/7/2019	34 2019	
<u>Analyte</u> Chloride Sulfate	്	<u>Result</u> 1904 927.7	<u>POL</u> 50.0 50.0	SPK value 500 500	<u>SPK Ref Val</u> 1423 414.1	<u>%REC</u> 96.2 103	LowLimit Hi 90 90	HighLimit 110 110	RPD Ref <u>Val</u> 0 0	0 0 0	RPDLimit	Qual
MSD	SeqNo Samp II	SeqNo: 2715331 Samp ID: 190920022-011a <i>(8911-SH)</i>					TestN(Units:	TestNo: E300 Units: mg/L	Ana	RunNo: 176134 Analysis Date: 10/7/2019	34 2019	
<u>Analyte</u> Sulfate		<u>Result</u> 313.8	<u>PQL</u> 20.0	SPK value 100	<u>SPK Ref Val</u> 214.7	<u>%REC</u> 99.1	LowLimit Hi 90	<u>HighLimit</u> 110	<u>RPD Ref Val</u> 312.4	<u>%RPD</u> <u>RP</u> 0.450	<u>RPDLimit</u> 20	Qual
Qualifiers:	ers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits	e e e e e e e e e e e e e e e e e e e	S - Sp R - RI	S - Spike Recovery outside accepted recovery limitsR - RPD outside accepted recovery limits	e accepted recorrected recorre	overy limits		3 - Analyte detect	B - Analyte detected in the associated Method Blank P_{2002} 35 of 5	Method Blank Dage 35 of 37	ık f.37

Qualifiers:	Sulfate	Nilfale, I		Fluoride	Chloride	Analyte		CCV	Sulfate	Nitrate, ľ	Fluoride	Chloride	Analyte		ССВ	Sulfate	Nitrate, N	Fluoride	<u>Chloride</u>	Analvte		ССВ	Sulfate	Nitrate, N	Fluoride	Chloride	Analyte		ССВ	Project:	CLIENT: Work Order:
S: ND - Not Detected at the Reporting Limit I - Analyte detected below quantitation limits		INITALE, INITOGETI (AS IN)					Samp ID: CCV	SeqNo: 2715333		Nitrate, Nitrogen (As N)				Samp ID: CCB	SeqNo: 2715357		Nitrate, Nitrogen (As N)				Samp ID: CCB	SeqNo: 2715346		Nitrate, Nitrogen (As N)				Samp ID: CCB	SeaNo: 2715334	Lockwood Ash Landfill	 Lockwood Hills LLC rder: 190920022
Reporting Limit	10.14	1.000		1.021	10.05	<u>Result</u>			ND	ND	ND	ND	<u>Result</u>			ND	ND	ND	ND	Result			ND	ND	ND	ND	Result			dfill	C
n	1.00	0.0200		0.100	1.00	PQL			1.00	0.0200	0.100	1.00	POL			1.00	0.0200	0.100	1.00	POI			1.00	0.0200	0.100	1.00	PQL				
S - Spike Recovery outside accepted recovery limits	10	_	. .		0	SPK value SPK Ref Val			0	0	0	0	SPK value SPK Ref Val			0	0	0	0	SPK value SPK Ref Val			0	0	0	0	SPK value SPK Ref Val				
e accented re	0	c)	0	0	ef Val			0	0	0	0	ef Val			0	0	0	0	ef Val			0	0	0	0	ef Val				
accepted reco	101	104		102	101	%REC			0	0	0	0	<u>%REC</u>			0	0	0	0	%REC			0	0	0	0	%REC				
overy limits	06	0E	0	06	-	LowLimit HighLimit	Units: mg/L	TestNo: E300	0	0	0	0	<u>LowLimit</u> <u>HighLimit</u>	Units: mg/L	TestNo: E300	0	0	0	-	LowLimit HighLimit	Units: mg/L	TestNo: E300	0	0	0	-	LowLimit HighLimit	Units: mg/L	Tootho: E		ANALYTI
B -	110	-	5	110	110		g/L	300	0	0	0	0		9/L	300	0	0	0	<u>.</u>		J/L	300	0	0	0	0		9/L 200	3	Bat	LYTICAL
Analyte detected	0	c	5	0	0	RPD Ref Val	Analys		0	0	0	0	<u>RPD Ref Val</u>	Analys		0	0	0	0	RPD Ref Val	Analys		0	0	0	0	RPD Ref Val	Analysi		BatchID: R17	QC SUM
B - Analyte detected in the associated Method Blank	o	c	0	0	0	<u>%RPD</u> RPDLimit	Analysis Date: 10/7/2019	RunNo: 176134	0	0	0	0	<u>%RPD</u> RPDLimit	Analysis Date: 10/8/2019	RunNo: 176134	0	0	0		%RPD RPDLimit		RunNo: 176134	0	0	0		<u>%RPD</u> RPDLimit	Analysis Date: 10/7/2019		R176134	SUMMARY REPORT
lank ~f 27						Qual							Qual						a da	Qual							Qual				RT

-5 . .

-

Project: CCV Seq Sarr Analyte Chloride Fluoride	1, 1/0/4044								ł		
<u> </u>		dfill						B	BatchID: R	R176134	
<u>alyte</u> hloride luoride	SeqNo: 2715345 Samp ID: CCV						Test	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10/7/2019	
		<u>Result</u> 10.11 1.038	PQL 1.00 0.100	<u>SPK value</u> <u>SI</u> 10 1	<u>SPK Ref Val</u> 0 0	<u>%REC</u> 101 104	LowLimit 90 90	<u>HighLimit</u> 110 110	<u>RPD Ref Val</u> 0 0	<u>%RPD</u> RPDLimit 0	Qual
Nitrate, Nitrogen (As N) Sulfate	gen (As N)	1.042 10.15	0.0200 1.00	- <u></u>	00	104	06	110		000	
ccv s	SeqNo: 2715356 Samp ID: CCV						Test	TestNo: E300 Units: mg/L	Anal	RunNo: 176134 Analysis Date: 10/8/2019	
Analyte Chloride		<u>Result</u> 10.04	<u>POL</u> 1.00		<u>SPK Ref Val</u> 0	<u>%REC</u> 100		<u>HighLimit</u> 110	<u>RPD Ref Val</u> 0	<u>%RPD</u> RPDLimit 0	t <u>Qual</u>
Fluoride Nitrate, Nitrogen (As N) Sulfate	gen (As N)	1.008 1.04 10.2	0.100 0.0200 1.00	0	000	101 104 102	06 06	110 110	000	000	
CRI S	SeqNo: 2715326 Samp ID: CRI ICA-81-D						Test	TestNo: E300 Units: mg/L	Ana	RunNo: 176134 Analysis Date: 10/7/2019	
Analyte Sulfate		<u>Result</u> 2.031	<u>POL</u> 1.00	SPK value SI	<u>SPK Ref Val</u> 0	<u>%REC</u> 102	<u>LowLimit</u> 50	<u>HighLimit</u> 150	<u>RPD Ref Val</u> 0	<u>%RPD</u> <u>RPDLimit</u> 0	t <u>Qual</u>
رد در B	SeqNo: 2715323 Samp ID: ICB 3449 DI						Test	TestNo: E300 Units: mg/L	Ana	RunNo: 176134 Analysis Date: 10/7/2019	
<u>Analyte</u> Chloride Sulfate		Result ND ND	<u>PQL</u> 1.00 1.00	SPK value SI 0 0	<u>SPK Ref Val</u> 0 0	<u>%REC</u> 0 0	<u>LowLimit</u> 0 0	<u>HighLimit</u> 0 0	<u>RPD Ref Val</u> 0 0	<u>%RPD</u> RPDLimit 0 0	t <u>Qual</u>
	SeqNo: 2715322 Samp ID: ICV IC100319C						Test	TestNo: E300 Units: mg/L	Ana	RunNo: 176134 Analysis Date: 10/7/2019	
<u>Analyte</u> Chloride Sulfate		Result 10 10.1	POL 1.00	<u>SPK value</u> 10 10	SPK Ref Val 0 0	<u>%REC</u> 100 101	LowLimit 90 90	HighLimit 110 110	RPD Ref Val 0 0	%RPD RPDLimit 0 0	
Qualifiers:	ND - Not Detected at the Reporting Limit	Reporting Limit		S - Spike	S - Spike Recovery outside accepted recovery limits	accepted reco	very limits		8 - Analyte detect	B - Analyte detected in the associated Method Blank	l Blank

A.4 FIELD DUPLICATES

Sample No.	190920022-006	Field Duplicate No.	190920022-014	Run date: 10/31/2019	
Lab Code:	AES	Case No.	190920022	Sample Matrix: Groundwater	

% Solids Sample: NA

% Solids Duplicate: NA

Concentration Units (ug/I or mg/kg dry weight): mg/L (unless noted)

Analyte	Sample Concentration	с	Duplicate Concentration	с	RPD	Units	Q
Ammonia	0.5		0.5				
Alkalinity	300		320		6.5%		
Color	7		10			CPU	
Conductivity	747		752		0.7%	umhos/cm	
Chloride	4.18		4.19		0.2%		
Hardness	54		61		12.2%		
Sulfate	101		104		2.9%		
TDS	695		695				
TOC	2.5		2.6		3.9%		

Parameter*	Sample Concentration	с	Duplicate Concentration	с	RPD	Units	Q
рН	9.6					SU	
Temperature	16					Deg C	
Turbidity	>999					NTU	

*Field parameters not measured on field duplicate.

A.4 FIELD DUPLICATES

Sample No.	190920022-021	Field Duplicate No.	190920022-02	Run Date:	10/31/2019
Lab Code:	AES	Case No.	190920022	<u>S</u> ample Matrix:	Surface Water
	% Solids Sample:	NA		% Solids Duplicate:	NA

Concentration Units (ug/l or mg/kg dry weight): mg/L (unless noted)

Analyte	Sample Concentration	с	Duplicate Concentration	с	RPD	Units	Q
Ammonia	0.1	U	0.1	U			
Alkalinity	116		110		5.3%		
Color	7		7			CPU	
Conductivity	404		498		20.8%	umhos/cm	J
Chloride	43.1		43.2		0.2%		
Hardness	153		153				
Sulfate	26.3		25.8		1.9%		
TDS	145		265		58.5%		J
тос	3.2		3.2				

	Sample		Duplicate				
Parameter	Concentration	С	Concentration	С	RPD	Units	Q
рН	8.5		8.3		2.4%	SU	
Temperature	19		19			Deg C	
Turbidity	5		5			NTU	
Dissolved Oxygen	5.2		5.24		0.8%	mg/l	

Collection Date	Sample ID	Depth	Elevation	Units
9/18/2019	8908-D	6.42	606.55	feet
9/18/2019	8909-D	45.74	516.16	feet
9/18/2019	8910-D	22.91	535.43	feet
9/18/2019	8911-D	26.89	530.02	feet
9/18/2019	8942-D	15.84	543.11	feet
9/18/2019	8908-SH	8.01	604.76	feet
9/18/2019	8909-SH	11.18	550.45	feet
9/18/2019	8910-SH	6.48	552.07	feet
9/18/2019	8911-SH	25.61	531.31	feet
9/18/2019	9306-SH	9.81	556.41	feet
9/18/2019	7741	22.43	565.62	feet
9/18/2019	1842	7.32	551.88	feet
9/18/2019	8406	12.69	556.86	feet
9/18/2019	8407	OBSTRUCTED		feet
9/18/2019	8401	7.71	652.58	feet
9/18/2019	8402	9.69	654.40	feet
9/18/2019	8403	8.00	656.07	feet
9/18/2019	8404	10.40	592.33	feet
9/18/2019	8405	DRY		feet

Lockwood Ash Disposal Site Second Quarter 2019

FOURTH QUARTER



Experience is the solution 314 North Pearl Street

Albany, New York 12207 (800) 848-4983

(518) 434-4546

Fax (518) 434-0891

December 13, 2019

Dale Irwin Lockwood Hills LLC 590 Plant Road, PO Box 187 Dresden, NY 14441

Work Order No: 191122020

TEL: (315) 536-2359

RE: Lockwood Ash Landfill Quarterly

Dear Dale Irwin:

Adirondack Environmental Services, Inc received 31 samples on 11/22/2019 for the analyses presented in the following report.

Please see case narrative for specifics on analysis.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Monica Higdon Laboratory Manager

ELAP#: 10709

Adirondack Environmental Services, Inc

CASE NARRATIVE

CLIENT:	Lockwood Hills LLC	Date: 13-Dec-19
Project:	Lockwood Ash Landfill	
Lab Order:	191122020	

The sampling was performed in accordance with the AES field sampling procedures and/or the client specified sampling procedures. Sample containers were supplied by Adirondack Environmental Services.

Definitions - RL: Reporting Limit DF: Dilution factor

Qualifiers:	ND : Not Detected at reporting limit	C: CCV below acceptable Limits
	J: Analyte detected below quantitation limit	C+: CCV above acceptable Limits
	B: Analyte detected in Blank	S: LCS Spike recovery is below acceptable limits
	X : Exceeds maximum contamination limit	S+: LCS Spike recovery is above acceptable limits
	H: Hold time exceeded	Z: Duplication outside acceptable limits
	N: Matrix Spike below acceptable limits	T : Tentatively Identified Compound-Estimated
	N+: Matrix Spike is above acceptable limits	E :Above quantitation range-Estimated

Note : All Results are reported as wet weight unless noted

The results relate only to the items tested. Information supplied by the client is assumed to be correct.

			1.3		
Calcium	83900	50.0	μg/L	1	12/4/2019 3:38:00 PM
Copper	ND	5.00	μg/L	1	12/4/2019 3:38:00 PM
Iron	3620	50.0	μg/L	1	12/4/2019 3:38:00 PM
Magnesium	54900	50.0	μg/L	1	12/4/2019 3:38:00 PM
Manganese	258	20.0	μg/L	1	12/4/2019 3:38:00 PM
Potassium	22200	50.0	μg/L	1	12/4/2019 3:38:00 PM
Selenium	ND	5.00	μg/L	1	12/4/2019 3:38:00 PM
Sodium	53900	5000	μg/L	10	12/4/2019 3:44:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	435	5	mg/L CaCO3	1	12/4/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:33:33 PM
ANIONS BY ION CHROMATOGRA	REV 2.1			Analyst: CS	
Chloride	ND	1.00	mg/L	1	12/4/2019 8:31:59 PM
Sulfate	25.4	1.00	mg/L	1	12/4/2019 8:51:02 PM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	130	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA				Analyst: PL	

0.1

mg/L

1

Adirondack Environmental Services, Inc

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

(Prep: SW3010A - 11/25/2019

Result

8.3

10

)

1160

ND

299

ND

0.2

> 999

RL Qual

1.0

100

5.00

50.0

5.00

Units

S.U.

deg C

NTU

μg/L

μg/L

μg/L

μg/L

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Analyses

pH (E150.1)

Aluminum

Cadmium

Arsenic

Boron

Nitrogen, Ammonia (As N)

Temperature (E170.1)

ICP METALS - EPA 200.7

Turbidity (E180.1)

Client Sample ID: 1842 Collection Date: 11/21/2019 8:40:00 AM Lab Sample ID: 191122020-001 Matrix: GROUNDWATER

DF

1

1

1

1

Date Analyzed

Analyst: FLD

11/21/2019 8:40:00 AM

11/21/2019 8:40:00 AM

11/21/2019 8:40:00 AM

12/4/2019 3:38:00 PM

12/4/2019 3:38:00 PM

12/4/2019 3:38:00 PM

12/4/2019 3:38:00 PM

Analyst: KH

Page 3 of 58

11/25/2019 1:22:42 PM

Date: 13-Dec-19

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 1842

 Collection Date:
 11/21/2019 8:40:00 AM

 Lab Sample ID:
 191122020-001

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	781	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM				Analyst: CC	
TDS (Residue, Filterable)	535	5	mg/L	1	11/27/2019

Page 5 of 58

Adirondack Environmental Services, Inc

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8404 Collection Date: 11/20/2019 4:20:00 PM Lab Sample ID: 191122020-002 Matrix: GROUNDWATER

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP /	ARE NOT ELAP CE	RTIFIABLE	E			Analyst: FLD
pH (E150.1)	7.1			S.U.		11/20/2019 4:20:00 PM
Temperature (E170.1)	11			deg C		11/20/2019 4:20:00 PM
Turbidity (E180.1)	4	1.0		NTU		11/20/2019 4:20:00 PM
ICP METALS - EPA 200.7						Analyst: KH
(Prep: SW3010A - 1	1/25/2019)					
Aluminum	ND	100		μg/L	1	12/4/2019 3:48:00 PM
Arsenic	5.31	5.00	Ν	μg/L	1	12/4/2019 3:48:00 PM
Boron	179	50.0		μg/L	1	12/4/2019 3:48:00 PM
Cadmium	ND	5.00		μg/L	1	12/4/2019 3:48:00 PM
Calcium	128000	50.0		μg/L	1	12/4/2019 3:48:00 PM
Copper	ND	5.00		μg/L	1	12/4/2019 3:48:00 PM
Iron	106	50.0		μg/L	1	12/4/2019 3:48:00 PM
Magnesium	24800	50.0		μg/L	1	12/4/2019 3:48:00 PM
Manganese	21.4	20.0		μg/L	1	12/4/2019 3:48:00 PM
Potassium	1200	50.0		μg/L	1	12/4/2019 3:48:00 PM
Selenium	ND	5.00	Ν	μg/L	1	12/4/2019 3:48:00 PM
Sodium	11700	500		μg/L	1	12/4/2019 3:48:00 PM
HARDNESS - EPA 200.7 REV 4.4						Analyst: KH
Total Hardness (As CaCO3)	421	5		mg/L CaCO3	1	12/4/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)					Analyst: AVE
Mercury	ND	0.0002		mg/L	1	11/25/2019 1:41:59 PM
ANIONS BY ION CHROMATOGRA	EV 2.1				Analyst: CS	
Chloride	2.17	2.00	N	mg/L	2	12/4/2019 10:27:52 PM
Sulfate	137	2.00	-	mg/L	2	12/4/2019 10:27:52 PM
ALKALINITY TO PH 4.5 -SM 2320	B-2011					Analyst: DAA
Alkalinity, Total (As CaCO3)	300	10		mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1		mg/L	1	11/25/2019 1:24:19 PM

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8404

 Collection Date:
 1/20/2019 4:20:00 PM

 Lab Sample ID:
 191122020-002

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25				Analyst: KB	
Specific Conductance	755	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM				Analyst: CC	
TDS (Residue, Filterable)	465	5	mg/L	1	11/25/2019

Page 7 of 58

Adirondack	Environmental	Services,	Inc
------------	----------------------	-----------	-----

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Client Sample ID: 8908-D Collection Date: 11/20/2019 1:30:00 PM Lab Sample ID: 191122020-003 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	Analyst: FLD				
pH (E150.1)	7.1		S.U.		11/20/2019 1:30:00 PM
Temperature (E170.1)	11		deg C		11/20/2019 1:30:00 PM
Turbidity (E180.1)	2	1.0	NTU		11/20/2019 1:30:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/4/2019 4:20:00 PM
Arsenic	ND	5.00	μg/L	1	12/4/2019 4:20:00 PM
Boron	258	50.0	μg/L	1	12/4/2019 4:20:00 PM
Cadmium	ND	5.00	μg/L	1	12/4/2019 4:20:00 PM
Calcium	167000	50.0	μg/L	1	12/4/2019 4:20:00 PM
Copper	ND	5.00	μg/L	1	12/4/2019 4:20:00 PM
Iron	1100	50.0	μg/L	1	12/4/2019 4:20:00 PM
Magnesium	72000	50.0	μg/L	1	12/4/2019 4:20:00 PM
Manganese	109	20.0	μg/L	1	12/4/2019 4:20:00 PM
Potassium	3310	50.0	μg/L	1	12/4/2019 4:20:00 PM
Selenium	ND	5.00	μg/L	1	12/4/2019 4:20:00 PM
Sodium	35200	500	μg/L	1	12/4/2019 4:20:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	713	5	mg/L CaCO3	1	12/4/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1 [°]	1/25/2019)				Analyst: AVE
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:43:41 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1					Analyst: CS
Chloride	15.4	2.00	mg/L	2	12/4/2019 11:06:06 PM
Sulfate	321	10.0	mg/L	10	12/4/2019 11:44:10 PN
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	420	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	11/25/2019 1:25:56 PM

Date: 13-Dec-19

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8908-D

 Collection Date:
 11/20/2019 1:30:00 PM

 Lab Sample ID:
 191122020-003

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	i10B-2011				Analyst: KB
Specific Conductance	1200	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	825	5	mg/L	1	11/25/2019

pH (E150.1) Temperature (E170.1) Turbidity (E180.1)	7.0 12 1	1.0	S.U. deg C NTU		11/20/2019 1:50:00 PM 11/20/2019 1:50:00 PM 11/20/2019 1:50:00 PM
ICP METALS - EPA 200.7	11/25/2010				Analyst: KH
(Prep: SW3010A -	11/25/2019)				
Aluminum	ND	100	μg/L	1	12/4/2019 4:38:00 PM
Arsenic	ND	5.00	μg/L	1	12/4/2019 4:38:00 PM
Boron	196	50.0	μg/L	1	12/4/2019 4:38:00 PM
Cadmium	ND	5.00	μg/L	1	12/4/2019 4:38:00 PM
Calcium	211000	500	μg/L	10	12/4/2019 4:55:00 PM
Copper	ND	5.00	μg/L	1	12/4/2019 4:38:00 PM
Iron	163	50.0	μg/L	1	12/4/2019 4:38:00 PM
Magnesium	71800	50.0	µg/L	1	12/4/2019 4:38:00 PM
Manganese	194	20.0	µg/L	1	12/4/2019 4:38:00 PM
Potassium	2870	50.0	µg/L	1	12/4/2019 4:38:00 PM
Selenium	ND	5.00	µg/L	1	12/4/2019 4:38:00 PM
Sodium	28000	500	µg/L	1	12/4/2019 4:38:00 PM
HARDNESS - EPA 200.7 REV 4.	4				Analyst: KH
Total Hardness (As CaCO3)	822	5	mg/L CaCO3	1	12/4/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 -					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:45:23 PM
ANIONS BY ION CHROMATOGI	RAPHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride Sulfate	15.9 378	2.00 10.0	mg/L mg/L	2 10	12/5/2019 12:03:12 AM 12/5/2019 12:22:14 AM
ALKALINITY TO PH 4.5 -SM 232	20B-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	430	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - E	EPA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	11/25/2019 1:27:33 PM

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Result

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

Date: 13-Dec-19

Collection Date: 11/20/2019 1:50:00 PM

DF

Matrix: GROUNDWATER

Date Analyzed

Analyst: FLD

Lab Sample ID: 191122020-004

Client Sample ID: 8908-SH

RL Qual Units

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8908-SH

 Collection Date:
 1/20/2019 1:50:00 PM

 Lab Sample ID:
 191122020-004

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	1330	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	905	5	mg/L	1	11/25/2019

