



King County

Solid Waste Division

Department of Natural Resources and Parks

King Street Center

201 South Jackson Street, Suite 701

Seattle, WA 98104-3855

206-477-4466

711 TTY Relay

www.kingcounty.gov/solidwaste

November 30, 2021

TO: Darshan Dhillon, Health & Environmental Investigator, Environmental Health Division, Public Health – Seattle and King County (PHSKC)

DS
LB

VIA: Laura Belt, P.E., Supervising Engineer, Facility Engineering and Science Section (FESS), Solid Waste Division (SWD), Department of Natural Resources & Parks (DNRP)

DS
ST

FM: Subrina Tahsin, Engineer II, SWD, DNRP

RE: Cedar Hills Regional Landfill Environmental Monitoring Report for the Third Quarter of 2021

The purpose of this memorandum is to transmit the latest quarterly environmental report for the Cedar Hills Regional Landfill (Landfill) for your review. This report includes environmental data collected from July 1st, 2021 through September 30th, 2021. The report contains groundwater monitoring results and evaluations as described in *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec, 2013)*, storm water quality requirements under the *Industrial Stormwater General Permit*, and a compilation of other environmental data collected from the Landfill.

Also included with this submittal is a copy of the Area 5 Top Deck Monitoring Report for the Second Quarter of 2021. This report addresses the activities specified in “Determination Regarding Proposed Extended Use of Temporary Cover for Cedar Hills Landfill Area 5” memorandum dated December 19, 2006.

If you have any questions, please call Laura Belt at 206-477-5215 or me at 206-263-6921.

Enclosures

cc: Alan Noell, Ph.D., P.E., Solid Waste Program, Washington State Department of Ecology
Tim O’Connor LG, LHG, Hydrogeologist 3, Solid Waste Program, Washington State Department of Ecology
Yolanda Pon, Solid Waste Program Supervisor, Public Health - Seattle and King County (PHSKC)
Glynda Steiner, P.E., CCM, Deputy Division Director, Solid Waste Division (SWD), Department of Natural Resources & Parks (DNRP)
Theresa Thurlow, P.E., Engineer Manager, SWD, DNRP
Laura Belt, P.E., Engineer Supervisor, SWD, DNRP



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November 30, 2021

Alan Noell, Ph.D., P.E.
Solid Waste Program
Washington State Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

RE: Cedar Hills Regional Landfill Environmental Quarterly Report for the Third Quarter of 2021

Dear Mr. Noell:

The purpose of this letter is to transmit a copy of the Solid Waste Division's Environmental Monitoring Quarterly Report for the Cedar Hills Regional Landfill (Landfill). This report includes environmental data collected from July 1st, 2021 through September 30th, 2021. The report contains groundwater monitoring results and evaluations as described in *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill* (Dec, 2013), storm water quality requirements under the Industrial Stormwater General Permit, and a compilation of other environmental data collected from the Landfill.

Also included with this submittal is a copy of the Area 5 Top Deck Monitoring Report for the Third Quarter of 2021. This report addresses the activities specified in the "Determination Regarding Proposed Extended Use of Temporary Cover for Cedar Hills Landfill Area 5" memorandum dated December 19, 2006.

If you have any questions, please contact Laura Belt at 206-477-5215 or me at is 206-263-6921.

Sincerely,

DocuSigned by:

Subrina Tahsin

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Subrina Tahsin

Engineer II

Alan Noell
November 30, 2021
Page 2

Enclosures

cc:

Alan Noell, Ph.D., P.E., Solid Waste Program, Washington State Department of Ecology
Tim O'Connor LG, LHG, Hydrogeologist 3, Solid Waste Program, Washington State Department of Ecology
Yolanda Pon, Solid Waste Program Supervisor, Public Health - Seattle and King County (PHSKC)
Darshan Dhillon, Health & Environmental Investigator, Environmental Health Division, PHSKC
Glynda Steiner, P.E., CCM, Deputy Division Director, Solid Waste Division (SWD), Department of Natural Resources and Parks (DNRP)
Theresa Thurlow, P.E., Engineer Manager, SWD, DNRP
Laura Belt, P.E., Engineer Supervisor, SWD, DNRP

CEDAR HILLS REGIONAL LANDFILL QUARTERLY ENVIRONMENTAL MONITORING REPORT

Third Quarter 2021



King County

Department of
Natural Resources and Parks
Solid Waste Division

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November 2021

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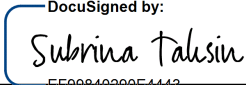


CHECKLIST FOR GROUNDWATER REPORTING
Municipal Solid Waste Landfills
WAC 173-351-415

Include a signed, completed copy of this checklist with each quarterly and annual report.

Quarterly groundwater reports shall be submitted to the jurisdictional health department and Ecology within 60 days of receipt of analytical data. Annual groundwater reports shall be submitted to the jurisdictional health department and Ecology by April 1 of each year.

1 st _____ 2 nd _____ 3 rd _____ 4 th _____ YEAR <u>2021</u>	Reference (section, subsection)	Included in this report	Location – page # or appendix #
<i>Quarterly Groundwater Reports: 173-351-415 (2) plus the referenced section</i>			
Statistical calculations and summaries			
Descriptive statistics	420, (1)	<input type="checkbox"/>	
Statistical tests	420, (2)	<input checked="" type="checkbox"/>	3
Notification of statistical increase (if applicable)	420, (4)	<input checked="" type="checkbox"/>	3
Notification of concentrations above Chapter 173-200 WAC criteria (if any)	430, (4)	<input checked="" type="checkbox"/>	29, 42
Static water level readings	415, (2)	<input checked="" type="checkbox"/>	App B
Potentiometric surface elevation maps depicting flow direction	415, (2)	<input checked="" type="checkbox"/>	App A
Flow rate – calculated	415, (2)	<input checked="" type="checkbox"/>	App A
Cation-anion balances	430, (5a)	<input checked="" type="checkbox"/>	31-33, 43
Explanation of greater than 5% (or 10%) difference if needed	430, (5a)	<input type="checkbox"/>	
Trilinear diagrams	430, (5b)	<input checked="" type="checkbox"/>	35, 37, 45, 47
Leachate analyses (if sampled and tested)	415, (2)	<input checked="" type="checkbox"/>	App B
Data entered into EIM database (date entered: _____)	415, (3)	<input type="checkbox"/>	
Complete copy of the lab report with chain of custody record.		<input type="checkbox"/>	
<i>Annual Groundwater Reports: 173-351-415 (1) YEAR</i>			
Summary of statistical results and trends	415, (1)	<input type="checkbox"/>	
Summary of groundwater flow rate and direction for the year	415, (1)	<input type="checkbox"/>	
Copy of all potentiometric maps for the year	415, (1)	<input type="checkbox"/>	
Summary geochemical evaluation	415, (1)	<input type="checkbox"/>	
<i>For Quarterly and Annual Reports</i>			
Stamped by a licensed professional	RCW 18.220	<input checked="" type="checkbox"/>	v

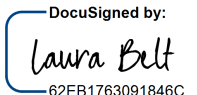
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 EF99840290E4443...
 _____ November 30, 2021 _____ Cedar Hills Regional Landfill
 Signature of Report Author Date Landfill

If you need this publication in an alternate format, please call the Waste 2 Resources Program at (360) 407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

CERTIFICATION

Quarterly Report Groundwater Evaluation Report Certification

I certify in accordance with the requirements of WAC 173-351-400(c) (3), that the contents of this **Cedar Hills Regional Landfill Quarterly Environmental Monitoring Report** were prepared under my direction or supervision under a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Where applicable, some specific and related hydrogeologic portions have been duly certified by the responsible groundwater scientist. Based on my inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Name: Laura Belt, P.E.	Title: Supervising Engineer, Facility Engineering and Science Section	Date: November 30, 2021
Mailing Address: Solid Waste Division King County Department of Natural Resources & Parks 201 South Jackson Street, Suite 701 Seattle, WA 98104-3855		Telephone Number: 206-477-5215
Signature: <div style="text-align: center;">  <p>DocuSigned by: Laura Belt 62EB1763091846C... Nov 30, 2021</p> </div>		



EXPIRES 08/10/2023

KING COUNTY CEDAR HILLS REGIONAL LANDFILL
SUMMARY OF QUARTERLY ENVIRONMENTAL MONITORING
THIRD QUARTER OF 2021

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**King County Cedar Hills Regional Landfill
Summary of Quarterly Environmental Monitoring
Third Quarter of 2021**

This summary discusses quarterly environmental monitoring results for groundwater, stormwater, and landfill gas migration monitoring for Cedar Hills Regional Landfill (CHRLF).

Environmental samples were collected and analyzed in accordance with the Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill (Dec., 2013), (SAP), and the Quality Assurance Project Plan for Environmental Monitoring at King County Solid Waste Facilities (QAPP). These plans describe procedures and activities to obtain sufficient and representative quality data to adequately conduct environmental monitoring at the CHRLF and provide documentation.

1.0 Quarterly Results and Analysis

This Section discusses the current monitoring results and how they compare to previous results from samples collected at CHRLF.

1.1 Groundwater

Groundwater monitoring well details, locations, and monitoring status are presented in Table 1 and Figure 1. Monitoring activities for the third quarter are listed in Table 2.

1.1.1 Regional Aquifer

A refined conceptual model was developed in the *Cedar Hills Regional Landfill Site Wide Hydrogeologic Report Addendum (Dec., 2013)*. The model fits the site into its regional context of recharge and discharge, provides a detailed look at flow paths within the Regional Aquifer, and defines specific detection zones for each monitoring well. The model provides a thorough evaluation of the monitoring well coverage from the facility waste placement areas and indicates that CHRLF has a sufficient and effective monitoring well network in place. In addition, an alternate groundwater sampling frequency has been implemented for detection groundwater monitoring consistent with WAC 173-351-450 (see SAP, Table 1 and Figure 1).

Regional Aquifer analysis results for downgradient and crossgradient wells for this quarter are generally consistent with past results. Several upgradient wells continue to show elevated concentrations of several parameters; however, these parameters remain below regulatory standards and in general exhibit stability.

Groundwater elevations and potentiometric surfaces are within historical ranges and reflect seasonal responses to precipitation. The Potentiometric Surface Map and Groundwater Flow Analysis Report can be found in Appendix A. Elevations measured this quarter conform to the current hydrogeologic model.

Groundwater samples were analyzed for both dissolved and total metal fractions. However, only total metals results (per WAC 173-351-430(2)(b)(ii)) were compared to primary groundwater and drinking water quality standards, as listed in WAC 173-351-990 Appendix I and Title 40 CFR Subpart G Part 141. Dissolved iron and manganese were compared to secondary groundwater quality standards, as listed in WAC 173-351-990 Appendix II. Implementation of the most recent SAP resulted in a reduction in the total number of wells that are monitored. The remaining wells to be monitored were designated either as quarterly (all quarters of the year), or as semi-annual (second and fourth quarters of the year). This quarter, wells designated for quarterly monitoring were sampled, and are listed in Table 1.

Analytical Results

Analytical results can be viewed in Appendix B: Field and Analytical Test Results, and a discussion of groundwater criteria exceedances is below.

Exceedances of the Primary Ground Water Quality Criteria were observed for total arsenic as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-66, MW-68*, MW-81, MW-83, MW-84, MW-93, MW-94, MW-113, MW-114, MW-115	MW-72, MW-74R, MW-75, MW-80, MW-85, MW-87

*Also exceeded Primary Federal Ground Water Quality Criteria

Exceedances of the Secondary Ground Water Quality Criteria were observed for dissolved iron as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-68, MW-113	MW-72, MW-75, MW-80, MW-87

Exceedances of the Secondary Ground Water Quality Criteria were observed for dissolved manganese as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-59, MW-68, MW-93, MW-113	MW-72, MW-75, MW-80, MW-87

Exceedances of the Primary Ground Water Quality Criteria were observed for Trichloroethene as listed below:

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	MW-114*, MW-115*	--

*Also exceeded Primary Federal Ground Water Quality Criteria.

Primary and secondary exceedances of regulatory standards are tabulated and presented in Table 3.

Trilinear Diagrams and Ion Balance

Trilinear Diagrams (Figures 5 and 6) indicate water quality type (hydrochemical facie) based on the dissolved ion distribution. The diagrams are useful to recognize spatial and temporal variability, potential analytical error, or change in hydrochemical facie. All regional samples are within the calcium-magnesium-bicarbonate hydrochemical facie. Data are consistent with previous quarters. Ion balance calculations (Table 4) indicate no analytical error (> 10%) in any regional wells.

Prediction Limits

Intra-well upper prediction limits (UPLs) are calculated annually and have been updated with data collected through the end of 2020. Calculated prediction limits and analytical results for Appendix I parameters are presented in Table 5 and summarized below. Newly installed Monitoring wells MW-113 through MW-115 do not yet have enough background data from sampling events to calculate prediction limits for analytical parameters.

	Upgradient and Crossgradient	Downgradient
Quarterly Sampled Wells	--	--

Monitoring wells MW-66, MW-84 which had 1-of-3 UPL exceedances and MW-93 which had 3-of-3 UPL exceedances passed out of the re-testing protocol.

MW-93

3-of-3 Prediction limit exceedances for Arsenic was reported in 1st quarter 2021 for MW-93, which is being sampled semi-annually. Although these prediction limit exceedances were all below Secondary Federal Drinking Water Maximum Contaminant Levels (MCLs), the Solid Waste Division is currently working on establishing a background threshold value (BTV) for the Cedar Hills and surrounding area using Public Supply Drinking water system reported analyses and will compare to MW-93 analytical results. The process was agreed to with Seattle/King County Department of Public Health (PHSKC) and Ecology.

In addition to the arsenic background concentration calculation, KCSWD, after discussion with PHSKC and Ecology, agreed to implement the following items as an alternative to entering assessment monitoring (per the SAP).

- Investigated down-well conditions using borehole camera; and
- Evaluate and compare the effect of recent well redevelopment activities on similar monitoring wells as relates to laboratory analytical results and consider appropriateness of redevelopment at MW-93.

Volatile Detections

Volatile Organic Compound (VOC) detections in upgradient and cross-gradient regional aquifer wells this quarter are presented in Table 6. There continue to be regularly occurring detections of chlorinated solvents and their breakdown products within the monitoring network at CHRLF, all of which are associated with the upgradient Queen City Farms (QCF) Superfund site. These detections include the following:

- Cis-1,2-Dichloroethene was detected in quarterly monitored well MW-59;
- Trichloroethene (TCE) was detected in quarterly monitored wells MW-83, MW-94 and the newly installed wells MW-114 and 115.

These upgradient well detections are consistent with past data including the recently installed wells (MW-114 and MW-115) and continuing migration from QCF.

No other volatile detections occurred this quarter in regional monitoring wells.

1.1.2 Perched Zones

The East Perched Zone (EPZ) is a series of localized areas east of the Main Hill exhibiting shallow subsurface saturation that appears laterally and vertically discontinuous, predominantly within till and lacustrine silts.

The South Solid Waste Area (SSWA) Perched Zone contains perched groundwater that occurs both within pockets of variable surficial deposits comprised of local alluvium, recessional outwash, and/or weathered till (shallow perched zone), and within melt-out deposits in an overall predominately lodgment till sequence (deeper perched zone).

Groundwater elevations measured during the quarter in the Perched Zones are within historical ranges. Samples were collected from eighteen EPZ monitoring wells (MW-30A, MW-47, MW-48, MW-50, MW-62, MW-64, MW-102, MW-103, MW-104, MW-105, MW-107, MW-108, MW-109, MW-110, MW-111, MW-112, MW-EB6). MW-101, which monitors the SSWA Perched Zone, was also sampled. Groundwater quality data from perched zones wells collected during the third quarter of 2021 are consistent with previous samples.

MW-105

MW-105 was installed on the south side of the east leachate lagoon to have a monitoring well in the shallowest perched groundwater zone to provide early leak detection. If specific conductance shows a statistically significant increasing trend or exceeds 500 $\mu\text{mhos/cm}$ specific conductance (whichever condition is triggered first), then additional sampling (per the SAP) will be conducted and results assessed with respect to potential leakage from the lagoon.

This quarter, the conductivity at MW-105 was field measured at 191.8 $\mu\text{mhos/cm}$.

Analytical Results

Exceedances of regulatory standards for the perched zone wells are tabulated and presented in Table 7. All exceedances are consistent with past analyses and known impacts. MW-109 exceeded Primary Federal Ground Water Quality Criteria for arsenic for multiple consecutive quarters; MW-109, MW-110 exceeded Primary Federal Ground Water Quality Criteria for total Sodium for multiple quarters; MW-47 exceeded Primary Federal Ground Water Quality Criteria for Vinyl Chloride. Exceedances for EPZ replacement monitoring wells MW-102 through MW-104 and MW-107 through MW-112 are also included in Table 7.

Trilinear Diagrams and Ion Balance

Trilinear plots for Perched Zone samples are all within the calcium-magnesium-bicarbonate hydrochemical facie, consistent with past samples (Figures 7 and 8). Ion balance calculations (Table 8) indicate no analytical error ($> 10\%$) in any perched wells. EPZ replacement monitoring wells MW-102 through MW-104 and MW-107 to MW-112 have been added in Figure 7. Ion balance calculations (Table 8) indicate no analytical error ($> 10\%$) in any perched wells.

Prediction Limits

As with the regional aquifer monitoring wells, perched zone prediction limits are derived from cumulative data through the end of 2020. Calculated prediction limits for Appendix I parameters along with analytical results are presented in Table 9.

No UPL exceedances occurred for Perched Zone wells in the third quarter of 2021. Monitoring wells MW-107 through MW-112 do not yet have enough background data from sampling events to calculate prediction limits for analytical parameters.

Volatile Detections

VOC detections in the perched zones are presented in Table 10. Multiple detections listed in the table are due to switching to Lower Limit of Quantitation (LLOQ) methodology, which lowered the detection limit for a variety of VOCs. Few detections are qualified 'JT' and 'GU' in Table 10. Qualifier 'JT' indicates sample result present but unquantified or in other words above the method detection limit (MDL) but below the Reporting Detection Limit (RDL). Qualifier 'GU' indicates estimated with low bias and also Undetected, or in other words, analyte concentration less than MDL.

All other analytes are consistent with past analyses and known impacts.

1.2 Stormwater

1.2.1 CHRLF ISGP

CHRLF stormwater discharge is authorized by an Industrial Stormwater General Permit (ISGP) issued by the Washington State Department of Ecology (Ecology). The permit defines discharge benchmarks, applicable to all facilities, and effluent limits, applicable specifically to landfills. These values are listed in Table 15. Sampling stations SW-N4, SW-SL3 and SW-GS1 (see Figure 2) are the designated points for comparison to permit benchmarks and effluent limits.

ISGP required monitoring activities for the third quarter of 2021 are listed in Table 12. There were no effluent limit exceedances at any sampling locations during the third quarter of 2021 (see Table 14). ISGP Discharge Monitoring Reports (DMRs) are included in Appendix B.

1.2.2 CHRLF CSWGP

Beginning in 2017, a Construction Stormwater General Permit (CSWGP) was issued for CHRLF (permit number WAR305034 with Ecology) for the Area 8 construction activities. A separate Stormwater Pollution Prevention Plan (SWPPP) was also created for this CSWGP permit. Four (4) discharge locations were monitored weekly for compliance with the CSWGP in accordance with the SWPPP by the contractor during the active phase of the project. The construction contractor also inspected the required construction site Best Management Practices (BMPs) and the CSWGP monitoring locations daily during construction activities.

The four locations monitored are listed as follows:

1. C-1 (NW end of the site, downstream of the NW siltation pond);
2. C-2 (NE end of the site, downstream of the N stormwater pond);
3. C-3 (SE portion of the site, downstream of the S stormwater lagoon and upstream of the bioswale); and,
4. C-4/CHL (SW part of the site, downstream from the SW siltation pond).

In Spring 2021 the CSGP permit was fully transferred to the contractor, Goodfellow Bros., and KCSWD is no longer responsible for the permit. KCSWD submitted their last monthly DMR to Ecology for March 2021. The permit was transferred to Goodfellow in April 2021 and they have been preparing and submitting all DMRs since that time. However, KC SWD receives copies of their stormwater inspection and DMR reports and monitors their work to ensure compliance with the permit.

There were no exceedances at all monitoring locations during the third quarter of 2021 (see Table 14). Copies of DMRs submitted to Ecology by Goodfellow can be provided upon request.

1.3 Landfill Gas

Compliance probes, interior probes, on-site buildings, and supplemental monitoring probe results and location maps are included in Appendix B.

1.3.1 Compliance Probe Network

A network of compliance probes is monitored for landfill gas (LFG) migration around the perimeter of the landfill. Probes are monitored by the LFG crew monthly to monitor system performance and quarterly for compliance. The location map for the compliance probes can be viewed in Figure 4 and in Appendix B. The monitoring results for the compliance probes during this quarter are located in Appendix B.

No methane exceedances were observed at any compliance probe during the third quarter of 2021.

1.3.2 Interior Probe Network

Additional probes on the landfill site, located interior to the compliance probes but outside of the waste footprint, are monitored monthly. These probes provide valuable information for optimizing the performance of the LFG collection system and help to prevent LFG migration. The location map and monitoring results for the interior probes during the third quarter of 2021 can be viewed in Appendix B.

1.3.3 On-Site Building Monitoring

As required by WAC 173-351-200, gas concentrations are monitored inside facility structures. Structures are monitored quarterly for methane. No detections of methane occurred this quarter. The location map and monitoring results for facility gas monitoring during the third quarter of 2021 are presented in Appendix B.

1.3.4 Supplemental Migration Monitoring

Detections above the regulatory limit in LFG probe GP-33C in September of 2011 prompted actions including monitoring frequency increase, operational adjustments to increase LFG recovery rates, off-site structure monitoring, and, preparation of a response plan. Operational review resulted in modifications to enhance extraction from unlined areas and under liner spaces that could potentially act as gas conveyance pathways. The plan resulted in installation of thirteen (13) borings targeting the potential zone of LFG migration in the native sediments. Eight (8) borings serve as LFG extraction wells and five (5) borings as monitoring probes. The extraction wells and migration probes are monitored twice a month.

This quarter, no methane was detected at levels above the detection limit. The location map and supplemental monitoring results are included in Appendix B. Review of historical data indicates the system has been effective in controlling LFG migration to the perimeter probes.

2.0 Analytical Methods

Groundwater quality is evaluated by comparison of analysis results to regulatory standards, geochemical analysis, and statistical evaluation. Water quality analytical results for stormwater runoff discharged from the landfill site are compared to the limits set in the ISGP

and CSWGP. The following is a brief description of the standards and analytical tools used to review each matrix.

2.1 Regulatory Standards

Stormwater monitoring results are compared to the ISGP Benchmark and Effluent Limits Criteria and CSWGP Benchmarks (Table 13). Groundwater monitoring results are compared to the groundwater quality criteria in WAC 173-200 (Table 15).

2.2 Trilinear Diagrams and Major Ion Balance

Geochemical data are presented on trilinear diagrams. Major cations and anions are plotted on individual triangles as percentages of total milliequivalents per liter (meq/L). These diagrams illustrate differences in major ion chemistry between groundwater samples and can be used to categorize water composition into identifiable groups or hydrochemical facies. Hydrochemical facies reflect distinct compositions of cation and anion concentrations. The value of the diagram lies in pointing out relationships that exist among individual samples. Trilinear diagrams are included with ionic balance calculations in this report. Ion balance calculations are useful for determining analytical correctness and can be of value in detecting laboratory error or variation in field sampling procedures.

2.3 Prediction Limits

A prediction limit is a statistical test that compares an analytical result to a computed limit value. The limit value is derived from past analytical results, which are considered representative historical data. A value outside of this limiting value is considered evidence that the result is not drawn from the same sample population distribution.

To evaluate the groundwater data for CHRLF, one-sided UPLs are calculated based on intra-well comparisons. Intra-well comparisons present a more conservative approach to determining if a statistically significant release has occurred and is recommended for evaluation of detection monitoring data. In the intra-well approach, a threshold background value is set by determining an UPL. Prediction limits set a comparison threshold for background data with compliance well data and are used to determine if a sample is statistically elevated above background conditions. UPLs for the subsequent year's detection monitoring are calculated at the end of each year and incorporate the previous year's analytical results. UPLs are based on a 0.05 significance level, as approved by Ecology to be protective of human health and the environment. A 0.05 significance level indicates that at most there is a five (5) percent chance that a Type I error (false positive) will occur in the results.

The method for calculating the UPLs depends on both the type of distribution and the number of non-detects present in the background data set. UPLs for background data sets with 100 percent non-detects (NDs) are equal to the highest laboratory MDL. UPLs for background data sets with greater than 50 percent, but less than 100 percent non-detects are calculated based on the highest detected concentration for the respective data set.

Note: Although there are alternative methods for calculating UPLs for background data sets with greater than 90 percent, but less than 100 percent non-detects (e.g., Poisson's Method), the use of the highest detected concentration is generally considered the most conservative.

UPLs for background data sets with less than 50 percent non-detects are evaluated for normality. UPLs with non-parametric data sets are based on the highest detected concentration for the respective data set. UPLs for either normally distributed or transformed-normal data sets are calculated based on the following equations for calculating parametric prediction limits with retesting (*EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, 2009*):

Normal Distribution

$$\text{UPL} = \bar{x} + \kappa s$$

or

Transformed Distribution:

$$\text{UPL} = \bar{y} + \kappa s_y$$

where: \bar{x} = mean of the baseline data
 \bar{y} = mean of the transformed data
 κ = multiplier for intra-well prediction limits
 s = standard deviation of baseline data
 s_y = standard deviation of transformed data

For UPLs of constituents that had only ever had non-detects prior to implementing the LLOQ and are now detected, the MDL is being used until sufficient data is available to calculate at UPL.

Analytical results are compared to the respective UPLs on a quarterly/semi-annual basis, depending on the monitoring program, for Appendix I parameters. If there is an exceedance of the UPL, retesting of that analytical parameter at the respective location is required to determine if the exceedance represents a statistically significant increase over background.

A 1-of-3 retesting plan is used for any exceedances of the intra-well UPLs at CHRLF. This retesting plan provides adequate statistical power and minimizes Type II (False Negative) errors, while providing retesting that accommodates lab turnaround time, data review, and scheduling. This test is performed on parameters in WAC 173-351-990 Appendix I and is used to detect a change in the population distribution of the individual well.

2.4 Laboratory Data Quality

Laboratory analytical data is reviewed to verify meeting data quality objectives (DQOs) as defined in the QAPP. Occasionally, results identified during this process are deemed unsuitable for evaluation purposes. A summary of suspect results can be found in Table 16.

2.4.1 Lower Limit of Quantification

Changes made in accordance with federal regulations for the guidance of analytical testing methodologies covered by SW-846 (Test Methods for Evaluating Solid Waste) were implemented in 2017 by the contract laboratory. One specific effect of these changes was to replace the MDL methodology with the LLOQ methodology as the basis for determining the lowest quantitative value of an analyte that can be reported. This affected all methods covered within SW-846.

The LLOQ is a performance-based methodology that tests known standards repeatedly to create a calibration curve for a specific method. Commonly, the lowest concentration of the (linear) calibration curve is set as the LLOQ. However, in some cases the LLOQ may be greater than the baseline curve concentration due to lab specific factors such as instrument sensitivity and method analytical uncertainty.

2.4.2 Analytical Uncertainty and Data Review

An important consideration when reviewing and evaluating analytical data is to examine the uncertainty associated with the measurement of each analyte. When a UPL or groundwater quality criteria exceedance, and the detection limit are similar in magnitude, uncertainty inherent in low level concentration results can call into question the actuality of both presence and/or exceedance of the limit or criteria. This uncertainty is partly due to the ‘noise’ that is intrinsic in analytical testing methods and laboratory protocol. Arsenic exceedances in groundwater provide an example of this scenario, as the UPL and detection limits for arsenic are both typically quite low (parts per billion), as is the groundwater quality criteria. This results in the analytical measurement being evaluated to be subject to both the uncertainty within the calculation of a UPL, and the ‘noise’ of the analytical testing method, which includes both method and laboratory specific elements. These factors must be considered when performing a review or statistical evaluation of analytical data before confirmation on a UPL or groundwater quality exceedance can be determined.

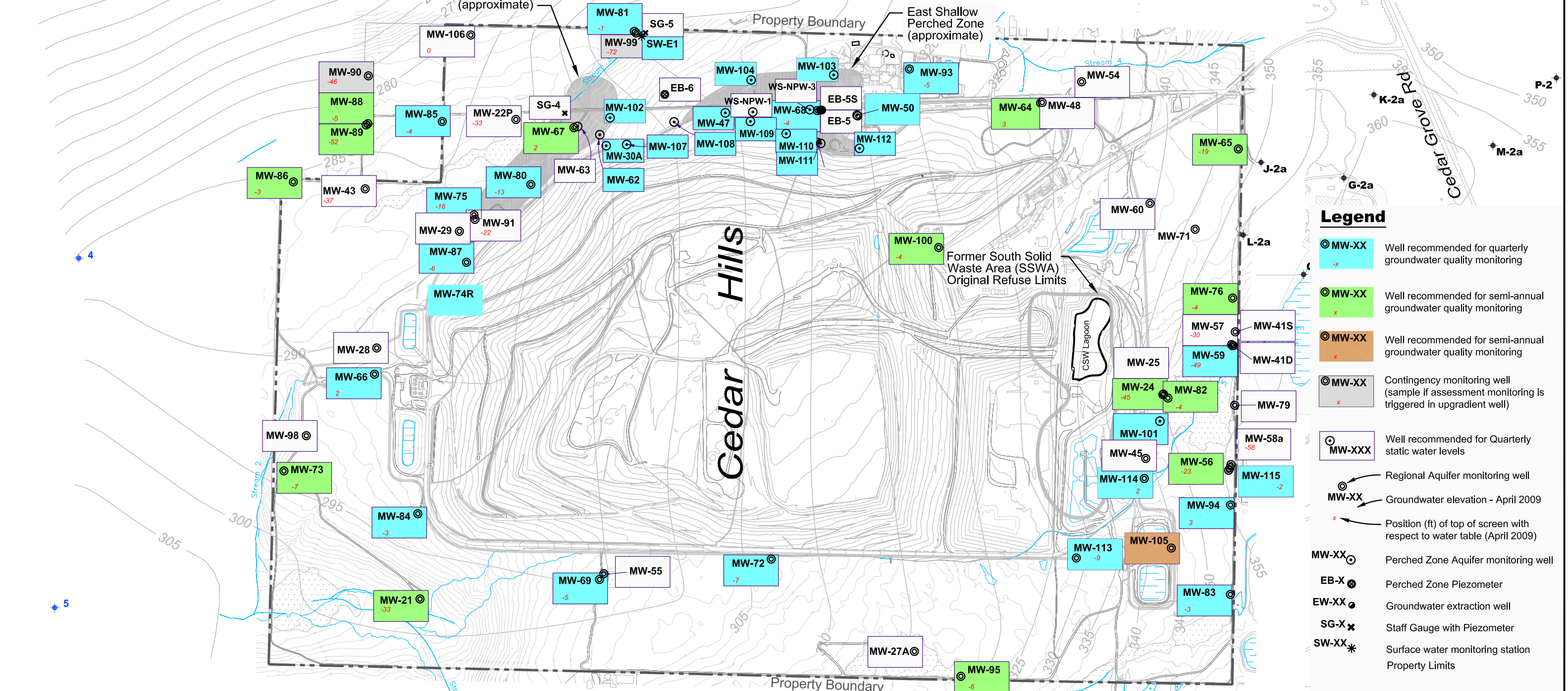
3. References

- 1) *Environmental Monitoring Sampling and Analysis Plan for Cedar Hills Regional Landfill*, December 2013 (SAP). King county, Department of Natural Resources and Parks, Solid Waste Division, prepared by Aspect Consulting LLC.
- 2) *Cedar Hills Regional Landfill Site Wide Hydrogeologic Report Addendum*, December 2013, King county, Department of Natural Resources and Parks, Solid Waste Division, prepared by Aspect Consulting LLC.

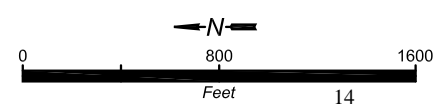
- 3) Hills Regional Landfill – EPZ Extraction Well Decommissioning Technical Memorandum, Phase 1 – Cedar Hills Regional Landfill, CONTRACT NO. E00286E12, Task No. 810, July 2018.
- 4) Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance, EPA, 2009.

15-207 15-208 15-209

McDonald3 Issaquah1

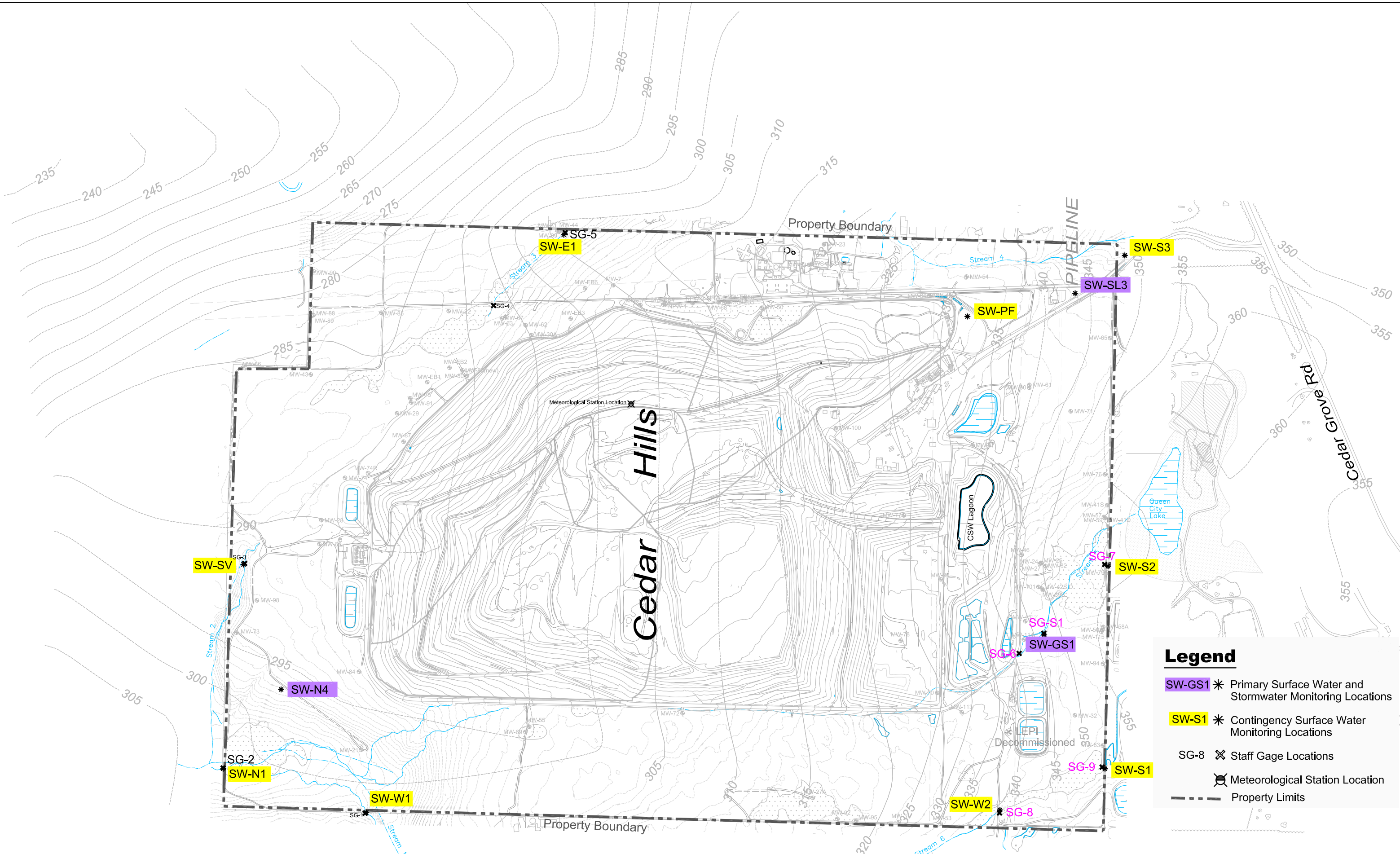


- Legend**
- ⊙ MW-XX Well recommended for quarterly groundwater quality monitoring
 - ⊙ MW-XX Well recommended for semi-annual groundwater quality monitoring
 - ⊙ MW-XX Well recommended for semi-annual groundwater quality monitoring
 - ⊙ MW-XX Contingency monitoring well (sample if assessment monitoring is triggered in upgradient well)
 - ⊙ MW-XXX Well recommended for Quarterly static water levels
 - ⊙ Regional Aquifer monitoring well
 - ⊙ MW-XX Groundwater elevation - April 2009
 - x Position (ft) of top of screen with respect to water table (April 2009)
 - ⊙ MW-XX Perched Zone Aquifer monitoring well
 - ⊙ EB-X Perched Zone Piezometer
 - ⊙ EW-XX Groundwater extraction well
 - x SG-X Staff Gauge with Piezometer
 - * SW-XX Surface water monitoring station
 - Property Limits



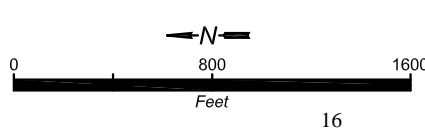
Groundwater Monitoring Network
 Environmental Monitoring Sampling and Analysis Plan
 Cedar Hills Regional Landfill, King County, Washington

DATE:	AUG 2020	PROJECT NO.
DESIGNED BY:		
DRAWN BY:		FIGURE NO.
REVISED BY:		FIG. 1



Legend

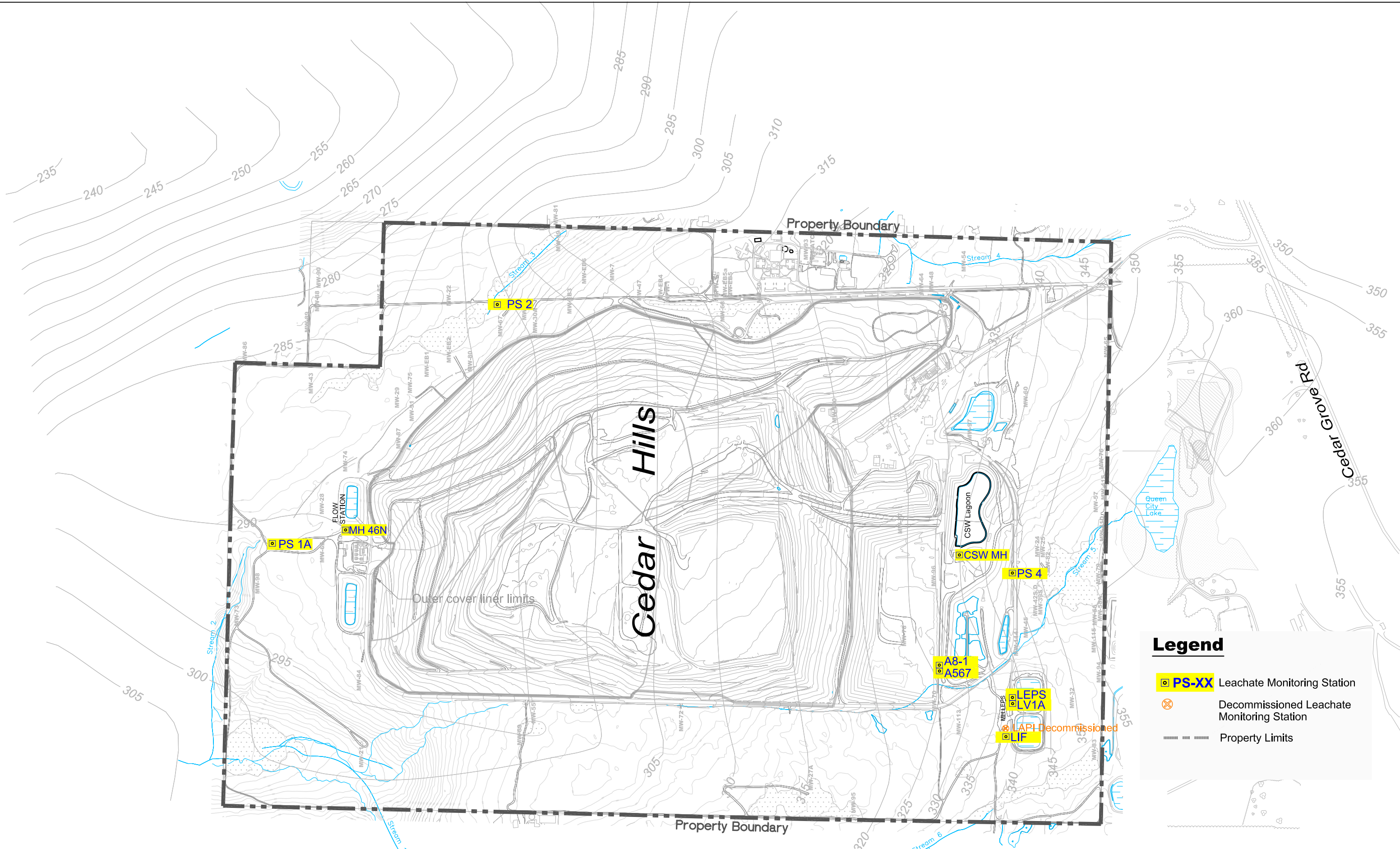
- SW-GS1 * Primary Surface Water and Stormwater Monitoring Locations
- SW-S1 * Contingency Surface Water Monitoring Locations
- SG-8 ✕ Staff Gage Locations
- Meteorological Station Location
- Property Limits



Surface Water and Stormwater Monitoring Network
 Environmental Monitoring Sampling and Analysis Plan
 Cedar Hills Regional Landfill, King County, Washington

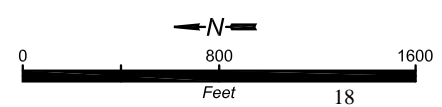
DATE: AUG 2020	PROJECT NO.
DESIGNED BY:	
DRAWN BY:	FIGURE NO.
REVISED BY:	FIG. 2

CAD Path: S:\CAD\CEDARHILL\CH Monitoring well and GP for CLEE quarterly Aug 2020\Fig 2\Fig 2 Surface water and stormwater monitoring network.dwg Figure 7.1 (11 x 17) | Coordinate System: NAD 1983 State Plane Washington North FIPS 4601 Feet | Date Saved: Jan 14, 2021 9:16am | User:

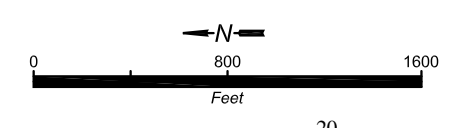
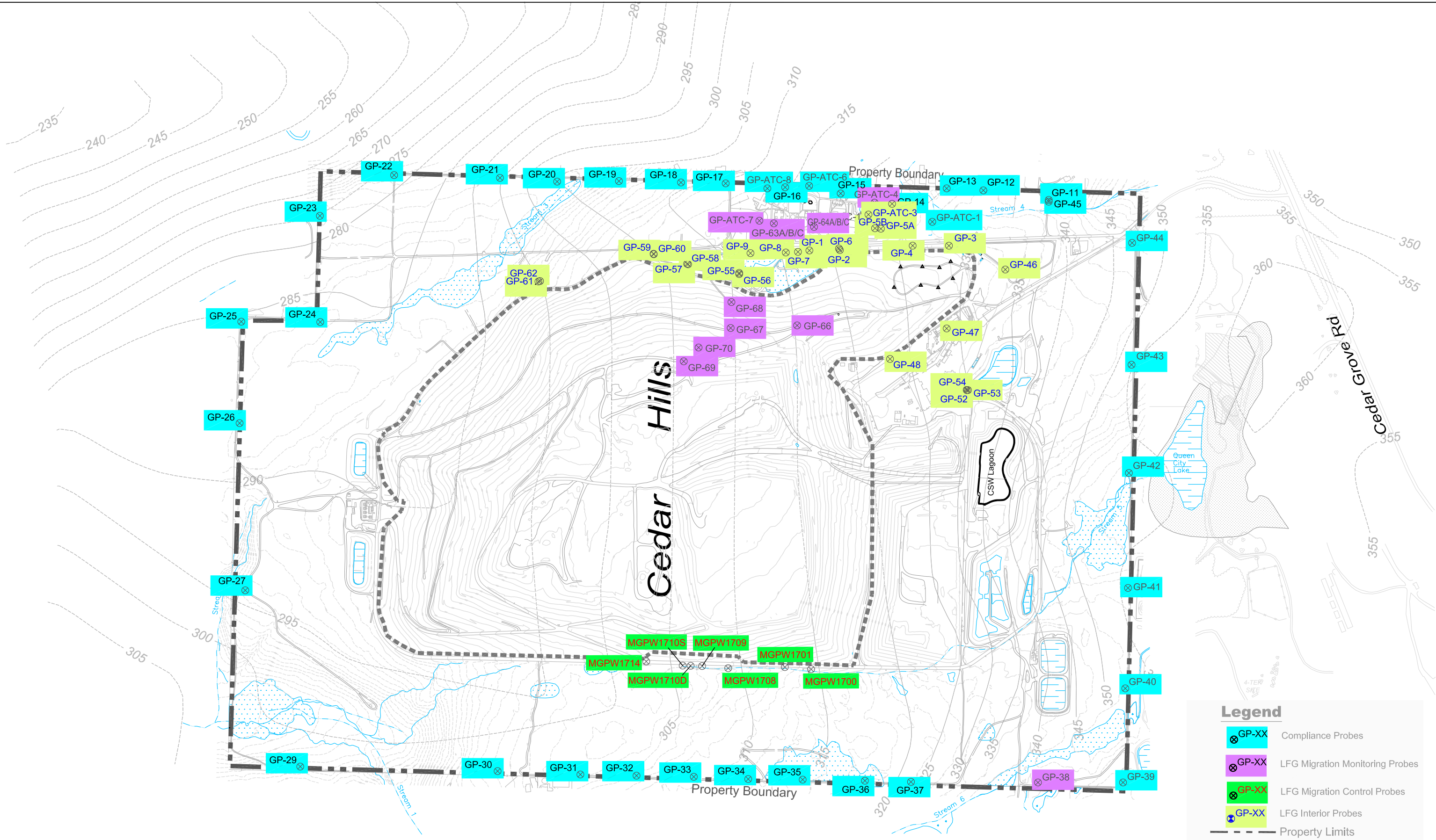


Legend

- PS-XX Leachate Monitoring Station
- X Decommissioned Leachate Monitoring Station
- Property Limits



KClago_v_b_m2{1}.tif	Leachate Monitoring Locations		DATE: AUG 2020	PROJECT NO.
	Environmental Monitoring Sampling and Analysis Plan		DESIGNED BY:	FIGURE NO. FIG. 3
	Cedar Hills Regional Landfill, King County, Washington		DRAWN BY:	
			REVISED BY:	



Landfill Gas Monitoring Network

Environmental Monitoring Sampling and Analysis Plan
 Cedar Hills Regional Landfill, King County, Washington

DATE: AUG 2020	PROJECT NO.
DESIGNED BY:	
DRAWN BY:	FIGURE NO.
REVISED BY:	FIG. 4

**Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS**

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW-21 (Upgradient)	6	163	5/17/83	Deep	Detection	Background	Quarterly	Semi-annual	Monitors background conditions of deep aquifer.
MW-22P (Downgradient)	2	284	5/25/83	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities or background monitoring.
MW-24 (Upgradient)	6	192	6/2/83	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in deep upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW-43 (Downgradient)	5	325	30/4/85	Deep	Detection	WL only	Quarterly	None	
MW-54 (Upgradient)	2	351	9/26/86	Deep	Detection	WL only	Quarterly	None	Not effectively located for facilities monitoring as it lies up gradient of the CHRLF facilities. Upgradient water quality monitored in other wells.
MW-56 (Upgradient)	2	166	10/12/88	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Low groundwater velocities indicate slow movement of QCF contaminants through this area.
MW-57 (Upgradient)	2	144	8/22/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-59. Strong downward vertical gradients indicate impacts at MW-57 would also be detected at MW-59.
MW-58A (Upgradient)	2	219	9/26/88	Deep	Detection	WL only	Quarterly	None	Monitoring redundant with MW-56. Strong downward vertical gradients indicate impacts at MW-58A would also be detected at MW-56.
MW-59 (Upgradient)	2	180.5	8/16/88	Deep	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in upgradient well.
MW-60 (Upgradient)	2.5	240	9/13/91	Water Table	Detection	WL only	Quarterly	None	Upgradient flow from QCF in shallow Regional Aquifer characterized by MW-65 and MW-76. Downgradient area monitored by MW-100.
MW-64 (Upgradient)	2.5	274	3/22/93	Water Table	Detection		Quarterly	Semi-annual	Adjacent to SE Pit. Conversion from quarterly to semiannual sampling does not have
MW-65 (Upgradient)	2.5	234	3/29/93	Deep	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in upgradient well. Monitor SWLs to define deeper Regional Aquifer flow paths.
MW-66 (Upgradient)	2.5	248	4/5/93	Water Table	Detection		Quarterly	Quarterly	Monitor north end leachate detention facilities.
MW-67 (Downgradient)	2.5	230	4/28/93	Water Table	Detection		Quarterly	Semi-annual	Monitors potential EPZ contaminants infiltrating into Regional Aquifer.
MW-68 (Cross-Gradient/Downgradient)	2.5	353	4/15/93	Water Table	Detection		Quarterly	Quarterly	Well is completed adjacent to unlined Main Hill where downward flow from Main Hill and impacted EPZ would be captured. Monitors Main Hill gas effected area.
MW-69 (Downgradient)	2.5	371	4/23/93	Water Table	Detection	WL only	Quarterly	Quarterly	West side flow converges in this area and well is upgradient of key downgradient wells.
MW-72 (Downgradient)	2.5	376	8/7/98	Water Table	Detection		Quarterly	Quarterly	Key water quality monitoring well for southwest landfill area.
MW-73 (Upgradient)	4	206	9/3/99	Water Table	Detection	Background	Quarterly	Semi-annual	Background water quality monitoring for northwest facility area. Downgradient flow paths from well largely by-pass facility so provides
MW-74R (Downgradient)	4	249	11/1/00	Water Table	Detection		Quarterly	Quarterly	Detection zone monitors north end facilities. Quarterly monitoring recommended due to
MW-75 (Downgradient)	4	269	9/24/99	Deep	Detection		Quarterly	Quarterly	Key downgradient monitoring well.
MW-76 (Upgradient)	4	148	10/25/99	Water Table	Detection	Background	Quarterly	Semi-annual	Monitor QCF impacts effecting upgradient water quality in shallow portion of Regional Aquifer. Low groundwater velocities (0.014 ft/day) indicate slow movement of QCF
MW-80 (Downgradient)	4	259	2/27/01	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well for monitoring impacts from unlined Main Hill and EPZ.
MW-81 (Upgradient)	4	192	10/3/02	Water Table	Detection		Quarterly	Quarterly	Monitors GW quality from off-site area east of facility. Retain as monitoring point for potential LFG impacts to GW. Key well for defining
MW-82 (Upgradient)	4	133	11/2/00	Water Table	Detection	Background	Quarterly	Semi-annual	Twice-annual monitoring of QCF impacts in shallow Regional upgradient well. Low groundwater velocities indicate slow movement of QCF
MW-83 (Upgradient)	4	154	10/27/00	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.
MW-84 (Upgradient)	4	246	10/20/00	Water Table	Detection	Background	Quarterly	Quarterly	Monitor background conditions in shallow regional aquifer
MW-85 (Downgradient)	4	257	12/1/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well with large detection zone underlying waste placement areas. Located in area of convergent GW flow and near center of high transmissivity channel.
MW-86 (Downgradient)	4	259	12/12/00	Water Table	Detection		Quarterly	Semi-annual	Provides monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on intrawell statistics.

**Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS**

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW-87 (Downgradient)	4	261	11/21/00	Water Table	Detection		Quarterly	Quarterly	Key downgradient monitoring well.
MW-88 (Downgradient)	4	239	9/13/01	Water Table	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities. Conversion from quarterly to semiannual sampling does not have significant effect on interval statistics.
MW-89 (Downgradient)	4	291	11/12/01	Deep	Detection		Quarterly	Semi-annual	Provides limited monitoring of north end facilities in deep Regional Aquifer. Continue monitoring in place of MW-43.
MW-90 (Downgradient)	4	274	8/14/02	Deep	Assessment		Quarterly	Contingent	Water quality monitoring redundant with MW-89. Reserve as contingency well in event assessment monitoring is triggered in MW-89 or 95.
MW-91 (Downgradient)	6	289	10/26/01	Deep	Detection	WL only	Quarterly	None	Large diameter well used for testing. Redundant with well MW-75.
MW-93 (Cross Gradient)	4	320	6/24/02	Water Table	Detection		Quarterly	Quarterly	Well monitors the Main Hill gas affected area.
MW-94 (Upgradient)	4	145	7/2/02	Water Table	Detection	Background	Quarterly	Quarterly	Quarterly monitoring of QCF impacts in shallow Regional upgradient well.
MW-95 (Cross Gradient)	4	263	7/22/02	Water Table	Detection		Quarterly	Semi-annual	Monitor off-site water quality at southwest end of facility. Downgradient flow paths poorly defined and may by-pass facility.
MW-99 (Upgradient)	4	279	8/30/02	Deep	Assessment		Quarterly	Contingent	Monitors easterly upgradient water quality from offsite. Reserve as contingency well in event assessment monitoring is triggered in MW-81.
MW-100 (Downgradient)	4	300	8/26/02	Water Table	Detection		Quarterly	Semi-annual	Well useful for flowpath and geochemical modeling. Assists in tracking QCF contaminant migration through facility.
MW-106 (Cross gradient)	4	203	2/19/09	Water Table	Detection	WL only	Quarterly	None	Defines east side flow paths.
MW-113 (Upgradient)	4	220	4/03/20	Water Table	Detection		Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
MW-114 (Upgradient)	4	150	4/10/20	Water Table	Detection	Background	Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
MW-115 (Upgradient)	4	145	4/14/20	Water Table	Detection	Background	Quarterly	Quarterly	New monitoring well as of 2nd quarter 2020
NPW1	8	382	8/22/1990	Deep	Non-Potable	WL only	Quarterly	None	Well provides non potable water to the fire suppression tank on-site
NPW3	6	376	6/5/1990	Deep	Non-Potable	WL only	Quarterly	None	Well provides non potable water to the fire suppression tank on-site
East Main Hill Perched Zones									
EB-5	2	60	5/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
EB-5S	2	20	6/06/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
EB-6	2	30	11/28/90	EPZ	Assessment		Quarterly	Quarterly	Monitor water levels to evaluate affect of extraction system shut down. Well has limited water yield limiting ability to collect samples.
EW-25	6	36	6/10/92	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well. Temporary monitoring point sampled with passive diffusion sampler. Decommissioned 2nd quarter of 2018.
MW 25	3	43	3/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW 27A	2	80	3/10/85	EPZ	Assessment	WL only	Quarterly	None	
MW 28	3	39	21/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW 29	3	60	23/6/83	EPZ	Assessment	WL only	Quarterly	None	
MW-30A	3	35	6/09/89	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs.
MW-41S	3	51	12/7/83	EPZ	Assessment	WL only	Quarterly	None	
MW-41D	3	51	12/7/83	EPZ	Assessment	WL only	Quarterly		
MW 45	2	64	5/17/1985	EPZ	Assessment	WL only	Quarterly	None	
MW-47	2	44	5/31/85	EPZ	Assessment		Quarterly	Quarterly	Key EPZ compliance well.

**Table 1
CEDAR HILLS REGIONAL LANDFILL: GROUNDWATER MONITORING WELLS**

Well Name	General Condition				Recommendations				
	Well Diameter (inches)	Well Depth (feet)	Installation Date	Water Table or Deep Zone	Well Monitoring Classification	Comments on Well Use	Static Water Level Monitoring Frequency	Water Quality Monitoring Frequency	Rationale
MW 48	2	63	24/5/85	EPZ	Assessment	WL only	Quarterly	None	
MW-50	2	40	6/03/85	EPZ	Assessment		Quarterly	Quarterly	
MW 55	2	67	10/02/86	EPZ	Assessment	WL only	Quarterly	None	
MW-62	2	54	1/02/90	EPZ	Assessment		Quarterly	Quarterly	Monitor attenuating VOCs.
MW-63	2	17	12/02/90	EPZ	Assessment	WL only	Quarterly	None	Monitor water levels to evaluate affect of extraction system shut down.
MW 79	2	56	11/05/99	EPZ	Assessment	WL only	Quarterly		THIS WELL IS BROKEN; needs to be fixed. No statics are taken since it is still broken.
MW 98	2	23	3/09/01	EPZ	Assessment	WL only	Quarterly	None	
MW-102	2	50	1/27/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-103	2	35	1/28/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-104	2	32	1/29/09	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-107	2	39	6/07/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-108	2	17	6/08/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-109	2	13	6/09/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-110	2	19	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-111	2	14	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
MW-112	2	17	6/11/18	EPZ	Assessment		Quarterly	Quarterly	EPZ monitoring well.
South Solid Waste Area Perched Zone									
MW-101	2	54	6/2/06	SSWA	Assessment		Quarterly	Quarterly	Key SSWA perched zone compliance well
MW 105	2	30	1/30/09	EPZ	Assessment	Conductance only	Quarterly	Quarterly	Well located near leachate lagoons; FE measures conductance every quarter on this well as a check of the leachate lagoons

Notes:

- (1) The following wells were decommissioned: MW-70, MW-77, MW-78, MW-96, MW-97, and EW-25 as of 2019.
- (2) Shallow wells are wells completed in the Regional Aquifer with the top screen slot within 10 ft of the water table. Deep wells are completed in the Regional Aquifer with the top screen slot greater than 10 ft below the water table.
- (3) Water quality monitoring shading relates to Figure 2.

Abbreviations:

WL = Water Level
 NA = Not Applicable
 DZ = Detection Zone EPZ = East Perched Zone
 SSWA = South Solid Waste Area QCF = Queen City Farms

TABLE 2
CEDAR HILLS REGIONAL LANDFILL:
GROUNDWATER MONITORING ACTIVITIES 3RD QUARTER 2021

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
Static Water Levels	NA	7/6/21	Groundwater Elevation Measurement	--	North half of landfill.
Static Water Levels	NA	7/7/21	Groundwater Elevation Measurement	--	South half of landfill.
MW-21	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-24	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-30A	Perched	7/6/21	Groundwater Elevation Measurement	W30A210720-	
MW-30A	Perched	7/20/2021	Groundwater Elevation Measurement	W30A210720-	
MW-30A	Perched	7/20/21	Quarterly Groundwater Sampling	--	
MW-47	Perched	7/6/21	Groundwater Elevation Measurement	W47-210719-	
MW-47	Perched	7/19/2021	Quarterly Groundwater Sampling	W47-210719-	
MW-48	Perched	7/19/2021	Groundwater Elevation Measurement	--	
MW-50	Perched	7/6/21	Groundwater Elevation Measurement	--	
MW-50	Perched	7/19/2021	Groundwater Elevation Measurement	--	
MW-56	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-59	Regional	7/6/21	Groundwater Elevation Measurement	W59-210712-	
MW-59	Regional	7/12/2021	Groundwater Elevation Measurement	W59-210712-	
MW-59	Regional	7/12/21	Quarterly Groundwater Sampling	W59-210712-	
MW-62	Perched	7/6/21	Groundwater Elevation Measurement	--	
MW-62	Perched	7/21/2021	Groundwater Elevation Measurement	--	
MW-64	Perched	7/6/21	Groundwater Elevation Measurement	--	
MW-65	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-66	Regional	7/6/2021	Groundwater Elevation Measurement	W66-210707-	
MW-66	Regional	7/7/21	Groundwater Elevation Measurement	W66-210707-	
MW-66	Regional	7/7/21	Quarterly Groundwater Sampling	W66-210707-	
MW-67	Regional	7/6/2021	Groundwater Elevation Measurement	--	
MW-68	Regional	7/6/21	Groundwater Elevation Measurement	W68-210713-	
MW-68	Regional	7/13/21	Quarterly Groundwater Sampling	W68-210713-	
MW-68	Regional	7/13/2021	Groundwater Elevation Measurement	W68-210713-	
MW-69	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-72	Regional	7/6/21	Groundwater Elevation Measurement	W72-210708-	
MW-72	Regional	7/8/2021	Groundwater Elevation Measurement	W72-210708-	
MW-72	Regional	7/8/21	Quarterly Groundwater Sampling	W72-210708-	
MW-73	Regional	7/6/21	Groundwater Elevation Measurement		
MW-74R	Regional	7/6/2021	Groundwater Elevation Measurement	W74R210709-	
MW-74R	Regional	7/9/21	Groundwater Elevation Measurement	W74R210709-	
MW-74R	Regional	7/9/21	Quarterly Groundwater Sampling	W74R210709-	
MW-75	Regional	7/6/2021	Groundwater Elevation Measurement	W75-210709-	
MW-75	Regional	7/9/21	Groundwater Elevation Measurement	W75-210709-	

TABLE 2
CEDAR HILLS REGIONAL LANDFILL:
GROUNDWATER MONITORING ACTIVITIES 3RD QUARTER 2021

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-75	Regional	7/9/21	Quarterly Groundwater Sampling	W75-210709-	
MW-76	Regional	7/6/2021	Groundwater Elevation Measurement	--	
MW-80	Regional	7/6/21	Groundwater Elevation Measurement	W80-210713-	
MW-80	Regional	7/13/21	Groundwater Elevation Measurement	W80-210713-	
MW-80	Regional	7/13/2021	Quarterly Groundwater Sampling	W80-210713-	
MW-81	Regional	7/6/21	Groundwater Elevation Measurement	W81-210708-	
MW-81	Regional	7/8/21	Groundwater Elevation Measurement	W81-210708-	
MW-81	Regional	7/8/2021	Quarterly Groundwater Sampling	W81-210708-	
MW-82	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-83	Regional	7/6/21	Groundwater Elevation Measurement	W83-210712-	
MW-83	Regional	7/12/2021	Groundwater Elevation Measurement	W83-210712-	
MW-83	Regional	7/12/21	Quarterly Groundwater Sampling	W83-210712-	
MW-84	Regional	7/6/21	Groundwater Elevation Measurement	W84-210707-	
MW-84	Regional	7/7/2021	Groundwater Elevation Measurement	W84-210707-	
MW-84	Regional	7/7/21	Quarterly Groundwater Sampling	W84-210707-	
MW-85	Regional	7/6/21	Groundwater Elevation Measurement	W85-210709-	
MW-85	Regional	7/9/2021	Groundwater Elevation Measurement	W85-210709-	
MW-85	Regional	7/9/21	Quarterly Groundwater Sampling	--	
MW-86	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-87	Regional	7/6/2021	Groundwater Elevation Measurement	W87-210708-	
MW-87	Regional	7/8/21	Groundwater Elevation Measurement	W87-210708-	
MW-87	Regional	7/8/21	Quarterly Groundwater Sampling	--	
MW-88	Regional	7/6/2021	Groundwater Elevation Measurement	--	
MW-89	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-90	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-93	Regional	7/6/2021	Groundwater Elevation Measurement	W93-210708-	
MW-93	Regional	7/8/21	Groundwater Elevation Measurement	W93-210708-	
MW-93	Regional	7/8/21	Quarterly Groundwater Sampling	W93-210708-	
MW-94	Regional	7/6/2021	Groundwater Elevation Measurement	W94-210712-	
MW-94	Regional	7/12/21	Groundwater Elevation Measurement	W94-210712-	
MW-94	Regional	7/12/21	Quarterly Groundwater Sampling	W94-210712-	
MW-95	Regional	7/6/2021	Groundwater Elevation Measurement	--	
MW-99	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-EB6	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-EB6	Regional	7/13/2021	Groundwater Elevation Measurement	--	

TABLE 2
CEDAR HILLS REGIONAL LANDFILL:
GROUNDWATER MONITORING ACTIVITIES 3RD QUARTER 2021

Well ID	Zone	Date	Planned Activity	Sample ID	Comment
MW-100	Regional	7/6/21	Groundwater Elevation Measurement	--	
MW-101	Perched	7/6/21	Groundwater Elevation Measurement	W101210728-	
MW-101	Perched	7/28/2021	Groundwater Elevation Measurement	W101210728-	
MW-101	Perched	7/28/21	Quarterly Groundwater Sampling	W101210728-	
MW-102	Perched	7/6/21	Groundwater Elevation Measurement	W102210716-	
MW-102	Perched	7/16/2021	Groundwater Elevation Measurement	W102210716-	
MW-102	Perched	7/16/21	Quarterly Groundwater Sampling	W102210716-	
MW-103	Perched	7/6/21	Groundwater Elevation Measurement	--	MW-30A
MW-103	Perched	7/20/2021	Groundwater Elevation Measurement	--	MW-47
MW-104	Perched	7/6/21	Groundwater Elevation Measurement	--	MW-48
					MW-50
MW-104	Perched	7/20/21	Groundwater Elevation Measurement	--	MW-62
MW-105	Regional	7/6/2021	Groundwater Elevation Measurement	--	MW-64
MW-105	Regional	7/29/21	Groundwater Elevation Measurement	--	MW-102
MW-107	Perched	7/6/21	Groundwater Elevation Measurement	W107210716-	MW-103
MW-107	Perched	7/16/2021	Groundwater Elevation Measurement	W107210716-	MW-104
					MW-105
MW-107	Perched	7/16/21	Quarterly Groundwater Sampling	W107210716-	MW-107
MW-108	Perched	7/6/21	Groundwater Elevation Measurement	--	MW-108
MW-108	Perched	7/16/2021	Groundwater Elevation Measurement	--	MW-109
MW-109	Perched	7/6/21	Groundwater Elevation Measurement	W109210715-	MW-110
MW-109	Perched	7/15/21	Groundwater Elevation Measurement	W109210715-	MW-111
					MW-112
MW-109	Perched	7/15/2021	Quarterly Groundwater Sampling	W109210715-	MW-EB6
MW-110	Perched	7/6/21	Groundwater Elevation Measurement	W110210715-	
MW-110	Perched	7/15/21	Groundwater Elevation Measurement	W110210715-	
MW-110	Perched	7/15/2021	Quarterly Groundwater Sampling	W110210715-	
MW-111	Perched	7/6/21	Groundwater Elevation Measurement	W111210715-	
MW-111	Perched	7/15/21	Groundwater Elevation Measurement	W111210715-	
MW-111	Perched	7/15/2021	Quarterly Groundwater Sampling	W111210715-	
MW-112	Perched	7/6/21	Groundwater Elevation Measurement	--	
MW-113	Regional	7/6/21	Groundwater Elevation Measurement	W113210712-	
MW-113	Regional	7/12/2021	Groundwater Elevation Measurement	W113210712-	
MW-113	Regional	7/12/21	Quarterly Groundwater Sampling	--	
MW-114	Regional	7/6/21	Groundwater Elevation Measurement	W114210712-	
MW-114	Regional	7/12/2021	Groundwater Elevation Measurement	W114210712-	
MW-114	Regional	7/12/21	Quarterly Groundwater Sampling	W114210712-	
MW-115	Regional	7/6/21	Groundwater Elevation Measurement	W115210712-	
MW-115	Regional	7/12/2021	Groundwater Elevation Measurement	W115210712-	
MW-115	Regional	7/12/21	Quarterly Groundwater Sampling	W115210712-	
MW-EB6	Perched	7/13/21	Quarterly Groundwater Sampling	--	
Field Blank	QA/QC	7/20/2021	Quarterly Groundwater Sampling	--	

Table 3
CEDAR HILLS REGIONAL LANDFILL:
REGIONAL AQUIFER GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from July 01, 2021 to September 30, 2021)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Upgradient and Crossgradient Wells					
pH (Field)	pH Units	MW-115	7/12/2021	W115210712-	6.45
		MW-83	7/12/2021	W83-210712-	6.41
		MW-94	7/12/2021	W94-210712-	6.35
Arsenic, Total	mg/L	MW-113	7/12/2021	W113210712-	0.000545
		MW-114	7/12/2021	W114210712-	0.000274
		MW-115	7/12/2021	W115210712-	0.000214
		MW-59	7/12/2021	W59-210712-	0.000436
		MW-66	7/7/2021	W66-210707-	0.000673
		MW-68	7/13/2021	W68-210713-	0.0312
		MW-81	7/8/2021	W81-210708-	0.000527
		MW-83	7/12/2021	W83-210712-	0.00034
		MW-84	7/7/2021	W84-210707-	0.000335
		MW-93	7/8/2021	W93-210708-	0.00143
		MW-94	7/12/2021	W94-210712-	0.00013
Iron, Dissolved	mg/L	MW-113	7/12/2021	W113210712-	1.21
		MW-59	7/12/2021	W59-210712-	4.6
		MW-68	7/13/2021	W68-210713-	0.505
Manganese, Dissolved	mg/L	MW-113	7/12/2021	W113210712-	0.404
		MW-59	7/12/2021	W59-210712-	0.118
		MW-68	7/13/2021	W68-210713-	0.277
		MW-93	7/8/2021	W93-210708-	0.163
Trichloroethene	µg/L	MW-114	7/12/2021	W114210712-	10.5
		MW-115	7/12/2021	W115210712-	5.08

Table 3
CEDAR HILLS REGIONAL LANDFILL:
REGIONAL AQUIFER GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from July 01, 2021 to September 30, 2021)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
Downgradient Wells					
Arsenic, Total	mg/L	MW-72	7/8/2021	W72-210708-	0.000161
		MW-74R	7/9/2021	W74R210709-	0.000421
		MW-75	7/9/2021	W75-210709-	0.000453
		MW-80	7/13/2021	W80-210713-	0.00294
		MW-85	7/9/2021	W85-210709-	0.00071
		MW-87	7/8/2021	W87-210708-	0.0137
Iron, Dissolved	mg/L	MW-72	7/8/2021	W72-210708-	2.68
		MW-75	7/9/2021	W75-210709-	2.99
		MW-80	7/13/2021	W80-210713-	2.14
		MW-87	7/8/2021	W87-210708-	4.8
Manganese, Dissolved	mg/L	MW-72	7/8/2021	W72-210708-	0.364
		MW-75	7/9/2021	W75-210709-	0.257
		MW-80	7/13/2021	W80-210713-	0.339
		MW-87	7/8/2021	W87-210708-	0.515
See Data Qualifier List for Qualifier Information.					