Mercury	ND	0.0002	mg/L	1	11/25/2019 1:47:04 PM
ANIONS BY ION CHROMATOGRAPHY	- EPA 300.0 R	EV 2.1			Analyst: CS
Chloride Sulfate	4.34 106	2.00 2.00	mg/L mg/L	2 2	12/5/2019 12:41:16 AM 12/5/2019 12:41:16 AM
ALKALINITY TO PH 4.5 -SM 2320B-20	11				Analyst: DAA
Alkalinity, Total (As CaCO3) AMMONIA (NON-DISTILLED) - EPA 35	310 0.1 REV 2.0	10	mgCaCO3/L	1	12/3/2019 Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	11/25/2019 1:29:10 PM

Adirondack Environmental Services, Inc	

Result

9.3

10

)

1000

1050

14800

ND

ND

ND

3590

3250

116

1450

186000

ND

50

)

> 999

RL Qual

1.0

100

5.00

50.0

5.00

50.0

5.00

50.0

50.0

20.0

50.0

5.00

5000

5

Units

S.U.

deg C

NTU

μg/L

μg/L

μg/L

μg/L

μg/L

µg/L

μg/L

μg/L

μg/L

μg/L

μg/L

μg/L

mg/L CaCO3

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

(Prep: SW3010A - 11/25/2019

(Prep: E245.1 - 11/25/2019

Analyses

pH (E150.1)

Aluminum

Arsenic

Cadmium

Calcium

Copper

Magnesium

Manganese

Potassium

Selenium

HARDNESS - EPA 200.7 REV 4.4

MERCURY - EPA 245.1 REV 3.0

Total Hardness (As CaCO3)

Sodium

Iron

Boron

Temperature (E170.1)

ICP METALS - EPA 200.7

Turbidity (E180.1)

Client Sample ID: 8909-D Collection Date: 11/20/2019 3:05:00 PM Lab Sample ID: 191122020-005 Matrix: GROUNDWATER

DF

1

1

1

1

1

1

1

1

1

1

1

1

10

Date Analyzed

Analyst: FLD

11/20/2019 3:05:00 PM

11/20/2019 3:05:00 PM

11/20/2019 3:05:00 PM

12/4/2019 4:42:00 PM

12/4/2019 4:49:00 PM

12/4/2019

Analyst: KH

Analyst: AVB

Analyst: KH

Page 11 of 58

Date: 13-Dec-19

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 8909-D

 Collection Date:
 11/20/2019 3:05:00 PM

 Lab Sample ID:
 191122020-005

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	754	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	675	5	mg/L	1	11/25/2019

11 2 019)	1.0	deg C NTU		11/20/2019 3:10:00 PM 11/20/2019 3:10:00 PM
_	1.0	NTU		11/20/2019 3:10:00 PM
010 \				
010 \				Analyst: KH
019)				
ND	100	μg/L	1	12/4/2019 4:59:00 PM
6.16	5.00	μg/L	1	12/4/2019 4:59:00 PM
261	50.0	μg/L	1	12/4/2019 4:59:00 PM
ND	5.00	μg/L	1	12/4/2019 4:59:00 PM
32400	50.0	μg/L	1	12/4/2019 4:59:00 PM
ND	5.00	μg/L	1	12/4/2019 4:59:00 PM
121	50.0	μg/L	1	12/4/2019 4:59:00 PM
19500	50.0	μg/L	1	12/4/2019 4:59:00 PM
ND	20.0	μg/L	1	12/4/2019 4:59:00 PM
2260	50.0	μg/L	1	12/4/2019 4:59:00 PM
ND	5.00	μg/L	1	12/4/2019 4:59:00 PM
60300	5000	μg/L	10	12/4/2019 5:03:00 PM
				Analyst: KH
019)				
161	5	mg/L CaCO3	1	12/4/2019
				Analyst: AVB
019)				
ND	0.0002	mg/L	1	11/25/2019 1:48:45 PM
EPA 300.0 R	EV 2.1			Analyst: CS
			_	
		-		12/5/2019 1:59:32 AM
110	2.00	mg/L	2	12/5/2019 1:59:32 AM
1				Analyst: DAA
180	10	mgCaCO3/L	1	12/3/2019
.1 REV 2.0				Analyst: PL
ND	0.1	mg/L	1	11/25/2019 1:35:40 PM
	261 ND 32400 ND 121 19500 ND 2260 ND 60300 2019) 161 2019) 161 2019) ND EPA 300.0 F ND 110 1 1 180 .1 REV 2.0	261 50.0 ND 5.00 32400 50.0 ND 5.00 121 50.0 19500 50.0 ND 20.0 2260 50.0 ND 5.00 60300 5000 2019) 161 5 2019) ND 0.0002 EPA 300.0 REV 2.1 ND 110 2.00 1 180 10 .1 REV 2.0 10	261 50.0 µg/L ND 5.00 µg/L 32400 50.0 µg/L ND 5.00 µg/L 121 50.0 µg/L 19500 50.0 µg/L 19500 50.0 µg/L 19500 50.0 µg/L 2260 50.0 µg/L 60300 5000 µg/L 60300 5000 µg/L 60300 5000 µg/L 6019) mg/L 161 5 mg/L CaCO3 mg/L ND 0.0002 mg/L 10 0.0002 mg/L 110 2.00 mg/L 110 2.00 mg/L 110 2.00 mg/L 110 10 mg/L 180 10 mgCaCO3/L .1 180 10	261 50.0 μg/L 1 ND 5.00 μg/L 1 32400 50.0 μg/L 1 ND 5.00 μg/L 1 ND 5.00 μg/L 1 ND 5.00 μg/L 1 121 50.0 μg/L 1 19500 50.0 μg/L 1 ND 20.0 μg/L 1 2260 50.0 μg/L 1 60300 5000 μg/L 10 2019) 161 5 mg/L CaCO3 1 2019) ND 0.0002 mg/L 1 2019) ND 0.0002 mg/L 1 2019) ND 0.0002 mg/L 2 1 5 mg/L 2 1 2 10 2.00 mg/L 2 1 10 2.00 mg/L 2 1 180 10 mgCaCO3/L 1 <tr< td=""></tr<>

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Result

RL Qual Units

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

 Client Sample ID:
 8909-SH

 Collection Date:
 11/20/2019 3:10:00 PM

 Lab Sample ID:
 191122020-006

 Matrix:
 GROUNDWATER

DF

Date Analyzed

Analyst: FLD

Date: 13-Dec-19

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 8909-SH

 Collection Date:
 11/20/2019 3:10:00 PM

 Lab Sample ID:
 191122020-006

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	533	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	290	5	mg/L	1	11/25/2019

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

Result

7.5

RL Qual Units

S.U.

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

pH (E150.1)

 Client Sample ID:
 8910-D

 Collection Date:
 11/20/2019 3:20:00 PM

 Lab Sample ID:
 191122020-007

 Matrix:
 GROUNDWATER

DF

Date Analyzed

Analyst: FLD

11/20/2019 3:20:00 PM

	7.5				
Temperature (E170.1)	10		deg C		11/20/2019 3:20:00 PM
Turbidity (E180.1)	4	1.0	NTU		11/20/2019 3:20:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A	- 11/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 2:35:00 PM
Arsenic	ND	5.00	μg/L	1	12/6/2019 2:35:00 PM
Boron	2780	50.0	μg/L	1	12/6/2019 2:35:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 2:35:00 PM
Calcium	72100	50.0	μg/L	1	12/6/2019 2:35:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 2:35:00 PM
Iron	54.9	50.0	μg/L	1	12/6/2019 2:35:00 PM
Magnesium	23400	50.0	μg/L	1	12/6/2019 2:35:00 PM
Manganese	ND	20.0	μg/L	1	12/6/2019 2:35:00 PM
Potassium	3350	50.0	μg/L	1	12/6/2019 2:35:00 PM
Selenium	ND	5.00	μg/L	1	12/6/2019 2:35:00 PM
Sodium	99700	5000	μg/L	10	12/6/2019 2:41:00 PM
ARDNESS - EPA 200.7 REV	4.4				Analyst: KH
Total Hardness (As CaCO3)	276	5	mg/L CaCO3	1	12/6/2019
	· · · · · · · · · · · · · · · · · · ·				Analyst: AVB
IERCURY - EPA 245.1 REV 3 (Prep: E245.1 Mercury		0.0002	mg/L	1	Analyst: AVB
(Prep: E245.1 Mercury	- 11/25/2019) ND		mg/L	1	
(Prep: E245.1 Mercury	- 11/25/2019) ND GRAPHY - EPA 300.0 F		Ū		11/25/2019 1:50:26 PM Analyst: CS
(Prep: E245.1 Mercury NIONS BY ION CHROMATO	- 11/25/2019) ND	EV 2.1	mg/L mg/L mg/L	1 2 10	11/25/2019 1:50:26 PM
(Prep: E245.1 Mercury NIONS BY ION CHROMATO Chloride Sulfate	- 11/25/2019) ND GRAPHY - EPA 300.0 F 23.9 308	REV 2.1 2.00	mg/L	2	11/25/2019 1:50:26 PM Analyst: CS 12/5/2019 2:37:54 AM
(Prep: E245.1 Mercury NIONS BY ION CHROMATO Chloride Sulfate LKALINITY TO PH 4.5 -SM 2	- 11/25/2019) ND GRAPHY - EPA 300.0 F 23.9 308	REV 2.1 2.00	mg/L	2	11/25/2019 1:50:26 PM Analyst: CS 12/5/2019 2:37:54 AM 12/5/2019 2:56:57 AM
Mercury	- 11/25/2019) ND GRAPHY - EPA 300.0 F 23.9 308 320B-2011 150	2.00 10.0	mg/L mg/L	2 10	11/25/2019 1:50:26 PM Analyst: CS 12/5/2019 2:37:54 AM 12/5/2019 2:56:57 AM Analyst: DAA

Date: 13-Dec-19

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 8910-D

 Collection Date:
 11/20/2019 3:20:00 PM

 Lab Sample ID:
 191122020-007

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	941	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	530	5	mg/L	1	11/25/2019

FIELD-PH, RES CL2, AND TEMP ARE NOT ELAP CERTIFIABLE

RL Qual Units

Result

pH (E150.1)	7.5		S.U.		11/20/2019 3:30:00 PM
Temperature (E170.1)	10		deg C		11/20/2019 3:30:00 PM
Turbidity (E180.1)	4	1.0	NTU		11/20/2019 3:30:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 2:46:00 PM
Arsenic	ND	5.00	μg/L	1	12/6/2019 2:46:00 PM
Boron	1180	50.0	μg/L	1	12/6/2019 2:46:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 2:46:00 PM
Calcium	47500	50.0	μg/L	1	12/6/2019 2:46:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 2:46:00 PM
Iron	56.7	50.0	μg/L	1	12/6/2019 2:46:00 PM
Magnesium	16200	50.0	μg/L	1	12/6/2019 2:46:00 PM
Manganese	23.1	20.0	μg/L	1	12/6/2019 2:46:00 PM
Potassium	3240	50.0	μg/L	1	12/6/2019 2:46:00 PM
Selenium	ND	5.00	μg/L	1	12/6/2019 2:46:00 PM
Sodium	101000	5000	μg/L	10	12/6/2019 2:57:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	185	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0					Analyst: AVB
(Prep: E245.1 - 1	1/25/2019)				
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:52:07 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	7.28	2.00	mg/L	2	12/5/2019 3:15:58 AM
Sulfate	219	10.0	mg/L	10	12/5/2019 3:35:00 AM
ALKALINITY TO PH 4.5 -SM 23208	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	210	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1	mg/L	1	11/25/2019 4:10:30 PM

Adirondack Environmental Services, Inc

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Analyses

Date: 13-Dec-19

Collection Date: 11/20/2019 3:30:00 PM

DF

Matrix: GROUNDWATER

Date Analyzed

Analyst: FLD

Lab Sample ID: 191122020-008

Client Sample ID: 8911-D

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 8911-D

 Collection Date:
 11/20/2019 3:30:00 PM

 Lab Sample ID:
 191122020-008

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	839	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	535	5	mg/L	1	11/25/2019

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.6		S.U.		11/20/2019 3:42:00 PM
Temperature (E170.1)	9		deg C		11/20/2019 3:42:00 PM
Turbidity (E180.1)	4	1.0	NTU		11/20/2019 3:42:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 11	/25/2019)				-
Aluminum	ND	100	μg/L	1	12/6/2019 3:02:00 PM
Arsenic	11.1	5.00	μg/L	1	12/6/2019 3:02:00 PM
Boron	313	50.0	μg/L	1	12/6/2019 3:02:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 3:02:00 PM
Calcium	49600	50.0	μg/L	1	12/6/2019 3:02:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 3:02:00 PM
Iron	736	50.0	μg/L	1	12/6/2019 3:02:00 PM
Magnesium	16000	50.0	μg/L	1	12/6/2019 3:02:00 PM
Manganese	72.3	20.0	μg/L	1	12/6/2019 3:02:00 PM
Potassium	1950	50.0	μg/L	1	12/6/2019 3:02:00 PM
Selenium	ND	5.00	μg/L	1	12/6/2019 3:02:00 PM
Sodium	68400	5000	μg/L	10	12/6/2019 3:07:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	189	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:53:48 PM
ANIONS BY ION CHROMATOGRAI	PHY - EPA 300.0 R	EV 2.1			Analyst: CS
Chloride	9.62	2.00	mg/L	2	12/5/2019 3:54:01 AM
Sulfate	216	10.0	mg/L	10	12/5/2019 4:13:04 AM
ALKALINITY TO PH 4.5 -SM 2320B	-		0		Analyst: DAA
Alkalinity, Total (As CaCO3)	96	4	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.2	0.1	mg/L	1	11/25/2019 1:43:53 PM

Lockwood Hills LLC

Lockwood Ash Landfill / Quarterly

191122020

CLIENT:

Reference:

PO#:

Work Order:

Page 19 of 58

Client Sample ID: 8911-SH

Date: 13-Dec-19

Collection Date: 11/20/2019 3:42:00 PM

Matrix: GROUNDWATER

Lab Sample ID: 191122020-009

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8911-SH

 Collection Date:
 1/20/2019 3:42:00 PM

 Lab Sample ID:
 191122020-009

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	656	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	385	5	mg/L	1	11/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 8942-D

 Collection Date:
 11/20/2019 7:45:00 AM

 Lab Sample ID:
 191122020-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.3		S.U.		11/20/2019 7:45:00 AM
Temperature (E170.1)	9		deg C		11/20/2019 7:45:00 AM
Turbidity (E180.1)	18	1.0	NTU		11/20/2019 7:45:00 AM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 3:11:00 PM
Arsenic	7.95	5.00	μg/L	1	12/6/2019 3:11:00 PM
Boron	332	50.0	μg/L	1	12/6/2019 3:11:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 3:11:00 PM
Calcium	79900	50.0	μg/L	1	12/6/2019 3:11:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 3:11:00 PM
Iron	469	50.0	μg/L	1	12/6/2019 3:11:00 PM
Magnesium	71800	50.0	μg/L	1	12/6/2019 3:11:00 PM
Manganese	180	20.0	μg/L	1	12/6/2019 3:11:00 PM
Potassium	3020	50.0	μg/L	1	12/6/2019 3:11:00 PM
Selenium	ND	5.00	μg/L	1	12/6/2019 3:11:00 PM
Sodium	39800	500	μg/L	1	12/6/2019 3:11:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	495	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:55:29 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0		EV 2.1			Analyst: CS
Chloride	3.82	2.00	mg/L	2	12/5/2019 4:32:06 AM
Sulfate	239	10.0	mg/L	10	12/5/2019 6:10:33 AM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.3	0.1	mg/L	1	11/25/2019 1:45:31 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8942-D

 Collection Date:
 11/20/2019 7:45:00 AM

 Lab Sample ID:
 191122020-010

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	950	1	µmhos/cm	1	11/25/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	615	5	mg/L	1	11/25/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 9306-SH

 Collection Date:
 11/21/2019 7:30:00 AM

 Lab Sample ID:
 191122020-011

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.4		S.U.		11/21/2019 7:30:00 AM
Temperature (E170.1)	10		deg C		11/21/2019 7:30:00 AM
Turbidity (E180.1)	7	1.0	NTU		11/21/2019 7:30:00 AM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 3:16:00 PM
Arsenic	13.3	5.00	µg/L	1	12/6/2019 3:16:00 PM
Boron	100	50.0	µg/L	1	12/6/2019 3:16:00 PM
Cadmium	ND	5.00	µg/L	1	12/6/2019 3:16:00 PM
Calcium	57600	50.0	µg/L	1	12/6/2019 3:16:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 3:16:00 PM
Iron	253	50.0	μg/L	1	12/6/2019 3:16:00 PM
Magnesium	60800	50.0	μg/L	1	12/6/2019 3:16:00 PM
Manganese	ND	20.0	μg/L	1	12/6/2019 3:16:00 PM
Potassium	3060	50.0	μg/L	1	12/6/2019 3:16:00 PM
Selenium	ND	5.00	µg/L	1	12/6/2019 3:16:00 PM
Sodium	20500	500	μg/L	1	12/6/2019 3:16:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	394	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 1:57:10 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	12/5/2019 6:29:46 AM
Sulfate	70.3	2.00	mg/L	2	12/5/2019 6:29:46 AM
		2.00	g/ =	-	
ALKALINITY TO PH 4.5 -SM 23201	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	370	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 1:47:08 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 9306-SH

 Collection Date:
 11/21/2019 7:30:00 AM

 Lab Sample ID:
 191122020-011

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	706	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	420	5	mg/L	1	11/27/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: GW DUP 8909D Collection Date: 11/20/2019 3:05:00 PM Lab Sample ID: 191122020-012 Matrix: GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	9.3		S.U.		11/20/2019 3:05:00 PM
Temperature (E170.1)	10		deg C		11/20/2019 3:05:00 PM
Turbidity (E180.1)	> 999	1.0	NTU		11/20/2019 3:05:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1 ⁻	1/25/2019)				
Aluminum	747	100	μg/L	1	12/6/2019 3:32:00 PM
Arsenic	ND	5.00	μg/L	1	12/6/2019 3:32:00 PM
Boron	1050	50.0	μg/L	1	12/6/2019 3:32:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 3:32:00 PM
Calcium	13800	50.0	μg/L	1	12/6/2019 3:32:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 3:32:00 PM
Iron	3040	50.0	μg/L	1	12/6/2019 3:32:00 PM
Magnesium	3040	50.0	μg/L	1	12/6/2019 3:32:00 PM
Manganese	104	20.0	μg/L	1	12/6/2019 3:32:00 PM
Potassium	1380	50.0	μg/L	1	12/6/2019 3:32:00 PM
Selenium	ND	5.00	μg/L	1	12/6/2019 3:32:00 PM
Sodium	163000	5000	μg/L	10	12/6/2019 3:43:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	47	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019)					Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 2:02:13 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	4.31	2.00	mg/L	2	12/5/2019 4:15:58 PM
Sulfate	106	2.00	mg/L	2	12/5/2019 4:15:58 PM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	310	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.5	0.1	mg/L	1	11/25/2019 1:48:46 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 GW DUP 8909D

 Collection Date:
 11/20/2019 3:05:00 PM

 Lab Sample ID:
 191122020-012

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	758	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	640	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: GW Dep Drain 1 Collection Date: 11/20/2019 1:10:00 PM Lab Sample ID: 191122020-013 Matrix: GROUNDWATER

(Prep: E245.1 - 11/25/2019)) Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM	Analyses	Result	RL Qu	al Units	DF	Date Analyzed
Flow, GPD 475 gal/day 11/20/2019 1:10:00 PM pH (E150.1) 6.4 S.U. 11/20/2019 1:10:00 PM Temperature (E170.1) 10 deg C 11/20/2019 1:10:00 PM Turbidity (E180.1) 20 1.0 NTU 11/20/2019 1:10:00 PM ICP METALS - EPA 200.7 Analyst: KH 11/20/2019 3:46:00 PM Analyst: KH (Prep: SW3010A - 11/25/2019) ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadrium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Cadrium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 µg/L 1<	FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 6.4 S.U. 11/20/2019 1:10:00 PM Temperature (E170.1) 10 deg C 11/20/2019 1:10:00 PM Turbidity (E180.1) 20 1.0 NTU 11/20/2019 1:10:00 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: KH Analyst: KH ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) ND 1 12/6/2019 3:46:00 PM Auminum ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L <	Dissolved Oxygen (E360.1)	4.69	0.10	mg/L		11/20/2019 1:10:00 PM
Temperature (E170.1) 10 deg C 11/20/2019 1:10:00 PM Turbidity (E180.1) 20 1.0 NTU 11/20/2019 1:10:00 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: KH Analyst: KH Analyst: KH Atuminum ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Caddium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Caddium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM Sodium <	Flow, GPD	475		gal/day		11/20/2019 1:10:00 PM
Turbidity (E180.1) 20 1.0 NTU 11/20/2019 1:10:00 PM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Aluminum ND 100 µg/L 1 12/6/2019 3:46:00 PM Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium ND 2.0.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 2.0.0 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM <	pH (E150.1)	6.4		S.U.		11/20/2019 1:10:00 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: KH Aluminum ND 100 µg/L 1 12/6/2019 3:46:00 PM Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 50.0 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Cadmium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 1707 50.0 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM Boron ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium MD </td <td>Temperature (E170.1)</td> <td>10</td> <td></td> <td>deg C</td> <td></td> <td>11/20/2019 1:10:00 PM</td>	Temperature (E170.1)	10		deg C		11/20/2019 1:10:00 PM
(Prep: SW3010A - 11/25/2019) Aluminum ND 100 µg/L 1 12/6/2019 3:46:00 PM Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 50.0 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadmium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Cadrium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Solium 46900 500 µg/L 1 12/6/2019 3:46:00 PM Solium 46900 500 µg/L 1 12/6/2019 3:46:00 PM MERCURY - EPA 200.7 REV 4.4 Analyst: KH Analyst: CS	Turbidity (E180.1)	20	1.0	NTU		11/20/2019 1:10:00 PM
Aluminum ND 100 µg/L 1 12/6/2019 3:46:00 PM Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 50.0 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadcium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 77770 50.0 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Beroury ND 5.00 µg/L 1 12/6/2019 3:46:00 PM ANIONS BY IO						Analyst: KH
Arsenic ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Boron 3300 50.0 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Cadrium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Calcium 308000 500 µg/L 1 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Kopper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: AVB Analyst: CS Mercury ND	(Prep: SW3010A - 1	1/25/2019)				
Boron 3300 50.0 µg/L 1 12/6/2019 3:46:00 PM Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Calcium 308000 500 µg/L 10 12/6/2019 3:46:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Marganese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L 1 11/2/6/2019 Mercury <t< td=""><td>Aluminum</td><td>ND</td><td>100</td><td>μg/L</td><td>1</td><td>12/6/2019 3:46:00 PM</td></t<>	Aluminum	ND	100	μg/L	1	12/6/2019 3:46:00 PM
Cadmium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Calcium 308000 500 µg/L 10 12/6/2019 3:45:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:45:00 PM Iron ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Manganese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1	Arsenic	ND	5.00	μg/L	1	12/6/2019 3:46:00 PM
Calcium 308000 500 µg/L 10 12/6/2019 3:51:00 PM Copper ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Iron ND 50.0 µg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Marganese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L 1 11/2/6/2019 Mercury ND 0.0002 mg/L 1 11/2/6/2019 5:03:50 PM AnioNS BY ION	Boron	3300	50.0	μg/L	1	12/6/2019 3:46:00 PM
Copper ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Iron ND 50.0 μg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 μg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 μg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 μg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 ND 5.00 μg/L 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 repre: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 4:35:01 PM <	Cadmium	ND	5.00	μg/L	1	12/6/2019 3:46:00 PM
Iron ND 50.0 μg/L 1 12/6/2019 3:46:00 PM Magnesium 118000 50.0 μg/L 1 12/6/2019 3:46:00 PM Marganese ND 20.0 μg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 μg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVB Analyst: AVB Analyst: AVB (Prep: E245.1 - 11/25/2019) MD 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 20 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L	Calcium	308000	500	μg/L	10	12/6/2019 3:51:00 PM
Magnesium 118000 50.0 µg/L 1 12/6/2019 3:46:00 PM Manganese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Monons BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 430 10 mgCaCO3/L 1 12/3/2019	Copper	ND	5.00	μg/L	1	12/6/2019 3:46:00 PM
Manganese ND 20.0 µg/L 1 12/6/2019 3:46:00 PM Potassium 7770 50.0 µg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 72.2 2.00 mg/L 20 12/5/2019 5:13:06 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Iron	ND	50.0	μg/L	1	12/6/2019 3:46:00 PM
Potassium 7770 50.0 μg/L 1 12/6/2019 3:46:00 PM Selenium ND 5.00 μg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 μg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 430 10 mgCaCO3/L 1 12/3/2019	Magnesium	118000	50.0	μg/L	1	12/6/2019 3:46:00 PM
Selenium ND 5.00 µg/L 1 12/6/2019 3:46:00 PM Sodium 46900 500 µg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Manganese	ND	20.0	μg/L	1	12/6/2019 3:46:00 PM
Sodium 46900 500 μg/L 1 12/6/2019 3:46:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Malyst: CS Analyst: CS Chloride 72.2 2.00 828 mg/L 2 12/5/2019 4:35:01 PM mg/L ALKALINITY TO PH 4.5 -SM 2320B-2011 430 10 mgCaCO3/L 1 12/3/2019	Potassium	7770	50.0	μg/L	1	12/6/2019 3:46:00 PM
HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Selenium	ND	5.00	μg/L	1	12/6/2019 3:46:00 PM
Total Hardness (As CaCO3) 1255 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 72.2 2.00 mg/L 20 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Sodium	46900	500	µg/L	1	12/6/2019 3:46:00 PM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019)) Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Analyst: DAA	HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
(Prep: E245.1 - 11/25/2019) Mercury ND 0.0002 mg/L 1 11/25/2019 2:03:54 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Total Hardness (As CaCO3)	1255	5	mg/L CaCO3	1	12/6/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019		1/25/2019)				Analyst: AVB
Chloride 72.2 2.00 mg/L 2 12/5/2019 4:35:01 PM Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Mercury	ND	0.0002	mg/L	1	11/25/2019 2:03:54 PM
Sulfate 828 20.0 mg/L 20 12/5/2019 5:13:06 PM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	ANIONS BY ION CHROMATOGRA	APHY - EPA 300.0 F	REV 2.1			Analyst: CS
ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Chloride	72.2	2.00	mg/L	2	12/5/2019 4:35:01 PM
Alkalinity, Total (As CaCO3) 430 10 mgCaCO3/L 1 12/3/2019	Sulfate	828	20.0	mg/L	20	12/5/2019 5:13:06 PM
	ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Alkalinity, Total (As CaCO3)	430	10	mgCaCO3/L	1	12/3/2019
	AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 GW Dep Drain 1