Exceedance Criteria: WAC 173-200-040 - Water Quality Standards for Groundwaters of the State of Washington

Table 8
 Ion Balance Calculations.
 Cedar Hills Regional Landfill.
 Perched Zones Groundwater Monitoring Wells

Data Collected from July 01, 2021 - September 30, 2021

Quarterly Upgradient and Crossgradient Wells																				
Cations	Molecular Weight	n	MW-59			MW-66			MW-81			MW-83			MW-84			MW-93		
			mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
			1/11/21			1/5/21			1/5/21			1/7/21			2/1/21			1/6/21		
			Date			Date			Date			Date			Date			Date		
pH			7.0			6.7			7.2			6.4			6.7			7.2		
Conductance			248.3			229.3			183.9			689.8			214.0			352.9		
TDSobs			152.0			131.0			117.0			444.0			128.0			208.0		
Calcium	40.1	2	18.4	0.92	39.0	16.9	0.84	37.1	14.5	0.72	42.0	69.6	3.47	52.3	15.7	0.78	37.2	31.9	1.59	45.6
Magnesium	24.3	2	11.5	0.95	40.2	13.2	1.086196	47.8	8.2	0.67	39.0	29.5	2.43	36.5	12.1	0.99568	47.3	17.3	1.42	40.8
Potassium	39.1	1	1.2	0.030	1.3	1.2	0.03	1.3	0.9	0.023	1.3	3.6	0.09	1.4	1.2	0.03	1.5	1.6	0.04	1.1
Sodium	23.0	1	6.7	0.29	12.4	7.2	0.31	13.8	7.0	0.30	17.6	15.0	0.65	9.8	6.8	0.29	14.0	9.8	0.43	12.2
Iron	55.8	2	4.6	0.16	7.0	0.0	0.000358	0.016	0.0	0.000358	0.02	0.0	0.000358	0.0054	0.0	0.000358	0.017	0.0	0.000358	0.010
Manganese	54.9	2	0.12	0.004296	0.18	0.00	3.64E-06	0.0002	0.00	3.64E-06	0.0002	0.04	0.001314	0.0198	0.00	3.79E-05	0.002	0.16	0.005934	0.1699
Ammonia-N	14.0	1	0.010	0.000742	0.03	0.002	0.000143	0.006	0.002	0.000143	0.008	0.007	0.000464	0.0070	0.002	0.000143	0.007	0.053	0.003755	0.108
			2.36			2.3			1.7			6.6			2.1			3.5		
Alkalinity, Total			73.1			85.9			58.1			217.0			78.0			122.0		
Carbonate	60.0	2	0.048	0.001605	0.1	0.026	0.000883	0.0	0.057	0.001886	0.1	0.034	0.001118	0.0	0.023	0.000766	0.0	0.122	0.004052	0.122
Bicarbonate	61.0	1	89.08	1.46	68.0	104.74	1.72	79.5	70.77	1.16	70.3	264.67	4.34	66.1	95.11	1.56	77.4	148.59	2.44	73.4
Chloride	35.5	1	12.1	0.34	15.9	4.3	0.12	5.6	5.1	0.14	8.7	66.6	1.88	28.6	3.8	0.11	5.3	2.7	0.08	2.3
Nitrate-N	14.0	1	0.017	0.001214	0.06	0.499	0.036	1.6	1.560	0.11	6.7	1.560	0.11	1.7	0.133	0.01	0.5	0.015	0.00	0.0
Sulfate	96.1	2	16.4	0.34	15.9	13.7	0.29	13.2	11.2	0.23	14.1	11.0	0.23	3.5	16.2	0.34	16.7	38.4	0.80	24.1
Total Anions (meq/L)			2.15			2.2			1.7			6.6			2.0			3.3		
Total Ions (meq/L)			4.5			4.4			3.4			13.2			4.1			6.8		
Cation/Anion Ratio			1.10			1.05			1.04			1.01			1.04			1.05		
Percent Difference			4.7			2.6			2.1			0.7			2.2			2.6		
Trilinear Diagram Data																				
sum (Ca, Mg, Na+K)			2.19			2.27			1.72			6.64			2.10			3.48		
Calcium			42.00			37.09			42.04			52.27			37.23			45.70		
Magnesium			43.29			47.77			39.01			36.54			47.32			40.87		
Sodium + Potassium			14.71			15.14			18.95			11.19			15.45			13.43		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)			2.14			2.12			1.54			6.45			2.00			3.32		
Sulfate			15.92			13.43			15.15			3.55			16.82			24.11		
Chloride			15.91			5.70			9.38			29.14			5.37			2.33		
Bicarbonate + Carbonate			68.16			80.87			75.47			67.31			77.80			73.56		

Table 8
 Ion Balance Calculations.
 Cedar Hills Regional Landfill.
 Perched Zones Groundwater Monitoring Wells

Data Collected from July 01, 2021 - September 30, 2021

Quarterly Upgradient and Crossgradient Wells																	
MW-94 1/7/21			MW-113 1/11/21			MW-114 1/11/21			MW-115 1/11/21			MW-68 1/11/21			MW-72 1/5/2021		
mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
6.4			7.1			6.8			6.5			7.0			6.8		
397.4			416.7			316.0			323.6			296.3			377.3		
243.0			253.0			189.0			205.0			179.0			221.0		
37.5	1.87	49.7	36.9	1.84	45.6	27.7	1.38	47.5	30.3	1.51	50.6	26.2	1.31	44.1	31.7	1.58	42.1
17.2	1.42	37.6	20.4	1.68	41.6	14.1	1.16	39.9	13.3	1.09	36.6	14.6	1.20	40.5	19.9	1.64	43.6
2.6	0.07	1.7	1.9	0.05	1.2	2.1	0.05	1.9	1.9	0.05	1.6	1.6	0.04	1.3	2.0	0.05	1.4
9.5	0.41	10.9	9.3	0.41	10.1	7.2	0.31	10.8	7.7	0.33	11.2	9.0	0.39	13.1	8.7	0.377124	10.034
0.0	0.000358	0.010	1.2	0.0433327	1.074	0.0	0.0003581	0.012	0.0	0.0003581	0.012	0.5	0.018	0.61	2.7	0.095977	2.5537
0.00	4.19E-06	0.0001	0.40	0.0147075	0.3646	0.00	7.791E-06	0.0003	0.00	0.000134	0.0045	0.28	0.010	0.34	0.36	0.013251	0.353
0.002	0.000143	0.004	0.017	0.0011994	0.030	0.002	0.0001428	0.005	0.002	0.0001428	0.005	0.018	0.001	0.042	0.017	0.0	
	3.8			4.0			2.9			3.0			3.0			3.8	
135.0			143.0			104.0			102.0			127.0			129.0		
0.018	0.000606	0.017	0.099	0.0032878	0.084	0.038	0.0012556	0.044	0.017	0.0005762	0.020	0.076	0.002544	0.09	0.051	0.00	0.0
164.66	2.70	73.8	174.26	2.86	73.4	126.80	2.08	72.8	124.40	2.04	69.2	154.78	2.54	86.1	157.28	2.58	73.5
27.1	0.76	20.9	28.4	0.80	20.6	17.5	0.49	17.3	22.7	0.64	21.7	3.1	0.087	3.0	7.7	0.22	6.2
0.666	0.05	1.3	0.010	0.00	0.0	1.690	0.12	4.2	0.873	0.06	2.1	0.010	0.000714	0.024	0.010	0.00	0.0
7.1	0.15	4.0	11.1	0.23	5.9	7.7	0.16	5.6	9.9	0.21	7.0	15.4	0.32	10.9	34.1	0.7	
	3.7			3.9			2.9			2.9			2.9			3.5	
	7.4			7.9			5.8			5.9			5.9			7.265	
	1.03			1.04			1.02			1.01			1.01			1.072	
	1.4			1.8			1.0			0.7			0.3			3.464	
3.76			3.97			2.91			2.99			2.94			3.65		
		49.72			46.33			47.50			50.62			44.50			43.36
		37.60			42.24			39.87			36.64			40.89			44.89
		12.68			11.43			12.63			12.75			14.61			100.000
3.61			3.89			2.73			2.89			2.95			3.51		
		4.07			5.94			5.88			7.11			10.88			20.25
		21.17			20.58			18.05			22.19			2.96			6.17
		74.76			73.48			76.07			70.70			86.16			73.58

Table 8
 Ion Balance Calculations.
 Cedar Hills Regional Landfill.
 Perched Zones Groundwater Monitoring Wells

Data Collected from July 01, 2021 - September 30, 2021

Quarterly Downgradient to Waste Cells and North End Facilities														
MW-74R 1/6/21			MW-75 1/6/21			MW-80 1/11/21			MW-85 1/6/21			MW-87 1/15/21		
mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)
6.8			6.9			6.9			6.7			6.7		
619.0			429.6			336.4			411.8			593.0		
371.0			285.0			207.0			243.0			441.0		
50.0	2.50	39.6	33.2	1.66	38.5	31.0	1.55	45.4	35.7	1.78	42.0	48.1	2.40	40.8
38.5	3.17	50.3	24.9	2.05	47.7	16.6	1.37	40.1	23.7	1.95	46.0	33.4	2.75	46.7
2.3	0.06	0.9	2.1	0.05	1.2	1.6	0.041	1.2	1.8	0.046	1.1	2.5	0.06	1.1
13.2	0.57	9.1	9.7	0.42	9.9	8.4	0.37	10.7	10.6	0.461	10.9	11.1	0.48	8.2
0.0	0.000358	0.006	3.0	0.11	2.49	2.1	0.077	2.2	0.0	0.000358	0.0084	4.8	0.171898	2.919
0.00	3.64E-06	0.00006	0.26	0.009356	0.22	0.34	0.012	0.36	0.00	3.64E-06	0.00009	0.52	0.018748	0.3184
0.002	0.000143	0.002	0.009	0.000657	0.015	0.010	0.000693	0.020	0.002	0.000143	0.0034	0.017	0.001242	0.021
	6.3			4.3			3.4			4.2			5.9	
224.0			115.0			123.0			155.0			116.0		
0.085	0.002832	0.05	0.056	0.001872	0.05	0.055	0.001827	0.06	0.046	0.001521	0.04	0.033	0.001113	0.020
273.11	4.48	74.2	140.19	2.30	57.4	149.95	2.46	76.4	189.01	3.10	75.4	141.45	2.32	41.3
26.9	0.76	12.6	12.9	0.36	9.1	4.5	0.13	4.0	10.3	0.29	7.1	18.5	0.52	9.3
0.295	0.021061	0.35	0.010	0.000714	0.018	0.010	0.000714	0.02	0.100	0.007139	0.2	0.010	0.00	0.0
37.2	0.77	12.8	64.3	1.34	33.4	30.3	0.63	19.6	34.1	0.71	17.3	133.0	2.77	49.3
	6.0			4.0			3.2			4.1			5.6	
	12.3			8.3			6.6			8.3			11.5	
	1.04			1.07			1.06			1.03			1.05	
	2.1			3.6			2.9			1.6			2.4	
6.30			4.18			3.32			4.24			5.70		
		39.63			39.61			46.60			42.03			42.14
		50.32			48.99			41.15			46.01			48.25
		10.05			11.40			12.25			11.96			9.61
6.01			4.00			3.22			4.10			5.61		
		12.88			33.45			19.60			17.32			49.36
		12.62			9.09			3.97			7.09			9.30
		74.50			57.46			76.43			75.60			41.34

Figure 5. Trilinear Diagram Upgradient and Crossgradient Regional Wells

Cedar Hills Regional Landfill

Third Quarter 2021

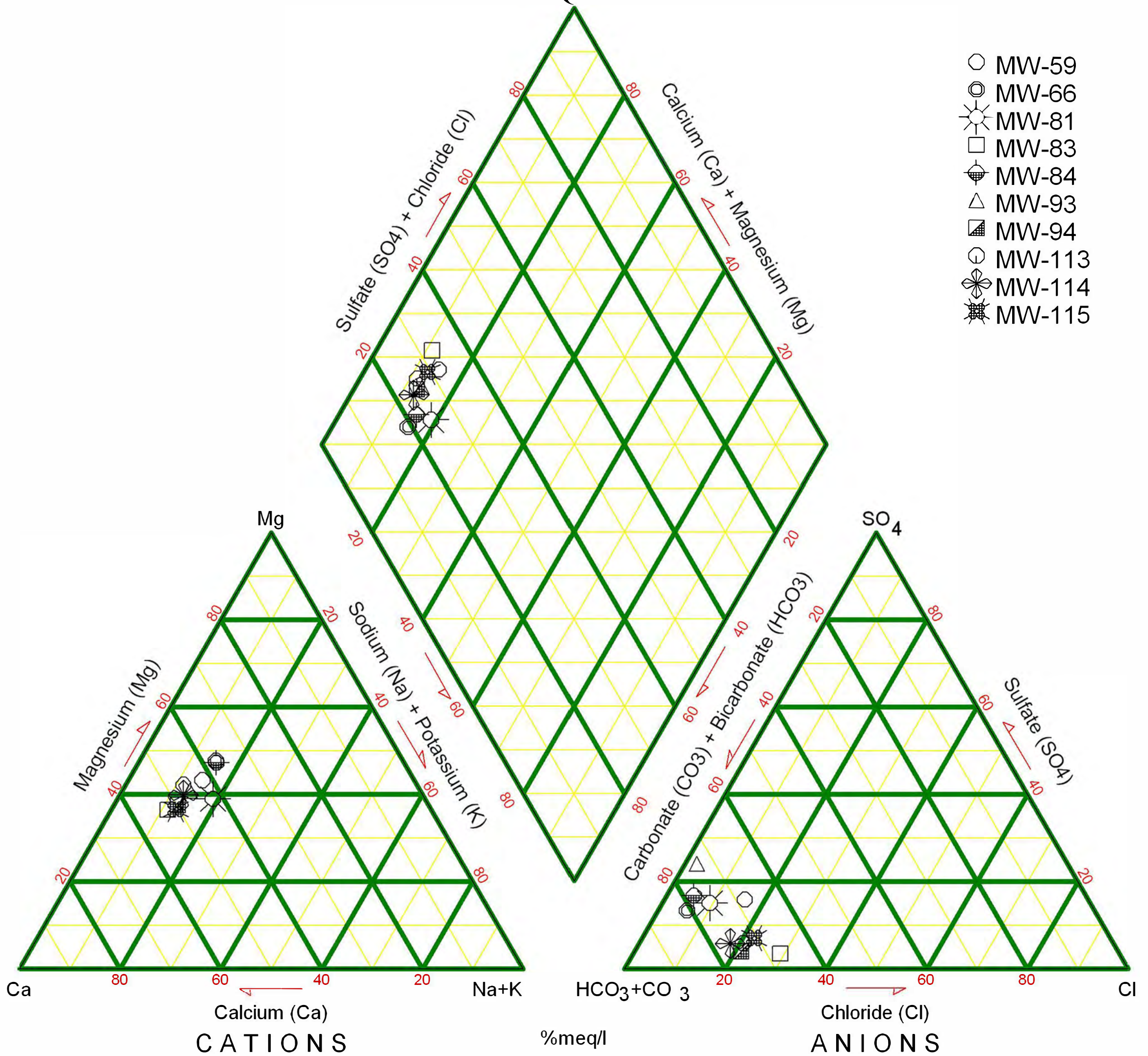


Figure 6. Trilinear Diagram Downgradient Regional Wells

Cedar Hills Regional Landfill

Third Quarter 2021

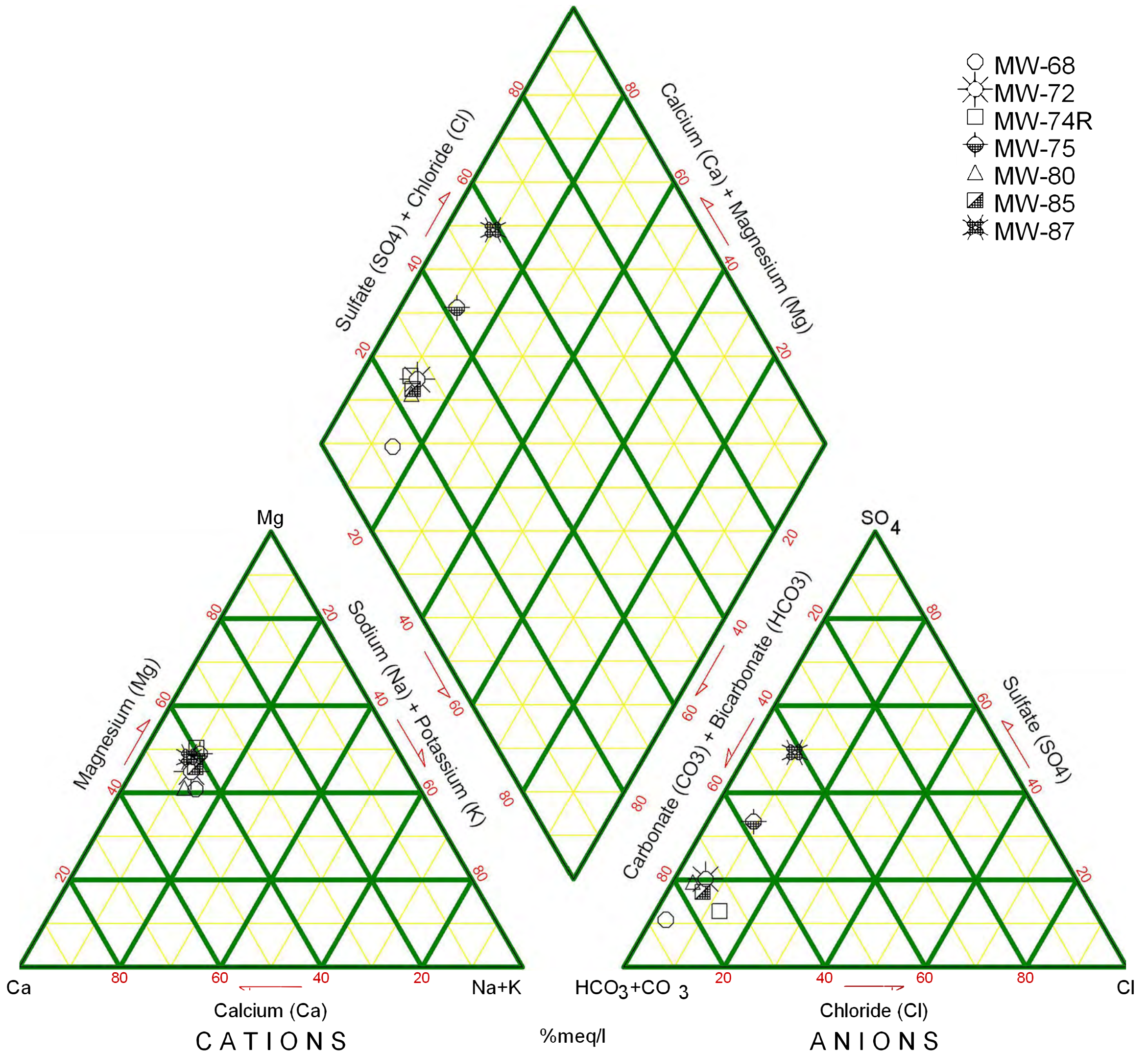


TABLE 5
INTRAWELL PREDICTION LIMIT VALUES AND RESULTS.
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER QUARTERLY AND SEMI-ANNUAL MONITORING WELLS
(Data Collected from July 01, 2021 - September 30, 2021)

Well	Parameter	Total Arsenic	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate as N	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L
Upgradient and Crossgradient Wells																					
MW-59	Limit	0.001	0.001	0.0051	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.00748	0.05	1.41	0.2	0.2	0.02
	Result	< 0.0003	0.000436	0.00421	< 0.0001	< 0.000005	0.000219	< 0.000005	< 0.0002	< 0.0001	0.000132	< 0.0005	< 0.000004	< 0.0000075	< 0.000075	0.000751	0.017 T	1.17	< 0.1	< 0.1	< 0.1
MW-66	Limit	0.001	0.001	0.0068	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.002	0.004	0.910	0.2	0.2	0.02	
	Result	< 0.0003	0.000673	0.00425	< 0.0001	< 0.000005	0.000269	< 0.000005	< 0.0002	< 0.0001	0.000253	0.000907	< 0.000004	< 0.0000075	0.000761	0.000913	0.499	< 0.1	< 0.1	< 0.1	
MW-81	Limit	0.001	0.001	0.0049	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.00253	0.00895	1.7376423	0.2	0.2	0.02	
	Result	< 0.0003	0.000527	0.00331	< 0.0001	< 0.000005	< 0.0002	< 0.000005	< 0.0002	< 0.0001	0.000176	0.00091	< 0.000004	< 0.0000075	0.0017	< 0.0005	1.56	< 0.1	< 0.1	< 0.1	
MW-83	Limit	0.001	0.001	0.0124	0.001	0.002	0.0628	0.003	0.00771	0.001	0.01	0.001	0.003	0.001	0.002	0.004	4.97	0.2	0.2	2.82	
	Result	< 0.0003	0.00034	0.00983	< 0.0001	< 0.000005	0.000261	0.000248	0.00335	< 0.0001	0.00182	< 0.0005	< 0.000004	< 0.0000075	0.000815	0.000521	1.56	< 0.1	< 0.1	2.19	
MW-84	Limit	0.001	0.001	0.0050	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.662	0.2	0.2	0.02	
	Result	< 0.0003	0.000335	0.00499	< 0.0001	< 0.000005	< 0.0002	< 0.000005	< 0.0002	< 0.0001	0.000517	0.00068	< 0.000004	< 0.0000075	0.00066	0.00224	0.133	< 0.1	< 0.1	< 0.1	
MW-93	Limit	0.001	0.00146091	0.0108	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.00265	0.0112	0.0549	0.2	0.2	0.02	
	Result	< 0.0003	0.00143	0.00789	< 0.0001	< 0.000005	< 0.0002	0.0000856	0.000247	< 0.0001	0.000263	< 0.0005	< 0.000004	< 0.0000075	0.00222	0.00285	0.015	< 0.1	< 0.1	< 0.1	
MW-94	Limit	0.001	0.001	0.0054	0.001	0.002	0.005	0.003	0.0051	0.001	0.01	0.001	0.003	0.001	0.002	0.004	2.56	0.2	0.2	3.54	
	Result	< 0.0003	0.00013	0.00239	< 0.0001	< 0.000005	0.000213	0.000102	0.00117	< 0.0001	0.000558	< 0.0005	< 0.000004	< 0.0000075	0.00126	< 0.0005	0.666	< 0.1	< 0.1	2.45	

NOTE:
Results greater than Limit Value in **Red**

TABLE 5
INTRAWELL PREDICTION LIMIT VALUES AND RESULTS.
CEDAR HILLS REGIONAL LANDFILL REGIONAL AQUIFER QUARTERLY AND SEMI-ANNUAL MONITORING WELLS
(Data Collected from July 01, 2021 - September 30, 2021)

Parameter	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate as N	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride		
	Downgradient																				
MW-68	Limit	0.001	0.326	0.0197	0.001	0.002	0.005	0.0015	0.0115999	0.001	0.005	0.001	0.003	0.001	0.0037	0.004	0.05	0.2	1	0.2	0.02
	Result	< 0003	0.0312	0.0104	< 0001	< 000005	< 0.0002	0.000212	0.000965	< 0.0001	0.000422	< 0.0005	< 000004	< 0000075	0.000647	< 0.0005	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
MW-69*	Limit	0.001	0.004	0.0142	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0112	0.076	0.2	0.2	0.2	0.02
	Result	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-72	Limit	0.001	0.001	0.0162	0.001	0.002	0.005	0.003	0.00331	0.00104	0.01	0.001	0.003	0.001	0.002	0.02583313	0.068	0.2	0.2	0.2	0.02
	Result	< 0003	0.000161	0.0142	< 0001	< 000005	< 0.0002	< 0.000005	< 0.0002	0.000427	0.000147	< 0.0005	< 000004	< 0000076	< 00000984	0.00111	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
MW-74R	Limit	0.001	0.001	0.0159	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00104	0.003	0.001	0.002	0.004	0.487	0.2	0.2	0.2	0.02
	Result	< 0003	0.000421	0.014	< 0001	< 000005	0.000207	< 0.000005	0.000218	< 0.0001	0.000896	0.000639	< 000004	< 0000077	0.000707	< 0.0005	0.295	< 0.1	< 0.1	< 0.1	< 0.1
MW-75	Limit	0.001	0.001	0.0139	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.004	0.05	0.2	0.2	0.2	0.02
	Result	< 0003	0.000453	0.0133	< 0001	< 000005	< 0.0002	< 0.000005	< 0.0002	< 0.0001	< 0.0001	< 0.0005	< 000004	< 0000078	< 00000843	< 0.0005	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
MW-80	Limit	0.001	0.039	0.0230	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.002	0.0117	0.028	0.2	1	0.2	0.02
	Result	< 0003	0.00294	0.0135	< 0001	< 000005	< 0.0002	< 0.000005	< 0.0002	< 0.0001	< 0.0001	< 0.0005	< 000004	< 0000079	< 0.0000075	0.000821	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
MW-85	Limit	0.001	0.001	0.0076	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.00136104	0.003	0.001	0.002	0.004	1.630	0.2	0.2	0.2	0.02
	Result	< 0003	0.00071	0.00747	< 0001	< 000005	< 0.0002	< 0.000005	0.000552	< 0.0001	0.000223	0.000903	< 000004	< 0000080	0.00106	0.000524	0.1	< 0.1	< 0.1	< 0.1	< 0.1
MW-87	Limit	0.001	0.026	0.0383	0.001	0.002	0.005	0.003	0.00347	0.001	0.01	0.001	0.003	0.001	0.005	0.00892	0.0803	0.2	0.2	0.2	0.02
	Result	< 0003	0.0137	0.0348	< 0001	< 000005	0.000621	0.000189	0.000957	0.000265	0.000335	< 0.0005	< 000004	< 0000081	0.00327	0.0017	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1

NOTE:
Results greater than Limit Value in **Red**
* MW-69 No sample collected; well was damaged.

TABLE 6
CEDAR HILLS REGIONAL LANDFILL.
REGIONAL AQUIFER VOLATILE ORGANIC COMPOUND DETECTIONS
(Data Collected from July 1, 2021 to September 30, 2021)

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
Upgradient and Crossgradient Wells				
Cis- 1,2-Dichloroethene	MW-59	7/12/2021	W59-210712-	1.17
Trichloroethene	MW-114	7/12/2021	W114210712-	10.5
	MW-115	7/12/2021	W115210712-	5.08
	MW-83	7/12/2021	W83-210712-	2.19
	MW-94	7/12/2021	W94-210712-	2.45
Downgradient Wells				
No volatile organic compound detections for this Quarter				

TABLE 7
CEDAR HILLS REGIONAL LANDFILL
PERCHED ZONES GROUNDWATER QUALITY STANDARD EXCEEDANCES
(Data Collected from July 01 2021 to September 30, 2021)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value
East Perched Zone Wells					
pH (Field)	pH Units	MW-102	7/16/2021	W102210716-	6.46
		MW-107	7/16/2021	W107210716-	5.65
		MW-110	7/15/2021	W110210715-	6.07
		MW-111	7/15/2021	W111210715-	5.98
		MW-30A	7/20/2021	W30A210720-	6.19
		MW-47	7/19/2021	W47-210719-	6.49
		MW-EB6	7/13/2021	WEB6210713-	6.16
1,1-Dichloroethane	µg/L	MW-30A	7/20/2021	W30A210720-	2.53
Arsenic, Total	mg/L	MW-102	7/16/2021	W102210716-	0.000492
		MW-107	7/16/2021	W107210716-	0.00363
		MW-109	7/15/2021	W109210715-	0.0239
		MW-110	7/15/2021	W110210715-	0.00209
		MW-111	7/15/2021	W111210715-	0.00152
		MW-30A	7/20/2021	W30A210720-	0.000541
		MW-47	7/19/2021	W47-210719-	0.0028
		MW-EB6	7/13/2021	WEB6210713-	0.0011
Iron, Dissolved	mg/L	MW-107	7/16/2021	W107210716-	3.67
		MW-109	7/15/2021	W109210715-	7.6
		MW-47	7/19/2021	W47-210719-	3.73
Manganese, Dissolved	mg/L	MW-107	7/16/2021	W107210716-	3.67
		MW-109	7/15/2021	W109210715-	1.53
		MW-110	7/15/2021	W110210715-	3.43
		MW-47	7/19/2021	W47-210719-	1.23
Sodium	mg/l	MW-109	7/15/2021	W109210715-	303 D
		MW-110	7/15/2021	W110210715-	31.2
Vinyl Chloride	µg/L	MW-107	7/16/2021	W107210716-	0.465
		MW-110	7/15/2021	W110210715-	0.251
		MW-47	7/19/2021	W47-210719-	2.57
Benzene		MW-109	7/15/2021	W109210715-	1.35
SPEC COND, FIELD		MW-109	7/15/2021	W109210715-	809.4
		MW-47	7/19/2021	W47-210719-	854.5
South Solid Waste Area Perched Wells					
Arsenic, Total	mg/L	MW-101	7/28/2021	W101210728-	0.00452
Iron, Dissolved	mg/L	MW-101	7/28/2021	W101210728-	0.378
Manganese, Dissolved	mg/L	MW-101	7/28/2021	W101210728-	0.899
Vinyl Chloride	µg/L	MW-101	7/28/2021	W101210728-	0.176

See Data Qualifier List for Qualifier Information.

Exceedance Criteria: WAC 173-200-040 - Water Quality Standards for Groundwaters of the State of Washington

Table 8
Ion Balance Calculations.
Cedar Hills Regional Landfill.
Perched Zones Groundwater Monitoring Wells

Data Collected from July 01, 2021 - September 30, 2021

Site ID Date	East Perched Zone																												
	MW-30A			MW-47			MW-101			MW-102			MW-107			MW-109			MW-110			MW-111			MW-EB6				
	7/20/2021			7/19/2021			7/28/2021			7/16/2021			7/16/2021			7/15/2021			7/15/2021			7/15/2021			7/13/2021				
Cations	Molecular Weight	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	mg/L	meq/L	%(meq)	
pH		6.2			6.5			7.0			6.5			5.7			6.5			6.1			6.0			6.2			
Conductance		227.2			854.5			457.6			145.6			267.8			809.4			647.2			94.0			83.2			
TDSobs		183.0			568.0			308.0			136.0			153.0			840.0			440.0			76.7			80.7			
Calcium	40.1	22.6	1.13	41.4	115.0	5.74	50.3	49.7	2.48	43.7	14.2	0.71	44.6	26.0	1.30	49.4	17.0	0.85	5.7	73.9	3.69	43.7	8.0	0.40	48.0	3.7	0.19	22.6	
Magnesium	24.3	12.6	1.04	38.0	55.9	4.60	40.3	28.9	2.38	41.9	5.3	0.43	27.3	8.0	0.66	25.1	7.6	0.62	4.2	38.5	3.17	37.5	2.3	0.19	23.0	2.0	0.16	19.9	
Potassium	39.1	1.4	0.036	1.30	4.5	0.115	1.01	2.7	0.070	1.22	1.0	0.026	1.66	2.7	0.069	2.62	1.1	0.029	0.19	3.0	0.075	0.89	0.4	0.009	1.09	0.7	0.018	2.17	
Sodium	23.0	12.1	0.53	19.3	17.6	0.77	6.7	16.2	0.70	12.4	9.6	0.42	26.4	6.6	0.29	10.9	300.0	13.05	87.6	31.8	1.38	16.4	5.3	0.23	27.9	9.8	0.42	51.8	
Iron	55.8	0.0	0.00036	0.0131	3.7	0.13358	1.1717	0.4	0.01354	0.2383	0.0	0.00036	0.0225	3.7	0.13143	4.9994	7.6	0.27217	1.8279	0.1	0.00387	0.0458	0.0	0.00036	0.0430	0.3	0.00985	1.2002	
Manganese	54.9	0.0	3.6E-06	0.00013	1.2	0.04478	0.39279	0.9	0.03273	0.57621	0.0	7.7E-05	0.00483	3.7	0.13361	5.08211	1.5	0.0557	0.37408	3.4	0.12487	1.47823	0.0	4.7E-05	0.00564	0.0	0.00106	0.12910	
Ammonia-N	14.0	0.0	0.00014	0.0052	0.0	0.00233	0.0204	0.0	0.00115	0.0202	0.0	0.00014	0.0090	0.7	0.05105	1.9417	0.2	0.01328	0.0892	0.1	0.00403	0.0478	0.0	0.00014	0.0171	0.3	0.01885	2.2969	
					2.73			11.40			5.68			1.59			2.63			14.89			8.45			0.83			0.82
Alkalinity, Total		92.4			507.0			260.0			62.7			99.2			572.0			390.0			28.7			31.8			
Carbonate	60.0	0.009	0.000	0.011	0.094	0.003	0.029	0.139	0.005	#DIV/0!	0.011	0.000	#DIV/0!	0.003	0.000	0.004	0.114	0.004	0.033	0.028	0.001	0.012	0.002	0.000	0.007	0.003	0.000	0.011	
Bicarbonate	61.0	112.71	1.847	72.302	618.35	10.135	95.135	316.92	5.195	#DIV/0!	76.47	1.253	#DIV/0!	121.02	1.984	86.962	697.61	11.434	99.482	475.74	7.798	98.162	35.01	0.574	71.641	38.79	0.636	78.311	
Chloride	35.5	2.0	0.056	2.175	9.0	0.254	2.385	2.6	0.073	#DIV/0!	5.3	0.150	#DIV/0!	5.1	0.143	6.257	1.7	0.048	0.417	1.8	0.051	0.646	0.9	0.026	3.306	1.0	0.028	3.474	
Nitrate-N	14.0	6.7	0.478	18.692	0.0	0.001	0.007	0.0	0.001	#DIV/0!	1.2	0.085	#DIV/0!	0.0	0.001	0.031	0.0	0.001	0.006	0.0	0.001	0.009	0.9	0.064	7.995	0.1	0.006	0.740	
Sulfate	96.1	8.4	0.174	6.820	12.5	0.260	2.443	3.7	0.077	#DIV/0!	5.9	0.123	#DIV/0!	7.4	0.154	6.746	0.3	0.007	0.062	4.5	0.093	1.172	6.6	0.137	17.051	6.8	0.142	17.464	
Total Anions (meq/L)		2.56			10.65						2.28			2.28			11.49			7.94			0.80			0.81			
Total Ions (meq/L)		5.282			22.054						4.910			26.384			16.391			16.391			1.634			1.632			
Cation/Anion Ratio		1.067			1.070						1.153			1.295			1.063			1.040			1.011			1.011			
Percent Difference		3.252			3.385						7.086			12.870			3.070			1.979			0.530			0.530			
Trilinear Diagram Data																													
sum (Ca, Mg, Na+K)		2.73			11.22									2.31			14.55			8.31			0.83			0.79			
Calcium			41.4			51.1									56.1			5.8			44.4			48.0			23.4		
Magnesium			38.0			41.0									28.5			4.3			38.1			23.0			20.6		
Sodium + Potassium			20.6			7.9									15.4			89.9			17.5			29.0			56.0		
sum (SO ₄ , Cl, HCO ₃ +CO ₃)		2.078			10.653									2.280			11.493			7.943			0.737			0.806			
Sulfate			8.4			2.4									6.7			0.1			1.2			18.5			17.6		
Chloride			2.7			2.4									6.3			0.4			0.6			3.6			3.5		
Bicarbonate + Carbonate			88.9			95.2									87.0			99.5			98.2			77.9			78.9		

Figure 7. Trilinear Diagram East Perched Zone Wells

Cedar Hills Regional Landfill

Third Quarter 2021

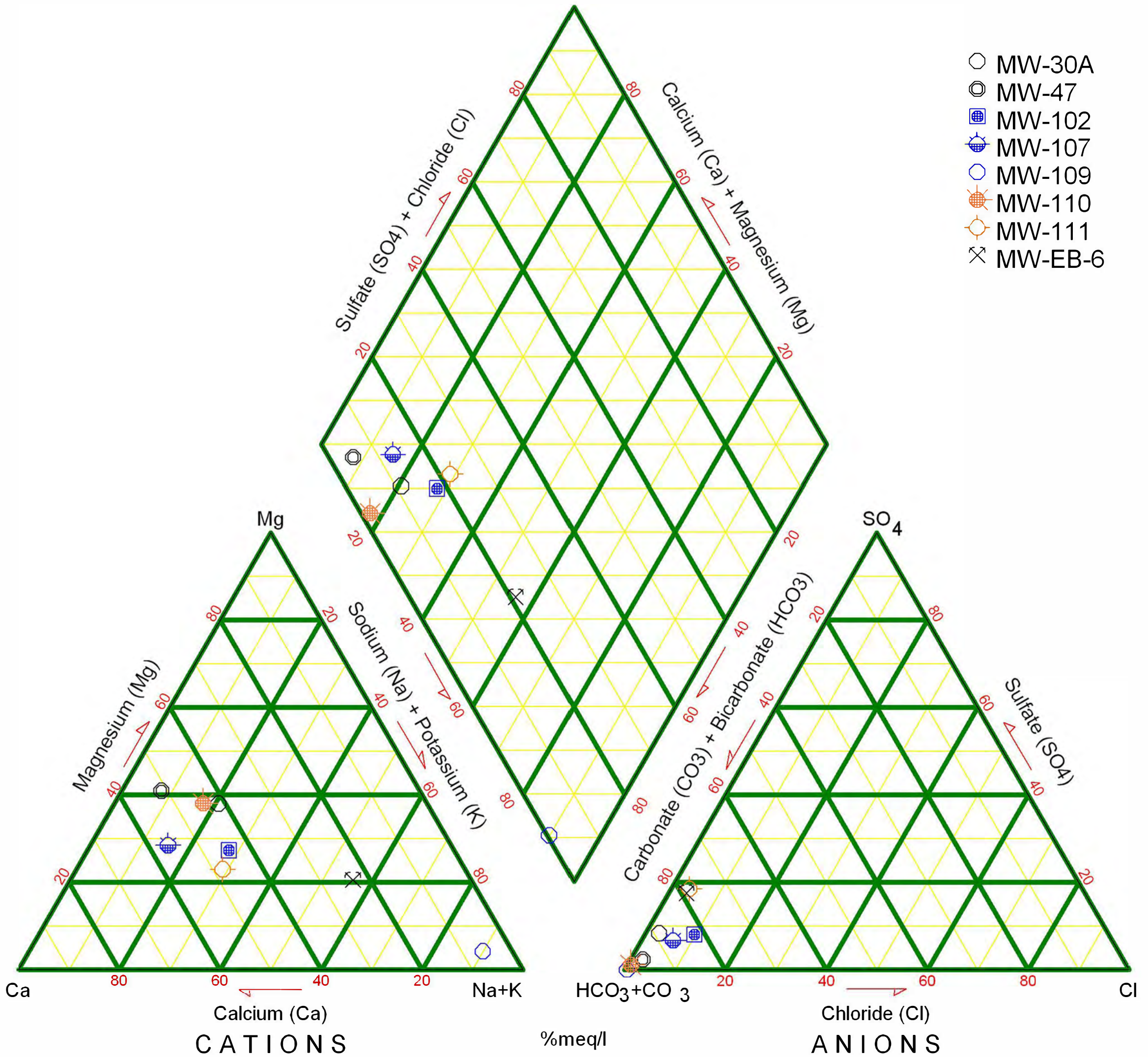


Figure 8. Trilinear Diagram SSW Area Perched Zones Wells
 Cedar Hills Regional Landfill
 Third Quarter 2021

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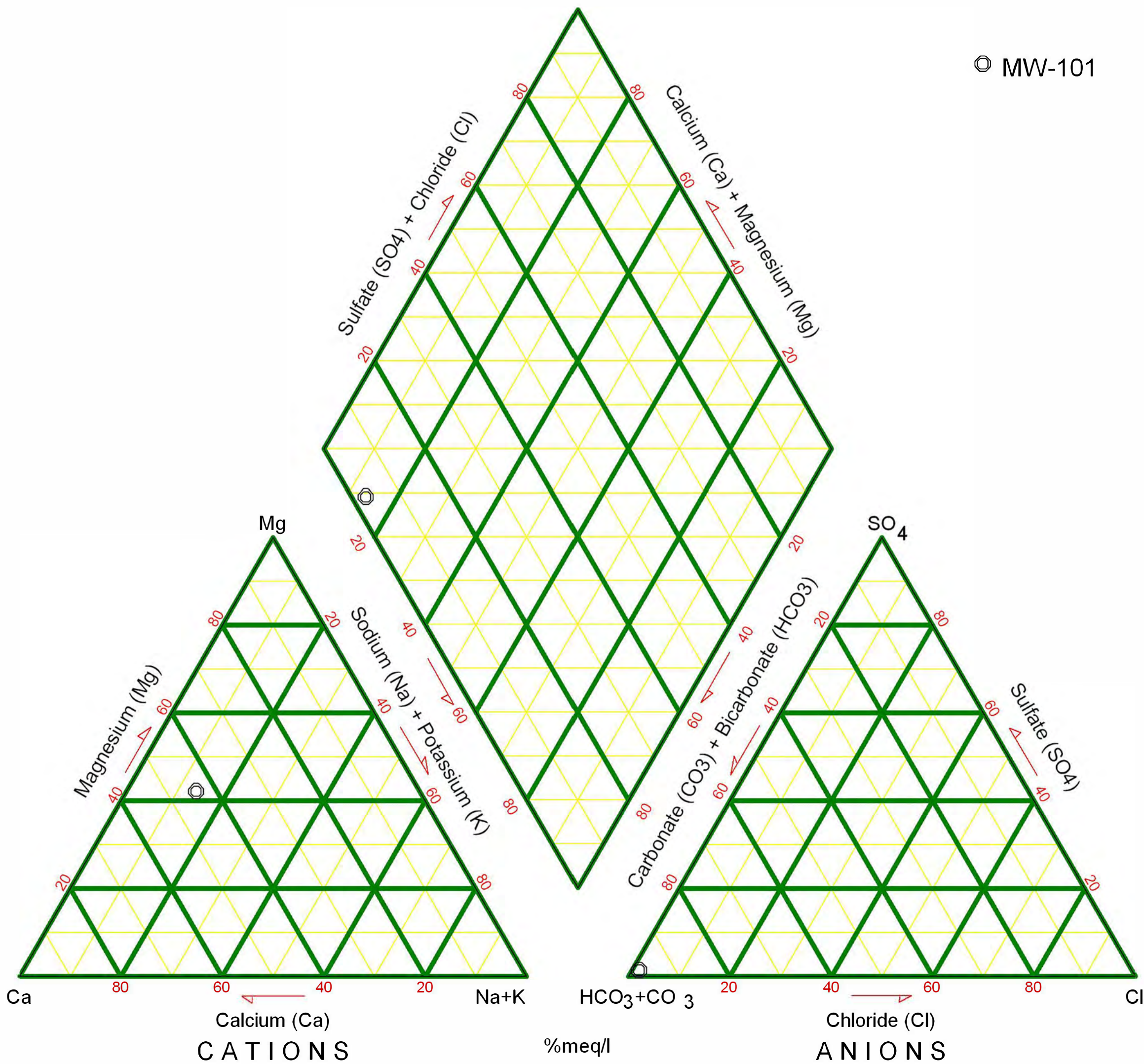


TABLE 9
INTRAWELL PREDICTION LIMIT VALUES AND RESULTS
CEDAR HILLS REGIONAL LANDFILL PERCHED ZONES MONITORING WELLS
(Data Collected from July 01, 2021 - September 30, 2021)

Parameter		Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium	Total Chromium	Total Cobalt	Total Copper	Total Lead	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc	Nitrate as N	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride
Well	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
East Perched Zone Wells																								
MW-30A	Limit	0.001	0.001	0.0077	0.001	0.002	0.005	0.003	0.0103	0.001	0.01	0.001	0.003	0.001	0.00331	0.0188	17	4.24	2.00	0.20	8.67	0.20	1.47	0.03
	Result	< 0.0003	0.0005	0.0045	< 0.0001	< 0.00005	0.0009	0.0000542	0.000388	< 0.0001	0.000884	< 0.0005	< 0.00004	< 0.000075	0.00239	0.000705	6.69	2.53	< 0.1	< 0.1	2.69	< 0.1	0.94	< 0.01
MW-47	Limit	0.001	0.0113	0.0462	0.001	0.002	0.005	0.003	0.0105	0.00143	0.01	0.001	0.003	0.001	0.00317	0.168	0.024	0.99	2.00	0.44	6.26	0.41	0.23	8.32
	Result	< 0.0003	0.0028	0.035	< 0.0001	< 0.00005	0.000344	0.000312	< 0.0002	< 0.0001	0.00178	< 0.0005	< 0.00004	< 0.000075	0.00019	< 0.0005	< 0.01	0.59	< 0.1	< 0.1	1.41	< 0.1	< 0.1	2.57
MW-62*	Limit	0.001	0.001	0.0035	0.001	0.002	0.005	0.003	0.002	0.001	0.01	0.001	0.003	0.001	0.00212	0.004	7.4273256	10.20	0.20	0.20	10.30	0.20	0.47	0.02
	Result	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
South Solid Waste Area Wells																								
MW-101	Limit	0.001	0.014	0.0344	0.001	0.002	0.005	0.003	0.00416	0.00109	0.01	0.001	0.003	0.001	0.0039	0.00729	0.062	0.21	0.20	0.23	0.28	0.20	0.20	0.87
	Result	< 0.0003	0.00452	0.0193	< 0.0001	< 0.00005	0.000203	0.000257	< 0.0002	< 0.0001	0.00348 D	< 0.0005	< 0.00004	< 0.000075	0.000286	0.000705	< 0.01	< 0.1	< 0.1	0.165 JT	0.196 JT	< 0.1	< 0.1	0.18

NOTE: MW-62 was not sampled due to DTW below pump.

Results greater than Limit Value in **RED Bold**

TABLE 10
CEDAR HILLS REGIONAL LANDFILL.
PERCHED ZONES VOLATILE ORGANIC COMPOUND DETECTIONS
(Data Collected from July 01, 2021 to September 30, 2021)

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
East Perched Zone Wells				
1,1-Dichloroethane	MW-107	44393.39583	W107210716-	0.166 JT
	MW-110	44392.34028	W110210715-	0.325
	MW-30A	44397.38889	W30A210720-	2.53
	MW-47	44396.37222	W47-210719-	0.586
1,2-Dichlorobenzene	MW-109	44392.36875	W109210715-	0.864
	MW-110	44392.34028	W110210715-	1.34
1,2-Dichloroethane	MW-110	44392.34028	W110210715-	0.305
1,2-Dichloropropane	MW-110	W110210715-	44392.34028	0.29
1,4-Dichlorobenzene	MW-109	44392.36875	W109210715-	1.75
Acetone	MW-107	44393.39583	W107210716-	3.25 JT
	MW-110	44392.34028	W110210715-	3.24 JT
Benzene	MW-109	44392.36875	W109210715-	1.35
	MW-110	44392.34028	W110210715-	0.577
Chlorobenzene	MW-109	44392.36875	W109210715-	1.97
	MW-110	44392.34028	W110210715-	1.46
Chloroethane	MW-110	44392.34028	W110210715-	0.341
	MW-47	44396.37222	W47-210719-	0.244
Chloromethane	MW-102	44393.38194	W102210716-	0.25 GU
Cis-1,2-Dichloroethene	MW-110	44392.34028	W110210715-	5.05
	MW-30A	44397.38889	W30A210720-	2.69
	MW-47	44396.37222	W47-210719-	1.41
Dichlorodifluoromethane	MW-47	44396.37222	W47-210719-	2.68
Tetrachloroethene	MW-107	44393.39583	W107210716-	0.116 JT
	MW-30A	44397.38889	W30A210720-	0.121 JT
Toluene	MW-109	44392.36875	W109210715-	0.398
Trans-1,2-Dichloroethene	MW-110	44392.34028	W110210715-	0.348
Trichloroethene	MW-110	44392.34028	W110210715-	0.142 JT
	MW-30A	44397.38889	W30A210720-	0.935
Vinyl Chloride	MW-107	44393.39583	W107210716-	0.465
	MW-110	44392.34028	W110210715-	0.251
	MW-47	44396.37222	W47-210719-	2.57
South Solid Waste Area Perched Wells				
1,2-Dichloroethane	MW-101	44405.37847	W101210728-	0.165 JT
Cis-1,2-Dichloroethene	MW-101	44405.37847	W101210728-	0.196 JT
Vinyl Chloride	MW-101	44405.37847	W101210728-	0.176

See Data Qualifier List for Qualifier Information.

TABLE 11
CEDAR HILLS REGIONAL LANDFILL.
VOLATILE ORGANIC COMPOUND DETECTIONS IN BLANKS
(Data Collected from July 01, 2021 to September 30, 2021)

Analyte	Site ID	Date	Sample ID	Sample Value (mg/L)
Chloroethane	Field Blank	07/20/21	W30A210720F	0.106 JT
Chloroform	Field Blank	07/20/21	W30A210720F	0.401

See Data Qualifier List for Qualifier Information.

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
No VOA Trip Blank Detections for 3Q2021				

See Data Qualifier List for Qualifier Information.

Analyte	Site ID	Date	Sample ID	Sample Value (µg/L)
No Method Blank Detections for 3Q2021				

See Data Qualifier List for Qualifier Information.

TABLE 12
CEDAR HILLS REGIONAL LANDFILL.
STORM AND SURFACE WATER MONITORING ACTIVITIES 3rd QUARTER 2021

Station ID	Date	Planned Activity	Sample ID	Comment
SW-GS1	--	NPDES Permit Sample	--	NST
SW-SL3	--	NPDES Permit Sample	--	NST
SW-N4	--	NPDES Permit Sample	--	NST
SW-TD1	9/30/2021	Top-Deck SW Monitoring	STD1210930-	
SW-E1	4/20/2021	East Perched Zone SW Monitoring	SE1-210420Q	
Stream Gauges	7/6/2021	Monthly Stream Gauge Level Measurement	--	North half of the landfill
Stream Gauges	7/6/2021	Monthly Stream Gauge Level Measurement	--	South half of the landfill

**TABLE 13
CEDAR HILLS REGIONAL LANDFILL.
STORMWATER PERMIT BENCHMARKS AND EFFLUENT LIMITS**

**INDUSTRIAL STORMWATER GENERAL PERMIT
BENCHMARKS AND EFFLUENT LIMITS**

Parameter	Units	Minimum Sampling Frequency	Benchmark	Effluent Limit	
				Monthly Average	Daily Maximum
pH	Std. Units	Quarterly	5.0 to 9.0	6.0 to 9.0	
Turbidity	NTU	Quarterly	25	--	--
Oil Sheen	Yes/No	Quarterly	None Visible	--	--
Copper, Total	ug/L	Quarterly	14	--	--
Zinc, Total	ug/L	Quarterly	117	110	200
BOD	mg/L	Quarterly	--	37	140
TSS	mg/L	Quarterly	--	27	88
Ammonia-N	mg/L	Quarterly	--	4.9	10
Alpha Terpineol	ug/L	Quarterly	--	16	33
Benzoic Acid	ug/L	Quarterly	--	71	120
4-Methylphenol*	ug/L	Quarterly	--	14	25
Phenol	ug/L	Quarterly	--	15	26

* Analytical result reported as the total of 3-Methylphenol (CAS RN 108-39-4) and 4-Methylphenol (CAS RN 106-44-5)

**CONSTRUCTION STORMWATER GENERAL PERMIT
BENCHMARKS**

Parameter	Units	Minimum Sampling Frequency	Benchmark
Turbidity	NTU	Weekly	25

TABLE 14
CEDAR HILLS REGIONAL LANDFILL.
STORMWATER PERMIT CRITERIA EXCEEDANCES

(Data Collected from July 01, 2021 - September 30, 2021)

SUMMARY OF ISGP* EXCEEDANCES

Parameter	Units	Sampling Location	Date	Value	Regulatory Limit	Type
No Stormwater Exceedances for this Quarter						

*ISGP - Industrial General Stormwater Permit

SUMMARY OF CSWGP* EXCEEDANCES

Parameter	Units	Sampling Location	Date	Value	Permit Limit	Type
No Stormwater Exceedances for this Quarter						

*CSWGP - Construction Stormwater General Permit

Table 15
Water Quality Standards for Groundwaters of the State of Washington

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
I. PRIMARY AND SECONDARY CONTAMINANTS AND RADIONUCLIDES			
A. Primary Contaminants			
Barium	7440-39-3	1	mg/L
Cadmium	7440-43-9	0.005	mg/L
Chromium	7440-47-3	0.05	mg/L
Lead	7439-92-1	0.015	mg/L
Mercury	7439-97-6	0.002	mg/L
Selenium	7782-49-2	0.01	mg/L
Silver	7440-22-4	0.05	mg/L
Fluoride	16984-48-8	4	mg/L
Nitrate	14797-55-8	10	mg/L
Endrin	72-20-8	0.2	ug/L
Methoxychlor	72-43-5	40	ug/L
1,1,1-Trichloroethane	71-55-6	200	ug/L
2,4-D	94-75-7	70	ug/L
2,4,5-TP	93-72-1	100	ug/L
Total Coliforms		1/100	mL
B. Secondary Standards			
Copper	7440-50-8	1	mg/L
Iron	7439-89-6	0.3	mg/L
Manganese	7439-96-5	0.05	mg/L
Zinc	7440-66-6	5	mg/L
Chloride	16887-00-6	250	mg/L
Sulfate	14808-79-8	250	mg/L
Total Dissolved Solids		500	mg/L
Foaming Agents		0.5	mg/L
pH	12408-02-5	6.5-8.5	units
Corrosivity		non-corrosive	
Color		15	units
Odor-Threshold		3	units
C. Radionuclides and Radioactivity			
Gross Alpha particle activity		15	pCi/L
Gross Beta particle activity		50	pCi/L
Tritium	10028-17-8	20,000	pCi/L
Strontium	7440-24-6	8	pCi/L
Radium 226 & Radium 228		5	pCi/L
Radium 226	13982-63-3	3	pCi/L
II. CARCINOGENS			
1,1-Dichloroethane	75-34-3	1	ug/L
1,2-Dichloroethane	107-06-2	0.5	ug/L
1,2-Dichloropropane	78-87-5	0.6	ug/L
1,2-Dimethylhydrazine	540-73-8	60	ug/L
1,2-Diphenylhydrazine	122-66-7	0.09	ug/L
1,3-Dichloropropene tot.	542-75-6	0.2	ug/L
1,4-Dichlorobenzene	106-46-7	4	ug/L
1,4-Dioxane	123-91-1	7	ug/L
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	0.0000006	ug/L
2,4,6-Trichlorophenol	88-06-2	4	ug/L
2,4-Dinitrotoluene	121-14-2	0.1	ug/L
2,4-Toluenediamine	95-80-7	0.002	ug/L
2,6-Dinitrotoluene	606-20-2	0.1	ug/L
2-Methoxy-5-nitroaniline	99-59-2	2	ug/L
2-Methylaniline	95-53-4	0.2	ug/L
2-Methylaniline hydrochloride	636-21-5	0.5	ug/L
3,3'-Dichlorobenzidine	91-94-1	0.2	ug/L
3,3'-Dimethoxybenzidine	119-90-4	6	ug/L
3,3-Dimethylbenzidine	119-93-7	0.007	ug/L
4,4'-Methylene bis(N,N'-dimethyl) aniline	101-61-1	2	ug/L
4-Chloro-2-methyl aniline	95-69-2	0.1	ug/L
4-Chloro-2-methyl aniline hydrochloride	3165-93-3	0.2	ug/L
Acrylamide	79-06-1	0.02	ug/L
Acrylonitrile	107-13-1	0.07	ug/L
Aldrin	309-00-2	0.005	ug/L
Aniline	62-53-3	14	ug/L
Aramite	140-57-8	3	ug/L
Arsenic	7440-38-2	0.00005	mg/L

Table 15
Water Quality Standards for Groundwaters of the State of Washington

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
Azobenzene	103-33-3	0.7	ug/L
Benzene	71-43-2	1	ug/L

Table 15
Water Quality Standards for Groundwaters of the State of Washington

Analyte	CAS No.	Ground Water Quality Criteria Criterion*	
Benzidine	92-87-5	0.0004	ug/L
Benzo(a)pyrene	50-32-8	0.008	ug/L
Benzo(trichloride)	98-07-7	0.007	ug/L
Benzyl chloride	100-44-7	0.5	ug/L
Bis(2-ethylhexyl)phthalate	117-81-7	6	ug/L
Bis(chloroethyl)ether	111-44-4	0.07	ug/L
Bis(chloromethyl)ether	542-88-1	0.0004	ug/L
Bromodichloromethane	75-27-4	0.3	ug/L
Bromoform	75-25-2	5	ug/L
Carbazole	86-74-8	5	ug/L
Carbon Tetrachloride	56-23-5	0.3	ug/L
Chlordane	5103-71-9	0.06	ug/L
Chlorodibromomethane	124-48-1	0.5	ug/L
Chloroform	67-66-3	7	ug/L
Chlorthalonil	1897-45-6	30	ug/L
DDT (includes DDE and DDD)	50-29-3, 72-55-9, 72-54-8	0.3	ug/L
Diallate	2303-16-4	1	ug/L
Dichlorovos	62-73-7	0.3	ug/L
Dieldrin	60-57-1	0.005	ug/L
Direct Black 38	1937-37-7	0.009	ug/L
Direct Blue 6	2602-46-2	0.009	ug/L
Direct Brown 95	16071-86-6	0.009	ug/L
Epichlorohydrin	106-89-8	8	ug/L
Ethyl acrylate	140-88-5	2	ug/L
Ethylene dibromide	106-93-4	0.001	ug/L
Ethylene thiourea	96-45-7	2	ug/L
Folpet	133-07-3	20	ug/L
Furazolidone	67-45-8	0.02	ug/L
Furium	531-82-8	0.002	ug/L
Furmecyclox	60568-05-0	3	ug/L
Heptachlor	76-44-8	0.02	ug/L
Heptachlor epoxide	1024-57-3	0.009	ug/L
Hexachlorobenzene	118-74-1	0.05	ug/L
Hexachlorocyclohexane (alpha)	319-84-6	0.001	ug/L
Hexachlorocyclohexane (technical)	608-73-1	0.05	ug/L
Hexachlorodibenzo-p-dioxin, mix	34465-46-8	0.00001	ug/L
Hydrazine/hydrazine sulfate	302-01-2/10034-93-2	0.03	ug/L
Lindane	58-89-9	0.06	ug/L
Methylene Chloride	75-09-2	5	ug/L
Mirex	2385-85-5	0.05	ug/L
Nitrofurazone	59-87-0	0.06	ug/L
N-Nitrosodiethanolamine	1116-54-7	0.03	ug/L
N-Nitrosodiethylamine	55-18-5	0.0005	ug/L
N-Nitrosodimethylamine	62-75-9	0.002	ug/L
N-Nitroso-di-n-butylamine	924-16-3	0.02	ug/L
N-Nitroso-di-n-propylamine	621-64-7	0.01	ug/L
N-Nitrosodiphenylamine	86-30-6	17	ug/L
N-Nitroso-N-methylethylamine	10595-95-6	0.004	ug/L
N-Nitrosopyrrolidine	930-55-2	0.04	ug/L
o-Chloronitrobenzene	88-73-3	3	ug/L
o-Phenylenediamine	95-54-5	0.005	ug/L
o-Toluidine	95-53-4	0.2	ug/L
p,a,a,a-Tetrachlorotoluene	5216-25-1	0.004	ug/L
PAHs [Benzo(a)pyrene]		0.01	ug/L
PBBs	59536-65-1	0.01	ug/L
PCBs c	27323-18-8	0.01	ug/L
p-Chloronitrobenzene	100-00-5	5	ug/L
Propylene oxide	75-56-9]	0.01	ug/L
Tetrachloroethylene	127-18-4	0.8	ug/L
Toxaphene c	8001-35-2	0.08	ug/L
Trichloroethylene (TCE)	79-01-6	3	ug/L
Trimethyl phosphate	512-56-1	2	ug/L
Vinyl chloride	75-01-4	0.02	ug/L

NOTES: pCi/L=picocuries per liter
mg/L=milligrams per liter
ug/L=micrograms per liter
*Ground Water Quality Criteria=173-200 WAC Water Quality Standards for Ground Waters of the State of Washington

TABLE 16
CEDAR HILLS REGIONAL LANDFILL.
LAB DATA REVIEW - SUSPECT DATA
(Data Collected from July 01, 2021 to September 30, 2021)

Parameter	Units	Well ID	Sample Date	Sample ID	Sample Value	Cause of Unuseability
No Suspect Data for 3Q2021						

See Data Qualifier List for Qualifier Information.

APPENDIX A

Potentiometric Surface Maps and Aquifer Flow Calculations



King County

Water and Land Resources Division

Department of Natural Resources and Parks

King Street Center

201 South Jackson Street, Suite 5600

Seattle, WA 98104-3855

206-477-4800 Fax 206-296-0192

TTY Relay: 711

TECHNICAL MEMORANDUM

November 17, 2021

TO: Subrina Tahsin, Engineer II, Facility Engineering and Science Section, Solid Waste Division, Department of Natural Resources and Parks (DNRP)

FM: Sevin Bilir, Environmental Scientist IV, Science and Technical Support Section, Water and Land Resources Division, DNRP

RE: Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations
Third Quarter 2021 Results
Cedar Hills Regional Landfill, King County, Washington
Project No. 1126980 – Task 25.106

The King County Water and Land Resources Division (WLRD) submits this memorandum report on groundwater conditions during the third quarter of 2021 for the regional aquifer beneath the Cedar Hills Regional Landfill (Landfill), in accordance with the *Proposal for Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations* (WLRD, 2021). King County Solid Waste Division (SWD) personnel measured regional aquifer groundwater levels at the Landfill on July 6, 2021. These measurements were received by WLRD on November 16, 2021, and were used to:

1. Evaluate the potentiometric groundwater surface elevation for the regional aquifer;
2. Determine the groundwater flow direction and horizontal gradient for the regional aquifer; and
3. Calculate the groundwater velocity of the regional aquifer.

There are no significant changes in the interpreted groundwater conditions for the regional aquifer in this quarter, when compared to the report submitted for the second quarter of 2021.

Groundwater Elevation Data

The SWD measured regional aquifer groundwater level measurements at 43 monitoring wells during the third quarter of 2021. These wells are completed in the regional aquifer as referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010) and in *Area 8 Development, Monitoring Well Replacement Report* (HDR, 2021).

Table A-1 lists the groundwater monitoring well identifications, locations, construction details, measured depth to groundwater levels, and calculated groundwater elevations for monitoring wells screened in the regional aquifer. A total of 25 wells had measured water levels within ten feet of the top of the screened interval and were used for mapping potentiometric surface contours. Measured water levels in these wells are on average 0.9 ft lower than those measured in the second quarter of 2021.

Figure A-1 shows calculated groundwater elevations at well locations and interpreted groundwater potentiometric surface contours for the regional aquifer based on measurements taken on July 6, 2021.

Direction of Groundwater Flow

Interpreted groundwater flow directions in the regional aquifer, based on measurements taken on July 6, 2021, are shown in Figure A-1. Calculated groundwater elevations during the third quarter of 2021 indicate that groundwater in the regional aquifer generally flows to the north with minor components of flow of the following:

- north-northwest and north-northeast to northeast in the *northern portion* of the Landfill,
- north-northwest beneath the *central portion* of the Landfill, and
- northwest and north-northeast beneath the *southern portion* of the Landfill.

Table A-2 lists the flow direction for each portion of the regional aquifer beneath the Landfill based on measurements taken on July 6, 2021 and mapping of groundwater elevation contours. Flow directions for the regional aquifer in the third quarter of 2021 are similar to those for the second quarter of 2021.

Groundwater Parameters

Table A-2 presents a summary of the groundwater parameters. Mean horizontal hydraulic conductivity and effective porosity values were based on the ranges referred to in *Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill* (Aspect, 2010). The mean horizontal hydraulic conductivity for the regional aquifer beneath the Landfill is 60 feet per day (ft/d) in the northern and central portions and 0.18 ft/d in the southern portion of the regional aquifer

beneath the Landfill (Aspect, 2010). Average effective porosities are 24 and 26 percent, respectively, for the same areas (Aspect, 2010).

Gradients

The hydraulic gradient for the regional aquifer was determined using potentiometric surface maps (Figure A-1). Table A-2 lists the gradients of regional aquifer for the northern, central and southern portions beneath the Landfill.

The hydraulic calculated gradient is greatest under the southern portion of the Landfill (0.012 ft/ft) and slightly lower under the rest of the Landfill based on measurements made during the third quarter of 2021. The gradients calculated for the regional aquifer in the third quarter of 2021 are within the range of gradients calculated during the second quarter of 2021.

Groundwater Velocities

Average horizontal groundwater velocities for the regional aquifer beneath the Landfill, are based on spatial differences in aquifer parameters, hydraulic gradients, and calculations using the following formula:

where:

$$v = \frac{1}{n_{eff}} K \frac{\Delta H}{\Delta L}$$

v = Groundwater velocity [L/t]

n_{eff} = Effective porosity [dimensionless]

K = Hydraulic conductivity [L/t]

$\frac{\Delta H}{\Delta L}$ = Hydraulic gradient [L/L]

Table A-2 summarizes the groundwater parameters used to calculate a groundwater velocity for the regional aquifer in the northern, central and southern portions beneath the Landfill. The mean horizontal groundwater velocities for the regional aquifer beneath the Landfill, are lowest under the southern portion of the Landfill (0.009 ft/d) and much greater under the rest of the Landfill (up to 1.79 ft/d under the central portion). The velocities calculated for the regional aquifer in the third quarter of 2021 are within the range of groundwater velocities calculated during the second quarter of 2021.

References

Aspect Consulting, LLC. (Aspect). 2010. Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill. Unpublished work. April 30.

HDR Engineering, Inc. (HDR). 2021. Area 8 Development, Monitoring Well Replacement Report. Prepared in association with Udaloy Environmental Consulting (UEC). Cedar Hills Regional Landfill. Contract No. E00284E12. July.

King County Water and Land Resources Division (WLRD). 2021. Proposal for 2021 Potentiometric Groundwater Surface Maps & Groundwater Velocity Calculations; King County Closed Landfills (Cedar Falls, Enumclaw, Hobart, and Vashon Island) and Cedar Hills Regional Landfill. April 15.

Thank you for the opportunity to provide hydrogeologic services to SWD. If you have any questions, please feel free to contact me at 206-477-4646 or sevin.bilir@kingcounty.gov.

Sincerely,



Sevin Bilir, WA LHG
Environmental Scientist IV
King County Water and Land Resources Division

Enclosures:

- Table A-1: Well Details and Groundwater Elevations –Third Quarter 2021
- Table A-2: Groundwater Parameters – Third Quarter 2021
- Figure A-1: Groundwater Potentiometric Surface Map – Third Quarter 2021 – Regional Aquifer

Table A-1: Well Details and Groundwater Elevations – Third Quarter 2021
Cedar Hills Regional Landfill
King County, Washington

							July 6, 2021	
Well Identification	Easting ¹ (ft)	Northing ¹ (ft)	Top of Casing Elevation ² (ft MSL ²)	Top of Screen Elevation ² (ft)	Bottom of Screen Elevation ² (ft)	Measured Depth to Water ³ (ft)	Groundwater Elevations ² (ft MSL)	
Wells with water levels within 10 ft of the top of screen	MW-60	1701154.47	167873.20	567.15	334.81	325.81	227.23	339.92
	MW-64	1701980.27	168772.19	596.55	334.03	320.23	265.85	330.70
	MW-66	1699750.19	174250.32	531.28	294.39	280.59	238.76	292.52
	MW-67	1701776.69	172610.65	516.43	297.80	284.00	220.57	295.86
	MW-68	1701917.32	170609.35	647.07	311.29	292.29	332.42	314.65
	MW-72	1698229.92	170987.71	671.87	303.63	294.03	361.28	310.59
	MW-73	1698954.95	174995.59	485.70	288.11	278.81	191.33	294.37
	MW-74R	1700386.85	173813.79	531.26	289.90	280.40	239.90	291.36
	MW-76	1700376.23	167193.13	491.71	351.06	341.56	138.39	353.32
	MW-81	1702568.87	172113.99	493.66	309.19	300.19	184.13	309.53
	MW-82	1699553.72	167725.31	474.85	348.88	339.38	123.53	351.32
	MW-83	1697939.89	167212.27	496.81	350.19	340.69	144.56	352.25
	MW-84	1698602.89	173894.54	530.80	292.46	282.96	236.03	294.77
	MW-85	1701828.95	173694.52	531.76	282.56	273.06	245.97	285.79
	MW-86	1701331.25	174917.90	536.04	283.43	274.63	248.58	287.46
	MW-87	1700670.27	173493.76	537.31	283.68	274.38	248.02	289.29
	MW-88	1701807.87	174303.06	513.68	281.52	272.22	227.13	286.55
	MW-93	1702259.35	169851.24	632.15	319.87	310.07	308.65	323.50
	MW-94	1698674.21	167210.22	495.51	357.22	348.52	142.44	353.07
	MW-95	1697265.32	169426.92	571.54	314.60	305.90	251.55	319.99
MW-100	1700791.72	169610.46	620.32	319.06	309.06	297.99	322.33	
MW-106	1702536.99	173461.69	475.47	280.04	270.04	190.22	285.25	
MW-113	1698238.80	168478.70	531.09	334.79	325.09	188.42	342.67	
MW-114	1698892.70	167919.80	490.45	353.65	344.05	139.37	351.08	
MW-115	1698960.70	167225.80	484.87	352.87	343.27	131.34	353.53	
Wells with water levels greater than 10 ft above the top of screen	MW-21	1697901.86	173876.38	420.66	263.22	255.22	125.21	295.45
	MW-22	1701844.34	173088.17	517.09	236.02	231.22	232.41	284.68
	MW-24	1699582.39	167767.76	475.99	286.76	281.76	145.75	330.24
	MW-43	1701274.23	174327.14	547.06	245.63	235.63	263.21	283.85
	MW-54	1702154.28	168435.53	580.43	250.25	228.25	278.68	301.75
	MW-56	1698980.77	167214.82	480.33	323.15	313.15	127.31	353.02
	MW-57	1699993.32	167201.99	456.64	326.65	311.65	103.55	353.09
	MW-58A	1699006.59	167207.16	479.27	270.05	260.05	149.75	329.52
	MW-59	1699983.91	167193.44	457.13	285.08	275.08	124.53	332.60
	MW-65	1701602.10	167146.55	545.83	317.71	308.91	209.94	335.89
	MW-75	1701059.70	173432.42	532.40	271.10	261.00	245.43	286.97
	MW-80	1701309.78	172964.99	530.41	279.17	269.67	238.85	291.56
	MW-89	1701799.57	174319.44	512.82	229.20	219.90	232.16	280.66
	MW-90	1702203.13	174300.67	502.22	235.16	226.16	221.70	280.52
	MW-91	1701023.09	173423.94	532.02	260.81	240.71	246.71	285.31
	MW-99	1702556.06	172098.73	493.64	221.77	212.77	200.50	293.14
	WS-NPW-1	1701906.96	171138.99	646.33	282.80	267.90	333.22	313.11
WS-NPW-3	1701922.88	170663.28	645.81	285.00	273.90	331.53	314.28	
Other	MW-69 ⁴	1698061.86	172400.20	653.69	293.57	279.97	NM	NA

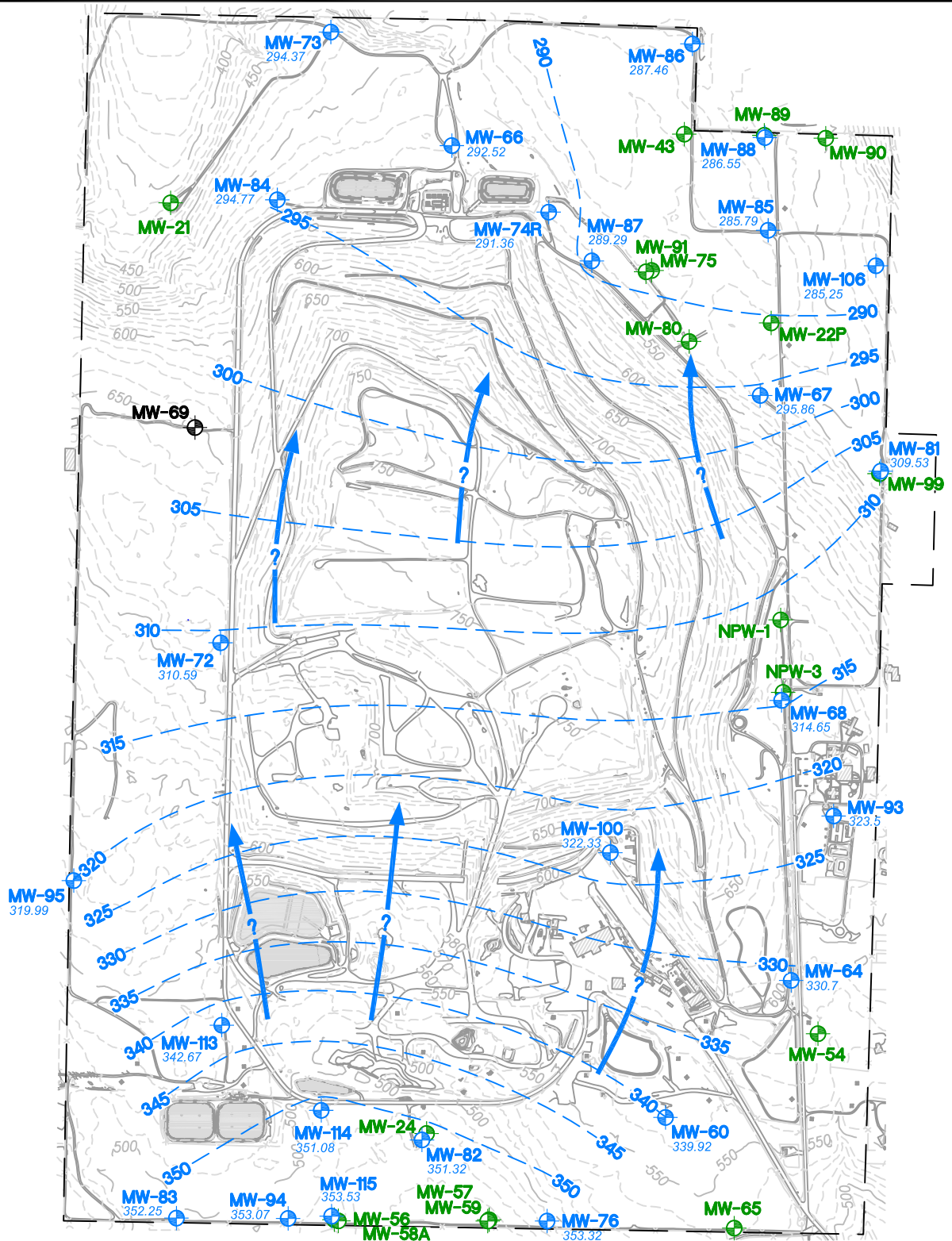
Notes:

1. Water level measurements made by SWD personnel.
 2. Reference datum for northing and easting coordinates is the North American Datum of 1927 (NAD 27).
 3. Elevations reported in feet (ft) above mean sea level (MSL) based on the National Geodetic Vertical Datum of 1929 (NGVD 29).
 4. MW-69 due to be repaired in near future.
- NM Not measured due to damaged well. Cannot access water level.
 NA Not Applicable

Table A-2: Groundwater Parameters – Third Quarter 2021
 Cedar Hills Regional Landfill
 King County, Washington

Third Quarter 2021 - July 6, 2021							
Regional Aquifer Zone Beneath the Landfill	Horizontal Hydraulic Conductivity ^{1,3} (K)			Horizontal Hydraulic Gradient ² (DH/DL)	Effective Porosity ¹ (n _{eff})	Horizontal Groundwater Velocity (v)	General Groundwater Flow Direction
	Range	(cm/s)	(ft/d)	(ft/ft)		(ft/d)	
Northern	Minimum	2.10E-03	6	0.007	24%	0.18	NNW, N, NNE, NE
	Maximum	4.20E-02	120			3.58	
	Mean	2.10E-02	60			1.79	
Central	Minimum	2.10E-03	6	0.008	24%	0.21	N, NNW
	Maximum	4.20E-02	120			4.12	
	Mean	2.10E-02	60			2.06	
Southern	Minimum	6.40E-06	0.018	0.013	26%	0.001	NW, N, NNE
	Maximum	6.40E-04	1.8			0.087	
	Mean	6.40E-05	0.18			0.009	

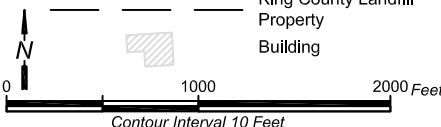
1. Horizontal hydraulic conductivity values and effective porosity values from Potentiometric Groundwater Surface Mapping and Groundwater Velocity Calculation – Cedar Hills Landfill (Aspect, 2010).
 2. Hydraulic gradients calculated using the potentiometric surface map shown on Figure A-1.
 3. Mean hydraulic conductivity values are the geometric mean of the high and low values.
- NNE north-northeast; NNW north-northwest; NE, northeast; NW northwest; N, north.



Legend

- MW-X** Well completed in Regional Aquifer with water levels within the screen or within 10 feet of the top of screen. Elevation (feet mean sea level) (MSL)
- MW-X** Wells completed in Regional Aquifer with water levels more than 10 feet above the top of screen. Elevation (feet MSL)
- MW-X** Wells completed in Regional Aquifer - Data not used or no measurement this quarter.
- 300** Regional Aquifer Groundwater Elevation Contour (feet MSL).
- Inferred Horizontal Groundwater Flow Path

- Pond
- Road
- Ditch
- Fence
- King County Landfill Property
- Building



Notes:

- Groundwater measurements made on July 6, 2021.
- Only wells completed in the Regional Aquifer with well screen tops within 10 feet of the water table were used for contouring.

Locations surveyed on North American Datum of 1927 (NAD 27).
Elevations reported in feet above mean sea level based on the National Geodetic Vertical Datum of 1929 (NGVD 29).
Basemap Layer Data: King County Solid Waste Division



Groundwater Potentiometric Surface Map
Third Quarter 2021 - Regional Aquifer
 Cedar Hills Regional Landfill
 King County, Washington

DATE: November 2021	PROJECT NO. 1126980
DESIGNED BY: SB	FIGURE NO. A-1
DRAWN BY: KK	
REVISED BY: SB	

APPENDIX B

Field and Analytical Test Results

Groundwater Field and Analytical Data

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-100	7/6/2021	620.32	297.99	322.33	
MW-101	7/6/2021	474.72	32.37	442.35	
MW-101	7/28/2021	474.72	33.12	441.6	
MW-102	7/6/2021	552.48	47.4	505.08	
MW-102	7/16/2021	552.48	47.43	505.05	
MW-103	7/6/2021	639.08	16.33	622.75	
MW-103	7/20/2021	639.08	17.47	621.61	
MW-104	7/6/2021	629.68	26.3	603.38	
MW-104	7/20/2021	629.68	26.9	602.78	
MW-105	7/6/2021	521.23	21.48	499.75	
MW-105	7/29/2021	521.23	21.73	499.5	
MW-107	7/6/2021	589.029	29.38	559.649	
MW-107	7/16/2021	589.03	30.82	558.21	
MW-108	7/6/2021	612.258	18.85	593.408	
MW-108	7/16/2021	612.26	19.42	592.84	
MW-109	7/6/2021	638.728	12.07	626.658	
MW-109	7/15/2021	638.73	12.52	626.21	
MW-110	7/6/2021	641.742	10.32	631.422	
MW-110	7/15/2021	641.74	10.95	630.79	
MW-111	7/6/2021	643.797	12.86	630.937	
MW-111	7/15/2021	643.8	13.77	630.03	
MW-112	7/6/2021	638.929	14.93	624.00	
MW-113	7/6/2021	531.09	188.42	342.67	
MW-113	7/12/2021	531.09	188.3	342.79	
MW-114	7/6/2021	490.45	139.37	351.08	
MW-114	7/12/2021	490.45	139.37	351.08	
MW-115	7/6/2021	484.87	131.29	353.58	
MW-115	7/12/2021	484.87	131.34	353.53	
MW-21	7/6/2021	420.66	125.21	295.45	
MW-24	7/6/2021	475.99	145.75	330.24	
MW-30A	7/6/2021	568.43	28.05	540.38	WATER IN ANNULUS
MW-30A	7/20/2021	568.43	28.34	540.09	
MW-47	7/6/2021	634.6	19.68	614.92	
MW-47	7/19/2021	634.6	20.18	614.42	
MW-50	7/6/2021	637.02	30.91	606.11	
MW-50	7/19/2021	637.05	31.33	605.72	sample was not collected due to insufficient
MW-56	7/6/2021	480.33	127.31	353.02	
MW-59	7/6/2021	457.13	124.53	332.6	CONCRETE PAD BROKEN
MW-59	7/12/2021	457.13	124.55	332.58	
MW-62	7/6/2021	556.21	53.98	502.23	WL BELOW TOP OF PUMP; REMOVED

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Reference Elevation (msl)	Depth to Water (feet)	Ground-Water Elevation (msl)	Comment
MW-62	7/21/2021	556.21	54.15	502.06	
MW-64	7/6/2021	596.55	265.85	330.7	
MW-65	7/6/2021	545.83	209.94	335.89	
MW-66	7/6/2021	531.28	238.76	292.52	
MW-66	7/7/2021	531.28	238.65	292.63	
MW-67	7/6/2021	516.43	220.57	295.86	
MW-68	7/6/2021	647.07	332.42	314.65	
MW-68	7/13/2021	647.07	332.35	314.72	
MW-69	7/6/2021	653.69			NEEDS TO BE FIXED
MW-72	7/6/2021	671.87	361.28	310.59	REPAIR LID
MW-72	7/8/2021	671.87	361.26	310.61	
MW-73	7/6/2021	485.7	191.33	294.37	
MW-74R	7/6/2021	531.26	239.9	291.36	
MW-74R	7/9/2021	531.28	240.02	291.26	
MW-75	7/6/2021	532.4	245.43	286.97	
MW-75	7/9/2021	532.4	245.7	286.7	
MW-76	7/6/2021	491.71	138.39	353.32	
MW-80	7/6/2021	530.41	238.85	291.56	WASPS IN STEEL CASING
MW-80	7/13/2021	530.41	238.85	291.56	
MW-81	7/6/2021	493.66	184.13	309.53	
MW-81	7/8/2021	531.28	238.65	292.63	
MW-82	7/6/2021	474.85	123.53	351.32	
MW-83	7/6/2021	496.81	144.56	352.25	
MW-83	7/12/2021	496.81	144.63	352.18	
MW-84	7/6/2021	530.8	236.03	294.77	
MW-84	7/7/2021	530.8	236.06	294.74	
MW-85	7/6/2021	531.76	245.97	285.79	
MW-85	7/9/2021	531.76	245.93	285.83	
MW-86	7/6/2021	536.04	248.58	287.46	
MW-87	7/6/2021	537.31	248.02	289.29	WASPS IN STEEL CASING
MW-87	7/8/2021	537.31	248.18	289.13	
MW-88	7/6/2021	513.68	227.13	286.55	
MW-89	7/6/2021	512.82	232.16	280.66	NEEDS TO BE FIXED
MW-90	7/6/2021	502.22	221.7	280.52	
MW-93	7/6/2021	632.15	308.65	323.5	
MW-93	7/8/2021	530.8	236.06	294.74	
MW-94	7/6/2021	495.51	142.44	353.07	
MW-94	7/12/2021	495.51	142.56	352.95	
MW-95	7/6/2021	571.54	251.55	319.99	
MW-99	7/6/2021	493.64	200.5	293.14	
MW-EB6	7/6/2021	589.61	28.35	561.26	
MW-EB6	7/13/2021	589.61	28.48	561.13	

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill – Groundwater Field Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH	Conductance	Temperature	Purge Volume	Dissolved Oxygen	ORP	Turbidity
			(Field)	(Field)	(Field)	(Field)	(Field)	(Field)	(Field)
			(std. Units)	(umhos/cm)	(°C)	(gal)	(mg/L)	mV	NTU
MW-30A	W30A210720-	7/20/2021	6.19	227.2	12	7.6			2.16
MW-47	W47-210719-	7/19/2021	6.49	854.5	10.94	11.4			0.79
MW-59	W59-210712-	7/12/2021	7.04	248.3	10.32	5.25	0.52	-68.2	1.04
MW-66	W66-210707-	7/7/2021	6.71	229.3	10.213	3	5.64	286.4	0.57
MW-68	W68-210713-	7/13/2021	7	296.3	10.143	5.5	0.81	14.7	5.74
MW-72	W72-210708-	7/8/2021	6.82	377.3	10.33	5.5	1.14	154.9	17.4
MW-74R	W74R210709-	7/9/2021	6.8	619	10.51	3.25	4.98	231.4	0.43
MW-75	W75-210709-	7/9/2021	6.91	429.6	9.75	5.25	0.75	106.8	1.75
MW-80	W80-210713-	7/13/2021	6.87	336.4	9.853	4.25	1.11	-37.5	1.07
MW-81	W81-210708-	7/8/2021	7.21	183.9	10.04	2.25	5.53	101.7	0.17
MW-83	W83-210712-	7/12/2021	6.41	689.8	11.11	4	0.98	437.7	0.89
MW-84	W84-210707-	7/7/2021	6.69	214	9.662	3.5	1.28	288.2	0.58
MW-85	W85-210709-	7/9/2021	6.69	411.8	9.391	4.5	2.89	269.6	0.39
MW-87	W87-210708-	7/8/2021	6.68	593	12.03	2.75	2.1	174.9	86.9
MW-93	W93-210708-	7/8/2021	7.22	352.9	11.46	4.25	1.03	134.6	0.51
MW-94	W94-210712-	7/12/2021	6.35	397.4	10.21	2.75	3.91	445.6	1.32
MW-EB6	WEB6210713-	7/13/2021	6.16	83.2	10.17	1.112			5.74
MW-101	W101210728-	7/28/2021	6.95	457.6	13.49	4.62			2.43
MW-102	W102210716-	7/16/2021	6.46	145.6	10.91	1			36.8
MW-107	W107210716-	7/16/2021	5.65	267.8	12.34	1	0.78	69.5	1.52
MW-109	W109210715-	7/15/2021	6.52	809.4	11.96	0.5			9.54
MW-110	W110210715-	7/15/2021	6.07	647.2	13.05	3.93			1.42
MW-111	W111210715-	7/15/2021	5.98	94	14.44	0.75			0.9
MW-113	W113210712-	7/12/2021	7.06	416.7	10.956	3	0.99	-54.2	0.83
MW-114	W114210712-	7/12/2021	6.78	316	9.82	3.25	5.2	153.2	0.37
MW-115	W115210712-	7/12/2021	6.45	323.6	9.637	4.5	3.08	214.5	0.59

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Conventionals Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Alkalinity, Bicarbonate (CaHCO ₃) (mg/L)	Alkalinity, Total (CaCO ₃) (mg/L)	Ammonia, (NH ₃) (mg/L)	Chloride (mg/L)	Nitrate- Nitrogen, (NO ₃ as N) (mg/L)	Specific Conductance (umhos/cm)	Sulfate (SO ₄) (mg/L)	Total Dissolved Solids (mg/L)	Total Organic Carbon (mg/L)	Total Solids (mg/L)	Suspended Solids (mg/L)
MW-101	W101210728-	7/28/2021		260	0.0161	2.6	0.01 U	485	3.72	308	4.62	324	1.79
MW-102	W102210716-	7/16/2021	3/2/1900	62.7	0.002 U	5.31	1.19	165	5.93	136	0.87 T	156	18.9
MW-107	W107210716-	7/16/2021	4/8/1900	99.2	0.715	5.06	0.01 U	240	7.39	153	5.52	151	8.2
MW-109	W109210715-	7/15/2021	7/25/1901	572	0.186	1.7 T	0.01 U	1040	0.34 T	840	20.4	859	0.9 T
MW-110	W110210715-	7/15/2021	1/24/1901	390	0.0565	1.82	0.01 U	730	4.47	440	3.02	443	2.22
MW-111	W111210715-	7/15/2021	1/28/1900	28.7	0.002 U	0.939	0.897	87.5	6.56	76.7	0.6 T	83.3	1 U
MW-113	W113210712-	7/12/2021		143	0.0168	28.4	0.01 U	384	11.1	253	1.61	243	1.5
MW-114	W114210712-	7/12/2021		104	0.002 U	17.5	1.69	288	7.72	189	0.6 T	179	0.5 U
MW-115	W115210712-	7/12/2021		102	0.002 U	22.7	0.873	301	9.85	205	1.24	211	0.5 U
MW-30A	W30A210720-	7/20/2021	4/1/1900	92.4	0.002 U	1.97	6.69	260	8.37	183	0.51 T	185	0.83 T
MW-47	W47-210719-	7/19/2021	5/21/1901	507	0.0326	9.01	0.01 U	951	12.5	568	3.8	588	7.8
MW-59	W59-210712-	7/12/2021		73.1	0.0104	12.1	0.017 T	218	16.4	152	0.68 T	149	2.3
MW-66	W66-210707-	7/7/2021		85.9	0.002 U	4.29	0.499	215	13.7	131	0.5 U	131	0.5 U
MW-68	W68-210713-	7/13/2021	5/6/1900	127	0.0176	3.09	0.01 U	283	15.4	179	0.5 U	175	1.9
MW-72	W72-210708-	7/8/2021		129	0.0169	7.67	0.01 U	340	34.1	221	0.5 U	221	11.6
MW-74R	W74R210709-	7/9/2021		224	0.002 U	26.9	0.295	563	37.2	371	0.51 T	352	0.5 U
MW-75	W75-210709-	7/9/2021		115	0.0092 T	12.9	0.01 U	390	64.3	285	0.5 U	279	5.1
MW-80	W80-210713-	7/13/2021	5/2/1900	123	0.0097 T	4.53	0.01 U	310	30.3	207	0.5 U	207	1.2
MW-81	W81-210708-	7/8/2021		58.1	0.002 U	5.12	1.56	167	11.2	117	0.5 U	108	0.52 U
MW-83	W83-210712-	7/12/2021		217	0.0065 T	66.6	1.56	640	11	444	6.18	473	0.52 U
MW-84	W84-210707-	7/7/2021		78	0.002 U	3.82	0.133	200	16.2	128	0.5 U	139	0.5 U
MW-85	W85-210709-	7/9/2021		155	0.002 U	10.3	0.1	385	34.1	243	0.5 U	247	0.5 U
MW-87	W87-210708-	7/8/2021		116	0.0174	18.5	0.01 U	529	133	441	0.89 T	425	47.1
MW-93	W93-210708-	7/8/2021		122.0	0.0526	2.74	0.015 T	322	38.4	208	0.5 U	215	0.5 U
MW-94	W94-210712-	7/12/2021		135	0.002 U	27.1	0.666	369	7.05	243	3.04	256	0.5 U
MW-EB6	WEB6210713-	7/13/2021	1/31/1900	31.8	0.264	1	0.0841	83.3	6.81	80.7	1.82	88	14

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Metals Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium	Cadmium	Cadmium
			Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-101	W101210728-	7/28/2021			0.00403	0.00452	0.0202	0.0193				
MW-102	W102210716-	7/16/2021			0.000191	0.000492	0.00426	0.0114				
MW-107	W107210716-	7/16/2021			0.00358	0.00363	0.0122	0.0124				
MW-109	W109210715-	7/15/2021			0.023	0.0239	0.0174	0.0224	0.000118	0.000169		
MW-110	W110210715-	7/15/2021			0.00164	0.00209	0.028	0.0286			0.0000838	0.0000836
MW-111	W111210715-	7/15/2021			0.0008	0.00152	0.00381	0.00951				
MW-113	W113210712-	7/12/2021			0.000536	0.000545	0.00225	0.00229				
MW-114	W114210712-	7/12/2021			0.000267	0.000274	0.00169	0.00176				
MW-115	W115210712-	7/12/2021			0.000208	0.000214	0.00103	0.00107				
MW-30A	W30A210720-	7/20/2021			4.75E-04	0.000541	0.00382	0.00454				
MW-47	W47-210719-	7/19/2021			0.00257	0.0028	0.0319	0.035				
MW-59	W59-210712-	7/12/2021			0.000432	0.000436	0.00416	0.00421				
MW-66	W66-210707-	7/7/2021			0.000678	0.000673	0.00406	0.00425				
MW-68	W68-210713-	7/13/2021			0.00877	0.0312	0.00996	0.0104				
MW-72	W72-210708-	7/8/2021			0.0000717	0.000161	0.0125	0.0142				
MW-74R	W74R210709-	7/9/2021			0.000384	0.000421	0.0132	0.014				
MW-75	W75-210709-	7/9/2021			0.00044	0.000453	0.0136	0.0133				
MW-80	W80-210713-	7/13/2021			0.00285	0.00294	0.0136	0.0135				
MW-81	W81-210708-	7/8/2021			0.000526	0.000527	0.00321	0.00331				
MW-83	W83-210712-	7/12/2021			0.000354	0.00034	0.00975	0.00983				
MW-84	W84-210707-	7/7/2021			0.000329	0.000335	0.00487	0.00499				
MW-85	W85-210709-	7/9/2021			0.000708	0.00071	0.00735	0.00747				
MW-87	W87-210708-	7/8/2021			0.000641	0.0137	0.0269	0.0348				
MW-93	W93-210708-	7/8/2021			0.00142	0.00143	0.00748	0.00789				
MW-94	W94-210712-	7/12/2021			0.000124	0.00013	0.00228	0.00239				
MW-EB6	WEB6210713-	7/13/2021			0.00101	0.0011	0.00373	0.00455				

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Metals Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Calcium Dissolved (mg/L)	Calcium Total (mg/L)	Chromium Dissolved (mg/L)	Chromium Total (mg/L)	Cobalt Dissolved (mg/L)	Cobalt Total (mg/L)	Copper Dissolved (mg/L)	Copper Total (mg/L)	Iron Dissolved (mg/L)	Iron Total (mg/L)	Lead Dissolved (mg/L)	Lead Total (mg/L)
MW-101	W101210728-	7/28/2021	49.7	48.9		0.000203	0.000248	2.57E-04			0.378	0.456		
MW-102	W102210716-	7/16/2021	14.2	15	0.000294	0.0025		0.000604	0.00256			1.3		0.000593
MW-107	W107210716-	7/16/2021	26	25.9	0.000605	0.000575	0.0046	0.00459	0.000868	0.00182	3.67	3.75		
MW-109	W109210715-	7/15/2021	17	17	0.0237	0.0236	0.000195	0.000379	0.00309	0.0115	7.6	8.66	0.000201	0.000795
MW-110	W110210715-	7/15/2021	73.9	75.1			0.00353	0.00363	0.000402	0.000555	0.108	0.144		
MW-111	W111210715-	7/15/2021	8.01	8.55	0.0024	3.63E-03		0.000308		0.00167		1.08		0.000319
MW-113	W113210712-	7/12/2021	36.9	37.1							1.21	1.21		
MW-114	W114210712-	7/12/2021	27.7	27.7		2.51E-04	0.000182	0.000232				0.0134		
MW-115	W115210712-	7/12/2021	30.3	30.6			0.0000692	0.0000794	0.000241	0.000268		0.0105		
MW-30A	W30A210720-	7/20/2021	22.6	22.2	0.0009	0.000874		0.0000542		0.000388		0.12		
MW-47	W47-210719-	7/19/2021	115	110		0.000344	3.07E-04	0.000312			3.73	3.83		
MW-59	W59-210712-	7/12/2021	18.4	18.2		0.000219					4.6	4.52		
MW-66	W66-210707-	7/7/2021	16.9	16.8	0.000234	2.69E-04								
MW-68	W68-210713-	7/13/2021	26.2	26.3			0.000206	0.000212		0.000965	0.505	1.14		
MW-72	W72-210708-	7/8/2021	31.7	32.4							2.68	5.78		0.000427
MW-74R	W74R210709-	7/9/2021	50	50	0.000233	0.000207				0.000218		0.0421		
MW-75	W75-210709-	7/9/2021	33.2	33.6							2.99	2.88		
MW-80	W80-210713-	7/13/2021	31	31.4							2.14	2.24		
MW-81	W81-210708-	7/8/2021	14.5	14.8	0.000503									
MW-83	W83-210712-	7/12/2021	69.6	69.3	0.000213	0.000261	0.00025	0.000248	0.0033	0.00335				
MW-84	W84-210707-	7/7/2021	15.7	16.1								0.0147		
MW-85	W85-210709-	7/9/2021	35.7	36.6						0.000552				
MW-87	W87-210708-	7/8/2021	48.1	48.4		0.000621	0.000155	0.000189		0.000957	4.8	17.4		0.000265
MW-93	W93-210708-	7/8/2021	31.9	32.7			0.0000634	0.0000856		0.000247		0.0166		
MW-94	W94-210712-	7/12/2021	37.5	38		0.000213	0.000103	0.000102	0.00117	0.00117				
MW-EB6	WEB6210713-	7/13/2021	3.71	3.74	0.000298	0.000816	0.000697	0.000671	0.00189	0.00302	0.275	0.464	0.000341	0.000447

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Metals Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Magnesium	Magnesium	Manganese	Manganese	Mercury	Mercury	Nickel	Nickel	Potassium	Potassium
			Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-101	W101210728-	7/28/2021	28.9	29.2	0.899	0.908			0.0032 D	0.00348 D	2.72	2.75
MW-102	W102210716-	7/16/2021	5.28	5.78	0.00211	0.0225			0.000503	0.00149	1.03	1.19
MW-107	W107210716-	7/16/2021	8.01	8.18	3.67	3.61			0.00939	0.00944	2.69	2.61
MW-109	W109210715-	7/15/2021	7.56	7.72	1.53	1.54			0.00161	0.0026	1.13	1.11
MW-110	W110210715-	7/15/2021	38.5	39.5	3.43	3.48			0.00647	0.00661	2.95	2.93
MW-111	W111210715-	7/15/2021	2.33	2.69	0.00129	0.0119			0.00134	0.00257	0.356	0.451
MW-113	W113210712-	7/12/2021	20.4	20.6	0.404	0.406			0.000228	0.000217	1.9	1.9
MW-114	W114210712-	7/12/2021	14.1	13.9	0.000214	0.000706			0.000346	0.000436	2.11	2.12
MW-115	W115210712-	7/12/2021	13.3	13.7	0.00368	0.00391			0.000366	0.000366	1.86	1.89
MW-30A	W30A210720-	7/20/2021	12.6	13		0.00156			0.000719	0.000884	1.39	1.52
MW-47	W47-210719-	7/19/2021	55.9	57.8	1.23	1.23			0.00165	0.00178	4.51	4.93
MW-59	W59-210712-	7/12/2021	11.5	11.3	0.118	0.116				0.000132	1.16	1.15
MW-66	W66-210707-	7/7/2021	13.2	13.4		0.000209			0.000171	0.000253	1.16	1.16
MW-68	W68-210713-	7/13/2021	14.6	14.8	0.277	0.281			0.000364	0.000422	1.56	1.56
MW-72	W72-210708-	7/8/2021	19.9	20.1	0.364	0.412			0.000123	0.000147	2.01	2.02
MW-74R	W74R210709-	7/9/2021	38.5	38.1		0.00122			0.000964	0.000896	2.29	2.26
MW-75	W75-210709-	7/9/2021	24.9	24.5	0.257	0.25					2.07	2
MW-80	W80-210713-	7/13/2021	16.6	16.5	0.339	0.34					1.59	1.6
MW-81	W81-210708-	7/8/2021	8.16	7.81					0.000181	0.000176	0.899	0.903
MW-83	W83-210712-	7/12/2021	29.5	29.4	0.0361	0.0847			0.00167	0.00182	3.56	3.53
MW-84	W84-210707-	7/7/2021	12.1	12.1	0.00104	0.00197			0.000489	0.000517	1.2	1.21
MW-85	W85-210709-	7/9/2021	23.7	22.6					0.000252	0.000223	1.8	1.8
MW-87	W87-210708-	7/8/2021	33.4	32.4	0.515	0.528			0.00022	0.000335	2.53	2.48
MW-93	W93-210708-	7/8/2021	17.3	16.9	0.163	0.185			0.00023	0.000263	1.57	1.62
MW-94	W94-210712-	7/12/2021	17.2	17.1	0.000115	0.000171			0.00058	0.000558	2.55	2.55
MW-EB6	WEB6210713-	7/13/2021	1.98	2.02	0.0291	0.0281			0.00195	0.00207	0.695	0.71

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Groundwater Metals Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Selenium	Selenium	Silver	Silver	Sodium	Sodium	Thallium	Thallium	Vanadium	Vanadium	Zinc	Zinc
			Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
MW-101	W101210728-	7/28/2021					16.2	16.6			0.000331	0.000286	0.000516	0.000705
MW-102	W102210716-	7/16/2021					9.63	10.2			0.000887	0.00309	0.00108	0.00357
MW-107	W107210716-	7/16/2021					6.61	6.72			0.00148	0.00155	0.00432	0.00449
MW-109	W109210715-	7/15/2021	0.000536	0.000687			300	303 D			0.0567	0.0628	0.000665	0.00176
MW-110	W110210715-	7/15/2021					31.8	31.2			0.000735	0.00081	0.000654	0.00158
MW-111	W111210715-	7/15/2021					5.34	5.59			0.0012	0.00341	0.00197	0.00302
MW-113	W113210712-	7/12/2021					9.33	9.18						
MW-114	W114210712-	7/12/2021					7.21	7.09			0.0008	0.000819		
MW-115	W115210712-	7/12/2021					7.66	7.7			5.19E-04	0.000527		
MW-30A	W30A210720-	7/20/2021					12.1	12.1			0.00207	2.39E-03	0.000592	0.000705
MW-47	W47-210719-	7/19/2021					17.6	17			0.000113	0.00019		
MW-59	W59-210712-	7/12/2021					6.71	6.52					0.000616	0.000751
MW-66	W66-210707-	7/7/2021	0.000862	0.000907			7.23	7.01			0.000764	0.000761	0.000745	0.000913
MW-68	W68-210713-	7/13/2021					8.95	9.1			0.000214	0.000647		
MW-72	W72-210708-	7/8/2021					8.67	8.72			0.000129	0.0000984	0.00074	0.00111
MW-74R	W74R210709-	7/9/2021	0.000583	0.000639			13.2	13.1			0.000684	0.000707		
MW-75	W75-210709-	7/9/2021					9.74	9.6			0.000111	0.0000843		
MW-80	W80-210713-	7/13/2021					8.41	8.35					0.000626	0.000821
MW-81	W81-210708-	7/8/2021	0.000817	0.00091			6.97	6.55			0.00171	0.0017		
MW-83	W83-210712-	7/12/2021					15	14.9			0.000785	0.000815		0.000521
MW-84	W84-210707-	7/7/2021	0.000656	0.00068			6.77	6.7			0.000619	0.00066	0.00221	0.00224
MW-85	W85-210709-	7/9/2021	0.000797	0.000903			10.6	10.3			0.00101	0.00106		0.000524
MW-87	W87-210708-	7/8/2021					11.1	11			0.000142	0.00327		0.0017
MW-93	W93-210708-	7/8/2021					9.83	9.68			0.00227	0.00222	0.00179	0.00285
MW-94	W94-210712-	7/12/2021					9.47	9.37			0.00126	0.00126		
MW-EB6	WEB6210713-	7/13/2021					9.77	9.69			0.00227	0.00293	0.00248	0.00238

See Data Qualifier List for Qualifier Information.

Site	Sample ID	Date	1,1,1,2-	1,1,1-	1,1,2,2-	1,1,2-	1,1-	1,1-	1,1-	1,1,2-	1,2,3-	1,2,3-Dibromo-
			Tetrachloroethane ug/l 630-20-6	Trichloroethane ug/l 71-55-6	Tetrachloroethane ug/l 79-34-5	Trichloroethane ug/l 79-00-5	Dichloroethane ug/l 75-34-3	Dichloroethane ug/l 75-35-4	Dichloroethane ug/l 563-58-6	Trichloroethane ug/l 96-18-4	Chloropropane ug/l 96-12-8	
MW-101	W101210728	7/28/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-102	W102210716	7/16/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-107	W107210716	7/16/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.166 JT	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-109	W109210715	7/15/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-110	W110210715	7/15/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.325	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-111	W111210715	7/15/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-113	W113210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-114	W114210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-115	W115210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-30A	W30A210720	7/20/2021	0.25 U	0.1 U	0.1 U	0.1 U	2.53	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-47	W47-210719	7/19/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.586	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-59	W59-210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-66	W66-210707	7/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-68	W68-210713	7/13/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-72	W72-210708	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-74R	W74R210709	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-75	W75-210709	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-80	W80-210713	7/13/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-81	W81-210708	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-83	W83-210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-84	W84-210707	7/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-85	W85-210709	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-87	W87-210708	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-93	W93-210708	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-94	W94-210712	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
MW-EB6	WEB6210713	7/13/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210707X	7/6/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210707Y	7/6/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210707Z	7/6/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210708X	7/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210708Z	7/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210709X	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210709Y	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210709Z	7/8/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210713X	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210713Y	7/12/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210715X	7/28/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210715Z	7/13/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210716X	7/15/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210716Z	7/15/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210719X	7/16/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210720X	7/16/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210804X	8/3/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210804Z	8/3/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210907Z	9/2/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210908Z	9/2/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U
VOA TRIP BLANK	VTRP210922X	9/16/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.5 U

Site	Sample ID	Date	1,2-	1,2-	1,2-	1,2-	1,3-	1,3-	1,4-	2,2-	2-	2-Methyl-1-	3-	4-Methyl-2-
			Dibromoethane ug/l	Dichlorobenzene ug/l	Dichloroethane ug/l	Dichloropropane ug/l	Dichlorobenzene ug/l	Dichloropropane ug/l	Dichlorobenzene ug/l	Dichloropropane ug/l	2-Butanone ug/l	Hexanone ug/l	2-Methyl-1-Propanol ug/l	Chloropropene ug/l
MW-101	W101210728-	7/28/2021	0.1 U	0.1 U	0.165 JT	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-102	W102210716-	7/16/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-107	W107210716-	7/16/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-109	W109210715-	7/15/2021	0.1 U	0.864	0.1 U	0.1 U	0.1 U	0.1 U	1.75	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-110	W110210715-	7/15/2021	0.1 U	1.34	0.305	0.29	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-111	W111210715-	7/15/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-113	W113210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-114	W114210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-115	W115210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-30A	W30A210720-	7/20/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-47	W47-210719-	7/19/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-59	W59-210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-66	W66-210707-	7/7/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-68	W68-210713-	7/13/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-72	W72-210708-	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-74R	W74R210709-	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-75	W75-210709-	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-80	W80-210713-	7/13/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
MW-81	W81-210708-	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-83	W83-210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-84	W84-210707-	7/7/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-85	W85-210709-	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-87	W87-210708-	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-93	W93-210708-	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-94	W94-210712-	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
MW-EB6	WEB6210713-	7/13/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210707X	7/6/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210707Y	7/6/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210707Z	7/6/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210708X	7/7/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210708Z	7/7/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210709X	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210709Y	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210709Z	7/8/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210713X	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210713Y	7/12/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210715X	7/28/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210715Z	7/13/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210716X	7/15/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210716Z	7/15/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210719X	7/16/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210720X	7/16/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U	0.5 U		2.5 U
VOA TRIP BLANK	VTRP210804X	8/3/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210804Z	8/3/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210907Z	9/2/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210908Z	9/2/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U
VOA TRIP BLANK	VTRP210922X	9/16/2021	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U	0.5 U	5 U	0.1 U

Site	Sample ID	Date	Acetone	Acetonitrile	Acrolein	Acrylonitrile	Benzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodibromomethane
			ug/l 67-64-1	ug/l 75-05-8	ug/l 107-02-8	ug/l 107-13-1	ug/l 71-43-2	ug/l 74-97-5	ug/l 75-27-4	ug/l 75-25-2	ug/l 74-83-9	ug/l 75-15-0	ug/l 56-23-5	ug/l 108-90-7	ug/l 124-48-1
MW-101	W101210728-	7/28/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-102	W102210716-	7/16/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-107	W107210716-	7/16/2021	3.25 JT	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-109	W109210715-	7/15/2021	2.5 U	5 U	2.5 U	0.035 U	1.35	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	1.97	0.5 U
MW-110	W110210715-	7/15/2021	3.24 JT	5 U	2.5 U	0.035 U	0.577	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	1.46	0.5 U
MW-111	W111210715-	7/15/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-113	W113210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-114	W114210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-115	W115210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-30A	W30A210720-	7/20/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-47	W47-210719-	7/19/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-59	W59-210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-66	W66-210707-	7/7/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-68	W68-210713-	7/13/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-72	W72-210708-	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-74R	W74R210709-	7/9/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-75	W75-210709-	7/9/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-80	W80-210713-	7/13/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-81	W81-210708-	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-83	W83-210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-84	W84-210707-	7/7/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-85	W85-210709-	7/9/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-87	W87-210708-	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-93	W93-210708-	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-94	W94-210712-	7/12/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
MW-EB6	WEB6210713-	7/13/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210707X	7/6/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210707Y	7/6/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210707Z	7/6/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210708X	7/7/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210708Z	7/7/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210709X	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210709Y	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210709Z	7/8/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	2.9 JT			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210713X	7/12/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210713Y	7/12/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210715X	7/28/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210715Z	7/13/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210716X	7/15/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210716Z	7/15/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210719X	7/16/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210720X	7/16/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	2.5 U			0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210804X	8/3/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210804Z	8/3/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210907Z	9/2/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210908Z	9/2/2021	2.5 U	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U
VOA TRIP BLANK	VTRP210922X	9/16/2021	3.55 JT	5 U	2.5 U	0.035 U	0.1 U	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U

Site	Sample ID	Date	Chloroethane	Chloroform	Chloromethane	Chloroprene	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromomethane	Dichlorodifluoroethane	Ethylbenzene	M & P Xylene	Methyl Iodide	Methyl Methacrylate
			ug/l 75-00-3	ug/l 67-66-3	ug/l 74-87-3	ug/l 126-99-8	ug/l 156-59-2	ug/l 10061-01-5	ug/l 74-95-3	ug/l 75-71-8	ug/l 100-41-4	ug/l MPX	ug/l 74-88-4	ug/l 80-62-6
MW-101	W101210728-	7/28/2021	0.1 U	0.1 U	0.25 U		0.196 JT	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-102	W102210716-	7/16/2021	0.1 U	0.1 U	0.25 GU	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-107	W107210716-	7/16/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-109	W109210715-	7/15/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-110	W110210715-	7/15/2021	0.341	0.1 U	0.25 U	0.1 U	5.05	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-111	W111210715-	7/15/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-113	W113210712-	7/12/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-114	W114210712-	7/12/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-115	W115210712-	7/12/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-30A	W30A210720-	7/20/2021	0.1 U	0.1 U	0.25 U	0.1 U	2.69	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-47	W47-210719-	7/19/2021	0.244	0.1 U	0.25 U	0.1 U	1.41	0.25 U	0.1 U	2.68	0.1 U	0.1 U	0.1 U	0.25 U
MW-59	W59-210712-	7/12/2021	0.1 U	0.1 U	0.25 U		1.17	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-66	W66-210707-	7/7/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-68	W68-210713-	7/13/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-72	W72-210708-	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-74R	W74R210709-	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-75	W75-210709-	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-80	W80-210713-	7/13/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
MW-81	W81-210708-	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-83	W83-210712-	7/12/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-84	W84-210707-	7/7/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-85	W85-210709-	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-87	W87-210708-	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-93	W93-210708-	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-94	W94-210712-	7/12/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
MW-EB6	WEB6210713-	7/13/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
VOA TRIP BLANK	VTRP210707X	7/6/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210707Y	7/6/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210707Z	7/6/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210708X	7/7/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210708Z	7/7/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709X	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709Y	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709Z	7/8/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210713X	7/12/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210713Y	7/12/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210715X	7/28/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210715Z	7/13/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210716X	7/15/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210716Z	7/15/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210719X	7/16/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210720X	7/16/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210804X	8/3/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210804Z	8/3/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210907Z	9/2/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210908Z	9/2/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210922X	9/16/2021	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

Site	Sample ID	Date	Methylacryl onitrile	Methylene Chloride	O-Xylene	Propionitrile	Styrene	Tetrachloroeth ene	Toluene	Trans-1,2- Dichloroeth ene	Trans-1,3- Dichloroprop ene	Trans-1,4- Dichloro-2- Butene	Trichloroeth ene	Trichloroeth eromethane	Vinyl Acetate	Vinyl Chloride
			ug/l 126-98-7	ug/l 75-09-2	ug/l 95-47-6	ug/l 107-12-0	ug/l 108-42-5	ug/l 127-18-4	ug/l 108-88-3	ug/l 156-90-5	ug/l 10661-02-6	ug/l 110-57-6	ug/l 79-01-6	ug/l 75-89-4	ug/l 108-05-4	ug/l 75-01-4
MW-101	W101210728-	7/28/2021	2.5 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.176
MW-102	W102210716-	7/16/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-107	W107210716-	7/16/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.116 JT	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.465
MW-109	W109210715-	7/15/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.398	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-110	W110210715-	7/15/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.348	0.5 U	0.5 U	0.142 JT	0.1 U	0.1 U	0.251
MW-111	W111210715-	7/15/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-113	W113210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-114	W114210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	10.5	0.1 U	0.1 U	0.01 U
MW-115	W115210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	5.08	0.1 U	0.1 U	0.01 U
MW-30A	W30A210720-	7/20/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.121 JT	0.1 U	0.1 U	0.5 U	0.5 U	0.935	0.1 U	0.1 U	0.01 U
MW-47	W47-210719-	7/19/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	257
MW-59	W59-210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-66	W66-210707-	7/7/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-68	W68-210713-	7/13/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-72	W72-210708-	7/8/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-74R	W74R210709-	7/9/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-75	W75-210709-	7/9/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-80	W80-210713-	7/13/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-81	W81-210708-	7/8/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-83	W83-210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	2.19	0.1 U	0.1 U	0.01 U
MW-84	W84-210707-	7/7/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-85	W85-210709-	7/9/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-87	W87-210708-	7/8/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-93	W93-210708-	7/8/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
MW-94	W94-210712-	7/12/2021		2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	2.45	0.1 U	0.1 U	0.01 U
MW-EB6	WEB6210713-	7/13/2021	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP210707X	7/6/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210707Y	7/6/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210707Z	7/6/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210708X	7/7/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210708Z	7/7/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709X	7/8/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709Y	7/8/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210709Z	7/8/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210713X	7/12/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210713Y	7/12/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210715X	7/28/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210715Z	7/13/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210716X	7/15/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210716Z	7/15/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210719X	7/16/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210720X	7/16/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021			2.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210804X	8/3/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210804Z	8/3/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210907Z	9/2/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210908Z	9/2/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210922X	9/16/2021	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U	304	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U

Storm and Surface Water Field and Analytical Data

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Surface Water Elevation-Staff Gage Measurements
 Contact Person: Natalya Usova (206) 263-0608

Staff Gage	Location	Date	Reference Elevation Staff Gage 0' (msl)	Reference Elevation Top of Peizo (msl)	Depth to Water (Peizometer) (feet)	Staff Gage Reading (feet)	Surface Water Elevation (msl)	Comments
SW-G1	SW-W1	4/1/2021	415.38	418.84		0.46	415.84	
SW-G1	SW-W1	5/27/2021	415.38	418.84		0.45	415.83	
SW-G2	SW-N1	10/1/2020	355.68	358.21		0.2	358.21	
SW-G2	SW-N1	11/25/2020	355.68	358.21		0.04	355.72	
SW-G3	SW -V	10/1/2020	466.46	469.88			466.46	DRY
SW-G3	SW -V	11/25/2020	466.46	469.88	DRY		466.46	DRY
SW-G4	Upstream of SW-E1	10/1/2020	502.41	505.85		0.29	502.70	
SW-G4	Upstream of SW-E1	11/25/2020	502.41	505.85	4.65		502.41	
SW-G5	SW-E1	10/1/2020	486.92	490.34		0.59	487.51	
SW-G5	SW-E1	11/25/2020	486.92	490.34	3.00		486.92	
SW-G6	Jpstream of SW-GS	10/1/2020	490.72	494.12	3.60		490.72	
SW-G6	Jpstream of SW-GS	11/25/2020	490.72	494.12	3.2		490.72	
SW-G7	SW-S2	10/1/2020	453.03	456.41		0.75	453.78	DRY
SW-G7	SW-S2	11/25/2020	453.03	456.41		0.65	453.68	
SW-G8	Upstream of SW-S1	10/1/2020	510.61	515.56		0.3	510.91	DRY
SW-G8	Upstream of SW-S1	11/25/2020	510.61	515.56		0.11	510.72	
SW-G9	SW-S1	10/1/2020	490.93	494.35		0.64	491.57	DRY
SW-G9	SW-S1	11/25/2020	490.93	494.35		0.4	491.33	

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
Cedar Hills Landfill - Surface Water Field Parameters

Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH (Field)	Spec. Conductance (Field)	Temperature (Field)	Turbidity (Field)	Dissolved Oxygen, (Field)
			(std. Units)	(umho/cm)	(°C)	(NTU)	(mg/L)
SW-TD1	STD1210930-	9/30/2021	7.29	370.9	14.99	198	9.61

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021

Cedar Hills Landfill --- Surface Water Conventional and Metals Parameters

Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Ammonia, (NH3) (mg/L)	Biological Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)	Zinc, total (mg/L)
SW-GS1						
SW-N4						
SW-SL3						

No sample taken

Refer to Appendix A for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Volatile Organic Compounds
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	3-,4-Methylphenol mixture (ug/L)	Alpha-Terpineol (ug/L)	Benzoic Acid (ug/L)	Phenol (ug/L)
SW-GS1						
SW-N4				No sample taken		
SW-SL3						

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,1,1,2- TETRACHLOR OETHANE	1,1,1- TRICHLOR OETHANE	1,1,2,2- TETRACHLOR OETHANE	1,1,2- TRICHLORO ETHANE	1,1- DICHLORO ETHANE	1,1- DICHLORO ETHENE	1,2,3- TRICHLOROP ROPANE	1,2- DIBROMO- 3- CHLOROPR OPANE	1,2- DIBROMO ETHANE	1,2- DICHLOROB ENZENE	1,2- DICHLOROE THANE	1,2- DICHLOROP ROPANE	1,4- DICHLOROB ENZENE	2-BUTANONE
			630-20-6	71-55-6	79-34-5	79-00-5	75-34-3	75-35-4	96-18-4	96-12-8	106-93-4	95-50-1	107-06-2	78-87-5	106-46-7	78-93-3
			ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N	ug/l N
SW-E1			No sample taken													

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	2-HEXANONE	3-,4-Methylphenol mixture	4-METHYL-2-PENTANONE	ACETONE	ACRYLONITRILE	ALKALINITY, TOTAL (AS CaCO3)	ALPHA-TERPINEOL	AMMONIA AS N	ANTIMONY	ANTIMONY	ARSENIC	ARSENIC	BARIUM
			591-78-6	15831-10-4	108-10-1	67-64-1	107-13-1	ALK	98-55-5	7664-41-7	7440-36-0	7440-36-0	7440-38-2	7440-38-2	7440-39-3
			ug/l	ug/l	ug/l	ug/l	ug/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
			N	N	N	N	N	N	N	N	D	T	D	T	D
								No sample taken							

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	BARIUM	BENZENE	BENZOIC ACID	BERYLLIUM	BERYLLIUM	BIOLOGICAL OXYGEN DEMAND - 5 DAY	BROMOCHLOROMETHANE	BROMODICHLOROMETHANE	BROMOFORM	BROMOMETHANE	CADMIUM	CADMIUM	CALCIUM
			mg/l	ug/l	ug/l	mg/l	mg/l	mg/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	mg/l
SW-E1			T	N	N	D	T	N	N	N	N	N	D	T	D
			7440-39-3	71-43-2	65-85-0	7440-41-7	7440-41-7	BOD	74-97-5	75-27-4	75-25-2	74-83-9	7440-43-9	7440-43-9	7440-70-2
								No sample taken							

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	CALCIUM	CARBON DISULFIDE	CARBON TETRACHLORIDE	CHLORIDE	CHLOROBENZENE	CHLORODIBROMOMETHANE	CHLOROETHANE	CHLOROFORM	CHLOROMETHANE	CHROMIUM	CHROMIUM	CIS-1,2-DICHLOROETHENE	-DICHLOROPR	COBALT
			7440-70-2	75-15-0	56-23-5	16887-00-6	108-90-7	124-48-1	75-00-3	67-66-3	74-87-3	7440-47-3	7440-47-3	156-59-2	10061-01-5	7440-48-4
			mg/l	ug/l	ug/l	mg/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/l	mg/l	ug/l	ug/l	mg/l
SW-E1			T	N	N	N	N	N	N	N	N	D	T	N	N	D
			No sample taken													

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	COBALT	COPPER	COPPER	DIBROMOETHANE	DICHLOROMETHANE	DISSOLVED OXYGEN	ETHYLENE	IRON	IRON	LEAD	LEAD	M & P XYLENE	MAGNESIUM	MAGNESIUM
			7440-48-4	7440-50-8	7440-50-8	74-95-3	75-71-8	DO-F	100-41-4	7439-89-6	7439-89-6	7439-92-1	7439-92-1	MPX	7439-95-4	7439-95-4
			mg/l	mg/l	mg/l	ug/l	ug/l	mg/l	ug/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
SW-E1			T	D	T	N	N	N	N	D	T	D	T	N	D	T
No sample taken																

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	MANGANESE	MANGAN ESE	MERCURY	MERCURY	METHYL IODIDE	METHYLENE CHLORIDE	NICKEL	NICKEL	NITRATE	O- XYLENE	pH, FIELD	PHENOL	POTASSIU M	POTASSIUM
			7439-96-5	7439-96-5	7439-97-6	7439-97-6	74-88-4	75-09-2	7440-02-0	7440-02-0	14797-55-8	95-47-6	pH-F	108-95-2	7440-09-7	7440-09-7
			mg/l	mg/l	mg/l	mg/l	ug/l	ug/l	mg/l	mg/l	mg/l	ug/l	pH units	ug/l	mg/l	mg/l
			D	T	D	T	N	N	D	T	N	N	N	N	D	T
SW-E1			No sample taken													

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	SELENIUM	SELENIUM	SILVER	SILVER	SODIUM	SODIUM	SPEC COND, FIELD	SPECIFIC CONDUCT ANCE	STYRENE	SULFATE	TEMPERAT URE, FIELD	TETRACHLOR OETHENE	THALLIUM	THALLIUM
			7782-49-2	7782-49-2	7440-22-4	7440-22-4	7440-23-5	7440-23-5	COND-F	COND	100-42-5	14808-79-8	TEMP	127-18-4	7440-28-0	7440-28-0
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	umhos/cm	umhos/cm	ug/l	mg/l	deg c	ug/l	mg/l	mg/l
SW-E1			D	T	D	T	D	T	N	N	N	N	N	N	D	T
									No sample taken							

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surface Water Elevation Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	TOLUENE	TOTAL DISSOLVED SOLIDS	TOTAL ORGANIC CARBON	TOTAL SOLIDS	TOTAL SUSPENDED SOLIDS	TRANS-1,2-DICHLOROETHENE	TRANS-1,3-DICHLOROPROPENE
SW-E1			108-88-3 ug/l N	TDS mg/l N	TOC mg/l N	TS mg/l N	TSS mg/l N	156-60-5 ug/l N	10061-02-6 ug/l N

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Surfacewater Top Deck Data
 Contact Person: Natalya Usova (206) 263-0608

Sample ID	Date	pH (Field) (std. Units)	Conductance (Field) (umho/cm)	Temperature (Field) (°C)	Turbidity (Field) (NTU)	Alkalinity, (Total) (CaCO3) (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen (mg/L)	Iron, (Dissolved) (mg/L)	Iron, (Total) (mg/L)	Sulfate (SO4) (mg/L)	Total Organic Carbon (mg/L)
SW-TD1 STD1210930-	9/30/2021	7.29	370.9	14.99	198	40	17 T	2.26	9.61	0.0248	6.23	143	7.69

Washington Department of Ecology Electronic Submission Cover Letter



**WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1786025 - 8/12/2021
5:14:03 PM**

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Thursday August 12 2021

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only



vWrAltacLb3NpqloItRZJwwY5+IvbJbCFrFeZgtwJHG0QB0UDc2sRGGGI0+Wc8Wui5eNYVG/11H+ibeahXgrkno9i7u6V7gL1Zuzln9gr0I=



Washington State Department of Ecology Discharge Monitoring Report (DMR)

Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: Queen City Farms Lake (QCFL)

Monitoring Period: 07/01/2021 - 07/31/2021

Outfall: CHL - Queen City Farms Lake (QCFL)

Version: 1

Week	Monitoring Point	Turbidity (NTU)	pH
		Measured NTU Weekly Grab	Standard Units Weekly Grab
		CHL	CHL

Minimum		
		BM: >= 6.5 (RO)
Maximum		
	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge

NO FLOW in July



Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: gravel pit lake

Monitoring Period: 07/01/2021 - 07/31/2021

Outfall: grav - The gravel pit lake infiltrates and has no surface discharge outlet

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured Weekly Grab	pH Standard Units Weekly Grab
	C3	C3	C3
Minimum			BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge

NO FLOW in July



Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: McDonald Creek

Monitoring Period: 07/01/2021 - 07/31/2021

Outfall: McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
Minimum			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge
NO FLOW in July

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams

8/12/2021 5:14:02 PM

Signature

Date

Washington Department of Ecology
Electronic Submission Cover Letter



**WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1789287 - 9/14/2021
5:29:04 PM**

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Tuesday September 14 2021

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only



Jc9jYXI2mBy3Q0fAJSAxOePJGWcDLT1okvrKeKqO7VU8143PbBiu+akmFblylJKwxdcUT6C
+YSmOp423IPgWrQ2Xle9y3XIDpMuBzsisE=



Washington State Department of Ecology Discharge Monitoring Report (DMR)

Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: Queen City Farms Lake (QCFL)

Monitoring Period: 08/01/2021 - 08/31/2021

Outfall: CHL - Queen City Farms Lake (QCFL)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		CHL	CHL
1-Su	8/1/21	C	C
2-Su	8/8/21	C	C
3-Su	8/15/21	C	C
4-Su	8/22/21	C	C
5-Su	8/29/21	C	C
Minimum			BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge



Washington State Department of Ecology Discharge Monitoring Report (DMR)

Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: gravel pit lake

Monitoring Period: 08/01/2021 - 08/31/2021

Outfall: grav - The gravel pit lake infiltrates and has no surface discharge outlet

Version: 1

Week	Monitoring Point	Turbidity (NTU)	pH
		Measured Weekly Grab	Standard Units Weekly Grab
		C3	C3
1-Su	8/1/21	C	C
2-Su	8/8/21	C	C
3-Su	8/15/21	C	C
4-Su	8/22/21	C	C
5-Su	8/29/21	C	C
Minimum			BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge



Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: McDonald Creek

Monitoring Period: 08/01/2021 - 08/31/2021

Outfall: McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
1-Su	8/1/21	C	C	C	C
2-Su	8/8/21	C	C	C	C
3-Su	8/15/21	C	C	C	C
4-Su	8/22/21	C	C	C	C
5-Su	8/29/21	C	C	C	C
Minimum			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams
Signature

9/14/2021 5:29:02 PM
Date

Washington Department of Ecology Electronic Submission Cover Letter



**WQWebDMR - Permit# WAR305034 - DMR Submission Id: 1792068 - 10/12/2021
8:29:25 AM**

Company Name	Signer Name	System Name
Goodfellow Bros LLC	Kyle Williams	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for Goodfellow Bros LLC	Copy of Record GoodfellowBrosLLC Tuesday October 12 2021

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only



Nkit4OS2VLV2Zitu8JM830K
+Nu7QbhkG7mEFNqCRdGoN8pPvOWpjOQP5pyLYtWfhlcrsML8qWBJAUYdHcWJCv9DYPr2MvjsegXJNfX0C4g=



Washington State Department of Ecology Discharge Monitoring Report (DMR)

Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: Queen City Farms Lake (QCFL)

Monitoring Period: 09/01/2021 - 09/30/2021

Outfall: CHL - Queen City Farms Lake (QCFL)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured	pH Standard Units
		NTU Weekly Grab	Weekly Grab
	CHL	CHL	CHL

Minimum		BM: >= 6.5 (RO)
Maximum	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge



Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: gravel pit lake

Monitoring Period: 09/01/2021 - 09/30/2021

Outfall: grav - The gravel pit lake infiltrates and has no surface discharge outlet

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured Weekly Grab	pH Standard Units Weekly Grab
		C3	C3
Minimum			BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge



Permit Number: WAR305034

Permittee: Cedar Hills regional Landfill

Facility County: King

Receiving Waterbody: McDonald Creek

Monitoring Period: 09/01/2021 - 09/30/2021

Outfall: McDo - Outfall SW N4 The discharge on the northern boundary drains to McDonald Creek at Lat 47 477875 and Long 122 054943

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab	Turbidity (NTU) Measured NTU Weekly Grab	pH Standard Units Weekly Grab
		C1	C1	C2	C2
Minimum			BM: >= 6.5 (RO)		BM: >= 6.5 (RO)
Maximum		BM: <= 25 (RO)	BM: <= 8.5 (RO)	BM: <= 25 (RO)	BM: <= 8.5 (RO)

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kyle Williams

10/12/2021 8:29:23 AM

Signature

Date

Washington Department of Ecology Electronic Submission Cover Letter



**WQWebDMR - Permit# WAR000756 - DMR Submission Id: 1797578 - 11/10/2021
3:05:39 PM**

Company Name	Signer Name	System Name
King County Solid Waste Division	Jennifer Keune	WQWebPortal

Attachments:

Document Name Or Description	Document Name
Submitted Copy of Record for King County Solid Waste Division	Copy of Record KingCountySolidWasteDivision Wednesday November 10 2021

Attestation Agreed to at Signing:

I certify I personally signed and submitted to the Department of Ecology an Electronic Signature Agreement. I understand that use of my electronic signature account/password to submit this information is equal to my written signature. I have read and followed all the rules of use in my Electronic Signature Agreement. I believe no one but me has had access to my password and other account information.

I further certify: I had the opportunity to review the content or meaning of the submittal before signing it; and to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I intend to submit this information as part of the implementation, oversight, and enforcement of a federal environmental program. I am aware there are significant penalties for submitting false information, including possible fines and imprisonment.

For Ecology Use Only



m+Lk6e43x+C9Hwtsu5uIFEWNlIuYeNOKZQqBwr7mFpJh/68gil0zoQRN2qekMzLnPaEQJXCUAIj/IsuOIN55CF
+V4F0oJlSqqSvPkiCG8=



Washington State Department of Ecology Discharge Monitoring Report (DMR)

Permit Number: WAR000756

Permittee: CEDAR HILLS REGIONAL LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 07/01/2021 - 09/30/2021

Outfall: GS1 - Discharge to unnamed stream (wetland)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,,alpha,,alpha,,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1	GS1
Limit Set	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
Minimum												
Average	BM: <= 25		BM: <= 14									
Maximum												
Month 1 Average				<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110	
Month 2 Average				<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110	
Month 3 Average				<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110	

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge

No sampleable discharge occurred during the monitoring period.



Permit Number: WAR000756

Permittee: CEDAR HILLS REGIONAL LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 07/01/2021 - 09/30/2021

Outfall: N4 - Discharge to unnamed stream (McDonald Cr)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,,alpha ,alpha ,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
	N4	N4	N4	N4	N4	N4	N4	N4	N4	N4	N4	N4
Limit Set	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
Minimum												
Average	BM: <= 25		BM: <= 14									
Maximum												
Month 1 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 2 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 3 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge
 No sampleable discharge occurred during the monitoring period.



Week	Monitoring Point	PH Standard Units Quarterly Grab N4
Limit Set		ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
Minimum		>= 6.0 (RO)
Average		
Maximum		<= 9.0 (RO)
Month 1 Average		
Month 2 Average		
Month 3 Average		



Washington State Department of Ecology **Discharge Monitoring Report (DMR)**

Permit Number: WAR000756

Permittee: CEDAR HILLS REGIONAL LANDFILL

Facility County: King

Receiving Waterbody: Unnamed stream

Monitoring Period: 07/01/2021 - 09/30/2021

Outfall: SL3 - Discharge to unnamed stream (ditch)

Version: 1

Week	Monitoring Point	Turbidity (NTU) Measured NTU Quarterly Grab	Oil & Grease Yes/No Quarterly Visual Observation	Copper Total Micrograms/L (ug/L) Quarterly Grab	Total BOD5 Total Milligrams/L (mg/L) Quarterly Grab	Solids (Residue) Total suspended (TSS) Milligrams/L (mg/L) Quarterly Grab	Ammonia Total Milligrams/L (mg/L) Quarterly Grab	Alpha-terpineol (3-Cyclohexene-1-methanol,,alpha,,alpha,,trimethyl-) Micrograms/L (ug/L) Quarterly Grab	Benzoic Acid Micrograms/L (ug/L) Quarterly Grab	p-Cresol (4-methylphenol) Micrograms/L (ug/L) Quarterly Grab	Phenol Micrograms/L (ug/L) Quarterly Grab	Zinc Total Micrograms/L (ug/L) Quarterly Grab
Week	Monitoring Point	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3	SL3
Limit Set		ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Western WA - 2020 Permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit	ISGP Non-Haz Waste Landfill (40CFR part 445 subpart B)- 2020 permit
Minimum												
Average		BM: <= 25		BM: <= 14								
Maximum												
Month 1 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 2 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110
Month 3 Average					<= 37	<= 27	<= 4.9	<= 16	<= 71	<= 14	<= 15	<= 110

Reporting Codes Used: C - No Discharge

Overall DMR Notes/Comment

Reporting Code: C - No Discharge
 No sampleable discharge occurred during the monitoring period.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jennifer Keune

11/10/2021 3:05:38 PM

Signature

Date

Leachate Field and Analytical Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Sample Roster
 Contact Person: Natalya Usova (206) 263-0608

Leachate Monitoring Activities 3rd Quarter 2021

Station ID	Date	Activity	Sample ID	Comment
LS-46N	7/7/2021	Monthly Characterization Sample	L46N210707M	
LS-46N	8/4/2021	Monthly Characterization Sample	L46N210804M	
LS-46N	9/7/2021	Monthly Characterization Sample	L46N210907M	
LS-A567	7/8/2021	Special Investigation	L567210708I	
LS-A567	8/5/2021	Special Investigation	L567210805I	
LS-A567	9/9/2021	Special Investigation	L567210909I	
LS-A8	7/8/2021	Special Investigation	LA81210708I	
LS-A8	8/5/2021	Special Investigation	LA81210805I	
LS-A8	9/9/2021	Special Investigation	LA81210909I	
LS-LEPS	7/7/2021	Permit Sample	LEPS210707P	
LS-LEPS	7/7/2021	Monthly Characterization Sample	LEPS210707M	
LS-LEPS	7/13/2021	Permit Sample	LEPS210713P	
LS-LEPS	7/23/2021	Permit Sample	LEPS210723P	
LS-LEPS	7/29/2021	Permit Sample	LEPS210729P	
LS-LEPS	8/4/2021	Permit Sample	LEPS210804P	
LS-LEPS	8/4/2021	Monthly Characterization Sample	LEPS210804M	
LS-LEPS	8/10/2021	Permit Sample	LEPS210810P	
LS-LEPS	8/31/2021	Permit Sample	LEPS210831P	
LS-LEPS	9/14/2021	Permit Sample	LEPS210914P	
LS-LEPS	9/22/2021	Monthly Characterization Sample	LEPS210922M	
LS-LEPS	9/22/2021	Permit Sample	LEPS210922P	
LS-LEPS	9/28/2021	Permit Sample	LEPS210928P	
LS-PS1A	7/8/2021	Special Investigation	LP1A210708I	
LS-PS1A	8/5/2021	Special Investigation	LP1A210805I	
LS-PS1A	9/9/2021	Special Investigation	LP1A210909I	
LS-PS2A	7/7/2021	Monthly Characterization Sample	LP2A210707M	
LS-PS2A	8/4/2021	Monthly Characterization Sample	LP2A210804M	
LS-PS2A	9/7/2021	Monthly Characterization Sample	LP2A210907M	
LS-PS4	7/8/2021	Special Investigation	LP4-210708I	
LS-PS4	8/5/2021	Special Investigation	LP4-210805I	
LS-PS4	9/9/2021	Special Investigation	LP4-210909I	
LS-V1A	7/7/2021	Monthly Characterization Sample	LV1A210707M	
LS-V1A	8/4/2021	Monthly Characterization Sample	LV1A210804M	
LS-V1A	9/8/2021	Monthly Characterization Sample	LV1A210908M	
LS-46N	7/7/2021	Duplicate	L46N210707D	
LS-A567	8/5/2021	Duplicate	L567210805D	
LS-LEPS	9/14/2021	Duplicate	LEPS210914D	
LS-LEPS	7/23/2021	QA/QC Sample	LEPS210723F	

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Field Parameter
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	pH (Field) (std. Units)	Specific Conductance (Field) (umho/cm)	Temperature (Field) (° C)
LS-A567	L567210708I	7/8/2021	8.05	26753	29.7
LS-A567	L567210805I	8/5/2021	8.1	23068	32.1
LS-A567	L567210909I	9/9/2021	8.1	23190	32.5
LS-A81	LA81210708I	7/8/2021	7.65	22966	18
LS-A81	LA81210805I	8/5/2021	7.07	30024	24.6
LS-A81	LA81210909I	9/9/2021	7.71	27138	22.6
LS-LEPS	LEPS210707M	7/7/2021	8.63	10155	20.9
LS-LEPS	LEPS210707P	7/7/2021	8.63	10155	20.9
LS-LEPS	LEPS210713P	7/13/2021	8.64	10329	21.1
LS-LEPS	LEPS210723P	7/23/2021	8.68	10229	18.4
LS-LEPS	LEPS210729P	7/29/2021	8.69	10709	20.6
LS-LEPS	LEPS210804M	8/4/2021	8.47	9123	28.5
LS-LEPS	LEPS210804P	8/4/2021	8.47	9123	28.5
LS-LEPS	LEPS210810P	8/10/2021	8.15	9546	20.5
LS-LEPS	LEPS210831P	8/31/2021	8.66	9510	18.6
LS-LEPS	LEPS210914P	9/14/2021	8.62	11646	18.3
LS-LEPS	LEPS210922P	9/22/2021	8.57	13789	17.5
LS-LEPS	LEPS210928P	9/28/2021	8.56	12171	17.1
LS-MH46N	L46N210707M	7/7/2021	7.05	12183	23
LS-MH46N	L46N210804M	8/4/2021	7.24	10481	24.5
LS-MH46N	L46N210907M	9/7/2021	7.26	11097	23.9
LS-PS1A	LP1A210708I	7/8/2021	7.96	2772	14.6
LS-PS1A	LP1A210805I	8/5/2021	7.84	6091	17.2
LS-PS1A	LP1A210909I	9/9/2021	8.06	10680	17.5
LS-PS2A	LP2A210707M	7/7/2021	7.45	412.1	14
LS-PS2A	LP2A210804M	8/4/2021	6.24	1174	16.1
LS-PS2A	LP2A210907M	9/7/2021	6.77	288.4	16.9
LS-PS4	LP4-210708I	7/8/2021	7.68	1830	16.1
LS-PS4	LP4-210805I	8/5/2021	7.79	2062	17.6
LS-PS4	LP4-210909I	9/9/2021	8.09	2133	18.2
LS-V1A	LV1A210707M	7/7/2021	8.43	19457	26.8
LS-V1A	LV1A210804M	8/4/2021	8.33	18432	26.4
LS-V1A	LV1A210908M	9/8/2021	8.24	19356	32.1

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Conventional Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Alkalinity, Bicarbonate mg/l	Alkalinity, Carbonate mg/l	Alkalinity, Total (As Caco3) mg/l	Ammonia As N mg/l	Biological Oxygen Demand - 5 Day mg/l	Chemical Oxygen Demand mg/l	Chloride mg/l	Coliforms, Fecal cfu/100ml	Coliforms, Total cfu/100ml	Cyanide mg/l	Fixed Suspended Solids mg/l
LS-LEPS	LEPS210922M	9/22/2021			5170	802	577	2960	1720	100000 CU	19000	0.015 ST	
LS-A567	L567210708I	7/8/2021	10100	1 U	10100	2060	2330	7110 S	2760				3.3 T
LS-A567	L567210805I	8/5/2021	10200	1 U	10200	2170	2550	7760 S	2880				4 T
LS-A567	L567210909I	9/9/2021	10400	1 U	10400	2220	2090	6430 S	2880				2.7 T
LS-A81	LA81210708I	7/8/2021	9760	1 U	9760	1790	493	2570 S	1710				24.4
LS-A81	LA81210805I	8/5/2021	13900	1 U	13900	2950	24700	36000 S	3260				22.4
LS-A81	LA81210909I	9/9/2021	12800	1 U	12800	2680	11900	18700 S	3240				520
LS-LEPS	LEPS210707M	7/7/2021			3780	603	190	1850	1060	140 C	7900	0.008 SU	
LS-LEPS	LEPS210804M	8/4/2021			3870	596	118	1510	1180	1000 C	20000	0.014 T	
LS-MH46N	L46N210707M	7/7/2021			3180	642	67.9	1630	1730	1 U	1 U	0.012 ST	
LS-MH46N	L46N210804M	8/4/2021			3360	658	104	1780	1790	1	390	0.008 SU	
LS-MH46N	L46N210907M	9/7/2021			3450	730	86	1860	1940	1 U	43	0.0096 ST	
LS-PS1A	LP1A210708I	7/8/2021	800	1 U	800	147	35	332	295				0.51 U
LS-PS1A	LP1A210805I	8/5/2021	2160	1 U	2160	426	54.3	877	862				2.75
LS-PS1A	LP1A210909I	9/9/2021	3760	1 U	3760	794	151	1850	1580				1.4 U
LS-PS2A	LP2A210707M	7/7/2021			93.1	11.3	3.2	25.4	15.1	1 U	650	0.002 U	
LS-PS2A	LP2A210804M	8/4/2021			188	56.2	4.9	127	97	2	4300	0.008 U	
LS-PS2A	LP2A210907M	9/7/2021			148	204	56	227	245	1 U	23000	0.008 U	
LS-PS4	LP4-210708I	7/8/2021	679	1 U	679	122	117	315	86.7				24
LS-PS4	LP4-210805I	8/5/2021	925	1 U	925	199	111	443	110				9.55
LS-PS4	LP4-210909I	9/9/2021	889	1 U	889	177	182	492	144				14.8
LS-V1A	LV1A210707M	7/7/2021			5640	1240	2610	5800	1390	120000	3700000	0.02 SU	
LS-V1A	LV1A210804M	8/4/2021			7720	1810	3790	8560 S	1920	47000	1800000	0.013 ST	
LS-V1A	LV1A210908M	9/8/2021			10200	2250 J	5670	11300 S	2640	64000	700000	0.019 ST	

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Conventional Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Sample ID	Date	Fluoride mg/l	Hardness mg/l	Nitrate + Nitrite As N mg/l	Phosphorus , Soluble , Reactive mg/l	Specific Conductance umhos/cm	Sulfate mg/l	Sulfide mg/l	Total Dissolved Solids mg/l	Total Fats, Oils & Grease, mg/l	Total Kjeldahl Nitrogen mg/l	Total Organic Carbon mg/l	Total Solids mg/l	Total Suspended Solids mg/l	Total Volatile Solids mg/l	Volatile Suspended Solids mg/l
LS-LEPS	LEPS210922M	9/22/2021	5 U		2 U	1.46	13200	37.3	2.29		3.8 ST	923	1010 S		713	3090	600
LS-A567	L567210708I	7/8/2021	10 U	534	0.05 U		24100	30.5	2.59	13800		2020 S	2730 S	13100	24	5620	20.7
LS-A567	L567210805I	8/5/2021	10 U	534	0.21 T		24700	35.2	6.16	12500		1860 S	2830 S	14800	30.5	6640	26.5
LS-A567	L567210909I	9/9/2021	5 U	534	0.5 U		25000	71.3	15.2	12500 H		2190 S	2210 S	13200	14.2	6440	11.6
LS-A81	LA81210708I	7/8/2021	1 U	1310	0.1 U		20500	191	43.6	8580		1970 S	845 S	9680	64.4	3460	40
LS-A81	LA81210805I	8/5/2021	200 U	5000	0.1 U		31900	13.7	38.7	23900		2850 S	13300 S	27500	77.6	13500	55.1
LS-A81	LA81210909I	9/9/2021	50 U	3670	0.1 U		30300	181	41.1	19500 H		2750 S	6520 S	21400	800	11300	280
LS-LEPS	LEPS210707M	7/7/2021	1.21		0.05 U	0.0854	8530	15	0.296		3.8 T	685	504		567	1940	473
LS-LEPS	LEPS210804M	8/4/2021	0.5 T		13.9	1.59	9690	34.9	0.55 T		3.7 T	656	428		291	2160	235
LS-MH46N	L46N210707M	7/7/2021	2.26		0.05 U	3.02	9840	0.25 T	1.12		2.7 T	640	566	0.63 T		1520	0.52 T
LS-MH46N	L46N210804M	8/4/2021	2 U		0.054 T	3.57	11200	3.1 T	1.07		3.4 ST	690	540		2.37	2040	1.44
LS-MH46N	L46N210907M	9/7/2021	2.19		0.346	3.64	11800	0.76 T	0.759		2.2 T	703	615	0.8 T		1390	0.7 T
LS-PS1A	LP1A210708I	7/8/2021	0.5 T	122	0.145		2450	24.6	0.01 U	1020		172	106	1070	2.32	316	1.92
LS-PS1A	LP1A210805I	8/5/2021	0.55 T	261	0.05 T		6550	30.6	0.18 T	2610		467	297	2850	11.3	800	8.5
LS-PS1A	LP1A210909I	9/9/2021	2 U	432	0.056 T		11400	40	3.85	5060 H		800	527 S	5020	4.57	1640	4
LS-PS2A	LP2A210707M	7/7/2021	0.047 T		2.2	0.00813	378	50.2	0.011 T		2.2 U	12.2	9.78		2.34	71.3	1.49
LS-PS2A	LP2A210804M	8/4/2021	0.072 T		1	0.08 T	1230	226	0.01 U		1.8 T	54.3	38.8		5.5	134	3.75
LS-PS2A	LP2A210907M	9/7/2021	0.19 T		34.7	0.0237	3100	704	0.063 T		1.9 U	190	67.1		2.68	591 J	1.75
LS-PS4	LP4-210708I	7/8/2021	0.26 T	183	0.408		1600	29.4	0.045	580		124	86.4	657	64	241	40
LS-PS4	LP4-210805I	8/5/2021	0.269	143	0.268		2210	14.3	0.0576	569		212	108	688	72.7	245	63.2
LS-PS4	LP4-210909I	9/9/2021	0.1 U	216	0.603		2280	35	0.0993	805 H		179	144	931	54.4	413	39.6
LS-V1A	LV1A210707M	7/7/2021	5 U		0.22 T	6.66	14200	33.3	0.58 T		15.4 S	1350	2180		35.6	4040	28
LS-V1A	LV1A210804M	8/4/2021	5 U		0.31 T	9.59	18800	41.5	9.36 S		23.3 S	1750 S	3230		319	6730	152
LS-V1A	LV1A210908M	9/8/2021	10 U		0.1 U	4.14	24700	72.9	1.76		10.2 S	1020 JS	3900 S		124	6700	73.3

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Aluminum	Aluminum	Antimony	Antimony	Arsenic	Arsenic	Barium	Barium	Beryllium	Beryllium
			Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l
LS-LEPS	9/22/2021	LEPS210922M	0.414		0.0291		0.198		0.464		0.000993 U	
LS-A567	7/8/2021	L567210708I	0.484	0.82	0.0175	0.0239	0.344	0.359	0.444	0.481	0.00099 U	0.000999 U
LS-A567	8/5/2021	L567210805I	0.521	0.579	0.0237	0.0213	0.366	0.37	0.425	0.44	0.000994 U	0.00103 U
LS-A567	9/9/2021	L567210909I	0.525	0.645	0.0188	0.0193	0.388	0.39	0.447	0.438	0.000982 U	0.000979 U
LS-A81	7/8/2021	LA81210708I	0.376	8.85	0.0139	0.0178	0.0443	0.0665	0.103	0.15	0.000997 U	0.000998 U
LS-A81	8/5/2021	LA81210805I	0.42	0.905	0.0307	0.0339	0.0682	0.115	1.01	1.05	0.000991 U	0.000999 U
LS-A81	9/9/2021	LA81210909I		21.1		0.0358		0.164		0.846		0.000953 U
LS-LEPS	7/7/2021	LEPS210707M	0.168		0.0167		0.161		0.0177		0.000997 U	
LS-LEPS	7/7/2021	LEPS210707P		0.454		0.016		0.172		0.0557		0.000989 U
LS-LEPS	7/13/2021	LEPS210713P		0.371		0.0173		0.178		0.0526		0.000996 U
LS-LEPS	7/23/2021	LEPS210723P		0.355		0.0173		0.19		0.0434		0.000987 U
LS-LEPS	7/29/2021	LEPS210729P		0.536		0.0192		0.199		0.0493		0.000997 U
LS-LEPS	8/4/2021	LEPS210804M	0.135		0.0217		0.213		0.0293		0.00101 U	
LS-LEPS	8/4/2021	LEPS210804P		0.326		0.0203		0.205		0.0539		0.001 U
LS-LEPS	8/10/2021	LEPS210810P		0.292		0.0243		0.219		0.0521		0.000996 U
LS-LEPS	8/31/2021	LEPS210831P		0.519		0.024		0.265		0.115		0.001 U
LS-LEPS	9/14/2021	LEPS210914P		0.992		0.0419		0.351		0.143		0.00103 U
LS-LEPS	9/22/2021	LEPS210922P		0.985		0.0305		0.278		0.159		0.000972 U
LS-LEPS	9/28/2021	LEPS210928P		0.665		0.0273		0.268		0.137		0.00101 U
LS-MH46N	7/7/2021	L46N210707M		0.0502 U		0.00301 U		0.1		0.455		0.001 U
LS-MH46N	8/4/2021	L46N210804M		0.0504 U		0.00303 U		0.103		0.456		0.00101 U
LS-MH46N	9/7/2021	L46N210907M		0.0495 U		0.00297 U		0.107		0.483		0.00099 U
LS-PS1A	7/8/2021	LP1A210708I	0.0503 U	0.0513	0.00831	0.00828	0.0497	0.0508	0.075	0.0776	0.00101 U	0.00101 U
LS-PS1A	8/5/2021	LP1A210805I	0.117	0.214	0.0203	0.0187	0.147	0.154	0.158	0.168	0.00101 U	0.00102 U
LS-PS1A	9/9/2021	LP1A210909I	0.143	0.158	0.041	0.0411	0.345	0.346	0.332	0.332	0.000977 U	0.000965 U
LS-PS2A	7/7/2021	LP2A210707M		0.0496 U		0.00423		0.0069		0.0209		0.000992 U
LS-PS2A	8/4/2021	LP2A210804M		0.0504 U		0.0128		0.0244		0.0354		0.00101 U
LS-PS2A	9/7/2021	LP2A210907M		0.0491 U		0.046		0.0574		0.0287		0.000981 U
LS-PS4	7/8/2021	LP4-210708I	0.0496 U	0.842	0.0221	0.0227	0.171	0.173	0.0345	0.0469	0.000993 U	0.000983 U
LS-PS4	8/5/2021	LP4-210805I	0.0497 U	0.284	0.057	0.0532	0.375	0.373	0.0421	0.0476	0.000993 U	0.00101 U
LS-PS4	9/9/2021	LP4-210909I	0.0704	0.736	0.0384	0.0397	0.366	0.37	0.0367	0.0471	0.000972 U	0.00097 U
LS-V1A	7/7/2021	LV1A210707M	0.395	0.727	0.0328	0.0334	0.329	0.334	0.213	0.228	0.001 U	0.001 U
LS-V1A	8/4/2021	LV1A210804M	0.627	6.38	0.0362	0.037	0.394	0.396	0.284	0.574	0.001 U	0.000992 U
LS-V1A	9/8/2021	LV1A210908M	0.298	1.88	0.0323	0.0342	0.305	0.244	0.0374	0.474	0.000994 U	0.000982 U

Environmental Monitoring Data

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 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Cadmium		Calcium		Chromium		Cobalt		Copper
			Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l
LS-LEPS	9/22/2021	LEPS210922M	0.000496 U		145		0.247		0.0444		0.00217
LS-A567	7/8/2021	L567210708I	0.000495 U	0.0005 U	52.4	57.9	0.201	0.239	0.0603	0.0706	0.02
LS-A567	8/5/2021	L567210805I	0.000497 U	0.000517 U	48.8	49	0.229	0.235	0.0701	0.0697	0.00484
LS-A567	9/9/2021	L567210909I	0.000491 U	0.00049 U	52	53.6	0.232	0.236	0.0738	0.0767	0.00302
LS-A81	7/8/2021	LA81210708I	0.000499 U	0.000675	135	135	0.16	0.174	0.041	0.0768	0.00199 U
LS-A81	8/5/2021	LA81210805I	0.000496 U	0.000953	1270	1280	0.234	0.245	0.0312	0.0497	0.00198 U
LS-A81	9/9/2021	LA81210909I		0.00174		825		0.291		0.161	
LS-LEPS	7/7/2021	LEPS210707M	0.000498 U		34.1		0.103		0.0247		0.00233
LS-LEPS	7/7/2021	LEPS210707P		0.000495 U		67.6		0.0993		0.0256	
LS-LEPS	7/13/2021	LEPS210713P		0.000498 U		59.9		0.105		0.0249	
LS-LEPS	7/23/2021	LEPS210723P		0.000494 U		47.5		0.106		0.0252	
LS-LEPS	7/29/2021	LEPS210729P		0.000499 U		45.9		0.122		0.0266	
LS-LEPS	8/4/2021	LEPS210804M	0.000503 U		30.7		0.118		0.03		0.00845
LS-LEPS	8/4/2021	LEPS210804P		0.0005 U		45.5		0.113		0.0294	
LS-LEPS	8/10/2021	LEPS210810P		0.000498 U		38.4		0.13		0.0318	
LS-LEPS	8/31/2021	LEPS210831P		0.000501 U		63		0.13		0.0341	
LS-LEPS	9/14/2021	LEPS210914P		0.000513 U		64		0.173		0.0416	
LS-LEPS	9/22/2021	LEPS210922P		0.000486 U		81.6		0.161		0.0373	
LS-LEPS	9/28/2021	LEPS210928P		0.000503 U		70.1		0.157		0.0356	
LS-MH46N	7/7/2021	L46N210707M		0.000502 U		88.2		0.0985		0.0331	
LS-MH46N	8/4/2021	L46N210804M		0.000504 U		88.2		0.102		0.036	
LS-MH46N	9/7/2021	L46N210907M		0.000495 U		91.7		0.106		0.0371	
LS-PS1A	7/8/2021	LP1A210708I	0.000503 U	0.000504 U	27.8	27.3	0.0124	0.0129	0.00732	0.00714	0.00439
LS-PS1A	8/5/2021	LP1A210805I	0.000503 U	0.000512 U	52.7	53.5	0.0344	0.036	0.0244	0.0281	0.00201 U
LS-PS1A	9/9/2021	LP1A210909I	0.000488 U	0.000482 U	82.7	81.6	0.0618	0.0609	0.0333	0.0345	0.00195 U
LS-PS2A	7/7/2021	LP2A210707M		0.000496 U		23.2		0.00198 U		0.00221	
LS-PS2A	8/4/2021	LP2A210804M		0.000504 U		31		0.00631		0.00663	
LS-PS2A	9/7/2021	LP2A210907M		0.000491 U		22.7		0.00424		0.00699	
LS-PS4	7/8/2021	LP4-210708I	0.000496 U	0.000491 U	42.3	42.5	0.00566	0.0104	0.00286	0.00331	0.00199 U
LS-PS4	8/5/2021	LP4-210805I	0.000497 U	0.000506 U	36.5	34.8	0.00907	0.0105	0.00349	0.00396	0.00199 U
LS-PS4	9/9/2021	LP4-210909I	0.000486 U	0.000485 U	44.4	45.4	0.00995	0.012	0.00439	0.00471	0.00206
LS-V1A	7/7/2021	LV1A210707M	0.000501 U	0.000502 U	48.9	49.7	0.161	0.171	0.037	0.0373	0.00315
LS-V1A	8/4/2021	LV1A210804M	0.000501 U	0.000615	53.3	191	0.239	0.264	0.0485	0.0642	0.00203
LS-V1A	9/8/2021	LV1A210908M	0.000497 U	0.000505	36.7	153	0.171	0.261	0.0376	0.0546	0.00199 U

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 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Copper		Iron		Lead		Magnesium		Manganese		Mercury
			Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	
LS-LEPS	9/22/2021	LEPS210922M		10		0.00102		255		1.03		0.0001 U	
LS-A567	7/8/2021	L567210708I	0.139	2.61	11.5	0.00142	0.00493	93.1	94.6	0.257	0.299	0.0001 U	
LS-A567	8/5/2021	L567210805I	0.0295	2.25	4.52	0.000994 U	0.0026	92.9	99.9	0.286	0.292	0.0001 U	
LS-A567	9/9/2021	L567210909I	0.039	2.1	4.66 D	0.000982 U	0.00242	96.5	97.2	0.297	0.255	0.0001 U	
LS-A81	7/8/2021	LA81210708I	0.0353	0.245	42.6	0.000997 U	0.0083	241	237	0.819	0.938	0.0001 U	
LS-A81	8/5/2021	LA81210805I	0.0177	0.921	19.5	0.000991 U	0.00771	431	435	9.03	9.1	0.0001 U	
LS-A81	9/9/2021	LA81210909I	0.0807		221 D		0.0253		390		7.76		
LS-LEPS	7/7/2021	LEPS210707M		5		0.000997 U		59.4		0.02		0.0001 U	
LS-LEPS	7/7/2021	LEPS210707P	0.00805		6.49		0.00167		63.1		0.461		
LS-LEPS	7/13/2021	LEPS210713P	0.0076		6.34		0.00174		63.2		0.404		
LS-LEPS	7/23/2021	LEPS210723P	0.00771		5.83		0.00157		63.8		0.249		
LS-LEPS	7/29/2021	LEPS210729P	0.0099		6.02		0.00223		63.1		0.248		
LS-LEPS	8/4/2021	LEPS210804M		5.5		0.0017		67.1		0.034		0.0001 U	
LS-LEPS	8/4/2021	LEPS210804P	0.0108		6.27		0.00205		68		0.237		
LS-LEPS	8/10/2021	LEPS210810P	0.0107		5.6		0.0026		67.9		0.168		
LS-LEPS	8/31/2021	LEPS210831P	0.0118		6.63		0.00383		78		0.541		
LS-LEPS	9/14/2021	LEPS210914P	0.0158		8.3		0.00429		97.8		0.459		
LS-LEPS	9/22/2021	LEPS210922P	0.0177		9.29 D		0.00425		103		0.673		
LS-LEPS	9/28/2021	LEPS210928P	0.00753		8.69		0.00383		100		0.573		
LS-MH46N	7/7/2021	L46N210707M	0.00201 U		3.09		0.001 U		48.7		0.55		
LS-MH46N	8/4/2021	L46N210804M	0.00202 U		3.11		0.00101 U		49.9		0.565		
LS-MH46N	9/7/2021	L46N210907M	0.00198 U		2.31 D		0.00099 U		53.5		0.423		
LS-PS1A	7/8/2021	LP1A210708I	0.00729	0.791	0.88	0.00101 U	0.00101 U	13.1	13.1	0.28	0.269	0.0001 U	
LS-PS1A	8/5/2021	LP1A210805I	0.0101	3.33	5.55	0.00101 U	0.00102 U	29.6	30.8	3.08	3.02	0.0001 U	
LS-PS1A	9/9/2021	LP1A210909I	0.00531	0.874	4 D	0.000977 U	0.000965 U	56	55.5	0.913	0.839	0.0001 U	
LS-PS2A	7/7/2021	LP2A210707M	0.0112		0.646		0.000992 U		8.59		0.879		
LS-PS2A	8/4/2021	LP2A210804M	0.0129		4.29		0.00101 U		12.8		3.28		
LS-PS2A	9/7/2021	LP2A210907M	0.0314		1.67 D		0.000981 U		12.2		1.32		
LS-PS4	7/8/2021	LP4-210708I	0.00741	0.84	2.99	0.000993 U	0.000983 U	18.4	18.6	0.899	0.923	0.0001 U	
LS-PS4	8/5/2021	LP4-210805I	0.00549	1.18	2.5	0.000993 U	0.00101 U	13.7	13.7	0.899	0.856	0.0001 U	
LS-PS4	9/9/2021	LP4-210909I	0.00698	1.06	3.88 D	0.000972 U	0.00097 U	25	24.8	0.905	0.91	0.0001 U	
LS-V1A	7/7/2021	LV1A210707M	0.00861	2.9	4.33	0.001 U	0.00152	57.1	59.2	0.614	0.626	0.0001 U	
LS-V1A	8/4/2021	LV1A210804M	0.039	4.77	69.6	0.001 U	0.0079	72	80.8	0.624	3.63	0.0001 U	
LS-V1A	9/8/2021	LV1A210908M	0.0175	4.96	15.4 D	0.000994 U	0.00543	105	267	0.0351	0.961	0.0001 U	