 Collection Date:
 11/20/2019 1:10:00 PM

 Lab Sample ID:
 191122020-013

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EI	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 1:50:24 PM
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	2070	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1700	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 Leak Detection Syst.

 Collection Date:
 1/20/2019 1:30:00 PM

 Lab Sample ID:
 191122020-014

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.33	0.10	mg/L		11/20/2019 1:30:00 PM
Flow, GPD	38		gal/day		11/20/2019 1:30:00 PM
pH (E150.1)	6.6		S.U.		11/20/2019 1:30:00 PM
Temperature (E170.1)	11		deg C		11/20/2019 1:30:00 PM
Turbidity (E180.1)	24	1.0	NTU		11/20/2019 1:30:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 11	/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 3:55:00 PM
Arsenic	ND	5.00	μg/L	1	12/6/2019 3:55:00 PM
Boron	1020	50.0	µg/L	1	12/6/2019 3:55:00 PM
Cadmium	ND	5.00	µg/L	1	12/6/2019 3:55:00 PM
Calcium	412000	500	µg/L	10	12/6/2019 3:59:00 PM
Copper	ND	5.00	µg/L	1	12/6/2019 3:55:00 PM
Iron	ND	50.0	µg/L	1	12/6/2019 3:55:00 PM
Magnesium	181000	50.0	µg/L	1	12/6/2019 3:55:00 PM
Manganese	23.7	20.0	µg/L	1	12/6/2019 3:55:00 PM
Potassium	5750	50.0	µg/L	1	12/6/2019 3:55:00 PM
Selenium	ND	5.00	µg/L	1	12/6/2019 3:55:00 PM
Sodium	100000	5000	μg/L	10	12/6/2019 3:59:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	1772	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 2:05:36 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	30.7	2.00	mg/L	2	12/5/2019 5:32:08 PM
Sulfate	1150	20.0	mg/L	20	12/5/2019 5:51:11 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	510	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 Leak Detection Syst.

 Collection Date:
 11/20/2019 1:30:00 PM

 Lab Sample ID:
 191122020-014

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 1:55:24 PM
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	2520	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	1 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	2110	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: Under Drain 1 Collection Date: 1/20/2019 12:00:00 PM Lab Sample ID: 09122020-015 Matrix: GROUNDWATER

Dissolved Oxygen (E360.1) 6.63 0.10 mg/L 11/20/2019 12.00: Flow, GPD 4185 gal/day 11/20/2019 12.00: pH (E150.1) 6.6 S.U. 11/20/2019 12.00: Turbidity (E180.1) 541 1.0 NTU 11/20/2019 12.00: CP METALS - EPA 200.7 Alaminum ND 100 µg/L 1 12/6/2019 4.03:00 Aluminum ND 100 µg/L 1 12/6/2019 4.03:00 Analyst: Coron 4270 50.0 µg/L 1 12/6/2019 4.03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4.03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4.03:00 Magnesium ND 5.00 µg	Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
Flow, GPD 4185 gal/day 11/20/2019 12:00: pH (E150.1) 6.6 S.U. 11/20/2019 12:00: Temperature (E170.1) 9 deg C 11/20/2019 12:00: Turbidity (E180.1) 541 1.0 NTU 11/20/2019 12:00: ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: Analyst: (Prep: SW3010A - 11/25/2019) Analyst: 1 12/6/2019 4:03:00 Arsenic 54.6 5:00 µg/L 1 12/6/2019 4:03:00 Gadmium ND 5:00 µg/L 1 12/6/2019 4:03:00 Gadium ND 5:00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5:00 µg/L 1 12/6/2019 4:03:00 Cadium 324000 5:00 µg/L 1 12/6/2019 4:03:00 Ivon 4890 5:00 µg/L 1 12/6/2019 4:03:00 Magneseum 81900 5:00 µg/L 1 12/6/2019 4:03:00 Magneseum ND 5:00 µg/L 1 12/6/2019 4:03:00 Sodium ND	FIELD-PH, RES CL2, AND TEMP /	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 6.6 S.U. 11/20/2019 12:00: Temperature (E170.1) 9 deg C 11/20/2019 12:00: Turbidity (E180.1) 541 1.0 NTU 11/20/2019 12:00: ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: Analyst: Auminum ND 100 µg/L 1 12/6/2019 4:03:00 Arsenic 54.6 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium 324000 500 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00	Dissolved Oxygen (E360.1)	6.63	0.10	mg/L		11/20/2019 12:00:00 PM
Temperature (E170.1) 9 deg C 11/20/2019 12:00: Turbidity (E180.1) 541 1.0 NTU 11/20/2019 12:00: ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) ND 100 µg/L 1 12/6/2019 4:03:00 Aluminum ND 100 µg/L 1 12/6/2019 4:03:00 Arsenic 54.6 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadrium 324000 500 µg/L 1 12/6/2019 4:03:00 Cadrium 324000 500 µg/L 1 12/6/2019 4:03:00 Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Maganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Marganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E ND	Flow, GPD	4185		gal/day		11/20/2019 12:00:00 PM
Turbidity (E180.1) 541 1.0 NTU 11/20/2019 12:00: ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: Aluminum ND 100 µg/L 1 12/6/2019 4:03:00 Arsenic 54.6 5.00 µg/L 1 12/6/2019 4:03:00 Boron 4270 50.0 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Calcium 324000 500 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Inter/state Analys	pH (E150.1)	6.6		S.U.		11/20/2019 12:00:00 PM
ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: Aluminum ND 100 µg/L 1 12/6/2019 4/03:00 Arsenic 54.6 5.00 µg/L 1 12/6/2019 4/03:00 Boron 4270 50.0 µg/L 1 12/6/2019 4/03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4/03:00 Cadrium 324000 500 µg/L 1 12/6/2019 4/03:00 Colum 324000 500 µg/L 1 12/6/2019 4/03:00 Copper ND 5.00 µg/L 1 12/6/2019 4/03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4/03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4/03:00 Magnesium 17700 50.0 µg/L 1 12/6/2019 4/03:00 Sodium 45400 500 µg/L 1 12/6/2019 4/03:00 Sodium 17/26/2019 1/0 ND 5.00 µg/L 1 12/6/2019 4/03:00 LOW LEVEL MERCURY - EPA 1631E <	Temperature (E170.1)	9		deg C		11/20/2019 12:00:00 PM
(Prep: SW3010A - 11/25/2019) Aluminum ND 100 µg/L 1 12/6/2019 4:03:00 Arsenic 54.6 5.00 µg/L 1 12/6/2019 4:03:00 Boron 4270 50.0 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 10 12/6/2019 4:03:00 Cadmium 324000 500 µg/L 1 12/6/2019 4:03:00 Cadmium 324000 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 5.00 µg/L 1 12/6/2019 4:03:00 Magnese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 177700 50.0 µg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Analyst: Chrep: 1631E - 11/25/2019 Anal	Turbidity (E180.1)	541	1.0	NTU		11/20/2019 12:00:00 PM
ND 100 μg/L 1 12/6/2019 4:03:00 Arsenic 54.6 5.00 μg/L 1 12/6/2019 4:03:00 Boron 4270 50.0 μg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 μg/L 1 12/6/2019 4:03:00 Cadmium 324000 500 μg/L 1 12/6/2019 4:03:00 Cadmium 324000 500 μg/L 1 12/6/2019 4:03:00 Copper ND 5.00 μg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 μg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 μg/L 1 12/6/2019 4:03:00 Marganese 625 20.0 μg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 μg/L 1 12/6/2019 4:03:00 Sodium 45400 500 μg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E ND 0.5 </td <td>ICP METALS - EPA 200.7</td> <td></td> <td></td> <td></td> <td></td> <td>Analyst: KH</td>	ICP METALS - EPA 200.7					Analyst: KH
Arsenic 54.6 5.00 µg/L 1 12/6/2019 4:03:00 Boron 4270 50.0 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Cadrium 324000 500 µg/L 1 12/6/2019 4:03:00 Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Marganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Solium ND 5.00 µg/L 1 12/6/2019 4:03:00 Solium ND 5.00 µg/L 1 12/6/2019 4:03:00 Solium 45400 500 µg/L 1 12/6/2019 4:03:00 Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst	(Prep: SW3010A - 1	1/25/2019)				
Boron 4270 50.0 µg/L 1 12/6/2019 4:03:00 Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Calcium 324000 500 µg/L 10 12/6/2019 4:03:00 Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Sodium VEVEL MERCURY - EPA 1631E Analyst: Analyst: ((Prep: 1631E - 11/25/2019)) Mercury ND 0.5 ng/L 1 11/26/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: Analyst: C Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L 1 <td>Aluminum</td> <td>ND</td> <td>100</td> <td>µg/L</td> <td>1</td> <td>12/6/2019 4:03:00 PM</td>	Aluminum	ND	100	µg/L	1	12/6/2019 4:03:00 PM
Cadmium ND 5.00 µg/L 1 12/6/2019 4:03:00 Calcium 324000 500 µg/L 10 12/6/2019 4:07:00 Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Imagenesize Analyst: Analyst: Analyst: Total Hardness (As CaCO3) 1147	Arsenic	54.6	5.00	μg/L	1	12/6/2019 4:03:00 PM
Calcium 324000 500 µg/L 10 12/6/2019 4:07:00 Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Analyst: Analyst: Analyst: (Prep: 1631E - 11/25/2019) Mercury ND 0.5 ng/L 1 11/26/2019 MERCURY - EPA 245.1 REV 3.0 mg/L CaCO3 1 12/6/2019 Analyst: Total Hardness (As CaCO3) 1147 5 mg/L 1 11/25/2019 2:07:1 <t< td=""><td>Boron</td><td>4270</td><td>50.0</td><td>μg/L</td><td>1</td><td>12/6/2019 4:03:00 PM</td></t<>	Boron	4270	50.0	μg/L	1	12/6/2019 4:03:00 PM
Copper ND 5.00 µg/L 1 12/6/2019 4:03:00 Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Magnese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Analyst: Analyst: (Prep: 1631E - 11/25/2019) Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 Mercury ND 0.0002 mg/L	Cadmium	ND	5.00	μg/L	1	12/6/2019 4:03:00 PM
Iron 4890 50.0 µg/L 1 12/6/2019 4:03:00 Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Manganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E (Prep: 1631E - 11/25/2019) Analyst: Analyst: (Prep: 1631E - 11/25/2019) MD 0.5 ng/L 1 11/26/2019 Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1	Calcium	324000	500	μg/L	10	12/6/2019 4:07:00 PM
Magnesium 81900 50.0 µg/L 1 12/6/2019 4:03:00 Manganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E (Prep: 1631E - 11/25/2019) Analyst: Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2	Copper	ND	5.00	μg/L	1	12/6/2019 4:03:00 PM
Marganese 625 20.0 µg/L 1 12/6/2019 4:03:00 Potassium 17700 50.0 µg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Analyst: Analyst: (Prep: 1631E - 11/25/2019) Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Iron	4890	50.0	μg/L	1	12/6/2019 4:03:00 PM
Potassium 17700 50.0 μg/L 1 12/6/2019 4:03:00 Selenium ND 5.00 μg/L 1 12/6/2019 4:03:00 Sodium 45400 500 μg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E Analyst: Analyst: Analyst: (Prep: 1631E - 11/25/2019) ND 0.5 ng/L 1 11/26/2019 Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Malyst: Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Magnesium	81900	50.0	μg/L	1	12/6/2019 4:03:00 PM
Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E (Prep: 1631E - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Manganese	625	20.0	μg/L	1	12/6/2019 4:03:00 PM
Selenium ND 5.00 µg/L 1 12/6/2019 4:03:00 Sodium 45400 500 µg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E (Prep: 1631E - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Potassium	17700	50.0		1	12/6/2019 4:03:00 PM
Sodium 45400 500 μg/L 1 12/6/2019 4:03:00 LOW LEVEL MERCURY - EPA 1631E (Prep: 1631E - 11/25/2019) Analyst: Analyst: Mercury ND 0.5 ng/L 1 11/26/2019 Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) ND 0.0002 mg/L 1 11/25/2019 2:07:1 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Selenium	ND	5.00		1	12/6/2019 4:03:00 PM
(Prep: 1631E - 11/25/2019) ND 0.5 ng/L 1 11/26/2019 Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Sodium	45400	500	μg/L	1	12/6/2019 4:03:00 PM
Mercury ND 0.5 ng/L 1 11/26/2019 HARDNESS - EPA 200.7 REV 4.4 Analyst: Analyst: Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) ND 0.0002 mg/L 1 11/25/2019 2:07:1 Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13						Analyst: WB
Total Hardness (As CaCO3) 1147 5 mg/L CaCO3 1 12/6/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/6/2019 6:10:13		-	0.5	ng/L	1	11/26/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
(Prep: E245.1 - 11/25/2019) Mercury ND 0.0002 mg/L 1 11/25/2019 2:07:1 ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Total Hardness (As CaCO3)	1147	5	mg/L CaCO3	1	12/6/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13		1/25/2019)				Analyst: AVB
Chloride 22.9 2.00 mg/L 2 12/5/2019 6:10:13	Mercury	ND	0.0002	mg/L	1	11/25/2019 2:07:18 PM
	ANIONS BY ION CHROMATOGRA	APHY - EPA 300.0 F	REV 2.1			Analyst: CS
Sulfate 429 20.0 mg/L 20 12/5/2019 7:27:03	Chloride	22.9	2.00	mg/L	2	12/5/2019 6:10:13 PM
	Sulfate	429	20.0	mg/L	20	12/5/2019 7:27:03 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst:	ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 Under Drain 1

 Collection Date:
 1/20/2019 12:00:00 PM

 Lab Sample ID:
 091122020-015

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-20	11				Analyst: DAA
Alkalinity, Total (As CaCO3)	530	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA 35	60.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 1:56:59 PM
CONDUCTANCE AT 25C - SM 2510B-	2011				Analyst: KB
Specific Conductance	1610	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM 254	0C-2011				Analyst: CC
TDS (Residue, Filterable)	1190	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 Under Drain 2

 Collection Date:
 1/20/2019 12:40:00 PM

 Lab Sample ID:
 09122020-016

 Matrix:
 GROUNDWATER

	Result	THE Qui	l Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.08	0.10	mg/L		11/20/2019 12:40:00 PM
Flow, GPD	3652		gal/day		11/20/2019 12:40:00 PM
pH (E150.1)	6.9		S.U.		11/20/2019 12:40:00 PM
Temperature (E170.1)	11		deg C		11/20/2019 12:40:00 PM
Turbidity (E180.1)	152	1.0	NTU		11/20/2019 12:40:00 PM
CP METALS - EPA 200.7 (Prep: SW3010A - 11	/25/2019)				Analyst: KH
Aluminum	ND	100	μg/L	1	12/6/2019 4:12:00 PM
Arsenic	13.8	5.00	μg/L	1	12/6/2019 4:12:00 PM
Boron	49600	50.0	μg/L	1	12/6/2019 4:12:00 PM
Cadmium	49000 ND	5.00	μg/L	1	12/6/2019 4:12:00 PM
Calcium	673000	500	μg/L	10	12/6/2019 4:16:00 PM
Copper	ND	5.00	μg/L	10	12/6/2019 4:12:00 PM
Iron	1820	50.0	μg/L	1	12/6/2019 4:12:00 PM
Magnesium	104000	50.0	μg/L	1	12/6/2019 4:12:00 PM
Manganese	1210	20.0	μg/L	1	12/6/2019 4:12:00 PM
Potassium	106000	500	μg/L	10	12/6/2019 4:16:00 PM
Selenium	7.18	5.00	μg/L	1	12/6/2019 4:12:00 PM
Sodium	249000	5000	μg/L	10	12/6/2019 4:16:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	2110	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 2:09:00 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	407	50.0	mg/L	50	12/5/2019 8:05:14 PM
Sulfate	1660	50.0	mg/L	50	12/5/2019 8:05:14 PM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	320	10	mgCaCO3/L	1	12/3/2019
					Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 Under Drain 2

 Collection Date:
 1/20/2019 12:40:00 PM

 Lab Sample ID:
 091122020-016

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.7	0.1	mg/L	1	11/25/2019 1:58:31 PM
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	4210	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	1 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	3540	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 Under Drain 3

 Collection Date:
 11/20/2019 11:33:00 AM

 Lab Sample ID:
 091122020-017

 Matrix:
 GROUNDWATER

FIELD-PH, RES CL2, AND TEMP ARE NO Dissolved Oxygen (E360.1) Flow, GPD pH (E150.1) Temperature (E170.1) Turbidity (E180.1) ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper Iron	6.55 238 6.5 11 31	RTIFIABLE 0.10 1.0 100 5.00 500	mg/L gal/day S.U. deg C NTU μg/L	1	Analyst: FLD 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM Analyst: KH
Flow, GPD pH (E150.1) Temperature (E170.1) Turbidity (E180.1) ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	238 6.5 11 31 19) ND ND 33400 ND	1.0 100 5.00	gal/day S.U. deg C NTU μg/L	1	11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM Analyst: KH
pH (E150.1) Temperature (E170.1) Turbidity (E180.1) ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	6.5 11 31 19) ND ND 33400 ND	100 5.00	S.U. deg C NTU µg/L	1	11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM Analyst: KH
Temperature (E170.1) Turbidity (E180.1) ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	11 31 I9) ND ND 33400 ND	100 5.00	deg C NTU µg/L	1	11/20/2019 11:33:00 AM 11/20/2019 11:33:00 AM Analyst: KH
Turbidity (E180.1) ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	31 19) ND ND 33400 ND	100 5.00	NTU μg/L	1	11/20/2019 11:33:00 AM Analyst: KH
ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	19) ND ND 33400 ND	100 5.00	μg/L	1	Analyst: KH
(Prep: SW3010A - 11/25/201 Aluminum Arsenic Boron Cadmium Calcium Copper	ND ND 33400 ND	5.00		1	
Aluminum Arsenic Boron Cadmium Calcium Copper	ND ND 33400 ND	5.00		1	
Arsenic Boron Cadmium Calcium Copper	ND 33400 ND	5.00		1	
Boron Cadmium Calcium Copper	33400 ND				12/6/2019 4:31:00 PM
Cadmium Calcium Copper	ND	500	μg/L	1	12/6/2019 4:31:00 PM
Calcium Copper		000	μg/L	10	12/6/2019 4:34:00 PM
Copper	733000	5.00	μg/L	1	12/6/2019 4:31:00 PM
	133000	500	μg/L	10	12/6/2019 4:34:00 PM
Iron	ND	5.00	μg/L	1	12/6/2019 4:31:00 PM
	106	50.0	μg/L	1	12/6/2019 4:31:00 PM
Magnesium	135000	50.0	μg/L	1	12/6/2019 4:31:00 PM
Manganese	343	20.0	μg/L	1	12/6/2019 4:31:00 PM
Potassium	149000	500	μg/L	10	12/6/2019 4:34:00 PM
Selenium	6.01	5.00	μg/L	1	12/6/2019 4:31:00 PM
Sodium	299000	5000	μg/L	10	12/6/2019 4:34:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	2386	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/201	19)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 2:10:41 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1					Analyst: CS
Chloride	534	50.0	mg/L	50	12/5/2019 9:02:22 PM
Sulfate	1720	50.0	mg/L	50	12/5/2019 9:02:22 PM
ALKALINITY TO PH 4.5 -SM 2320B-2011					Analyst: DAA
Alkalinity, Total (As CaCO3)	460	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA 350.1	REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 Under Drain 3

 Collection Date:
 11/20/2019 11:33:00 AM

 Lab Sample ID:
 191122020-017

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/26/2019 12:28:11 PM
CONDUCTANCE AT 25C - SM 2510B-2011					Analyst: KB
Specific Conductance	4850	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM 2540C-2011					Analyst: CC
TDS (Residue, Filterable)	4050	5	mg/L	1	11/26/2019

CLIENT: Lockwood Hills LLC Work Order: 191122020 Lockwood Ash Landfill / Quarterly **Reference: PO#:**

Date: 13-Dec-19 BAWA le ID: 2001 Client Sample ID: Inlet To Pond Collection Date: 11/20/2019 1:50:00 PM Lab Sample ID: 191122020-018 Matrix: GROUNDWATER

Analyses	Result	RL Qu	1al Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.24	0.10	mg/L		11/20/2019 1:50:00 PM
Flow, GPD	11,033		gal/day		11/20/2019 1:50:00 PM
pH (E150.1)	6.5		S.U.		11/20/2019 1:50:00 PM
Temperature (E170.1)	10		deg C		11/20/2019 1:50:00 PM
Turbidity (E180.1)	610	1.0	NTU		11/20/2019 1:50:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/6/2019 4:40:00 PM
Arsenic	50.7	5.00	μg/L	1	12/6/2019 4:40:00 PM
Boron	24500	500	μg/L	10	12/6/2019 4:44:00 PM
Cadmium	ND	5.00	μg/L	1	12/6/2019 4:40:00 PM
Calcium	513000	500	μg/L	10	12/6/2019 4:44:00 PM
Copper	ND	5.00	μg/L	1	12/6/2019 4:40:00 PM
Iron	5010	50.0	μg/L	1	12/6/2019 4:40:00 PM
Magnesium	96000	50.0	μg/L	1	12/6/2019 4:40:00 PM
Manganese	599	20.0	μg/L	1	12/6/2019 4:40:00 PM
Potassium	69500	500	μg/L	10	12/6/2019 4:44:00 PM
Selenium	21.8	5.00	μg/L	1	12/6/2019 4:40:00 PM
Sodium	224000	5000	μg/L	10	12/6/2019 4:44:00 PM
LOW LEVEL MERCURY - EPA 16	31E				Analyst: WB
(Prep: 1631E - 1	1/25/2019)				,
Mercury	0.6	0.5	ng/L	1	11/26/2019
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	1675	5	mg/L CaCO3	1	12/6/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 2:12:22 PM
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1					Analyst: CS
Chloride	250	20.0	mg/L	20	12/5/2019 9:21:24 PM
Sulfate	1410	20.0	mg/L	20	12/5/2019 9:21:24 PM
ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA

Date: 13-Dec-19 BAMA 02/20/20

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:Constant of the second secon

Client Sample ID: 21 Inlet To Pond Collection Date: 11/20/2019 1:50:00 PM Lab Sample ID: 191122020-018 Matrix: GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
ALKALINITY TO PH 4.5 -SM 2320B-20)11				Analyst: DAA
Alkalinity, Total (As CaCO3)	350	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA 3	50.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	0.1	0.1	mg/L	1	11/26/2019 12:29:49 PM
CONDUCTANCE AT 25C - SM 2510B-	2011				Analyst: KB
Specific Conductance	3510	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM 254	DTAL DISSOLVED SOLIDS - SM 2540C-2011				
TDS (Residue, Filterable)	2880	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 Keuka Upstream

 Collection Date:
 1/20/2019 2:53:00 PM

 Lab Sample ID:
 191122020-019

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A		Analyst: FLD			
Dissolved Oxygen (E360.1)	7.15	0.10	mg/L		11/20/2019 2:53:00 PM
pH (E150.1)	6.3		S.U.		11/20/2019 2:53:00 PM
Temperature (E170.1)	7		deg C		11/20/2019 2:53:00 PM
Turbidity (E180.1)	35	1.0	NTU		11/20/2019 2:53:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1 ⁻	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/9/2019 12:40:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 12:40:00 PM
Boron	ND	50.0	μg/L	1	12/9/2019 12:40:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 12:40:00 PM
Calcium	36000	50.0	μg/L	1	12/9/2019 12:40:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 12:40:00 PM
Iron	53.4	50.0	μg/L	1	12/9/2019 12:40:00 PM
Magnesium	11000	50.0	μg/L	1	12/9/2019 12:40:00 PM
Manganese	ND	20.0	μg/L	1	12/9/2019 12:40:00 PM
Potassium	2440	50.0	μg/L	1	12/9/2019 12:40:00 PM
Selenium	ND	5.00	μg/L	1	12/9/2019 12:40:00 PM
Sodium	19500	500	μg/L	1	12/9/2019 12:40:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	135	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep:E245.1 - 1 ⁻	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:07:03 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	34.6	2.00	mg/L	2	12/5/2019 9:59:29 PM
Sulfate	22.3	2.00	mg/L	2	12/5/2019 9:59:29 PM
ALKALINITY TO PH 4.5 -SM 2320E	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	120	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/26/2019 12:31:26 PN

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

Client Sample ID:Keuka UpstreamCollection Date:11/20/2019 2:53:00 PMLab Sample ID:191122020-019Matrix:GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	361	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	175	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 Keuka Downstream

 Collection Date:
 11/20/2019 2:33:00 PM

 Lab Sample ID:
 191122020-020

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A		Analyst: FLD			
Dissolved Oxygen (E360.1)	7.34	0.10	mg/L		11/20/2019 2:33:00 PM
pH (E150.1)	6.4		S.U.		11/20/2019 2:33:00 PM
Temperature (E170.1)	7		deg C		11/20/2019 2:33:00 PM
Turbidity (E180.1)	37	1.0	NTU		11/20/2019 2:33:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 11	/25/2019)				
Aluminum	ND	100	μg/L	1	12/9/2019 12:45:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 12:45:00 PM
Boron	ND	50.0	μg/L	1	12/9/2019 12:45:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 12:45:00 PM
Calcium	35900	50.0	μg/L	1	12/9/2019 12:45:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 12:45:00 PM
Iron	56.5	50.0	μg/L	1	12/9/2019 12:45:00 PM
Magnesium	11000	50.0	μg/L	1	12/9/2019 12:45:00 PM
Manganese	ND	20.0	μg/L	1	12/9/2019 12:45:00 PM
Potassium	2410	50.0	μg/L	1	12/9/2019 12:45:00 PM
Selenium	ND	5.00	μg/L	1	12/9/2019 12:45:00 PM
Sodium	19400	500	μg/L	1	12/9/2019 12:45:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	135	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:08:45 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Oblecide		0.00		0	
Chloride	34.4	2.00	mg/L	2	12/5/2019 11:55:30 PM
Sulfate	22.1	2.00	mg/L	2	12/5/2019 11:55:30 PM
ALKALINITY TO PH 4.5 -SM 2320E	8-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	120	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP/	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 2:00:03 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

Client Sample ID:Keuka DownstreamCollection Date:11/20/2019 2:33:00 PMLab Sample ID:191122020-020Matrix:SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	361	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	A 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	140	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: Surface Water Dup Collection Date: 11/20/2019 2:53:00 PM Lab Sample ID: 191122020-021 Matrix: SURFACE WATER

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A		Analyst: FLD			
Dissolved Oxygen (E360.1)	7.21	0.10	mg/L		11/20/2019 2:53:00 PM
pH (E150.1)	6.4		S.U.		11/20/2019 2:53:00 PM
Temperature (E170.1)	7		deg C		11/20/2019 2:53:00 PM
Turbidity (E180.1)	34	1.0	NTU		11/20/2019 2:53:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	µg/L	1	12/9/2019 12:48:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 12:48:00 PM
Boron	ND	50.0	μg/L	1	12/9/2019 12:48:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 12:48:00 PM
Calcium	35300	50.0	μg/L	1	12/9/2019 12:48:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 12:48:00 PM
Iron	94.9	50.0	μg/L	1	12/9/2019 12:48:00 PM
Magnesium	10900	50.0	μg/L	1	12/9/2019 12:48:00 PM
Manganese	ND	20.0	μg/L	1	12/9/2019 12:48:00 PM
Potassium	2390	50.0	μg/L	1	12/9/2019 12:48:00 PM
Selenium	ND	5.00	μg/L	1	12/9/2019 12:48:00 PM
Sodium	19100	500	μg/L	1	12/9/2019 12:48:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	133	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:13:51 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	34.7	2.00	mg/L	2	12/6/2019 12:14:32 AM
Sulfate	22.2	2.00	mg/L	2	12/6/2019 12:14:32 AM
ALKALINITY TO PH 4.5 -SM 23206		Analyst: DAA			
Alkalinity, Total (As CaCO3)	110	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0					Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/26/2019 12:33:03 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:

Date: 13-Dec-19

 Client Sample ID:
 Surface Water Dup

 Collection Date:
 11/20/2019 2:53:00 PM

 Lab Sample ID:
 191122020-021

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 2510B-2011					Analyst: KB
Specific Conductance	358	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM				Analyst: CC	
TDS (Residue, Filterable)	160	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: Pond Grab Collection Date: 1/20/2019 2:00:00 PM Lab Sample ID: 191122020-022 Matrix: SURFACE WATER

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	9.49	0.10	mg/L		11/20/2019 2:00:00 PM
pH (E150.1)	6.8		S.U.		11/20/2019 2:00:00 PM
Temperature (E170.1)	4		deg C		11/20/2019 2:00:00 PM
Turbidity (E180.1)	71	1.0	NTU		11/20/2019 2:00:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 1	1/25/2019)				
Aluminum	ND	100	μg/L	1	12/9/2019 12:54:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 12:54:00 PM
Boron	18800	50.0	μg/L	1	12/9/2019 12:54:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 12:54:00 PM
Calcium	267000	500	μg/L	10	12/9/2019 12:59:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 12:54:00 PM
Iron	163	50.0	μg/L	1	12/9/2019 12:54:00 PM
Magnesium	65600	50.0	μg/L	1	12/9/2019 12:54:00 PM
Manganese	85.1	20.0	μg/L	1	12/9/2019 12:54:00 PM
Potassium	67800	50.0	μg/L	1	12/9/2019 12:54:00 PM
Selenium	12.5	5.00	μg/L	1	12/9/2019 12:54:00 PM
Sodium	154000	5000	μg/L	10	12/9/2019 12:59:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	938	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:18:57 PM
ANIONS BY ION CHROMATOGRA	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	165	20.0	mg/L	20	12/6/2019 12:33:34 AM
Sulfate	929	20.0	mg/L	20	12/6/2019 12:33:34 AM
ALKALINITY TO PH 4.5 -SM 23201	3-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	120	10	mgCaCO3/L	1	12/3/2019
AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.2	mg/L	2	11/26/2019 1:42:38 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 Pond Grab

 Collection Date:
 11/20/2019 2:00:00 PM

 Lab Sample ID:
 191122020-022

 Matrix:
 SURFACE WATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	i10B-2011				Analyst: KB
Specific Conductance	2340	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	1770	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: Field Blank Collection Date: 1/20/2019 1:05:00 PM Lab Sample ID: 091122020-023 Matrix: GROUNDWATER

Analyses	Result	RL Qu	ial Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP AI	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
Dissolved Oxygen (E360.1)	6.74	0.10	mg/L		11/20/2019 1:05:00 PM
pH (E150.1)	6.9		S.U.		11/20/2019 1:05:00 PM
Temperature (E170.1)	8		deg C		11/20/2019 1:05:00 PM
Turbidity (E180.1)	< 1	1.0	NTU		11/20/2019 1:05:00 PM
CP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 11	/25/2019)				
Aluminum	ND	100	μg/L	1	12/9/2019 1:02:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 1:02:00 PM
Boron	ND	50.0	μg/L	1	12/9/2019 1:02:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 1:02:00 PM
Calcium	ND	50.0	μg/L	1	12/9/2019 1:02:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 1:02:00 PM
Iron	ND	50.0	μg/L	1	12/9/2019 1:02:00 PM
Magnesium	ND	50.0	μg/L	1	12/9/2019 1:02:00 PM
Manganese	ND	20.0	μg/L	1	12/9/2019 1:02:00 PM
Potassium	ND	50.0	μg/L	1	12/9/2019 1:02:00 PM
Selenium	ND	5.00	μg/L	1	12/9/2019 1:02:00 PM
Sodium	ND	500	μg/L	1	12/9/2019 1:02:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	ND	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:20:40 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	ND	2.00	mg/L	2	12/6/2019 12:52:36 AM
Sulfate	ND	2.00	mg/L	2	12/6/2019 12:52:36 AM
ALKALINITY TO PH 4.5 -SM 2320B	-2011				Analyst: DAA
Alkalinity, Total (As CaCO3)	ND	10	mgCaCO3/L	1	12/4/2019
AMMONIA (NON-DISTILLED) - EPA	350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/26/2019 12:42:49 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

Client Sample ID:Field BlankCollection Date:11/20/2019 1:05:00 PMLab Sample ID:191122020-023Matrix:GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	2	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	I 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	5	5	mg/L	1	11/26/2019

i iun onuuc						
CLIENT:	Lockwood Hills LLC			Client Sample	ID: LLHg	Field Blank
Work Order:	191122020			Collection E	ate: 11/20/	2019 1:45:00 AM
Reference:	Lockwood Ash Landfill /	Landfill / Quarterly		Lab Sample ID: 191122020-0		
PO#:				Ma	trix: GROU	INDWATER
Analyses]	Result	RL (Jual Units	DF	Date Analyzed
	ERCURY - EPA 1631E Prep: 1631E - 11/25/2019))				Analyst: WE

Date: 13-Dec-19

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

 Client Sample ID:
 8401

 Collection Date:
 11/20/2019 2:20:00 PM

 Lab Sample ID:
 191122020-025

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES CL2, AND TEMP A	RE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1)	7.4		S.U.		11/20/2019 2:20:00 PM
Temperature (E170.1)	8		deg C		11/20/2019 2:20:00 PM
Turbidity (E180.1)	8	1.0	NTU		11/20/2019 2:20:00 PM
ICP METALS - EPA 200.7					Analyst: KH
(Prep: SW3010A - 11	/25/2019)				
Aluminum	ND	100	μg/L	1	12/9/2019 1:07:00 PM
Arsenic	ND	5.00	μg/L	1	12/9/2019 1:07:00 PM
Boron	881	50.0	μg/L	1	12/9/2019 1:07:00 PM
Cadmium	ND	5.00	μg/L	1	12/9/2019 1:07:00 PM
Calcium	89100	50.0	μg/L	1	12/9/2019 1:07:00 PM
Copper	ND	5.00	μg/L	1	12/9/2019 1:07:00 PM
Iron	210	50.0	μg/L	1	12/9/2019 1:07:00 PM
Magnesium	26200	50.0	μg/L	1	12/9/2019 1:07:00 PM
Manganese	65.4	20.0	μg/L	1	12/9/2019 1:07:00 PM
Potassium	2730	50.0	μg/L	1	12/9/2019 1:07:00 PM
Selenium	ND	5.00	μg/L	1	12/9/2019 1:07:00 PM
Sodium	81700	5000	µg/L	10	12/9/2019 1:12:00 PM
HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
Total Hardness (As CaCO3)	330	5	mg/L CaCO3	1	12/9/2019
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11	/25/2019)				Analyst: AVB
Mercury	ND	0.0002	mg/L	1	11/25/2019 3:22:23 PM
ANIONS BY ION CHROMATOGRAF	PHY - EPA 300.0 F	REV 2.1			Analyst: CS
Chloride	50.3	2.00	mg/L	2	12/6/2019 1:11:38 AM
Sulfate	79.0	2.00	mg/L	2	12/6/2019 1:11:38 AM
ALKALINITY TO PH 4.5 -SM 2320B			0		Analyst: DAA
Alkalinity, Total (As CaCO3)	360	10	mgCaCO3/L	1	12/4/2019
AMMONIA (NON-DISTILLED) - EPA			-		Analyst: PL
	0.9	0.1	mg/L	1	11/25/2019 2:01:35 PM

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 8401

 Collection Date:
 1/20/2019 2:20:00 PM

 Lab Sample ID:
 091122020-025

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
CONDUCTANCE AT 25C - SM 25	10B-2011				Analyst: KB
Specific Conductance	951	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SI	M 2540C-2011				Analyst: CC
TDS (Residue, Filterable)	560	5	mg/L	1	11/26/2019

CLIENT:	Lockwood Hills LLC
Work Order:	191122020
Reference:	Lockwood Ash Landfill / Quarterly
PO#:	

Date: 13-Dec-19

Client Sample ID: GW Dep Drain 3 Collection Date: 11/20/2019 11:17:00 AM Lab Sample ID: 191122020-026 Matrix: GROUNDWATER

Flow, GPD 266 gal/day 11/20/2019 11:17:00 AM pH (E150.1) 7.0 S.U. 11/20/2019 11:17:00 AM Temperature (E170.1) 10 deg C 11/20/2019 11:17:00 AM Turbidity (E180.1) 43 1.0 NTU 11/20/2019 11:7:00 AM ICP METALS - EPA 200.7 Analyst: KH 11/20/2019 1:4:0:00 PM Arsenic ND 5.00 µg/L 1 12/9/2019 1:4:0:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:4:0:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:4:0:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:4:0:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:4:0:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:	Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
Flow, GPD 266 gal/day 11/20/2019 11:17:00 AM pH (E150.1) 7.0 S.U. 11/20/2019 11:17:00 AM Temperature (E170.1) 10 deg C 11/20/2019 11:17:00 AM Turbidity (E180.1) 43 1.0 NTU 11/20/2019 11:7:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Aluminum ND 100 µg/L 1 12/9/2019 1:40:00 PM Assenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cademium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µ	FIELD-PH, RES CL2, AND TEMP	ARE NOT ELAP CE	RTIFIABLE			Analyst: FLD
pH (E150.1) 7.0 S.U. 11/20/2019 11:17:00 AM Temperature (E170.1) 10 deg C 11/20/2019 11:17:00 AM Turbidity (E180.1) 43 1.0 NTU 11/20/2019 11:17:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Auminum ND 100 µg/L 1 12/9/2019 1:40:00 PM Auminum ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 1777 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadrium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadrium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM <t< td=""><td>Dissolved Oxygen (E360.1)</td><td>6.24</td><td>0.10</td><td>mg/L</td><td></td><td>11/20/2019 11:17:00 AM</td></t<>	Dissolved Oxygen (E360.1)	6.24	0.10	mg/L		11/20/2019 11:17:00 AM
Temperature (E170.1) 10 deg C 11/20/2019 11:17:00 AM Turbidity (E180.1) 43 1.0 NTU 11/20/2019 11:17:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: KH Analyst: KH Auminum ND 100 µg/L 1 12/9/2019 1:40:00 PM Assenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Gadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 5.00 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 5.00 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 5.00 µg/L 1 12/9/2019 1:40:00 PM Calcium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L <td>Flow, GPD</td> <td>266</td> <td></td> <td>gal/day</td> <td></td> <td>11/20/2019 11:17:00 AM</td>	Flow, GPD	266		gal/day		11/20/2019 11:17:00 AM
Turbidity (E180.1) 43 1.0 NTU 11/20/2019 11:17:00 AM ICP METALS - EPA 200.7 (Prep: SW3010A - 11/25/2019) Analyst: KH Aluminum ND 100 µg/L 1 12/9/2019 1:40:00 PM Arsenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadeium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Manganese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Manganese ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L <	pH (E150.1)	7.0		S.U.		11/20/2019 11:17:00 AM
Aluminum ND Aluminum ND 1/2/2/019 1:40:00 PM Arsenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadewium 49000 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 20300 50.0 µg/L 1 12	Temperature (E170.1)	10		deg C		11/20/2019 11:17:00 AM
(Prep: SW3010A - 11/25/2019) Aluminum ND 100 µg/L 1 12/9/2019 1:40:00 PM Arsenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L 1 12/9/2019 1:40:00 PM MERCURY -	Turbidity (E180.1)	43	1.0	NTU		11/20/2019 11:17:00 AM
Numinum ND 100 µg/L 1 12/9/2019 1:40:00 PM Arsenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadcium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Marganese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Mercury ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Mercury <	ICP METALS - EPA 200.7					Analyst: KH
Arsenic ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Boron 1777 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadrium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Mercury ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Mercury <t< td=""><td>(Prep: Sw3010A - 1</td><td>1/25/2019)</td><td></td><td></td><td></td><td></td></t<>	(Prep: Sw3010A - 1	1/25/2019)				
Boron 177 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Cadmium 100 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: CS Analyst: AVB Analyst: AVB <	Aluminum	ND	100	μg/L	1	12/9/2019 1:40:00 PM
Cadmium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Calcium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Iron ND 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: Magnesite AVB Analyst: CS Analyst: AVB	Arsenic	ND	5.00	μg/L	1	12/9/2019 1:40:00 PM
Calcium 191000 50.0 µg/L 1 12/9/2019 1:40:00 PM Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Iron ND 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: CO3 1 12/9/2019 1:40:00 PM MERCURY - EPA 245.1 REV 3.0 rmg/L CACCO3 1 12/9/2019 Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L <t< td=""><td>Boron</td><td>177</td><td>50.0</td><td>μg/L</td><td>1</td><td>12/9/2019 1:40:00 PM</td></t<>	Boron	177	50.0	μg/L	1	12/9/2019 1:40:00 PM
Copper 5.84 5.00 µg/L 1 12/9/2019 1:40:00 PM Iron ND 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnessium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnessee ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: KH Analyst: CS Analyst: CS Analyst: CS Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17	Cadmium	ND	5.00	μg/L	1	12/9/2019 1:40:00 PM
Iron ND 50.0 µg/L 1 12/9/2019 1:40:00 PM Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Manganese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 Analyst: AVB Analyst: AVB Analyst: AVB (Prep: E245.1 - 11/25/2019) Mo 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17 2.00 mg/L 10 12/6/2019 1:30:40 AM Sulfate 319	Calcium	191000	50.0	μg/L	1	12/9/2019 1:40:00 PM
Magnesium 46900 50.0 µg/L 1 12/9/2019 1:40:00 PM Manganese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM ARDNESS - EPA 200.7 REV 4.4 Analyst: AVB Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17 2.00 mg/L 10 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 <th< td=""><td>Copper</td><td>5.84</td><td>5.00</td><td>μg/L</td><td>1</td><td>12/9/2019 1:40:00 PM</td></th<>	Copper	5.84	5.00	μg/L	1	12/9/2019 1:40:00 PM
Manganese ND 20.0 µg/L 1 12/9/2019 1:40:00 PM Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L 10 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Iron	ND	50.0	µg/L	1	12/9/2019 1:40:00 PM
Potassium 3230 50.0 µg/L 1 12/9/2019 1:40:00 PM Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 2 12/6/2019 1:30:40 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Magnesium	46900	50.0	μg/L	1	12/9/2019 1:40:00 PM
Selenium ND 5.00 µg/L 1 12/9/2019 1:40:00 PM Sodium 20300 500 µg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Analyst: KH Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019 Analyst: AVB Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17 2.00 mg/L 10 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Manganese	ND	20.0	µg/L	1	12/9/2019 1:40:00 PM
Sodium 20300 500 μg/L 1 12/9/2019 1:40:00 PM HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 2 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst DA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Potassium	3230	50.0	µg/L	1	12/9/2019 1:40:00 PM
HARDNESS - EPA 200.7 REV 4.4 Analyst: KH Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride 6.17 2.00 mg/L 10 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Selenium	ND	5.00	µg/L	1	12/9/2019 1:40:00 PM
Total Hardness (As CaCO3) 670 5 mg/L CaCO3 1 12/9/2019 MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019) Analyst: AVB Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:30:40 AM ALKALINITY TO PH 4.5 - SM 2320B-2011 Xanalyst: Char Analyst: DAA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Sodium	20300	500	μg/L	1	12/9/2019 1:40:00 PM
MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 11/25/2019)) Analyst: AVB Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Analyst: CS Chloride Sulfate 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM ALKALINITY TO PH 4.5 - SM 2320B-2011 319 10.0 mg/L 10 12/6/2019 1:49:42 AM Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	HARDNESS - EPA 200.7 REV 4.4					Analyst: KH
(Prep: E245.1 - 11/25/2019) Mercury ND 0.0002 mg/L 1 11/25/2019 3:27:28 PM ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Analyst: DAA	Total Hardness (As CaCO3)	670	5	mg/L CaCO3	1	12/9/2019
ANIONS BY ION CHROMATOGRAPHY - EPA 300.0 REV 2.1 Analyst: CS Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Xanalyst: DAA Xanalyst: DAA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	MERCURY - EPA 245.1 REV 3.0 (Prep: E245.1 - 1	1/25/2019)				Analyst: AVB
Chloride 6.17 2.00 mg/L 2 12/6/2019 1:30:40 AM Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Mercury	ND	0.0002	mg/L	1	11/25/2019 3:27:28 PM
Sulfate 319 10.0 mg/L 10 12/6/2019 1:49:42 AM ALKALINITY TO PH 4.5 -SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	ANIONS BY ION CHROMATOGRA		Analyst: CS			
ALKALINITY TO PH 4.5 - SM 2320B-2011 Analyst: DAA Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Chloride	6.17	2.00	mg/L	2	12/6/2019 1:30:40 AM
Alkalinity, Total (As CaCO3) 330 10 mgCaCO3/L 1 12/4/2019	Sulfate	319	10.0	mg/L	10	12/6/2019 1:49:42 AM
	ALKALINITY TO PH 4.5 -SM 2320	B-2011				Analyst: DAA
AMMONIA (NON-DISTILLED) - EPA 350.1 REV 2.0 Analyst: PL	Alkalinity, Total (As CaCO3)	330	10	mgCaCO3/L	1	12/4/2019
	AMMONIA (NON-DISTILLED) - EP	A 350.1 REV 2.0				Analyst: PL