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Mercury	Nickel	Nickel	Potassium	Potassium	Selenium	Selenium	Silver	Silver	Sodium
			Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l	Total mg/l	Dissolved mg/l
LS-LEPS	9/22/2021	LEPS210922M		0.311		874		0.00856		0.000397 U		2420
LS-A567	7/8/2021	L567210708I	0.0001 U	0.235	0.268	797	814	0.00495 U	0.005 U	0.000396 U	0.0004 U	2640
LS-A567	8/5/2021	L567210805I	0.0001 U	0.285 D	0.275	825	826	0.00497 U	0.00517 U	0.000397 U	0.000413 U	2750 D
LS-A567	9/9/2021	L567210909I	0.0001 U	0.281	0.291 D	860	849	0.00491 U	0.0049 U	0.000393 U	0.000392 U	2690 D
LS-A81	7/8/2021	LA81210708I	0.0001 U	0.272	0.348	847	821	0.00964	0.0123	0.000399 U	0.000399 U	1720
LS-A81	8/5/2021	LA81210805I	0.0001 U	0.43 D	0.441	1210 D	1160 D	0.0144	0.0161	0.000397 U	0.0004 U	3100 D
LS-A81	9/9/2021	LA81210909I	0.00016		0.777 D		1200		0.0224		0.000381 U	
LS-LEPS	7/7/2021	LEPS210707M		0.11		356		0.00498 U		0.000399 U		1010
LS-LEPS	7/7/2021	LEPS210707P	0.0001 U		0.114		349		0.00495 U		0.000396 U	
LS-LEPS	7/13/2021	LEPS210713P	0.0001 U		0.114		365		0.00498 U		0.000399 U	
LS-LEPS	7/23/2021	LEPS210723P	0.0001 U		0.126 D		380		0.00494 U		0.000395 U	
LS-LEPS	7/29/2021	LEPS210729P	0.0001 U		0.127		375		0.00499 U		0.000399 U	
LS-LEPS	8/4/2021	LEPS210804M		0.138 D		411		0.00503 U		0.000402 U		1170
LS-LEPS	8/4/2021	LEPS210804P	0.0001 U		0.127		393		0.005 U		0.0004 U	
LS-LEPS	8/10/2021	LEPS210810P	0.0005 U		0.136		407		0.00498 U		0.000398 U	
LS-LEPS	8/31/2021	LEPS210831P	0.0001 U		0.142		478		0.00501 U		0.000401 U	
LS-LEPS	9/14/2021	LEPS210914P	0.0001 U		0.172		542		0.00513 U		0.00041 U	
LS-LEPS	9/22/2021	LEPS210922P	0.0001 U		0.184 D		546		0.00486 U		0.000389 U	
LS-LEPS	9/28/2021	LEPS210928P	0.0001 U		0.184		547		0.00503 U		0.000403 U	
LS-MH46N	7/7/2021	L46N210707M	0.0001 U		0.133		351		0.00502 U		0.000402 U	
LS-MH46N	8/4/2021	L46N210804M	0.0001 U		0.141		353		0.00504 U		0.000403 U	
LS-MH46N	9/7/2021	L46N210907M	0.0001 U		0.151 D		387		0.00495 U		0.000396 U	
LS-PS1A	7/8/2021	LP1A210708I	0.0001 U	0.0244	0.0241	57.8	58.3	0.00503 U	0.00504 U	0.000402 U	0.000403 U	220
LS-PS1A	8/5/2021	LP1A210805I	0.0001 U	0.0671 D	0.0685	167	167	0.00503 U	0.00512 U	0.000402 U	0.00041 U	616
LS-PS1A	9/9/2021	LP1A210909I	0.0001 U	0.118	0.12 D	309	304	0.00488 U	0.00482 U	0.000391 U	0.000386 U	1160
LS-PS2A	7/7/2021	LP2A210707M	0.0001 U		0.0181		5.82		0.00496 U		0.000397 U	
LS-PS2A	8/4/2021	LP2A210804M	0.0001 U		0.0451		27.4		0.00504 U		0.000403 U	
LS-PS2A	9/7/2021	LP2A210907M	0.0001 U		0.0481 D		72.9		0.00491 U		0.000392 U	
LS-PS4	7/8/2021	LP4-210708I	0.0001 U	0.00986	0.0108	24	24.4	0.00496 U	0.00491 U	0.000397 U	0.000393 U	86.2
LS-PS4	8/5/2021	LP4-210805I	0.0001 U	0.0127 D	0.0147	28.7	27.7	0.00497 U	0.00506 U	0.000397 U	0.000405 U	103
LS-PS4	9/9/2021	LP4-210909I	0.0001 U	0.0143	0.0137 D	38.8	38.3	0.00486 U	0.00485 U	0.000389 U	0.000388 U	131
LS-V1A	7/7/2021	LV1A210707M	0.0001 U	0.117	0.124	460	464	0.00501 U	0.00502 U	0.000401 U	0.000402 U	1370
LS-V1A	8/4/2021	LV1A210804M	0.000154	0.178 D	0.199	642	639	0.00501 U	0.00497	0.000401 U	0.000397 U	1850
LS-V1A	9/8/2021	LV1A210908M	0.000111	0.191	0.346 D	579	878	0.00497 U	0.0123	0.000398 U	0.000393 U	1660

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill --- Leachate Metal Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Sodium	Thallium	Thallium	Tin	Tin	Vanadium	Vanadium	Zinc	Zinc
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
LS-LEPS	9/22/2021	LEPS210922M		0.000745 U		0.0221		0.229		0.411	
LS-A567	7/8/2021	L567210708I	2650	0.000742 U	0.000749 U	0.032	0.0438	0.163	0.172	0.0997	0.203
LS-A567	8/5/2021	L567210805I	2790 D	0.000745 U	0.000775 U	0.041	0.0369	0.162	0.17	0.0686	0.14
LS-A567	9/9/2021	L567210909I	2880	0.000736 U	0.000735 U	0.0341	0.0348	0.176	0.177	0.0345	0.128
LS-A81	7/8/2021	LA81210708I	1650	0.000748 U	0.000749 U	0.00499 U	0.0128	0.0559	0.073	0.0151	2.88
LS-A81	8/5/2021	LA81210805I	2950 D	0.000743 U	0.000749 U	0.00874	0.0242	0.109	0.117	0.2	4.21
LS-A81	9/9/2021	LA81210909I	2980		0.000715 U		0.0415		0.188		10.8
LS-LEPS	7/7/2021	LEPS210707M		0.000748 U		0.00933		0.0371		0.0481	
LS-LEPS	7/7/2021	LEPS210707P	1010		0.000742 U		0.00867		0.0375		0.229
LS-LEPS	7/13/2021	LEPS210713P	991		0.000747 U		0.00949		0.0383		0.166
LS-LEPS	7/23/2021	LEPS210723P	1060		0.00074 U		0.0085		0.0405		0.137
LS-LEPS	7/29/2021	LEPS210729P	1060		0.000748 U		0.00944		0.0416		0.151
LS-LEPS	8/4/2021	LEPS210804M		0.000754 U		0.0106		0.0453		0.0963	
LS-LEPS	8/4/2021	LEPS210804P	1170		0.00075 U		0.0109		0.0441		0.161
LS-LEPS	8/10/2021	LEPS210810P	1200		0.000747 U		0.0133		0.0444 D		0.147
LS-LEPS	8/31/2021	LEPS210831P	1330		0.000752 U		0.0104		0.0576		0.246
LS-LEPS	9/14/2021	LEPS210914P	1540		0.000769 U		0.0127		0.0796		0.398
LS-LEPS	9/22/2021	LEPS210922P	1540		0.000729 U		0.0127		0.0855		0.499
LS-LEPS	9/28/2021	LEPS210928P	1500		0.000755 U		0.0104		0.0835		0.438
LS-MH46N	7/7/2021	L46N210707M	1210		0.000753 U		0.00502 U		0.138		0.0108
LS-MH46N	8/4/2021	L46N210804M	1270		0.000757 U		0.00504 U		0.139		0.00798
LS-MH46N	9/7/2021	L46N210907M	1330		0.000742 U		0.00495 U		0.149		0.00495 U
LS-PS1A	7/8/2021	LP1A210708I	225	0.000755 U	0.000755 U	0.00503 U	0.00504 U	0.0159	0.0162	0.0163	0.0195
LS-PS1A	8/5/2021	LP1A210805I	655	0.000754 U	0.000768 U	0.00503 U	0.00512 U	0.052	0.0554	0.0471	0.0579
LS-PS1A	9/9/2021	LP1A210909I	1180	0.000733 U	0.000724 U	0.00488 U	0.00482 U	0.0824	0.081	0.0282	0.0319
LS-PS2A	7/7/2021	LP2A210707M	16.9		0.000744 U		0.00496 U		0.000759		0.234
LS-PS2A	8/4/2021	LP2A210804M	105		0.000756 U		0.00504 U		0.00287		0.318
LS-PS2A	9/7/2021	LP2A210907M	212		0.000736 U		0.00491 U		0.00167		0.142
LS-PS4	7/8/2021	LP4-210708I	85.4	0.000745 U	0.000737 U	0.00496 U	0.00491 U	0.00377	0.00522	0.0138	0.0347
LS-PS4	8/5/2021	LP4-210805I	104	0.000745 U	0.000758 U	0.00497 U	0.00506 U	0.00518	0.00577	0.0211	0.0424
LS-PS4	9/9/2021	LP4-210909I	127	0.000729 U	0.000728 U	0.00527	0.0055	0.00566	0.00697	0.0196	0.0828
LS-V1A	7/7/2021	LV1A210707M	1410	0.000751 U	0.000753 U	0.0214	0.022	0.0581	0.0602	0.0412	0.0868
LS-V1A	8/4/2021	LV1A210804M	1890	0.000751 U	0.000744 U	0.0292	0.0275	0.075	0.0963	0.0536	0.925
LS-V1A	9/8/2021	LV1A210908M	2590	0.000746 U	0.000737 U	0.0145	0.0272	0.0863	0.242	0.0502	1.78

Environmental Monitoring Data

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 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,1,1,2-	1,1,1-	1,1,2,2-	1,1,2-	1,1-	1,1-	1,1-	1,2,3-
			Tetrachloroethane	Trichloroethane	Tetrachloroethane	Trichloroethane	Dichloroethane	Dichloroethene	Dichloropropene	Trichloropropane
			630-20-6	71-55-6	79-34-5	79-00-5	75-34-3	75-35-4	563-58-6	96-18-4
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
LS-LEPS	LEPS210922M	9/22/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-LEPS	LEPS210707M	7/7/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-LEPS	LEPS210804M	8/4/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-MH46N	L46N210707M	7/7/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-MH46N	L46N210804M	8/4/2021	12.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
LS-MH46N	L46N210907M	9/7/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-PS2A	LP2A210707M	7/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A210804M	8/4/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A210907M	9/7/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-V1A	LV1A210707M	7/7/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
LS-V1A	LV1A210804M	8/4/2021	2.5 U	1 U	1 U	1 U	1 U	2.73	1 U	1 U
LS-V1A	LV1A210908M	9/8/2021	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	1,2-Dibromo-3-Chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone
			96-12-8 (ug/L)	106-93-4 (ug/L)	95-50-1 (ug/L)	107-06-2 (ug/L)	78-87-5 (ug/L)	541-73-1 (ug/L)	142-28-9 (ug/L)	106-46-7 (ug/L)	594-20-7 (ug/L)	78-93-3 (ug/L)
LS-LEPS	LEPS210922M	9/22/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	963 D
LS-LEPS	LEPS210707M	7/7/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5 U
LS-LEPS	LEPS210804M	8/4/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	17.7
LS-MH46N	L46N210707M	7/7/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	6.78	1 U	2.5 U
LS-MH46N	L46N210804M	8/4/2021	125 U	5 U	5 U	5 U	5 U	5 U	5 U	6.58 JT	5 U	51.4
LS-MH46N	L46N210907M	9/7/2021	25 U	1 U	2.24	1 U	1 U	1 U	1 U	9.19	1 U	13.5
LS-PS2A	LP2A210707M	7/7/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 U
LS-PS2A	LP2A210804M	8/4/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.207	0.1 U	0.25 U
LS-PS2A	LP2A210907M	9/7/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.317	0.1 U	0.754
LS-V1A	LV1A210707M	7/7/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3950 D
LS-V1A	LV1A210804M	8/4/2021	25 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3 JT	1 U	4320 D
LS-V1A	LV1A210908M	9/8/2021	25 U	1 U	1 U	1.32 JT	1 U	1 U	1 U	1 U	1 U	25700 D
VOA TRIP BLANK	VTRP210712X	7/9/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	2.5 U	0.1 U	0.1 U	0.1 U	0.1 U			0.1 U		1 U

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Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	2-Hexanone	2-Methyl-1-Propanol	3-Chloropropene	4-Methyl-2-Pentanone	Acetone	Acetonitrile	Acrolein	Acrylonitrile	Benzene
			591-78-6 (ug/L)	78-83-1 (ug/L)	107-05-1 (ug/L)	108-10-1 (ug/L)	67-64-1 (ug/L)	75-05-8 (ug/L)	107-02-8 (ug/L)	107-13-1 (ug/L)	71-43-2 (ug/L)
LS-LEPS	LEPS210922M	9/22/2021	5 U	50 U	1 U	25 U	1480 D	50 U	25 U	0.35 U	1 U
LS-LEPS	LEPS210707M	7/7/2021	5 U	50 U	1 U	25 U	112	50 U	25 U	0.35 U	1 U
LS-LEPS	LEPS210804M	8/4/2021	5 U	50 U	1 U	25 U	147	50 U	25 U	0.35 U	1 U
LS-MH46N	L46N210707M	7/7/2021	5 U	50 U	1 U	25 U	51.9	50 U	25 U	0.35 U	2.97
LS-MH46N	L46N210804M	8/4/2021	25 U	250 U	5 U	125 U	543	250 U	125 U	1.75 U	5 U
LS-MH46N	L46N210907M	9/7/2021	5 U	50 U	1 U	25 U	49.4 JT	50 U	25 U	0.35 U	4.03
LS-PS2A	LP2A210707M	7/7/2021	0.5 U	5 U	0.1 U	2.5 U	2.5 U	5 U	2.5 U	0.035 U	0.1 U
LS-PS2A	LP2A210804M	8/4/2021	0.5 U	5 U	0.1 U	2.5 U	4.91 JT	5 U	2.5 U	0.035 U	0.1 U
LS-PS2A	LP2A210907M	9/7/2021	0.5 U	5 U	0.1 U	2.5 U	6.5	5 U	2.5 U	0.035 U	0.1 U
LS-V1A	LV1A210707M	7/7/2021	14.9	91.5 JT	1 U	57.3	6400 D	83.2 JT	25 U	0.35 U	1 U
LS-V1A	LV1A210804M	8/4/2021	19.4	111	1 U	61.9	7330 D	86.2 JT	25 U	0.35 U	1 U
LS-V1A	LV1A210908M	9/8/2021	40.6	50 U	1 U	275	28800 D	50 U	25 U	0.35 U	1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.5 U			2.5 U	2.5 U			0.035 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.5 U			2.5 U	2.5 U			0.035 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.5 U			2.5 U	2.9 JT			0.035 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.5 U			2.5 U	2.5 U			0.035 U	0.1 U

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Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Bromochloromet	Bromodichlorom	Bromoform	Bromomethane	Carbon	Carbon	Chlorobenzene	Chlorodibromome	Chloroethane
			thane	ethane			Disulfide	Tetrachloride		thane	
			74-97-5	75-27-4	75-25-2	74-83-9	75-15-0	56-23-5	108-90-7	124-48-1	75-00-3
			(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
LS-LEPS	LEPS210922M	9/22/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-LEPS	LEPS210707M	7/7/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-LEPS	LEPS210804M	8/4/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-MH46N	L46N210707M	7/7/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-MH46N	L46N210804M	8/4/2021	5 U	12.5 U	25 U	5 GU	5 U	12.5 U	5 U	25 U	5 U
LS-MH46N	L46N210907M	9/7/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	2.19	5 U	1 U
LS-PS2A	LP2A210707M	7/7/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
LS-PS2A	LP2A210804M	8/4/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
LS-PS2A	LP2A210907M	9/7/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
LS-V1A	LV1A210707M	7/7/2021	1 U	2.5 U	5 U	1 U	1 U	2.5 U	1 U	5 U	1 U
LS-V1A	LV1A210804M	8/4/2021	1 U	2.5 U	5 U	1 U	1.39 JT	2.5 U	1 U	5 U	1 U
LS-V1A	LV1A210908M	9/8/2021	1 U	2.5 U	5 U	1 U	1.33 JT	2.5 U	1 U	5 U	1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U	0.25 U	0.5 U	0.1 U	0.1 U	0.25 U	0.1 U	0.5 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Chloroform	Chloromethane	Chloroprene	Cis-1,2-Dichloroethene	Cis-1,3-Dichloropropene	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	M & P Xylene
			67-66-3 (ug/L)	74-87-3 (ug/L)	126-99-8 (ug/L)	156-59-2 (ug/L)	10061-01-5 (ug/L)	74-95-3 (ug/L)	75-71-8 (ug/L)	100-41-4 (ug/L)	MPX (ug/L)
LS-LEPS	LEPS210922M	9/22/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-LEPS	LEPS210707M	7/7/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-LEPS	LEPS210804M	8/4/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-MH46N	L46N210707M	7/7/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	27.4	23.8
LS-MH46N	L46N210804M	8/4/2021	5 U	12.5 U	5 U	5 U	12.5 U	5 U	5 U	29.1	25.1
LS-MH46N	L46N210907M	9/7/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	41.5	34.9
LS-PS2A	LP2A210707M	7/7/2021	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A210804M	8/4/2021	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-PS2A	LP2A210907M	9/7/2021	0.1 U	0.25 U	0.1 U	0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
LS-V1A	LV1A210707M	7/7/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-V1A	LV1A210804M	8/4/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1 U	1 U
LS-V1A	LV1A210908M	9/8/2021	1 U	2.5 U	1 U	1 U	2.5 U	1 U	1 U	1.59 JT	3.01
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U	0.25 U		0.1 U	0.25 U	0.1 U	0.1 U	0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Methyl Iodide	Methyl Methacrylate	Methylacrylonitrile	Methylene Chloride	O-Xylene	Propionitrile	Styrene	Tetrachloroethene
			74-88-4 (ug/L)	80-62-6 (ug/L)	126-98-7 (ug/L)	75-09-2 (ug/L)	95-47-6 (ug/L)	107-12-0 (ug/L)	100-42-5 (ug/L)	127-18-4 (ug/L)
LS-LEPS	LEPS210922M	9/22/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-LEPS	LEPS210707M	7/7/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-LEPS	LEPS210804M	8/4/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-MH46N	L46N210707M	7/7/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-MH46N	L46N210804M	8/4/2021	5 U	12.5 U	5 U	125 U	5 U	25 U	5 U	5 U
LS-MH46N	L46N210907M	9/7/2021	1 U	2.5 U	1 U	25 U	3.37	5 U	1 U	1 U
LS-PS2A	LP2A210707M	7/7/2021	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
LS-PS2A	LP2A210804M	8/4/2021	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
LS-PS2A	LP2A210907M	9/7/2021	0.1 U	0.25 U	0.1 U	2.5 U	0.1 U	0.5 U	0.1 U	0.1 U
LS-V1A	LV1A210707M	7/7/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-V1A	LV1A210804M	8/4/2021	1 U	2.5 U	1 U	25 U	1 U	5 U	1 U	1 U
LS-V1A	LV1A210908M	9/8/2021	1 U	2.5 U	1 U	25 U	2.09	5 U	1 U	1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U			2.5 U	0.1 U		0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U			2.5 U	0.1 U		0.1 U	0.1 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U			2.5 U	0.1 U		0.1 U	0.1 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U			2.5 U	0.1 U		0.1 U	0.1 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate VOAs Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Site	Date	Sample ID	Toluene 108-88-3 (ug/L)	Trans-1,2- Dichloroethene 156-60-5 (ug/L)	Trans-1,3- Dichloropropene 10061-02-6 (ug/L)	Trans-1,4-Dichloro- 2-Butene 110-57-6 (ug/L)	Trichloroethene 79-01-6 (ug/L)	Trichlorofluoromethane 75-69-4 (ug/L)	Vinyl Acetate 108-05-4 (ug/L)	Vinyl Chloride 75-01-4 (ug/L)
LS-LEPS	LEPS210922M	9/22/2021	2.38	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-LEPS	LEPS210707M	7/7/2021	1 U	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-LEPS	LEPS210804M	8/4/2021	6.57	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-MH46N	L46N210707M	7/7/2021	2.52	1 U	5 U	5 U	1 U	1 U	1 U	1.99
LS-MH46N	L46N210804M	8/4/2021	5 U	5 U	25 U	25 U	5 U	5 U	5 U	1.39
LS-MH46N	L46N210907M	9/7/2021	6.04	1 U	5 U	5 U	1 U	1 U	1 U	1.75
LS-PS2A	LP2A210707M	7/7/2021	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
LS-PS2A	LP2A210804M	8/4/2021	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
LS-PS2A	LP2A210907M	9/7/2021	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.1 U	0.1 U	0.01 U
LS-V1A	LV1A210707M	7/7/2021	3.33	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-V1A	LV1A210804M	8/4/2021	3.52	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
LS-V1A	LV1A210908M	9/8/2021	40	1 U	5 U	5 U	1 U	1 U	1 U	0.1 U
VOA TRIP BLANK	VTRP210712X	7/9/2021	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP210712Y	7/9/2021	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP210712Z	7/9/2021	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U
VOA TRIP BLANK	VTRP210728X	7/20/2021	0.1 U	0.1 U	0.5 U	5 U	0.1 U	0.1 U	0.1 U	0.01 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate PCB Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Chemical_Name			2,4,5-T	2,4,5-Tp Silvex	2,4-D	4,4'ddd	4,4'dde	4,4'ddt	Aldrin	Alpha Bhc	Alpha Chlordane	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242
Site	Date	CAS_RN	93-76-5	93-72-1	94-75-7	72-54-8	72-55-9	50-29-3	309-00-2	319-84-6	5103-71-9	12674-11-2	11104-28-2	11141-16-5	53469-21-9
		Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS210922M	9/22/2021	0.5 U	1 U	1.76	0.05 GU	0.05 GU	0.05 GU	0.05 GU	0.05 U	0.05 GU	0.1 GU	0.1 GU	0.1 GU	0.1 GU
LS-LEPS	LEPS210707M	7/7/2021	0.5 U	4 U	1.55 J	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.1 GU	0.125 U	0.125 U	0.125 U	0.125 U
LS-LEPS	LEPS210804M	8/4/2021	0.5 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 GU	0.025 U	0.025 U	0.025 U	0.0478
LS-MH46N	L46N210707M	7/7/2021	0.5 U	0.9	2.5 U	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.1 GU	0.025 U	0.0578 J	0.025 U	0.12
LS-MH46N	L46N210804M	8/4/2021	0.5 U	1 U	4 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 GU	0.025 U	0.0593 J	0.025 U	0.139
LS-PS2A	LP2A210707M	7/7/2021	0.5 U	0.5 U	1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-PS2A	LP2A210804M	8/4/2021	0.5 U	0.5 U	1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U
LS-V1A	LV1A210707M	7/7/2021	0.5 U	5 U	2.57	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.1 GU	0.025 U	0.025 U	0.025 U	0.202
LS-V1A	LV1A210804M	8/4/2021	0.5 U	1 U	2.03	0.125 U	0.125 U	0.125 U	0.125 U	0.125 U	0.125 GU	0.05 U	0.05 U	0.05 U	0.432

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate PCB Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

Chemical_Name			Aroclor 1248	Aroclor 1254	Aroclor 1260	Beta Bhc	Delta Bhc	Dieldrin	Dinoseb	Endosulfan I	Endosulfan li	Endosulfan Sulfate	Endrin
CAS_RN			12672-29-6	11097-69-1	11096-82-5	319-85-7	319-86-8	60-57-1	88-85-7	959-98-8	33213-65-9	1031-07-8	72-20-8
Site	Date	Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS210922M	9/22/2021	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.05 U	0.05 GU	1 U	0.05 U	0.05 U	0.05 GU	0.05 GU
LS-LEPS	LEPS210707M	7/7/2021	0.125 U	0.125 U	0.125 GU	0.1 GU	0.1 GU	0.1 GU	0.5 U	0.2 U	0.1 U	0.1 U	0.1 GU
LS-LEPS	LEPS210804M	8/4/2021	0.025 U	0.025 U	0.025 U	0.1 JU	0.1 U	0.1 U	1.5 U	0.1 U	0.1 U	0.1 GU	0.1 U
LS-MH46N	L46N210707M	7/7/2021	0.025 U	0.025 U	0.025 U	0.1 GU	0.1 GU	0.1 GU	0.5 U	0.1 U	0.1 U	0.1 U	0.1 GU
LS-MH46N	L46N210804M	8/4/2021	0.025 U	0.025 U	0.025 U	0.05 JU	0.025 U	0.025 U	0.5 U	0.025 U	0.025 U	0.025 GU	0.025 U
LS-PS2A	LP2A210707M	7/7/2021	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	0.01 U
LS-PS2A	LP2A210804M	8/4/2021	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.5 U	0.01 U	0.01 U	0.01 U	0.01 U
LS-V1A	LV1A210707M	7/7/2021	0.025 U	0.0646	0.025 U	0.1 GU	0.1 GU	0.1 GU	0.5 U	0.1 U	0.1 U	0.1 U	0.1 GU
LS-V1A	LV1A210804M	8/4/2021	0.05 U	0.184	0.05 U	0.75 JU	0.125 U	0.125 U	0.5 U	0.125 U	0.125 U	0.125 GU	0.125 U

See Data Qualifier List for Qualifier Information.

Environmental Monitoring Data

Data Collected from July 01, 2021 to September 30, 2021
 Cedar Hills Landfill ---Leachate PCB Analytical Data
 Contact Person: Natalya Usova (206) 263-0608

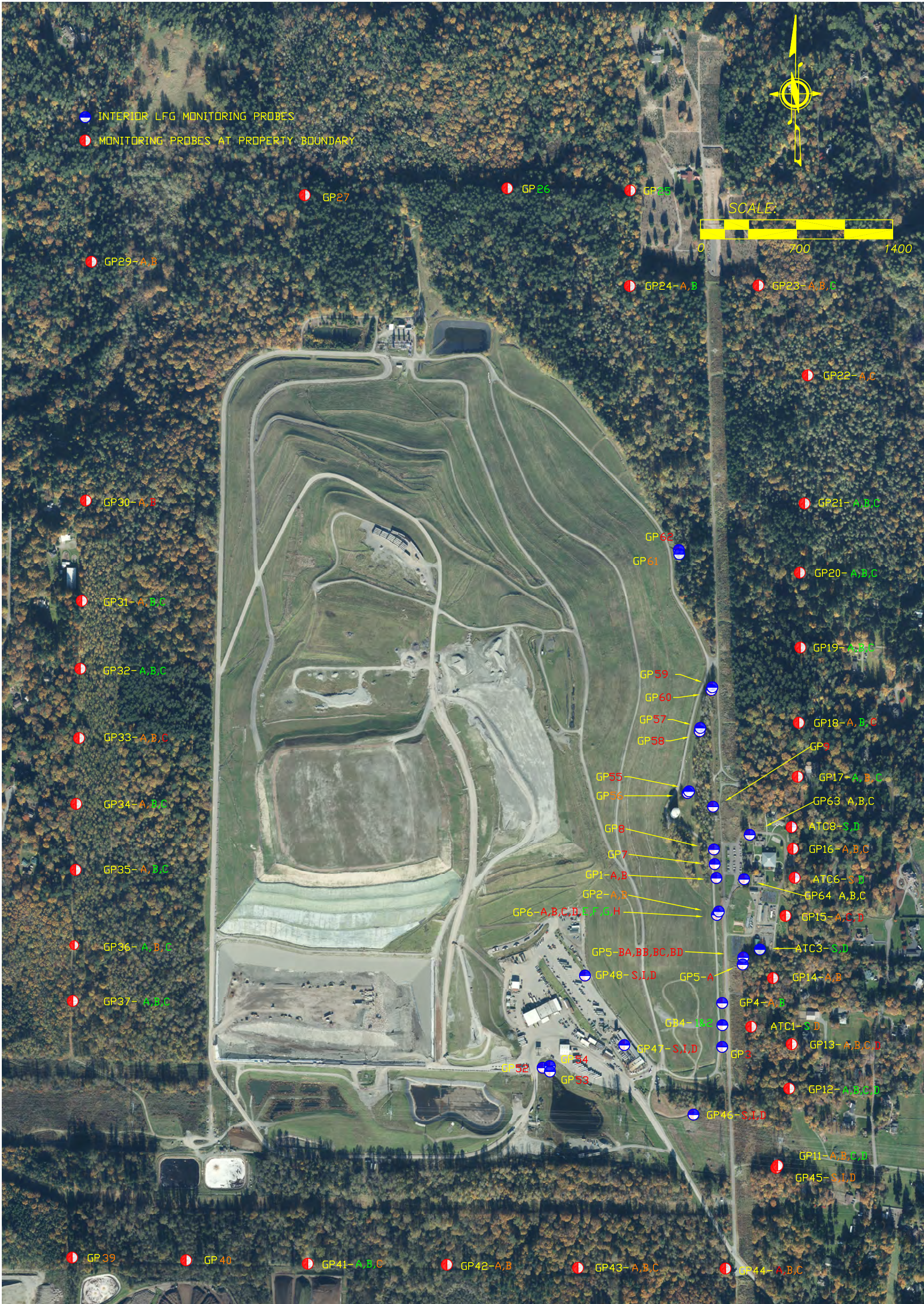
Site	Date	Chemical_Name	Endrin Aldehyde	Heptachlor	Heptachlor Epoxide	Isodrin	Lindane(Gamma Bhc)	Methoxychlor	Total Aroclors	Toxaphene	Trans-Chlordane
		CAS_RN	7421-93-4	76-44-8	1024-57-3	465-73-6	58-89-9	72-43-5	T_AROCLOR	8001-35-2	5103-74-2
		Sample ID	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
LS-LEPS	LEPS210922M	9/22/2021	0.05 GU	0.05 GU	0.05 GU	0.05 GU	0.05 U	0.25 GU	0.1 U	5 U	0.05 GU
LS-LEPS	LEPS210707M	7/7/2021	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.5 U	0.125 U	10 U	0.1 GU
LS-LEPS	LEPS210804M	8/4/2021	0.1 GU	0.1 U	0.1 U	0.1 GU	0.1 U	0.5 U	0.0478	10 U	0.1 GU
LS-MH46N	L46N210707M	7/7/2021	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.5 U	0.1778	10 U	0.1 GU
LS-MH46N	L46N210804M	8/4/2021	0.025 GU	0.025 U	0.025 U	0.025 GU	0.025 U	0.125 U	0.1983	2.5 U	0.025 GU
LS-PS2A	LP2A210707M	7/7/2021	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.025 U	1 U	0.01 U
LS-PS2A	LP2A210804M	8/4/2021	0.01 GU	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.025 U	1 U	0.01 U
LS-V1A	LV1A210707M	7/7/2021	0.1 GU	0.1 GU	0.1 GU	0.1 GU	0.1 U	0.5 U	0.2666	10 U	0.1 GU
LS-V1A	LV1A210804M	8/4/2021	0.125 GU	0.125 U	0.125 U	0.125 GU	0.125 U	0.625 U	0.616	12.5 U	0.125 GU

See Data Qualifier List for Qualifier Information.

Data Qualifiers

Landfill Gas Monitoring Data

Compliance Probes



CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

July 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-1D	7/11/2021 14:24	0.0	0.2	20.9	0.0	-0.02	
ATC-1S	7/11/2021 14:23	0.0	2.7	18.9	0.0	-0.02	
ATC-6D	7/12/2021 16:43	0.0	0.4	19.4	0.0	-0.13	
ATC-6S	7/12/2021 16:41	0.0	1.8	18.5	0.0	0.42	
ATC-8D	7/12/2021 16:32	0.0	2.5	17.9	0.0	0.23	
ATC-8S	7/12/2021 16:31	0.0	0.4	19.1	0.0	0	
GP-11A	7/11/2021 14:10	0.0	1.3	19.2	0	-0.02	
GP-11B	7/11/2021 14:11	0.0	0.2	21.0	0	0	
GP-11C	7/11/2021 14:13	0.0	0.2	21.0	0	0.03	
GP-11D	7/11/2021 14:15	0.0	0.2	21.0	0	0.04	
GP-12A	7/11/2021 14:31	0.0	0.8	19.8	0	0.01	
GP-12B	7/11/2021 14:33	0.0	0.1	20.7	0	-0.01	
GP-12C	7/11/2021 14:35	0.0	0.2	20.6	0	0	
GP-12D	7/11/2021 14:37	0.0	0.2	20.7	0	-0.02	
GP-13A	7/11/2021 14:40	0.0	2.1	19.2	0	0.04	
GP-13B	7/11/2021 14:42	0.0	0.2	20.8	0	-0.01	
GP-13C	7/11/2021 14:43	0.0	0.1	21.0	0	0.04	
GP-13D	7/11/2021 14:44	0.0	0.1	21.0	0	-0.64	
GP-14A	7/11/2021 14:51	0.0	0.1	21.0	0	-0.04	
GP-14B	7/11/2021 14:52	0.0	0.1	21.0	0	-0.06	
GP-15A	7/12/2021 16:15	0.0	0.2	19.4	0	0.04	
GP-15C	7/12/2021 16:17	0.0	0.8	16.1	0	0.13	
GP-15D	7/12/2021 16:18	0.0	0.2	19.5	0	-0.88	
GP-16A	7/12/2021 16:35	0.0	3.4	17.6	0	-0.01	
GP-16B	7/12/2021 16:37	0.0	0.2	19.6	0	-1.23	
GP-16C	7/12/2021 16:38	0.0	0.2	19.7	0	0.31	
GP-17A	7/11/2021 15:43	0.0	0.5	21.0	0	0.41	
GP-17B	7/11/2021 15:44	0.0	0.8	18.4	0	0.07	
GP-17C	7/11/2021 15:46	0.0	0.1	21.0	0	-0.02	
GP-18A	7/11/2021 15:50	0.0	2.7	16.9	0	0.09	
GP-18B	7/11/2021 15:51	0.0	0.3	17.2	0	0.07	
GP-18C	7/11/2021 15:52	0.0	0.2	21.0	0	-0.3	
GP-19A	7/11/2021 15:58	0.0	0.1	21.0	0	0.02	
GP-19B	7/11/2021 15:59	0.0	0.6	17.3	0	-0.02	
GP-19C	7/11/2021 16:00	0.0	0.1	21.0	0	0.36	
GP-20A	7/11/2021 16:13	0.0	1.4	19.7	0	0	
GP-20B	7/11/2021 16:14	0.0	0.3	19.6	0	-0.02	
GP-20C	7/11/2021 16:16	0.0	0.4	10.3	0	0	
GP-21A	7/11/2021 16:20	0.0	0.1	21.0	0	0	
GP-21B	7/11/2021 16:21	0.0	0.2	10.7	0	-0.03	
GP-21C	7/11/2021 16:22	0.0	0.1	21.0	0	-0.05	

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Compliance Probes

July 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-22A	7/11/2021 16:31	0.0	2.3	17.2	0	0	
GP-22C	7/11/2021 16:32	0.0	0.4	4.3	0	-0.11	
GP-23A	7/11/2021 16:39	0.0	0.1	21.0	0	0.01	
GP-23B	7/11/2021 16:40	0.0	0.1	21.0	0	-0.04	
GP-23C	7/11/2021 16:42	0.0	0.1	21.0	0	0	
GP-24A	7/11/2021 16:51	0.0	6.3	14.7	0	0	
GP-24B	7/11/2021 16:52	0.0	0.2	21.0	0	0.02	
GP-25	7/11/2021 16:55	0.0	3.5	18.1	0	0	
GP-26	7/11/2021 17:00	0.0	0.7	20.3	0	0.45	
GP-27	7/11/2021 17:13	0.0	10.4	9.3	0	-0.02	
GP-29A	7/11/2021 17:29	0.0	1.7	19.2	0	0	
GP-29B	7/11/2021 17:30	0.0	0.4	21.0	0	-0.07	
GP-30A	7/11/2021 9:10	0.0	2.4	19.3	0	-0.01	
GP-30B	7/11/2021 9:11	0.0	0.3	21.0	0	-0.44	
GP-31A	7/11/2021 9:16	0.0	9.2	10.8	0	0.02	
GP-31B	7/11/2021 9:17	0.0	0.3	19.3	0	-0.16	
GP-31C	7/11/2021 9:19	0.0	0.2	20.9	0	-0.02	
GP-32A	7/11/2021 9:25	0.0	0.2	21.0	0	-0.02	
GP-32B	7/11/2021 9:26	0.0	0.2	21.0	0	-0.02	
GP-32C	7/11/2021 9:27	0.0	0.2	21.0	0	-0.02	
GP-33A	7/11/2021 9:35	0.0	2.8	18.1	0	0.03	
GP-33B	7/11/2021 9:37	0.0	0.5	19.6	0	-0.02	
GP-33C	7/11/2021 9:38	0.0	0.2	21.0	0	-0.62	
GP-34A	7/11/2021 9:44	0.0	0.3	21.0	0	0.03	
GP-34B	7/11/2021 9:46	0.0	0.2	21.0	0	0.01	
GP-34C	7/11/2021 9:47	0.0	0.2	21.0	0	-1.07	
GP-35A	7/11/2021 10:03	0.0	9.1	7.5	0	0	
GP-35B	7/11/2021 10:05	0.0	0.2	21.0	0	-0.02	
GP-35C	7/11/2021 10:07	0.0	0.2	21.0	0	0.01	
GP-36A	7/11/2021 10:16	0.0	1.2	20.3	0	-0.47	
GP-36B	7/11/2021 10:17	0.0	3.2	16.7	0	-0.02	
GP-36C	7/11/2021 10:19	0.0	0.2	21.0	0	-0.05	
GP-37A	7/11/2021 10:26	0.0	0.2	21.0	0	0.04	
GP-37B	7/11/2021 10:27	0.0	0.2	21.0	0	0.04	
GP-37C	7/11/2021 10:29	0.0	0.2	20.2	0	-0.96	
GP-39	7/11/2021 10:46	0.0	2.3	19.0	0	0.06	
GP-40	7/11/2021 10:56	0.0	0.2	16.6	0	0.09	
GP-41A	7/11/2021 11:02	0.0	5.3	14.3	0	0.01	
GP-41B	7/11/2021 11:03	0.0	0.8	9.9	0	-0.01	
GP-41C	7/11/2021 11:05	0.0	0.2	20.9	0	0.01	
GP-42A	7/11/2021 11:13	0.0	0.2	20.6	0	-0.03	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Compliance Probes
July 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-42B	7/11/2021 11:14	0.0	0.8	18.2	0	0	
GP-43A	7/11/2021 11:23	0.0	0.1	20.8	0	0.05	
GP-43B	7/11/2021 11:25	0.0	0.1	20.9	0	0.06	
GP-43C	7/11/2021 11:26	0.0	0.1	21.0	0	0.11	
GP-44A	7/11/2021 11:33	2.5	8.4	4.9	50	0	
GP-44B	7/11/2021 11:35	0.0	0.4	20.2	0	0.1	
GP-44C	7/11/2021 11:36	0.0	0.1	21.0	0	0.01	
GP-45D	7/11/2021 14:08	0.0	0.1	21.0	0	0.27	
GP-45I	7/11/2021 14:06	0.0	0.1	21.0	0	-0.02	
GP-45S	7/11/2021 14:05	0.0	0.2	21.0	0	-0.02	

Interior Probes

CEDAR HILLS REGIONAL LANDFILL

Landfill Gas Interior Probes

July 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	7/12/2021 16:12	0.0	0.2	19.5	0	-0.03	
ATC-3S	7/12/2021 16:11	0.0	0.2	19.9	0	0.05	
GP-1A	7/9/2021 21:48	0.0	1.5	20.4	0	0.01	
GP-1B	7/9/2021 21:50	0.0	0.2	21.0	0	-0.01	
GP-2A	7/9/2021 22:08	0.0	8.4	13.1	0	1.08	
GP-2B	7/9/2021 22:10	0.0	0.2	21.0	0	0.02	
GP-3	7/9/2021 22:22	0.0	12.7	12.7	0	-0.03	
GP-46D	7/9/2021 22:29	0.0	0.2	21.0	0	-0.53	
GP-46I	7/9/2021 22:27	0.6	0.2	21.0	12	-0.54	
GP-46S	7/9/2021 22:25	0.0	0.2	21.0	0	0.79	
GP-47D	7/12/2021 16:58	0	0.9	17.5	0	0.07	
GP-47I	7/12/2021 16:57	19.3	16.1	0.9	>>>>	0.6	
GP-47S	7/12/2021 16:56	0.1	0.7	18.3	2	0.62	
GP-48D	7/9/2021 22:38	0.0	0.2	21.0	0	-0.69	
GP-48I	7/9/2021 22:36	0.0	0.3	21.0	0	-0.09	
GP-48S	7/9/2021 22:34	0.0	0.4	19.7	0	-0.02	
GP-4A	7/9/2021 22:14	0.0	10.3	14.3	0	-0.01	
GP-4B	7/9/2021 22:16	0.0	0.3	21.0	0	0.02	
GP-52	7/12/2021 17:06	0.0	3.8	14.0	0	0.08	
GP-53	7/12/2021 17:07	0.0	0.4	18.9	0	0.33	
GP-54	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
GP-55	7/9/2021 21:30	0.0	0.5	20.5	0	-0.01	
GP-56	7/9/2021 21:32	0.0	1.9	18.8	0	-0.03	
GP-57	7/9/2021 21:24	53.5	24.7	0.4	>>>>	-7.73	
GP-58	7/9/2021 21:27	0.6	26.1	0.0	12	0.03	
GP-59	7/9/2021 21:19	0.0	0.3	20.6	0	0.02	
GP-5A	7/11/2021 15:01	0.0	0.1	20.9	0	-1.68	
GP-5BA	7/11/2021 15:03	0.0	0.3	20.7	0	0.05	
GP-5BB	7/11/2021 15:04	0.0	0.1	21.0	0	-1.63	
GP-5BC	7/11/2021 15:07	0.0	0.2	20.9	0	-1.61	
GP-5BD	7/11/2021 15:08	0.0	0.2	20.9	0	-1.14	
GP-60	7/9/2021 21:21	0.0	0.2	20.7	0	0.06	
GP-61	7/9/2021 21:08	0.0	0.2	20.9	0	-0.05	
GP-62	7/9/2021 21:10	0.0	4.5	17.6	0	-0.01	
GP-63A	7/12/2021 16:23	0.0	0.4	19.3	0	0.02	
GP-63B	7/12/2021 16:26	0.0	0.3	19.0	0	-0.01	
GP-63C	7/12/2021 16:27	0.0	0.2	19.5	0	-0.07	
GP-64A	7/12/2021 16:46	0.0	0.5	19.2	0	0.09	
GP-64B	7/12/2021 16:48	0.0	0.9	17.3	0	0.04	
GP-64C	7/12/2021 16:49	0.0	0.2	19.3	0	-0.19	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
July 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-6A	7/9/2021 21:53	0.0	0.2	21.0	0	-0.95	
GP-6B	7/9/2021 21:54	0.0	0.2	21.0	0	-0.85	
GP-6C	7/9/2021 21:56	0.0	5.7	17.1	0	-0.97	
GP-6D	7/9/2021 21:57	0.0	0.2	21.0	0	-0.91	
GP-6E	7/9/2021 21:59	0.0	0.2	21.0	0	-0.81	
GP-6F	7/9/2021 22:01	0.0	0.2	21.0	0	-0.01	
GP-6G	7/9/2021 22:03	0.0	0.2	21.0	0	-0.87	
GP-6H	7/9/2021 22:05	0.0	0.2	21.0	0	-1.21	
GP-7	7/9/2021 21:37	0.0	0.2	21.0	0	-0.81	
GP-8	7/9/2021 21:35	0.0	0.2	20.9	0	-0.79	
GP-9	7/9/2021 21:15	0.0	0.3	20.7	0	-0.72	
GP-B4-1	7/9/2021 22:18	0.0	3.7	17.8	0	-1.17	
GP-B4-2	7/9/2021 22:20	0.0	0.2	21.0	0	-0.68	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
August 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	8/10/2021 11:34	0.0	0.1	20.7	0	0.01	
ATC-3S	8/10/2021 11:32	0.0	0.1	20.8	0	-0.07	
GP-1A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
GP-1B	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
GP-2A	8/31/2021 10:28	0.0	7.2	12.9	0.0	0.10	
GP-2B	8/31/2021 10:30	0.0	0.3	20.4	0.0	0.11	
GP-3	8/31/2021 10:16	0.0	14.1	8.4	0.0	0.12	
GP-46D	8/31/2021 10:13	0.0	0.3	20.5	0.0	-0.19	
GP-46I	8/31/2021 10:12	0.0	0.3	20.5	0.0	-0.34	
GP-46S	8/31/2021 10:11	0.0	0.4	20.0	0.0	0.01	
GP-47D	8/10/2021 7:14	0.0	0.5	19.4	0	0	
GP-47I	8/10/2021 7:13	19.8	12.7	5.5	>>>>	-0.66	
GP-47S	8/10/2021 7:11	0.0	0.0	20.4	0	-0.55	
GP-48D	8/31/2021 10:06	0.7	9.6	14.3	14.0	0.00	
GP-48I	8/31/2021 10:04	0.0	0.3	20.4	0.0	0.05	
GP-48S	8/31/2021 10:03	0.0	0.4	19.1	0.0	0.03	
GP-4A	8/31/2021 10:23	0.0	2.8	18.5	0.0	0.15	
GP-4B	8/31/2021 10:24	0.0	0.3	20.4	0.0	0.11	
GP-52	8/10/2021 7:02	0.0	4.5	12.5	0	0.02	
GP-53	8/10/2021 7:04	0.0	0.2	19.4	0	-0.14	
GP-54	8/10/2021 7:06	0.0	0.0	20.5	0	0	
GP-55	8/31/2021 10:56	0.0	0.4	20.8	0.0	0.12	
GP-56	8/31/2021 10:57	0.0	1.7	19.7	0.0	-0.02	
GP-57	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
GP-58	8/31/2021 11:00	0.0	12.9	10.7	0.0	0.11	
GP-59	8/31/2021 11:02	8.6	5.0	11.7	>>>>	0.03	
GP-5A	8/10/2021 11:21	0.0	0.0	20.9	0	-1.71	
GP-5BA	8/10/2021 11:23	0.0	0.1	20.8	0	0.11	
GP-5BB	8/10/2021 11:25	0.0	0.0	21.0	0	-1.69	
GP-5BC	8/10/2021 11:27	0.0	0.0	21.0	0	-1.72	
GP-5BD	8/10/2021 11:28	0.0	0.9	20.2	0	-1.38	
GP-60	8/31/2021 11:03	0.0	0.3	20.8	0.0	0.15	
GP-61	8/31/2021 11:10	0.0	2.2	19.8	0.0	0.13	
GP-62	8/31/2021 11:12	0.0	5.1	16.5	0.0	0.11	
GP-63A	8/10/2021 12:10	0.0	5.7	16.2	0.0	0.02	
GP-63B	8/10/2021 12:12	0.0	0.1	20.3	0.0	0.00	
GP-63C	8/10/2021 12:13	0.0	0.0	20.5	0.0	-0.76	
GP-64A	8/10/2021 11:46	0.0	8.4	4.0	0.0	-0.07	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
August 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-64B	8/10/2021 11:47	0.0	0.5	18.8	0.0	0.00	
GP-64C	8/10/2021 11:50	0	0.1	20.2	0	-0.7	
GP-6A	8/31/2021 10:32	0.0	0.3	20.2	0.0	-0.36	
GP-6B	8/31/2021 10:33	0.0	2.1	10.0	0.0	0.02	
GP-6C	8/31/2021 10:34	0.0	3.1	17.0	0.0	0.11	
GP-6D	8/10/2021 11:55	0.0	0.1	20.0	0.0	-0.04	
GP-6E	8/31/2021 10:37	0.0	0.3	20.6	0.0	0.03	
GP-6F	8/31/2021 10:38	0.0	0.2	20.7	0.0	0.00	
GP-6G	8/31/2021 10:39	0.0	0.2	20.8	0.0	0.10	
GP-6H	8/31/2021 10:40	0.0	1.3	16.6	0.0	-0.22	
GP-7	8/31/2021 10:50	0.0	0.5	19.9	0	-0.3	
GP-8	8/31/2021 10:52	0.0	0.2	21	0	0.15	
GP-9	8/31/2021 11:06	0.0	0.2	21	0	-0.29	
GP-B4-1	8/31/2021 10:19	0.0	2.9	17.9	0	-0.36	
GP-B4-2	8/31/2021 10:20	0.0	0.4	20.3	0	-0.11	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
September 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
ATC-3D	9/27/2021 15:11	0	0.3	20.3	0	-0.03	
ATC-3S	9/27/2021 15:09	0	0.3	19.4	0	-1.33	
GP-1A	9/9/2021 17:29	0.0	2.2	18.6	0	0	
GP-1B	9/9/2021 17:31	0.0	0.3	19.7	0	-0.03	
GP-2A	9/9/2021 17:50	0.0	7.4	11.7	0	0.05	
GP-2B	9/9/2021 17:52	0.0	0.2	19.9	0	-0.04	
GP-3	9/9/2021 18:04	0.0	16.0	5.8	0	0.92	
GP-46D	9/9/2021 18:10	0.0	0.1	20.5	0	0.84	
GP-46I	9/9/2021 18:08	0.0	0.1	20.4	0	0.6	
GP-46S	9/9/2021 18:06	0.0	0.1	19.7	0	-0.01	
GP-47D	9/27/2021 16:39	0.1	1.6	10.3	2	-0.02	
GP-47I	9/27/2021 16:38	25.1	19.5	0	>>>>	1.75	
GP-47S	9/27/2021 16:36	68.4	21.6	0.4	>>>>	1.93	
GP-48D	9/9/2021 18:18	4.2	24.5	0.2	84	1.18	
GP-48I	9/9/2021 18:16	0.0	0.1	20.4	0	0.04	
GP-48S	9/9/2021 18:14	0.0	0.3	18.7	0	0	
GP-4A	9/9/2021 17:59	0.0	8.2	13.0	0	0.02	
GP-4B	9/9/2021 18:01	0.0	0.1	20.3	0	0.02	
GP-52	9/27/2021 16:21	0	0.2	17.2	0	-0.05	
GP-53	9/27/2021 16:24	0	0.5	19	0	-0.02	
GP-54	9/27/2021 16:23	0	1.5	17.5	0	-0.03	
GP-55	9/9/2021 17:17	0.0	0.3	19.7	0	0.17	
GP-56	9/9/2021 17:19	0.0	1.7	18.6	0	-0.06	
GP-57	9/9/2021 17:12	52.1	25.4	0.3	>>>>	-5.3	
GP-58	9/9/2021 17:14	0.0	11.6	10.7	0	0	
GP-59	9/9/2021 17:08	24.0	10.2	0.1	>>>>	0.39	
GP-5A	9/27/2021 14:38	0	0.3	17.4	0	3.01	
GP-5BA	9/27/2021 14:40	0	0.2	19.4	0	0	
GP-5BB	9/27/2021 14:42	0	1.4	14.5	0	3.14	
GP-5BC	9/27/2021 14:43	0	0.9	13	0	3	
GP-5BD	9/27/2021 14:44	0	0.9	12.8	0	2.37	
GP-60	9/9/2021 17:10	0.0	0.2	19.7	0	0.06	
GP-61	9/9/2021 16:58	0.0	2.1	18.7	0	0.64	
GP-62	9/9/2021 17:00	0.0	5.0	16.8	0	0.01	
GP-63A	9/27/2021 15:25	0	3.8	17.9	0	-0.03	
GP-63B	9/27/2021 15:28	0	0.2	20.2	0	0.03	
GP-63C	9/27/2021 15:30	0	0.3	18.9	0	1.14	
GP-64A	9/27/2021 15:53	0	11.3	8.4	0	-0.07	
GP-64B	9/27/2021 15:55	0	5.5	12.3	0	-0.08	

CEDAR HILLS REGIONAL LANDFILL
Landfill Gas Interior Probes
September 2021 Monitoring Data

Location ID	Date/Time	CH4 (% Vol)	CO2 (% Vol)	O2 (% Vol)	Lower Explosive Limit (% LEL)	Static Pressure (in INWC)	Comments
GP-64C	9/27/2021 15:56	0.1	0.8	15	2	1.5	
GP-6A	9/9/2021 17:35	0.0	0.4	18.4	0	0.96	
GP-6B	9/9/2021 17:37	0.0	0.2	19.5	0	1.35	
GP-6C	9/9/2021 17:39	0.0	0.7	16.1	0	1.32	
GP-6D	9/9/2021 17:40	0.0	3.8	0.5	0	1.08	
GP-6E	9/9/2021 17:42	0.0	0.1	19.9	0	1.34	
GP-6F	9/9/2021 17:43	0.0	0.1	20.2	0	1.29	
GP-6G	9/9/2021 17:46	0.0	1.1	13.0	0	1.27	
GP-6H	9/9/2021 17:47	0.0	1.5	12.7	0	1.05	
GP-7	9/9/2021 17:27	0.0	0.4	18.7	0	0.93	
GP-8	9/9/2021 17:23	0.0	0.8	15.9	0	0.83	
GP-9	9/9/2021 17:04	0.0	0.2	20.1	0	1	
GP-B4-1	9/9/2021 17:55	0.0	3.7	15.9	0	0.84	
GP-B4-2	9/9/2021 17:57	0.0	2.0	18.3	0	1.03	

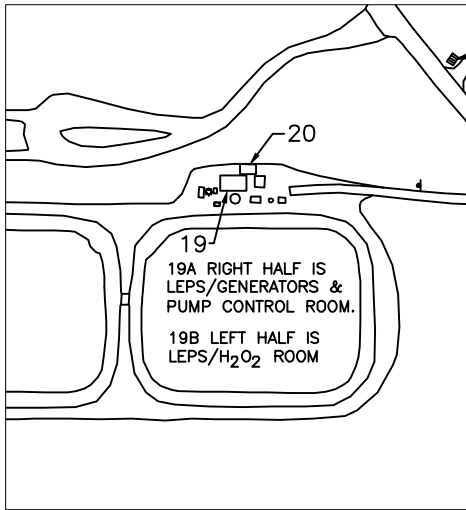
Migration Probes

CEDAR HILLS REGIONAL LANDFILL
West Perimeter Landfill Gas Migration Control Probes
Third Quarter 2021 Monitoring Data

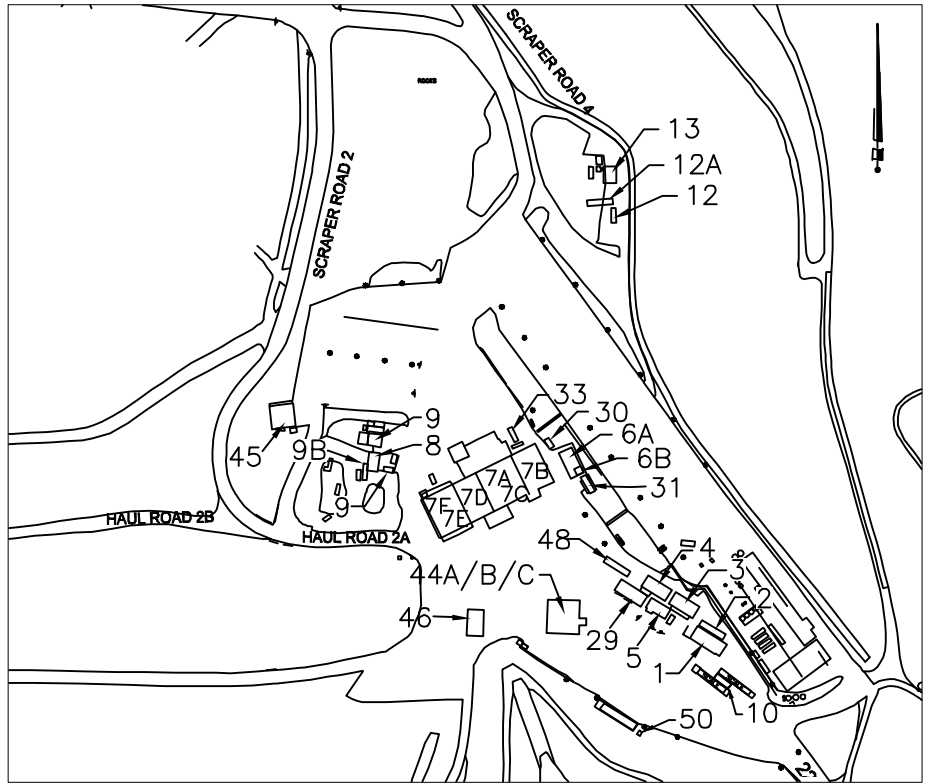
Probe ID	Date	Time	Barometric			Static		Comments
			Pressure in Hg	CH4 %vol	CO2 %vol	O2 %vol	Pressure in INWC	
MGPW 1700	7/3/2021		29.93	0	0.2	18.4	0.06	
MGPW 1700	8/2/2021	10:40am	30.03	0	0.1	20.3	-0.17	
MGPW 1700	9/8/2021	11:25am	29.95	0	0.1	19.7	-0.02	
MGPW 1708	7/3/2021		29.93	0	0.1	18.8	0.03	
MGPW 1708	8/2/2021	10:50am	30.03	0	0.2	19.7	-1.7	
MGPW 1708	9/8/2021	11:11am	29.95	0	0	20.2	-1.2	
MGPW 1710S	7/3/2021		29.93	0	0.2	19.1	-0.81	
MGPW 1710S	8/2/2021	10:58am	30.03	0	0.1	19.6	-1.66	
MGPW 1710S	9/8/2021	11:02am	29.95	0	0	20.1	-1.16	
MGPW 1710D	7/3/2021		29.93	0	0.2	19.2	-0.85	
MGPW 1710D	8/2/2021	10:56am	30.03	0	0.1	19.6	-1.64	
MGPW 1710D	9/8/2021	10:58am	29.95	0	0.1	19.6	-1.14	
MGPW 1714	7/3/2021		29.93	0	0.2	19.5	-0.9	
MGPW 1714	8/2/2021	11:02am	30.03	0	0.1	19.5	-1.55	
MGPW 1714	9/8/2021	10:50am	29.95	0	0.1	19.9	-1.18	

On-Site Building Monitoring

Aeration Ponds

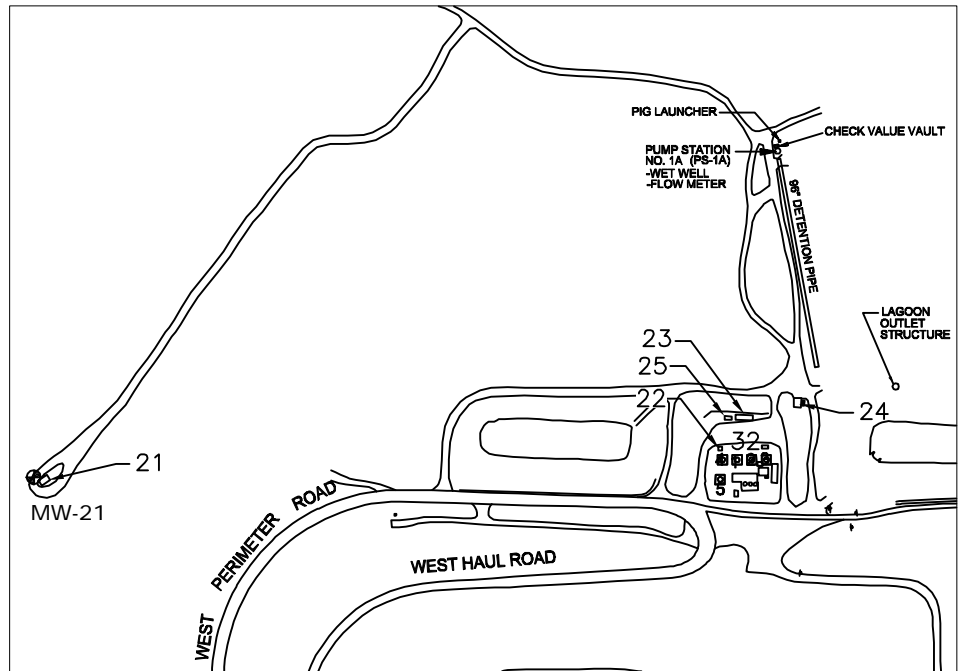


Shop and Office Buildings



BUILDING NO.	EO Description
1	Front Office
2	Conference Room
3	Vacant (Old Payroll Trailer)
4	Engineering Trailer
5	Lunch Room Trailer
6A	Dry Storage
6B	Electrician Office
7	Maintenance Shop
7A	Shop Office
7B	Stores—Shipping/Receiving
7C	Trailer Bay and Pit Area
7D	Tire Shop and Trailer Bay
7E	East Weld Shop
7F	West Weld Shop
8	Carpenter's Shop
9	Wastewater Shed
9B	Carpenter Storage
10	Scale House
11	New Eqpt. Operator's Trailer
12	EQ. Operator's Trailer (Old)
13	WW Compressor
16	Generator (Not Shown)
19	LEPS (P.S. #5)
19A	LEPS Pump Control Room
19B	LEPS/H ₂ O ₂ room
20	LEPS, Elec Panels
21	Storage (Old PS1)
22	Storage/N.Flare
23	LFGAS Office
24	NE Generator Bldg.
25	Storage BLDG. @ N.F.S.
29	OPS Administration Office
30	Women Brk Rm.
31	Landfill Leads/Accts Payable
32	North Flare Station
33	SPOC trailer
44A	Truck Wash West Restroom
44B	Truck Wash East Restroom
44C	Pressure Wash Room
45	Heavy Equipment Canopy
46	Fuel Island
48	Operations Planning
49	CCG Faster (Not Shown)
50	Chlorine Shed

North Flare Station



CEDAR HILLS REGIONAL LANDFILL BUILDING NUMBERS

Source: KCSWD, February 2012



King County Regional Landfill
Environmental Monitoring Report
3rd Quarter 2021

Landfill Gas Structure Monitoring Location

Environmental Monitoring Sampling and Analysis Plan
Cedar Hills Regional Landfill, King County, Washington

DATE:	February 2012
DESIGNED BY:	
DRAWN BY:	
REVISED BY:	

PROJECT NO.

FIGURE NO.

**THIRD QUARTER
BUILDING MONITORING**



King County

INSTRUMENT: Place check by instrument used :

WEATHER:

DATE: 07/14/21

Sunny SW 2mph

TECH: LD

SEM 500

×

ENVIS ID	BLDG #	DESCRIPTION	CH ₄ (ppm)	REMARKS	BAR PRESS (in. Hg)	TIME
GOC- 07/14/21	1	FRONT OFFICE				
GCR- 07/14/21	2	CONF ROOM			29.9	8:30 PM
GAO- 07/14/21	3	PAYROLL OFFICE				
GEO- 07/14/21	4	ENGR. OFFICE				
GLRC- 07/14/21	5	LUNCHROOM				
GSPC 07/14/21		SPOC				
GELO- 07/14/21	A 6A	DRY STORAGE				
GELO- 07/14/21	B 6B	ELECTRICIAN OFFICE				
GAP- 07/14/21		ACCOUNT PAYABLE				
GSO- 07/14/21	A 7A	SHOP OFFICE				
GPR- 07/14/21	B 7B	PARTS ROOM				
GMS- 07/14/21	C 7C	SHOP PIT AREA/BAY				
GTB- 07/14/21	D 7D	SHOP TIRE BAY				
GEW- 07/14/21	E 7E	EAST WELD SHOP				
GWV- 07/14/21	F 7F	WEST WELD SHOP				
GCS- 07/14/21	8	CARPENTER'S				
GSS- 07/14/21	9	WASTEWATER				
GSS- 07/14/21	B 9B	CARPENTER/STORAGE	N/A	BULD REMOVED		
GSH- 07/14/21	10	SCALEHOUSE				
GB13- 07/14/21	13	WW COMPRESSOR				
GB16- 07/14/21	16	GENERATOR				
GB19- 07/14/21	19	LEPS (P.S.# 5)				
GB19- 07/14/21	B 19B	LEPS/H2O2 ROOM	N/A	BULD REMOVED		
GB20- 07/14/21	20	LEPS ELEC PANALS				
GB21- 07/14/21	21	STORAGE(OLD PS 1)				
GB22- 07/14/21	22	STORAGE/N FLARE				
GB23- 07/14/21	23	LFGAS				
GB24- 07/14/21	24	NE GENERATOR BLDG				
GBWW-07/14/21	30	WOMEN BRK RM				
GPWT- 07/14/21	PW	PRESSURE WASH RM				
GBRR- 07/14/21	RR	TRUCKWASH RR W				
GBSS- 07/14/21	SS	TRUCKWASH RR E				
GBZZ- 07/14/21	29	MANAGERS TRAILER				
GBPT- 07/14/21		CCG FASTER				
GCLS- 07/14/21		CHLORINE SHED				

**KING COUNTY SOLID WASTE DIVISION
QUALIFIER INFORMATION**
(Effective 8/27/2015)

QUAL	QUALIFIER DESCRIPTION
U	Undetected; Analyte Concentration Less than Method Detection Limit (< MDL)
T	Estimated; Less than Reporting Detection Limit (<RDL) but Greater than Method Detection Limit (> MDL)
J	Reported Value is an Estimate
B	Matrix Target Analyte Present in Blank, AND, Sample Result Less than or Equal to 10x Blank Detection
C	Confluent Growth
E	Estimated; Outside Expected Accuracy
H	Exceeds Holding Time
R	Data Rejected
S	Sample Handling Errors
X	Too Numerous to Count
D	Re-analysis Due to Dilution
P	PASS – Qualitative Result Acceptable
F	FAIL – Qualitative Result is not Acceptable
G	Estimated with Low Bias (Coliform; BOD; All Other Chemistry Parameters)
L	Estimated with High Bias (BOD; All Other Chemistry Parameters)

APPENDIX C

Meteorological Data

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/1/2021 0:05	4.205	130.3	12.22	17.15	29.18	0
7/1/2021 0:28	4.009	120.3	8.62	17.21	29.18	0
7/1/2021 0:31	5.218	127.2	9.38	17.18	29.18	0
7/1/2021 0:52	5.262	121.8	7.744	17.16	29.17	0
7/1/2021 1:00	5.298	120.6	7.561	17.15	29.17	0
7/1/2021 1:22	5.031	130.6	9.95	17.13	29.17	0
7/1/2021 1:33	4.709	123.3	10.82	17.06	29.17	0
7/1/2021 1:57	4.19	125.8	10.49	17.04	29.16	0
7/1/2021 2:11	4.314	126.4	9.12	17.01	29.16	0
7/1/2021 2:27	3.965	132.3	6.577	16.97	29.16	0
7/1/2021 2:39	4.805	129.8	8.62	16.98	29.16	0
7/1/2021 2:52	4.599	134.2	8.33	17.01	29.15	0
7/1/2021 3:10	5.147	140.7	5.008	17	29.15	0
7/1/2021 3:21	4.419	137.2	5.407	17	29.15	0
7/1/2021 3:43	3.862	142.7	8.29	16.98	29.15	0
7/1/2021 3:45	4.154	143.5	10.25	16.94	29.15	0
7/1/2021 4:12	4.653	135.8	5.399	16.91	29.15	0
7/1/2021 4:17	5.519	139.8	5.347	16.91	29.15	0
7/1/2021 4:35	5.497	139.3	6.185	16.92	29.15	0
7/1/2021 4:47	5.277	151.5	9.54	16.97	29.16	0
7/1/2021 5:03	5.269	144.3	8.27	16.97	29.16	0
7/1/2021 5:18	4.958	147.3	7.779	16.95	29.16	0
7/1/2021 5:30	4.759	142.5	7.242	16.97	29.16	0
7/1/2021 5:52	4.264	138.3	11.91	17.02	29.17	0
7/1/2021 6:14	3.93	135.4	8.49	17.09	29.17	0
7/1/2021 6:16	3.767	120.5	13.56	17.27	29.17	0
7/1/2021 6:35	4.456	124.8	9.2	17.34	29.17	0
7/1/2021 6:53	4.243	125.7	17.17	17.51	29.18	0
7/1/2021 7:12	5.754	120.8	8.65	17.64	29.18	0
7/1/2021 7:27	5.128	133.9	13.94	17.83	29.18	0
7/1/2021 7:38	5.122	135.7	12.52	17.93	29.18	0
7/1/2021 7:50	4.804	137	10.89	18.09	29.18	0
7/1/2021 8:09	6.063	140.4	10.52	18.14	29.18	0
7/1/2021 8:28	5.39	140.5	9.7	18.29	29.18	0
7/1/2021 8:42	5.511	133	14.76	18.42	29.18	0
7/1/2021 8:56	6.669	132.4	14.48	18.63	29.2	0
7/1/2021 9:11	6.583	135.6	12.79	18.76	29.2	0
7/1/2021 9:17	6.335	119.6	8.9	18.89	29.2	0
7/1/2021 9:44	6.038	128.5	20.89	19.5	29.2	0
7/1/2021 9:48	5.781	110	15.42	19.59	29.18	0
7/1/2021 10:10	6.071	131.3	25.27	20.23	29.18	0
7/1/2021 10:24	6.143	141.4	15.47	20.54	29.18	0
7/1/2021 10:30	5.292	164.6	22.85	20.52	29.18	0
7/1/2021 10:46	3.883	160.8	51.58	21.16	29.21	0
7/1/2021 11:12	5.121	133.6	21.2	21.46	29.21	0
7/1/2021 11:27	2.58	106.4	34.69	21.6	29.21	0
7/1/2021 11:32	4.598	123.7	25.41	21.54	29.21	0
7/1/2021 11:48	3.572	142.5	40.59	21.32	29.19	0
7/1/2021 12:08	6.289	263.2	12.61	20.45	29.19	0
7/1/2021 12:26	6.77	267.8	7.588	20.2	29.19	0
7/1/2021 12:30	6.106	281	9.22	20.2	29.19	0
7/1/2021 12:45	4.492	287.6	13.09	20.48	29.21	0
7/1/2021 13:04	3.129	283	20.98	20.88	29.21	0
7/1/2021 13:23	2.031	192.1	92.1	21.58	29.21	0
7/1/2021 13:43	3.277	108.9	62.81	22.04	29.21	0
7/1/2021 13:50	2.254	62.57	31.55	21.76	29.18	0
7/1/2021 14:14	1.734	34	45.23	21.9	29.18	0
7/1/2021 14:15	1.296	294	41.58	22.64	29.18	0
7/1/2021 14:31	2.126	241.8	35.42	22.72	29.18	0
7/1/2021 14:47	3.163	155.4	54.5	22.91	29.19	0
7/1/2021 15:05	1.727	136.7	48.67	23.16	29.19	0
7/1/2021 15:17	2.315	211	48.5	22.64	29.19	0
7/1/2021 15:41	2.724	59.34	39.76	22.49	29.19	0
7/1/2021 15:47	3.569	77.71	10	22.31	29.18	0
7/1/2021 16:04	2.581	75.87	15.13	22.34	29.18	0
7/1/2021 16:20	2.917	77.37	10.37	22.3	29.18	0
7/1/2021 16:30	2.7	47.09	19.41	22.27	29.18	0
7/1/2021 16:50	2.421	39.19	11.99	22.24	29.17	0
7/1/2021 17:04	1.304	76.24	15.77	22.31	29.17	0
7/1/2021 17:20	1.134	73.04	13.34	22.21	29.17	0
7/1/2021 17:42	0.384	56.66	3.114	22.09	29.17	0
7/1/2021 17:59	1.616	42.17	9.05	21.91	29.19	0
7/1/2021 18:00	1.572	45.76	8.83	21.84	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/1/2021 18:19	1.011	36.04	0.189	21.76	29.19	0
7/1/2021 18:44	1.247	38.12	0.289	21.71	29.19	0
7/1/2021 18:45	1.239	37.11	3.123	21.6	29.16	0
7/1/2021 19:03	0.748	31.03	1.358	21.47	29.16	0
7/1/2021 19:24	1.307	87.4	9.9	21.4	29.16	0
7/1/2021 19:34	1.653	106.2	17.87	21.27	29.16	0
7/1/2021 19:58	1.245	101	10.69	21.01	29.17	0
7/1/2021 20:11	2.079	108.5	9.8	20.6	29.17	0
7/1/2021 20:16	1.383	89.6	3.145	20.39	29.17	0
7/1/2021 20:39	1.876	31.72	20.73	20.32	29.17	0
7/1/2021 20:45	0.788	18.11	1.024	20.12	29.18	0
7/1/2021 21:02	0.123	14.07	0.106	20.23	29.18	0
7/1/2021 21:29	3.453	274	13.18	20.59	29.18	0
7/1/2021 21:32	4.002	286.7	8.29	20.4	29.18	0
7/1/2021 21:59	4.535	277.7	8	20.37	29.17	0
7/1/2021 22:01	4.856	262.5	8.22	20.3	29.17	0
7/1/2021 22:20	4.346	262.9	7.582	20.19	29.17	0
7/1/2021 22:31	4.104	264.4	7.76	20.01	29.17	0
7/1/2021 22:54	4.134	243	10.96	19.97	29.19	0
7/1/2021 23:14	3.218	236	11.63	19.89	29.19	0
7/1/2021 23:16	3.884	245.2	8.46	19.79	29.19	0
7/1/2021 23:30	2.361	211.6	17.11	19.71	29.19	0
7/1/2021 23:55	2.789	190.4	15.44	19.51	29.19	0
7/2/2021 0:11	2.405	194.6	19.36	19.28	29.19	0
7/2/2021 0:29	2.795	203.1	10.62	19.29	29.19	0
7/2/2021 0:44	3.257	213.7	8.91	19.15	29.19	0
7/2/2021 0:59	3.609	223.8	15.29	18.96	29.19	0
7/2/2021 1:02	4.399	236.8	9.4	18.75	29.19	0
7/2/2021 1:15	2.996	231.4	13.64	18.67	29.19	0
7/2/2021 1:38	2.646	220.5	10.05	18.66	29.19	0
7/2/2021 1:50	4.436	205.7	12.65	18.47	29.2	0
7/2/2021 2:01	4.48	213.4	7.553	18.27	29.2	0
7/2/2021 2:22	3.456	212	12.82	18.25	29.2	0
7/2/2021 2:33	2.628	202.6	14.05	18.19	29.2	0
7/2/2021 2:55	3.365	181.6	7.743	17.97	29.21	0
7/2/2021 3:12	4.704	186.6	7.577	17.84	29.21	0
7/2/2021 3:22	5.503	197.8	5.81	17.82	29.21	0
7/2/2021 3:30	4.794	195.8	7.496	17.71	29.21	0
7/2/2021 3:50	3.871	222.7	12.81	17.64	29.21	0
7/2/2021 4:02	4.057	217.9	9.35	17.49	29.21	0
7/2/2021 4:16	4.234	207.8	9.68	17.44	29.21	0
7/2/2021 4:34	3.421	192.3	9.44	17.41	29.21	0
7/2/2021 4:59	3.493	222.3	13.69	17.37	29.2	0
7/2/2021 5:02	3.915	227.1	12.04	17.26	29.2	0
7/2/2021 5:29	2.551	231.9	12.84	17.26	29.2	0
7/2/2021 5:37	3.208	206	16.78	17.25	29.2	0
7/2/2021 5:45	3.445	239.3	22.91	17.16	29.21	0
7/2/2021 6:02	2.908	219.7	17.42	16.94	29.21	0
7/2/2021 6:27	3.604	186	4.434	16.94	29.21	0
7/2/2021 6:32	3.724	200.4	19.6	17.23	29.21	0
7/2/2021 6:51	4.156	211.6	13.49	17.24	29.21	0
7/2/2021 7:07	3.716	186.5	16.12	17.41	29.21	0
7/2/2021 7:15	3.023	169.5	15.45	17.52	29.21	0
7/2/2021 7:44	2.039	151.2	34.03	17.81	29.21	0
7/2/2021 7:45	2.781	130.8	20.02	18.17	29.22	0
7/2/2021 8:11	2.392	133.4	44.48	18.51	29.22	0
7/2/2021 8:18	2.684	236.7	34.2	18.56	29.22	0
7/2/2021 8:41	2.592	262.1	16.18	18.69	29.22	0
7/2/2021 8:58	1.96	275.9	18.61	19.19	29.22	0
7/2/2021 9:08	2.461	242.1	42.34	19.77	29.22	0
7/2/2021 9:19	3.108	213.8	52.17	20.24	29.22	0
7/2/2021 9:31	3.056	206.6	38.19	20.77	29.22	0
7/2/2021 9:56	3.493	231.8	29.13	21.32	29.24	0
7/2/2021 10:05	2.917	257.5	49.2	21.56	29.24	0
7/2/2021 10:23	3.587	272.4	30.6	21.75	29.24	0
7/2/2021 10:31	4.517	284.4	28.41	21.85	29.24	0
7/2/2021 10:56	5.537	289.8	25.28	21.98	29.23	0
7/2/2021 11:07	6.226	310.3	18.81	22.53	29.23	0
7/2/2021 11:20	4.898	304	18.89	22.86	29.23	0
7/2/2021 11:44	3.131	295.8	43.93	23.01	29.23	0
7/2/2021 11:45	4.004	345	25.67	23.64	29.24	0
7/2/2021 12:11	4.85	311.8	41.31	23.47	29.24	0
7/2/2021 12:26	3.742	325	23.66	23.87	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/2/2021 12:36	5.142	310	25.76	24.51	29.24	0
7/2/2021 12:57	6.016	298.4	18.74	24.56	29.23	0
7/2/2021 13:02	5.77	289.5	30.26	24.89	29.23	0
7/2/2021 13:28	6.007	307.6	17.89	25.37	29.23	0
7/2/2021 13:38	7.611	338	16.39	25.31	29.23	0
7/2/2021 13:56	6.811	316	19.18	25.4	29.23	0
7/2/2021 14:10	6.07	302.6	31.78	25.44	29.23	0
7/2/2021 14:17	5.823	280.3	23.76	25.21	29.23	0
7/2/2021 14:31	4.913	308.1	18.96	25.35	29.23	0
7/2/2021 14:50	3.769	349.9	29.33	25.23	29.22	0
7/2/2021 15:08	5.617	352.6	20.65	25.18	29.22	0
7/2/2021 15:16	5.354	304	18.18	25.36	29.22	0
7/2/2021 15:39	6.449	310.3	18.32	25.54	29.22	0
7/2/2021 15:59	6.525	309.4	11.54	25.82	29.2	0
7/2/2021 16:10	7.149	308	16.32	25.35	29.2	0
7/2/2021 16:19	7.374	306.2	11.51	25.53	29.2	0
7/2/2021 16:44	6.398	310.5	10.7	25.63	29.2	0
7/2/2021 16:47	5.582	326.4	19.01	25.79	29.19	0
7/2/2021 17:06	4.474	324.8	33.11	25.77	29.19	0
7/2/2021 17:23	4.484	10.35	44.81	25.72	29.19	0
7/2/2021 17:39	4.98	8.9	11.35	25.33	29.19	0
7/2/2021 17:46	3.63	358.5	18	25.21	29.18	0
7/2/2021 18:12	3.054	3.403	10.05	24.76	29.18	0
7/2/2021 18:29	2.91	319.1	25.74	24.98	29.18	0
7/2/2021 18:35	4.112	301	7.22	25.19	29.18	0
7/2/2021 18:58	3.809	310.3	12.39	25.36	29.18	0
7/2/2021 19:00	3.815	326.2	23.31	24.82	29.18	0
7/2/2021 19:16	3.298	326	5.457	24.39	29.18	0
7/2/2021 19:44	4.379	314.4	5.856	23.9	29.18	0
7/2/2021 19:58	4.889	307.1	4.715	23.45	29.16	0
7/2/2021 20:14	5.774	310.5	1.866	23.05	29.16	0
7/2/2021 20:15	4.777	323.4	5.741	22.86	29.16	0
7/2/2021 20:30	2.6	336.5	3.81	22.46	29.16	0
7/2/2021 20:57	2.872	338.5	6.568	22.43	29.19	0
7/2/2021 21:00	3.089	354.1	11.89	22.09	29.19	0
7/2/2021 21:19	2.368	21.37	5.118	21.35	29.19	0
7/2/2021 21:36	2.415	13.88	6.698	21.32	29.19	0
7/2/2021 21:54	2.14	27.16	1.154	20.9	29.18	0
7/2/2021 22:11	1.76	57.5	25.5	20.65	29.18	0
7/2/2021 22:17	1.737	81.9	11.56	20.54	29.18	0
7/2/2021 22:35	1.786	72.11	2.141	20.45	29.18	0
7/2/2021 22:47	1.21	50.2	8.81	20.33	29.16	0
7/2/2021 23:05	1.847	40.49	4.815	20.28	29.16	0
7/2/2021 23:23	2.088	42.22	8.72	20.1	29.16	0
7/2/2021 23:40	2.542	38.53	11.25	19.93	29.16	0
7/2/2021 23:49	3.042	21.42	3.379	19.63	29.17	0
7/3/2021 0:00	2.079	16.81	5.067	19.61	29.17	0
7/3/2021 0:21	1.972	231.3	68.43	19.17	29.17	0
7/3/2021 0:30	2.239	216	9	18.99	29.17	0
7/3/2021 0:45	1.135	264	62.43	18.73	29.18	0
7/3/2021 1:08	0.798	27.04	6.949	18.36	29.18	0
7/3/2021 1:25	1.207	33.03	4.076	18.37	29.18	0
7/3/2021 1:41	3.264	16.58	10.91	18.49	29.18	0
7/3/2021 1:46	3.261	20.82	10.96	17.96	29.18	0
7/3/2021 2:14	3.035	30.95	12.22	17.28	29.18	0
7/3/2021 2:27	4.665	39	8.15	16.84	29.18	0
7/3/2021 2:43	5.615	17.03	8.09	16.8	29.18	0
7/3/2021 2:46	5.52	27.28	6.918	16.89	29.18	0
7/3/2021 3:13	5.161	25.19	6.619	16.73	29.18	0
7/3/2021 3:16	4.207	39.2	12.8	16.62	29.18	0
7/3/2021 3:44	3.513	104.2	31.79	16.46	29.18	0
7/3/2021 3:58	4.213	135.3	7.433	16.4	29.19	0
7/3/2021 4:00	4.965	145.2	5.215	16.19	29.19	0
7/3/2021 4:15	3.458	128.4	12.74	16.11	29.19	0
7/3/2021 4:31	4.273	140.4	4.958	16	29.19	0
7/3/2021 4:46	2.832	143.5	6.058	16.18	29.2	0
7/3/2021 5:11	3.602	151	9.28	16.37	29.2	0
7/3/2021 5:28	4.781	175.5	7.67	16.58	29.2	0
7/3/2021 5:32	4.401	178.7	7.226	16.43	29.2	0
7/3/2021 5:46	3.347	184.5	10.39	16.52	29.18	0
7/3/2021 6:08	3.541	196.1	8.46	16.6	29.18	0
7/3/2021 6:27	2.58	136.9	28.55	16.88	29.18	0
7/3/2021 6:40	3.372	137.5	20.64	16.71	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/3/2021 6:54	2.79	193.2	29.55	17	29.18	0
7/3/2021 7:12	3.479	208.3	18.34	17.1	29.18	0
7/3/2021 7:25	3.955	222.4	13.78	17.33	29.18	0
7/3/2021 7:33	3.257	191.8	19.49	17.89	29.18	0
7/3/2021 7:54	2.479	177.5	19.52	18.32	29.2	0
7/3/2021 8:11	1.622	180.5	42.67	19.33	29.2	0
7/3/2021 8:22	3.48	190	26.29	20.21	29.2	0
7/3/2021 8:32	3.361	163.2	33.53	21.25	29.2	0
7/3/2021 8:45	2.922	217.7	72.16	22.33	29.2	0
7/3/2021 9:03	3.416	257	31.73	22.42	29.2	0
7/3/2021 9:16	2.325	254.2	39.42	23.14	29.2	0
7/3/2021 9:42	2.863	272.6	56.25	23.13	29.2	0
7/3/2021 9:58	4.346	278.1	24.01	23.82	29.19	0
7/3/2021 10:10	5.726	273.6	27.11	24.18	29.19	0
7/3/2021 10:17	5.906	261.7	23.41	24.57	29.19	0
7/3/2021 10:40	6.238	282.8	35.42	25.19	29.19	0
7/3/2021 10:55	7.608	265	24.51	25.13	29.19	0
7/3/2021 11:12	9.33	259.5	15.92	25.42	29.19	0
7/3/2021 11:15	9.44	265.2	16.59	25.2	29.19	0
7/3/2021 11:38	8.12	284.5	26.38	26.05	29.19	0
7/3/2021 11:47	6.547	288.4	25.23	26.06	29.19	0
7/3/2021 12:07	6.428	257.1	19.87	26.2	29.19	0
7/3/2021 12:23	6.824	273	27.1	26.8	29.19	0
7/3/2021 12:37	6.729	300.6	20.11	26.88	29.19	0
7/3/2021 12:47	9.89	253.1	21.27	27.4	29.18	0
7/3/2021 13:02	8.75	280.8	14.98	27.72	29.18	0
7/3/2021 13:15	8.04	293.5	24.65	27.82	29.18	0
7/3/2021 13:40	8.54	288.6	24.13	28.11	29.18	0
7/3/2021 13:51	6.708	303.2	26.8	28.32	29.17	0
7/3/2021 14:13	6.14	297.4	26.43	28.55	29.17	0
7/3/2021 14:26	7.59	287	14.88	28.84	29.17	0
7/3/2021 14:39	5.718	322.8	49.02	28.73	29.17	0
7/3/2021 14:55	7.271	301.7	27.61	29.39	29.16	0
7/3/2021 15:14	4.176	301.4	47.89	29.25	29.16	0
7/3/2021 15:18	6.477	290	22.56	29.6	29.16	0
7/3/2021 15:40	6.747	304.4	29.69	29.58	29.16	0
7/3/2021 15:56	6.121	285.6	21.21	29.69	29.15	0
7/3/2021 16:06	7.095	291	25.39	29.76	29.15	0
7/3/2021 16:24	5.491	283.2	21.07	29.83	29.15	0
7/3/2021 16:35	7.712	304.6	29.93	29.76	29.15	0
7/3/2021 16:53	7.265	294.8	15.1	29.77	29.13	0
7/3/2021 17:11	7.559	310.5	15.83	29.73	29.13	0
7/3/2021 17:29	7.349	298.8	13.23	29.53	29.13	0
7/3/2021 17:42	6.915	287.5	13.18	29.52	29.13	0
7/3/2021 17:46	7.195	282.6	12.12	29.35	29.14	0
7/3/2021 18:12	8.02	304.4	11.13	29.15	29.14	0
7/3/2021 18:28	7.883	292.1	9.85	28.87	29.14	0
7/3/2021 18:33	9	291.1	7.743	28.42	29.14	0
7/3/2021 18:45	7.373	297	8.82	28.08	29.12	0
7/3/2021 19:08	6.697	293.6	6.382	27.71	29.12	0
7/3/2021 19:21	5.353	295.8	5.795	27.28	29.12	0
7/3/2021 19:31	5.105	296.9	4.274	26.71	29.12	0
7/3/2021 19:54	4.82	303.3	3.565	26.05	29.12	0
7/3/2021 20:03	5.205	309.1	4.917	25.49	29.12	0
7/3/2021 20:15	3.466	327.8	7.384	24.89	29.12	0
7/3/2021 20:43	2.231	348.9	6.409	24.61	29.12	0
7/3/2021 20:52	2.167	15.79	7.322	24.55	29.14	0
7/3/2021 21:06	0.866	230.7	70.98	24.19	29.14	0
7/3/2021 21:26	1.737	270.7	12.44	24.72	29.14	0
7/3/2021 21:37	3.456	291.1	39.69	23.74	29.14	0
7/3/2021 21:48	2.272	317.2	18.88	22.13	29.12	0
7/3/2021 22:01	0.351	334.7	0.745	22.11	29.12	0
7/3/2021 22:29	0.132	337.8	1.641	22.28	29.12	0
7/3/2021 22:44	1.28	295.4	34.29	22.47	29.12	0
7/3/2021 22:59	3.448	196.9	5.024	21.97	29.13	0
7/3/2021 23:12	4.652	189	3.804	21.46	29.13	0
7/3/2021 23:29	4.119	180.9	8.11	20.81	29.13	0
7/3/2021 23:41	4.545	180.7	8.98	20.3	29.13	0
7/3/2021 23:54	5.461	213.7	9.48	20.62	29.15	0
7/4/2021 0:02	3.023	209.4	49.08	20.46	29.15	0
7/4/2021 0:16	1.325	109	2.281	19.61	29.15	0
7/4/2021 0:44	2.62	154.5	17.98	19.51	29.15	0
7/4/2021 0:57	4.295	185.8	5.878	19.52	29.15	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/4/2021 1:03	4.381	207.9	8.08	19.85	29.15	0
7/4/2021 1:16	3.996	205.8	7.466	19.24	29.15	0
7/4/2021 1:32	3.233	209	5.667	18.84	29.15	0
7/4/2021 1:52	2.996	201.8	6.448	18.43	29.16	0
7/4/2021 2:13	2.873	219.6	17.11	18.02	29.16	0
7/4/2021 2:17	3.667	245	7.891	17.83	29.16	0
7/4/2021 2:36	4.932	260.3	3.223	17.14	29.16	0
7/4/2021 2:45	4.832	264.7	7.269	16.62	29.17	0
7/4/2021 3:04	4.328	269.7	4.427	16.29	29.17	0
7/4/2021 3:16	2.798	260.3	6.107	16.22	29.17	0
7/4/2021 3:36	3.127	219.4	15.31	16.25	29.17	0
7/4/2021 3:57	4.138	209.2	7.706	15.8	29.18	0
7/4/2021 4:06	4.531	224.6	9.67	15.75	29.18	0
7/4/2021 4:15	3.212	231.5	10.98	15.61	29.18	0
7/4/2021 4:31	2.565	222.5	10.36	15.55	29.18	0
7/4/2021 4:51	2.537	198.5	9.45	15.55	29.18	0
7/4/2021 5:12	3.652	192	8.98	15.46	29.18	0
7/4/2021 5:28	3.669	196	11.75	15.39	29.18	0
7/4/2021 5:37	4.215	225.9	11.74	15.28	29.18	0
7/4/2021 5:52	4.598	203.6	12.71	15.25	29.2	0
7/4/2021 6:00	3.63	220.9	14.44	15.26	29.2	0
7/4/2021 6:28	4.049	189.3	18.44	15.27	29.2	0
7/4/2021 6:36	3.985	189.8	18.28	15.26	29.2	0
7/4/2021 6:49	3.944	182.1	9.95	15.41	29.19	0
7/4/2021 7:08	3.712	189.6	11.63	15.66	29.19	0
7/4/2021 7:19	3.41	195.3	20.92	15.76	29.19	0
7/4/2021 7:31	3.781	189.4	17.93	15.97	29.19	0
7/4/2021 7:54	4.335	214.8	21.24	16.1	29.19	0
7/4/2021 8:08	4.041	209.6	28.17	15.92	29.19	0
7/4/2021 8:22	3.299	227.6	30.72	16.24	29.19	0
7/4/2021 8:44	2.584	176.8	34.43	16.63	29.19	0
7/4/2021 8:51	2.384	223.7	30.73	16.86	29.19	0
7/4/2021 9:07	3.109	204.2	25.36	17.11	29.19	0
7/4/2021 9:25	3.942	209.7	26.62	17.44	29.19	0
7/4/2021 9:42	4.095	171.9	33.56	17.83	29.19	0
7/4/2021 9:56	3.333	184.5	31.93	18.26	29.22	0
7/4/2021 10:05	4.082	186.3	47.18	19.09	29.22	0
7/4/2021 10:18	3.682	240.4	31.11	19.41	29.22	0
7/4/2021 10:39	3.952	164.4	25.65	20.11	29.22	0
7/4/2021 10:52	5.153	183.5	27.49	20.68	29.2	0
7/4/2021 11:13	5.02	227.8	36.07	21.52	29.2	0
7/4/2021 11:23	3.629	231.3	23.84	21.53	29.2	0
7/4/2021 11:37	3.771	226.7	29.38	22.06	29.2	0
7/4/2021 11:59	5.259	196.3	37.71	22.7	29.2	0
7/4/2021 12:05	4.724	239.7	32.82	23.01	29.2	0
7/4/2021 12:16	4.062	217.5	37.42	23.75	29.2	0
7/4/2021 12:32	5.114	210.7	23.76	24.14	29.2	0
7/4/2021 12:57	4.39	179.8	44.46	24.69	29.21	0
7/4/2021 13:09	5.329	244.6	38.82	25.46	29.21	0
7/4/2021 13:22	5.307	275.8	22.85	25.72	29.21	0
7/4/2021 13:31	6.044	260.4	22.94	25.59	29.21	0
7/4/2021 13:54	6.142	254.2	27.03	26.23	29.2	0
7/4/2021 14:13	7.008	260.3	23.62	26.57	29.2	0
7/4/2021 14:23	7.516	269.3	20.5	26.6	29.2	0
7/4/2021 14:36	8.05	278.4	14.32	26.82	29.2	0
7/4/2021 14:55	7.572	265.2	20.44	27.09	29.16	0
7/4/2021 15:10	5.266	243	31.27	27.05	29.16	0
7/4/2021 15:22	5.912	249	30.33	27.27	29.16	0
7/4/2021 15:35	6.23	258.8	30.54	27.34	29.16	0
7/4/2021 15:46	6.266	264.2	21.39	27.57	29.17	0
7/4/2021 16:14	8.18	271.6	10.91	27.38	29.17	0
7/4/2021 16:15	8.01	268.8	11.28	27.28	29.17	0
7/4/2021 16:40	8.04	267.3	12.64	27.3	29.17	0
7/4/2021 16:46	7.351	258.3	21.53	27.21	29.18	0
7/4/2021 17:06	7.683	249.4	15.71	27.07	29.18	0
7/4/2021 17:19	6.475	218	14.19	26.51	29.18	0
7/4/2021 17:42	5.398	226.4	18.27	26.71	29.18	0
7/4/2021 17:46	4.596	250.3	19	26.79	29.17	0
7/4/2021 18:07	3.958	274.5	21.72	26.84	29.17	0
7/4/2021 18:21	3.787	289	13.33	26.73	29.17	0
7/4/2021 18:31	3.969	266.2	17.97	26.47	29.17	0
7/4/2021 18:56	3.787	275.5	13.75	26.23	29.18	0
7/4/2021 19:09	4.48	271.2	9.07	25.65	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/4/2021 19:15	4.684	244.9	19.27	25.24	29.18	0
7/4/2021 19:39	4.507	231.4	10.26	24.67	29.18	0
7/4/2021 19:52	4.351	233.6	9.22	24.23	29.16	0
7/4/2021 20:02	2.923	228.7	10.04	23.95	29.16	0
7/4/2021 20:19	2.025	220.1	9.51	23.69	29.16	0
7/4/2021 20:30	2.03	215.5	4.081	23.57	29.16	0
7/4/2021 20:53	1.243	248.1	13.35	23.25	29.19	0
7/4/2021 21:14	0.617	309.7	13.93	22.38	29.19	0
7/4/2021 21:23	3.603	270.5	10.37	21.98	29.19	0
7/4/2021 21:42	5.546	275.1	5.435	21.42	29.19	0
7/4/2021 21:46	5.14	278.9	7.291	21	29.18	0
7/4/2021 22:13	4.517	289.1	9.83	20.37	29.18	0
7/4/2021 22:26	4.814	267.1	5.305	20.31	29.18	0
7/4/2021 22:39	5.77	257.2	6.063	20.02	29.18	0
7/4/2021 22:45	3.955	241.1	12.44	19.82	29.2	0
7/4/2021 23:14	4.051	199.5	10.61	19.11	29.2	0
7/4/2021 23:28	4.185	208.4	7.924	18.66	29.2	0
7/4/2021 23:31	4.009	229.3	9.34	18.52	29.2	0
7/4/2021 23:59	5.076	236.7	4.23	18.29	29.18	0
7/5/2021 0:13	6.504	238.5	5.674	17.92	29.18	0
7/5/2021 0:29	6.87	234	10.38	17.32	29.18	0
7/5/2021 0:32	5.821	228.1	9.34	16.87	29.18	0
7/5/2021 0:59	3.769	238.8	8.52	16.54	29.19	0
7/5/2021 1:00	4.572	239.5	6.692	16.2	29.19	0
7/5/2021 1:17	4.506	239.6	5.964	16.17	29.19	0
7/5/2021 1:31	3.559	244.1	7.21	16.04	29.19	0
7/5/2021 1:53	4.549	188.3	21.79	15.87	29.21	0
7/5/2021 2:03	4.937	194	6.919	15.71	29.21	0
7/5/2021 2:22	4.044	218.3	18.2	15.79	29.21	0
7/5/2021 2:32	4.767	189.8	8.7	15.54	29.21	0
7/5/2021 2:45	3.521	168.8	22.9	15.4	29.23	0
7/5/2021 3:10	4.025	156.5	6.734	15.29	29.23	0
7/5/2021 3:28	3.808	192.4	20.25	15.47	29.23	0
7/5/2021 3:40	5.194	203.7	5.197	15.57	29.23	0
7/5/2021 3:54	4.31	203.2	13.02	15.4	29.21	0
7/5/2021 4:12	3.639	202.5	11.8	15.28	29.21	0
7/5/2021 4:21	3.833	216.3	13.01	15.11	29.21	0
7/5/2021 4:42	3.856	224	8.66	15.05	29.21	0
7/5/2021 4:57	4.438	220	8.75	14.97	29.24	0
7/5/2021 5:10	3.922	222.9	10.33	15.03	29.24	0
7/5/2021 5:23	4.001	217.7	9.89	15.06	29.24	0
7/5/2021 5:39	3.873	189.1	12.58	14.98	29.24	0
7/5/2021 5:48	3.932	231.2	13.81	14.87	29.25	0
7/5/2021 6:07	4.473	222.6	10.86	14.57	29.25	0
7/5/2021 6:28	4.174	226.2	14.03	14.59	29.25	0
7/5/2021 6:30	4.1	230.3	11.98	14.46	29.25	0
7/5/2021 6:47	4.754	212.7	11.25	14.43	29.27	0
7/5/2021 7:08	4.702	193.4	19.06	14.35	29.27	0
7/5/2021 7:30	4.307	189.3	10.69	14.36	29.27	0
7/5/2021 7:35	4.022	228.9	24.84	14.38	29.27	0
7/5/2021 7:58	3.372	232.7	15.24	14.37	29.26	0
7/5/2021 8:12	4.514	189	12.58	14.51	29.26	0
7/5/2021 8:22	4.205	191.4	17.54	14.67	29.26	0
7/5/2021 8:35	3.427	189.6	16.16	14.8	29.26	0
7/5/2021 8:53	3.238	170.1	26.05	15.14	29.28	0
7/5/2021 9:07	3.96	181.1	15.83	15.56	29.28	0
7/5/2021 9:27	3.187	225.1	33.52	15.75	29.28	0
7/5/2021 9:36	4.211	223	22.93	16.12	29.28	0
7/5/2021 9:56	4.347	196.7	22.43	16.42	29.29	0
7/5/2021 10:11	3.806	188.8	28.03	16.51	29.29	0
7/5/2021 10:27	3.648	166.3	23.91	16.83	29.29	0
7/5/2021 10:38	4.399	207.5	25.69	17.04	29.29	0
7/5/2021 10:51	4.429	200.1	32.27	17.45	29.29	0
7/5/2021 11:09	4.28	192.7	29.88	17.4	29.29	0
7/5/2021 11:22	4.076	197.9	30.43	17.7	29.29	0
7/5/2021 11:40	4.605	194.6	24.67	18.01	29.29	0
7/5/2021 11:53	3.479	218	24.7	18.04	29.3	0
7/5/2021 12:03	4.387	230.2	29.03	18.33	29.3	0
7/5/2021 12:19	3.214	222	37.85	18.74	29.3	0
7/5/2021 12:33	2.48	218.2	33.23	18.85	29.3	0
7/5/2021 12:55	3.867	201.5	33.38	19.78	29.29	0
7/5/2021 13:10	3.748	217.4	43.07	20.04	29.29	0
7/5/2021 13:25	2.664	270.1	44.24	21.1	29.29	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/5/2021 13:32	3.503	210.4	40.37	21.94	29.29	0
7/5/2021 13:51	3.968	251.6	35.65	22.48	29.28	0
7/5/2021 14:06	3.353	262.3	58.84	23.11	29.28	0
7/5/2021 14:25	2.264	207.2	59.03	23.88	29.28	0
7/5/2021 14:38	3.792	221.6	60.2	24.28	29.28	0
7/5/2021 14:55	3.341	218.7	45.4	24.44	29.25	0
7/5/2021 15:01	2.992	255.8	70.39	25.19	29.25	0
7/5/2021 15:25	3.461	260.5	52.47	25.18	29.25	0
7/5/2021 15:39	5.396	271.8	34.51	25.5	29.25	0
7/5/2021 15:45	5.109	257.4	26.12	25.2	29.25	0
7/5/2021 16:06	6.554	272.2	16.23	25.39	29.25	0
7/5/2021 16:22	6.127	286.6	17.66	25.3	29.25	0
7/5/2021 16:38	6.503	271.8	16.22	25.29	29.25	0
7/5/2021 16:52	6.862	266.4	13.86	25.1	29.24	0
7/5/2021 17:07	6.323	278.3	13.59	25.2	29.24	0
7/5/2021 17:26	6.427	265.3	10.89	25.01	29.24	0
7/5/2021 17:42	5.772	259.7	13.55	25.06	29.24	0
7/5/2021 17:49	6.319	274.1	13.11	24.77	29.24	0
7/5/2021 18:03	6.145	263.2	12.37	24.57	29.24	0
7/5/2021 18:17	5.641	271.5	18.38	24.52	29.24	0
7/5/2021 18:39	5.308	270.2	15.62	24.3	29.24	0
7/5/2021 18:48	5.703	264.5	12.11	23.83	29.25	0
7/5/2021 19:06	4.18	267.8	11.82	23.65	29.25	0
7/5/2021 19:16	4.153	277.3	7.016	23.32	29.25	0
7/5/2021 19:35	4.355	275.8	4.675	22.91	29.25	0
7/5/2021 19:45	4.047	274.7	3.595	22.49	29.25	0
7/5/2021 20:00	3.504	276.5	5.81	22.15	29.25	0
7/5/2021 20:17	2.225	294	14.48	21.77	29.25	0
7/5/2021 20:30	1.221	337	1.087	21.12	29.25	0
7/5/2021 20:47	1.414	332.5	2.149	21.2	29.25	0
7/5/2021 21:14	1.62	305.2	28.43	21	29.25	0
7/5/2021 21:17	3.226	262.8	10.71	20.85	29.25	0
7/5/2021 21:30	2.629	283.7	3.745	20.52	29.25	0
7/5/2021 21:48	1.051	290.1	3.405	19.84	29.25	0
7/5/2021 22:00	0.019	319.2	0.559	19.24	29.25	0
7/5/2021 22:19	0.96	323.7	0.632	19.35	29.25	0
7/5/2021 22:43	0.608	292.3	22.65	19.24	29.25	0
7/5/2021 22:51	2.778	219	6.267	19.29	29.26	0
7/5/2021 23:11	3.786	211.9	3.363	18.34	29.26	0
7/5/2021 23:19	3.679	202.2	4.384	18.48	29.26	0
7/5/2021 23:39	2.516	193.1	2.531	18.48	29.26	0
7/5/2021 23:59	2.58	204.3	7.117	18.33	29.25	0
7/6/2021 0:02	2.904	228.7	9.77	18.19	29.25	0
7/6/2021 0:27	2.994	222.7	4.716	17.91	29.25	0
7/6/2021 0:34	3.533	218.7	8.45	17.33	29.25	0
7/6/2021 0:45	3.112	217.6	13.53	17.11	29.25	0
7/6/2021 1:09	3.31	190.8	3.241	16.83	29.25	0
7/6/2021 1:19	2.998	194.7	1.849	16.62	29.25	0
7/6/2021 1:30	2.651	200	3.929	16.36	29.25	0
7/6/2021 1:50	2.002	210.6	2.424	16.34	29.26	0
7/6/2021 2:14	2.753	208.7	5.364	16	29.26	0
7/6/2021 2:15	2.986	201.2	1.94	15.56	29.26	0
7/6/2021 2:32	2.489	180.3	7.119	15.39	29.26	0
7/6/2021 2:51	3.456	192	7.432	15.29	29.24	0
7/6/2021 3:01	2.994	202.2	5.506	15.12	29.24	0
7/6/2021 3:21	3.31	185.7	4.337	14.85	29.24	0
7/6/2021 3:44	2.909	170.5	7.56	14.64	29.24	0
7/6/2021 3:45	3.364	199.4	12.52	14.86	29.24	0
7/6/2021 4:00	2.19	181.6	21.66	15.02	29.24	0
7/6/2021 4:28	0.492	126.9	5.361	14.96	29.24	0
7/6/2021 4:45	0.476	128	8.24	15.07	29.24	0
7/6/2021 4:45	0.669	92.8	47.27	14.94	29.25	0
7/6/2021 5:14	0.26	38.61	25.92	14.91	29.25	0
7/6/2021 5:28	2.434	180.1	25.87	14.98	29.25	0
7/6/2021 5:34	2.734	175.6	18.84	14.81	29.25	0
7/6/2021 5:49	1.693	187.1	16.06	14.78	29.24	0
7/6/2021 6:04	0.37	296.7	23.76	15.08	29.24	0
7/6/2021 6:25	1.642	302.1	20.04	15.33	29.24	0
7/6/2021 6:41	1.327	242.2	24.12	15.39	29.24	0
7/6/2021 6:55	2.06	250.3	14.26	15.39	29.25	0
7/6/2021 7:04	2.807	258.7	18.75	15.41	29.25	0
7/6/2021 7:21	3.406	286.3	12.11	15.5	29.25	0
7/6/2021 7:44	3.303	289.9	11.19	15.7	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/6/2021 7:54	3.625	267.5	19.49	15.75	29.26	0
7/6/2021 8:01	2.881	269.3	21.79	15.9	29.26	0
7/6/2021 8:27	2.61	268.7	29.22	16.15	29.26	0
7/6/2021 8:30	3.335	298.7	18.62	16.53	29.26	0
7/6/2021 8:56	4.695	276	12.1	16.78	29.26	0
7/6/2021 9:09	5.254	263.4	12.52	16.9	29.26	0
7/6/2021 9:15	4.039	275.9	21.26	17.34	29.26	0
7/6/2021 9:43	2.817	284.5	27.96	17.98	29.26	0
7/6/2021 9:57	3.247	273.7	29.65	18.57	29.23	0
7/6/2021 10:05	2.932	261.5	35.99	19.18	29.23	0
7/6/2021 10:28	4.403	265.5	21.34	19.89	29.23	0
7/6/2021 10:33	4.345	297.2	47.58	20.31	29.23	0
7/6/2021 10:45	4.459	300.9	35.13	21.29	29.24	0
7/6/2021 11:03	4.648	321	31.1	21.93	29.24	0
7/6/2021 11:24	4.429	319.7	25.45	22.65	29.24	0
7/6/2021 11:39	5.083	319.7	37.3	23.2	29.24	0
7/6/2021 11:56	5.537	261.2	19.6	23.46	29.22	0
7/6/2021 12:10	7.242	273.2	16.56	23.99	29.22	0
7/6/2021 12:16	6.982	272.4	25.48	24.7	29.22	0
7/6/2021 12:43	8.48	258.6	15.27	24.78	29.22	0
7/6/2021 12:58	8.94	252.4	12.19	25.48	29.2	0
7/6/2021 13:09	9.18	252.4	14.79	25.52	29.2	0
7/6/2021 13:25	9.41	261.7	12.56	26.45	29.2	0
7/6/2021 13:32	8.8	257.9	12.37	26.48	29.2	0
7/6/2021 13:47	7.5	269.9	19.08	27.42	29.18	0
7/6/2021 14:07	7.566	270.7	15.72	27.5	29.18	0
7/6/2021 14:22	7.505	266.4	20.11	27.82	29.18	0
7/6/2021 14:42	7.629	264.4	15.27	28.18	29.18	0
7/6/2021 14:58	6.966	264.8	16.82	28.16	29.14	0
7/6/2021 15:07	7.946	261.6	16.28	28.53	29.14	0
7/6/2021 15:28	7.557	269.6	13.67	29.27	29.14	0
7/6/2021 15:34	6.606	270.1	13.85	29.23	29.14	0
7/6/2021 15:58	5.947	296.9	42.71	30.01	29.12	0
7/6/2021 16:06	4.995	346.3	33.98	29.75	29.12	0
7/6/2021 16:28	5.032	357.5	25.05	30.03	29.12	0
7/6/2021 16:42	5.331	345.6	27.98	30.2	29.12	0
7/6/2021 16:53	5.32	338.9	21.81	30.22	29.12	0
7/6/2021 17:14	6.402	349.1	18.97	30.08	29.12	0
7/6/2021 17:21	7.413	310.6	12.06	30.2	29.12	0
7/6/2021 17:33	7.421	325.7	18.88	29.94	29.12	0
7/6/2021 17:56	8.94	307.1	8.89	29.46	29.1	0
7/6/2021 18:02	8.8	303.4	9.23	29.04	29.1	0
7/6/2021 18:17	7.611	305.2	8.25	28.91	29.1	0
7/6/2021 18:31	6.897	297.7	6.237	28.34	29.1	0
7/6/2021 18:46	6.968	303.6	8.02	27.98	29.1	0
7/6/2021 19:00	6.798	300.2	5.627	27.55	29.1	0
7/6/2021 19:27	7.029	305	4.586	26.83	29.1	0
7/6/2021 19:34	6.51	303.3	5.477	25.83	29.1	0
7/6/2021 19:45	5.715	303.7	4.668	25.29	29.09	0
7/6/2021 20:05	5.48	314.7	13.14	25.01	29.09	0
7/6/2021 20:18	4.862	319.6	7.995	24.55	29.09	0
7/6/2021 20:38	3.685	331	14.35	24.41	29.09	0
7/6/2021 20:46	2.938	10.69	9.95	23.46	29.11	0
7/6/2021 21:01	2.111	2.35	11.76	23.24	29.11	0
7/6/2021 21:29	2.226	35.56	11.02	22.77	29.11	0
7/6/2021 21:35	3.362	33.75	6.171	22.1	29.11	0
7/6/2021 21:59	2.49	62.22	25.25	21.29	29.11	0
7/6/2021 22:01	3.532	78.19	10.39	21.15	29.11	0
7/6/2021 22:16	3.328	65.46	9.74	21.73	29.11	0
7/6/2021 22:31	2.628	70.22	5.636	21.97	29.11	0
7/6/2021 22:58	4.164	52.16	9.65	20.98	29.11	0
7/6/2021 23:13	3.862	49.1	12.18	20.31	29.11	0
7/6/2021 23:19	3.787	37.85	11.3	19.69	29.11	0
7/6/2021 23:36	3.641	44.21	11.58	19.34	29.11	0
7/6/2021 23:54	4.535	50.32	8.57	19.02	29.13	0
7/7/2021 0:03	3.044	62.4	11.03	19.31	29.13	0
7/7/2021 0:28	1.449	96.1	39.52	19.42	29.13	0
7/7/2021 0:36	2.757	120	8.54	19.44	29.13	0
7/7/2021 0:57	3.399	119.3	5.321	18.94	29.13	0
7/7/2021 1:00	3.583	137	7.521	18.44	29.13	0
7/7/2021 1:29	4.164	164.8	21.66	18.13	29.13	0
7/7/2021 1:35	5.444	182.1	9.84	17.61	29.13	0
7/7/2021 1:57	5.614	197.5	7.937	17.41	29.16	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/7/2021 2:10	6.378	188.5	9.64	17.11	29.16	0
7/7/2021 2:15	2.107	81.8	39.32	16.64	29.16	0
7/7/2021 2:40	1.546	293.5	48.38	16.95	29.16	0
7/7/2021 2:54	3.272	229.2	24.97	17.22	29.18	0
7/7/2021 3:03	4.66	148.2	17.43	16.53	29.18	0
7/7/2021 3:21	5.066	152.2	10.46	16.29	29.18	0
7/7/2021 3:42	6.677	208.9	16.82	16.38	29.18	0
7/7/2021 3:51	5.243	260	18.84	15.94	29.18	0
7/7/2021 4:12	4.296	240	26	15.54	29.18	0
7/7/2021 4:27	5.4	157.2	24.2	15.24	29.18	0
7/7/2021 4:44	8.34	150.6	20.8	15.11	29.18	0
7/7/2021 4:45	9.63	193.3	8.21	14.82	29.18	0
7/7/2021 5:02	6.442	167.7	25.8	14.51	29.18	0
7/7/2021 5:22	6.469	185.8	32.49	14.54	29.18	0
7/7/2021 5:42	3.797	158.2	51.79	14.43	29.18	0
7/7/2021 5:49	6.106	183	17.97	14.61	29.19	0
7/7/2021 6:08	7.129	168.9	36.22	14.55	29.19	0
7/7/2021 6:23	6.447	162.2	21.22	14.5	29.19	0
7/7/2021 6:38	11.14	181.7	10.52	14.52	29.19	0
7/7/2021 6:46	7.93	191.8	14.33	14.54	29.24	0
7/7/2021 7:10	9.82	199.5	13.02	14.62	29.24	0
7/7/2021 7:20	11.29	195.3	9.67	14.63	29.24	0
7/7/2021 7:35	10.67	192.9	11.32	14.62	29.24	0
7/7/2021 7:45	8.12	199.2	11.81	14.84	29.22	0
7/7/2021 8:02	7.645	175.2	20.03	15.12	29.22	0
7/7/2021 8:17	8	163.3	15.97	15.46	29.22	0
7/7/2021 8:37	7.488	156.6	16.52	15.65	29.22	0
7/7/2021 8:50	8.34	149.4	8.95	15.73	29.24	0
7/7/2021 9:11	6.196	143.6	12.5	15.83	29.24	0
7/7/2021 9:27	6.172	130.8	12.18	16.37	29.24	0
7/7/2021 9:35	6.49	134.4	14.25	16.5	29.24	0
7/7/2021 9:57	6.731	151.4	12.67	16.75	29.24	0
7/7/2021 10:11	6.889	134.1	11.39	16.9	29.24	0
7/7/2021 10:25	7.093	136.5	12.66	16.85	29.24	0
7/7/2021 10:43	6.335	149.9	11.08	16.99	29.24	0
7/7/2021 10:51	7.185	154	8.74	17.23	29.25	0
7/7/2021 11:05	6.932	150.8	13.2	17.59	29.25	0
7/7/2021 11:28	7.093	142.8	12.46	17.66	29.25	0
7/7/2021 11:43	7.675	146.7	11.37	18.01	29.25	0
7/7/2021 11:47	6.369	144	11.85	18.25	29.23	0
7/7/2021 12:00	4.41	163.6	30.95	18.49	29.23	0
7/7/2021 12:23	3.749	254.2	81.8	19.04	29.23	0
7/7/2021 12:37	4.076	308.6	38.24	18.97	29.23	0
7/7/2021 12:56	2.426	315.2	26.89	19.39	29.25	0
7/7/2021 13:05	5.564	301.9	14.15	20.2	29.25	0
7/7/2021 13:15	3.809	247.4	51.73	20.67	29.25	0
7/7/2021 13:33	2.866	182.6	77.26	21.26	29.25	0
7/7/2021 13:48	4.498	119.1	67.62	21.64	29.22	0
7/7/2021 14:07	3.605	47.36	45.24	22.24	29.22	0
7/7/2021 14:28	3.214	315.8	36.06	22.52	29.22	0
7/7/2021 14:42	3.678	324.4	42.99	22.17	29.22	0
7/7/2021 14:54	5.076	0.966	32.12	22.29	29.23	0
7/7/2021 15:07	5.427	327	52.23	23	29.23	0
7/7/2021 15:21	8.35	275.3	14.74	22.86	29.23	0
7/7/2021 15:37	10.14	274.9	12.51	23.33	29.23	0
7/7/2021 15:45	8.06	270.7	26.05	23.03	29.2	0
7/7/2021 16:04	7.117	253.1	12.99	23.16	29.2	0
7/7/2021 16:17	7.863	247.3	15.31	22.97	29.2	0
7/7/2021 16:30	7.433	254.3	13.44	22.85	29.2	0
7/7/2021 16:45	6.432	244.9	23.98	22.63	29.21	0
7/7/2021 17:08	6.847	235.9	15.07	22.55	29.21	0
7/7/2021 17:26	7.561	243.3	23.47	22.46	29.21	0
7/7/2021 17:37	9.22	260.5	11.81	21.97	29.21	0
7/7/2021 17:47	7.965	254.8	18.56	21.9	29.21	0
7/7/2021 18:04	8.54	247.1	8.25	21.45	29.21	0
7/7/2021 18:21	7.986	250.9	10.32	21.18	29.21	0
7/7/2021 18:41	8.43	241.7	8.12	20.63	29.21	0
7/7/2021 18:51	9.13	248.5	7.736	20.26	29.2	0
7/7/2021 19:06	8.21	264	8.81	19.91	29.2	0
7/7/2021 19:27	7.916	256.1	10.85	19.55	29.2	0
7/7/2021 19:38	8.68	249.6	6.503	18.83	29.2	0
7/7/2021 19:51	7.355	247.6	6.161	18.36	29.22	0
7/7/2021 20:02	5.243	252.3	7.849	18.11	29.22	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/7/2021 20:28	5.031	247	10.12	17.99	29.22	0
7/7/2021 20:34	4.006	244.3	12.19	17.57	29.22	0
7/7/2021 20:57	5.288	241.5	7.911	17.24	29.23	0
7/7/2021 21:04	6.67	243.6	5.951	17.02	29.23	0
7/7/2021 21:27	3.05	244.4	12.38	16.91	29.23	0
7/7/2021 21:38	4.157	240.8	9.77	16.58	29.23	0
7/7/2021 21:58	3.792	238.2	12.04	16.22	29.24	0
7/7/2021 22:00	2.994	243.8	9.17	16.01	29.24	0
7/7/2021 22:26	2.765	203.7	18.43	15.77	29.24	0
7/7/2021 22:40	4.452	216.9	12.45	15.58	29.24	0
7/7/2021 22:50	4.36	242.4	8.92	15.45	29.22	0
7/7/2021 23:02	3.429	238.7	11.24	15.4	29.22	0
7/7/2021 23:28	3.747	255.3	6.948	15.05	29.22	0
7/7/2021 23:30	3.93	249.1	5.429	14.9	29.22	0
7/7/2021 23:54	4.238	247.5	4.104	14.85	29.22	0
7/8/2021 0:03	3.547	255.2	8.92	14.83	29.22	0
7/8/2021 0:27	3.407	274.4	6.615	14.54	29.22	0
7/8/2021 0:35	4.338	267	4.286	14.32	29.22	0
7/8/2021 0:51	3.964	271.7	4.745	14.06	29.2	0
7/8/2021 1:06	3.518	281.6	4.223	13.79	29.2	0
7/8/2021 1:16	3.213	282.7	4.072	13.62	29.2	0
7/8/2021 1:31	3.101	284.9	5.385	13.56	29.2	0
7/8/2021 1:55	2.409	290.2	6.295	13.36	29.21	0
7/8/2021 2:06	2.299	294.8	8.88	13.23	29.21	0
7/8/2021 2:22	2.324	306	4.769	13.02	29.21	0
7/8/2021 2:43	2.444	298.6	10.54	12.9	29.21	0
7/8/2021 2:48	3.466	303	6.206	12.71	29.2	0
7/8/2021 3:09	3.191	300.2	8.25	12.7	29.2	0
7/8/2021 3:29	3.304	275.9	4.311	12.88	29.2	0
7/8/2021 3:37	4.101	268.5	6.914	12.94	29.2	0
7/8/2021 3:56	3.811	258.2	10.23	12.93	29.21	0
7/8/2021 4:06	3.011	231.6	11.23	12.84	29.21	0
7/8/2021 4:20	1.68	216.6	13.5	12.79	29.21	0
7/8/2021 4:32	1.267	221.7	22.25	12.73	29.21	0
7/8/2021 4:58	1.953	216.1	18.7	12.78	29.22	0
7/8/2021 5:01	2.069	247.4	15.27	12.81	29.22	0
7/8/2021 5:25	3.033	253.8	8.38	12.87	29.22	0
7/8/2021 5:38	2.946	273.5	10.45	12.81	29.22	0
7/8/2021 5:57	2.884	282.6	14.39	12.88	29.22	0
7/8/2021 6:14	1.906	296.4	21.44	13	29.22	0
7/8/2021 6:29	3.733	257.5	14.48	12.93	29.22	0
7/8/2021 6:32	3.981	268.3	17.57	13	29.22	0
7/8/2021 6:45	2.937	280.5	7.643	13	29.22	0
7/8/2021 7:05	2.065	254.2	12.4	13.03	29.22	0
7/8/2021 7:27	2.098	230.6	41.09	13.22	29.22	0
7/8/2021 7:43	2.649	232.8	18.81	13.61	29.22	0
7/8/2021 7:48	3.119	233	25.36	13.37	29.21	0
7/8/2021 8:13	1.177	252.7	29.66	13.76	29.21	0
7/8/2021 8:25	2.353	245.6	22.13	13.69	29.21	0
7/8/2021 8:37	2.277	230.7	42.05	14.21	29.21	0
7/8/2021 8:48	1.185	220.4	61.36	14.53	29.24	0
7/8/2021 9:12	1.709	233.2	42.09	14.73	29.24	0
7/8/2021 9:17	1.325	286.3	31.7	14.87	29.24	0
7/8/2021 9:35	2.212	222.9	34.46	15.18	29.24	0
7/8/2021 9:54	2.652	231.8	30.58	15.33	29.24	0
7/8/2021 10:03	3.077	208.9	30.06	15.38	29.24	0
7/8/2021 10:16	3.446	257.2	19.7	15.51	29.24	0
7/8/2021 10:42	3.736	253.2	21.83	15.62	29.24	0
7/8/2021 10:57	3.631	237.8	16.51	15.83	29.24	0
7/8/2021 11:02	3.784	225.1	37.85	16	29.24	0
7/8/2021 11:18	3.344	251.2	28.58	16.23	29.24	0
7/8/2021 11:40	3.341	261.8	29.34	16.69	29.24	0
7/8/2021 11:49	2.51	286.7	39.44	17.24	29.25	0
7/8/2021 12:01	2.967	210.9	53.07	17.64	29.25	0
7/8/2021 12:24	3.113	206.6	26.14	18.15	29.25	0
7/8/2021 12:43	3.73	210.1	44.17	18.43	29.25	0
7/8/2021 12:45	4.114	165.9	32.03	18.6	29.25	0
7/8/2021 13:04	2.343	205.8	85.3	19.26	29.25	0
7/8/2021 13:19	4.269	296.2	24.39	19.6	29.25	0
7/8/2021 13:39	3.215	253	42.98	20.22	29.25	0
7/8/2021 13:53	3.128	295	34.73	20.77	29.22	0
7/8/2021 14:08	3.586	262.4	61.95	21.23	29.22	0
7/8/2021 14:20	2.902	294.7	73.14	21.33	29.22	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/8/2021 14:41	3.584	19.91	61.02	20.87	29.22	0
7/8/2021 14:58	2.951	136.5	72.38	22.02	29.22	0
7/8/2021 15:13	2.552	254	29.27	21.99	29.22	0
7/8/2021 15:30	2.944	328.9	91.9	22.78	29.22	0
7/8/2021 15:30	3.316	243.9	47.27	23.26	29.22	0
7/8/2021 15:52	4.799	254.9	30	23.28	29.22	0
7/8/2021 16:14	5.554	256.3	24.19	23.43	29.22	0
7/8/2021 16:20	5.564	281.8	26.91	23.4	29.22	0
7/8/2021 16:44	6.043	286.3	18.2	23.51	29.22	0
7/8/2021 16:59	5.382	268	24.97	23.21	29.22	0
7/8/2021 17:05	5.945	266	20.82	23.15	29.22	0
7/8/2021 17:16	5.349	279.2	17.23	23.25	29.22	0
7/8/2021 17:34	5.03	261.3	13.86	23.06	29.22	0
7/8/2021 17:45	4.312	278.3	27.81	23.13	29.2	0
7/8/2021 18:06	5.073	276.7	19.75	23.02	29.2	0
7/8/2021 18:17	4.934	276.1	10.85	22.76	29.2	0
7/8/2021 18:37	5.364	266.5	10.63	22.63	29.2	0
7/8/2021 18:50	5.488	269.2	9.3	22.28	29.22	0
7/8/2021 19:09	5.232	280.7	6.017	21.75	29.22	0
7/8/2021 19:17	4.407	286	3.504	21.52	29.22	0
7/8/2021 19:33	3.377	281.1	5.514	21.44	29.22	0
7/8/2021 19:59	2.258	310.7	38.93	21.25	29.23	0
7/8/2021 20:00	2.466	18.1	1.942	19.73	29.23	0
7/8/2021 20:23	2.491	49.11	11.96	19.43	29.23	0
7/8/2021 20:32	2.311	62.01	6.391	19.13	29.23	0
7/8/2021 20:59	2.183	48.14	7.957	18.98	29.24	0
7/8/2021 21:05	2.693	41.19	4.494	18.32	29.24	0
7/8/2021 21:23	2.798	34.69	5.76	17.92	29.24	0
7/8/2021 21:32	3.005	42.44	10.2	17.83	29.24	0
7/8/2021 21:55	2.4	188.8	77.45	17.92	29.25	0
7/8/2021 22:12	5.798	211.2	6.865	16.88	29.25	0
7/8/2021 22:15	4.918	198.7	9.65	16.89	29.25	0
7/8/2021 22:32	3.459	194.2	3.768	16.89	29.25	0
7/8/2021 22:50	2.64	168.5	47.87	16.69	29.26	0
7/8/2021 23:08	3.303	109.4	10.81	15.48	29.26	0
7/8/2021 23:18	2.986	123.5	13.3	15.83	29.26	0
7/8/2021 23:42	3.531	174.9	8.04	16.29	29.26	0
7/8/2021 23:57	3.894	177.1	9.75	15.9	29.28	0
7/9/2021 0:05	3.964	171.2	5.305	15.4	29.28	0
7/9/2021 0:16	3.71	151.7	9.95	15.11	29.28	0
7/9/2021 0:31	2.238	133.3	12.79	14.86	29.28	0
7/9/2021 0:58	2.502	139.8	17.66	15.05	29.27	0
7/9/2021 1:02	2.73	126.8	4.806	15.07	29.27	0
7/9/2021 1:15	1.708	138.1	4.105	15.42	29.27	0
7/9/2021 1:44	2.4	157.1	6.7	15.6	29.27	0
7/9/2021 1:58	3.425	200	15.18	15.33	29.28	0
7/9/2021 2:06	3.515	234.6	7.125	15.3	29.28	0
7/9/2021 2:29	2.735	232.9	9.17	15.26	29.28	0
7/9/2021 2:34	3.041	204.9	12.31	14.63	29.28	0
7/9/2021 2:54	2.792	167.9	7.105	14.32	29.3	0
7/9/2021 3:10	2.93	150.6	6.728	14.3	29.3	0
7/9/2021 3:25	3.501	173	18.67	14.28	29.3	0
7/9/2021 3:33	4.665	189.1	11.61	14.06	29.3	0
7/9/2021 3:58	4.449	188	10.68	14.04	29.32	0
7/9/2021 4:13	4.463	212.2	8.25	13.93	29.32	0
7/9/2021 4:20	3.402	164.4	20.84	13.77	29.32	0
7/9/2021 4:37	3.013	145.4	13.21	13.79	29.32	0
7/9/2021 4:57	3.463	187.8	14.27	13.97	29.31	0
7/9/2021 5:08	3.752	214.9	9.01	14.08	29.31	0
7/9/2021 5:15	1.608	250.6	17.32	14.08	29.31	0
7/9/2021 5:34	0.818	251.7	14.07	14.2	29.31	0
7/9/2021 5:49	1.459	279.4	15.84	14.45	29.31	0
7/9/2021 6:13	1.742	306.2	9.38	15.29	29.31	0
7/9/2021 6:27	2.162	298.2	16.31	15.63	29.31	0
7/9/2021 6:37	0.768	321.4	17.41	16.66	29.31	0
7/9/2021 6:55	2.542	22.54	21.92	17.17	29.32	0
7/9/2021 7:02	2.077	15.4	25.3	17.13	29.32	0
7/9/2021 7:17	1.706	345.8	59.24	17.87	29.32	0
7/9/2021 7:35	3.286	261	31.88	17.83	29.32	0
7/9/2021 7:45	2.434	253.9	21.41	18.27	29.34	0
7/9/2021 8:13	3.509	281.9	42.41	18.82	29.34	0
7/9/2021 8:19	2.674	333	41.25	19.31	29.34	0
7/9/2021 8:44	3.162	307.1	35.2	20.07	29.34	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/9/2021 8:57	3.348	313.4	19.86	20.28	29.3	0
7/9/2021 9:11	3.253	280.9	41.13	20.85	29.3	0
7/9/2021 9:17	4.592	329.3	29.64	21.44	29.3	0
7/9/2021 9:31	5.736	322.4	41.6	22.21	29.3	0
7/9/2021 9:49	5.029	356.6	30.65	22.51	29.29	0
7/9/2021 10:03	4.448	289.9	32.12	23.42	29.29	0
7/9/2021 10:22	4.818	1.883	36.23	24.05	29.29	0
7/9/2021 10:37	7.089	19.36	22.22	24.46	29.29	0
7/9/2021 10:59	8.09	11.45	18.35	24.96	29.31	0
7/9/2021 11:12	9.65	302.9	18.73	25.51	29.31	0
7/9/2021 11:17	10.46	283.2	19.41	25.52	29.31	0
7/9/2021 11:34	9	282.2	12.56	25.44	29.31	0
7/9/2021 11:47	8.22	285.3	16.92	26.03	29.3	0
7/9/2021 12:06	9.2	300.3	24.21	26.48	29.3	0
7/9/2021 12:15	8.18	308.8	17.29	27.04	29.3	0
7/9/2021 12:31	6.281	316.8	26.96	27.43	29.3	0
7/9/2021 12:59	6.512	288.5	25.2	27.28	29.29	0
7/9/2021 13:09	7.281	315.7	24.16	27.54	29.29	0
7/9/2021 13:25	5.873	324.3	22.95	27.7	29.29	0
7/9/2021 13:43	6.564	326.4	34.06	28.31	29.29	0
7/9/2021 13:46	6.256	340.3	31.76	28.06	29.28	0
7/9/2021 14:09	7.248	307.7	21.81	28.56	29.28	0
7/9/2021 14:24	7.009	325.8	24.54	28.74	29.28	0
7/9/2021 14:35	7.402	311.1	25.91	28.6	29.28	0
7/9/2021 14:45	7.476	283.5	15.76	28.59	29.27	0
7/9/2021 15:07	6.939	313.6	22.23	29.03	29.27	0
7/9/2021 15:21	7.298	304.2	23.5	28.96	29.27	0
7/9/2021 15:32	6.243	300.3	20.24	29.39	29.27	0
7/9/2021 15:54	6.401	292.6	24.73	29.28	29.25	0
7/9/2021 16:07	6.29	321.8	38.18	29.22	29.25	0
7/9/2021 16:25	6.643	294.7	16.41	29.69	29.25	0
7/9/2021 16:41	7.131	305.2	21.43	29.47	29.25	0
7/9/2021 16:51	6.992	299.5	13.54	29.7	29.22	0
7/9/2021 17:00	6.936	302.1	11.07	29.44	29.22	0
7/9/2021 17:26	6.988	297.3	14.21	29.22	29.22	0
7/9/2021 17:30	6.666	292.7	13.02	29.11	29.22	0
7/9/2021 17:46	7.68	294	13.64	28.77	29.22	0
7/9/2021 18:09	7.508	289.5	12.42	28.37	29.22	0
7/9/2021 18:28	7.86	293.8	9.32	27.98	29.22	0
7/9/2021 18:33	8.16	284.5	8.98	27.49	29.22	0
7/9/2021 18:52	7.289	299	7.428	27.11	29.23	0
7/9/2021 19:14	6.503	300.8	6.271	26.73	29.23	0
7/9/2021 19:15	5.704	291.4	6.961	26.34	29.23	0
7/9/2021 19:35	7.142	286.3	6.466	25.86	29.23	0
7/9/2021 19:54	6.188	296.7	4.7	25.13	29.25	0
7/9/2021 20:08	6.173	296.6	4.064	24.47	29.25	0
7/9/2021 20:16	6.253	296.5	4.924	23.91	29.25	0
7/9/2021 20:30	4.477	304.5	5.751	23.59	29.25	0
7/9/2021 20:55	4.246	343.8	31.99	23.19	29.27	0
7/9/2021 21:14	5.26	19.67	9.05	22.59	29.27	0
7/9/2021 21:16	5.452	26.2	8.18	22.24	29.27	0
7/9/2021 21:34	4.135	15.48	10.8	21.58	29.27	0
7/9/2021 21:59	2.925	14.79	22.08	21.43	29.26	0
7/9/2021 22:12	5.57	33.21	9.38	20.91	29.26	0
7/9/2021 22:15	6.049	30.99	8.29	20.8	29.26	0
7/9/2021 22:42	5.571	32.15	8.72	20.53	29.26	0
7/9/2021 22:45	5.385	37.62	7.168	20.34	29.28	0
7/9/2021 23:10	6.446	36.67	11.11	19.63	29.28	0
7/9/2021 23:27	5.145	34.64	11.98	19.53	29.28	0
7/9/2021 23:37	5.73	36.54	10.55	18.89	29.28	0
7/9/2021 23:52	5.259	22.08	7.251	18.55	29.28	0
7/10/2021 0:11	5.11	24.57	7.622	18.26	29.28	0
7/10/2021 0:26	4.755	23.11	8.93	18.1	29.28	0
7/10/2021 0:37	3.969	26.63	6.885	17.78	29.28	0
7/10/2021 0:55	5.929	25.53	7.132	17.83	29.29	0
7/10/2021 1:12	6.483	36.34	9.66	17.67	29.29	0
7/10/2021 1:22	6.719	38.85	7.704	17.68	29.29	0
7/10/2021 1:35	5.257	50.23	8.62	17.82	29.29	0
7/10/2021 1:45	4.273	71.65	15.16	17.57	29.29	0
7/10/2021 2:01	3.467	104.2	12.79	17.41	29.29	0
7/10/2021 2:24	4.592	147.6	5.205	18.14	29.29	0
7/10/2021 2:39	4	144.1	6.577	18.32	29.29	0
7/10/2021 2:50	3.297	163.3	7.143	18.34	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/10/2021 3:10	4.027	162.4	10.17	17.93	29.31	0
7/10/2021 3:18	4.407	189	6.532	17.81	29.31	0
7/10/2021 3:41	4.927	198	6.837	17.25	29.31	0
7/10/2021 3:46	5.251	200.8	3.051	16.78	29.34	0
7/10/2021 4:11	4.228	200.8	8.07	16.8	29.34	0
7/10/2021 4:18	3.996	201.3	8.41	16.49	29.34	0
7/10/2021 4:30	2.938	211.9	5.381	16.28	29.34	0
7/10/2021 4:56	3.302	208.7	9.68	16	29.35	0
7/10/2021 5:05	3.913	215	11.1	16.1	29.35	0
7/10/2021 5:15	2.616	204.7	9.43	16.06	29.35	0
7/10/2021 5:35	1.288	173.9	25.96	16.51	29.35	0
7/10/2021 5:57	1.955	168.4	18.2	16.85	29.34	0
7/10/2021 6:13	2.892	189.6	12.24	16.84	29.34	0
7/10/2021 6:28	3.692	192.3	19.18	17.05	29.34	0
7/10/2021 6:35	4.126	194.7	16.87	17.21	29.34	0
7/10/2021 6:59	3.484	207.2	20.97	17.82	29.37	0
7/10/2021 7:00	3.163	217.9	27.14	17.99	29.37	0
7/10/2021 7:15	2.824	224	35.08	18.69	29.37	0
7/10/2021 7:37	3.175	191.5	31.01	19.11	29.37	0
7/10/2021 7:54	3.261	184.6	32.51	19.34	29.36	0
7/10/2021 8:05	2.266	228.2	61.58	20.11	29.36	0
7/10/2021 8:21	4.195	234.9	21.74	20	29.36	0
7/10/2021 8:33	3.744	239.8	20.93	20.33	29.36	0
7/10/2021 8:52	4.475	238	21.31	20.82	29.36	0
7/10/2021 9:14	4.567	248	24.72	21.06	29.36	0
7/10/2021 9:19	6.755	247.5	12.23	21.21	29.36	0
7/10/2021 9:43	7.441	254.5	12.62	21.37	29.36	0
7/10/2021 9:58	6.631	255.4	17.62	21.82	29.38	0
7/10/2021 10:06	7.404	257.3	12.88	22.09	29.38	0
7/10/2021 10:22	7.013	263.5	14.27	22.13	29.38	0
7/10/2021 10:38	6.361	260.8	14.19	22.3	29.38	0
7/10/2021 10:55	6.279	271.6	16.27	22.75	29.38	0
7/10/2021 11:13	7.374	268.1	20.38	23.26	29.38	0
7/10/2021 11:16	6.603	282	16.07	23.39	29.38	0
7/10/2021 11:38	6.981	270.6	16.61	23.61	29.38	0
7/10/2021 11:47	6.661	258	28.2	24	29.36	0
7/10/2021 12:07	6.992	262.1	20.59	24.48	29.36	0
7/10/2021 12:15	5.562	253.5	19.55	24.98	29.36	0
7/10/2021 12:44	5.44	259.4	21.11	25.26	29.36	0
7/10/2021 12:45	6.416	271.5	25	25.59	29.36	0
7/10/2021 13:05	6.131	254	26.98	26.32	29.36	0
7/10/2021 13:28	7.094	266.8	22.14	26.55	29.36	0
7/10/2021 13:44	6.342	270.3	16.38	26.9	29.36	0
7/10/2021 13:45	6.945	277.6	22.65	27.39	29.33	0
7/10/2021 14:04	7.72	259.4	18.75	27.54	29.33	0
7/10/2021 14:27	8.01	268.2	16.22	28.21	29.33	0
7/10/2021 14:39	7.096	287.2	18.97	28.32	29.33	0
7/10/2021 14:51	8.45	281.8	18.44	28.4	29.33	0
7/10/2021 15:00	8.98	289.1	17.19	28.82	29.33	0
7/10/2021 15:26	9.53	279.6	14.87	28.64	29.33	0
7/10/2021 15:43	8.62	284	11.76	28.96	29.33	0
7/10/2021 15:55	8.47	281.7	13.89	28.9	29.33	0
7/10/2021 16:13	8.95	279.1	12.67	28.56	29.33	0
7/10/2021 16:27	7.991	285.3	16.45	28.98	29.33	0
7/10/2021 16:37	9.3	300.2	14.73	28.7	29.33	0
7/10/2021 16:52	9.09	306.5	12.21	28.44	29.32	0
7/10/2021 17:11	8.56	303.8	9.76	28.67	29.32	0
7/10/2021 17:27	8.66	300.5	14.56	28.53	29.32	0
7/10/2021 17:38	9.33	282.6	9.41	28.02	29.32	0
7/10/2021 17:53	9.13	293.7	13.81	27.92	29.31	0
7/10/2021 18:05	8.68	298	8.16	27.69	29.31	0
7/10/2021 18:15	8.77	303.9	8.11	27.41	29.31	0
7/10/2021 18:37	7.954	306.9	7.602	27.18	29.31	0
7/10/2021 18:59	8.39	300.5	6.549	26.72	29.3	0
7/10/2021 19:02	7.772	305	6.477	26.21	29.3	0
7/10/2021 19:18	6.89	306.8	5.675	25.71	29.3	0
7/10/2021 19:32	7.118	309.1	5.236	24.94	29.3	0
7/10/2021 19:46	7.533	331.2	7.897	24.04	29.31	0
7/10/2021 20:04	6.55	355.3	15.11	23.63	29.31	0
7/10/2021 20:23	8.52	14.54	12.62	22.65	29.31	0
7/10/2021 20:34	9.76	14.84	10.89	22	29.31	0
7/10/2021 20:47	9.7	16.94	12.76	21.55	29.31	0
7/10/2021 21:02	8.36	16.32	9.75	21.28	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/10/2021 21:21	9.66	25.2	9.14	21.27	29.31	0
7/10/2021 21:41	10.2	17.71	7.642	21.03	29.31	0
7/10/2021 21:58	11.09	15.74	7.212	20.84	29.31	0
7/10/2021 22:00	9.07	19.7	9.58	20.77	29.31	0
7/10/2021 22:28	7.24	26.2	11.03	20.78	29.31	0
7/10/2021 22:33	6.956	35.06	12.03	20.65	29.31	0
7/10/2021 22:48	4.762	35.09	17.07	20.25	29.34	0
7/10/2021 23:05	7.316	30.42	12.08	20.1	29.34	0
7/10/2021 23:20	8.23	33.95	9.19	20.05	29.34	0
7/10/2021 23:41	7.405	21.61	12.33	20.19	29.34	0
7/10/2021 23:50	5.712	5.026	21.37	20.08	29.32	0
7/11/2021 0:00	1.671	239.3	71.72	19.65	29.32	0
7/11/2021 0:23	1.952	24.88	20.72	19.14	29.32	0
7/11/2021 0:44	0.994	51.63	13.91	18.49	29.32	0
7/11/2021 0:59	5.139	41.07	9.82	18.11	29.33	0
7/11/2021 1:14	6.491	64.53	13.36	17.41	29.33	0
7/11/2021 1:16	5.363	68.11	18.16	17.41	29.33	0
7/11/2021 1:30	1.92	97.8	46.56	17.26	29.33	0
7/11/2021 1:47	4.078	182.3	9.08	16.43	29.32	0
7/11/2021 2:00	4.422	187.5	5.635	16	29.32	0
7/11/2021 2:15	3.195	159.1	15.9	15.46	29.32	0
7/11/2021 2:39	4.934	145.6	7.693	15.05	29.32	0
7/11/2021 2:55	5.18	163.6	14.56	14.6	29.35	0
7/11/2021 3:00	3.405	146	26.69	14.57	29.35	0
7/11/2021 3:17	2.483	152.9	15.72	14.46	29.35	0
7/11/2021 3:31	2.761	159.2	6.631	14.62	29.35	0
7/11/2021 3:59	3.57	172.1	13.5	14.37	29.36	0
7/11/2021 4:02	3.355	174.8	10.39	14.26	29.36	0
7/11/2021 4:24	3.518	181.9	6.435	14.1	29.36	0
7/11/2021 4:39	2.501	164.2	11.06	14.22	29.36	0
7/11/2021 4:51	3.003	180.6	6.062	14.38	29.36	0
7/11/2021 5:14	2.624	192.6	6.845	14.51	29.36	0
7/11/2021 5:15	2.938	200.7	9.76	14.6	29.36	0
7/11/2021 5:32	2.297	214.7	13.63	14.74	29.36	0
7/11/2021 5:49	2.281	205	25.11	14.84	29.35	0
7/11/2021 6:12	3.227	204.4	12.41	14.8	29.35	0
7/11/2021 6:16	2.566	219.6	24.6	14.74	29.35	0
7/11/2021 6:37	2.299	217.7	29.58	14.88	29.35	0
7/11/2021 6:48	3.2	192	19.37	14.8	29.37	0
7/11/2021 7:06	1.398	181.3	40.08	15.06	29.37	0
7/11/2021 7:18	1.844	194.1	37.06	15.26	29.37	0
7/11/2021 7:32	1.929	230.8	26.78	15.56	29.37	0
7/11/2021 7:53	3.031	240.4	29.59	15.61	29.35	0
7/11/2021 8:12	2.321	228.1	34.42	15.91	29.35	0
7/11/2021 8:16	1.509	301.7	45.33	17.2	29.35	0
7/11/2021 8:37	2.686	236.3	42.03	18.26	29.35	0
7/11/2021 8:54	3.486	219.3	34.97	18.42	29.37	0
7/11/2021 9:13	3.715	260.3	31.57	19.02	29.37	0
7/11/2021 9:23	3.856	283	30.84	19.96	29.37	0
7/11/2021 9:32	4.768	284.5	26.67	20.74	29.37	0
7/11/2021 9:55	5.531	273.5	19.31	21.47	29.33	0
7/11/2021 10:00	5.112	270.3	20.98	22	29.33	0
7/11/2021 10:28	5.773	282.5	27.93	22.38	29.33	0
7/11/2021 10:35	7.236	260.4	24.64	22.57	29.33	0
7/11/2021 10:52	7.615	238.2	15.22	22.8	29.33	0
7/11/2021 11:11	8.85	246.2	20.69	23.54	29.33	0
7/11/2021 11:22	8.22	255.6	21.19	23.88	29.33	0
7/11/2021 11:36	10.49	245.6	13.15	24.04	29.33	0
7/11/2021 11:48	9.79	252.8	14.62	24.7	29.32	0
7/11/2021 12:03	8.15	249.8	21.72	24.95	29.32	0