CLIENT:Lockwood Hills LLCWork Order:191122020Reference:Lockwood Ash Landfill / QuarterlyPO#:PO#:

Date: 13-Dec-19

 Client Sample ID:
 GW Dep Drain 3

 Collection Date:
 11/20/2019 11:17:00 AM

 Lab Sample ID:
 191122020-026

 Matrix:
 GROUNDWATER

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
AMMONIA (NON-DISTILLED) - EF	PA 350.1 REV 2.0				Analyst: PL
Nitrogen, Ammonia (As N)	ND	0.1	mg/L	1	11/25/2019 2:03:07 PM
CONDUCTANCE AT 25C - SM 25	I0B-2011				Analyst: KB
Specific Conductance	1130	1	µmhos/cm	1	11/26/2019
TOTAL DISSOLVED SOLIDS - SM	2540C-2011				Analyst: CC
TDS (Residue, Filterable)	800	5	mg/L	1	11/26/2019

Adirondac	k Environmental S	ervices, Iı	nc	Date	: 13-De	c-19
CLIENT:	Lockwood Hills LLC		C	lient Sample ID	: GW D	ep Drain 2
Work Order:	191122020			Collection Date	: 11/20/	2019 11:12:00 AM
Reference:	Lockwood Ash Landfill /	Quarterly]	Lab Sample ID:	19112	2020-027
PO#:				Matrix	GROU	INDWATER
Analyses		Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT	ELAP CERT	FIABLE			Analyst: FLD
Observation		DRY		NA		11/20/2019 11:12:00 AM

Date: 13-Dec-19

Adirondac	k Environmental S	ervices, Iı	nc	Dat	e: 13	Dec-19
CLIENT:	Lockwood Hills LLC		С	lient Sample I	D: GW	/ Dep Drain 4
Work Order:	191122020			Collection Dat	e: 11/2	20/2019 11:14:00 AM
Reference:	Lockwood Ash Landfill	Quarterly		Lab Sample II): 191	122020-028
PO#:				Matri	x: GR	OUNDWATER
Analyses		Result	RL Qual	Units	Dł	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT	ELAP CERT	FIABLE			Analyst: FLD
Observation		DRY		NA		11/20/2019 11:14:00 AM

Adirondac	k Environmental Services	s, Inc Date	• 15 Dt	
CLIENT:	Lockwood Hills LLC	Client Sample ID	: Under	Drain 5
Work Order:	191122020	Collection Date	e: 11/20/	/2019 11:27:00 AM
Reference:	Lockwood Ash Landfill / Quarter	y Lab Sample ID	: 19112	2020-029
PO#:		Matrix	: GROU	JNDWATER
Analyses	Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP C	ERTIFIABLE		Analyst: FLD
Observation	DRY	NA		11/20/2019 11:27:00 AM

Date: 13-Dec-19

Adirondac	k Environmental Service	s, Inc Date	: 13-De	<i>pc-19</i>
CLIENT:	Lockwood Hills LLC	Client Sample ID	: 8910-	SH
Work Order:	191122020	Collection Date	: 11/20/	/2019 8:00:00 AM
Reference:	Lockwood Ash Landfill / Quarte	ly Lab Sample ID:	19112	2020-030
PO#:		Matrix	GROU	JNDWATER
Analyses	Result	RL Qual Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT ELAP (ERTIFIABLE		Analyst: FLD
Observation	Poor Recovery	NA		11/20/2019 8:00:00 AM

Adirondac	k Environmental Se	ervices, Iı	nc	Date:	13-De	<i>c-19</i>
CLIENT:	Lockwood Hills LLC		С	lient Sample ID:	8405	
Work Order:	191122020			Collection Date:	11/20/	2019 3:35:00 PM
Reference:	Lockwood Ash Landfill /	Quarterly]	Lab Sample ID:	19112	2020-031
PO#:				Matrix:	GROU	JNDWATER
Analyses]	Result	RL Qual	Units	DF	Date Analyzed
FIELD-PH, RES	CL2, AND TEMP ARE NOT	ELAP CERT	FIABLE			Analyst: FLD
Observation		DRY		NA		11/20/2019 3:35:00 PM



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891 CHAIN OF CUSTODY RECORD

AES Work Order#:

191122020

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Na		Address:								
Lockw	rood Hills LLC				<u>.</u>				.,	
Send Rep		Project Nam	e (Location):			Ī	Samplers 1			
Dale In		Lockwo	od Ash LF	Quarter	rlv		Rich	n'R	ille	y Kenn Anb.
Client Pho	one No:	PO #:		Quarte			Samplers	Signature:	0001-	7 //
Client Fay	x No:						Sampician		2_	
AES		Date	Time	Sampl	e Tvn	e	# of			/
Sample ID	Client Sample ID:	Sampled	A=am P=pm	Matrix	C	G	Cont's		A	nalysis
001	1842	11/21 19				Lock	wood A	sh LF Quarterly		
DUL	8404	11/20/19	1620 A	GW		G	4	Fiel	d pH, T	emp, Turbidity
2003	8908-D	11/20/19		GW		G	4			
0)4	8908-SH	11/20/19	1350 A	GW		G	4			
35	8909-D	11/20/19	1505 A	GW		G	4			
006	8909-SH	11/20/19	1510 A	GW		G	4			
007	8910-D	11/20/19	1520 A	GW		G	4			
208	8911-D	11/20/19	11)20 19 15 30 A GW G 4							
029	8911-SH	11/20/19								,
010	8942-D	11/20/19	0745 A	GW		G	4			
011	9306-SH	11/21/19	0730 A	GW	-	G	4			
りね	GW Dup <u>5909 D</u>	11/20/19/505 - GW G 4								
Shipmen	t Arrived Via:		Sp	ecial Instru	ctions	/Rem	arks:			
FedEx	UPS Client (AES) Oth	her:	De	ige 1 of 3	ı					
	ound Time Requested:			ige I of 5						
(1) a										
@ 2 -Da										
	shed by: (Signature)	Receive	d by: (Signature)					Date		Time
Relinquis	shed by: (Signature)	Receive	d by: (Signature)	1				Date		Time
Relinquis	shed by: (Signature)	Receive	d for Laborator	y by:				Date		Time
		ý	m	and well and the state of the s	····.			1/201	91	SXAn
0	Sample Temperature	0	Prope	erly Preser	ved			R	eceived Wit	thin Holding Times
	Ambient Chilled Chilling Process begun		CT.	Y) N					Y) и
	40							Motory		
No	ites:	_ Note	s							
L				* a		, i	,			
		·				-				
									1911220	120



b

314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#:

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Nar	A full service analytic	Address:	11 14001	101	<u>j 011011</u>	<u></u>				
Lockw	ood Hills LLC									
Send Repo								Samplers		. 1
Dale Ir Client Pho		Lockwo	od Ash	LF	Quarte	rly		Ryar	n Bai	sley Kevir Ambra
Client Fax	No	PO #:						Samplers	Signature:	_ /
AES		Date	Time		61	- T		# of		
Sample ID	Client Sample ID:	Sampled	A=am P=pm		Sampl <u>Matrix</u>	<u>C</u>	<u>G</u>	Cont's		Analysis
013	GW Dep Drain 1	11/20/19	1310	A P	GW		G	4		vood Q Field pH, Temp, Field Flow Reading, DO
214 YIC	Leak Detection Syst.	11/20/19	1330	A P	GW		G	4		66
215	Under Drain 1	11/20/19	1200	A P	GW		G	5		66
016	Under Drain 2	11/20/19	1240	A P	GW		G	4		<u> </u>
017	Under Drain 3	11/20/19	1133	A P	GW		G	4		66
018	21" Inlet to Pond	11/20/19	1350	A P	GW		G	5		
219	Keuka Upstream	11/20/19	1453	A P	GW		G	4	1	kwood Quarterly +DO
220	Keuka Downstream	11/20/19	1433	A P	SF		G	4		kwood Quarterly +DO
DAI	Surface Water Dup	11)20/19	1453	A P	SF		G	4		kwood Quarterly +DO
DJJ	Pond Grab	11/20/19	1400	A P	SF		G	4	L	kwood Quarterly +DO
023	Field Blank	11/20/19	1305	<u>A</u>	GW		G	4	Loc	kwood Quarterly +DO
Day	LLHg Field Blank	11/20/19	1345	P	GW		G	1		EPA 1631
Shipmen	t Arrived Via:			Sp	ecial Instru	ctions	/Rem	arks:		
FedEx	UPS Client AES Oth	er:		Pa	ige 2 of 3					
@ 1 Day										
4 2 -Da Relinquis	ay ④ 5 Day shed by: (Signature)	Received	l by: (Signa	ature)					Date	Time
Relinquis	shed by: (Signature)	Received by: (Signature)					Date	Time		
Relinquis	shed by: (Signature)	Received for Laboratory by:					Date	Time		
	11/1		2.4	<u>2</u> 2				<u> </u>	Madi	G 1158 A. ceived Within Holding Times
	Sample Temperature Ambient Chillee Chilling Process begun		Property Preserved					Re Notes:	Ŷ N	
	tes: (S:							······································



314 North Pearl Street Albany, New York 12207 518-434-4546♦ Fax: 518-434-0891

CHAIN OF CUSTODY RECORD

AES Work Order#: 9 1120

EXPERIENCE IS THE SOLUTION

A full service analytical research laboratory offering solutions to environmental concerns

Client Nan	ne:	Address:			<u> </u>	<u> </u>					
Lockw	ood Hills LLC								T		
Send Repo		Project Nam	e (Location):				Samplers r	Samplers Name:		
Dale Ir		Lockwo	ockwood Ash LF Quarterly					Ryar	Baistey/Rain Alb.	<u> </u>	
		PO #:	Samplers				Samplers S	Signature			
Client Fax AES	No:	Date	Time		Sample	Type		# of	A 1		
Sample ID	Client Sample ID:	Sampled	A=am P=pm		Matrix	C	G	Cont's	Analysis		
026	8401	11/20/19	1420		GW			4	Lockwood Ash LF Quarter Field pH, Temp, Turbidit	ty	
126	GW Dep Drain 3	11/20/19	1117	A P	GW			4	+ Field Flow Reading, DO	<u>с</u>	
$\frac{2}{2}$	GW Dep Drain 2	11/20/19	1112	A P	GW			0	Observation Only		
W8	GW Dep Drain 4	11/20/19	1114	A P	GW			0	Observation Only		
229	Under Drain 5	11/20/19	1127	A P	GW			0	Observation Only		
$\overrightarrow{030}$	8910-SH	11/20/19	0800	A P	GW			0 Observation Only			
031	8405	11/20/19	1535	A	GW			0	Observation Only		
				P							
				A							
				A							
			<u> </u>	P A		+					
				P A							
				Р	1		<u> </u>	1			
	t Arrived Via:			Sp	ecial Instru	ictions	/Ren	harks:			
FedEx	UPS Client (AES) O	ther:		Pa	age 3 of 3	3					
Turnar ④ 1 Da	ound Time Requested: y ④ 3 Day ④ Normal										
@ 2 -D		Dessive	d by: (Signa	otura			,		Date Time		
Relinqui	shed by: (Signature)	Receive	a by. (Sign	ature							
Relinqui	shed by: (Signature)	Receive	ed by: (Signa	ature))				Date Time		
Relinqui	shed-by: (Signature)	Receive	ed for Labo	orator	y by:				Date Time		
			$\underline{1}$	22	-	and the second			Received Within Holding Times	\sim	
	Sample Temperature Ambient Chilled Chilling Process begun	0	1		erly Present	rvea			Y N		
No	bites: 4°	Note	es:						Notes:		
		-									

Collection Date	Sample ID	Depth	Elevation	Units
11/20/2019	8908-D	7.69	605.28	feet
11/20/2019	8909-D	45.62	516.28	feet
11/20/2019	8910-D	23.28	535.06	feet
11/20/2019	8911-D	28.71	528.20	feet
11/20/2019	8942-D	15.72	543.23	feet
11/20/2019	8908-SH	6.71	606.06	feet
11/20/2019	8909-SH	10.52	551.11	feet
11/20/2019	8910-SH	15.79	542.76	feet
11/20/2019	8911-SH	19.72	537.20	feet
11/20/2019	9306-SH	8.30	557.92	feet
11/20/2019	7741	22.51	565.54	feet
11/20/2019	1842	6.92	552.28	feet
11/20/2019	8406	16.21	553.34	feet
11/20/2019	8407	Obstructed	-	feet
11/20/2019	8401	7.48	652.81	feet
11/20/2019	8402	9.42	654.67	feet
11/20/2019	8403	8.18	655.89	feet
11/20/2019	8404	7.06	595.67	feet
11/20/2019	8405	DRY	DRY	feet

Lockwood Ash Disposal Site Fourth Quarter 2019

ATTACHMENT 5

Time-Series Plots

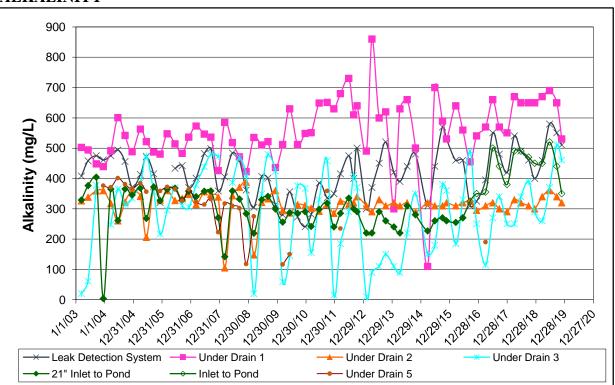
Baseline Parameters in the Leachate and Monitoring Wells

Updated Through 4th Quarter 2019

Table of Contents:

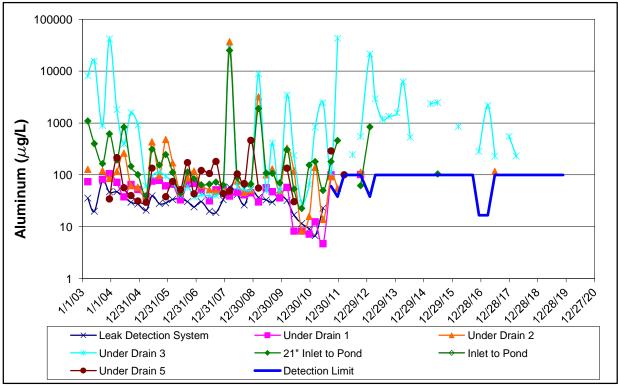
Leachate Time-Series Plots (alphabetical order)	A5-2 thru A5-16
Monitoring Well Time-Series Plots (alphabetical order)	A5-17 thru A5-45
Static Groundwater Level Time-Series Plots	A5-46 thru A5-47

LEACHATE TIME-SERIES PLOTS

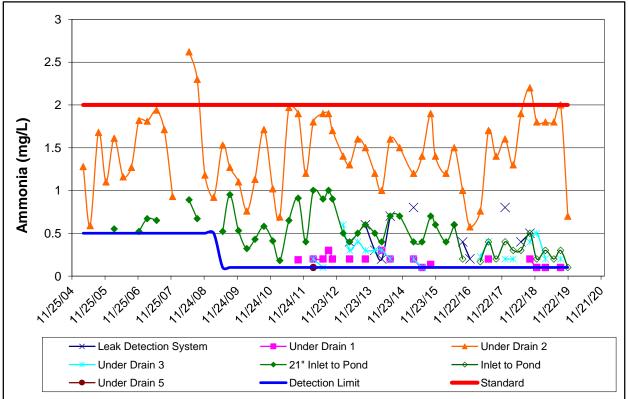


ALKALINITY

ALUMINUM

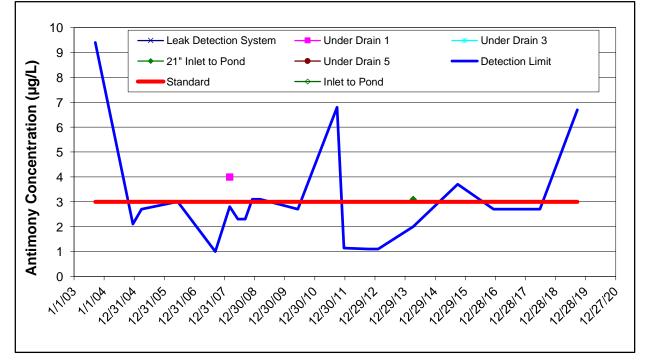


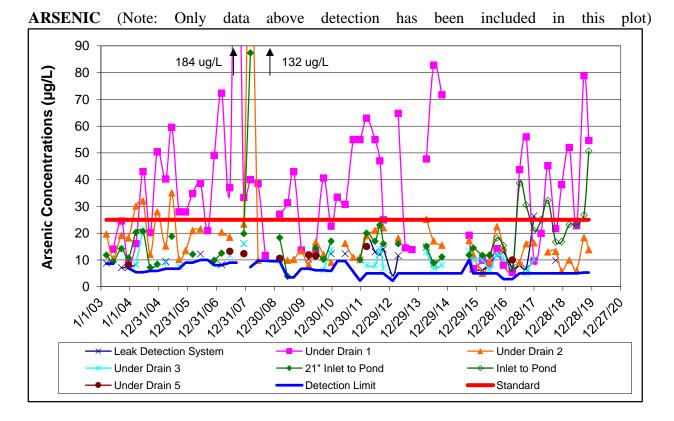




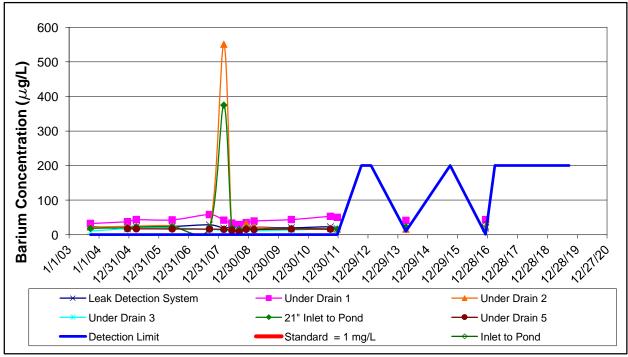
AMMONIA (Note: Only data above detection has been included in this plot)

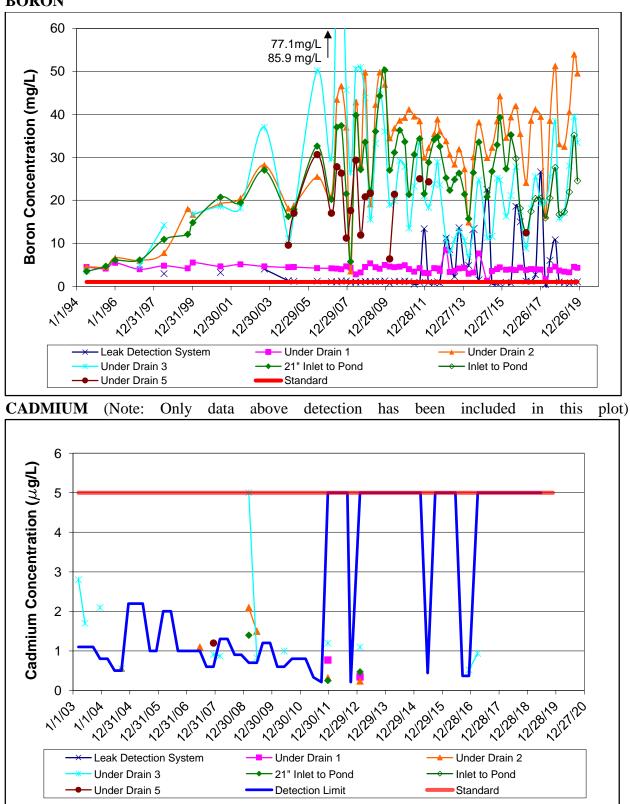
ANTIMONY (Note: Only data above detection has been included in this plot)



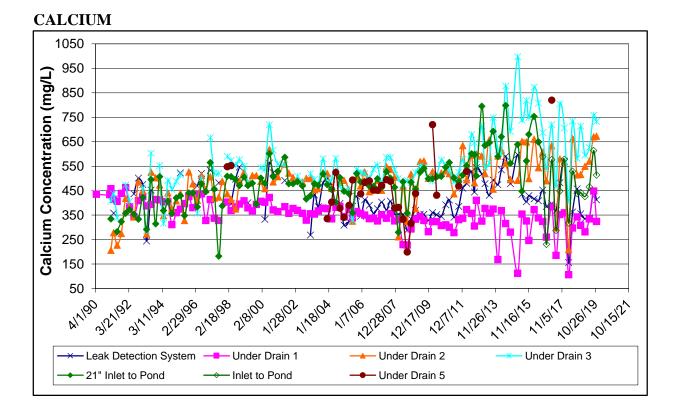


BARIUM

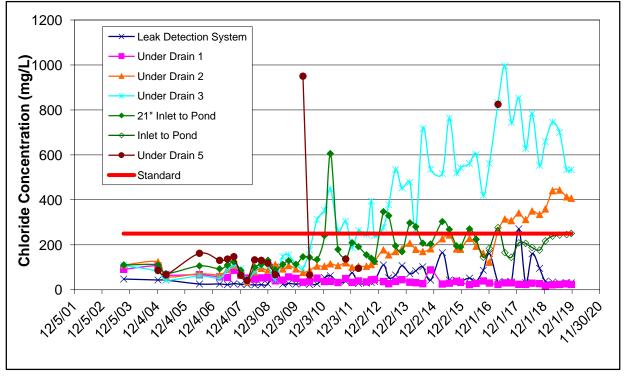


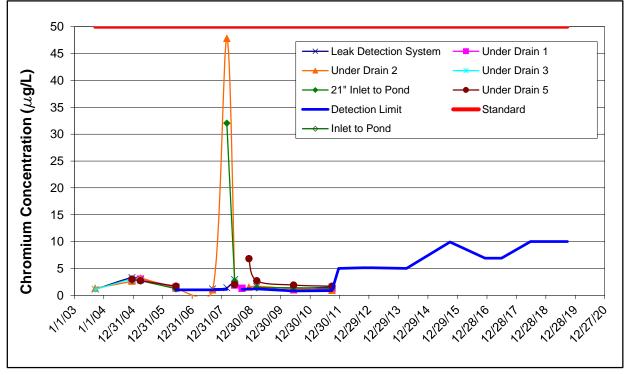


BORON



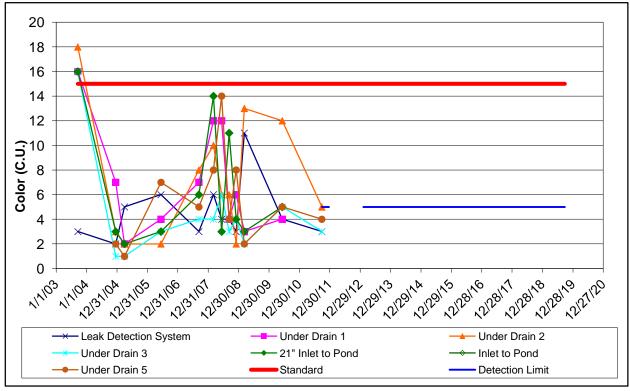
CHLORIDE

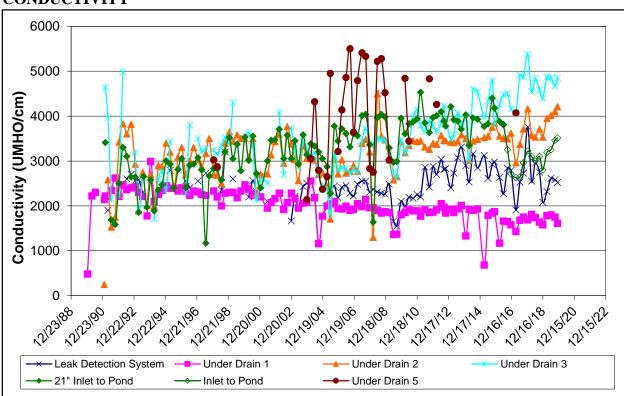




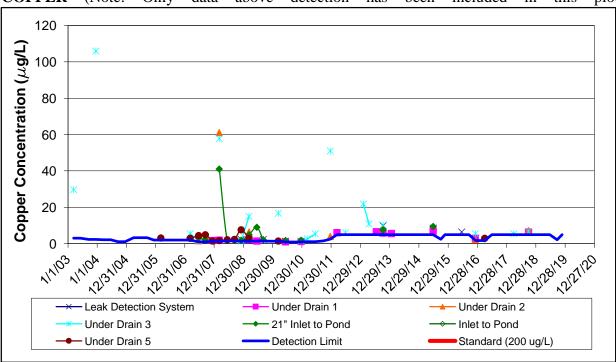
CHROMIUM (Note: Only data above detection has been included in this plot)

COLOR

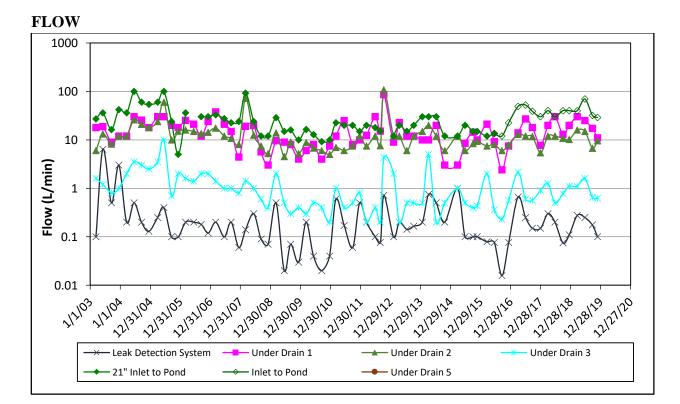




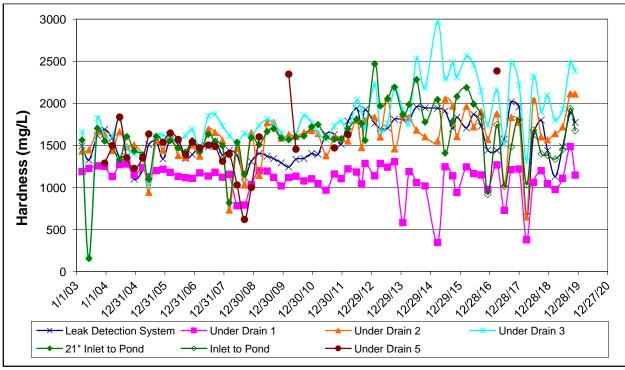
CONDUCTIVITY

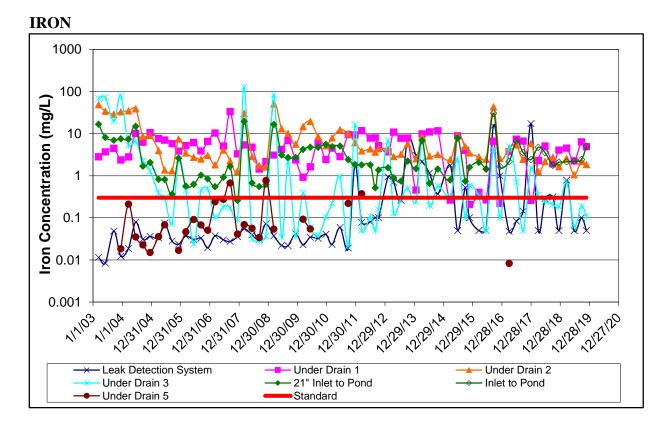


COPPER (Note: Only data above detection has been included in this plot)

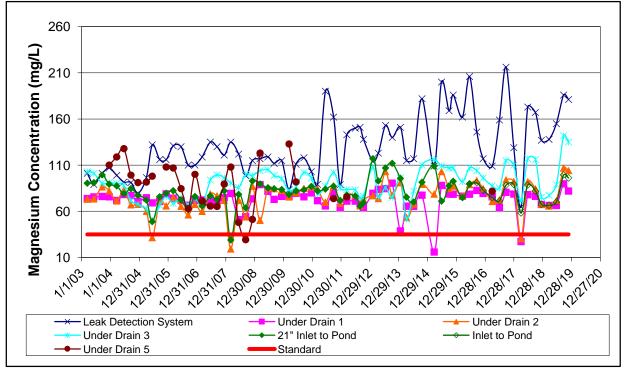


HARDNESS



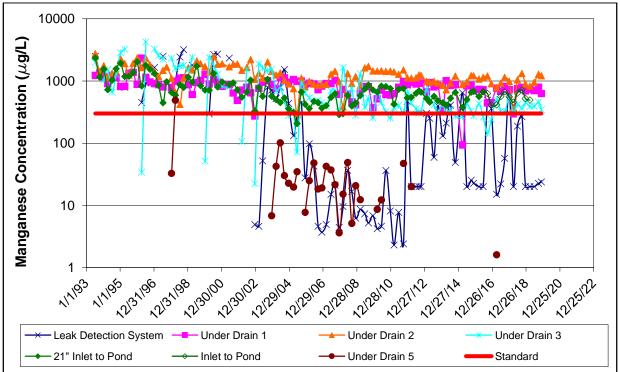


MAGNESIUM

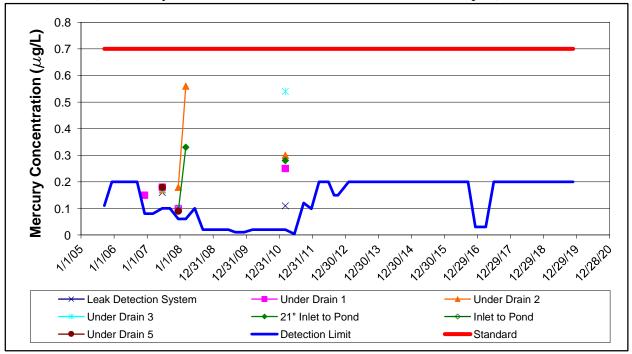


A5-10

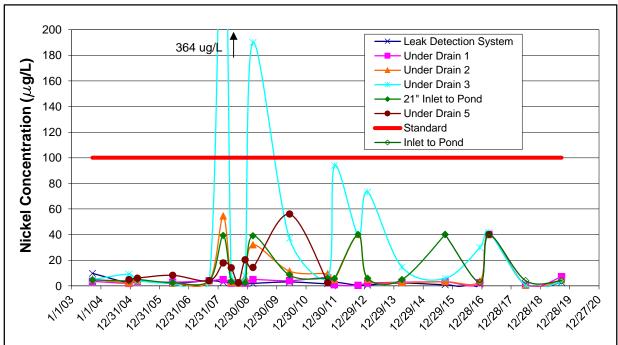
MANGANESE



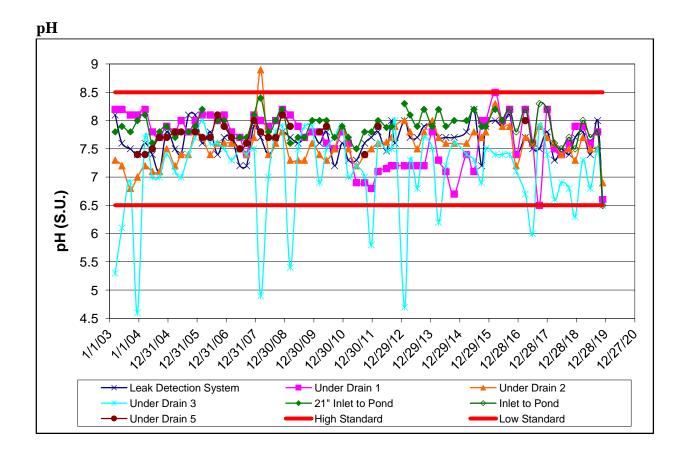
MERCURY (Note: Only data above detection has been included in this plot)



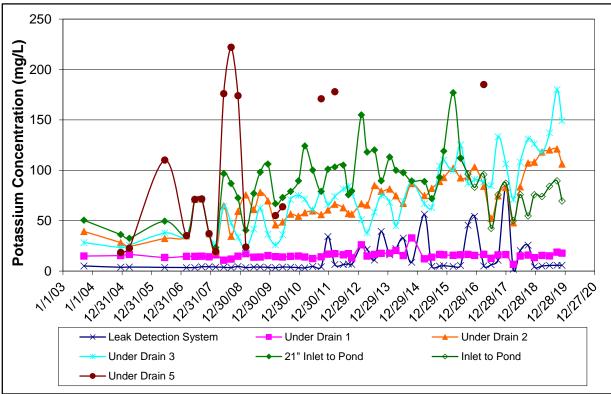




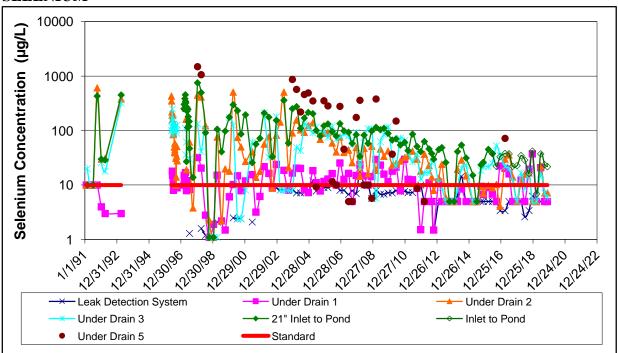




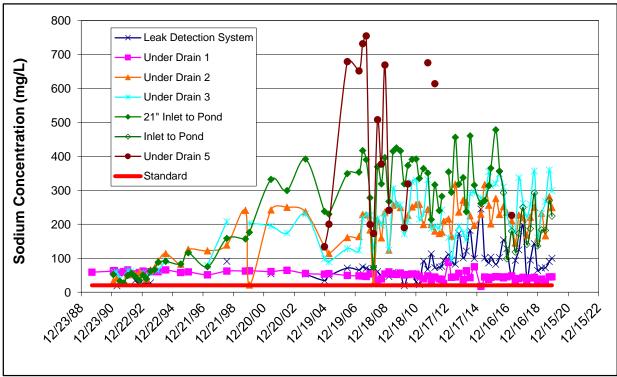




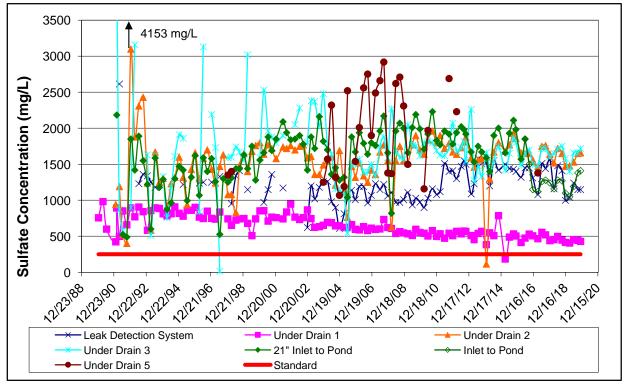
SELENIUM



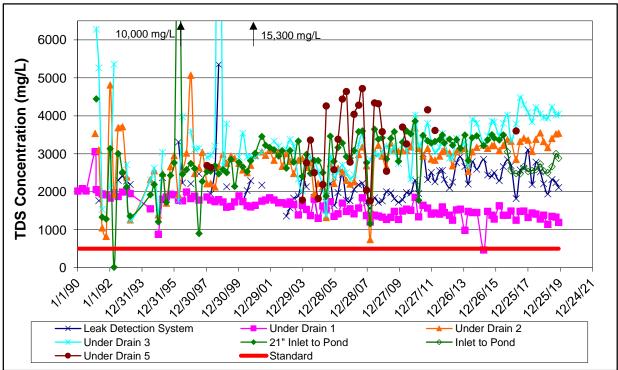
SODIUM



SULFATE

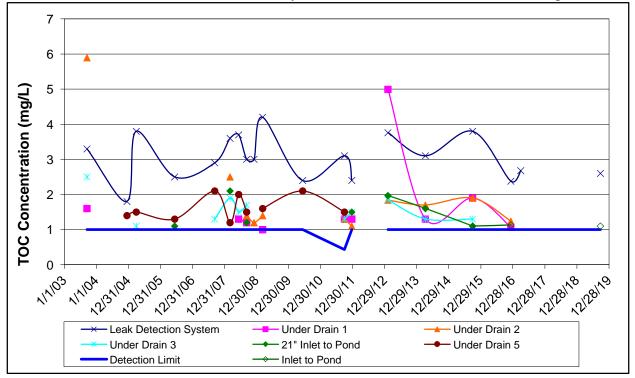


A5-14

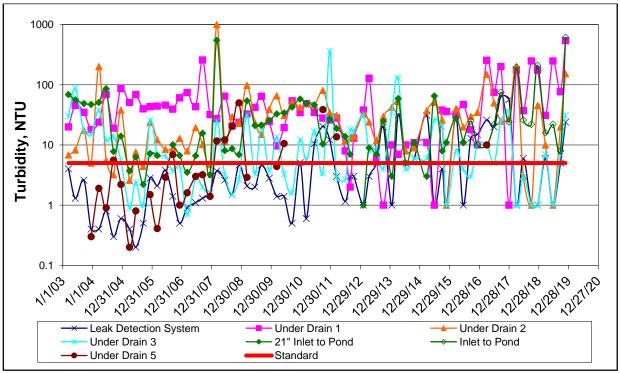


TOTAL DISSOLVED SOLIDS

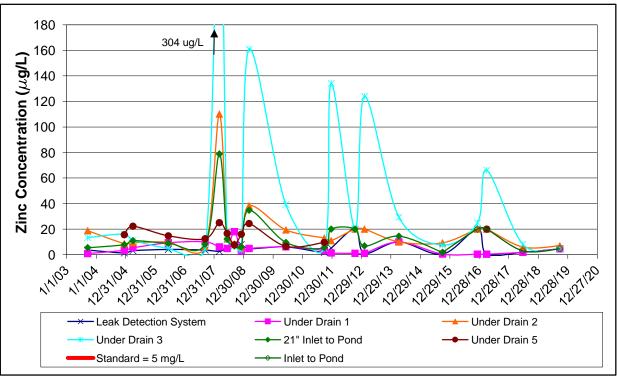
TOTAL ORGANIC CARBON (Note: Only data above detection is included in this plot)



TURBIDITY



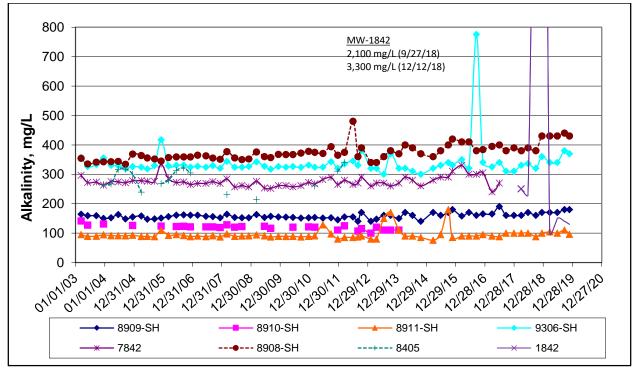
ZINC



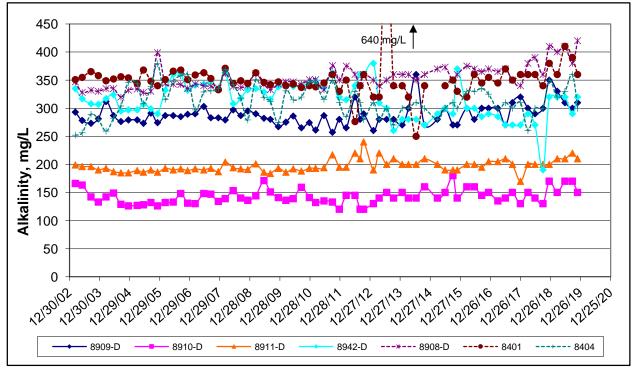
Q:\Lockwood Hills LLC\31-0020 2020 Services\01 Environmental Monitoring\Annual-Q4 Report\Att 5 Time Series Plots.docx Date: 2/25/2020; Rev 0

MONITORING WELL TIME-SERIES PLOTS ALKALINITY

GLACIAL TILL

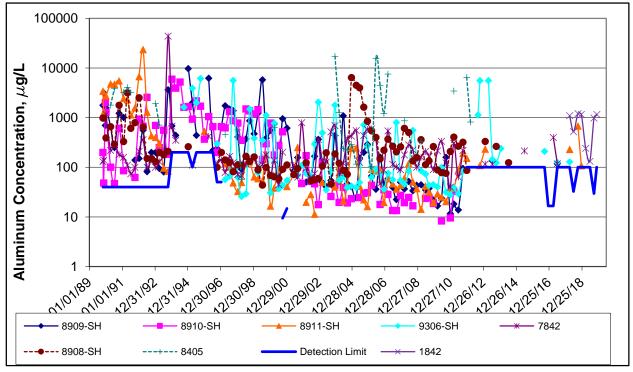


BEDROCK

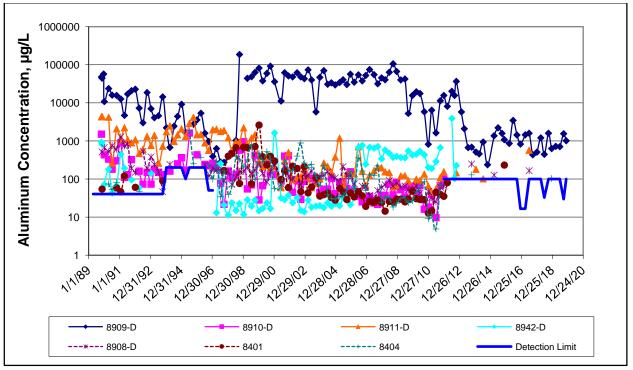


MONITORING WELL TIME-SERIES PLOTS, CONT. ALUMINUM

GLACIAL TILL



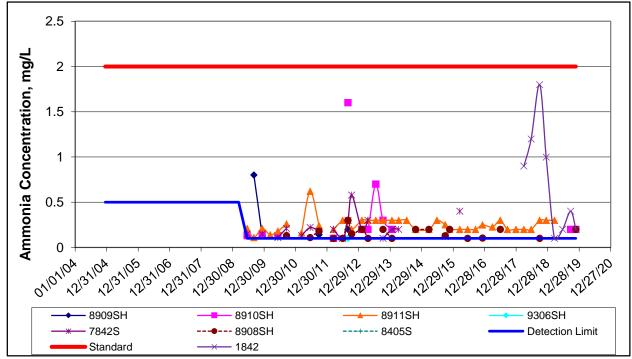
BEDROCK



Q:\Lockwood Hills LLC\31-0020 2020 Services\01 Environmental Monitoring\Annual-Q4 Report\Att 5 Time Series Plots.docx Date: 2/25/2020; Rev 0

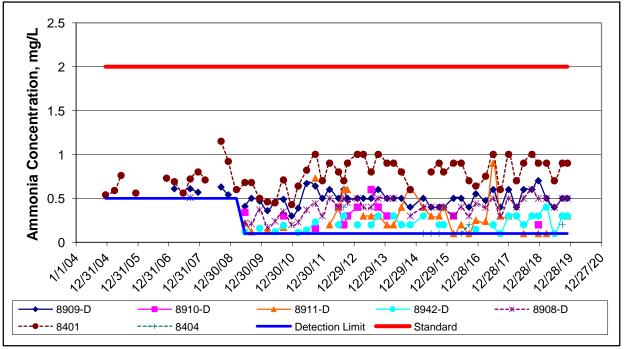
A5-18

MONITORING WELL TIME-SERIES PLOTS, CONT. AMMONIA

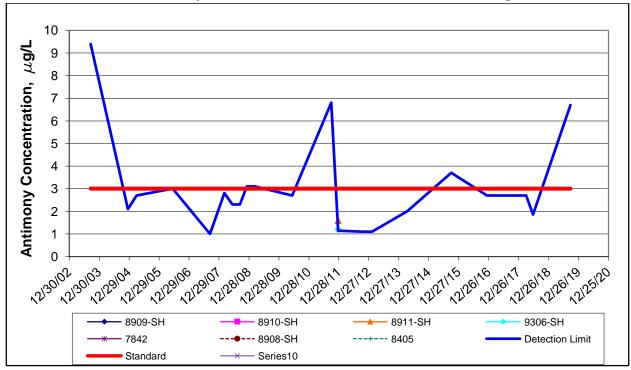


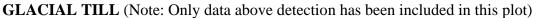
GLACIAL TILL (Note: Only data above detection has been included in this plot)