7/11/2021 12:25	9.84	242.2	12.81	25.04	29.32	0
7/11/2021 12:36	8.09	245.3	20.12	25.55	29.32	0
7/11/2021 12:45	7.747	259	17.33	26.23	29.3	0
7/11/2021 13:02	8.7	254.5	17.44	26.22	29.3	0
7/11/2021 13:24	6.318	294.3	36.58	27.22	29.3	0
7/11/2021 13:42	7.013	284.7	21.65	27.19	29.3	0
7/11/2021 13:53	5.284	302.9	34.78	27.46	29.3	0
7/11/2021 14:00	7.658	318.9	35.03	28.45	29.3	0
7/11/2021 14:22	6.847	335	27.75	28.86	29.3	0
7/11/2021 14:33	7.801	350.7	29.14	28.79	29.3	0
7/11/2021 14:58	8.49	341.6	19.84	28.96	29.27	0
7/11/2021 15:14	8.37	8.22	27.37	28.74	29.27	0
7/11/2021 15:22	8.27	329	23.02	29.59	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/11/2021 15:39	8.25	341.4	20.09	29.27	29.27	0
7/11/2021 15:55	8.85	312.7	12.85	29.43	29.27	0
7/11/2021 16:14	10.12	313	18.72	29.48	29.27	0
7/11/2021 16:17	10.48	309.8	10.73	29.07	29.27	0
7/11/2021 16:39	11.14	313.9	8.38	28.88	29.27	0
7/11/2021 16:50	10.44	307.8	11.53	28.87	29.26	0
7/11/2021 17:01	10.91	301.8	8.87	28.58	29.26	0
7/11/2021 17:23	10.69	317.4	16.73	28.58	29.26	0
7/11/2021 17:32	10.36	327	12.61	28.2	29.26	0
7/11/2021 17:51	8.8	325.8	18.44	27.82	29.25	0
7/11/2021 18:11	8.15	314.7	11.24	27.57	29.25	0
7/11/2021 18:16	8.28	321	8.07	27.2	29.25	0
7/11/2021 18:31	6.799	333.7	12.49	26.94	29.25	0
7/11/2021 18:51	5.76	353.6	12.76	26.34	29.24	0
7/11/2021 19:02	6.367	358.6	11.03	25.63	29.24	0
7/11/2021 19:26	8.55	2.913	8.14	24.8	29.24	0
7/11/2021 19:31	9.74	1.986	7.484	24.18	29.24	0
7/11/2021 19:48	8.75	0.039	7.899	23.78	29.24	0
7/11/2021 20:00	7.344	348.7	9.34	23.58	29.24	0
7/11/2021 20:26	7.148	339.2	9.46	22.99	29.24	0
7/11/2021 20:43	7.566	337.1	6.828	22.79	29.24	0
7/11/2021 20:59	8.49	354.6	10.55	22.44	29.24	0
7/11/2021 21:11	10.81	13.59	10.2	22.11	29.24	0
7/11/2021 21:15	5.379	359.6	25.74	21.26	29.24	0
7/11/2021 21:31	4.496	329.6	15.58	21.18	29.24	0
7/11/2021 22:00	6.234	16.09	16.5	20.6	29.24	0
7/11/2021 22:12	12.06	13.62	8.82	20.22	29.24	0
7/11/2021 22:16	9.65	17.85	13.99	19.82	29.24	0
7/11/2021 22:30	6.226	38.15	16.67	19.5	29.24	0
7/11/2021 22:53	11.53	16.07	8.65	19.57	29.24	0
7/11/2021 23:11	10.1	27.19	7.467	18.9	29.24	0
7/11/2021 23:16	10.54	23.66	9.03	18.49	29.24	0
7/11/2021 23:40	10.28	26.87	8.81	17.8	29.24	0
7/11/2021 23:45	11.02	19.66	6.677	17.52	29.25	0
7/12/2021 0:06	10.18	26.34	8.74	17.67	29.25	0
7/12/2021 0:17	9.05	29.68	8.3	17.29	29.25	0
7/12/2021 0:43	10.42	28.42	8.78	17.05	29.25	0
7/12/2021 0:48	11.52	24.24	7.692	17	29.24	0
7/12/2021 1:05	11.79	20.17	6.887	17.16	29.24	0
7/12/2021 1:25	9.92	21.34	8.1	16.7	29.24	0
7/12/2021 1:38	9.49	18.78	7.243	16.27	29.24	0
7/12/2021 1:45	7.592	28.63	8.34	15.86	29.24	0
7/12/2021 2:09	7.299	31.21	7.267	15.59	29.24	0
7/12/2021 2:16	7.851	27.95	5.403	15.29	29.24	0
7/12/2021 2:31	6.138	38.46	6.576	15.61	29.24	0
7/12/2021 2:47	3.31	73.84	19.54	16.63	29.26	0
7/12/2021 3:02	3.174	103.7	13.59	16.07	29.26	0
7/12/2021 3:19	2.781	74.52	27.96	15.84	29.26	0
7/12/2021 3:38	2.334	115.8	16.91	16.29	29.26	0
7/12/2021 3:55	3.108	153.4	5.634	16.29	29.26	0
7/12/2021 4:07	3.642	163.9	5.734	15.87	29.26	0
7/12/2021 4:15	2.897	166.2	7.468	15.61	29.26	0
7/12/2021 4:30	2.976	165.5	4.142	15.41	29.26	0
7/12/2021 4:59	3.164	159.9	7.11	15.48	29.26	0
7/12/2021 5:08	4.938	164.2	3.513	15.3	29.26	0
7/12/2021 5:22	5.084	158.7	8.51	15.59	29.26	0
7/12/2021 5:36	4.828	148.9	5.405	15.81	29.26	0
7/12/2021 5:51	5.161	162.7	11.11	16.01	29.28	0
7/12/2021 6:11	4.968	180.5	12.99	16.09	29.28	0
7/12/2021 6:16	4.999	194.2	8.58	16.12	29.28	0
7/12/2021 6:34	5.187	184.2	9.15	16.32	29.28	0
7/12/2021 6:53	3.754	184.1	15.48	16.86	29.28	0
7/12/2021 7:07	2.909	192.7	18.38	17.4	29.28	0
7/12/2021 7:16	2.752	210.2	22.74	17.93	29.28	0
7/12/2021 7:38	2.731	215.3	34.36	18.43	29.28	0
7/12/2021 7:46	2.558	227.3	37.01	19.14	29.26	0
7/12/2021 8:14	2.68	206.2	39.55	20.07	29.26	0
7/12/2021 8:19	2.748	218.8	34.6	20.29	29.26	0
7/12/2021 8:36	3.607	252.1	38.97	21.27	29.26	0
7/12/2021 8:55	4.675	333.7	23.35	21.93	29.28	0
7/12/2021 9:11	5.039	322.1	31.73	22.34	29.28	0
7/12/2021 9:24	4.176	279.7	33.59	22.61	29.28	0
7/12/2021 9:37	6.012	281.9	19.94	23.45	29.28	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/12/2021 9:59	7.36	273.8	19.68	23.55	29.27	0
7/12/2021 10:14	7.357	271.7	19.3	23.83	29.27	0
7/12/2021 10:25	6.956	273.1	16.12	24.13	29.27	0
7/12/2021 10:39	8.61	281	19.24	24.84	29.27	0
7/12/2021 10:48	8.23	269.1	16.87	24.78	29.25	0
7/12/2021 11:08	7.56	275	26.71	25.78	29.25	0
7/12/2021 11:24	7.716	287.3	19.87	26.13	29.25	0
7/12/2021 11:35	8.09	290.2	16.03	26.32	29.25	0
7/12/2021 11:58	7.516	274.2	26.74	26.51	29.25	0
7/12/2021 12:01	8.11	279	17.64	26.73	29.25	0
7/12/2021 12:24	7.812	280.5	21.33	27.43	29.25	0
7/12/2021 12:36	8.82	280.2	17.04	27.43	29.25	0
7/12/2021 12:53	7.49	278.3	28.26	27.78	29.26	0
7/12/2021 13:09	6.669	292.8	21.36	28.4	29.26	0
7/12/2021 13:16	7.913	294.3	24.54	28.6	29.26	0
7/12/2021 13:41	8.04	301.5	20.43	29.02	29.26	0
7/12/2021 13:49	7.656	302.2	19.1	29.22	29.24	0
7/12/2021 14:01	7.866	307.1	28.14	29.24	29.24	0
7/12/2021 14:26	8.19	319.8	21.94	29.69	29.24	0
7/12/2021 14:32	9.57	308.9	14.56	29.48	29.24	0
7/12/2021 14:55	10.73	303.5	15.24	29.74	29.24	0
7/12/2021 15:05	9.51	306.3	14.81	29.89	29.24	0
7/12/2021 15:23	9.77	303.8	12.98	29.92	29.24	0
7/12/2021 15:36	8.5	309.1	17.93	29.98	29.24	0
7/12/2021 15:59	7.821	311.7	14.24	29.91	29.24	0
7/12/2021 16:05	9.51	300.2	14.26	29.91	29.24	0
7/12/2021 16:26	8.04	309.4	12.84	30.11	29.24	0
7/12/2021 16:38	8.78	299.7	15.76	30.07	29.24	0
7/12/2021 16:56	8.77	306.6	12.49	30.07	29.22	0
7/12/2021 17:02	9.56	309.6	9.34	29.84	29.22	0
7/12/2021 17:21	9.46	301.2	10.76	29.6	29.22	0
7/12/2021 17:44	8.69	301.9	12.63	29.51	29.22	0
7/12/2021 17:57	8.54	302.8	10.7	29.2	29.21	0
7/12/2021 18:07	8.55	300.5	10.26	28.96	29.21	0
7/12/2021 18:16	9.05	304.6	8.17	28.57	29.21	0
7/12/2021 18:30	8.38	302.9	7.077	28.29	29.21	0
7/12/2021 18:50	7.568	303.3	7.911	27.95	29.23	0
7/12/2021 19:12	6.925	302.5	7.101	27.56	29.23	0
7/12/2021 19:18	6.041	300.3	5.696	27.05	29.23	0
7/12/2021 19:38	5.989	294.7	5.532	26.45	29.23	0
7/12/2021 19:45	6.064	302.1	4.224	25.75	29.23	0
7/12/2021 20:03	5.535	306.4	5.152	25.18	29.23	0
7/12/2021 20:27	4.168	330.7	3.609	24.87	29.23	0
7/12/2021 20:36	4.638	341.2	5.783	24.53	29.23	0
7/12/2021 20:56	3.694	351.8	8.9	24.26	29.25	0
7/12/2021 21:00	3.032	344.8	11.75	23.85	29.25	0
7/12/2021 21:29	3.525	291.1	15.58	23.53	29.25	0
7/12/2021 21:30	5.82	293.1	10.96	23.29	29.25	0
7/12/2021 21:45	1.614	32.65	20.85	22.08	29.24	0
7/12/2021 22:05	0.339	42.64	0.988	21.58	29.24	0
7/12/2021 22:27	1.188	354.7	12.35	22.13	29.24	0
7/12/2021 22:42	1.582	306.8	52.8	21.19	29.24	0
7/12/2021 22:54	3.107	204.6	17.29	21.01	29.26	0
7/12/2021 23:10	3.889	201.5	10.09	20.85	29.26	0
7/12/2021 23:16	4.5	219.9	5.703	20.64	29.26	0
7/12/2021 23:42	4.479	223.1	14.21	19.88	29.26	0
7/12/2021 23:48	5.438	227.6	10.09	19.35	29.25	0
7/13/2021 0:00	2.526	217.5	7.07	18.89	29.25	0
7/13/2021 0:28	1.349	245.3	19.82	18.51	29.25	0
7/13/2021 0:41	2.423	276.3	3.197	18.09	29.25	0
7/13/2021 0:58	2.722	281.3	8.62	17.72	29.26	0
7/13/2021 1:03	3.544	251.1	9.03	17.5	29.26	0
7/13/2021 1:25	3.643	229.5	7.809	17.53	29.26	0
7/13/2021 1:34	3.992	216.2	4.888	16.94	29.26	0
7/13/2021 1:46	2.478	189.2	18.95	16.47	29.26	0
7/13/2021 2:14	3.299	159.6	14.97	16.11	29.26	0
7/13/2021 2:26	4.872	182.5	10.5	15.95	29.26	0
7/13/2021 2:42	4.896	201	4.835	15.76	29.26	0
7/13/2021 2:50	4.195	199.1	6.633	15.49	29.26	0
7/13/2021 3:00	2.11	201.7	6.237	15.37	29.26	0
7/13/2021 3:20	1.738	168.8	17.91	15.1	29.26	0
7/13/2021 3:43	2.062	147.4	13.67	14.87	29.26	0
7/13/2021 3:49	1.984	188.5	15.9	15.01	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/13/2021 4:14	3.222	205.1	10.44	14.95	29.26	0
7/13/2021 4:22	5.25	244	9.22	14.49	29.26	0
7/13/2021 4:33	4.449	273.1	9.94	14.1	29.26	0
7/13/2021 4:45	2.862	284.3	9.23	13.91	29.28	0
7/13/2021 5:04	2.628	240.1	8.43	14.12	29.28	0
7/13/2021 5:15	1.532	181.3	33.17	14.11	29.28	0
7/13/2021 5:41	1.135	141.4	9.92	14.31	29.28	0
7/13/2021 5:59	1.309	111.7	10.8	14.93	29.29	0
7/13/2021 6:09	2.409	142.2	8.27	15.02	29.29	0
7/13/2021 6:17	2.796	137.3	12.96	15.22	29.29	0
7/13/2021 6:42	2.779	172.4	15.63	15.24	29.29	0
7/13/2021 6:56	2.58	170.1	29.95	16.02	29.29	0
7/13/2021 7:10	2.091	150	41.34	16.38	29.29	0
7/13/2021 7:24	3.268	208.6	37.49	16.44	29.29	0
7/13/2021 7:31	3.359	217.6	27.81	16.76	29.29	0
7/13/2021 7:48	2.886	200.3	27.71	17.64	29.3	0
7/13/2021 8:11	3.774	219.2	30.28	17.86	29.3	0
7/13/2021 8:24	3.607	214.1	27.59	18.09	29.3	0
7/13/2021 8:44	3.108	234.6	29.13	18.74	29.3	0
7/13/2021 8:56	5.016	249.2	21.05	19.06	29.29	0
7/13/2021 9:07	4.889	254.2	25.46	19.48	29.29	0
7/13/2021 9:23	4.687	231.2	30.9	19.84	29.29	0
7/13/2021 9:30	4.034	217.6	39.96	20.25	29.29	0
7/13/2021 9:57	4.715	225.3	25.35	20.58	29.26	0
7/13/2021 10:06	4.601	215.7	33.21	20.74	29.26	0
7/13/2021 10:27	4.82	228.4	32.07	21.69	29.26	0
7/13/2021 10:36	6.14	245.5	24.2	22.07	29.26	0
7/13/2021 10:45	6.273	258.3	23.45	22.63	29.27	0
7/13/2021 11:12	5.761	227.2	25.4	22.84	29.27	0
7/13/2021 11:15	5.892	248.5	18.38	23.49	29.27	0
7/13/2021 11:34	5.225	258.5	25.26	23.84	29.27	0
7/13/2021 11:52	5.551	269.1	31.15	24.39	29.25	0
7/13/2021 12:13	6.064	258.3	21.26	24.68	29.25	0
7/13/2021 12:17	5.749	253.3	28.38	24.87	29.25	0
7/13/2021 12:34	5.587	255.7	32.09	25.31	29.25	0
7/13/2021 12:49	6.83	268.1	17.05	26.01	29.24	0
7/13/2021 13:13	5.526	260.5	28.27	26.03	29.24	0
7/13/2021 13:16	6.824	241.5	23.14	26.33	29.24	0
7/13/2021 13:37	6.904	255.2	19.67	27.05	29.24	0
7/13/2021 13:49	7.827	270.9	13.23	27.17	29.24	0
7/13/2021 14:09	7.229	270.6	21.97	27.43	29.24	0
7/13/2021 14:22	6.348	266	19.31	27.65	29.24	0
7/13/2021 14:41	7.192	245.7	19.44	28.29	29.24	0
7/13/2021 14:45	7.67	249.9	19.42	28.47	29.22	0
7/13/2021 15:06	7.771	258.8	18.51	28.45	29.22	0
7/13/2021 15:19	8.64	251	20.49	29.01	29.22	0
7/13/2021 15:32	7.295	276.6	19.7	29.33	29.22	0
7/13/2021 15:53	7.502	274.3	14.69	29.5	29.21	0
7/13/2021 16:00	7.791	284.7	12.35	29.65	29.21	0
7/13/2021 16:16	8.43	267.1	17.66	29.62	29.21	0
7/13/2021 16:40	8.68	269.9	16	29.97	29.21	0
7/13/2021 16:46	7.8	283.3	12.24	29.97	29.19	0
7/13/2021 17:04	7.5	284	12.38	30.04	29.19	0
7/13/2021 17:16	6.897	288.1	16.14	29.95	29.19	0
7/13/2021 17:31	5.821	306.6	13.64	29.94	29.19	0
7/13/2021 17:48	4.061	324.8	25.07	29.71	29.19	0
7/13/2021 18:06	4.184	359.7	12.31	29.09	29.19	0
7/13/2021 18:24	4.592	339.2	21.5	29.05	29.19	0
7/13/2021 18:33	6.048	305.9	6.638	29.08	29.19	0
7/13/2021 18:46	5.31	307.4	6.196	28.69	29.19	0
7/13/2021 19:00	4.952	294.2	6.497	28.33	29.19	0
7/13/2021 19:18	5.259	289	4.112	27.73	29.19	0
7/13/2021 19:43	5.363	292.4	5.506	26.93	29.19	0
7/13/2021 19:55	6.694	309.3	10.96	25.93	29.2	0
7/13/2021 20:13	6.817	339.3	6.841	25.15	29.2	0
7/13/2021 20:30	7.763	353.4	9.85	24.67	29.2	0
7/13/2021 20:41	7.493	341.6	11.75	24.42	29.2	0
7/13/2021 20:53	8.53	346.5	12	23.96	29.21	0
7/13/2021 21:13	8.67	5.878	8.7	23.4	29.21	0
7/13/2021 21:20	8.53	0.907	13.78	23.66	29.21	0
7/13/2021 21:40	8.28	8.95	5.562	21.99	29.21	0
7/13/2021 21:57	9.86	9.51	6.897	21.84	29.2	0
7/13/2021 22:13	13.05	1.86	9.31	22.04	29.2	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/13/2021 22:28	12.83	354.4	9.87	22.08	29.2	0
7/13/2021 22:43	12.83	354.6	11.14	21.8	29.2	0
7/13/2021 22:48	10.27	357.5	10.73	21.19	29.2	0
7/13/2021 23:11	9.93	357.3	11.85	20.6	29.2	0
7/13/2021 23:15	7.937	4.864	10.43	19.83	29.2	0
7/13/2021 23:32	8.44	25.65	9.34	19.34	29.2	0
7/13/2021 23:49	6.526	45.28	11.03	19.17	29.22	0
7/14/2021 0:01	4.738	92.9	11.66	18.43	29.22	0
7/14/2021 0:28	4.51	99.8	10.6	17.75	29.22	0
7/14/2021 0:31	3.882	95	8.87	17.05	29.22	0
7/14/2021 0:58	4.356	143	24.82	16.65	29.22	0
7/14/2021 1:13	6.283	166.4	4.057	16.53	29.22	0
7/14/2021 1:15	4.633	164.8	8.68	16.02	29.22	0
7/14/2021 1:31	4.339	178.1	4.631	16.07	29.22	0
7/14/2021 1:47	4.304	179	6.169	15.93	29.2	0
7/14/2021 2:05	4.453	189	5.895	15.8	29.2	0
7/14/2021 2:23	3.749	197.5	8.21	15.67	29.2	0
7/14/2021 2:38	3.194	192.1	12.89	15.43	29.2	0
7/14/2021 2:45	2.467	150	15.32	14.93	29.23	0
7/14/2021 3:14	3.094	177.3	14.78	14.75	29.23	0
7/14/2021 3:20	3.517	201	8.12	14.79	29.23	0
7/14/2021 3:39	4.688	204.6	6.085	14.83	29.23	0
7/14/2021 3:57	4.085	197	8.62	14.83	29.24	0
7/14/2021 4:05	5.231	196	11.25	14.62	29.24	0
7/14/2021 4:29	5.23	192.4	11.22	14.44	29.24	0
7/14/2021 4:32	5.618	185.8	6.468	14.24	29.24	0
7/14/2021 4:50	5.441	183.8	10.55	14.19	29.22	0
7/14/2021 5:08	4.897	185.2	10.42	14.11	29.22	0
7/14/2021 5:16	3.87	178.3	10.86	14.04	29.22	0
7/14/2021 5:32	3.651	187.9	17.31	13.93	29.22	0
7/14/2021 5:50	2.932	187.2	14.67	13.89	29.25	0
7/14/2021 6:13	3.008	172.5	12.04	13.95	29.25	0
7/14/2021 6:26	3.874	170.4	12.92	14.14	29.25	0
7/14/2021 6:32	4.186	173	9.47	14.23	29.25	0
7/14/2021 6:46	4.318	173.1	6.914	14.22	29.26	0
7/14/2021 7:05	3.873	167.5	11.8	14.28	29.26	0
7/14/2021 7:25	3.883	217.1	14.03	14.31	29.26	0
7/14/2021 7:34	4.195	216.5	12.89	14.27	29.26	0
7/14/2021 7:47	3.679	193.5	25.03	14.29	29.24	0
7/14/2021 8:03	3.67	162.6	13.7	14.38	29.24	0
7/14/2021 8:15	3.384	159.5	17.23	14.68	29.24	0
7/14/2021 8:39	2.458	154.2	18.22	14.67	29.24	0
7/14/2021 8:56	3.37	171.9	14.49	14.95	29.26	0
7/14/2021 9:05	2.935	173.7	14.78	15.17	29.26	0
7/14/2021 9:25	3.931	195.5	27.14	15.57	29.26	0
7/14/2021 9:34	4.21	203.6	23.62	15.81	29.26	0
7/14/2021 9:45	3.777	231.3	22.54	16.23	29.25	0
7/14/2021 10:09	4.305	176.9	39.64	16.78	29.25	0
7/14/2021 10:29	2.897	149.4	35.98	17.03	29.25	0
7/14/2021 10:39	3.025	162.1	40.14	17.25	29.25	0
7/14/2021 10:54	3.513	145.1	48.27	17.84	29.23	0
7/14/2021 11:06	5.724	175.8	32.32	17.93	29.23	0
7/14/2021 11:21	4.478	169	30.31	18.42	29.23	0
7/14/2021 11:43	4.967	213.9	28.72	18.36	29.23	0
7/14/2021 11:48	4.622	233.9	32.03	18.48	29.22	0
7/14/2021 12:11	3.004	193.5	56.55	19.33	29.22	0
7/14/2021 12:23	4.566	209.2	39.36	19.78	29.22	0
7/14/2021 12:35	4.093	195.5	35.06	20.56	29.22	0
7/14/2021 12:54	3.384	244.8	49.12	21.01	29.23	0
7/14/2021 13:09	4.789	190.8	45.73	21.58	29.23	0
7/14/2021 13:19	4.441	171.9	50.84	21.82	29.23	0
7/14/2021 13:31	4.454	209.3	47.64	22.98	29.23	0
7/14/2021 13:57	5.862	209.3	32.93	22.88	29.19	0
7/14/2021 14:14	3.13	272.5	41.08	23.12	29.19	0
7/14/2021 14:16	5.668	270.2	26.72	23.85	29.19	0
7/14/2021 14:37	4.809	240.7	25.25	23.64	29.19	0
7/14/2021 14:49	5.534	242.4	26.08	24.19	29.21	0
7/14/2021 15:00	6.334	247.7	26.51	24.51	29.21	0
7/14/2021 15:24	5.893	262	24.99	24.4	29.21	0
7/14/2021 15:32	5.807	250.6	21.84	24.38	29.21	0
7/14/2021 15:58	5.274	253.8	25.2	24.94	29.19	0
7/14/2021 16:04	4.592	231.4	19.42	24.72	29.19	0
7/14/2021 16:25	5.223	251	30.27	25.15	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/14/2021 16:39	6.329	233.7	16.5	24.9	29.19	0
7/14/2021 16:59	5.733	265.1	29.66	25.22	29.18	0
7/14/2021 17:03	6.726	263.9	13.39	24.99	29.18	0
7/14/2021 17:15	5.318	235.4	18.17	24.71	29.18	0
7/14/2021 17:37	5.673	234.9	13.38	24.76	29.18	0
7/14/2021 17:58	4.515	262.7	21.56	24.91	29.17	0
7/14/2021 18:01	5.026	249.5	15.39	24.69	29.17	0
7/14/2021 18:22	5.205	246.6	18.64	24.43	29.17	0
7/14/2021 18:35	4.887	247.2	15	24.14	29.17	0
7/14/2021 18:48	5.388	236.9	13.6	23.86	29.16	0
7/14/2021 19:07	4.909	218.1	10.36	23.41	29.16	0
7/14/2021 19:28	5.402	221.9	8.03	23.02	29.16	0
7/14/2021 19:31	5.73	221	6.831	22.6	29.16	0
7/14/2021 19:47	5.329	229.4	5.963	22.23	29.14	0
7/14/2021 20:03	4.738	246.9	12.9	21.61	29.14	0
7/14/2021 20:24	3.549	286.2	10.08	20.85	29.14	0
7/14/2021 20:42	4.427	264.6	7.315	20.59	29.14	0
7/14/2021 20:47	4.067	265.9	6.951	20.28	29.16	0
7/14/2021 21:13	4.112	256.7	6.298	19.91	29.16	0
7/14/2021 21:15	4.125	239.6	4.777	19.56	29.16	0
7/14/2021 21:36	4.987	239.8	5.469	18.92	29.16	0
7/14/2021 21:46	5.831	227.8	7.791	18.44	29.19	0
7/14/2021 22:01	5.502	227.2	5.968	18.13	29.19	0
7/14/2021 22:19	5.973	239.5	3.606	17.66	29.19	0
7/14/2021 22:44	4.572	236.5	6.759	17.25	29.19	0
7/14/2021 22:47	6.16	232.2	6.304	16.69	29.2	0
7/14/2021 23:12	5.62	222.8	9.26	16.34	29.2	0
7/14/2021 23:26	5.356	218.6	8.77	15.96	29.2	0
7/14/2021 23:42	5.956	209	8.68	15.75	29.2	0
7/14/2021 23:46	4.908	210.7	10.25	15.42	29.21	0
7/15/2021 0:01	4.377	227.5	7.643	15.08	29.21	0
7/15/2021 0:27	3.274	236.5	10.08	14.85	29.21	0
7/15/2021 0:36	3.439	211	13.38	14.79	29.21	0
7/15/2021 0:47	4.161	207.3	8.22	14.67	29.19	0
7/15/2021 1:09	3.741	202.3	15.34	14.64	29.19	0
7/15/2021 1:29	4.424	191.6	10.17	14.45	29.19	0
7/15/2021 1:35	5.282	191.5	10.05	14.15	29.19	0
7/15/2021 1:59	5.464	205	9.33	14.02	29.19	0
7/15/2021 2:11	5.861	215.7	9.54	13.94	29.19	0
7/15/2021 2:21	5.89	216.6	9.56	13.89	29.19	0
7/15/2021 2:44	5.686	211.9	9.33	13.81	29.19	0
7/15/2021 2:58	6.589	207.2	9.16	13.71	29.21	0
7/15/2021 3:04	6.51	204.4	8.11	13.61	29.21	0
7/15/2021 3:20	5.716	212.6	9.81	13.46	29.21	0
7/15/2021 3:41	4.75	206.4	13.32	13.42	29.21	0
7/15/2021 3:53	3.715	188.5	11.4	13.36	29.23	0
7/15/2021 4:13	4.504	164.7	20.49	13.19	29.23	0
7/15/2021 4:29	5.537	141.1	6.243	12.79	29.23	0
7/15/2021 4:44	4.761	168	14.04	12.8	29.23	0
7/15/2021 4:56	6.129	172.1	9.68	12.78	29.24	0
7/15/2021 5:11	5.255	177.5	9.13	12.77	29.24	0
7/15/2021 5:24	5.364	174.4	8.91	12.72	29.24	0
7/15/2021 5:41	5.455	140.8	9.35	12.67	29.24	0
7/15/2021 5:48	6.127	166.3	20.39	12.76	29.24	0
7/15/2021 6:09	5.525	166.2	10.2	12.98	29.24	0
7/15/2021 6:19	5.98	175.7	9.88	12.91	29.24	0
7/15/2021 6:38	6.18	181.3	9.22	12.97	29.24	0
7/15/2021 6:58	5.919	185.9	13.46	13.06	29.26	0
7/15/2021 7:00	6.547	179.2	9.25	13.07	29.26	0
7/15/2021 7:22	6.252	169.8	13.49	13.3	29.26	0
7/15/2021 7:40	5.137	175.4	10.01	13.54	29.26	0
7/15/2021 7:52	6.652	179.2	13.18	13.72	29.27	0
7/15/2021 8:05	5.812	172.7	11	13.78	29.27	0
7/15/2021 8:27	6.759	174.5	7.249	13.8	29.27	0
7/15/2021 8:37	6.336	177.9	11.82	14	29.27	0
7/15/2021 8:46	5.043	190.1	20.31	14.02	29.25	0
7/15/2021 9:07	5.76	177.4	16.78	14.16	29.25	0
7/15/2021 9:23	5.493	173.5	19.54	14.39	29.25	0
7/15/2021 9:43	4.312	191.5	24.18	14.53	29.25	0
7/15/2021 9:53	4.172	203.6	21.19	14.58	29.28	0
7/15/2021 10:09	5.36	205.8	19.21	14.93	29.28	0
7/15/2021 10:25	5.962	173.7	20.1	15.21	29.28	0
7/15/2021 10:41	5.167	201.4	24.65	15.43	29.28	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/15/2021 10:48	4.149	149.9	37.16	15.93	29.26	0
7/15/2021 11:03	5.383	176.5	17.94	16.29	29.26	0
7/15/2021 11:18	4.659	137.9	29.77	16.42	29.26	0
7/15/2021 11:36	4.173	170.7	27.96	16.65	29.26	0
7/15/2021 11:57	5.039	170.6	23.5	16.8	29.27	0
7/15/2021 12:04	4.78	173.9	35.97	17.17	29.27	0
7/15/2021 12:28	4.351	201.4	35.53	17.52	29.27	0
7/15/2021 12:30	4.337	171.1	17.94	17.8	29.27	0
7/15/2021 12:52	5.16	197.1	20.23	17.76	29.25	0
7/15/2021 13:01	6.064	202.1	16.63	17.73	29.25	0
7/15/2021 13:15	5.283	196.8	22.63	17.96	29.25	0
7/15/2021 13:35	4.853	195.4	27.6	18.25	29.25	0
7/15/2021 13:45	3.562	155.5	34.83	18.78	29.26	0
7/15/2021 14:10	4.628	178.1	31.77	18.76	29.26	0
7/15/2021 14:20	5.004	207.5	31.53	18.88	29.26	0
7/15/2021 14:45	4.304	171.9	17.27	19.13	29.26	0
7/15/2021 14:45	2.296	132	50.41	19.34	29.25	0
7/15/2021 15:11	4.222	147.4	31.36	19.79	29.25	0
7/15/2021 15:18	3.532	93.3	26.18	19.55	29.25	0
7/15/2021 15:38	2.607	106	33.87	20.51	29.25	0
7/15/2021 15:49	4.575	155.2	41.43	20.67	29.24	0
7/15/2021 16:10	3.136	149.6	32.02	20.73	29.24	0
7/15/2021 16:21	3.118	206.8	41.05	20.87	29.24	0
7/15/2021 16:44	3.229	274.3	26.45	21.49	29.24	0
7/15/2021 16:45	3.363	295.3	32.86	21.52	29.23	0
7/15/2021 17:00	3.174	122.5	56.99	21.43	29.23	0
7/15/2021 17:16	1.917	93.8	32.82	21.88	29.23	0
7/15/2021 17:40	1.105	72	25.35	22.17	29.23	0
7/15/2021 17:47	1.053	249.8	64.6	22.32	29.2	0
7/15/2021 18:14	2.213	258.3	61.29	22	29.2	0
7/15/2021 18:22	3.26	220	20.39	21.29	29.2	0
7/15/2021 18:44	1.642	242.3	38.04	21.51	29.2	0
7/15/2021 18:45	2.762	221.3	14.33	21.08	29.2	0
7/15/2021 19:10	3.47	228.7	15.11	20.75	29.2	0
7/15/2021 19:27	3.032	221.1	14.65	20.6	29.2	0
7/15/2021 19:44	4.689	230.6	8.52	19.97	29.2	0
7/15/2021 19:53	5.488	248.1	5.387	19.22	29.21	0
7/15/2021 20:02	5.28	248.6	3.663	18.87	29.21	0
7/15/2021 20:19	4.093	266.3	27.73	18.63	29.21	0
7/15/2021 20:38	1.906	335.4	2.379	17.86	29.21	0
7/15/2021 20:49	1.468	0.264	4.203	17.65	29.2	0
7/15/2021 21:02	0.992	5.432	4.302	17.28	29.2	0
7/15/2021 21:27	1.349	44.71	7.583	16.95	29.2	0
7/15/2021 21:37	1.831	38.3	4.069	17.16	29.2	0
7/15/2021 21:48	1.592	31.75	0.96	17.42	29.21	0
7/15/2021 22:12	2.882	29.2	66.99	17.39	29.21	0
7/15/2021 22:25	5.982	233.1	10.11	17.26	29.21	0
7/15/2021 22:37	7.455	243.2	5.351	17.22	29.21	0
7/15/2021 22:48	6.882	237.7	5.821	16.79	29.21	0
7/15/2021 23:05	6.576	234.3	8.55	16.47	29.21	0
7/15/2021 23:29	4.37	248.1	6.804	16.22	29.21	0
7/15/2021 23:35	3.992	229.2	10.27	16.17	29.21	0
7/15/2021 23:48	3.769	242	6.935	15.94	29.23	0
7/16/2021 0:06	4.98	237	7.73	15.8	29.23	0
7/16/2021 0:29	5.317	246.5	9.29	15.41	29.23	0
7/16/2021 0:35	5.823	232.7	7.924	15.2	29.23	0
7/16/2021 0:56	5.81	223.1	8.14	15.03	29.21	0
7/16/2021 1:00	6.249	231.6	6.243	14.8	29.21	0
7/16/2021 1:15	3.839	228.5	6.827	14.71	29.21	0
7/16/2021 1:37	3.279	220.4	15.17	14.69	29.21	0
7/16/2021 1:54	3.578	198.4	14.08	14.78	29.23	0
7/16/2021 2:07	4.31	194.3	12.85	14.76	29.23	0
7/16/2021 2:21	5.999	179.3	9.89	14.58	29.23	0
7/16/2021 2:44	6.655	154.2	14.31	14.16	29.23	0
7/16/2021 2:47	6.984	167.2	12.84	13.95	29.21	0
7/16/2021 3:02	4.837	173.5	8.49	13.96	29.21	0
7/16/2021 3:20	6.262	177.4	7.417	13.98	29.21	0
7/16/2021 3:39	5.573	175.9	7.073	13.91	29.21	0
7/16/2021 3:58	4.106	176.1	9.8	13.91	29.22	0
7/16/2021 4:06	4.274	140.5	9.64	13.83	29.22	0
7/16/2021 4:26	5.257	146.2	8.92	13.79	29.22	0
7/16/2021 4:33	5.235	150.1	12.34	13.81	29.22	0
7/16/2021 4:46	4.047	175	11.85	13.91	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/16/2021 5:08	5.212	181.1	8.37	13.89	29.25	0
7/16/2021 5:25	4.981	158.5	14.86	13.87	29.25	0
7/16/2021 5:30	4.141	151.1	14.53	13.89	29.25	0
7/16/2021 5:59	4.556	163.3	23.07	13.92	29.26	0
7/16/2021 6:06	6.755	176	12.03	13.95	29.26	0
7/16/2021 6:28	5.992	189	13.39	13.92	29.26	0
7/16/2021 6:44	6.675	180.1	12.49	13.82	29.26	0
7/16/2021 6:56	8.63	174.2	9.39	13.73	29.25	0
7/16/2021 7:00	8.44	162.6	11.46	13.87	29.25	0
7/16/2021 7:15	6.508	137.1	9.71	14.15	29.25	0
7/16/2021 7:35	5.472	142.2	15.41	14.5	29.25	0
7/16/2021 7:50	6.531	166.7	15.89	14.65	29.25	0
7/16/2021 8:08	7.034	179.8	10.65	14.61	29.25	0
7/16/2021 8:19	5.523	180.2	18.52	14.76	29.25	0
7/16/2021 8:42	5.67	162.7	27.05	15.03	29.25	0
7/16/2021 8:59	5.933	144.4	23.96	15.38	29.27	0
7/16/2021 9:14	6.378	185.1	14.34	15.26	29.27	0
7/16/2021 9:17	6.01	176.7	15.3	15.46	29.27	0
7/16/2021 9:31	5.899	184	14.82	15.59	29.27	0
7/16/2021 9:53	6.282	156.5	16.13	16.37	29.27	0
7/16/2021 10:07	6.165	157.1	23.26	16.67	29.27	0
7/16/2021 10:16	5.871	148.8	24.13	16.97	29.27	0
7/16/2021 10:35	6.206	172.2	15.44	16.9	29.27	0
7/16/2021 10:56	6.048	194.7	28.48	16.95	29.26	0
7/16/2021 11:10	7.251	174.9	13.2	17.25	29.26	0
7/16/2021 11:19	6.182	165	15.33	17.27	29.26	0
7/16/2021 11:44	5.64	135.5	31.82	17.8	29.26	0
7/16/2021 11:58	4.922	162.5	35.58	18.53	29.26	0
7/16/2021 12:00	6.008	169.1	26.4	18.74	29.26	0
7/16/2021 12:15	4.983	155.3	31.74	19.19	29.26	0
7/16/2021 12:44	5.812	166.5	25.52	19.45	29.26	0
7/16/2021 12:55	5.352	172.5	20.65	19.79	29.26	0
7/16/2021 13:14	4.522	203.4	36.94	19.66	29.26	0
7/16/2021 13:16	5.18	209.3	20.98	19.74	29.26	0
7/16/2021 13:38	6.021	178.5	19.26	19.92	29.26	0
7/16/2021 13:53	6.179	201.1	18.14	20.02	29.26	0
7/16/2021 14:07	6.596	194.9	11.53	19.61	29.26	0
7/16/2021 14:15	5.461	213.4	14.78	19.74	29.26	0
7/16/2021 14:41	5.17	184.5	22.52	19.9	29.26	0
7/16/2021 14:45	3.481	172.7	38.72	20.55	29.24	0
7/16/2021 15:14	5.229	163.9	29.61	20.25	29.24	0
7/16/2021 15:17	6.46	172.8	14.75	19.89	29.24	0
7/16/2021 15:37	6.708	174.2	12.17	20.43	29.24	0
7/16/2021 15:50	5.396	156.8	25.47	20.3	29.22	0
7/16/2021 16:05	6.226	147.4	18.68	20.47	29.22	0
7/16/2021 16:17	5.898	129.5	12.88	20.3	29.22	0
7/16/2021 16:31	5.119	130.4	12.64	20.06	29.22	0
7/16/2021 16:49	4.734	121.8	15.68	20.14	29.23	0
7/16/2021 17:00	4.404	128	13.91	20.18	29.23	0
7/16/2021 17:23	3.436	192.5	44.14	20.08	29.23	0
7/16/2021 17:30	4.612	225.3	13.11	19.89	29.23	0
7/16/2021 17:46	4.319	224.7	11.67	19.75	29.23	0
7/16/2021 18:01	3.305	220.6	13.33	19.79	29.23	0
7/16/2021 18:26	3.793	246	15.86	19.8	29.23	0
7/16/2021 18:32	4.713	251.1	12.46	19.67	29.23	0
7/16/2021 18:48	5.945	251.1	7.745	19.49	29.22	0
7/16/2021 19:05	6.049	246.6	7.988	19.24	29.22	0
7/16/2021 19:18	4.813	240.5	9.98	19.16	29.22	0
7/16/2021 19:33	3.492	236.1	8.01	19.12	29.22	0
7/16/2021 19:51	3.426	227.2	13.65	19.03	29.24	0
7/16/2021 20:01	2.343	200.9	23.43	18.92	29.24	0
7/16/2021 20:29	0.658	240.4	31.58	18.72	29.24	0
7/16/2021 20:34	3.276	238.7	7.326	18.8	29.24	0
7/16/2021 20:56	3.311	229.6	7.707	18.75	29.23	0
7/16/2021 21:09	4.08	242.3	10.69	18.66	29.23	0
7/16/2021 21:20	5.61	241.1	7.68	18.37	29.23	0
7/16/2021 21:35	4.667	240.2	8.06	18.11	29.23	0
7/16/2021 21:47	3.395	228.5	8.61	17.93	29.25	0
7/16/2021 22:14	3.34	219.5	8.17	17.78	29.25	0
7/16/2021 22:27	4.711	210.6	7.748	17.61	29.25	0
7/16/2021 22:38	4.454	210.7	8.1	17.43	29.25	0
7/16/2021 22:50	4.011	211.7	7.653	17.26	29.24	0
7/16/2021 23:00	2.556	203.5	7.976	17.24	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/16/2021 23:21	2.16	200.3	11.44	17.28	29.24	0
7/16/2021 23:37	3.505	183.9	7.593	17.2	29.24	0
7/16/2021 23:51	4.377	189.5	6.994	17.03	29.25	0
7/17/2021 0:00	3.893	201.2	9.19	16.63	29.25	0
7/17/2021 0:19	3.535	210.5	9.02	16.6	29.25	0
7/17/2021 0:43	2.574	204.5	9.37	16.6	29.25	0
7/17/2021 0:52	4.201	221.2	10.87	16.63	29.25	0
7/17/2021 1:10	4.414	222.3	9.91	16.43	29.25	0
7/17/2021 1:17	4.064	239.9	7.479	16.16	29.25	0
7/17/2021 1:41	3.747	256.4	7.816	16.03	29.25	0
7/17/2021 1:48	4.042	251.4	6.118	15.98	29.24	0
7/17/2021 2:04	3	269	7.394	15.89	29.24	0
7/17/2021 2:17	2.858	267.3	5.079	15.72	29.24	0
7/17/2021 2:30	1.701	277.7	7.583	15.58	29.24	0
7/17/2021 2:47	1.379	293	5.187	15.51	29.24	0
7/17/2021 3:13	1.225	303.9	2.688	15.37	29.24	0
7/17/2021 3:23	0.731	308.1	0.054	15.34	29.24	0
7/17/2021 3:44	0.154	306.4	0.444	15.34	29.24	0
7/17/2021 3:51	2.688	242.4	10.75	15.36	29.26	0
7/17/2021 4:05	2.408	262.7	4.031	15.09	29.26	0
7/17/2021 4:18	1.019	259.4	1.559	15.03	29.26	0
7/17/2021 4:43	0.394	337.2	4.863	14.96	29.26	0
7/17/2021 4:49	2.203	337.2	5.061	14.58	29.27	0
7/17/2021 5:00	1.365	328.6	1.911	14.81	29.27	0
7/17/2021 5:15	0.293	330.2	1.445	15.03	29.27	0
7/17/2021 5:44	0.538	0.186	26.89	15.07	29.27	0
7/17/2021 5:58	1.263	73.39	12.28	14.93	29.27	0
7/17/2021 6:12	2.732	123.8	12.8	15.36	29.27	0
7/17/2021 6:28	3.944	131.4	6.791	15.64	29.27	0
7/17/2021 6:31	4.573	133.5	6.693	15.9	29.27	0
7/17/2021 6:49	4.119	129.4	11.95	16.28	29.29	0
7/17/2021 7:10	4.31	128.2	15.12	16.62	29.29	0
7/17/2021 7:29	4.575	149.3	21.17	16.74	29.29	0
7/17/2021 7:31	4.244	175.2	14.22	17	29.29	0
7/17/2021 7:47	3.794	177.4	15.51	17.23	29.29	0
7/17/2021 8:10	4.106	156.8	30.66	17.49	29.29	0
7/17/2021 8:16	3.381	177.5	41.43	17.93	29.29	0
7/17/2021 8:36	3.393	163.1	39.04	18.38	29.29	0
7/17/2021 8:53	4.024	194.4	33.72	18.01	29.29	0
7/17/2021 9:08	5.455	151.3	24.58	18.56	29.29	0
7/17/2021 9:19	3.725	138.5	37.66	19.07	29.29	0
7/17/2021 9:33	4.677	139.1	47.31	20	29.29	0
7/17/2021 9:54	5.006	189.2	53.71	20.41	29.29	0
7/17/2021 10:00	3.229	203.3	51.62	20.84	29.29	0
7/17/2021 10:15	5.733	241.8	14.13	20.96	29.29	0
7/17/2021 10:39	4.253	242.6	34.68	21.04	29.29	0
7/17/2021 10:58	3.547	241.6	36.14	21.76	29.27	0
7/17/2021 11:13	4.45	236.3	53.21	22.17	29.27	0
7/17/2021 11:24	5.593	226.6	28.39	22.3	29.27	0
7/17/2021 11:34	5.941	211.7	26.57	22.57	29.27	0
7/17/2021 11:47	5.568	229.7	41.05	22.79	29.29	0
7/17/2021 12:14	7.373	270.5	44.99	23.35	29.29	0
7/17/2021 12:23	7.347	272.8	26.2	24.25	29.29	0
7/17/2021 12:35	11.66	238.9	11.73	23.94	29.29	0
7/17/2021 12:48	9.14	245.6	18.28	24.06	29.27	0
7/17/2021 13:13	8.7	273.4	27.1	24.14	29.27	0
7/17/2021 13:15	8.7	294.8	15.92	24.25	29.27	0
7/17/2021 13:42	6.118	295.9	26.58	24.17	29.27	0
7/17/2021 13:54	7.285	267.8	31.85	24.34	29.27	0
7/17/2021 14:14	6.045	251.6	32.37	24.92	29.27	0
7/17/2021 14:26	7.007	314.9	29.67	25.27	29.27	0
7/17/2021 14:38	8.54	296.1	29.15	25.2	29.27	0
7/17/2021 14:53	7.76	319.8	25.9	24.94	29.25	0
7/17/2021 15:00	7.189	318.7	26.66	24.2	29.25	0
7/17/2021 15:29	4.044	326	36.31	25.19	29.25	0
7/17/2021 15:33	7.68	274.8	10.22	24.72	29.25	0
7/17/2021 15:57	5.793	285.1	12.56	24.51	29.24	0
7/17/2021 16:10	5.478	281.2	21.13	25.4	29.24	0
7/17/2021 16:20	5.931	284.8	13.04	25.32	29.24	0
7/17/2021 16:43	6.049	281.9	13.11	24.77	29.24	0
7/17/2021 16:45	5.782	274.6	18.19	25.29	29.23	0
7/17/2021 17:00	6.5	269.4	12.08	24.78	29.23	0
7/17/2021 17:20	6.982	308.7	14.72	25.33	29.23	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/17/2021 17:36	5.621	287.8	15.83	25.32	29.23	0
7/17/2021 17:51	5.632	297.4	17.36	25.05	29.24	0
7/17/2021 18:14	7.454	290.9	10.02	24.88	29.24	0
7/17/2021 18:18	10.03	292.4	6.316	24.13	29.24	0
7/17/2021 18:36	7.551	290.8	9.43	23.82	29.24	0
7/17/2021 18:49	7.374	313.1	13.26	23.17	29.26	0
7/17/2021 19:00	6.14	334.4	8.38	22.56	29.26	0
7/17/2021 19:20	6.03	326.8	9.7	21.89	29.26	0
7/17/2021 19:32	5.295	305	12.23	21.72	29.26	0
7/17/2021 19:57	4.255	322.7	15.53	21.52	29.25	0
7/17/2021 20:14	3.813	351.3	13.08	20.91	29.25	0
7/17/2021 20:29	9	10.28	9.82	20.33	29.25	0
7/17/2021 20:34	10.62	355.2	12.86	19.89	29.25	0
7/17/2021 20:45	10.47	355.5	14.15	19.7	29.27	0
7/17/2021 21:06	10.11	2.979	14.04	19.27	29.27	0
7/17/2021 21:22	11.32	5.19	10.29	18.77	29.27	0
7/17/2021 21:37	11	1.21	11.47	18.5	29.27	0
7/17/2021 21:55	9.56	0.655	12.17	18.3	29.28	0
7/17/2021 22:04	8.5	8.95	8.21	17.83	29.28	0
7/17/2021 22:15	10.33	8.87	7.385	17.4	29.28	0
7/17/2021 22:36	10.02	3.926	12.08	17.19	29.28	0
7/17/2021 22:49	8.8	1.764	12.75	17.29	29.28	0
7/17/2021 23:12	10.31	1.615	11.3	16.93	29.28	0
7/17/2021 23:16	11	4.902	10.02	16.72	29.28	0
7/17/2021 23:44	9.2	8.77	10.63	16.41	29.28	0
7/17/2021 23:46	8.38	17.36	10.23	16.29	29.31	0
7/18/2021 0:13	8.27	20.31	10.13	15.92	29.31	0
7/18/2021 0:25	7.55	24.39	12.93	15.91	29.31	0
7/18/2021 0:44	5.683	32.22	20.04	15.83	29.31	0
7/18/2021 0:49	5.564	24.2	8.96	15.82	29.32	0
7/18/2021 1:14	5.006	22.62	9.92	15.68	29.32	0
7/18/2021 1:24	5.868	21.32	10.22	15.45	29.32	0
7/18/2021 1:38	5.395	23.03	7.243	15.01	29.32	0
7/18/2021 1:47	5.082	16.7	6.809	14.91	29.31	0
7/18/2021 2:00	4.557	21.8	7.357	14.94	29.31	0
7/18/2021 2:29	3.642	30.26	8.79	14.75	29.31	0
7/18/2021 2:36	5.837	21.79	6.488	14.53	29.31	0
7/18/2021 2:50	4.484	20.58	9.76	14.5	29.33	0
7/18/2021 3:10	5.745	32.49	10.25	14.42	29.33	0
7/18/2021 3:29	5.855	32.34	8.49	14.37	29.33	0
7/18/2021 3:30	4.792	35.15	9.64	14.14	29.33	0
7/18/2021 3:57	3.972	40.12	8.42	13.95	29.34	0
7/18/2021 4:11	4.073	34.02	6.894	13.99	29.34	0
7/18/2021 4:20	4.579	33.88	6.964	13.83	29.34	0
7/18/2021 4:36	5.272	29.72	5.254	13.76	29.34	0
7/18/2021 4:56	4.635	38.62	5.447	13.89	29.34	0
7/18/2021 5:00	3.025	40.94	4.968	14.43	29.34	0
7/18/2021 5:22	3.009	60.43	7.424	15.42	29.34	0
7/18/2021 5:32	2.213	74.89	4.937	15.98	29.34	0
7/18/2021 5:50	1.711	57.92	9.27	16.33	29.34	0
7/18/2021 6:14	1.606	66.53	30.01	16.64	29.34	0
7/18/2021 6:21	3.356	138.8	15.08	16.7	29.34	0
7/18/2021 6:38	3.767	136.8	10.39	17.08	29.34	0
7/18/2021 6:48	2.703	142	25.71	17.47	29.34	0
7/18/2021 7:01	3.166	204.8	35.55	17.62	29.34	0
7/18/2021 7:17	1.483	251.4	46.48	18.07	29.34	0
7/18/2021 7:35	2.346	355.3	27.97	18.81	29.34	0
7/18/2021 7:55	3.02	278.2	18.82	19.17	29.36	0
7/18/2021 8:07	2.895	306	25.91	19.56	29.36	0
7/18/2021 8:25	4.307	14.94	33.91	19.8	29.36	0
7/18/2021 8:34	5.929	32.29	17.09	19.97	29.36	0
7/18/2021 8:48	3.696	25.03	19.39	20.25	29.35	0
7/18/2021 9:10	4.949	24.18	15.91	20.92	29.35	0
7/18/2021 9:15	4.008	28.03	18.16	21.12	29.35	0
7/18/2021 9:39	3.598	37.45	36.44	22.38	29.35	0
7/18/2021 9:47	3.482	9.91	51.96	22.68	29.33	0
7/18/2021 10:04	5.348	274.9	21.05	22.91	29.33	0
7/18/2021 10:24	5.606	275.4	23.9	23.02	29.33	0
7/18/2021 10:34	5.201	274.3	39.22	23.72	29.33	0
7/18/2021 10:56	5.485	335	30.93	23.76	29.35	0
7/18/2021 11:05	4.926	305.4	40.11	24.29	29.35	0
7/18/2021 11:23	4.033	328.1	43.79	24.64	29.35	0
7/18/2021 11:42	4.908	348	36.82	24.96	29.35	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/18/2021 11:58	4.732	310.6	44.35	25.62	29.34	0
7/18/2021 12:04	5.144	328.1	33.7	25.71	29.34	0
7/18/2021 12:24	3.96	354.3	62.89	25.93	29.34	0
7/18/2021 12:30	3.852	342.9	48.49	26.38	29.34	0
7/18/2021 12:49	4.493	298.2	36.05	26.91	29.32	0
7/18/2021 13:08	7.144	288.4	48.63	27.22	29.32	0
7/18/2021 13:17	9.2	265.4	25.24	27.51	29.32	0
7/18/2021 13:32	9.47	269	28.7	27.49	29.32	0
7/18/2021 13:45	8.06	291.3	27.83	27.71	29.31	0
7/18/2021 14:10	7.275	320.3	31.52	28.06	29.31	0
7/18/2021 14:26	8.72	290.3	24.77	28.19	29.31	0
7/18/2021 14:33	8.59	287.7	19.75	28.31	29.31	0
7/18/2021 14:45	8.58	298.8	26.31	28.97	29.28	0
7/18/2021 15:04	6.639	328.4	29.5	29.05	29.28	0
7/18/2021 15:23	6.239	326.2	29.08	29.05	29.28	0
7/18/2021 15:38	9.2	303.1	30.75	29.18	29.28	0
7/18/2021 15:53	9.41	295	15.8	29.12	29.27	0
7/18/2021 16:01	8.58	299.7	17.61	29.22	29.27	0
7/18/2021 16:29	9.16	306.3	15.84	29.24	29.27	0
7/18/2021 16:41	9.72	290.5	12.25	28.72	29.27	0
7/18/2021 16:47	10.02	295.1	10.72	28.87	29.27	0
7/18/2021 17:06	9.95	303.3	9.48	28.62	29.27	0
7/18/2021 17:19	10	301.9	8.9	28.52	29.27	0
7/18/2021 17:42	9.83	305.8	9.46	28.07	29.27	0
7/18/2021 17:47	9.41	301.4	7.028	27.82	29.26	0
7/18/2021 18:05	8.98	308.4	8.64	27.3	29.26	0
7/18/2021 18:15	7.539	323.3	13.16	26.83	29.26	0
7/18/2021 18:35	6.379	335.4	11.55	26.47	29.26	0
7/18/2021 18:59	6.546	321	9.95	25.84	29.27	0
7/18/2021 19:13	7.142	331.1	15.5	25.09	29.27	0
7/18/2021 19:26	6.497	323.3	16.44	24.56	29.27	0
7/18/2021 19:40	6.088	334.4	16.72	24.03	29.27	0
7/18/2021 19:50	6.581	347.5	18.63	23.63	29.28	0
7/18/2021 20:05	8.13	0.165	13.31	23.15	29.28	0
7/18/2021 20:27	6.861	1.952	15.53	22.64	29.28	0
7/18/2021 20:41	9.32	17.57	11.6	22.2	29.28	0
7/18/2021 20:54	8.78	21.83	10.69	21.69	29.26	0
7/18/2021 21:06	8.47	22.94	10.31	21.11	29.26	0
7/18/2021 21:21	7.862	17.7	8.77	20.82	29.26	0
7/18/2021 21:37	6.532	17.06	11.42	20.81	29.26	0
7/18/2021 21:46	7.842	19.16	10.83	20.49	29.27	0
7/18/2021 22:05	8.69	17.48	10.27	20.13	29.27	0
7/18/2021 22:22	7.791	27.67	10.23	19.7	29.27	0
7/18/2021 22:44	8.23	26.22	9.33	19.21	29.27	0
7/18/2021 22:53	8.73	28.65	9.98	18.63	29.29	0
7/18/2021 23:11	9.88	26.67	8.62	18.35	29.29	0
7/18/2021 23:24	12.68	20.74	7.206	17.95	29.29	0
7/18/2021 23:38	11.47	22.36	8.12	17.42	29.29	0
7/18/2021 23:50	9.98	25.87	8.86	17.11	29.3	0
7/19/2021 0:14	9.36	28.37	7.985	16.88	29.3	0
7/19/2021 0:28	8.87	29.88	8.89	16.72	29.3	0
7/19/2021 0:43	7.587	26.98	8.6	16.49	29.3	0
7/19/2021 0:45	7.955	33.9	8.69	16.32	29.28	0
7/19/2021 1:06	6.969	36.05	8.1	16.02	29.28	0
7/19/2021 1:15	7.051	36.42	8.49	15.65	29.28	0
7/19/2021 1:41	5.855	33.91	7.28	15.46	29.28	0
7/19/2021 1:47	5.323	39.59	10.21	15.39	29.3	0
7/19/2021 2:10	4.093	48.05	8.93	15.39	29.3	0
7/19/2021 2:21	3.948	35.59	18.08	15.29	29.3	0
7/19/2021 2:30	2.375	30.22	21	15.34	29.3	0
7/19/2021 2:57	2.514	70.55	9.53	14.95	29.29	0
7/19/2021 3:09	2.85	60.21	11.23	15.08	29.29	0
7/19/2021 3:26	2.594	94.2	6.506	15.53	29.29	0
7/19/2021 3:44	3.239	99.7	10.34	15.52	29.29	0
7/19/2021 3:51	4.423	120.2	2.573	15.83	29.3	0
7/19/2021 4:00	3.734	130.2	2.659	15.96	29.3	0
7/19/2021 4:26	2.652	106.2	10.39	15.39	29.3	0
7/19/2021 4:37	3.671	122.3	9.61	15.59	29.3	0
7/19/2021 4:45	2.209	130.4	13.43	15.93	29.31	0
7/19/2021 5:08	0.712	14.97	22.61	15.56	29.31	0
7/19/2021 5:29	0.287	353.4	0.902	16.96	29.31	0
7/19/2021 5:35	0.43	7.661	17.36	17.66	29.31	0
7/19/2021 5:54	0.493	56.71	15.77	18.51	29.32	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/19/2021 6:14	2.403	162.1	21.19	17.23	29.32	0
7/19/2021 6:25	3.889	176.4	13.43	17.08	29.32	0
7/19/2021 6:38	5.073	173.1	10.24	17.49	29.32	0
7/19/2021 6:49	4.111	175.3	10.21	17.81	29.31	0
7/19/2021 7:12	3.727	169.6	11.05	18.42	29.31	0
7/19/2021 7:21	3.634	167.8	26.43	18.91	29.31	0
7/19/2021 7:39	2.655	153.9	29.43	19.99	29.31	0
7/19/2021 7:46	2.202	171.5	41.94	20.4	29.32	0
7/19/2021 8:10	3.273	190.3	31.31	20.62	29.32	0
7/19/2021 8:29	2.786	222.8	35.85	21.13	29.32	0
7/19/2021 8:35	4.043	195.9	21.51	21.31	29.32	0
7/19/2021 8:56	3.649	177.2	40.59	21.72	29.32	0
7/19/2021 9:04	2.709	171.8	46.79	22.87	29.32	0
7/19/2021 9:16	3.402	164.4	46	23.5	29.32	0
7/19/2021 9:42	2.629	112.7	68.3	24.08	29.32	0
7/19/2021 9:46	3.485	185.8	34.59	24.15	29.29	0
7/19/2021 10:14	2.738	270.8	31.96	25.16	29.29	0
7/19/2021 10:23	3.484	236.1	58.32	25.1	29.29	0
7/19/2021 10:37	6.099	259.4	31.37	25.7	29.29	0
7/19/2021 10:57	4.754	251.3	23.6	25.66	29.3	0
7/19/2021 11:10	7.497	257.6	25.42	26.23	29.3	0
7/19/2021 11:26	6.018	248.4	33.63	26.53	29.3	0
7/19/2021 11:32	4.704	269.6	23.49	26.73	29.3	0
7/19/2021 11:59	5.042	230	36.75	27.22	29.29	0
7/19/2021 12:12	6.041	266.1	29.78	27.39	29.29	0
7/19/2021 12:25	5.445	273.5	31.69	27.52	29.29	0
7/19/2021 12:37	5.35	228.1	40.26	27.99	29.29	0
7/19/2021 12:47	6.691	272.5	24.4	28.07	29.3	0
7/19/2021 13:08	6.382	256.9	25.7	28.67	29.3	0
7/19/2021 13:24	6.368	232.1	26.1	28.52	29.3	0
7/19/2021 13:40	6.35	242.8	43.87	28.7	29.3	0
7/19/2021 13:47	5.825	232.4	39.64	28.91	29.28	0
7/19/2021 14:11	7.318	282.7	22.55	29.36	29.28	0
7/19/2021 14:20	7.426	242.5	30.84	29.29	29.28	0
7/19/2021 14:42	7.397	258.5	26.76	29.4	29.28	0
7/19/2021 14:47	8.2	257.1	13.81	29.6	29.28	0
7/19/2021 15:05	6.316	267.1	18.42	29.69	29.28	0
7/19/2021 15:17	7.194	240.1	24.91	29.68	29.28	0
7/19/2021 15:35	7.843	267.9	18.2	29.81	29.28	0
7/19/2021 15:45	6.113	261.4	34.92	29.93	29.28	0
7/19/2021 16:12	6.634	238.9	22.52	30.14	29.28	0
7/19/2021 16:22	6.731	222.2	24.34	29.42	29.28	0
7/19/2021 16:42	5.775	246.4	26.63	29.78	29.28	0
7/19/2021 16:55	8.44	245.7	19.45	29.76	29.26	0
7/19/2021 17:02	6.704	257.1	18.94	29.93	29.26	0
7/19/2021 17:17	6.283	253.3	16.84	29.65	29.26	0
7/19/2021 17:36	6.595	248.7	21.8	29.44	29.26	0
7/19/2021 17:53	7.332	255	15.71	29.06	29.25	0
7/19/2021 18:09	6.957	242.8	15.76	28.7	29.25	0
7/19/2021 18:19	8.54	251.9	11.22	28.28	29.25	0
7/19/2021 18:38	8.24	255	9.02	27.95	29.25	0
7/19/2021 18:58	8.91	239.4	9.13	27.54	29.28	0
7/19/2021 19:07	11.05	234.8	7.048	26.52	29.28	0
7/19/2021 19:17	9.5	236.1	7.402	25.78	29.28	0
7/19/2021 19:44	11.04	246	7.677	24.98	29.28	0
7/19/2021 19:45	11.61	246	6.459	24.14	29.27	0
7/19/2021 20:02	7.72	247.7	8.96	23.48	29.27	0
7/19/2021 20:16	6.322	243.2	11.2	23	29.27	0
7/19/2021 20:31	7.043	215.1	11.33	22.5	29.27	0
7/19/2021 20:48	7.609	209	7.459	21.79	29.3	0
7/19/2021 21:09	8.04	205.8	6.087	21.3	29.3	0
7/19/2021 21:16	7.089	211.8	10.04	20.88	29.3	0
7/19/2021 21:34	7.213	219	8.72	20.54	29.3	0
7/19/2021 21:45	6.302	225.3	9.62	20.19	29.31	0
7/19/2021 22:00	4.443	248.9	11.75	19.74	29.31	0
7/19/2021 22:22	6.383	228.9	8.39	19.43	29.31	0
7/19/2021 22:31	5.437	234.2	6.12	19.2	29.31	0
7/19/2021 22:45	3.437	247.5	7.195	18.75	29.3	0
7/19/2021 23:08	4.167	237.4	6.913	18.48	29.3	0
7/19/2021 23:15	2.635	238.7	7.615	18.24	29.3	0
7/19/2021 23:33	2.12	228.3	12.59	18.14	29.3	0
7/19/2021 23:59	3.668	260.9	11.88	17.67	29.32	0
7/20/2021 0:10	7.431	238.6	13.22	17.19	29.32	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/20/2021 0:15	6.268	228	9.49	16.92	29.32	0
7/20/2021 0:35	6.995	244.2	7.245	16.52	29.32	0
7/20/2021 0:49	6.308	238.2	8.85	16.18	29.32	0
7/20/2021 1:04	3.779	241.3	7.121	15.95	29.32	0
7/20/2021 1:16	0.711	282.3	18.12	15.77	29.32	0
7/20/2021 1:36	1.939	6.706	11.26	15.47	29.32	0
7/20/2021 1:47	0.666	14.38	0.38	15.61	29.33	0
7/20/2021 2:02	0.001	13.99	0.001	15.8	29.33	0
7/20/2021 2:29	1.033	146.7	47.98	15.87	29.33	0
7/20/2021 2:36	2.17	192.8	13.97	16.14	29.33	0
7/20/2021 2:51	4.426	183.3	14.71	15.69	29.34	0
7/20/2021 3:05	5.883	165.3	6.828	15.73	29.34	0
7/20/2021 3:15	4.815	164.4	10.6	15.74	29.34	0
7/20/2021 3:34	4.526	155.2	11.76	15.69	29.34	0
7/20/2021 3:54	5.648	139	5.282	15.49	29.33	0
7/20/2021 4:06	4.859	134.9	6.206	15.51	29.33	0
7/20/2021 4:29	4.247	128.7	9.28	15.54	29.33	0
7/20/2021 4:44	3.881	121.5	14.22	15.56	29.33	0
7/20/2021 4:55	5.763	133.5	9.2	15.4	29.36	0
7/20/2021 5:06	5.071	131.4	8.12	15.22	29.36	0
7/20/2021 5:28	6.763	141.8	7.602	15.04	29.36	0
7/20/2021 5:35	6.877	138.9	5.602	14.81	29.36	0
7/20/2021 5:45	5.984	132.4	7.199	14.79	29.34	0
7/20/2021 6:02	5.167	130.9	8.65	14.92	29.34	0
7/20/2021 6:29	6.004	133	6.966	14.92	29.34	0
7/20/2021 6:30	6.74	133.2	6.7	14.9	29.34	0
7/20/2021 6:55	6.348	134.4	7.238	14.95	29.38	0
7/20/2021 7:01	5.474	131.6	7.576	14.89	29.38	0
7/20/2021 7:18	5.57	131.5	6.335	14.93	29.38	0
7/20/2021 7:42	6.009	128.9	6.306	14.96	29.38	0
7/20/2021 7:46	4.554	148.3	21.31	15.09	29.36	0.01
7/20/2021 8:09	4.071	161.5	13.35	15.29	29.36	0
7/20/2021 8:18	3.636	149.3	15.26	15.51	29.36	0
7/20/2021 8:43	4.028	153.8	18.62	15.73	29.36	0
7/20/2021 8:46	4.101	158.4	21.47	15.84	29.38	0
7/20/2021 9:01	4.281	149.3	18.38	16.12	29.38	0
7/20/2021 9:27	4.931	186.3	26.69	16.42	29.38	0
7/20/2021 9:34	5.422	210.9	14.68	16.43	29.38	0
7/20/2021 9:59	4.172	195.9	19.78	16.66	29.38	0
7/20/2021 10:09	5.499	202.2	15.72	16.79	29.38	0
7/20/2021 10:20	6.467	219.7	12.16	16.86	29.38	0
7/20/2021 10:30	4.678	184.9	23.08	17.08	29.38	0
7/20/2021 10:56	6.762	215.4	12.09	17.61	29.38	0
7/20/2021 11:04	6.711	198.3	16.64	17.58	29.38	0
7/20/2021 11:26	6.867	207.6	11.19	17.49	29.38	0
7/20/2021 11:41	6.257	222.5	17.09	17.79	29.38	0
7/20/2021 11:46	6.234	226.6	14.3	18.11	29.36	0
7/20/2021 12:01	6.166	214.4	18.3	18.2	29.36	0
7/20/2021 12:19	6.123	206.5	15.55	18.16	29.36	0
7/20/2021 12:31	4.757	220.3	17.05	18.44	29.36	0
7/20/2021 12:46	5.811	254.9	23.21	18.47	29.37	0
7/20/2021 13:13	4.993	221.9	22.48	18.75	29.37	0
7/20/2021 13:29	4.997	263.3	18.09	18.98	29.37	0
7/20/2021 13:30	3.802	262.7	28.34	19.24	29.37	0
7/20/2021 13:46	3.81	227.4	45.03	19.12	29.36	0
7/20/2021 14:01	3.376	261.4	31.07	19.09	29.36	0
7/20/2021 14:20	5.643	322.7	15.29	19.66	29.36	0
7/20/2021 14:38	5.408	281.7	25.95	19.85	29.36	0
7/20/2021 14:58	5.422	317	40.07	21.08	29.32	0
7/20/2021 15:05	6.403	252.9	20.25	21.59	29.32	0
7/20/2021 15:25	4.029	260.8	46.46	20.67	29.32	0
7/20/2021 15:43	5.59	275.4	39.98	21.53	29.32	0
7/20/2021 15:50	4.406	248.3	48.64	21.76	29.31	0
7/20/2021 16:09	3.478	300.6	31.46	22.09	29.31	0
7/20/2021 16:19	2.964	330.4	56.53	21.99	29.31	0
7/20/2021 16:43	3.515	301.2	46.79	22.05	29.31	0
7/20/2021 16:46	5.433	258.6	19.06	21.98	29.31	0
7/20/2021 17:00	4.545	299.5	39.43	22.07	29.31	0
7/20/2021 17:25	4.551	239.6	15.92	22	29.31	0
7/20/2021 17:32	2.547	250.7	27.95	21.94	29.31	0
7/20/2021 17:58	2.34	334.4	32.31	22.28	29.3	0
7/20/2021 18:00	2.916	308.6	13.33	21.57	29.3	0
7/20/2021 18:19	2.714	22.01	19.16	20.87	29.3	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/20/2021 18:33	1.912	25.75	6.52	20.99	29.3	0
7/20/2021 18:47	2.348	9.83	5.37	20.51	29.28	0
7/20/2021 19:11	2.01	358.4	5.542	20.65	29.28	0
7/20/2021 19:25	2.659	4.971	3.601	19.9	29.28	0
7/20/2021 19:44	2.791	4.86	4.017	19.14	29.28	0
7/20/2021 19:51	4.129	12.95	7.055	18.43	29.27	0
7/20/2021 20:04	4	16.66	4.812	17.74	29.27	0
7/20/2021 20:16	4.035	6.654	4.758	17.5	29.27	0
7/20/2021 20:30	3.187	2.583	7.897	17.32	29.27	0
7/20/2021 20:59	4.43	7.877	11.13	16.89	29.26	0
7/20/2021 21:13	6.457	12.76	8.69	16.71	29.26	0
7/20/2021 21:27	7.559	16.26	9.39	16.65	29.26	0
7/20/2021 21:42	8.42	11.69	8.83	16.4	29.26	0
7/20/2021 21:55	9.4	13.05	8.25	16.24	29.27	0
7/20/2021 22:04	10	12.63	7.924	16.15	29.27	0
7/20/2021 22:24	9.86	10.02	8.14	16.21	29.27	0
7/20/2021 22:31	9.31	10.21	9.13	16.14	29.27	0
7/20/2021 22:51	8.36	1.021	10.47	16.26	29.28	0
7/20/2021 23:02	4.29	13.97	16.64	16.26	29.28	0
7/20/2021 23:28	5.944	33.4	10.49	15.85	29.28	0
7/20/2021 23:33	9.5	14.74	9.94	15.71	29.28	0
7/20/2021 23:46	6.151	17.21	13.19	15.58	29.27	0
7/21/2021 0:04	5.849	53.13	12.32	15.23	29.27	0
7/21/2021 0:15	4.573	76.94	12.03	14.83	29.27	0
7/21/2021 0:32	3.429	105.6	16.9	14.72	29.27	0
7/21/2021 0:51	3.695	108.2	17.86	14.68	29.3	0
7/21/2021 1:12	3.23	145.5	18.63	14.38	29.3	0
7/21/2021 1:17	2.84	135.6	16.27	14.38	29.3	0
7/21/2021 1:41	2.599	115.9	6.056	14.53	29.3	0
7/21/2021 1:49	3.068	108.7	5.114	14.59	29.28	0
7/21/2021 2:09	2.524	153.3	35.32	14.7	29.28	0
7/21/2021 2:21	3.528	170.4	11.87	14.75	29.28	0
7/21/2021 2:32	3.042	171.1	8.72	14.74	29.28	0
7/21/2021 2:46	2.57	207.1	26.5	14.77	29.3	0
7/21/2021 3:06	1.696	229.9	11.85	14.85	29.3	0
7/21/2021 3:26	2.044	215.2	11.3	14.82	29.3	0
7/21/2021 3:40	1.606	215.9	11.95	14.82	29.3	0
7/21/2021 3:48	1.108	98.9	7.598	14.58	29.31	0
7/21/2021 4:06	1.173	351.2	67.15	14.53	29.31	0
7/21/2021 4:27	1.303	304.8	38.33	14.6	29.31	0
7/21/2021 4:44	3.497	224.4	17.96	14.61	29.31	0
7/21/2021 4:46	4.643	218.6	8.87	14.36	29.3	0
7/21/2021 5:10	4.34	215.3	7.572	14.27	29.3	0
7/21/2021 5:21	5.174	191.7	9.39	14.12	29.3	0
7/21/2021 5:43	6.6	172.3	6.537	13.88	29.3	0
7/21/2021 5:46	6.247	176.5	10.33	13.74	29.33	0
7/21/2021 6:11	5.306	172.6	8.36	13.77	29.33	0
7/21/2021 6:21	5.663	145.3	13.02	13.71	29.33	0
7/21/2021 6:30	4.363	139.6	8.18	13.78	29.33	0
7/21/2021 6:57	5.766	128.2	7.953	13.87	29.33	0
7/21/2021 7:09	5.655	129.9	15.59	13.89	29.33	0
7/21/2021 7:29	5.162	139.7	18.04	13.82	29.33	0
7/21/2021 7:44	3.712	102.8	22.02	13.87	29.33	0
7/21/2021 7:54	4.595	100.1	11.23	13.92	29.33	0
7/21/2021 8:07	5.117	118.7	24.96	14.15	29.33	0
7/21/2021 8:21	5.849	148.9	15.4	14.15	29.33	0
7/21/2021 8:32	5.833	156.5	12.89	14.57	29.33	0
7/21/2021 8:50	5.638	131.2	21.43	15.24	29.35	0
7/21/2021 9:04	5.412	131.9	24.7	15.63	29.35	0
7/21/2021 9:23	5.949	137.4	18.61	15.92	29.35	0
7/21/2021 9:42	6.77	120.6	20	15.92	29.35	0
7/21/2021 9:47	6.023	145.2	20.51	16	29.36	0
7/21/2021 10:07	5.057	137.3	22.7	16.31	29.36	0
7/21/2021 10:21	4.827	119.5	16.66	17.05	29.36	0
7/21/2021 10:32	3.055	141.3	25.31	17.27	29.36	0
7/21/2021 10:49	3.409	135.9	59.42	18	29.33	0
7/21/2021 11:07	2.842	108.6	52.64	18.17	29.33	0
7/21/2021 11:25	3.078	192.1	40.82	18.15	29.33	0
7/21/2021 11:43	2.342	284.7	55.68	18.29	29.33	0
7/21/2021 11:59	4.84	244.5	29.7	18.24	29.33	0
7/21/2021 12:00	7.518	220.2	13.97	18.85	29.33	0
7/21/2021 12:20	7.338	183.6	26.82	19.69	29.33	0
7/21/2021 12:31	8.32	213.9	13.96	19.62	29.33	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/21/2021 12:45	6.454	194.2	23.61	19.7	29.35	0
7/21/2021 13:10	4.688	199.9	48.45	21.12	29.35	0
7/21/2021 13:17	7.835	206.5	21.73	20.07	29.35	0
7/21/2021 13:34	7.606	215.9	27.2	20.8	29.35	0
7/21/2021 13:59	7.577	213.6	30.18	21.4	29.33	0
7/21/2021 14:13	7.299	227.8	21.53	21.49	29.33	0
7/21/2021 14:29	5.762	225	23.46	21.7	29.33	0
7/21/2021 14:42	9.09	220	20.64	21.73	29.33	0
7/21/2021 14:45	9.69	215	18.7	21.64	29.33	0
7/21/2021 15:01	8.89	233.1	13.87	21.83	29.33	0
7/21/2021 15:21	6.655	244.8	36.18	21.95	29.33	0
7/21/2021 15:34	8.57	240.9	23.24	22.35	29.33	0
7/21/2021 15:57	7.29	242.3	23.77	22.86	29.33	0
7/21/2021 16:07	8.07	255.2	18.49	22.79	29.33	0
7/21/2021 16:17	7.139	257.2	17.69	21.98	29.33	0
7/21/2021 16:39	6.019	251.5	18.33	22.79	29.33	0
7/21/2021 16:48	6.861	258.7	25.39	22.69	29.31	0
7/21/2021 17:12	3.682	270.9	42.43	22.82	29.31	0
7/21/2021 17:29	6.715	298.6	20.98	22.78	29.31	0
7/21/2021 17:37	6.761	304.6	17.05	22.6	29.31	0
7/21/2021 17:48	4.217	338.9	36.79	21.62	29.31	0
7/21/2021 18:05	4.821	332.6	18.97	20.74	29.31	0
7/21/2021 18:24	4.647	352.5	11.83	19.9	29.31	0
7/21/2021 18:41	5.567	333.6	12.55	19.97	29.31	0
7/21/2021 18:51	6.635	338.6	14.52	19.7	29.31	0
7/21/2021 19:04	6.744	356.5	11.22	19.29	29.31	0
7/21/2021 19:20	5.917	8.76	8.14	19.01	29.31	0
7/21/2021 19:39	5.91	359.3	11.32	18.78	29.31	0
7/21/2021 19:47	4.787	318.6	16.78	19.08	29.32	0
7/21/2021 20:05	4.769	349.2	33.39	18.69	29.32	0
7/21/2021 20:20	7.426	357.9	13.62	17.88	29.32	0
7/21/2021 20:38	6.089	354.3	14.4	17.62	29.32	0
7/21/2021 20:57	6.504	347.6	13.32	17.45	29.33	0
7/21/2021 21:03	6.6	351.3	13.22	17.33	29.33	0
7/21/2021 21:29	6.115	348.9	16.18	17.12	29.33	0
7/21/2021 21:36	7.664	353.2	13.76	17.12	29.33	0
7/21/2021 21:46	5.723	358.6	13.86	16.87	29.34	0
7/21/2021 22:04	5.906	359.4	11.46	16.65	29.34	0
7/21/2021 22:18	3.93	18.47	23.5	16.32	29.34	0
7/21/2021 22:44	4.387	31.42	14.16	15.97	29.34	0
7/21/2021 22:52	5.671	36.53	9.86	16.03	29.34	0
7/21/2021 23:03	5.508	42.33	10.93	16.04	29.34	0
7/21/2021 23:24	7.018	34.55	10.89	15.99	29.34	0
7/21/2021 23:42	10.69	6.724	10.78	15.88	29.34	0
7/21/2021 23:45	6.475	39.8	22.05	15.69	29.33	0
7/22/2021 0:11	4.749	48.4	13.52	15.63	29.33	0
7/22/2021 0:15	2.645	55.99	19.14	15.49	29.33	0
7/22/2021 0:31	2.076	69.22	22.99	15.3	29.33	0
7/22/2021 0:45	2.525	25.78	8.86	15.35	29.35	0
7/22/2021 1:13	2.4	34.45	7.361	15.48	29.35	0
7/22/2021 1:27	4.048	26.34	7.275	15.3	29.35	0
7/22/2021 1:36	4.913	29.29	18.8	15.22	29.35	0
7/22/2021 1:56	4.028	27.11	11.86	15.03	29.33	0
7/22/2021 2:08	4.136	17.76	11.23	14.73	29.33	0
7/22/2021 2:22	4.631	7.496	10.53	14.73	29.33	0
7/22/2021 2:39	3.584	16.11	13.06	14.63	29.33	0
7/22/2021 2:58	2.745	22.93	10.16	14.71	29.36	0
7/22/2021 3:07	3.821	44.08	14.82	14.63	29.36	0
7/22/2021 3:16	1.496	51.79	12.5	14.66	29.36	0
7/22/2021 3:33	2.65	26.68	23.72	14.62	29.36	0
7/22/2021 3:47	3.553	34.58	15.57	14.56	29.36	0
7/22/2021 4:14	2.386	43.68	16.07	14.44	29.36	0
7/22/2021 4:25	2.326	32.61	22.19	14.41	29.36	0
7/22/2021 4:34	4.126	27.8	13.6	14.24	29.36	0
7/22/2021 4:46	3.768	21.36	17.69	13.76	29.35	0
7/22/2021 5:14	2.972	28.18	26.19	13.55	29.35	0
7/22/2021 5:24	3.566	26.9	22.61	13.5	29.35	0
7/22/2021 5:30	4.366	44.59	28.12	14.22	29.35	0
7/22/2021 5:57	5.231	36.08	15.69	14.85	29.36	0
7/22/2021 6:01	6.753	41.33	14.08	15.26	29.36	0
7/22/2021 6:28	4.597	41.21	18.59	15.65	29.36	0
7/22/2021 6:32	5.713	38.27	14.76	15.79	29.36	0
7/22/2021 6:54	5.955	50.4	17.11	16.24	29.37	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/22/2021 7:06	9.62	25.24	11.85	16.44	29.37	0
7/22/2021 7:17	10.71	22.56	10.96	16.56	29.37	0
7/22/2021 7:30	9.42	20.64	10.22	16.06	29.37	0
7/22/2021 7:58	8.11	26.38	15.41	16.99	29.36	0
7/22/2021 8:14	8.84	20.7	16.15	17.54	29.36	0
7/22/2021 8:28	10.02	15.16	12.43	17.97	29.36	0
7/22/2021 8:35	10.02	11.93	16.02	18.25	29.36	0
7/22/2021 8:55	10.7	16.3	11.23	18.53	29.37	0
7/22/2021 9:14	10.4	16.81	15.37	18.61	29.37	0
7/22/2021 9:27	10.79	8.19	14.07	19.14	29.37	0
7/22/2021 9:35	9.79	10.13	15.31	19.35	29.37	0
7/22/2021 9:48	8.85	358.3	22.93	19.84	29.37	0
7/22/2021 10:02	8.55	9.96	17.18	20.84	29.37	0
7/22/2021 10:27	8.71	11.04	22.91	21.02	29.37	0
7/22/2021 10:42	8	342.9	23.62	21.35	29.37	0
7/22/2021 10:52	9.43	335.4	24.43	21.49	29.34	0
7/22/2021 11:04	8.72	334.9	22.74	21.81	29.34	0
7/22/2021 11:19	7.386	329.9	34.9	22.37	29.34	0
7/22/2021 11:34	7.075	325.5	41.27	22.51	29.34	0
7/22/2021 11:56	8.07	307.9	17.1	22.75	29.34	0
7/22/2021 12:11	6.924	351.1	24.98	22.99	29.34	0
7/22/2021 12:23	7.293	331.6	25.29	23.5	29.34	0
7/22/2021 12:43	6.1	347.3	39.37	23.86	29.34	0
7/22/2021 12:59	8.15	350.1	31.08	23.7	29.35	0
7/22/2021 13:14	8.74	8.63	22.15	23.35	29.35	0
7/22/2021 13:17	6.864	357.7	30.79	24.27	29.35	0
7/22/2021 13:36	8.21	359.2	24.38	24.15	29.35	0
7/22/2021 13:57	8.46	337	24.23	24.05	29.34	0
7/22/2021 14:00	7.281	345.2	30.38	24.51	29.34	0
7/22/2021 14:21	7.713	296.7	18.23	24.7	29.34	0
7/22/2021 14:36	8.96	320.7	18.58	24.95	29.34	0
7/22/2021 14:53	7.773	313.4	20.36	25.01	29.33	0
7/22/2021 15:10	8.16	317.3	23.3	25.27	29.33	0
7/22/2021 15:22	7.915	341.2	38.13	25.29	29.33	0
7/22/2021 15:35	7.768	345.9	43.79	25.11	29.33	0
7/22/2021 15:57	8.41	324.5	16.8	25.59	29.33	0
7/22/2021 16:04	8.93	337.1	20.76	25.37	29.33	0
7/22/2021 16:29	6.564	0.932	22.64	25.21	29.33	0
7/22/2021 16:38	9.14	321.3	12.98	25.07	29.33	0
7/22/2021 16:53	7.838	336	25.35	25.18	29.33	0
7/22/2021 17:07	9.25	312.6	10.51	25.05	29.33	0
7/22/2021 17:28	7.991	318.6	9.91	24.75	29.33	0
7/22/2021 17:43	8.67	318.4	13.02	24.77	29.33	0
7/22/2021 17:56	8.64	321.1	9.62	24.39	29.33	0
7/22/2021 18:00	7.87	316.5	8.32	24.07	29.33	0
7/22/2021 18:22	8.53	309.8	6.652	23.45	29.33	0
7/22/2021 18:34	7.299	316.2	6.026	22.76	29.33	0
7/22/2021 18:45	7.051	317.1	7.799	22.35	29.32	0
7/22/2021 19:03	5.963	325.1	6.156	21.85	29.32	0
7/22/2021 19:20	4.569	320.2	5.166	21.46	29.32	0
7/22/2021 19:34	4.29	321	8.36	21.15	29.32	0
7/22/2021 19:56	5.348	353.8	19.18	20.74	29.31	0
7/22/2021 20:04	5.355	19.31	12.68	20.3	29.31	0
7/22/2021 20:28	3.142	8.74	20.05	19.91	29.31	0
7/22/2021 20:34	3.864	6.273	19.45	19.7	29.31	0
7/22/2021 20:54	4.227	16.27	14.6	18.77	29.35	0
7/22/2021 21:06	3.342	8.13	11.08	18.72	29.35	0
7/22/2021 21:15	1.833	3.203	25.58	18.67	29.35	0
7/22/2021 21:40	2.739	20.63	14.79	18.02	29.35	0
7/22/2021 21:58	4.675	13.05	14.1	17.62	29.36	0
7/22/2021 22:07	7.444	19.98	11.9	17.61	29.36	0
7/22/2021 22:24	9.2	16.16	9.61	17.28	29.36	0
7/22/2021 22:41	10.83	13.81	9.92	17.06	29.36	0
7/22/2021 22:45	10.35	23.87	9.47	16.53	29.37	0
7/22/2021 23:11	8.74	23.6	8.67	15.92	29.37	0
7/22/2021 23:29	7.98	26.52	7.626	15.54	29.37	0
7/22/2021 23:39	7.968	30.91	8.24	15.43	29.37	0
7/22/2021 23:51	5.174	30.09	10.38	15.15	29.37	0
7/23/2021 0:06	6.057	34.43	11.42	15.14	29.37	0
7/23/2021 0:19	4.132	56.58	12.37	15.41	29.37	0
7/23/2021 0:34	4.036	94.3	7.292	14.94	29.37	0
7/23/2021 0:55	5.249	116.4	11.31	14.68	29.38	0
7/23/2021 1:01	4.182	108.6	7.775	14.53	29.38	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/23/2021 1:18	3.386	117	12.51	14.68	29.38	0
7/23/2021 1:41	2.93	84.2	19.81	14.42	29.38	0
7/23/2021 1:57	3.071	69.05	4.699	13.93	29.39	0
7/23/2021 2:02	3.032	64.31	7.438	13.73	29.39	0
7/23/2021 2:25	3.599	65.08	6.498	14.1	29.39	0
7/23/2021 2:31	2.738	95.4	14.44	14.36	29.39	0
7/23/2021 2:58	3.592	129.5	6.846	14.69	29.39	0
7/23/2021 3:13	4.475	150.4	7.634	14.32	29.39	0
7/23/2021 3:29	4.982	143	9.21	13.73	29.39	0
7/23/2021 3:34	5.964	152.6	6.909	13.44	29.39	0
7/23/2021 3:46	4.469	130.5	8.25	13.16	29.39	0
7/23/2021 4:06	4.816	164.5	14.7	13.09	29.39	0
7/23/2021 4:15	3.174	154.2	13.36	13.17	29.39	0
7/23/2021 4:42	3.356	136.5	19.44	13.16	29.39	0
7/23/2021 4:48	4.168	167	12.16	13.21	29.42	0
7/23/2021 5:12	3.871	165.5	13.21	13.05	29.42	0
7/23/2021 5:17	3.92	161	7.561	13.34	29.42	0
7/23/2021 5:41	4.038	169.1	10.86	13.92	29.42	0
7/23/2021 5:47	4.9	198.5	12.49	13.79	29.44	0
7/23/2021 6:00	4.094	192.7	9.85	13.73	29.44	0
7/23/2021 6:23	3.548	185.7	14.29	14.38	29.44	0
7/23/2021 6:36	2.745	157.9	22.81	15	29.44	0
7/23/2021 6:58	2.118	156.1	27.07	15.63	29.44	0
7/23/2021 7:11	3.188	134	20.24	15.92	29.44	0
7/23/2021 7:17	2.612	154.7	50.45	16.13	29.44	0
7/23/2021 7:36	3.523	211.7	15.76	16.09	29.44	0
7/23/2021 7:52	2.68	214.8	31.82	16.57	29.45	0
7/23/2021 8:08	3.435	218.9	28.23	17.05	29.45	0
7/23/2021 8:23	3.18	241.3	38.28	17.84	29.45	0
7/23/2021 8:31	3.194	212.9	33.59	18.48	29.45	0
7/23/2021 8:45	2.325	258.2	31.4	18.67	29.45	0
7/23/2021 9:03	2.492	234.5	47.94	19.34	29.45	0
7/23/2021 9:18	3.271	245.6	41.99	19.85	29.45	0
7/23/2021 9:39	4.11	259.6	34.45	20.37	29.45	0
7/23/2021 9:55	4.319	283.6	28.48	20.75	29.47	0
7/23/2021 10:03	5.197	249.9	23.76	21.13	29.47	0
7/23/2021 10:23	5.721	246.5	17.93	21.43	29.47	0
7/23/2021 10:34	5.199	231	22.72	22.05	29.47	0
7/23/2021 10:54	5.046	281.5	28.55	22.49	29.46	0
7/23/2021 11:01	6.029	269	21.73	23.17	29.46	0
7/23/2021 11:15	3.559	232.7	45.58	23.16	29.46	0
7/23/2021 11:40	4.718	276.5	33.61	24.02	29.46	0
7/23/2021 11:50	4.562	243.8	38.43	24.32	29.45	0
7/23/2021 12:07	5.577	246.9	34.58	24.49	29.45	0
7/23/2021 12:27	6.149	257.5	29.96	24.79	29.45	0
7/23/2021 12:33	5.548	278.1	27.35	24.94	29.45	0
7/23/2021 12:57	5.328	240.4	43.23	25.46	29.45	0
7/23/2021 13:09	7.682	231.7	20.92	25.62	29.45	0
7/23/2021 13:16	7.897	253	34.95	26.05	29.45	0
7/23/2021 13:38	7.483	257.7	18.12	26.23	29.45	0
7/23/2021 13:49	7.014	257.4	29.92	26.36	29.44	0
7/23/2021 14:01	7.934	263.9	23.99	26.92	29.44	0
7/23/2021 14:18	7.377	289	24.59	27.25	29.44	0
7/23/2021 14:43	8.67	295.6	19.33	27.4	29.44	0
7/23/2021 14:59	8.46	316.7	19.3	27.36	29.42	0
7/23/2021 15:00	6.79	311.2	25.54	27.83	29.42	0
7/23/2021 15:18	8.7	325.8	13.73	27.82	29.42	0
7/23/2021 15:42	7.12	358.3	28.22	28.01	29.42	0
7/23/2021 15:57	8.11	6.973	23.6	27.77	29.39	0
7/23/2021 16:01	8.5	11.85	21.25	27.43	29.39	0
7/23/2021 16:16	7.886	13.04	23.68	27.58	29.39	0
7/23/2021 16:36	6.93	346	15.05	27.99	29.39	0
7/23/2021 16:46	7.677	351.4	19.83	27.79	29.39	0
7/23/2021 17:14	8.87	321.6	11.41	27.85	29.39	0
7/23/2021 17:15	8.62	344.9	26.72	27.43	29.39	0
7/23/2021 17:34	10.34	313.7	6.547	27.21	29.39	0
7/23/2021 17:59	8.43	325	20.5	26.92	29.39	0
7/23/2021 18:13	9.08	319.2	9.65	26.57	29.39	0
7/23/2021 18:17	7.92	319.3	12.7	26.14	29.39	0
7/23/2021 18:39	8.38	318.3	13.75	25.64	29.39	0
7/23/2021 18:51	9.97	308.3	8.82	25.15	29.39	0
7/23/2021 19:07	9.92	307.4	7.03	24.65	29.39	0
7/23/2021 19:16	9.98	315.4	5.722	24.08	29.39	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/23/2021 19:40	10.03	324.5	7.41	23.46	29.39	0
7/23/2021 19:53	10.1	331.5	11.35	23.11	29.39	0
7/23/2021 20:05	9.65	345.3	14.32	22.82	29.39	0
7/23/2021 20:27	9.16	357.4	13.87	22.42	29.39	0
7/23/2021 20:31	9.3	10.18	17.68	21.92	29.39	0
7/23/2021 20:47	7.3	17.49	12.87	21.1	29.38	0
7/23/2021 21:13	8.87	12.04	14.76	20.85	29.38	0
7/23/2021 21:20	8.82	14.67	10.72	20.52	29.38	0
7/23/2021 21:43	12.76	18.49	7.023	20.22	29.38	0
7/23/2021 21:50	13.47	18.97	6.56	20.06	29.39	0
7/23/2021 22:04	13.35	12.22	7.365	20.07	29.39	0
7/23/2021 22:16	10.77	7.359	7.904	20.01	29.39	0
7/23/2021 22:32	6.631	7.993	10.87	19.8	29.39	0
7/23/2021 22:58	5.599	19.62	15.51	19.08	29.39	0
7/23/2021 23:08	8.39	12.52	4.857	18.77	29.39	0
7/23/2021 23:25	9.45	7.923	4.93	18.77	29.39	0
7/23/2021 23:44	9.79	9.19	5.657	18.82	29.39	0
7/23/2021 23:58	10.32	18.85	7.621	18.93	29.4	0
7/24/2021 0:13	10.46	17.54	6.572	18.73	29.4	0
7/24/2021 0:29	9.44	11.08	7.145	18.59	29.4	0
7/24/2021 0:43	8.78	14.53	7.856	18.27	29.4	0
7/24/2021 0:47	6.944	17.95	14.08	18.47	29.39	0
7/24/2021 1:09	4.898	20.61	16.26	18.35	29.39	0
7/24/2021 1:21	6.355	13.64	12.05	17.89	29.39	0
7/24/2021 1:44	7.557	16.32	6.595	17.9	29.39	0
7/24/2021 1:50	10.1	18.48	8.14	17.99	29.39	0
7/24/2021 2:13	9.89	20	5.902	17.97	29.39	0
7/24/2021 2:18	8.98	37.23	10.28	18.47	29.39	0
7/24/2021 2:38	7.217	29.04	13.5	18.35	29.39	0
7/24/2021 2:46	6.4	33.72	7.272	17.42	29.38	0
7/24/2021 3:01	5.076	27.71	12.12	17.39	29.38	0
7/24/2021 3:21	3.888	10.73	19.28	17.54	29.38	0
7/24/2021 3:39	1.985	353.6	37.05	17.57	29.38	0
7/24/2021 3:55	1.377	330.9	42.3	16.73	29.38	0
7/24/2021 4:05	2.813	359.6	10.92	16.38	29.38	0
7/24/2021 4:21	3.279	5.677	14.4	15.91	29.38	0
7/24/2021 4:41	1.637	25.75	26.91	15.6	29.38	0
7/24/2021 4:58	1.546	15.7	21.73	15.68	29.36	0
7/24/2021 5:13	8.14	2.822	9.94	15.49	29.36	0
7/24/2021 5:26	10.7	0.912	9.72	16.31	29.36	0
7/24/2021 5:37	11.66	358.5	11.97	16.86	29.36	0
7/24/2021 5:47	11.17	1.973	10.56	17.19	29.38	0
7/24/2021 6:02	9.69	8.58	14.25	17.58	29.38	0
7/24/2021 6:25	9.55	18.91	10.79	17.53	29.38	0
7/24/2021 6:38	10.5	12.75	9.84	18.38	29.38	0
7/24/2021 6:56	9.95	7.565	12	18.98	29.38	0
7/24/2021 7:04	10.56	6.588	11.79	19.01	29.38	0
7/24/2021 7:29	9.62	3.529	14.64	19.29	29.38	0
7/24/2021 7:34	10.58	0.93	12.81	19.87	29.38	0
7/24/2021 7:45	11.62	5.068	12.2	20.11	29.38	0
7/24/2021 8:00	11.21	7.532	10.55	20.59	29.38	0
7/24/2021 8:17	6.83	26.06	15.36	21.58	29.38	0
7/24/2021 8:36	5.435	16.89	31.46	22.54	29.38	0
7/24/2021 8:58	3.929	351	35.4	22.73	29.39	0
7/24/2021 9:05	5.219	25.76	17.87	23.13	29.39	0
7/24/2021 9:27	6.257	335.6	42.21	23.55	29.39	0
7/24/2021 9:33	6.131	319.2	24.29	23.86	29.39	0
7/24/2021 9:47	5.608	329.4	29.87	24.44	29.36	0
7/24/2021 10:11	5.555	1.852	35.97	25.18	29.36	0
7/24/2021 10:26	7.98	319.9	18.02	25.76	29.36	0
7/24/2021 10:42	11.31	306.3	10.8	26.33	29.36	0
7/24/2021 10:50	12.56	308.4	9.39	26.38	29.35	0
7/24/2021 11:06	12.06	306.5	10.16	26.72	29.35	0
7/24/2021 11:28	10.75	307.7	10.38	27.34	29.35	0
7/24/2021 11:38	11.3	312	11.04	27.47	29.35	0
7/24/2021 11:54	10.35	315.8	11.87	27.8	29.33	0
7/24/2021 12:12	9.76	317.6	16.43	28.22	29.33	0
7/24/2021 12:19	10.82	327.1	18.69	28.66	29.33	0
7/24/2021 12:31	11.26	317.8	14.33	28.92	29.33	0
7/24/2021 12:46	9.87	335.3	19.73	29.11	29.32	0
7/24/2021 13:04	9.22	345.4	20.61	29.37	29.32	0
7/24/2021 13:29	8.34	341.6	20.54	29.51	29.32	0
7/24/2021 13:34	9.74	344.3	34.09	29.67	29.32	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/24/2021 13:59	10.61	321.8	22.54	30.08	29.3	0
7/24/2021 14:13	10.59	316.3	17.47	30.15	29.3	0
7/24/2021 14:28	11.14	323.3	24.89	30.34	29.3	0
7/24/2021 14:34	11.28	318.9	20.66	30.06	29.3	0
7/24/2021 14:51	10.04	325.5	15.08	30.38	29.29	0
7/24/2021 15:09	10.51	331.9	21.48	30.7	29.29	0
7/24/2021 15:19	9.66	324.7	21.9	30.82	29.29	0
7/24/2021 15:33	9.2	342.4	21.96	30.6	29.29	0
7/24/2021 15:56	10.44	327.4	17.89	30.62	29.28	0
7/24/2021 16:12	11.86	310	12.77	30.52	29.28	0
7/24/2021 16:17	11.45	322.5	11.97	30.3	29.28	0
7/24/2021 16:44	11.6	331	19.6	29.89	29.28	0
7/24/2021 16:59	12.08	326.9	11.79	29.64	29.26	0
7/24/2021 17:05	10.9	330.6	17.58	29.45	29.26	0
7/24/2021 17:23	8.39	346.7	15.26	29.24	29.26	0
7/24/2021 17:33	11.99	323	10.68	28.59	29.26	0
7/24/2021 17:57	10.92	316.7	7.75	28.24	29.26	0
7/24/2021 18:00	10.63	319.5	7.644	27.78	29.26	0
7/24/2021 18:17	8.7	326.4	8.02	27.54	29.26	0
7/24/2021 18:31	8.21	326.8	9.38	27.16	29.26	0
7/24/2021 18:46	9.26	318.8	6.965	26.56	29.24	0
7/24/2021 19:04	8.83	321.7	8.05	26	29.24	0
7/24/2021 19:20	6.532	336.8	9.01	25.38	29.24	0
7/24/2021 19:41	6.412	343.9	9.69	24.75	29.24	0
7/24/2021 19:47	5.233	355.9	15.43	24.2	29.26	0
7/24/2021 20:10	7.518	2.413	10.25	23.63	29.26	0
7/24/2021 20:28	9.24	2.074	9.48	23.18	29.26	0
7/24/2021 20:37	11.92	5.655	9.01	22.7	29.26	0
7/24/2021 20:58	13.45	7.47	7.102	22.33	29.26	0
7/24/2021 21:09	13.18	9.79	11.31	22.22	29.26	0
7/24/2021 21:29	11.27	11.51	11.84	22.01	29.26	0
7/24/2021 21:31	10.07	13.17	10.07	21.66	29.26	0
7/24/2021 21:45	7.074	16.87	13.66	21.23	29.27	0
7/24/2021 22:08	7.862	28.76	7.41	20.39	29.27	0
7/24/2021 22:28	8.85	26.47	8.54	20.04	29.27	0
7/24/2021 22:32	11.07	13.55	8.16	19.87	29.27	0
7/24/2021 22:45	10.71	20.42	8.87	19.72	29.26	0
7/24/2021 23:04	9.17	25.37	8.54	19.46	29.26	0
7/24/2021 23:18	9.39	25.92	9.29	19.19	29.26	0
7/24/2021 23:39	11.4	10.52	7.606	19.2	29.26	0
7/24/2021 23:45	10.29	17.83	9.03	19.29	29.26	0
7/25/2021 0:01	10.86	19.27	6.477	19.45	29.26	0
7/25/2021 0:15	8.92	25.88	6.23	18.84	29.26	0
7/25/2021 0:30	8.48	26.07	7.353	18.73	29.26	0
7/25/2021 0:47	7.062	24.34	8.71	18.72	29.24	0
7/25/2021 1:00	4.287	31.09	9.34	18.24	29.24	0
7/25/2021 1:23	4.186	13.21	10.15	17.92	29.24	0
7/25/2021 1:36	6.143	17.8	6.912	17.91	29.24	0
7/25/2021 1:50	6.763	24.24	9.05	18.05	29.24	0
7/25/2021 2:07	6.501	33.56	9.12	17.74	29.24	0
7/25/2021 2:26	5.306	39.98	11.97	17.29	29.24	0
7/25/2021 2:30	3.402	50.97	13.24	16.69	29.24	0
7/25/2021 2:55	4.195	59.36	14.1	16.77	29.25	0
7/25/2021 3:01	6.298	47.92	9.82	16.61	29.25	0
7/25/2021 3:18	4.275	34.48	10.72	16.14	29.25	0
7/25/2021 3:36	3.531	26.84	12.02	15.69	29.25	0
7/25/2021 3:48	3.06	31.03	7.492	15.57	29.27	0
7/25/2021 4:05	2.484	18.75	10.78	15.44	29.27	0
7/25/2021 4:28	3.674	18.15	10.55	15.33	29.27	0
7/25/2021 4:39	4.222	28.19	5.1	15.27	29.27	0
7/25/2021 4:47	4.004	29.92	4.285	15.07	29.26	0
7/25/2021 5:01	2.309	43.87	14.94	15.19	29.26	0
7/25/2021 5:28	2.858	105.1	7.651	16.11	29.26	0
7/25/2021 5:33	3.519	117.7	10.8	17.12	29.26	0
7/25/2021 5:45	2.638	100.4	15.04	17.85	29.3	0
7/25/2021 6:06	1.443	82.4	20.71	18.76	29.3	0
7/25/2021 6:26	1.522	49.82	38.62	19.53	29.3	0
7/25/2021 6:41	2.781	100.5	20.1	19.66	29.3	0
7/25/2021 6:56	3.084	138.9	28.89	19.85	29.28	0
7/25/2021 7:01	4.12	138.5	16.97	19.95	29.28	0
7/25/2021 7:21	2.482	118.7	30.94	20.43	29.28	0
7/25/2021 7:32	2.016	151.5	35.81	21.19	29.28	0
7/25/2021 7:58	2.005	200.7	31.49	21.49	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/25/2021 8:04	2.596	232.2	28.51	21.4	29.31	0
7/25/2021 8:20	2.186	191.3	43.41	22.33	29.31	0
7/25/2021 8:37	2.7	15.76	51.17	23.22	29.31	0
7/25/2021 8:48	4.077	13.83	24.62	23.45	29.29	0
7/25/2021 9:02	3.248	359.9	28.64	23.98	29.29	0
7/25/2021 9:22	6.036	4.36	27.99	24.52	29.29	0
7/25/2021 9:44	8.26	28.67	16.61	25.05	29.29	0
7/25/2021 9:59	10.15	40.05	10.22	25.48	29.28	0
7/25/2021 10:01	8.97	33.74	14.99	25.84	29.28	0
7/25/2021 10:26	8.77	29.1	13.2	26.32	29.28	0
7/25/2021 10:30	8.59	35.66	14.36	26.09	29.28	0
7/25/2021 10:56	9.06	28.82	20.06	26.6	29.28	0
7/25/2021 11:00	7.624	342.7	37.1	27.12	29.28	0
7/25/2021 11:27	7.133	344.6	35.08	27.52	29.28	0
7/25/2021 11:31	8.37	334.3	32.25	28.03	29.28	0
7/25/2021 11:58	10.4	327.4	37.3	28.07	29.25	0
7/25/2021 12:05	9.62	310	18.31	28.51	29.25	0
7/25/2021 12:30	7.944	323.7	21.77	28.99	29.25	0
7/25/2021 12:38	9.64	311.6	13.64	28.78	29.25	0
7/25/2021 12:58	9.09	322.1	16.73	29.09	29.23	0
7/25/2021 13:14	8.91	327.7	14.25	29.32	29.23	0
7/25/2021 13:28	8.98	305.5	16.17	29.42	29.23	0
7/25/2021 13:42	8.59	320	17.66	29.63	29.23	0
7/25/2021 13:45	6.913	318.5	27.66	29.8	29.24	0
7/25/2021 14:06	7.163	342.3	26.39	30.28	29.24	0
7/25/2021 14:28	8.29	345.2	25	30.36	29.24	0
7/25/2021 14:44	7.54	348	19.99	30.15	29.24	0
7/25/2021 14:45	8.42	346	16.34	30.48	29.21	0
7/25/2021 15:13	10.15	346.2	18.2	30.67	29.21	0
7/25/2021 15:15	7.36	348.5	27.48	30.33	29.21	0
7/25/2021 15:40	7.387	10.37	23.14	30.44	29.21	0
7/25/2021 15:59	8.66	331.3	23.96	30.71	29.21	0
7/25/2021 16:11	8.82	317.3	22.81	30.69	29.21	0
7/25/2021 16:24	10.81	332.5	21.68	30.34	29.21	0
7/25/2021 16:35	8.14	350.6	17.05	30.34	29.21	0
7/25/2021 16:52	8.51	349.6	19.21	29.73	29.2	0
7/25/2021 17:07	11.05	13.29	10.41	28.36	29.2	0
7/25/2021 17:21	11.83	8.52	9.87	27.85	29.2	0
7/25/2021 17:39	11.36	12.56	10.01	27.5	29.2	0
7/25/2021 17:49	10.07	9.63	11.8	27.32	29.19	0
7/25/2021 18:01	9.28	8.07	11.37	27.04	29.19	0
7/25/2021 18:27	8.13	17.41	11.4	26.77	29.19	0
7/25/2021 18:36	9.21	9.65	12	26.56	29.19	0
7/25/2021 18:58	8.16	10.5	14.89	26.23	29.18	0
7/25/2021 19:08	7.793	6.608	14.63	25.67	29.18	0
7/25/2021 19:18	7.258	9.23	14.64	25.17	29.18	0
7/25/2021 19:44	6.829	11.2	15.86	24.67	29.18	0
7/25/2021 19:50	8.67	14.22	13.37	24.08	29.2	0
7/25/2021 20:12	8.72	24.43	11.46	23.59	29.2	0
7/25/2021 20:22	10.94	33.5	10.41	22.8	29.2	0
7/25/2021 20:40	11.36	28.15	10.12	22.38	29.2	0
7/25/2021 20:48	13.6	17.6	10.66	22.08	29.18	0
7/25/2021 21:10	12.22	13.21	12.32	21.65	29.18	0
7/25/2021 21:28	10.12	17.05	14.18	21.3	29.18	0
7/25/2021 21:42	10.94	21.22	12.97	21.12	29.18	0
7/25/2021 21:54	10.17	23.93	11.17	20.85	29.19	0
7/25/2021 22:04	11.89	17.7	12.82	20.66	29.19	0
7/25/2021 22:29	12.66	7.048	11.29	20.37	29.19	0
7/25/2021 22:42	15.81	10.84	12.21	20.05	29.19	0
7/25/2021 22:55	16.03	9.2	12.35	19.87	29.18	0
7/25/2021 23:00	13.65	14.74	11.62	19.64	29.18	0
7/25/2021 23:17	11.52	26.56	12.09	19.21	29.18	0
7/25/2021 23:42	14.14	25.4	8.6	18.58	29.18	0
7/25/2021 23:48	14.72	18.81	8.58	18.59	29.21	0
7/26/2021 0:03	12.89	17.85	8.99	18.54	29.21	0
7/26/2021 0:29	9.44	25.15	10.15	17.87	29.21	0
7/26/2021 0:43	10.85	19.51	9.08	17.39	29.21	0
7/26/2021 0:45	8.91	25.33	11.16	17.24	29.21	0
7/26/2021 1:02	9.21	26.02	9.35	17.23	29.21	0
7/26/2021 1:17	9.96	26.57	9.79	17.41	29.21	0
7/26/2021 1:39	10.55	24.61	9.26	17.35	29.21	0
7/26/2021 1:48	9.44	28.49	9.96	17.68	29.21	0
7/26/2021 2:00	7.878	27.52	8.48	17.85	29.21	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/26/2021 2:18	8.1	26.34	9.1	17.76	29.21	0
7/26/2021 2:37	6.29	32.48	16.12	17.43	29.21	0
7/26/2021 2:57	4.65	45.31	24.56	17.46	29.21	0
7/26/2021 3:00	4.762	34.69	14.09	17.09	29.21	0
7/26/2021 3:20	4.615	34.71	12.82	16.75	29.21	0
7/26/2021 3:32	6.608	30.83	11.33	16.5	29.21	0
7/26/2021 3:45	5.539	33.02	9.46	16.17	29.19	0
7/26/2021 4:07	6.468	29.26	8.45	15.58	29.19	0
7/26/2021 4:15	6.395	24.87	7.469	15.39	29.19	0
7/26/2021 4:30	3.998	30.66	8.9	15.23	29.19	0
7/26/2021 4:55	3.587	32.5	9.1	15.4	29.22	0
7/26/2021 5:01	3.43	102.4	44.67	15.11	29.22	0
7/26/2021 5:18	1.487	125.9	31.45	15.5	29.22	0
7/26/2021 5:32	2.817	124.1	12.04	16.53	29.22	0
7/26/2021 5:58	2.246	104.2	39.37	17.2	29.21	0
7/26/2021 6:14	4.038	143.3	10.95	17.21	29.21	0
7/26/2021 6:15	4.361	143.9	10	17.44	29.21	0
7/26/2021 6:31	4.048	146	14.4	17.78	29.21	0
7/26/2021 6:55	3.753	162.7	17.16	18.19	29.21	0
7/26/2021 7:11	3.887	179.2	19.78	18.45	29.21	0
7/26/2021 7:15	2.868	155.4	49.62	19.3	29.21	0
7/26/2021 7:44	2.836	49.02	51.47	20.13	29.21	0
7/26/2021 7:55	3.384	37.16	21.45	20.54	29.22	0
7/26/2021 8:11	3.722	6.744	28.42	21.14	29.22	0
7/26/2021 8:26	4.704	28.24	25.59	22.28	29.22	0
7/26/2021 8:43	7.516	10.32	19.86	22.47	29.22	0
7/26/2021 8:59	8.36	21.78	17.86	22.81	29.22	0
7/26/2021 9:00	9.67	20.06	11.9	23.29	29.22	0
7/26/2021 9:29	9.1	17.28	16.12	23.61	29.22	0
7/26/2021 9:32	8.62	27.74	16.75	24.07	29.22	0
7/26/2021 9:51	9.7	15.55	21.06	24.52	29.22	0
7/26/2021 10:09	9.62	28.76	15.7	24.71	29.22	0
7/26/2021 10:23	8.85	5.317	19.63	25.21	29.22	0
7/26/2021 10:35	9.69	18.3	15.47	25.54	29.22	0
7/26/2021 10:49	7.897	10.65	16.81	26.13	29.21	0
7/26/2021 11:00	7.697	350.6	27.68	26.15	29.21	0
7/26/2021 11:23	7.79	1.177	24.48	26.77	29.21	0
7/26/2021 11:39	8.18	340.6	24.26	27.21	29.21	0
7/26/2021 11:59	8.8	331.6	23.72	27.58	29.2	0
7/26/2021 12:00	8.85	336.4	26.52	28.02	29.2	0
7/26/2021 12:26	9.42	335	20.61	28.08	29.2	0
7/26/2021 12:35	11.98	315.9	11.93	28.48	29.2	0
7/26/2021 12:46	11.94	315.7	10.71	28.62	29.19	0
7/26/2021 13:03	11.11	312.6	11.71	28.65	29.19	0
7/26/2021 13:21	10.22	321.1	12.52	28.75	29.19	0
7/26/2021 13:43	10.33	313.9	10.78	29.19	29.19	0
7/26/2021 13:47	9.56	311.5	11.76	29.45	29.18	0
7/26/2021 14:02	10.44	314.6	10.82	29.77	29.18	0
7/26/2021 14:22	8.61	312.3	13.66	29.56	29.18	0
7/26/2021 14:43	9.53	319.9	16.18	29.75	29.18	0
7/26/2021 14:49	10.94	319.3	11.01	29.76	29.17	0
7/26/2021 15:06	9.62	326.7	21.48	30.04	29.17	0
7/26/2021 15:22	9.49	317.2	23.56	30.25	29.17	0
7/26/2021 15:36	9.41	317.2	25.77	30.16	29.17	0
7/26/2021 15:59	9.05	323.1	23.89	30.04	29.14	0
7/26/2021 16:00	10.77	314.6	9.2	30.18	29.14	0
7/26/2021 16:15	9.71	314.5	14.2	29.79	29.14	0
7/26/2021 16:36	9.29	317.4	12.07	29.77	29.14	0
7/26/2021 16:57	8.85	316.1	14.35	29.71	29.15	0
7/26/2021 17:02	9.13	313.3	17.42	29.51	29.15	0
7/26/2021 17:20	9.32	309.1	11	29.17	29.15	0
7/26/2021 17:41	9.63	317.9	9.1	28.99	29.15	0
7/26/2021 17:57	10.06	318.5	9.42	28.56	29.15	0
7/26/2021 18:00	8.21	335.4	14.16	28.22	29.15	0
7/26/2021 18:28	8.28	348.7	17.38	27.52	29.15	0
7/26/2021 18:34	8.3	343.9	12.05	26.96	29.15	0
7/26/2021 18:50	7.573	2.127	15.16	26.07	29.14	0
7/26/2021 19:04	9.5	8.83	9.01	25.39	29.14	0
7/26/2021 19:16	9.76	13.07	9.52	24.64	29.14	0
7/26/2021 19:41	9.05	9.84	10.51	24.09	29.14	0
7/26/2021 19:58	10.01	21.7	9.03	23.7	29.16	0
7/26/2021 20:05	12.81	25.61	7.891	23.15	29.16	0
7/26/2021 20:28	12.38	23.23	7.517	22.71	29.16	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/26/2021 20:36	10.8	28.13	8.07	22.34	29.16	0
7/26/2021 20:50	10.98	27.56	10.39	22.01	29.16	0
7/26/2021 21:13	11.07	28.51	8.79	21.83	29.16	0
7/26/2021 21:17	13.84	17.26	10.38	21.78	29.16	0
7/26/2021 21:35	13.15	20.64	10.39	21.65	29.16	0
7/26/2021 21:51	12.73	26.54	7.581	21.35	29.16	0
7/26/2021 22:05	12.17	20.47	8.96	21.12	29.16	0
7/26/2021 22:15	10.51	18	11.28	20.85	29.16	0
7/26/2021 22:34	7.913	25.57	11.24	20.59	29.16	0
7/26/2021 22:49	8.69	31.69	11.22	20.68	29.18	0
7/26/2021 23:09	8.4	41.16	12.35	20.76	29.18	0
7/26/2021 23:21	11.44	31.55	8.75	20.62	29.18	0
7/26/2021 23:34	10.89	35.32	8.19	20.61	29.18	0
7/26/2021 23:57	10.77	38.29	7.351	20.57	29.18	0
7/27/2021 0:03	12.82	28.15	6.706	20.59	29.18	0
7/27/2021 0:27	14.25	21.86	6.939	20.42	29.18	0
7/27/2021 0:31	13.17	25.64	6.626	20.43	29.18	0
7/27/2021 0:59	11.59	22.47	7.37	20.28	29.17	0
7/27/2021 1:00	11.17	18.13	9.57	20.07	29.17	0
7/27/2021 1:22	10.3	15.78	7.709	19.66	29.17	0
7/27/2021 1:41	10.76	17.39	8.29	19.77	29.17	0
7/27/2021 1:53	12.07	19.16	10.51	19.96	29.2	0
7/27/2021 2:07	11.04	23.84	12.85	19.83	29.2	0
7/27/2021 2:28	10.76	24.66	11.41	19.49	29.2	0
7/27/2021 2:39	9.79	22.25	9.76	19.25	29.2	0
7/27/2021 2:46	9.11	24.64	9.97	18.81	29.18	0
7/27/2021 3:00	8.36	24.3	10.06	18.76	29.18	0
7/27/2021 3:15	6.224	30.7	10.46	18.22	29.18	0
7/27/2021 3:33	3.771	42.87	22.56	17.86	29.18	0
7/27/2021 3:57	3.408	48.74	14.05	17.7	29.19	0
7/27/2021 4:13	3.401	62.46	11.08	17.61	29.19	0
7/27/2021 4:16	1.99	172	49.13	17.3	29.19	0
7/27/2021 4:36	2.171	145.3	31.38	17.64	29.19	0
7/27/2021 4:58	3.732	178.1	7.431	17.42	29.22	0
7/27/2021 5:06	3.695	166	12.56	17.03	29.22	0
7/27/2021 5:24	3.926	172.1	7.507	17	29.22	0
7/27/2021 5:40	4.294	176	4.524	17.35	29.22	0
7/27/2021 5:55	3.935	166.8	14.16	17.72	29.24	0
7/27/2021 6:14	5.546	149.6	6.982	17.77	29.24	0
7/27/2021 6:15	4.487	147.8	10.78	18.11	29.24	0
7/27/2021 6:30	3.894	156.7	20.19	18.56	29.24	0
7/27/2021 6:56	3.658	182.6	13.61	18.37	29.22	0
7/27/2021 7:00	3.909	179.3	12.25	18.55	29.22	0
7/27/2021 7:17	2.902	157.4	42.47	19.58	29.22	0
7/27/2021 7:34	1.393	112.9	35.51	20.7	29.22	0
7/27/2021 7:59	2.533	11.16	31.16	21.31	29.24	0
7/27/2021 8:07	4.928	353.6	22.37	21.66	29.24	0
7/27/2021 8:28	3.737	352.5	22.13	21.73	29.24	0
7/27/2021 8:43	4.367	326.9	24.09	22.31	29.24	0
7/27/2021 8:55	6.583	308.8	25.22	22.93	29.25	0
7/27/2021 9:14	6.18	322.6	20.69	23.12	29.25	0
7/27/2021 9:27	5.806	4.774	20.46	23.44	29.25	0
7/27/2021 9:36	4.74	350.7	51.12	24.37	29.25	0
7/27/2021 9:52	5.124	317.6	34.16	24.35	29.24	0
7/27/2021 10:03	4.06	331.6	31.34	24.65	29.24	0
7/27/2021 10:20	5.011	10.38	42.54	24.82	29.24	0
7/27/2021 10:31	3.933	351.2	37.44	25.81	29.24	0
7/27/2021 10:45	4.316	334	36.71	26.25	29.24	0
7/27/2021 11:02	5.408	314.6	31.8	25.96	29.24	0
7/27/2021 11:20	5.691	299.9	26.6	26.62	29.24	0
7/27/2021 11:41	5.939	312.6	32.6	27.23	29.24	0
7/27/2021 11:50	6.187	278.7	24.19	27.44	29.26	0
7/27/2021 12:08	5.68	319.9	30.39	27.97	29.26	0
7/27/2021 12:26	7.286	301.5	23.24	28.14	29.26	0
7/27/2021 12:39	9.97	289.4	16.32	28.25	29.26	0
7/27/2021 12:56	8.81	283	16.26	28.49	29.25	0
7/27/2021 13:11	7.986	297.1	20.98	28.9	29.25	0
7/27/2021 13:18	9.66	298.8	11.35	28.73	29.25	0
7/27/2021 13:36	10.41	297	20.34	28.88	29.25	0
7/27/2021 13:57	8.84	295.2	23.67	28.91	29.25	0
7/27/2021 14:03	8.06	305.6	23.34	29.59	29.25	0
7/27/2021 14:16	8.87	289.4	16.93	29.67	29.25	0
7/27/2021 14:43	7.836	290.3	16.17	29.74	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/27/2021 14:52	8.4	300	19.98	29.83	29.23	0
7/27/2021 15:04	7.745	299.3	20.49	29.82	29.23	0
7/27/2021 15:18	6.745	306.3	29.51	30.37	29.23	0
7/27/2021 15:32	8	297.6	22.44	30.73	29.23	0
7/27/2021 15:56	7.383	301	21.33	30.35	29.24	0
7/27/2021 16:07	7.798	304	22.37	30.72	29.24	0
7/27/2021 16:27	7.005	321.6	19.5	30.96	29.24	0
7/27/2021 16:44	8.14	304.7	17.88	30.63	29.24	0
7/27/2021 16:50	8.52	293.1	20.78	30.53	29.23	0
7/27/2021 17:01	8.25	297.7	16.34	30.22	29.23	0
7/27/2021 17:18	9.23	294.7	17.8	29.85	29.23	0
7/27/2021 17:30	8.74	313.1	8.46	29.48	29.23	0
7/27/2021 17:59	8.25	315	13.26	29.47	29.24	0
7/27/2021 18:04	8.21	305.8	9.05	29.15	29.24	0
7/27/2021 18:26	8.01	301.9	7.127	28.94	29.24	0
7/27/2021 18:30	6.62	305.9	8.21	28.55	29.24	0
7/27/2021 18:52	6.831	303.6	7.676	28.07	29.26	0
7/27/2021 19:03	5.427	300.7	5.431	27.51	29.26	0
7/27/2021 19:27	4.371	306	5.583	26.84	29.26	0
7/27/2021 19:43	4.954	312.5	16.51	26.28	29.26	0
7/27/2021 19:58	4.921	350.8	25.51	25.95	29.26	0
7/27/2021 20:03	5.984	17.19	10.69	25.36	29.26	0
7/27/2021 20:15	4.854	23.78	8.42	24.35	29.26	0
7/27/2021 20:41	3.942	31.5	6.403	23.79	29.26	0
7/27/2021 20:59	3.981	26.71	5.69	23.41	29.28	0
7/27/2021 21:13	6.236	33.75	7.325	22.82	29.28	0
7/27/2021 21:29	6.99	34.4	7.294	22.21	29.28	0
7/27/2021 21:36	9.05	27.91	9.88	22.21	29.28	0
7/27/2021 21:48	9.19	26.25	8.65	22.04	29.27	0
7/27/2021 22:14	9.58	24.56	8.53	22.06	29.27	0
7/27/2021 22:27	10.62	21.22	8.98	21.69	29.27	0
7/27/2021 22:38	12.15	19.22	9.17	21.57	29.27	0
7/27/2021 22:57	12	23.64	8.53	21.24	29.28	0
7/27/2021 23:04	12.96	22.22	8.68	20.69	29.28	0
7/27/2021 23:15	10.99	31.63	9.28	20.32	29.28	0
7/27/2021 23:35	8.79	38.31	9.28	20.03	29.28	0
7/27/2021 23:53	8.82	31.18	12.25	19.84	29.31	0
7/28/2021 0:08	7.364	33.74	12.74	19.75	29.31	0
7/28/2021 0:25	7.493	24.88	7.635	19.63	29.31	0
7/28/2021 0:32	5.511	21.11	8.13	19.24	29.31	0
7/28/2021 0:46	4.586	26.89	8.83	19.06	29.3	0
7/28/2021 1:00	3.985	27.39	8.22	19.08	29.3	0
7/28/2021 1:29	3.558	37.19	6.988	18.81	29.3	0
7/28/2021 1:40	4.087	50.84	7.002	18.54	29.3	0
7/28/2021 1:53	4.154	54.1	6.533	18.75	29.32	0
7/28/2021 2:11	4.213	50.19	10.11	19.1	29.32	0
7/28/2021 2:19	2.94	62.29	12.76	19.2	29.32	0
7/28/2021 2:36	2.12	81.3	15.84	19.14	29.32	0
7/28/2021 2:59	1.893	131.2	8.74	19.65	29.32	0
7/28/2021 3:14	2.43	156.5	10.1	19.54	29.32	0
7/28/2021 3:16	3.312	130.2	4.868	19.36	29.32	0
7/28/2021 3:30	2.512	139.7	11.61	18.89	29.32	0
7/28/2021 3:53	4.013	161.6	6.911	18.55	29.32	0
7/28/2021 4:14	3.678	150.2	13.2	18.08	29.32	0
7/28/2021 4:15	2.532	115.4	26.39	17.68	29.32	0
7/28/2021 4:35	1.168	306.3	25.73	17.29	29.32	0
7/28/2021 4:49	1.907	280.4	12.01	17.59	29.32	0
7/28/2021 5:10	2.525	192.6	25.44	17.57	29.32	0
7/28/2021 5:16	1.785	215.8	22.74	17.39	29.32	0
7/28/2021 5:44	1.334	225.8	19.54	17.99	29.32	0
7/28/2021 5:45	2.478	223.9	13.29	18.05	29.33	0
7/28/2021 6:04	2.411	218.7	14.06	18.23	29.33	0
7/28/2021 6:26	1.95	210	27.21	18.61	29.33	0
7/28/2021 6:45	2.245	170.1	15.19	19.01	29.33	0
7/28/2021 6:59	4.227	182.4	13.37	19.06	29.32	0
7/28/2021 7:06	4.408	191.1	13.78	19.07	29.32	0
7/28/2021 7:16	1.906	189.8	41.77	19.95	29.32	0
7/28/2021 7:30	1.707	62.66	38.94	21.48	29.32	0
7/28/2021 7:54	2.047	53.02	36.2	22	29.32	0
7/28/2021 8:14	1.343	267.6	53.25	22.57	29.32	0
7/28/2021 8:26	2.505	283.4	39.61	23.02	29.32	0
7/28/2021 8:31	3.427	327	19.69	23.9	29.32	0
7/28/2021 8:58	2.572	340.7	35.12	24.27	29.33	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/28/2021 9:13	3.871	334.5	29.62	25.19	29.33	0
7/28/2021 9:22	3.981	27.54	32.27	25.89	29.33	0
7/28/2021 9:41	3.925	12.46	30.38	26.6	29.33	0
7/28/2021 9:59	7.9	354.5	20.44	27.6	29.31	0
7/28/2021 10:01	9.94	357.5	11.62	27.68	29.31	0
7/28/2021 10:26	7.785	12.13	14.38	27.79	29.31	0
7/28/2021 12:00	7.067	23.57	8.07	77.67	29.31	0.11
7/28/2021 12:15	8.08	23.27	11.93	78.71	29.31	0
7/28/2021 12:30	7.992	16.64	22.34	79.96	29.31	0
7/28/2021 12:45	8.54	35.9	14.85	79.82	29.3	0
7/28/2021 13:00	8.77	37.54	13.77	80.2	29.3	0
7/28/2021 13:15	9.26	16.66	17.02	80.7	29.3	0
7/28/2021 13:30	7.397	9.01	23.07	81.7	29.3	0
7/28/2021 13:45	7.25	354.5	17.95	81.2	29.29	0
7/28/2021 14:00	6.699	8.15	16.77	82.3	29.29	0
7/28/2021 14:15	7.705	18.77	25.3	83.2	29.29	0
7/28/2021 14:30	6.951	12.71	29.24	84	29.28	0
7/28/2021 14:45	6.088	5.686	24.76	83.6	29.28	0
7/28/2021 15:00	8.04	21.82	21.71	83.8	29.28	0
7/28/2021 15:15	7.557	10.67	29.11	84	29.27	0
7/28/2021 15:30	8.22	341.2	26.66	85.2	29.27	0
7/28/2021 15:45	8.03	334.3	30.13	84.5	29.27	0
7/28/2021 16:00	9.49	303.6	12.46	85.1	29.26	0
7/28/2021 16:15	8.5	312.4	14.57	84.6	29.26	0
7/28/2021 16:30	7.577	358.7	33.12	84.6	29.26	0
7/28/2021 16:45	6.23	6.709	24.13	84.4	29.25	0
7/28/2021 17:00	7.43	347.3	16.31	84.1	29.25	0
7/28/2021 17:15	7.337	2.035	18.39	84.2	29.24	0
7/28/2021 17:30	6.604	323.2	16.45	84.3	29.24	0
7/28/2021 17:45	9.43	353.5	20.79	83.7	29.24	0
7/28/2021 18:00	8.1	349.8	23.23	83.5	29.23	0
7/28/2021 18:15	9.04	346.4	15.95	82.7	29.23	0
7/28/2021 18:30	8.42	350.4	18.47	82	29.23	0
7/28/2021 18:45	8.42	6.691	9.58	81	29.24	0
7/28/2021 19:00	7.074	5.598	12.9	80.3	29.24	0
7/28/2021 19:15	7.235	3.814	9.24	79.7	29.24	0
7/28/2021 19:30	6.787	0.647	9.93	78.84	29.24	0
7/28/2021 19:45	6.76	352.8	8.62	77.85	29.24	0
7/28/2021 20:00	6.253	352.6	7.341	76.93	29.24	0
7/28/2021 20:15	7.347	339.5	6.646	76.24	29.24	0
7/28/2021 20:30	8.2	337.8	9.9	76.54	29.25	0
7/28/2021 20:45	6.785	3.051	19.17	75.15	29.25	0
7/28/2021 21:00	9.63	16.76	14.08	73.63	29.25	0
7/28/2021 21:15	12.42	23.72	11.24	72.25	29.25	0
7/28/2021 21:30	8.66	30.89	12.26	70.68	29.26	0
7/28/2021 21:45	10.75	26.74	8.36	69.73	29.26	0
7/28/2021 22:00	12.81	21.29	9.74	69.69	29.26	0
7/28/2021 22:15	13.08	21.18	8.36	69.17	29.26	0
7/28/2021 22:30	11.67	16.12	14.5	69.23	29.26	0
7/28/2021 22:45	11.78	13.62	10	68.92	29.26	0
7/28/2021 23:00	12.99	9.96	10.24	68.78	29.26	0
7/28/2021 23:15	10.02	19.3	12.14	68.27	29.26	0
7/28/2021 23:30	9.04	31.39	9.62	66.38	29.26	0
7/28/2021 23:45	8.04	29.32	10.22	66.65	29.26	0
7/29/2021 0:00	7.803	28.12	11.13	66.66	29.26	0
7/29/2021 0:15	8.8	31.6	7.481	66.25	29.26	0
7/29/2021 0:30	7.642	38.63	9.38	66.31	29.26	0
7/29/2021 0:45	5.318	49.89	12.92	66.07	29.26	0
7/29/2021 1:00	3.878	49.76	10.05	66.45	29.26	0
7/29/2021 1:15	2.97	39.96	10.54	66.29	29.26	0
7/29/2021 1:30	1.388	36.07	7.341	66.49	29.26	0
7/29/2021 1:45	0.092	330.7	7.079	65.99	29.26	0
7/29/2021 2:00	0.332	206.9	44.15	66.87	29.26	0
7/29/2021 2:15	1.729	102.2	24.48	65.24	29.26	0
7/29/2021 2:30	1.797	76.62	79.54	64.16	29.26	0
7/29/2021 2:45	1.78	276.4	22.36	63.27	29.26	0
7/29/2021 3:00	1.417	312.2	15.09	63.49	29.26	0
7/29/2021 3:15	0.884	14.14	15.86	63.2	29.26	0
7/29/2021 3:30	0.795	341	18.45	62.46	29.27	0
7/29/2021 3:45	0.978	258.3	23.33	62.14	29.27	0
7/29/2021 4:00	2.151	218.4	11.95	61.92	29.27	0
7/29/2021 4:15	0.605	273.5	13.51	61.86	29.27	0
7/29/2021 4:30	2.63	212.3	8.93	61.87	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/29/2021 4:45	2.361	223.1	16.12	61.62	29.27	0
7/29/2021 5:00	4.06	190.1	15.13	61.51	29.27	0
7/29/2021 5:15	3.742	168.6	7.514	61.47	29.27	0
7/29/2021 5:30	2.842	169.9	4.835	61.6	29.28	0
7/29/2021 5:45	1.11	209.1	50.31	63.23	29.28	0
7/29/2021 6:00	2.314	260.6	43.53	64.34	29.28	0
7/29/2021 6:15	2.716	169.7	14.84	63.9	29.28	0
7/29/2021 6:30	2.736	153.6	5.83	64.3	29.28	0
7/29/2021 6:45	1.776	115.4	46.14	65.91	29.29	0
7/29/2021 7:00	1.639	40.48	19.97	66.63	29.29	0
7/29/2021 7:15	1.268	53.37	20.84	68.34	29.29	0
7/29/2021 7:30	1.84	31.98	15.22	69.41	29.29	0
7/29/2021 7:45	2.366	31.27	18.12	70.27	29.29	0
7/29/2021 8:00	2.932	351.2	26.14	70.66	29.29	0
7/29/2021 8:15	2.475	333.2	20.81	71.33	29.29	0
7/29/2021 8:30	1.948	256	32.27	72.51	29.29	0
7/29/2021 8:45	2.621	281.1	28.47	73.67	29.28	0
7/29/2021 9:00	3.144	347.3	29.5	74.85	29.28	0
7/29/2021 9:15	5.376	30.83	19.81	75.74	29.28	0
7/29/2021 9:30	6.259	21.66	13.37	75.99	29.28	0
7/29/2021 9:45	6.583	15.23	14.24	76.8	29.27	0
7/29/2021 10:00	7.198	322.6	33.24	78.2	29.27	0
7/29/2021 10:15	7.88	297.7	15.74	79.07	29.27	0
7/29/2021 10:30	8.72	287.2	10.55	79.36	29.26	0
7/29/2021 10:45	9.89	286.3	9.03	80.3	29.26	0
7/29/2021 11:00	11.58	285.6	8.48	80.5	29.26	0
7/29/2021 11:15	9.22	305.7	17.81	81.6	29.25	0
7/29/2021 11:30	7.97	351.4	23.91	81.8	29.25	0
7/29/2021 11:45	9.27	7.19	15.34	82.2	29.24	0
7/29/2021 12:00	8.69	13.81	16.87	82.7	29.24	0
7/29/2021 12:15	9.42	16.82	18.64	82.9	29.24	0
7/29/2021 12:30	9.08	14.34	20.96	84.3	29.23	0
7/29/2021 12:45	7.812	3.161	21.86	85.1	29.23	0
7/29/2021 13:00	8.33	353.4	28.58	85.5	29.22	0
7/29/2021 13:15	8.46	4.137	19.8	85.7	29.22	0
7/29/2021 13:30	8.7	1.331	18.93	85.9	29.22	0
7/29/2021 13:45	8.46	350.4	22.69	86.1	29.21	0
7/29/2021 14:00	8.52	1	28.35	86.6	29.21	0
7/29/2021 14:15	9.04	338.5	21.34	87.3	29.21	0
7/29/2021 14:30	8.95	331.6	28.27	87	29.2	0
7/29/2021 14:45	8.84	325.2	21.74	88.2	29.2	0
7/29/2021 15:00	9.35	330.2	26.63	88.5	29.2	0
7/29/2021 15:15	8.25	332.9	21.4	88.3	29.2	0
7/29/2021 15:30	9.66	343.8	18.24	88	29.19	0
7/29/2021 15:45	7.886	332.4	15.74	88.3	29.19	0
7/29/2021 16:00	8.6	343.2	23.6	88.5	29.19	0
7/29/2021 16:15	8.16	347.6	21.91	88.4	29.18	0
7/29/2021 16:30	8.86	326.8	18.44	88.5	29.18	0
7/29/2021 16:45	8.1	327.4	15.53	88.2	29.17	0
7/29/2021 17:00	7.729	337.2	18.77	88.2	29.17	0
7/29/2021 17:15	10.35	327.8	14.04	87.6	29.17	0
7/29/2021 17:30	10.67	322.4	8.99	87.2	29.16	0
7/29/2021 17:45	8.94	328.1	10.7	87	29.16	0
7/29/2021 18:00	7.998	329.4	14.22	86.6	29.16	0
7/29/2021 18:15	6.987	322.6	15.84	86.1	29.16	0
7/29/2021 18:30	6.777	310.9	10.34	85.4	29.15	0
7/29/2021 18:45	7.741	291	9.3	84.8	29.16	0
7/29/2021 19:00	6.449	320.7	15.26	83.7	29.15	0
7/29/2021 19:15	5.63	336.2	22.34	82.5	29.16	0
7/29/2021 19:30	5.693	324.6	17.32	81.5	29.16	0
7/29/2021 19:45	6.168	332.7	20.54	80.5	29.16	0
7/29/2021 20:00	6.105	354	13.53	79.17	29.16	0
7/29/2021 20:15	8.22	349.4	16.4	77.82	29.17	0
7/29/2021 20:30	11.21	1.899	16.58	76.55	29.17	0
7/29/2021 20:45	11.41	15.43	13.66	74.94	29.18	0
7/29/2021 21:00	13.85	12.59	12.59	74	29.18	0
7/29/2021 21:15	12.2	13.66	13.71	73.87	29.18	0
7/29/2021 21:30	12.95	10.11	15.81	73.04	29.18	0
7/29/2021 21:45	13.89	11.5	12.95	72.47	29.18	0
7/29/2021 22:00	12.23	8.65	13.95	72.35	29.19	0
7/29/2021 22:15	11.56	10.15	12.72	72.71	29.19	0
7/29/2021 22:30	10.62	9.45	13.44	72.33	29.18	0
7/29/2021 22:45	10.92	14.71	11.99	72.09	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/29/2021 23:00	12.53	7.701	11.47	71.62	29.18	0
7/29/2021 23:15	12.9	20.47	11.89	71.75	29.18	0
7/29/2021 23:30	11.82	19.26	7.599	71	29.18	0
7/29/2021 23:45	13.53	13.51	8.18	71.5	29.18	0
7/30/2021 0:00	11.74	17.55	9.87	70.93	29.18	0
7/30/2021 0:15	8.32	25.06	13.04	69.89	29.18	0
7/30/2021 0:30	4.119	33.44	10.82	69.09	29.19	0
7/30/2021 0:45	6.349	19.82	14.14	68.57	29.19	0
7/30/2021 1:00	7.645	16.62	11.64	69.52	29.18	0
7/30/2021 1:15	5.209	21.41	11	68.75	29.19	0
7/30/2021 1:30	5.97	11.84	6.299	67.86	29.18	0
7/30/2021 1:45	4.269	22.18	8.27	67.97	29.18	0
7/30/2021 2:00	4.501	30.47	7.26	67.84	29.18	0
7/30/2021 2:15	3.589	41.88	5.475	66.16	29.18	0
7/30/2021 2:30	4.22	80.6	19.88	65.59	29.18	0
7/30/2021 2:45	1.414	65.27	39.61	65.77	29.18	0
7/30/2021 3:00	0.436	1.135	7.312	66.9	29.18	0
7/30/2021 3:15	1.52	117.4	42.07	67.69	29.19	0
7/30/2021 3:30	0.788	267.7	13.44	67.55	29.19	0
7/30/2021 3:45	2.685	219.6	23.8	67.37	29.18	0
7/30/2021 4:00	1.361	69.79	36.61	66.32	29.19	0
7/30/2021 4:15	2.931	31.31	3.611	63.55	29.19	0
7/30/2021 4:30	4.409	11.77	7.519	62.62	29.19	0
7/30/2021 4:45	5.191	13.23	9.08	61.66	29.19	0
7/30/2021 5:00	5.794	6.899	9.34	60.62	29.19	0
7/30/2021 5:15	4.331	18.53	14.77	60.26	29.19	0
7/30/2021 5:30	3.44	12.07	12.61	60.58	29.19	0
7/30/2021 5:45	4.325	22.49	9.77	61.14	29.2	0
7/30/2021 6:00	5.426	6.93	11.55	61.48	29.2	0
7/30/2021 6:15	4.785	12.86	7.919	62.28	29.2	0
7/30/2021 6:30	4.074	21.49	9.11	63.73	29.2	0
7/30/2021 6:45	6.064	12.91	7.985	65.87	29.21	0
7/30/2021 7:00	5.247	3.157	16.33	66.49	29.21	0
7/30/2021 7:15	3.874	9.46	22.29	68.62	29.21	0
7/30/2021 7:30	3.926	30.09	13.42	69.07	29.21	0
7/30/2021 7:45	3.458	25.12	14.96	69.99	29.21	0
7/30/2021 8:00	2.812	23.32	14.51	71	29.21	0
7/30/2021 8:15	2.662	54.54	25.06	72.88	29.21	0
7/30/2021 8:30	3.217	40.39	21.04	73.85	29.21	0
7/30/2021 8:45	2.691	12.25	20.83	74.46	29.21	0
7/30/2021 9:00	3.983	37.04	14.35	74.57	29.21	0
7/30/2021 9:15	4.053	17.47	14.03	75.09	29.21	0
7/30/2021 9:30	4.22	28.5	14.99	76.35	29.21	0
7/30/2021 9:45	4.736	27.1	20.02	77.31	29.21	0
7/30/2021 10:00	4.737	32.97	17.16	77.4	29.2	0
7/30/2021 10:15	4.059	57.47	21.07	79.11	29.2	0
7/30/2021 10:30	3.734	3.619	25.42	80.9	29.2	0
7/30/2021 10:45	5.686	272.9	26.93	80.7	29.2	0
7/30/2021 11:00	5.712	251.3	19.25	80.8	29.2	0
7/30/2021 11:15	5.621	259.2	19.41	81.7	29.19	0
7/30/2021 11:30	7.897	14.75	41.36	83.2	29.19	0
7/30/2021 11:45	7.133	10	25.87	83.9	29.18	0
7/30/2021 12:00	7.725	5.116	25.35	84.6	29.18	0
7/30/2021 12:15	8.43	17.92	14.5	85.1	29.17	0
7/30/2021 12:30	9.15	11.63	11.35	85.7	29.17	0
7/30/2021 12:45	9.64	15.04	10.58	86.2	29.17	0
7/30/2021 13:00	9.2	14.68	12.2	87	29.16	0
7/30/2021 13:15	8.21	348.6	23.38	88.2	29.16	0
7/30/2021 13:30	7.54	332.5	19.96	88.3	29.16	0
7/30/2021 13:45	8.1	357.9	24.11	89.2	29.16	0
7/30/2021 14:00	7.294	350.7	23.47	89.8	29.15	0
7/30/2021 14:15	8.67	319.1	18.63	90	29.15	0
7/30/2021 14:30	7.732	343.1	21.5	89.9	29.15	0
7/30/2021 14:45	9.2	317.3	20.88	90.1	29.15	0
7/30/2021 15:00	8.91	303.7	19.67	90.7	29.14	0
7/30/2021 15:15	7.634	345	21.02	90.6	29.14	0
7/30/2021 15:30	9.09	358.8	15.67	90.4	29.14	0
7/30/2021 15:45	8.23	339.9	19.56	91.2	29.14	0
7/30/2021 16:00	8.55	351.8	13.84	91.1	29.13	0
7/30/2021 16:15	8.16	314	23.96	91.4	29.13	0
7/30/2021 16:30	8.09	298.5	10.72	90.5	29.13	0
7/30/2021 16:45	7.764	296.3	12.35	90.8	29.13	0
7/30/2021 17:00	8.01	296.8	13.03	90.9	29.13	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/30/2021 17:15	7.292	313.6	21.47	90.7	29.13	0
7/30/2021 17:30	7.01	306.2	13.98	90.3	29.13	0
7/30/2021 17:45	6.532	310	11.13	89.7	29.13	0
7/30/2021 18:00	7.025	304.8	8.05	88.8	29.13	0
7/30/2021 18:15	6.792	306.2	10.22	88.4	29.13	0
7/30/2021 18:30	7.15	310.9	7.815	87.4	29.13	0
7/30/2021 18:45	6.823	304.4	5.84	86.9	29.13	0
7/30/2021 19:00	5.469	300.8	8.43	86.1	29.14	0
7/30/2021 19:15	6.538	305.8	7.032	84.8	29.14	0
7/30/2021 19:30	6.204	314.5	10.21	83.7	29.14	0
7/30/2021 19:45	7.641	354.4	21.16	82.9	29.13	0
7/30/2021 20:00	7.323	17.98	14.25	82.5	29.14	0
7/30/2021 20:15	9.42	9.72	13.52	81.7	29.14	0
7/30/2021 20:30	10.03	355.8	12.13	81	29.14	0
7/30/2021 20:45	11.02	359.9	12.19	80.7	29.14	0
7/30/2021 21:00	10.99	357.3	13.79	80.5	29.15	0
7/30/2021 21:15	11.5	352.4	15.18	80.2	29.15	0
7/30/2021 21:30	9.52	350.7	11.75	79.57	29.16	0
7/30/2021 21:45	7.55	3.985	12.24	78.06	29.16	0
7/30/2021 22:00	10.07	10.32	10.62	77.18	29.16	0
7/30/2021 22:15	12.37	9.09	12.52	76.5	29.16	0
7/30/2021 22:30	12.56	12.54	11.36	75.98	29.16	0
7/30/2021 22:45	12.57	10.94	10.89	75.6	29.16	0
7/30/2021 23:00	12.84	13	10.81	76.15	29.16	0
7/30/2021 23:15	14.38	6.028	12.41	76.55	29.15	0
7/30/2021 23:30	14.93	357.8	12.75	77.48	29.15	0
7/30/2021 23:45	9.39	351.1	17.68	78.02	29.16	0
7/31/2021 0:00	9.09	350.3	14.74	77.57	29.16	0
7/31/2021 0:15	9.81	3.393	13.75	76.78	29.16	0
7/31/2021 0:30	7.615	11.02	11.66	75.48	29.16	0
7/31/2021 0:45	8.35	24.52	12.65	74.57	29.15	0
7/31/2021 1:00	9.95	15.69	10.14	74.13	29.15	0
7/31/2021 1:15	10.61	10.91	9.54	75.61	29.15	0
7/31/2021 1:30	11.32	9.73	10.81	76.28	29.15	0
7/31/2021 1:45	10.79	4.616	11.86	76.66	29.15	0
7/31/2021 2:00	7.533	9.31	11.42	76.23	29.15	0
7/31/2021 2:15	7.873	18.94	8.75	75.43	29.16	0
7/31/2021 2:30	9.26	20.3	10.31	75.03	29.16	0
7/31/2021 2:45	9.78	21.14	10.58	74.77	29.16	0
7/31/2021 3:00	8.61	21.54	9.16	74.68	29.16	0
7/31/2021 3:15	7.304	31.45	12.18	74.45	29.17	0
7/31/2021 3:30	6.909	38.32	11.16	73.78	29.17	0
7/31/2021 3:45	5.284	38.66	23	72.7	29.17	0
7/31/2021 4:00	2.578	52.03	24.53	72.47	29.18	0
7/31/2021 4:15	5.046	8.63	29.55	73.81	29.17	0
7/31/2021 4:30	6.087	306.7	8.05	72.89	29.16	0
7/31/2021 4:45	1.984	112.8	33.09	72.47	29.18	0
7/31/2021 5:00	3.004	98	36.36	73.53	29.19	0
7/31/2021 5:15	2.353	24.22	84.5	72.67	29.19	0
7/31/2021 5:30	5.102	246.3	93.3	72.81	29.2	0
7/31/2021 5:45	3.75	336.1	75.05	71.01	29.2	0
7/31/2021 6:00	8.78	314.9	8.4	71.27	29.18	0
7/31/2021 6:15	12.17	36.05	36.05	72.8	29.19	0
7/31/2021 6:30	13.14	11.49	19.62	74.79	29.19	0
7/31/2021 6:45	9.93	320.2	52.32	75.99	29.2	0
7/31/2021 7:00	7.135	257.7	20.98	73.52	29.2	0
7/31/2021 7:15	5.247	3.281	70.77	73.82	29.2	0
7/31/2021 7:30	3.163	192.8	75.82	73.44	29.22	0
7/31/2021 7:45	3.766	347.5	35.99	73.76	29.22	0
7/31/2021 8:00	9.02	10.13	9.54	72.43	29.21	0
7/31/2021 8:15	7.478	341.5	31.13	71.96	29.21	0
7/31/2021 8:30	4.209	245.6	24.47	72.71	29.22	0
7/31/2021 8:45	4.027	251.4	55.9	71.98	29.23	0
7/31/2021 9:00	2.684	65.79	36.28	71.51	29.23	0
7/31/2021 9:15	3.055	41.98	47.89	71.7	29.23	0
7/31/2021 9:30	7.08	8.79	12.71	71.62	29.23	0
7/31/2021 9:45	7.063	18.13	13.48	71.21	29.24	0
7/31/2021 10:00	9.39	13.82	9.82	71.15	29.24	0
7/31/2021 10:15	9.29	3.563	12.52	71.01	29.23	0
7/31/2021 10:30	4.594	23.74	15.24	71.25	29.24	0
7/31/2021 10:45	7.166	1.426	14.96	71.05	29.26	0
7/31/2021 11:00	10.52	5.686	12	71.23	29.24	0
7/31/2021 11:15	9.01	23.25	15.94	70.95	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
7/31/2021 11:30	5.245	58.66	37.04	71.52	29.24	0
7/31/2021 11:45	7.218	56.31	17.44	71.56	29.24	0
7/31/2021 12:00	5.874	359.3	15.79	72.81	29.23	0
7/31/2021 12:15	7.008	12.43	10.94	73.52	29.23	0
7/31/2021 12:30	5.663	43.14	19.14	73.94	29.22	0
7/31/2021 12:45	5.75	29.43	20.75	73.7	29.23	0
7/31/2021 13:00	1.284	66.27	53.45	75.54	29.24	0
7/31/2021 13:15	5.253	219.6	51.24	76.52	29.24	0
7/31/2021 13:30	9.06	276.5	9.42	76.37	29.23	0
7/31/2021 13:45	9.81	287.7	6.674	75.89	29.22	0
7/31/2021 14:00	9.29	285.2	9.01	75.38	29.22	0
7/31/2021 14:15	6.069	298.3	15.91	75.37	29.22	0
7/31/2021 14:30	4.813	299.3	17.41	74.94	29.22	0
7/31/2021 14:45	6.862	314.6	15.19	74.39	29.21	0
7/31/2021 15:00	6.899	240.7	48.18	73.78	29.21	0
7/31/2021 15:15	7.31	190.2	23.76	72.34	29.23	0
7/31/2021 15:30	6.136	182.5	32.29	72.75	29.23	0
7/31/2021 15:45	4.164	272.8	62.47	73.01	29.23	0
7/31/2021 16:00	5.111	294.9	13.01	73.17	29.22	0
7/31/2021 16:15	1.331	23.35	37.14	73.5	29.22	0
7/31/2021 16:30	1.866	359.2	29.44	73.74	29.22	0
7/31/2021 16:45	3.221	305	34.07	73.69	29.21	0
7/31/2021 17:00	5.294	290.3	11.59	73.26	29.2	0
7/31/2021 17:15	2.122	199.7	61.41	73.17	29.2	0
7/31/2021 17:30	2.61	154.2	38.69	72.9	29.2	0
7/31/2021 17:45	2.092	230.7	14.58	72.64	29.21	0
7/31/2021 18:00	2.196	207.3	11.29	72.58	29.21	0
7/31/2021 18:15	1.809	181.7	26.82	72.34	29.22	0
7/31/2021 18:30	2.151	307.4	36.06	72.42	29.21	0
7/31/2021 18:45	2.749	316.4	7.604	72.08	29.2	0
7/31/2021 19:00	4.337	317.7	6.513	71.54	29.2	0
7/31/2021 19:15	4.946	291.9	14.49	70.95	29.21	0
7/31/2021 19:30	5.291	350.7	57.7	69.83	29.2	0
7/31/2021 19:45	6.446	26.48	32.41	70.21	29.2	0
7/31/2021 20:00	8.09	325.2	20.32	70.04	29.19	0
7/31/2021 20:15	5.087	206.6	53.53	69.22	29.21	0
7/31/2021 20:30	7.225	220.7	8.2	69.04	29.21	0
7/31/2021 20:45	4.64	226.1	13.07	68.92	29.22	0
7/31/2021 21:00	3.972	267.2	14.53	68.29	29.21	0
7/31/2021 21:15	5.777	275.4	6.496	67.83	29.2	0
7/31/2021 21:30	4.347	263.5	31.43	67.52	29.2	0
7/31/2021 21:45	2.963	139.7	16.56	67.01	29.21	0
7/31/2021 22:00	1.158	172.4	13.14	67.03	29.22	0
7/31/2021 22:15	2.359	143.6	26.83	67.38	29.22	0
7/31/2021 22:30	4.876	190.7	30.3	67.25	29.22	0
7/31/2021 22:45	5.633	255.9	11.99	66.77	29.21	0
7/31/2021 23:00	3.634	152.3	59.91	66.23	29.22	0
7/31/2021 23:15	3.457	106.5	8.74	65.42	29.24	0
7/31/2021 23:30	2.823	76.78	8.46	65.49	29.24	0
7/31/2021 23:45	3.01	100.3	8.38	65.88	29.23	0
8/1/2021 0:00	3.316	117.6	11.61	66.31	29.23	0
8/1/2021 0:15	3.73	138.7	9.05	66.68	29.23	0
8/1/2021 0:30	4.992	130.9	4.516	66.73	29.24	0
8/1/2021 0:45	4.044	116.4	16.17	66.49	29.24	0
8/1/2021 1:00	4.673	145.6	6.318	66.52	29.24	0
8/1/2021 1:15	4.046	118.5	7.314	66.72	29.24	0
8/1/2021 1:30	4.431	126.3	4.646	66.88	29.24	0
8/1/2021 1:45	4.366	126	6.202	67.1	29.24	0
8/1/2021 2:00	3.804	123.3	6.11	67.17	29.23	0
8/1/2021 2:15	4.059	129.7	17.14	67.2	29.23	0
8/1/2021 2:30	1.945	213.1	31.48	67.63	29.23	0
8/1/2021 2:45	2.816	350.1	26.42	66.71	29.23	0
8/1/2021 3:00	3.59	19.64	9.53	65.84	29.23	0
8/1/2021 3:15	0.656	249.9	39.86	66.73	29.24	0
8/1/2021 3:30	4.019	229.7	14.75	67.4	29.24	0
8/1/2021 3:45	3.811	277.6	16.72	66.17	29.23	0
8/1/2021 4:00	0.131	328.6	14.66	65.29	29.23	0
8/1/2021 4:15	0.376	55.75	6.241	65.09	29.23	0
8/1/2021 4:30	0.854	173	45.75	65.54	29.24	0
8/1/2021 4:45	0.566	299.3	51.24	65.58	29.23	0
8/1/2021 5:00	1.959	270.7	45.42	65.22	29.24	0
8/1/2021 5:15	4.329	225.4	7.174	64.87	29.24	0
8/1/2021 5:30	3.7	236.4	4.867	65.28	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/1/2021 5:45	2.81	260.7	13.2	65.2	29.24	0