BEDROCK (Note: Only data above detection has been included in this plot)

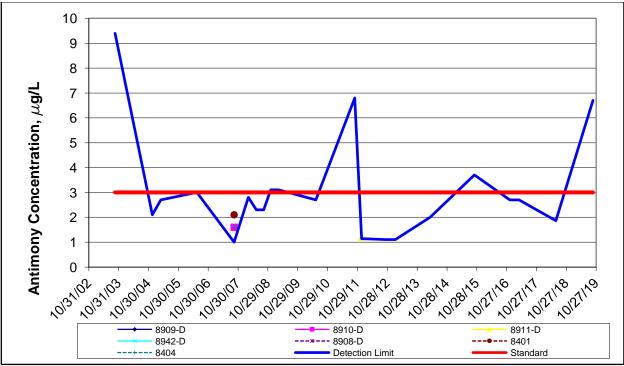


MONITORING WELL TIME-SERIES PLOTS, CONT. ANTIMONY

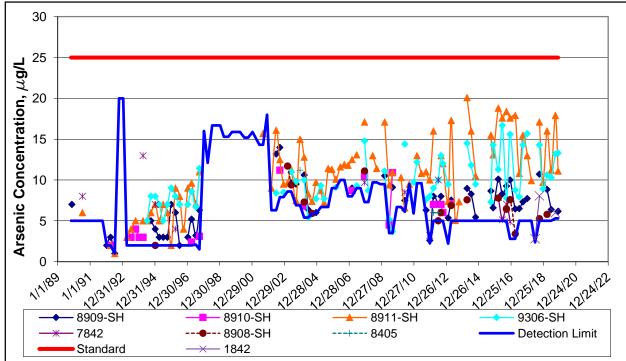




BEDROCK (Note: Only data above detection has been included in this plot)

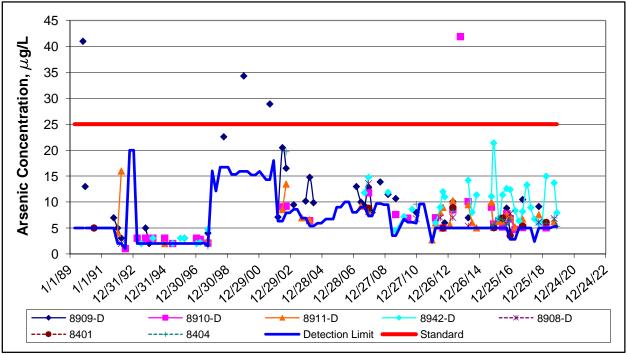


MONITORING WELL TIME-SERIES PLOTS, CONT. ARSENIC



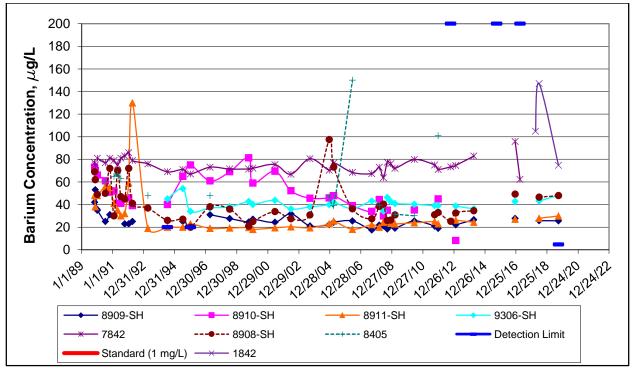
GLACIAL TILL (Note: Only data above detection has been included in this plot)

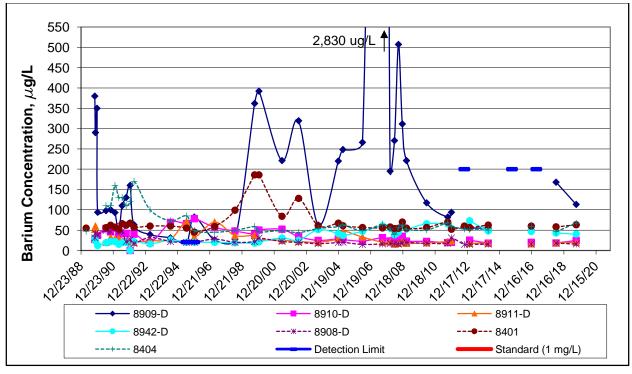
BEDROCK (Note: Only data above detection has been included in this plot)



MONITORING WELL TIME-SERIES PLOTS, CONT. BARIUM

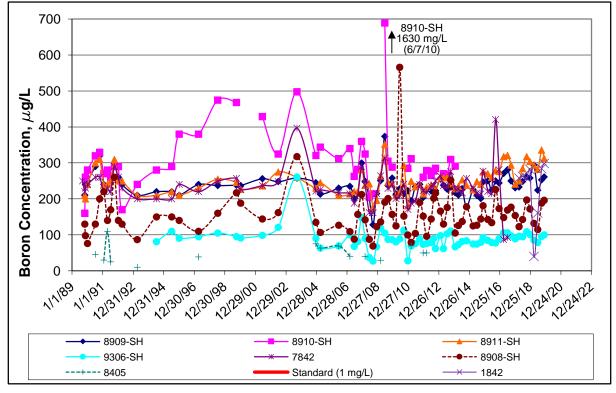
GLACIAL TILL

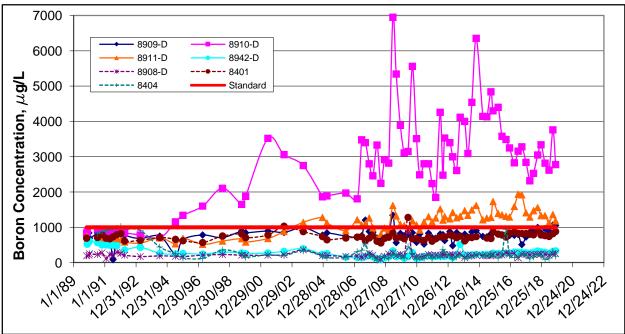




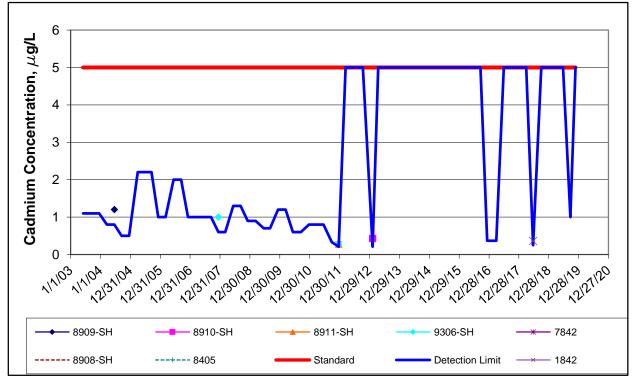
MONITORING WELL TIME-SERIES PLOTS, CONT. BORON

GLACIAL TILL



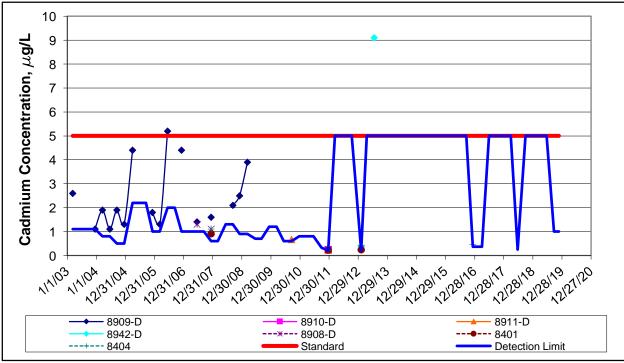


MONITORING WELL TIME-SERIES PLOTS, CONT. CADMIUM



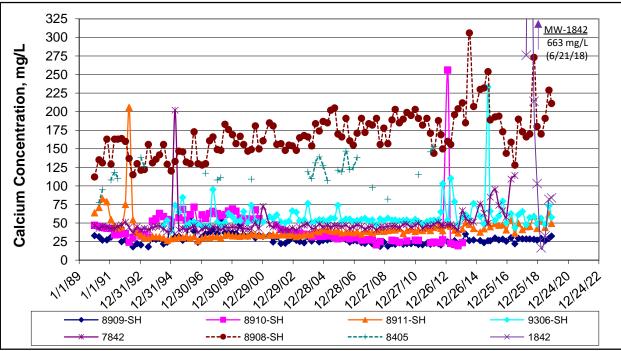
GLACIAL TILL (Note: Only data above detection has been included in this plot)

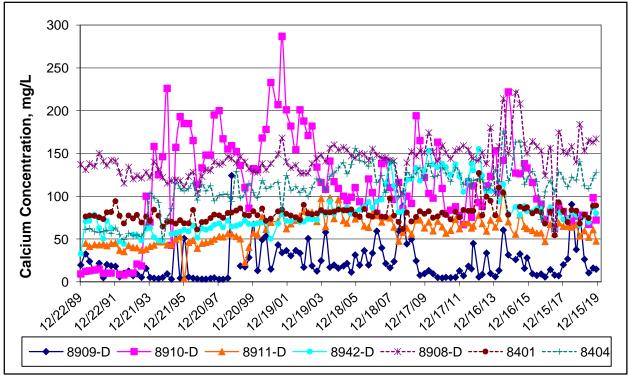
BEDROCK (Note: Only data above detection has been included in this plot)



MONITORING WELL TIME-SERIES PLOTS, CONT. CALCIUM

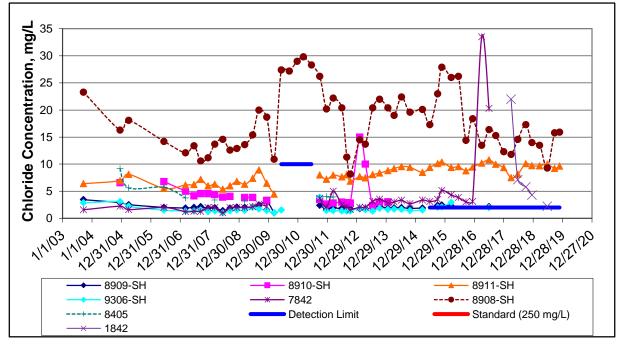
GLACIAL TILL

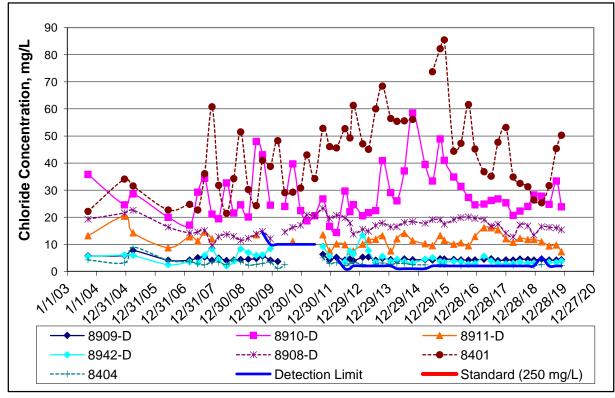




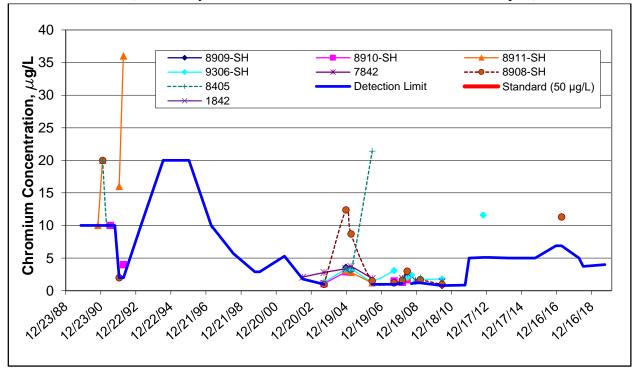
MONITORING WELL TIME-SERIES PLOTS, CONT. CHLORIDE

GLACIAL TILL



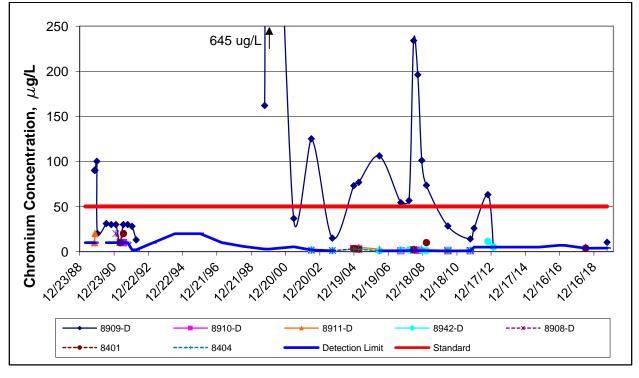


MONITORING WELL TIME-SERIES PLOTS, CONT. CHROMIUM



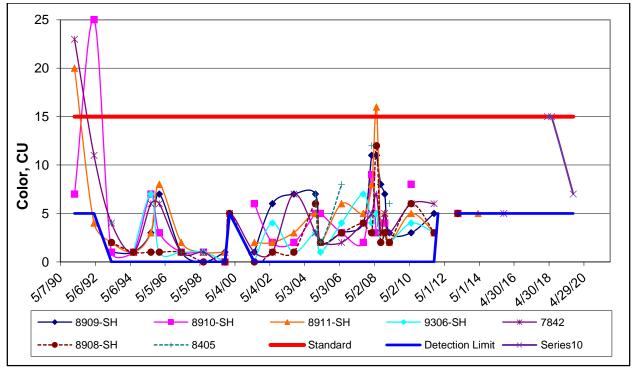
GLACIAL TILL (Note: Only data above detection has been included in this plot)

BEDROCK (Note: Only data above detection has been included in this plot)

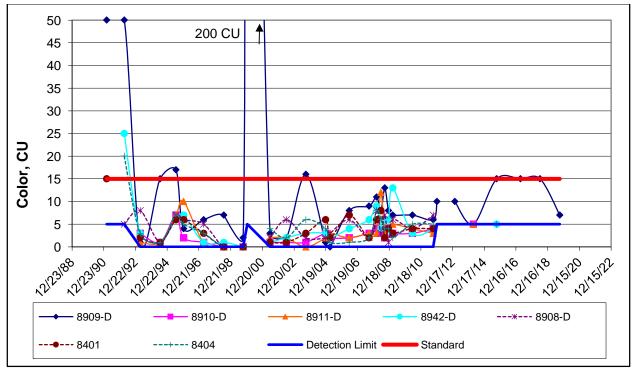


MONITORING WELL TIME-SERIES PLOTS, CONT. COLOR

GLACIAL TILL



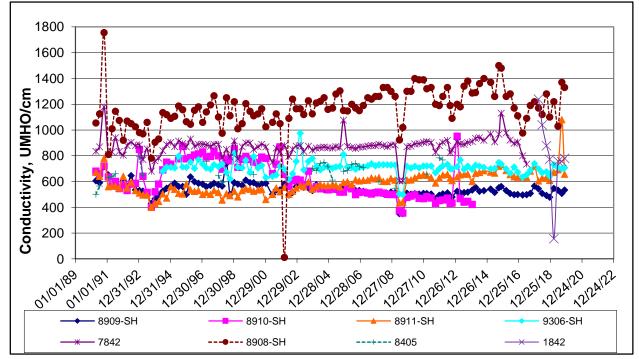
BEDROCK

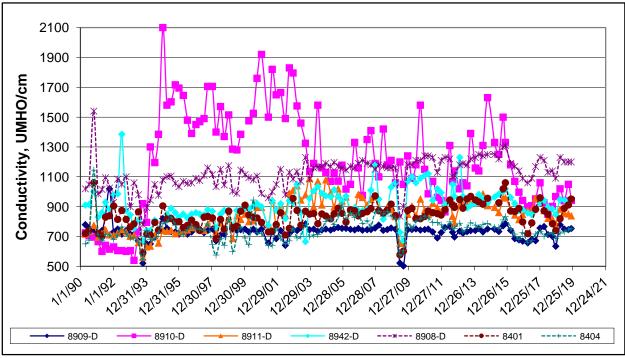


A5-28

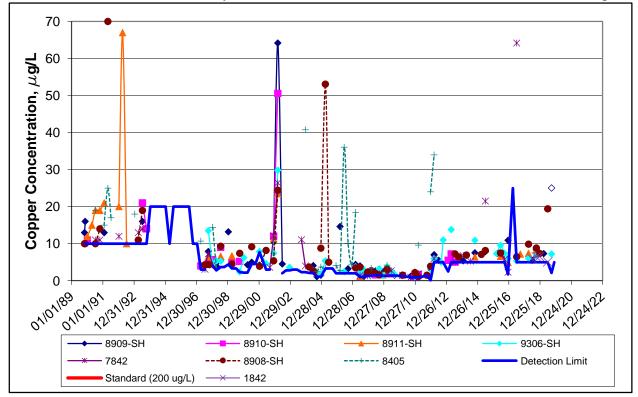
MONITORING WELL TIME-SERIES PLOTS, CONT. CONDUCTIVITY

GLACIAL TILL

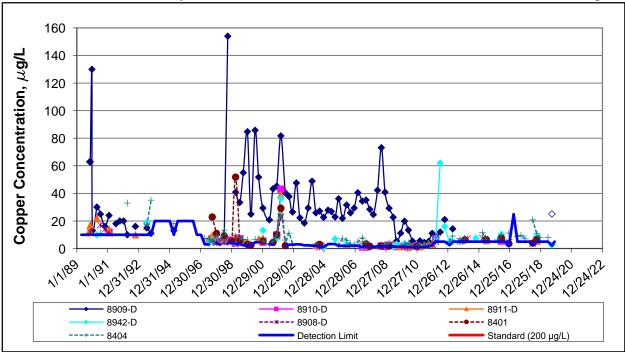




MONITORING WELL TIME-SERIES PLOTS, CONT. COPPER



GLACIAL TILL (Note: Only data above detection has been included in this plot)

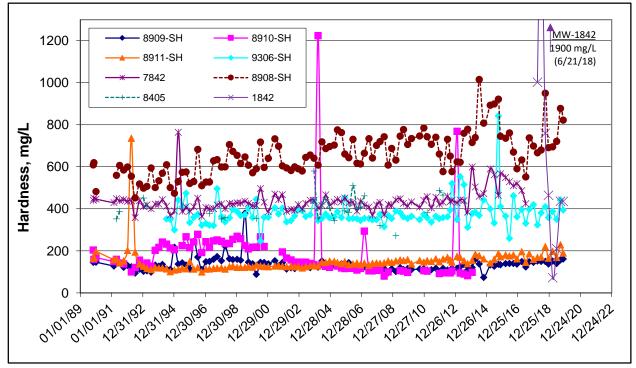


BEDROCK (Note: Only data above detection has been included in this plot)

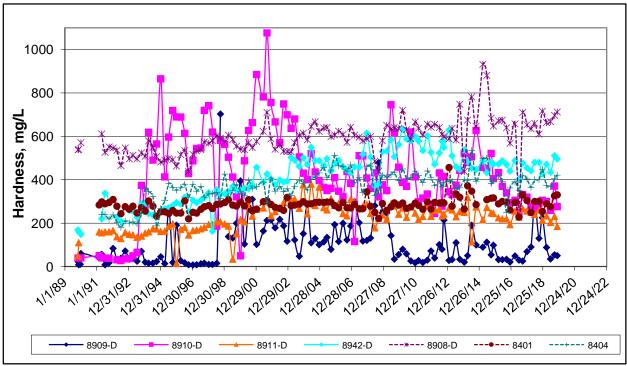
Q:\Lockwood Hills LLC\31-0020 2020 Services\01 Environmental Monitoring\Annual-Q4 Report\Att 5 Time Series Plots.docx Date: 2/25/2020; Rev 0

MONITORING WELL TIME-SERIES PLOTS, CONT. HARDNESS

GLACIAL TILL



BEDROCK

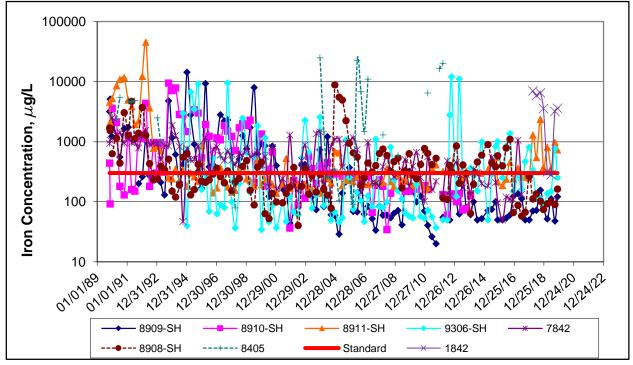


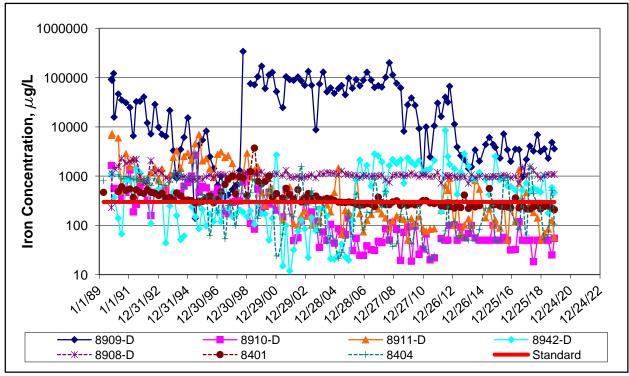
Q:\Lockwood Hills LLC\31-0020 2020 Services\01 Environmental Monitoring\Annual-Q4 Report\Att 5 Time Series Plots.docx Date: 2/25/2020; Rev 0

A5-31

MONITORING WELL TIME-SERIES PLOTS, CONT. IRON

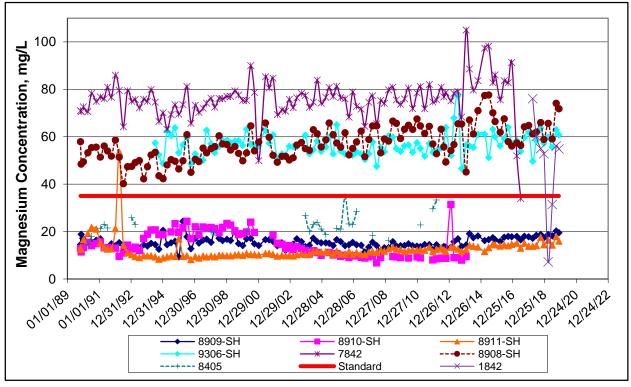
GLACIAL TILL

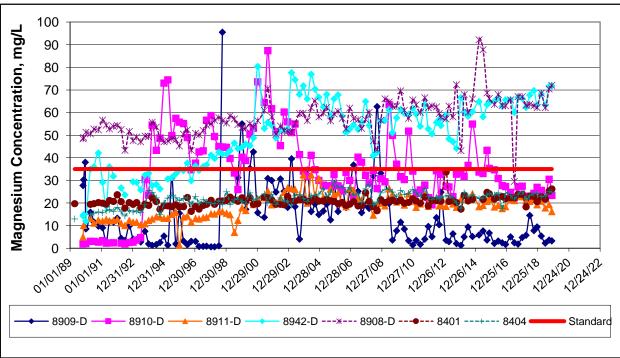




MONITORING WELL TIME-SERIES PLOTS, CONT. MAGNESIUM

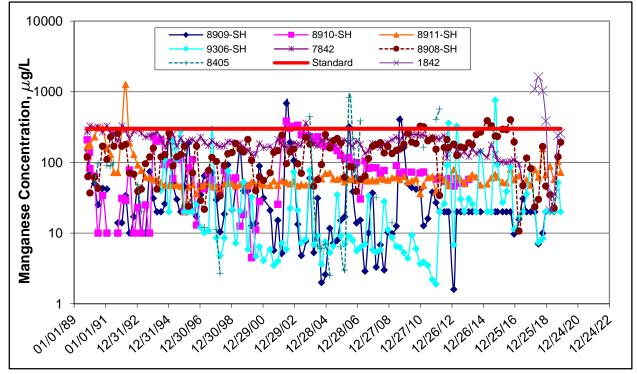
GLACIAL TILL



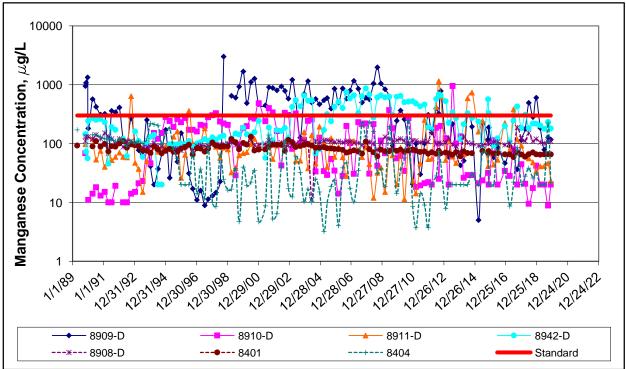


MONITORING WELL TIME-SERIES PLOTS, CONT. MANGANESE

GLACIAL TILL



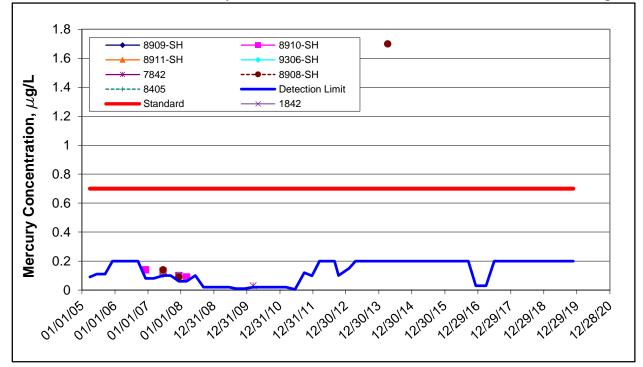
BEDROCK



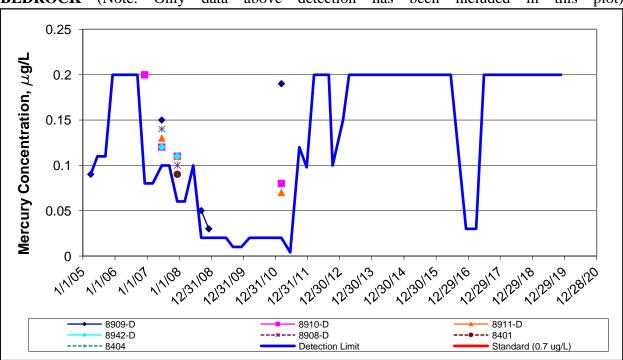
Q:\Lockwood Hills LLC\31-0020 2020 Services\01 Environmental Monitoring\Annual-Q4 Report\Att 5 Time Series Plots.docx Date: 2/25/2020; Rev 0

A5-34

MONITORING WELL TIME-SERIES PLOTS, CONT. MERCURY

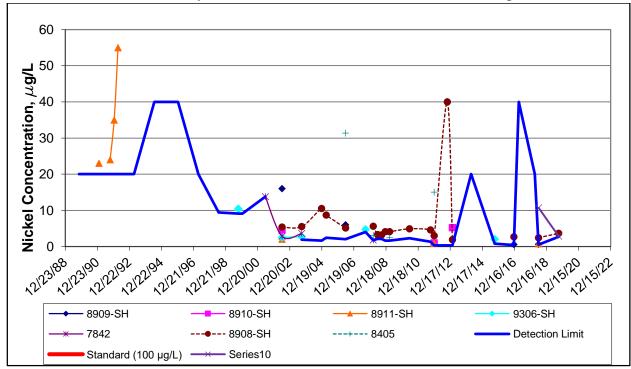


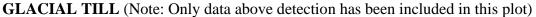
GLACIAL TILL (Note: Only data above detection has been included in this plot)



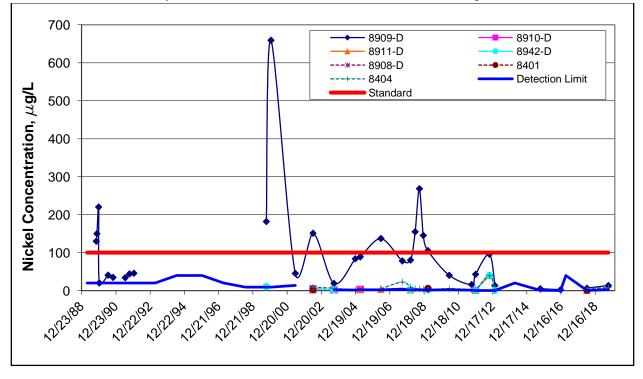
BEDROCK (Note: Only data above detection has been included in this plot)

MONITORING WELL TIME-SERIES PLOTS, CONT. NICKEL



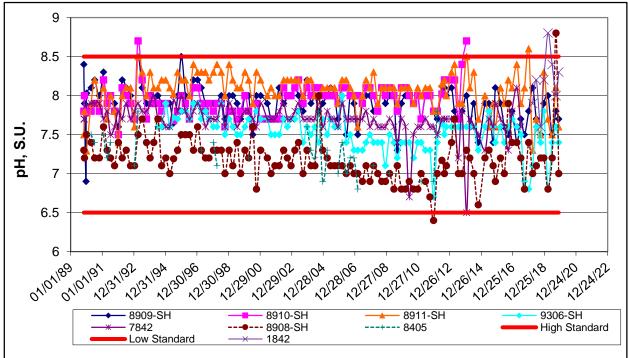


BEDROCK (Note: Only data above detection has been included in this plot)

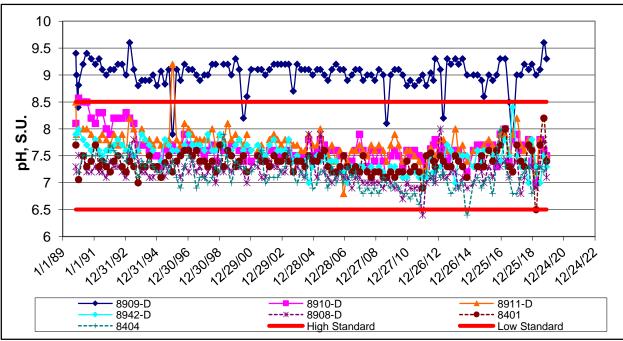


MONITORING WELL TIME-SERIES PLOTS, CONT. pH

GLACIAL TILL



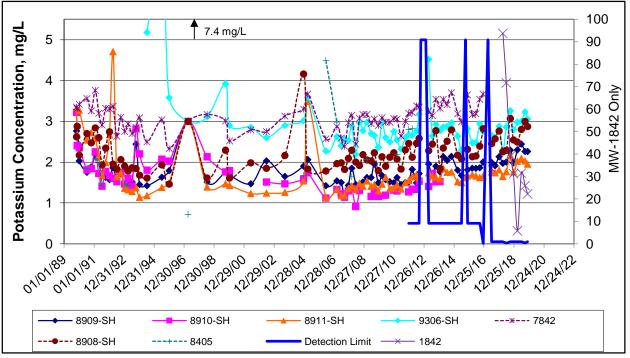
BEDROCK

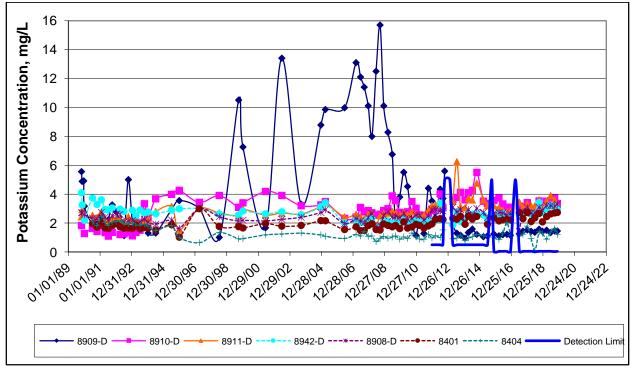


MONITORING WELL TIME-SERIES PLOTS, CONT.

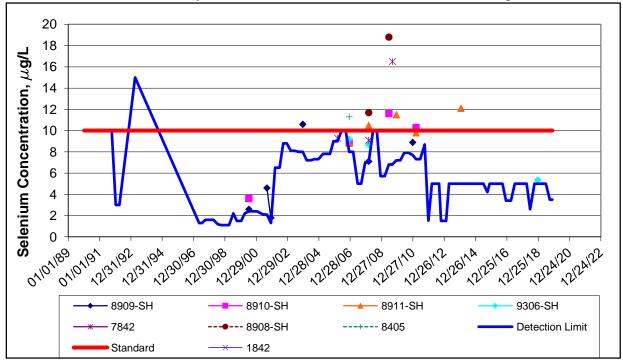
POTASSIUM

GLACIAL TILL



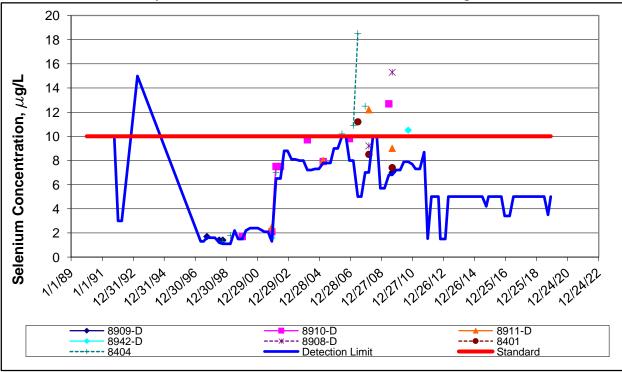


MONITORING WELL TIME-SERIES PLOTS, CONT. SELENIUM



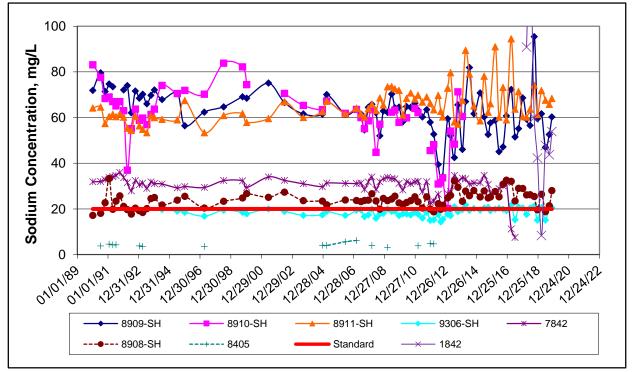
GLACIAL TILL (Note: Only data above detection has been included in this plot)

BEDROCK (Note: Only data above detection has been included in this plot)

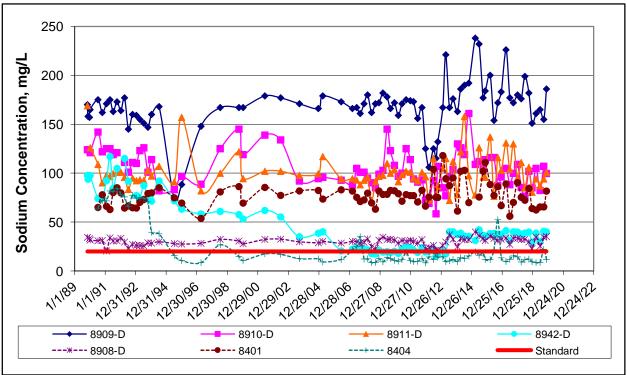


MONITORING WELL TIME-SERIES PLOTS, CONT. SODIUM

GLACIAL TILL



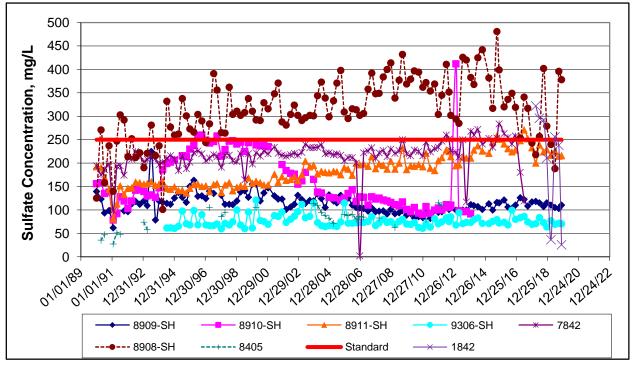
BEDROCK

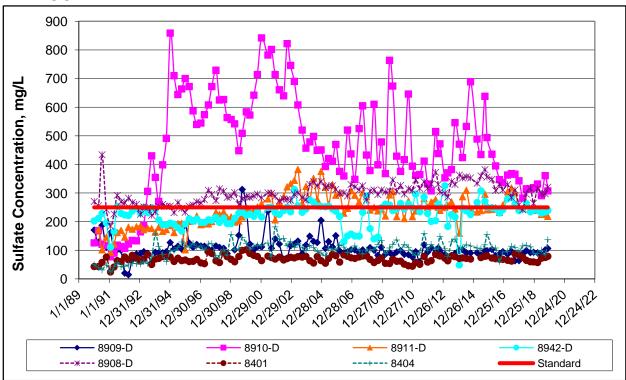


A5-40

MONITORING WELL TIME-SERIES PLOTS, CONT. SULFATE

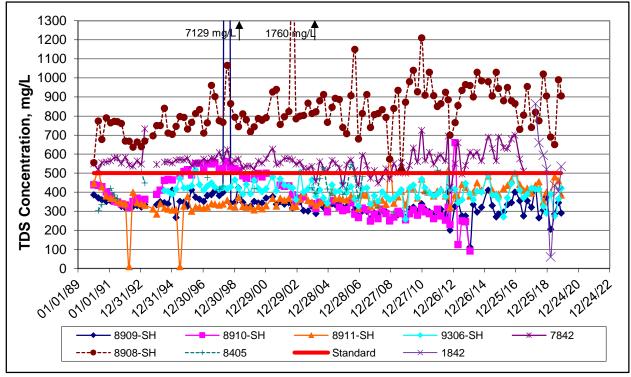
GLACIAL TILL

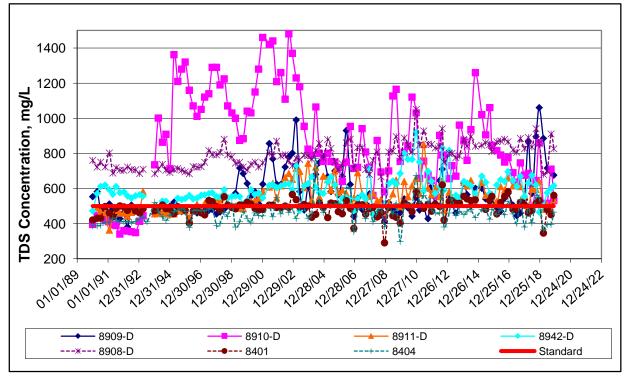




MONITORING WELL TIME-SERIES PLOTS, CONT. TOTAL DISSOLVED SOLIDS

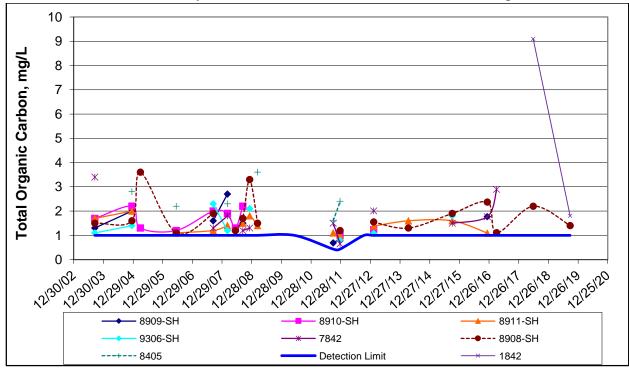
GLACIAL TILL





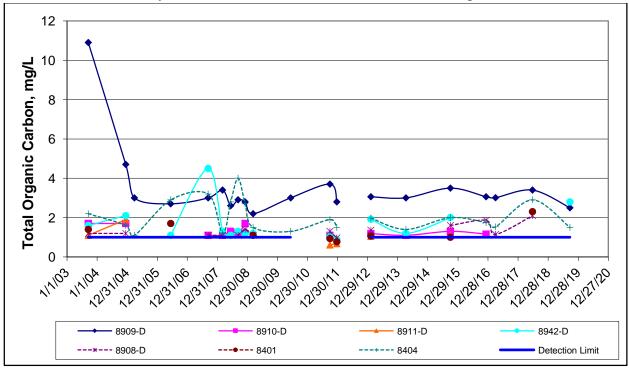


MONITORING WELL TIME-SERIES PLOTS, CONT. TOTAL ORGANIC CARBON



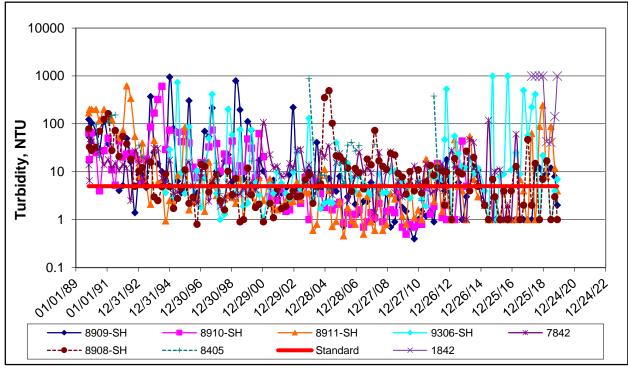
GLACIAL TILL (Note: Only data above detection has been included in this plot)

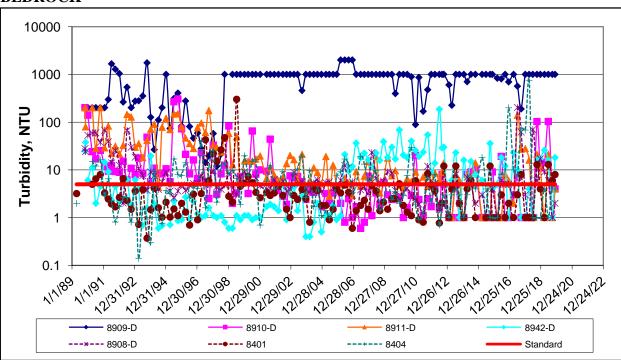
BEDROCK (Note: Only data above detection has been included in this plot)



MONITORING WELL TIME-SERIES PLOTS, CONT. TURBIDITY

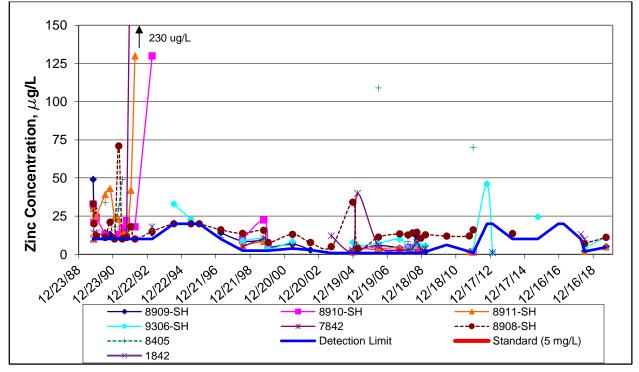
GLACIAL TILL

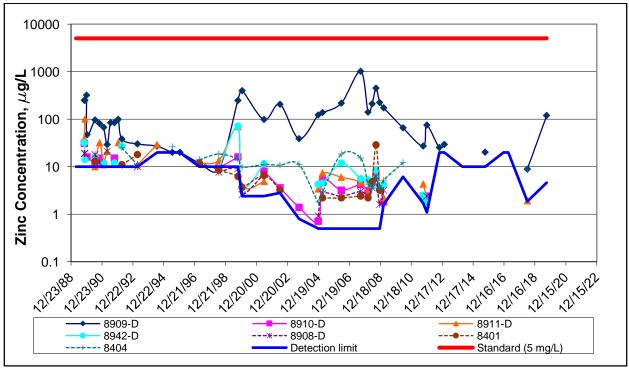




MONITORING WELL TIME-SERIES PLOTS, CONT. ZINC

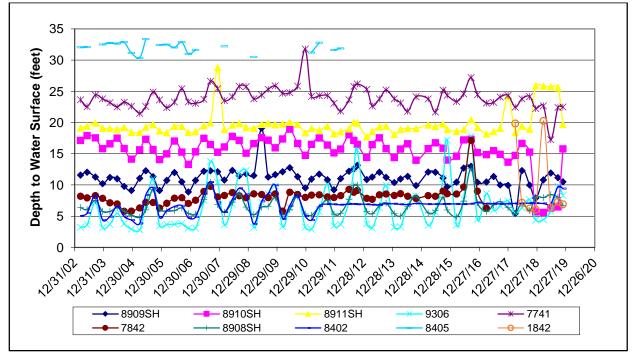
GLACIAL TILL



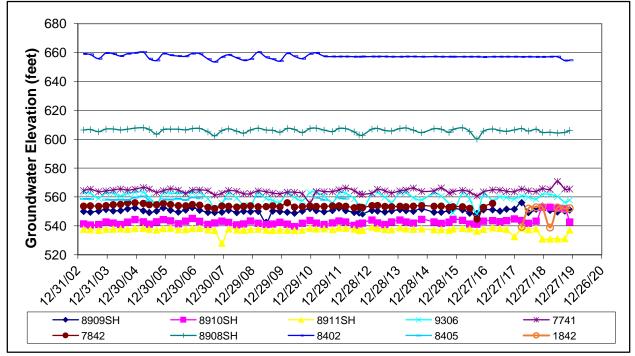


STATIC GROUNDWATER LEVEL TIME-SERIES PLOTS GLACIAL TILL

DEPTH TO WATER SURFACE

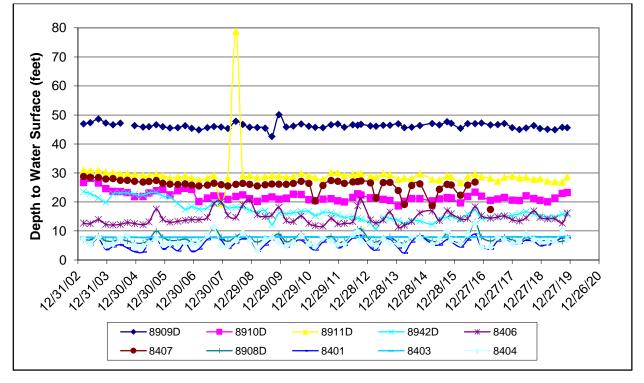


GROUNDWATER ELEVATION



STATIC GROUNDWATER LEVEL TIME-SERIES PLOTS BEDROCK

DEPTH TO WATER SURFACE



GROUNDWATER ELEVATION