8/1/2021 6:00	1.809	258.6	6.406	65.05	29.25	0
8/1/2021 6:15	2.236	252.4	12.02	65.17	29.25	0
8/1/2021 6:30	3.439	245.9	14.22	65.09	29.25	0
8/1/2021 6:45	2.887	244.3	8.03	65.05	29.26	0
8/1/2021 7:00	2.853	261	9.18	65.15	29.26	0
8/1/2021 7:15	4.429	263.9	7.885	65.16	29.27	0
8/1/2021 7:30	3.672	251.5	19.36	65.57	29.27	0
8/1/2021 7:45	4.965	241.5	10.96	65.53	29.27	0
8/1/2021 8:00	3.478	221.6	14.99	65.69	29.27	0
8/1/2021 8:15	4.242	226.6	12.74	65.67	29.27	0
8/1/2021 8:30	4.158	219	18.06	65.82	29.28	0
8/1/2021 8:45	3.446	213.9	32.7	66.59	29.28	0
8/1/2021 9:00	3.286	204.5	22.05	67.3	29.27	0
8/1/2021 9:15	3.697	211.5	38.59	67.96	29.27	0
8/1/2021 9:30	3.396	213.5	19.26	68.77	29.27	0
8/1/2021 9:45	3.912	220.8	18.67	68.97	29.27	0
8/1/2021 10:00	3.292	243.1	25.44	70.1	29.28	0
8/1/2021 10:15	3.346	229.1	33.38	70.72	29.27	0
8/1/2021 10:30	2.72	247	32.91	71.21	29.27	0
8/1/2021 10:45	3.776	198.4	26.51	71.03	29.27	0
8/1/2021 11:00	3.701	246.4	30.78	71.59	29.27	0
8/1/2021 11:15	2.628	265.9	42.15	72.72	29.27	0
8/1/2021 11:30	3.405	194.4	38.29	73.31	29.27	0
8/1/2021 11:45	2.884	210.2	38.88	74.84	29.27	0
8/1/2021 12:00	2.836	254.6	30.6	74.99	29.27	0
8/1/2021 12:15	2.806	292.8	50.88	75.31	29.27	0
8/1/2021 12:30	4.847	298.1	34.75	76.07	29.26	0
8/1/2021 12:45	6.409	322.9	20.37	76.66	29.26	0
8/1/2021 13:00	5.365	311.6	36.79	77.06	29.26	0
8/1/2021 13:15	4.918	255.1	45.51	77.16	29.26	0
8/1/2021 13:30	6.262	225.4	19.69	77.51	29.26	0
8/1/2021 13:45	6.211	294.9	25.54	78.11	29.26	0
8/1/2021 14:00	5.669	253.7	41.47	78.39	29.26	0
8/1/2021 14:15	4.863	211.8	34.12	78.14	29.26	0
8/1/2021 14:30	5.374	227.7	24.86	78.68	29.26	0
8/1/2021 14:45	6.905	234.7	16.46	79.23	29.26	0
8/1/2021 15:00	6.304	237.5	22.69	79.43	29.26	0
8/1/2021 15:15	6.673	263.1	19.94	79.8	29.25	0
8/1/2021 15:30	6.205	250.2	30.18	80.3	29.25	0
8/1/2021 15:45	6.042	256.3	17.38	79.74	29.26	0
8/1/2021 16:00	5.365	219.2	23.58	79.62	29.26	0
8/1/2021 16:15	5.119	265.2	25.2	79.92	29.25	0
8/1/2021 16:30	6.561	263.5	21.15	79.96	29.25	0
8/1/2021 16:45	5.62	277	28.35	79.62	29.25	0
8/1/2021 17:00	6.207	262.8	16.47	79.1	29.25	0
8/1/2021 17:15	5.099	282.2	20.12	79.13	29.25	0
8/1/2021 17:30	3.761	293.6	28.62	78.94	29.25	0
8/1/2021 17:45	3.299	301.1	34.76	79.04	29.25	0
8/1/2021 18:00	4.824	300.9	12.25	78.82	29.25	0
8/1/2021 18:15	4.704	280.3	20.23	78.38	29.25	0
8/1/2021 18:30	5.672	261	7.243	77.93	29.25	0
8/1/2021 18:45	5.535	260.6	10.47	77.42	29.25	0
8/1/2021 19:00	5.122	269.2	5.783	76.75	29.25	0
8/1/2021 19:15	4.102	255.5	6.74	76.4	29.26	0
8/1/2021 19:30	4.693	256.5	6.454	75.96	29.26	0
8/1/2021 19:45	4.429	261.6	8.34	75.08	29.26	0
8/1/2021 20:00	5.591	257	5.3	74.46	29.27	0
8/1/2021 20:15	5.714	256.9	5.49	73.95	29.27	0
8/1/2021 20:30	5.073	275.2	9.38	73.3	29.27	0
8/1/2021 20:45	5.047	290.6	2.126	72.47	29.28	0
8/1/2021 21:00	4.158	285.2	2.241	72.37	29.28	0
8/1/2021 21:15	3.361	297.3	4.178	71.93	29.28	0
8/1/2021 21:30	4.538	264.9	9.33	71.76	29.28	0
8/1/2021 21:45	4.528	261.9	6.131	70.99	29.28	0
8/1/2021 22:00	4.869	261.9	7.071	70.44	29.28	0
8/1/2021 22:15	7.141	251.7	5.326	69.83	29.28	0
8/1/2021 22:30	4.422	276.8	15.25	69.06	29.29	0
8/1/2021 22:45	1.024	322.3	7.9	68.17	29.29	0
8/1/2021 23:00	1.947	227	5.246	68.45	29.29	0
8/1/2021 23:15	3.381	220.5	12.08	68.37	29.29	0
8/1/2021 23:30	3.421	188.3	5.918	67.65	29.3	0
8/1/2021 23:45	3.587	194.8	6.797	66.87	29.3	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/2/2021 0:00	2.258	192.2	4.209	66.19	29.3	0
8/2/2021 0:15	3.288	221.4	4.473	66.26	29.3	0
8/2/2021 0:30	5.613	221.8	3.843	66.07	29.3	0
8/2/2021 0:45	4.353	224.7	5.644	65.4	29.3	0
8/2/2021 1:00	2.78	218.3	8.67	64.51	29.31	0
8/2/2021 1:15	4.622	240	8.13	63.74	29.31	0
8/2/2021 1:30	4.488	250.6	4.21	63.08	29.31	0
8/2/2021 1:45	3.839	252.2	4.525	62.58	29.31	0
8/2/2021 2:00	2.898	268.7	10.27	62.05	29.31	0
8/2/2021 2:15	0.271	291.3	0.24	61.63	29.31	0
8/2/2021 2:30	0.561	290.9	0.292	61.64	29.31	0
8/2/2021 2:45	0.015	289.4	0.004	61.56	29.31	0
8/2/2021 3:00	1.148	278.7	9.13	61.67	29.31	0
8/2/2021 3:15	0.333	267.3	1.5	61.49	29.31	0
8/2/2021 3:30	1.49	315.5	17.89	61.23	29.31	0
8/2/2021 3:45	3.455	286.7	3.514	60.56	29.31	0
8/2/2021 4:00	4.438	270.4	4.564	60.15	29.32	0
8/2/2021 4:15	5.463	280.9	8.03	59.64	29.32	0
8/2/2021 4:30	4.697	325.5	14.65	59.04	29.32	0
8/2/2021 4:45	4.149	10.12	10.58	58.7	29.32	0
8/2/2021 5:00	5.036	20.36	7.767	59.32	29.32	0
8/2/2021 5:15	4.275	31.06	13.71	59.33	29.32	0
8/2/2021 5:30	2.543	246	36.51	59.17	29.33	0
8/2/2021 5:45	4.635	297.1	20.16	58.97	29.34	0
8/2/2021 6:00	4.771	301.7	17.02	59.04	29.34	0
8/2/2021 6:15	4.315	264.7	14.85	59.74	29.34	0
8/2/2021 6:30	5.675	245.4	11.86	59.7	29.35	0
8/2/2021 6:45	6.388	257.3	7.585	59.8	29.35	0
8/2/2021 7:00	4.012	258.2	15.06	60.02	29.36	0
8/2/2021 7:15	1.294	299.1	8.36	60.39	29.35	0
8/2/2021 7:30	1.529	282.1	23.08	61.19	29.35	0
8/2/2021 7:45	1.872	253.5	44.63	61.89	29.35	0
8/2/2021 8:00	2.258	257.7	19	62.75	29.35	0
8/2/2021 8:15	2.454	262.2	20.96	63.86	29.36	0
8/2/2021 8:30	2.394	233.1	28.5	64.34	29.35	0
8/2/2021 8:45	1.958	135.2	60.4	65.75	29.35	0
8/2/2021 9:00	2.837	3.968	21.93	66.98	29.34	0
8/2/2021 9:15	3.214	273.8	33.91	67.97	29.34	0
8/2/2021 9:30	3.217	289.5	32.57	69.2	29.34	0
8/2/2021 9:45	3.174	336.1	27.54	70.04	29.34	0
8/2/2021 10:00	5.415	264.5	23.77	70.81	29.34	0
8/2/2021 10:15	3.983	277	27.96	71.51	29.34	0
8/2/2021 10:30	3.069	348.7	35.54	73.38	29.33	0
8/2/2021 10:45	3.701	295.9	32.27	73.93	29.34	0
8/2/2021 11:00	5.584	281.7	26.32	74.5	29.33	0
8/2/2021 11:15	4.95	308.2	44.27	75.53	29.33	0
8/2/2021 11:30	5.373	19.49	36.6	76.32	29.32	0
8/2/2021 11:45	4.394	318.9	36.03	77.98	29.32	0
8/2/2021 12:00	7.366	20.38	19.62	78.39	29.31	0
8/2/2021 12:15	8.31	17.06	11.46	78.82	29.31	0
8/2/2021 12:30	7.868	16.41	13.65	79.7	29.31	0
8/2/2021 12:45	7.635	4.031	33.98	80.8	29.31	0
8/2/2021 13:00	10.51	21.19	11.37	80.9	29.3	0
8/2/2021 13:15	11.08	12.2	9.18	81.4	29.29	0
8/2/2021 13:30	9.72	9.39	15.51	81.7	29.29	0
8/2/2021 13:45	10.07	3.846	18.96	82.7	29.28	0
8/2/2021 14:00	9.9	359.8	15.62	83.9	29.28	0
8/2/2021 14:15	10.76	358.2	14.19	83.8	29.27	0
8/2/2021 14:30	11.46	357.3	13.04	84.1	29.27	0
8/2/2021 14:45	11.54	1.348	12.69	84.2	29.26	0
8/2/2021 15:00	10.28	359.7	13.46	84.5	29.26	0
8/2/2021 15:15	6.229	337.1	15.64	85	29.26	0
8/2/2021 15:30	8.25	324.5	26.05	85.9	29.26	0
8/2/2021 15:45	8.71	340.1	19.72	85.9	29.26	0
8/2/2021 16:00	8.99	332.5	16.86	85.9	29.25	0
8/2/2021 16:15	9.33	339.9	21.41	85.7	29.25	0
8/2/2021 16:30	8.93	340	20.56	85.6	29.25	0
8/2/2021 16:45	8.51	323.7	17.87	85	29.25	0
8/2/2021 17:00	7.629	332.2	25.83	84.5	29.25	0
8/2/2021 17:15	7.09	313.8	24.8	84.6	29.26	0
8/2/2021 17:30	8.09	307.5	12.44	83.8	29.26	0
8/2/2021 17:45	8.46	344.9	18.56	83.2	29.25	0
8/2/2021 18:00	11.32	349.3	19.3	83.2	29.23	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/2/2021 18:15	5.806	358.9	25.45	82.7	29.24	0
8/2/2021 18:30	11.34	20.86	13.52	81.4	29.24	0
8/2/2021 18:45	14.4	8.78	11.84	79.98	29.24	0
8/2/2021 19:00	11.28	14.87	8.56	79.13	29.25	0
8/2/2021 19:15	12.65	16.93	8.57	78.34	29.24	0
8/2/2021 19:30	13.23	12.13	11.12	77.2	29.24	0
8/2/2021 19:45	9.59	342.8	13.64	76.79	29.24	0
8/2/2021 20:00	7.577	336.7	25.47	76.27	29.25	0
8/2/2021 20:15	11.81	5.103	13.27	75.39	29.24	0
8/2/2021 20:30	11.79	2.462	11.47	73.92	29.24	0
8/2/2021 20:45	10.86	12.82	9.62	73.1	29.24	0
8/2/2021 21:00	9.51	1.486	12.88	72.54	29.24	0
8/2/2021 21:15	11.42	353.2	12.47	72.31	29.24	0
8/2/2021 21:30	10.93	356.2	15.8	71.71	29.25	0
8/2/2021 21:45	12.59	358.3	14.85	71.01	29.24	0
8/2/2021 22:00	12.68	5.03	14.48	70.59	29.24	0
8/2/2021 22:15	14.24	11.46	14.58	69.65	29.24	0
8/2/2021 22:30	11.43	11.23	10.99	69.24	29.25	0
8/2/2021 22:45	13.98	10.74	11.21	68.6	29.24	0
8/2/2021 23:00	13.3	11.61	11.62	68.55	29.24	0
8/2/2021 23:15	14.37	9.81	13.47	68.66	29.24	0
8/2/2021 23:30	14.16	13.99	10.21	68.32	29.24	0
8/2/2021 23:45	11.55	16.63	12.83	67.98	29.25	0
8/3/2021 0:00	10.03	14.12	9.58	67.22	29.25	0
8/3/2021 0:15	9.71	15.7	8.34	66.71	29.26	0
8/3/2021 0:30	10.46	15.77	8.55	66.85	29.25	0
8/3/2021 0:45	11.55	12.33	11.51	67.51	29.25	0
8/3/2021 1:00	14.19	7.225	10.86	68.05	29.25	0
8/3/2021 1:15	10.35	13.44	10.61	67.33	29.25	0
8/3/2021 1:30	10.61	12.65	7.035	65.97	29.25	0
8/3/2021 1:45	10.19	12.34	7.685	65.74	29.25	0
8/3/2021 2:00	10.93	12.12	9.27	66.97	29.25	0
8/3/2021 2:15	10.85	9.17	10.37	68.2	29.25	0
8/3/2021 2:30	7.616	13.77	11.09	67.15	29.26	0
8/3/2021 2:45	7.084	26.65	11.35	65.19	29.26	0
8/3/2021 3:00	7.865	25.45	7.206	64.46	29.26	0
8/3/2021 3:15	9	23.83	7.608	64.68	29.25	0
8/3/2021 3:30	6.129	27.92	11.06	64.64	29.25	0
8/3/2021 3:45	4.074	33.23	9.97	63.95	29.26	0
8/3/2021 4:00	4.151	17.36	9.54	63.59	29.26	0
8/3/2021 4:15	3.194	3.037	8.5	63.51	29.26	0
8/3/2021 4:30	1.815	36.3	16.66	63.64	29.26	0
8/3/2021 4:45	2.254	17.51	10.27	63.41	29.26	0
8/3/2021 5:00	3.427	10.3	7.911	63.45	29.26	0
8/3/2021 5:15	4.373	14.72	10.96	62.31	29.26	0
8/3/2021 5:30	4.218	16.95	10	61.63	29.26	0
8/3/2021 5:45	3.726	9.3	8.92	61.86	29.27	0
8/3/2021 6:00	4.091	10.76	8.69	62.34	29.27	0
8/3/2021 6:15	4.119	6.818	11.33	62.71	29.28	0
8/3/2021 6:30	4.744	18.7	12.03	63.05	29.28	0
8/3/2021 6:45	3.779	7.856	9.49	63.43	29.28	0
8/3/2021 7:00	3.491	7.407	12.51	64.7	29.28	0
8/3/2021 7:15	3.427	21.64	15.21	65.35	29.28	0
8/3/2021 7:30	4.772	14.07	9.59	66.02	29.28	0
8/3/2021 7:45	4.094	20.9	11.64	66.76	29.29	0
8/3/2021 8:00	4.365	20.67	18.66	67.5	29.28	0
8/3/2021 8:15	3.256	11.42	27.47	68	29.28	0
8/3/2021 8:30	2.682	27.31	21.81	69.22	29.28	0
8/3/2021 8:45	3.224	35.22	19.06	69.82	29.28	0
8/3/2021 9:00	3.734	51.74	15.31	70.47	29.27	0
8/3/2021 9:15	3.307	49.82	20.35	71.73	29.27	0
8/3/2021 9:30	2.875	68.82	35.09	73.01	29.27	0
8/3/2021 9:45	2.459	63.1	51.93	74.62	29.27	0
8/3/2021 10:00	2.587	46.02	46.42	74.47	29.27	0
8/3/2021 10:15	3.055	33.38	57.19	75.51	29.26	0
8/3/2021 10:30	5.882	279	27.07	75.24	29.26	0
8/3/2021 10:45	7.71	264.2	13.87	75.04	29.26	0
8/3/2021 11:00	8.72	260.2	14.84	74.88	29.26	0
8/3/2021 11:15	6.604	259.4	21.93	75.02	29.25	0
8/3/2021 11:30	8.77	265.5	16.18	75.55	29.25	0
8/3/2021 11:45	8.74	234.6	13.77	75.28	29.25	0
8/3/2021 12:00	9.61	237.3	13.39	76.16	29.25	0
8/3/2021 12:15	10.72	240.4	7.515	75.83	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/3/2021 12:30	9.14	248.1	10.65	75.14	29.25	0
8/3/2021 12:45	6.186	258.5	12.29	75.43	29.25	0
8/3/2021 13:00	5.236	256.4	19.15	76.07	29.24	0
8/3/2021 13:15	5.798	257.9	15.69	77.5	29.24	0
8/3/2021 13:30	4.813	280	35.85	78.76	29.24	0
8/3/2021 13:45	6.161	256.4	20.94	79.58	29.23	0
8/3/2021 14:00	8.47	259	25.91	79.67	29.23	0
8/3/2021 14:15	7.363	270.7	13.71	80.2	29.23	0
8/3/2021 14:30	7.11	279.8	16.18	80.8	29.23	0
8/3/2021 14:45	8.24	250	17.26	81.4	29.23	0
8/3/2021 15:00	8.85	247.5	19.15	80.2	29.23	0
8/3/2021 15:15	8.71	232.1	9.46	80.6	29.23	0
8/3/2021 15:30	7.55	241.1	20.58	80.5	29.22	0
8/3/2021 15:45	8.71	242.2	15.12	81.3	29.22	0
8/3/2021 16:00	7.808	259.3	16.91	80.6	29.22	0
8/3/2021 16:15	6.937	253.2	24.2	80.7	29.22	0
8/3/2021 16:30	5.23	285.5	13.86	80.5	29.22	0
8/3/2021 16:45	6.775	311.2	10.38	79.74	29.22	0
8/3/2021 17:00	6.918	302.8	9.12	79	29.23	0
8/3/2021 17:15	6.625	319.4	18.91	78.03	29.23	0
8/3/2021 17:30	8.26	11.8	14.91	77.41	29.22	0
8/3/2021 17:45	7.475	344.1	11.12	77.61	29.22	0
8/3/2021 18:00	7.77	352.1	12.19	77.72	29.21	0
8/3/2021 18:15	6.167	348.2	13.49	77.52	29.21	0
8/3/2021 18:30	4.549	349.7	9.64	77.23	29.2	0
8/3/2021 18:45	4.872	319.5	20.82	76.46	29.2	0
8/3/2021 19:00	5.958	303.7	6.413	76.01	29.2	0
8/3/2021 19:15	5.34	349.4	23.5	74.49	29.21	0
8/3/2021 19:30	6.491	355.4	12.84	73.14	29.2	0
8/3/2021 19:45	7.087	3.124	8.86	73.05	29.21	0
8/3/2021 20:00	9.35	8.93	11.33	72.86	29.21	0
8/3/2021 20:15	9.39	5.355	13.76	72.68	29.21	0
8/3/2021 20:30	11.74	6.252	15.54	72.44	29.21	0
8/3/2021 20:45	9.59	1.606	13.44	72.15	29.22	0
8/3/2021 21:00	7.796	15	17.53	71.85	29.22	0
8/3/2021 21:15	7.099	33.29	9.85	70.77	29.22	0
8/3/2021 21:30	8.52	32.24	9.38	70.56	29.22	0
8/3/2021 21:45	8.2	30.93	8.92	70.04	29.21	0
8/3/2021 22:00	9.09	26.07	7.048	69.63	29.21	0
8/3/2021 22:15	10.36	9.83	9.78	69.29	29.21	0
8/3/2021 22:30	11.56	8.55	7.304	68.45	29.21	0
8/3/2021 22:45	8.28	16.95	11.38	68.04	29.21	0
8/3/2021 23:00	6.154	8.2	11.27	67.76	29.21	0
8/3/2021 23:15	4.007	19.04	7.667	67.55	29.21	0
8/3/2021 23:30	4.686	19.61	9.77	66.09	29.21	0
8/3/2021 23:45	4.219	15.42	6.77	65.5	29.21	0
8/4/2021 0:00	3.784	10.11	5.797	65.79	29.22	0
8/4/2021 0:15	3.961	7.116	5.244	66.09	29.22	0
8/4/2021 0:30	3.244	20.11	11.19	64.79	29.22	0
8/4/2021 0:45	2.969	45.46	10.82	65.06	29.22	0
8/4/2021 1:00	2.342	56.16	7.716	65.53	29.22	0
8/4/2021 1:15	2.871	87.5	26.09	65.98	29.22	0
8/4/2021 1:30	3.304	115.1	7.967	66.31	29.22	0
8/4/2021 1:45	3.312	122.3	6.187	66.01	29.22	0
8/4/2021 2:00	3.976	139.3	13.56	65.35	29.22	0
8/4/2021 2:15	4.852	168	8.15	64.57	29.22	0
8/4/2021 2:30	5.239	158.9	6.723	63.66	29.22	0
8/4/2021 2:45	4.376	154.2	5.31	63.79	29.22	0
8/4/2021 3:00	2.879	159	7.724	64.31	29.22	0
8/4/2021 3:15	1.97	177.4	32.47	63.59	29.22	0
8/4/2021 3:30	0.475	84.7	26.4	62.16	29.22	0
8/4/2021 3:45	0.683	40.72	22.22	62.36	29.22	0
8/4/2021 4:00	0.209	44.54	0.629	62.71	29.22	0
8/4/2021 4:15	0.016	43.03	0.01	62.66	29.22	0
8/4/2021 4:30	0	0	0	62.44	29.22	0
8/4/2021 4:45	0.074	88.4	3.068	61.86	29.22	0
8/4/2021 5:00	1.928	117.8	16.76	62.05	29.22	0
8/4/2021 5:15	2.772	140	8.27	62.13	29.21	0
8/4/2021 5:30	2.196	87	24.01	61.58	29.21	0
8/4/2021 5:45	1.844	43.79	8.64	61.09	29.21	0
8/4/2021 6:00	1.285	27.43	9.45	61.68	29.22	0
8/4/2021 6:15	1.245	15.17	11.72	62.44	29.22	0
8/4/2021 6:30	2.151	27.01	8.74	62.52	29.22	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/4/2021 6:45	0.752	23.05	22.56	65.02	29.22	0
8/4/2021 7:00	1.493	132.5	27.68	65.77	29.22	0
8/4/2021 7:15	1.338	106	47.91	66.36	29.22	0
8/4/2021 7:30	2.958	18.49	15.78	66.06	29.21	0
8/4/2021 7:45	2.327	341.5	25.3	67.07	29.22	0
8/4/2021 8:00	1.794	284.6	31.71	68.62	29.22	0
8/4/2021 8:15	2.241	220.6	68.81	69.47	29.22	0
8/4/2021 8:30	1.838	48.73	82.6	70.66	29.22	0
8/4/2021 8:45	1.863	311.5	23.83	71.23	29.21	0
8/4/2021 9:00	2.837	330.8	32.3	72.65	29.21	0
8/4/2021 9:15	3.288	309.3	55.95	73.47	29.21	0
8/4/2021 9:30	3.829	9.05	31.21	74.72	29.2	0
8/4/2021 9:45	6.241	359.7	21.43	75.78	29.2	0
8/4/2021 10:00	8.46	22.51	12.86	76.27	29.2	0
8/4/2021 10:15	9.96	9.66	17.15	77.13	29.19	0
8/4/2021 10:30	9.07	358.5	19.85	77.91	29.19	0
8/4/2021 10:45	8.09	351.6	22.33	79.08	29.19	0
8/4/2021 11:00	8.16	1.293	24.47	78.88	29.19	0
8/4/2021 11:15	7.346	355.4	36.18	79.31	29.19	0
8/4/2021 11:30	6.615	309.3	34.98	80.9	29.19	0
8/4/2021 11:45	7.914	322.8	17.76	80.4	29.18	0
8/4/2021 12:00	9.02	322.7	15.58	81.1	29.18	0
8/4/2021 12:15	10.9	307.4	18.15	82	29.18	0
8/4/2021 12:30	11.45	306.4	10.15	82.6	29.17	0
8/4/2021 12:45	8.97	321.9	23.91	83.1	29.17	0
8/4/2021 13:00	9.09	342.2	21.84	83.6	29.17	0
8/4/2021 13:15	7.961	352.7	25.67	83.7	29.16	0
8/4/2021 13:30	10.59	347.2	18.2	84.5	29.15	0
8/4/2021 13:45	10.98	345.9	18.16	84.5	29.15	0
8/4/2021 14:00	8.88	359.5	28.49	84.6	29.15	0
8/4/2021 14:15	7.097	11.76	32.41	85.7	29.14	0
8/4/2021 14:30	8.8	2.162	18.89	85.1	29.14	0
8/4/2021 14:45	7.397	324.4	19.17	85.8	29.14	0
8/4/2021 15:00	7.436	354.3	28.2	86.4	29.13	0
8/4/2021 15:15	8.94	310.5	28.36	86.9	29.13	0
8/4/2021 15:30	8.96	310.9	20.09	87.1	29.13	0
8/4/2021 15:45	8.13	297	19.34	87	29.12	0
8/4/2021 16:00	8.5	325.1	27.58	87.2	29.12	0
8/4/2021 16:15	7.7	326.4	20.22	86.9	29.12	0
8/4/2021 16:30	7.821	305.3	16.55	87.1	29.11	0
8/4/2021 16:45	9.65	302.8	14.89	86.3	29.11	0
8/4/2021 17:00	9.64	301.7	10.38	86	29.11	0
8/4/2021 17:15	10.19	299.5	10.98	85.6	29.11	0
8/4/2021 17:30	9.49	300	9.28	85.4	29.11	0
8/4/2021 17:45	8.96	307.6	8.85	85	29.1	0
8/4/2021 18:00	8.42	304.5	8.93	84.6	29.1	0
8/4/2021 18:15	8.75	302.5	6.727	84	29.1	0
8/4/2021 18:30	6.672	307.2	9.33	83.4	29.1	0
8/4/2021 18:45	6.834	308.6	8.96	82.4	29.1	0
8/4/2021 19:00	5.635	320	8.27	81.3	29.1	0
8/4/2021 19:15	6.827	326.8	8.62	80.2	29.1	0
8/4/2021 19:30	7.645	339.2	12.13	79.63	29.1	0
8/4/2021 19:45	7.238	330.1	12.22	78.82	29.11	0
8/4/2021 20:00	9.6	347.4	17.65	77.08	29.11	0
8/4/2021 20:15	13.57	12.77	10.34	74.74	29.11	0
8/4/2021 20:30	13.87	13.18	10.41	73.4	29.11	0
8/4/2021 20:45	10.73	17.25	9.44	72.34	29.11	0
8/4/2021 21:00	11.17	13.84	13.09	72.21	29.11	0
8/4/2021 21:15	10.45	18.93	16.62	71.88	29.12	0
8/4/2021 21:30	8.76	20.57	18.32	71.69	29.12	0
8/4/2021 21:45	7.874	23.02	17.29	71.16	29.12	0
8/4/2021 22:00	7.226	34.01	23.08	70.89	29.12	0
8/4/2021 22:15	10.64	19.5	13.97	71.16	29.12	0
8/4/2021 22:30	14.41	10.26	7.179	70.46	29.11	0
8/4/2021 22:45	11.28	18.99	11.97	70.31	29.11	0
8/4/2021 23:00	11.68	11.12	12.12	70.37	29.11	0
8/4/2021 23:15	10.22	21.13	22.26	70.54	29.11	0
8/4/2021 23:30	11.46	13.47	10.56	70.48	29.11	0
8/4/2021 23:45	9.09	6.472	10.69	70.67	29.11	0
8/5/2021 0:00	11.39	2.961	11.62	70.29	29.11	0
8/5/2021 0:15	7.821	13.7	8.59	70.27	29.12	0
8/5/2021 0:30	2.854	34.34	15.69	69.17	29.11	0
8/5/2021 0:45	2.185	36.62	22.53	68.76	29.11	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/5/2021 1:00	0.904	5.455	17.05	68.05	29.11	0
8/5/2021 1:15	3.323	11.64	23.71	68.1	29.11	0
8/5/2021 1:30	3.628	40.6	16.17	67.97	29.12	0
8/5/2021 1:45	3.07	37.56	15.87	67.5	29.12	0
8/5/2021 2:00	1.131	28.08	11.38	67.38	29.12	0
8/5/2021 2:15	0.578	60.29	42.35	66.95	29.12	0
8/5/2021 2:30	1.354	62.6	61	65.97	29.12	0
8/5/2021 2:45	1.079	55.4	41.41	64.99	29.11	0
8/5/2021 3:00	3.381	182.4	22.28	65.14	29.11	0
8/5/2021 3:15	5.816	187.2	7.42	64.68	29.12	0
8/5/2021 3:30	1.11	223.7	47.11	63.67	29.12	0
8/5/2021 3:45	0.681	25.65	17.01	62.7	29.12	0
8/5/2021 4:00	2.627	31.07	4.741	62.9	29.13	0
8/5/2021 4:15	2.521	28.15	4.582	62.33	29.13	0
8/5/2021 4:30	2.258	26.33	1.54	62.46	29.13	0
8/5/2021 4:45	0.486	37.12	4.964	62.96	29.13	0
8/5/2021 5:00	2.92	88.2	17.61	62.77	29.13	0
8/5/2021 5:15	3.713	123.4	12.7	62.41	29.14	0
8/5/2021 5:30	3.192	135.3	4.093	62.93	29.14	0
8/5/2021 5:45	3.585	130.2	4.704	63.15	29.14	0
8/5/2021 6:00	2.636	131.6	7.526	62.91	29.14	0
8/5/2021 6:15	2.587	150.3	10.38	63.14	29.14	0
8/5/2021 6:30	5.026	158.2	6.146	62.91	29.14	0
8/5/2021 6:45	5.669	164.3	6.801	63.01	29.15	0
8/5/2021 7:00	5.037	161.6	8.74	63.21	29.15	0
8/5/2021 7:15	5.246	145	9.53	63.91	29.15	0
8/5/2021 7:30	6.013	154.3	13.57	64.25	29.14	0
8/5/2021 7:45	4.941	161.7	16.33	64.95	29.14	0
8/5/2021 8:00	5.042	150.1	19.27	65.81	29.14	0
8/5/2021 8:15	3.385	163	22.03	66.21	29.15	0
8/5/2021 8:30	3.39	142.4	23.12	67.82	29.14	0
8/5/2021 8:45	3.333	203	27.64	67.75	29.14	0
8/5/2021 9:00	2.507	196.8	29.97	68.25	29.14	0
8/5/2021 9:15	3.815	179.7	19.93	68.84	29.14	0
8/5/2021 9:30	3.659	191.7	25.11	69.47	29.14	0
8/5/2021 9:45	4.536	175.6	20.08	70.27	29.14	0
8/5/2021 10:00	4.107	182	26.54	70.9	29.14	0
8/5/2021 10:15	3.966	211.2	30.95	72.12	29.14	0
8/5/2021 10:30	2.799	246.4	40.39	72.45	29.14	0
8/5/2021 10:45	2.338	233.9	54.59	74	29.14	0
8/5/2021 11:00	2.977	267	22.35	74.58	29.14	0
8/5/2021 11:15	3.022	283.4	41.02	75.45	29.13	0
8/5/2021 11:30	1.885	263.9	51.18	76.47	29.13	0
8/5/2021 11:45	2.806	216.5	36.96	76.36	29.13	0
8/5/2021 12:00	3.629	191.8	72.97	77.53	29.14	0
8/5/2021 12:15	4.464	192.8	70.38	78.19	29.14	0
8/5/2021 12:30	4.524	237.6	38.99	77.47	29.14	0
8/5/2021 12:45	5.864	248.9	28.92	78.05	29.14	0
8/5/2021 13:00	6.105	252.8	21.59	78.8	29.14	0
8/5/2021 13:15	5.181	258.6	25.09	78.99	29.14	0
8/5/2021 13:30	5.215	271.7	24.07	78.76	29.14	0
8/5/2021 13:45	6.195	261	22.2	79.38	29.14	0
8/5/2021 14:00	6.171	254.4	28.43	79.32	29.14	0
8/5/2021 14:15	7.77	256.5	23.87	79.85	29.14	0
8/5/2021 14:30	10.15	255.8	11.89	79.18	29.14	0
8/5/2021 14:45	8.48	250.7	18.82	79.57	29.14	0
8/5/2021 15:00	7.391	245	25.65	79.46	29.14	0
8/5/2021 15:15	7.41	237.5	19.89	79.9	29.14	0
8/5/2021 15:30	6.209	247.9	32.53	80.3	29.14	0
8/5/2021 15:45	6.389	228.5	33.31	80.7	29.14	0
8/5/2021 16:00	5.856	244.9	33.19	80.6	29.14	0
8/5/2021 16:15	7.231	216	18.78	80.2	29.14	0
8/5/2021 16:30	8.27	202.5	14.46	80	29.14	0
8/5/2021 16:45	5.685	237.2	16.53	80.7	29.14	0
8/5/2021 17:00	6.841	224.1	19.38	80.6	29.14	0
8/5/2021 17:15	9.49	235.8	11.15	80.3	29.14	0
8/5/2021 17:30	9.27	225.2	15.51	79.9	29.14	0
8/5/2021 17:45	10.15	236	14.62	79.42	29.14	0
8/5/2021 18:00	12.19	239.1	10.75	78.74	29.14	0
8/5/2021 18:15	13.62	239.6	8.72	76.89	29.15	0
8/5/2021 18:30	12.91	239.8	8.84	74.91	29.15	0
8/5/2021 18:45	12.3	245.7	9.57	72.98	29.16	0
8/5/2021 19:00	12.57	240.7	9.78	71.07	29.17	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/5/2021 19:15	8.87	232.9	13.86	69.9	29.18	0
8/5/2021 19:30	8.46	232.4	12.52	68.35	29.19	0
8/5/2021 19:45	7.826	230.5	11.68	67.33	29.2	0
8/5/2021 20:00	8.1	232.6	14.6	66.56	29.2	0
8/5/2021 20:15	9.04	226.3	8.9	66.08	29.21	0
8/5/2021 20:30	7.465	229	9.09	65.89	29.22	0
8/5/2021 20:45	5.794	231.7	11.36	65.94	29.22	0
8/5/2021 21:00	5.454	212.8	8.94	65.99	29.22	0
8/5/2021 21:15	4.846	190.4	12.62	66.14	29.22	0
8/5/2021 21:30	5.58	193.6	14.94	66.24	29.22	0
8/5/2021 21:45	10.93	171.7	9.23	65.91	29.21	0
8/5/2021 22:00	9.09	182.4	11.76	65.7	29.21	0
8/5/2021 22:15	10.7	167.6	9.37	64.6	29.21	0
8/5/2021 22:30	10.9	170.2	9.41	63.76	29.21	0
8/5/2021 22:45	9.1	168.3	8.61	62.72	29.21	0
8/5/2021 23:00	7.595	164.6	11.65	62.32	29.21	0
8/5/2021 23:15	6.188	145.4	9.04	62.11	29.21	0
8/5/2021 23:30	7.187	145.9	10.65	62.09	29.21	0
8/5/2021 23:45	8.57	140	7.64	61.9	29.21	0
8/6/2021 0:00	9.23	145.9	7.977	61.91	29.21	0
8/6/2021 0:15	8.11	142.1	7.719	61.88	29.21	0
8/6/2021 0:30	8.21	137.3	7.547	61.85	29.21	0
8/6/2021 0:45	9.13	139.2	9.17	61.83	29.21	0
8/6/2021 1:00	8.1	140.5	6.907	61.84	29.2	0
8/6/2021 1:15	8.48	144.7	7.034	61.82	29.2	0
8/6/2021 1:30	8.26	141.2	8.77	61.82	29.2	0
8/6/2021 1:45	7.144	130.6	10.96	61.77	29.2	0
8/6/2021 2:00	6.771	153.5	11.31	61.88	29.21	0
8/6/2021 2:15	6.766	157.4	9.28	61.96	29.21	0
8/6/2021 2:30	6.361	151.3	12.42	61.94	29.21	0
8/6/2021 2:45	7.01	168.1	9.59	61.99	29.21	0
8/6/2021 3:00	6.712	151.5	10.45	61.94	29.21	0
8/6/2021 3:15	6.365	152.2	10.84	61.96	29.21	0
8/6/2021 3:30	7.409	137.9	6.263	61.85	29.21	0
8/6/2021 3:45	7.553	138.7	6.537	61.82	29.21	0
8/6/2021 4:00	6.657	135	7.493	61.83	29.21	0
8/6/2021 4:15	6.533	138.5	7.758	61.85	29.21	0
8/6/2021 4:30	6.117	145.1	7.605	61.91	29.2	0
8/6/2021 4:45	6.12	163.3	8.67	62.05	29.21	0
8/6/2021 5:00	7.052	161.4	8.38	61.99	29.21	0
8/6/2021 5:15	6.288	165.3	8.11	62.01	29.21	0
8/6/2021 5:30	6.683	160.4	7.729	61.96	29.21	0
8/6/2021 5:45	6.534	154.3	10.17	61.96	29.21	0
8/6/2021 6:00	6.164	138.5	7.118	61.85	29.21	0
8/6/2021 6:15	6.266	152.2	12.27	61.96	29.22	0
8/6/2021 6:30	7.343	168.4	6.569	61.99	29.22	0
8/6/2021 6:45	6.25	165.7	8.1	62.1	29.22	0
8/6/2021 7:00	6.027	169.6	8.68	62.11	29.22	0
8/6/2021 7:15	7.098	161.4	8.03	62.15	29.22	0
8/6/2021 7:30	7.398	173.5	10.57	62.33	29.22	0
8/6/2021 7:45	7.408	173	8.75	62.4	29.23	0
8/6/2021 8:00	7.574	169.4	9.07	62.37	29.23	0
8/6/2021 8:15	7.621	170.8	7.901	62.49	29.23	0
8/6/2021 8:30	8.09	168.2	7.563	62.58	29.23	0
8/6/2021 8:45	7.385	163.7	8.65	62.71	29.23	0
8/6/2021 9:00	6.541	164.7	7.533	62.86	29.23	0
8/6/2021 9:15	7.132	164.6	7.483	62.85	29.23	0
8/6/2021 9:30	6.381	159	11.52	63.09	29.23	0
8/6/2021 9:45	5.641	149.5	13.68	63.14	29.23	0
8/6/2021 10:00	4.007	141.5	24.64	63.25	29.23	0
8/6/2021 10:15	2.32	106.9	15.21	63.54	29.24	0
8/6/2021 10:30	2.864	217	25.37	63.61	29.24	0
8/6/2021 10:45	3.523	166.8	21.34	63.96	29.24	0
8/6/2021 11:00	2.982	147.6	22.35	64.56	29.24	0
8/6/2021 11:15	3.622	108.6	15.19	65.13	29.24	0
8/6/2021 11:30	3.221	85.5	11.13	65.45	29.24	0
8/6/2021 11:45	3.988	78.15	15.16	66.22	29.24	0
8/6/2021 12:00	4.184	75.1	10.64	66.24	29.24	0
8/6/2021 12:15	4.363	92.8	31.5	67.27	29.24	0
8/6/2021 12:30	5.066	121.4	13.27	68.41	29.24	0
8/6/2021 12:45	5.112	136.6	14.77	69.94	29.24	0
8/6/2021 13:00	5.568	165.9	28.6	70.92	29.24	0
8/6/2021 13:15	5.944	181.5	24.9	71.8	29.23	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/6/2021 13:30	3.069	231.7	78.92	71.27	29.23	0
8/6/2021 13:45	5.139	248.7	18.98	71.74	29.24	0
8/6/2021 14:00	7.877	236.6	13.93	72.95	29.24	0
8/6/2021 14:15	8.39	239.1	14.25	73.11	29.23	0
8/6/2021 14:30	8.01	229.4	19.61	73.9	29.23	0
8/6/2021 14:45	8.81	241	21.45	74.28	29.23	0
8/6/2021 15:00	10.01	246.5	14.96	73.61	29.23	0
8/6/2021 15:15	11.66	245.4	13.09	73.81	29.23	0
8/6/2021 15:30	11.01	228.9	14.47	74.37	29.22	0
8/6/2021 15:45	11.25	243.4	16.99	74.79	29.22	0
8/6/2021 16:00	12.13	247.9	14.68	74.51	29.21	0
8/6/2021 16:15	13.28	253.9	10.49	74.42	29.21	0
8/6/2021 16:30	11.6	244.2	13.04	74.44	29.21	0
8/6/2021 16:45	12.95	247.6	10.23	74.49	29.21	0
8/6/2021 17:00	12.33	237.7	11.08	73.46	29.21	0
8/6/2021 17:15	10.08	240.6	10.96	72.99	29.21	0
8/6/2021 17:30	9.03	242.6	10.63	73.12	29.21	0
8/6/2021 17:45	9.22	248.8	13.15	72.09	29.21	0
8/6/2021 18:00	10.16	259.6	13.46	71.6	29.21	0
8/6/2021 18:15	8.96	263.2	10.17	70.79	29.21	0
8/6/2021 18:30	8.68	251.6	10.8	70.25	29.22	0
8/6/2021 18:45	9.06	236.7	9.87	69.96	29.22	0
8/6/2021 19:00	9.88	232.2	11.34	69.5	29.21	0
8/6/2021 19:15	9.44	235.8	9.72	68.9	29.22	0
8/6/2021 19:30	8.84	238.4	10.65	68.24	29.22	0
8/6/2021 19:45	10.88	229.7	9.4	67.54	29.22	0
8/6/2021 20:00	9	226.4	7.194	67.01	29.23	0
8/6/2021 20:15	7.502	228.5	9.37	66.56	29.23	0
8/6/2021 20:30	6.955	237.8	10.4	66.23	29.23	0
8/6/2021 20:45	5.912	229.4	10.36	65.93	29.24	0
8/6/2021 21:00	5.394	223.1	13.08	65.48	29.23	0
8/6/2021 21:15	2.96	166.3	42.09	64.97	29.23	0
8/6/2021 21:30	1.345	206.1	32.77	64.58	29.23	0
8/6/2021 21:45	1.675	237.8	16.73	64.46	29.23	0
8/6/2021 22:00	2.973	260	25.26	64.18	29.23	0
8/6/2021 22:15	3.734	271.7	8.08	63.61	29.23	0
8/6/2021 22:30	5.515	253	10.64	63.26	29.23	0
8/6/2021 22:45	5.733	245.7	8.52	62.84	29.23	0
8/6/2021 23:00	4.936	226.1	11.32	62.56	29.23	0
8/6/2021 23:15	4.789	217.4	11.55	62.33	29.22	0
8/6/2021 23:30	2.768	179.5	9.2	61.91	29.22	0
8/6/2021 23:45	2.952	193.2	6.787	61.64	29.21	0
8/7/2021 0:00	2.832	183.9	8.32	61.55	29.21	0
8/7/2021 0:15	2.48	130.9	24.7	61.15	29.21	0
8/7/2021 0:30	1.871	141.3	27.19	60.62	29.21	0
8/7/2021 0:45	2.708	164	15.35	60.94	29.2	0
8/7/2021 1:00	4.112	165.8	10.17	61.16	29.2	0
8/7/2021 1:15	4.481	164.4	6.847	61.02	29.2	0
8/7/2021 1:30	4.485	173.2	10.75	61.15	29.2	0
8/7/2021 1:45	4.23	164	7.332	60.78	29.19	0
8/7/2021 2:00	4.449	144.5	8.99	60.47	29.19	0
8/7/2021 2:15	5.81	146.1	5.901	60.48	29.19	0
8/7/2021 2:30	5.571	170.1	7.932	60.93	29.18	0
8/7/2021 2:45	6.157	173.9	7.706	60.72	29.18	0
8/7/2021 3:00	6.501	158.8	8.13	60.28	29.18	0
8/7/2021 3:15	6.395	151.4	11.92	60.14	29.17	0
8/7/2021 3:30	7.232	143.4	5.829	60.11	29.17	0
8/7/2021 3:45	7.162	134.7	7.389	60.29	29.17	0
8/7/2021 4:00	8.28	143.9	7.789	60.41	29.16	0
8/7/2021 4:15	5.912	141.9	6.82	60.38	29.16	0
8/7/2021 4:30	6.459	137.3	7.461	60.31	29.16	0
8/7/2021 4:45	6.353	127.6	9.27	60.25	29.16	0
8/7/2021 5:00	7.645	124.2	7.764	60.29	29.15	0
8/7/2021 5:15	7.933	132.3	10.41	60.37	29.15	0
8/7/2021 5:30	8.01	137	9.2	60.39	29.15	0
8/7/2021 5:45	8.5	132.9	13.53	59.81	29.15	0
8/7/2021 6:00	6.743	132.8	10.64	59.36	29.15	0
8/7/2021 6:15	7.063	122.5	10.63	58.93	29.15	0
8/7/2021 6:30	5.419	141.3	11.39	57.8	29.16	0
8/7/2021 6:45	4.954	135.5	11.02	57.03	29.16	0
8/7/2021 7:00	5.691	117.7	7.141	57.04	29.16	0
8/7/2021 7:15	9.22	115.3	8.66	57.41	29.15	0
8/7/2021 7:30	9.97	113	9.07	57.86	29.15	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/7/2021 7:45	9.33	116.2	8.81	58.19	29.15	0
8/7/2021 8:00	8.11	123.2	9.92	58.57	29.15	0
8/7/2021 8:15	8.31	133.9	8.68	58.74	29.15	0
8/7/2021 8:30	7.867	133.8	10.68	58.61	29.15	0
8/7/2021 8:45	7.517	125.7	10.42	58.66	29.15	0
8/7/2021 9:00	7.834	126.2	10.6	58.78	29.14	0
8/7/2021 9:15	7.648	134.4	10.12	59.01	29.14	0
8/7/2021 9:30	7.162	129.7	11.6	59.21	29.14	0
8/7/2021 9:45	7.153	134.2	9.66	59.45	29.14	0
8/7/2021 10:00	6.768	128.6	13.22	59.68	29.13	0
8/7/2021 10:15	6.21	129.3	12.6	60.14	29.13	0
8/7/2021 10:30	7.033	130.7	14.02	60.64	29.13	0
8/7/2021 10:45	7.48	138	8.79	61.13	29.13	0
8/7/2021 11:00	7.881	136.6	13.06	61.73	29.13	0
8/7/2021 11:15	7.885	136.6	8.23	62.61	29.12	0
8/7/2021 11:30	7.086	127.2	12.28	63.34	29.12	0
8/7/2021 11:45	7.612	148.2	14.77	64.24	29.11	0
8/7/2021 12:00	7.661	135.9	12.81	64.72	29.11	0
8/7/2021 12:15	6.725	120.6	12.77	64.89	29.11	0
8/7/2021 12:30	7.521	162	24.98	66.38	29.1	0
8/7/2021 12:45	8.66	151.9	17.01	67.05	29.1	0
8/7/2021 13:00	10.78	163.7	13.77	68.52	29.1	0
8/7/2021 13:15	12.05	172.4	16.79	69.43	29.09	0
8/7/2021 13:30	13.33	182.1	12.2	69	29.09	0
8/7/2021 13:45	12.13	178.7	10.4	69.18	29.09	0
8/7/2021 14:00	10.64	177	13.41	69.25	29.09	0
8/7/2021 14:15	9.45	179.8	11.82	70.23	29.09	0
8/7/2021 14:30	12.78	173.5	9.71	71.87	29.08	0
8/7/2021 14:45	10.81	190.7	17.2	70.67	29.08	0
8/7/2021 15:00	12.26	204	13.45	70.55	29.08	0
8/7/2021 15:15	9.91	207.6	12.26	71.29	29.07	0
8/7/2021 15:30	13.52	214	9.54	71.95	29.07	0
8/7/2021 15:45	15.98	213.4	12.79	71.82	29.06	0
8/7/2021 16:00	16.8	218.7	9.48	71.5	29.06	0
8/7/2021 16:15	18.42	215.4	7.404	71.21	29.06	0
8/7/2021 16:30	14.28	214.3	8.86	70.96	29.06	0
8/7/2021 16:45	13.28	221.2	9.82	71.6	29.05	0
8/7/2021 17:00	13.79	228.4	9.8	71.94	29.05	0
8/7/2021 17:15	13.78	236.1	12.1	71.81	29.04	0
8/7/2021 17:30	12.85	235.9	11.67	71.3	29.04	0
8/7/2021 17:45	12.27	233.3	13.9	71.24	29.04	0
8/7/2021 18:00	14.63	222	13.63	70.17	29.03	0
8/7/2021 18:15	14.89	242.8	10.39	68.99	29.04	0
8/7/2021 18:30	13.89	242.1	11.79	68.3	29.04	0
8/7/2021 18:45	14.58	237.4	11.35	67.82	29.04	0
8/7/2021 19:00	14.37	238.3	10.33	66.7	29.05	0
8/7/2021 19:15	14.4	241.6	11.76	65.7	29.05	0
8/7/2021 19:30	12.82	250.3	10.5	64.53	29.05	0
8/7/2021 19:45	11.83	269	13.4	63.67	29.06	0
8/7/2021 20:00	10	272	13.76	63.3	29.06	0
8/7/2021 20:15	8.27	272	10.78	63.04	29.07	0
8/7/2021 20:30	9.63	264.3	12.4	62.43	29.07	0
8/7/2021 20:45	10.51	244.3	11.85	61.81	29.08	0
8/7/2021 21:00	8.68	232.6	17.25	60.97	29.09	0
8/7/2021 21:15	11.26	225.3	7.549	60.37	29.1	0
8/7/2021 21:30	12.59	227.1	6.699	59.91	29.1	0
8/7/2021 21:45	4.934	282.2	61.58	59.4	29.1	0
8/7/2021 22:00	3.441	12.16	7.859	58.55	29.11	0
8/7/2021 22:15	3.571	357.1	17.99	58.12	29.11	0
8/7/2021 22:30	4.027	292.3	12.25	58.52	29.11	0
8/7/2021 22:45	4.005	259.2	16.38	58.32	29.11	0
8/7/2021 23:00	2.787	252.1	12.69	58.05	29.11	0
8/7/2021 23:15	2.147	2.251	24.53	57.25	29.11	0
8/7/2021 23:30	3.035	32.36	16.09	57.34	29.11	0
8/7/2021 23:45	3.269	27.21	15.21	57.01	29.11	0
8/8/2021 0:00	3.136	59.77	49.46	56.74	29.12	0
8/8/2021 0:15	3.54	144.7	32.48	56.8	29.12	0
8/8/2021 0:30	6.965	188.3	13.89	56.51	29.12	0
8/8/2021 0:45	3.14	93.6	39.73	55.72	29.13	0
8/8/2021 1:00	1.773	82.4	10.33	55.75	29.13	0
8/8/2021 1:15	1.867	41.71	22.71	54.96	29.14	0
8/8/2021 1:30	2.934	36.01	18.41	54.18	29.13	0
8/8/2021 1:45	3.925	37.9	12.88	54.24	29.14	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/8/2021 2:00	3.377	8.38	19.32	54.09	29.14	0
8/8/2021 2:15	5.894	2.258	14.16	53.52	29.15	0
8/8/2021 2:30	4.97	4.719	13.83	53.13	29.15	0
8/8/2021 2:45	3.961	34.06	6.438	53.01	29.15	0
8/8/2021 3:00	3.951	37.53	9.9	52.84	29.16	0
8/8/2021 3:15	3.857	40.18	8.47	52.58	29.16	0
8/8/2021 3:30	2.836	75.98	17.49	52.5	29.16	0
8/8/2021 3:45	3.981	103	7.709	52.61	29.17	0
8/8/2021 4:00	4.783	110.7	6.49	52.67	29.17	0
8/8/2021 4:15	6.556	122.2	9.18	52.68	29.17	0
8/8/2021 4:30	6.877	114.5	9.09	52.57	29.17	0
8/8/2021 4:45	6.404	108.5	8.78	52.54	29.17	0
8/8/2021 5:00	7.749	103.9	9.43	52.47	29.17	0
8/8/2021 5:15	7.063	102.2	8.4	52.43	29.18	0
8/8/2021 5:30	7.228	115.2	9.25	52.65	29.18	0
8/8/2021 5:45	5.846	119.9	9.18	52.68	29.19	0
8/8/2021 6:00	4.22	103	10.1	52.72	29.2	0
8/8/2021 6:15	4.746	100.2	8.49	52.79	29.2	0
8/8/2021 6:30	3.993	97.3	11.63	52.84	29.21	0
8/8/2021 6:45	4.966	103.9	10.48	53.08	29.21	0
8/8/2021 7:00	5.235	106.9	8.11	53.33	29.21	0
8/8/2021 7:15	4.819	103.1	9.43	53.46	29.21	0
8/8/2021 7:30	5.373	103.7	8.95	53.67	29.22	0
8/8/2021 7:45	5.107	115.7	10.16	54.05	29.22	0
8/8/2021 8:00	3.932	108.3	26.87	54.57	29.22	0
8/8/2021 8:15	5.817	104	10.6	54.43	29.22	0
8/8/2021 8:30	4.717	127.1	25.44	56.21	29.22	0
8/8/2021 8:45	5.022	186.5	18.24	56.24	29.22	0
8/8/2021 9:00	6.028	204.4	17.21	56.39	29.23	0
8/8/2021 9:15	7.393	205.5	18.48	56.94	29.23	0
8/8/2021 9:30	6.101	180.2	24.68	58.45	29.22	0
8/8/2021 9:45	3.222	145.2	54.72	59.3	29.23	0
8/8/2021 10:00	3.655	165.7	42.2	59.62	29.24	0
8/8/2021 10:15	5.477	181.7	22.57	59.67	29.24	0
8/8/2021 10:30	5.337	160.2	24.62	59.57	29.24	0
8/8/2021 10:45	4.973	171.2	35.8	61.49	29.24	0
8/8/2021 11:00	5.39	150.4	32.95	62.83	29.25	0
8/8/2021 11:15	6.942	184.1	25.56	61.49	29.25	0
8/8/2021 11:30	4.412	124.9	41.86	62.53	29.25	0
8/8/2021 11:45	5.152	211.9	50.41	62.78	29.25	0
8/8/2021 12:00	3.657	255.9	25.13	63.81	29.26	0
8/8/2021 12:15	4.319	118.3	36.93	65.05	29.26	0
8/8/2021 12:30	4.584	115.2	25.8	65.86	29.26	0
8/8/2021 12:45	5.566	187.2	51.61	67.09	29.26	0
8/8/2021 13:00	4.089	171.9	35.45	66.74	29.26	0
8/8/2021 13:15	3.878	200.3	19.39	66.2	29.26	0
8/8/2021 13:30	3.615	182.1	47.6	67.39	29.26	0
8/8/2021 13:45	4.604	194.3	27.16	66.8	29.26	0
8/8/2021 14:00	4.054	181	65.16	67.59	29.27	0
8/8/2021 14:15	4.053	240.3	24.53	67.16	29.27	0
8/8/2021 14:30	3.646	225	28.45	67.12	29.27	0
8/8/2021 14:45	2.719	149.5	51.67	67.88	29.27	0
8/8/2021 15:00	3.907	63.53	63.04	69.52	29.27	0
8/8/2021 15:15	6.67	93.6	64.39	69.51	29.26	0
8/8/2021 15:30	3.46	184.1	27.02	68.98	29.27	0
8/8/2021 15:45	3.511	245.1	31.53	68.77	29.27	0
8/8/2021 16:00	3.755	192.6	52.03	68.99	29.27	0
8/8/2021 16:15	3.655	175.8	27.96	68.7	29.26	0
8/8/2021 16:30	4.023	194.8	30.74	68.9	29.26	0
8/8/2021 16:45	4.124	196.8	18.95	68.6	29.26	0
8/8/2021 17:00	4.015	165.5	35.08	69.57	29.26	0
8/8/2021 17:15	1.742	225.2	64.64	69.15	29.26	0
8/8/2021 17:30	2.762	253.4	31.73	70.04	29.26	0
8/8/2021 17:45	2.339	232.8	16.07	69.27	29.25	0
8/8/2021 18:00	1.521	309.6	49.84	69.36	29.25	0
8/8/2021 18:15	1.2	318.3	23.1	68.79	29.26	0
8/8/2021 18:30	0.243	18.53	11.44	68.34	29.26	0
8/8/2021 18:45	1.879	12.66	14.2	67.47	29.26	0
8/8/2021 19:00	1.576	6.629	13.24	67.26	29.26	0
8/8/2021 19:15	2.314	18.38	11.54	65.97	29.26	0
8/8/2021 19:30	1.397	339.5	23.03	65.83	29.27	0
8/8/2021 19:45	4.783	253.2	8.98	65.92	29.27	0
8/8/2021 20:00	4.902	249.8	9.38	65.41	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/8/2021 20:15	5.053	233.8	14.92	64.88	29.28	0
8/8/2021 20:30	4.523	222.7	9.96	64.32	29.28	0
8/8/2021 20:45	0.858	256.7	43.79	63.43	29.29	0
8/8/2021 21:00	0.348	334.1	5.247	62.22	29.29	0
8/8/2021 21:15	0.068	17.17	7.338	61.81	29.29	0
8/8/2021 21:30	0.927	278.1	12.71	62.17	29.3	0
8/8/2021 21:45	0.106	10.97	24.67	61.91	29.3	0
8/8/2021 22:00	3.49	187.9	12.01	61.3	29.3	0
8/8/2021 22:15	4.158	202.5	10.98	61.17	29.31	0
8/8/2021 22:30	3.669	199.4	5.946	60.85	29.31	0
8/8/2021 22:45	3.677	191	8.82	59.8	29.31	0
8/8/2021 23:00	4.101	192.9	9.16	59.48	29.31	0
8/8/2021 23:15	3.662	205.4	6.334	59.08	29.31	0
8/8/2021 23:30	2.322	214.9	10.22	59.03	29.31	0
8/8/2021 23:45	0.968	228	2.766	58.65	29.31	0
8/9/2021 0:00	1.479	88.5	38.52	57.87	29.31	0
8/9/2021 0:15	2.554	109.7	13.18	57.37	29.31	0
8/9/2021 0:30	2.176	133.6	7.098	57.66	29.31	0
8/9/2021 0:45	2.779	182.5	6.789	57.89	29.31	0
8/9/2021 1:00	2.892	176.5	5.922	57.69	29.31	0
8/9/2021 1:15	2.209	166.4	16.8	57.6	29.31	0
8/9/2021 1:30	1.745	133.8	7.721	57.09	29.31	0
8/9/2021 1:45	1.768	115.3	20.13	56.71	29.3	0
8/9/2021 2:00	2.415	136.8	11.45	56.6	29.31	0
8/9/2021 2:15	1.899	144.2	15.29	56.4	29.31	0
8/9/2021 2:30	3.401	160.3	3.519	56.21	29.3	0
8/9/2021 2:45	3.359	178.5	8.91	55.96	29.31	0
8/9/2021 3:00	1.401	168.9	22.91	54.96	29.31	0
8/9/2021 3:15	0.264	293.6	1.883	54.54	29.31	0
8/9/2021 3:30	0.115	296.5	0.05	54.93	29.31	0
8/9/2021 3:45	0.066	328.5	0.557	54.88	29.31	0
8/9/2021 4:00	0.54	318	6.78	54.99	29.31	0
8/9/2021 4:15	0.194	308.7	0.832	55.57	29.31	0
8/9/2021 4:30	1.434	224.2	25.58	55.44	29.31	0
8/9/2021 4:45	2.162	203.6	10.07	55.22	29.31	0
8/9/2021 5:00	2.55	199.6	12.86	54.95	29.32	0
8/9/2021 5:15	2.714	183.6	9.17	54.96	29.32	0
8/9/2021 5:30	2.957	187.5	6.36	54.84	29.32	0
8/9/2021 5:45	3.046	192.4	5.483	55.03	29.32	0
8/9/2021 6:00	2.404	203.7	8.16	55.07	29.32	0
8/9/2021 6:15	1.779	192.5	11.3	55.27	29.32	0
8/9/2021 6:30	0.307	148	26.28	55.41	29.32	0
8/9/2021 6:45	0.295	95.6	5.638	55.78	29.32	0
8/9/2021 7:00	1.956	147.8	18.43	56.34	29.32	0
8/9/2021 7:15	1.242	180.1	36.94	56.69	29.32	0
8/9/2021 7:30	1.836	184.4	29.2	57	29.32	0
8/9/2021 7:45	2.359	188.4	30.88	58.74	29.32	0
8/9/2021 8:00	1.851	170.3	77.88	59.65	29.32	0
8/9/2021 8:15	2.232	246.8	27.66	60.3	29.32	0
8/9/2021 8:30	3.425	282.2	12.8	59.7	29.32	0
8/9/2021 8:45	0.868	249.3	26.36	60.12	29.31	0
8/9/2021 9:00	2.541	235.2	27.23	60.53	29.31	0
8/9/2021 9:15	2.101	308.8	66.96	62.45	29.31	0
8/9/2021 9:30	2.777	286.4	49.26	64.12	29.31	0
8/9/2021 9:45	3.293	347.4	19.68	64.29	29.31	0
8/9/2021 10:00	4.999	321.5	21.95	66.15	29.31	0
8/9/2021 10:15	5.002	311.2	27.82	66.02	29.31	0
8/9/2021 10:30	4.946	318.2	30.08	67.58	29.31	0
8/9/2021 10:45	5.097	342.5	29.03	68.13	29.3	0
8/9/2021 11:00	7.563	351.3	32.35	69.44	29.3	0
8/9/2021 11:15	7.682	18.3	19.16	69.8	29.3	0
8/9/2021 11:30	10.46	22.52	12.22	70.1	29.29	0
8/9/2021 11:45	10.75	24.16	16	69.99	29.29	0
8/9/2021 12:00	9.07	15.19	17.99	70.61	29.28	0
8/9/2021 12:15	8.11	16.72	14.23	71.01	29.28	0
8/9/2021 12:30	7.463	346.6	20.98	71.45	29.27	0
8/9/2021 12:45	4.341	10.79	58.71	72.37	29.28	0
8/9/2021 13:00	6.864	23.08	18.97	72.36	29.27	0
8/9/2021 13:15	7.975	349.7	35.9	73.74	29.27	0
8/9/2021 13:30	9.47	26.5	23.88	73.35	29.27	0
8/9/2021 13:45	8.04	355.4	31.31	74.25	29.27	0
8/9/2021 14:00	9.08	341.9	21.89	74.68	29.26	0
8/9/2021 14:15	11.94	314.2	15.41	75.48	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/9/2021 14:30	11.52	300.3	12.85	75.58	29.26	0
8/9/2021 14:45	12	304.5	10.11	75.9	29.26	0
8/9/2021 15:00	10.01	326	26.29	75.7	29.26	0
8/9/2021 15:15	12.3	315.6	12.51	76.06	29.26	0
8/9/2021 15:30	11.87	321.3	9.69	76.29	29.26	0
8/9/2021 15:45	10.64	327.4	24.05	76	29.26	0
8/9/2021 16:00	8.27	344	21.51	75.64	29.26	0
8/9/2021 16:15	10.02	349.8	17.99	76.01	29.26	0
8/9/2021 16:30	9.11	349.2	18.52	76.06	29.26	0
8/9/2021 16:45	8.18	331.9	22.76	75.91	29.26	0
8/9/2021 17:00	10.47	321.5	13.46	75.06	29.26	0
8/9/2021 17:15	11.98	317.7	7.749	75.02	29.26	0
8/9/2021 17:30	10.27	319.8	18.69	74.09	29.26	0
8/9/2021 17:45	10.81	324.3	16.2	74.25	29.26	0
8/9/2021 18:00	9.74	318.1	13.47	74	29.26	0
8/9/2021 18:15	7.145	339.6	16.48	73.27	29.26	0
8/9/2021 18:30	10.1	315.5	8.52	72.26	29.26	0
8/9/2021 18:45	7.842	309.9	7.451	71.45	29.26	0
8/9/2021 19:00	7.567	313	6.294	70.49	29.26	0
8/9/2021 19:15	5.637	309.2	5.577	69.78	29.26	0
8/9/2021 19:30	4.253	333.1	14.97	69.24	29.26	0
8/9/2021 19:45	4.575	354	12.08	68.7	29.26	0
8/9/2021 20:00	6.36	5.557	12.17	67.4	29.26	0
8/9/2021 20:15	8.46	9.92	8.88	67.02	29.27	0
8/9/2021 20:30	8.18	12.53	7.111	66.61	29.27	0
8/9/2021 20:45	9.09	19.31	6.064	66.1	29.27	0
8/9/2021 21:00	9.95	23.28	4.713	66.16	29.27	0
8/9/2021 21:15	8.15	13.63	7.37	65.99	29.27	0
8/9/2021 21:30	5.074	329.1	36.01	65.75	29.27	0
8/9/2021 21:45	3.766	311.2	13.63	65.53	29.27	0
8/9/2021 22:00	2.718	330.2	16.53	65.12	29.27	0
8/9/2021 22:15	2.994	334.8	19.63	64.33	29.28	0
8/9/2021 22:30	2.889	331.2	14.5	63.46	29.28	0
8/9/2021 22:45	2.214	12.59	23.81	62.74	29.27	0
8/9/2021 23:00	1.509	28.05	22.68	61.89	29.27	0
8/9/2021 23:15	1.777	35.12	55.29	61.68	29.27	0
8/9/2021 23:30	1.783	247.7	28.29	62.59	29.28	0
8/9/2021 23:45	0.616	8.55	23.19	62.85	29.28	0
8/10/2021 0:00	1.985	21.99	8.39	62.49	29.28	0
8/10/2021 0:15	2.608	3.618	12.36	62.06	29.27	0
8/10/2021 0:30	2.847	1.844	16.38	61.77	29.27	0
8/10/2021 0:45	2.331	12.76	6.485	61.43	29.27	0
8/10/2021 1:00	2.874	19.2	5.336	60.61	29.27	0
8/10/2021 1:15	3.553	21.41	10.96	60.29	29.27	0
8/10/2021 1:30	4.658	9.96	11.23	59.92	29.27	0
8/10/2021 1:45	4.405	359	15.28	59.51	29.27	0
8/10/2021 2:00	3.403	7.541	16.41	59.57	29.27	0
8/10/2021 2:15	3.834	10.84	7.064	59.47	29.27	0
8/10/2021 2:30	3.972	14.81	9.9	58.81	29.27	0
8/10/2021 2:45	4.03	15.6	7.686	58.18	29.27	0
8/10/2021 3:00	2.786	10.28	4.546	58.43	29.27	0
8/10/2021 3:15	3.555	10.08	12.35	59.01	29.27	0
8/10/2021 3:30	3.568	15.4	7.478	58.58	29.27	0
8/10/2021 3:45	3.52	13.26	6.872	57.88	29.27	0
8/10/2021 4:00	2.805	17.59	8.79	57.96	29.27	0
8/10/2021 4:15	2.967	11.17	15.74	58.6	29.28	0
8/10/2021 4:30	3.243	6.894	19.36	58.31	29.28	0
8/10/2021 4:45	3.99	9.5	10.79	58.66	29.28	0
8/10/2021 5:00	4.699	8.39	8.68	58.04	29.28	0
8/10/2021 5:15	4.909	7.632	12.12	57.74	29.28	0
8/10/2021 5:30	4.85	8.69	10.18	57.81	29.28	0
8/10/2021 5:45	3.947	11.74	7.754	57.52	29.29	0
8/10/2021 6:00	4.536	22.92	9.31	57.91	29.29	0
8/10/2021 6:15	5.171	26.61	8.63	58.19	29.29	0
8/10/2021 6:30	5.902	23.41	8.7	58.74	29.29	0
8/10/2021 6:45	6.541	24.67	7.651	59.73	29.29	0
8/10/2021 7:00	6.221	19.32	9.4	60.37	29.3	0
8/10/2021 7:15	5.685	19.86	9.57	61.97	29.3	0
8/10/2021 7:30	2.85	6.792	19.94	63.78	29.3	0
8/10/2021 7:45	1.772	41.74	14.14	66.52	29.3	0
8/10/2021 8:00	2.271	43.5	17.54	66.89	29.3	0
8/10/2021 8:15	1.659	25.14	26.24	68.09	29.3	0
8/10/2021 8:30	4.61	34.19	11.62	68.31	29.3	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/10/2021 8:45	5.495	31.49	15.09	68.59	29.3	0
8/10/2021 9:00	5.646	19.1	15.13	69.46	29.3	0
8/10/2021 9:15	4.828	19.84	18.71	70.35	29.3	0
8/10/2021 9:30	5.46	31.97	17.93	71.76	29.3	0
8/10/2021 9:45	5.457	17.52	15.2	71.91	29.3	0
8/10/2021 10:00	8.46	295.1	22.08	73.35	29.3	0
8/10/2021 10:15	7.575	334.5	62.12	73.45	29.3	0
8/10/2021 10:30	6.774	1.622	22.41	74.37	29.3	0
8/10/2021 10:45	7.227	336	15.85	74.15	29.3	0
8/10/2021 11:00	10.82	327.6	10.96	75.39	29.3	0
8/10/2021 11:15	11.56	347.6	19.44	75.98	29.29	0
8/10/2021 11:30	11.55	348	16.03	76.56	29.29	0
8/10/2021 11:45	9.33	16.76	18.3	76.89	29.29	0
8/10/2021 12:00	7.835	0.248	29.99	77.46	29.29	0
8/10/2021 12:15	7.787	20.93	19.3	77.99	29.29	0
8/10/2021 12:30	6.745	349	47.63	78.87	29.29	0
8/10/2021 12:45	11.54	319.8	21.63	79.56	29.29	0
8/10/2021 13:00	12.16	332.1	20.08	79.61	29.28	0
8/10/2021 13:15	9.58	349.7	22.95	79.81	29.28	0
8/10/2021 13:30	8.33	344	25.91	80.7	29.28	0
8/10/2021 13:45	10.49	335	35.17	80.9	29.28	0
8/10/2021 14:00	7.8	326.7	18.67	81	29.28	0
8/10/2021 14:15	9.93	319.8	27.92	81.8	29.28	0
8/10/2021 14:30	9.36	307	29.79	81.4	29.28	0
8/10/2021 14:45	10.91	305.6	15.82	81.5	29.28	0
8/10/2021 15:00	8.81	307	19.64	81.9	29.27	0
8/10/2021 15:15	8.31	290.8	18.99	82.2	29.27	0
8/10/2021 15:30	6.507	305.7	28.44	81.9	29.27	0
8/10/2021 15:45	4.951	338.3	49.24	82.4	29.27	0
8/10/2021 16:00	7.81	22.86	12.31	81.5	29.26	0
8/10/2021 16:15	4.827	29.13	22.41	81.7	29.26	0
8/10/2021 16:30	4.727	19.06	19.01	82.1	29.25	0
8/10/2021 16:45	4.417	0.138	20.7	82.3	29.25	0
8/10/2021 17:00	6.022	16.65	17.08	82	29.25	0
8/10/2021 17:15	5.902	9.28	14.4	81.7	29.25	0
8/10/2021 17:30	5.922	351.3	25.13	81.3	29.25	0
8/10/2021 17:45	10.18	296.7	8.73	80.8	29.25	0
8/10/2021 18:00	9.25	310.3	8.88	80.2	29.25	0
8/10/2021 18:15	7.161	329.8	14.12	79.75	29.25	0
8/10/2021 18:30	5.297	325.5	14.38	79.56	29.25	0
8/10/2021 18:45	5.377	338.5	15.05	78.83	29.25	0
8/10/2021 19:00	6.257	332.8	8.45	77.86	29.25	0
8/10/2021 19:15	7.519	341.8	5.957	76.96	29.25	0
8/10/2021 19:30	4.775	3.949	7.379	76.04	29.26	0
8/10/2021 19:45	6.553	357	11.51	75.43	29.26	0
8/10/2021 20:00	6.924	345.4	9.62	75	29.26	0
8/10/2021 20:15	5.996	348.7	13.15	73.89	29.26	0
8/10/2021 20:30	6.352	342.3	10.15	72.69	29.27	0
8/10/2021 20:45	4.785	4.677	12.79	71.78	29.27	0
8/10/2021 21:00	4.807	357.2	14.05	70.91	29.27	0
8/10/2021 21:15	3.933	3.021	6.621	70.76	29.27	0
8/10/2021 21:30	4.222	16.78	9.79	69.53	29.27	0
8/10/2021 21:45	4.187	4.183	13.67	69.1	29.27	0
8/10/2021 22:00	6.045	348.3	16.16	69.09	29.27	0
8/10/2021 22:15	5.962	356.9	15.28	70.79	29.27	0
8/10/2021 22:30	4.841	17.11	8.14	69.19	29.27	0
8/10/2021 22:45	4.423	48.48	16.07	67	29.27	0
8/10/2021 23:00	3.084	64.39	15.9	67.39	29.26	0
8/10/2021 23:15	3.365	31.42	14.85	68.86	29.26	0
8/10/2021 23:30	3.212	32.66	16.27	68.57	29.26	0
8/10/2021 23:45	1.652	38.54	81.4	67.14	29.26	0
8/11/2021 0:00	1.824	1.282	67.49	67.51	29.26	0
8/11/2021 0:15	3.242	13.36	12.96	67.27	29.26	0
8/11/2021 0:30	4.189	11.01	10.03	66.2	29.26	0
8/11/2021 0:45	4.545	8.48	12.07	65.72	29.25	0
8/11/2021 1:00	3.719	6.996	15.9	65.31	29.25	0
8/11/2021 1:15	2.874	351.4	15.67	65.21	29.25	0
8/11/2021 1:30	3.254	350	19.39	65.01	29.25	0
8/11/2021 1:45	3.075	7.512	8.94	64.49	29.25	0
8/11/2021 2:00	2.9	18.09	6.785	64.23	29.25	0
8/11/2021 2:15	3.269	28.3	7.684	63.51	29.25	0
8/11/2021 2:30	3.676	44.41	7.464	62.97	29.25	0
8/11/2021 2:45	4.411	31.78	5.578	63.3	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/11/2021 3:00	4.072	25.41	11.1	63.91	29.25	0
8/11/2021 3:15	3.006	28.31	14.17	63.6	29.25	0
8/11/2021 3:30	3	29.51	28.63	63.1	29.25	0
8/11/2021 3:45	0.361	37.9	15.24	64.43	29.24	0
8/11/2021 4:00	1.835	0.653	48.67	64.52	29.24	0
8/11/2021 4:15	3.018	271.6	12.14	62.96	29.24	0
8/11/2021 4:30	4.094	272.2	7.858	62.79	29.24	0
8/11/2021 4:45	3.566	278.1	6.41	63.2	29.25	0
8/11/2021 5:00	1.748	306.4	13.1	62.99	29.25	0
8/11/2021 5:15	1.136	317	6.009	63.31	29.25	0
8/11/2021 5:30	0.905	336.3	19.05	63.77	29.25	0
8/11/2021 5:45	1.649	32.18	4.096	63.48	29.25	0
8/11/2021 6:00	1.646	77.3	18.06	63.85	29.25	0
8/11/2021 6:15	2.407	59.12	35.25	64.75	29.25	0
8/11/2021 6:30	2.729	30.01	11.5	63.92	29.25	0
8/11/2021 6:45	4.082	38.42	7.436	65.44	29.26	0
8/11/2021 7:00	3.798	43.77	11.49	66.57	29.26	0
8/11/2021 7:15	3.741	37.86	15.89	66.64	29.26	0
8/11/2021 7:30	2.721	26.6	20.5	68.89	29.25	0
8/11/2021 7:45	4.446	41.79	16.49	70.86	29.25	0
8/11/2021 8:00	3.611	30.41	12.73	72.03	29.25	0
8/11/2021 8:15	3.56	30.26	13.31	73.61	29.25	0
8/11/2021 8:30	4.518	12.15	15.65	74.3	29.25	0
8/11/2021 8:45	4.658	19.57	13.09	74.95	29.25	0
8/11/2021 9:00	5.583	38.8	10.05	76.56	29.25	0
8/11/2021 9:15	5.489	28.09	15.07	77.28	29.25	0
8/11/2021 9:30	4.78	22.84	11.99	78.15	29.24	0
8/11/2021 9:45	3.742	8.22	18.04	79.35	29.24	0
8/11/2021 10:00	3.823	36.11	22.52	80.2	29.24	0
8/11/2021 10:15	4.679	15.27	39.28	81.3	29.24	0
8/11/2021 10:30	4.479	350	50.45	81.6	29.24	0
8/11/2021 10:45	5.014	306.4	22.86	82.2	29.24	0
8/11/2021 11:00	7.403	353.5	52.17	83.4	29.24	0
8/11/2021 11:15	5.818	7.791	26.7	83.3	29.24	0
8/11/2021 11:30	8.15	321.8	19.54	83.8	29.24	0
8/11/2021 11:45	5.244	286.9	20.93	84	29.23	0
8/11/2021 12:00	3.741	328.8	42.61	84.4	29.23	0
8/11/2021 12:15	3.204	5.186	45.91	85.6	29.23	0
8/11/2021 12:30	5.104	11.05	41.49	86.7	29.22	0
8/11/2021 12:45	3.446	330.5	61.08	87.3	29.22	0
8/11/2021 13:00	2.486	342.3	78.06	87.4	29.21	0
8/11/2021 13:15	5.783	299	23.23	87.1	29.21	0
8/11/2021 13:30	6.276	290.1	31.55	87.6	29.21	0
8/11/2021 13:45	6.893	310.6	31.75	87.9	29.2	0
8/11/2021 14:00	7.729	297.7	20.11	88.4	29.2	0
8/11/2021 14:15	7.974	284.5	17.04	88.7	29.19	0
8/11/2021 14:30	8.76	266.2	16.7	88.3	29.18	0
8/11/2021 14:45	6.349	278.5	14.71	88.8	29.18	0
8/11/2021 15:00	6.254	272.2	20	89	29.17	0
8/11/2021 15:15	5.99	273.2	23.84	89.5	29.16	0
8/11/2021 15:30	6.459	298.1	32.01	89.2	29.16	0
8/11/2021 15:45	6.212	314.8	19.03	89.4	29.15	0
8/11/2021 16:00	5.731	300.6	24.82	89.6	29.15	0
8/11/2021 16:15	7.663	313.7	12.08	89.5	29.15	0
8/11/2021 16:30	8.39	294.8	14.5	89.4	29.14	0
8/11/2021 16:45	10.78	307.8	10.71	88.7	29.14	0
8/11/2021 17:00	10.15	299.7	11.29	88.3	29.14	0
8/11/2021 17:15	9.94	306.7	7.617	87.8	29.14	0
8/11/2021 17:30	8.93	292.2	8.86	87.8	29.14	0
8/11/2021 17:45	8.29	283.6	10.9	87.6	29.14	0
8/11/2021 18:00	7.898	288.3	8.15	87.1	29.14	0
8/11/2021 18:15	8.34	285.5	10.33	86.3	29.14	0
8/11/2021 18:30	10.64	290.4	6.91	84.9	29.13	0
8/11/2021 18:45	10.19	298.4	7.283	83.7	29.13	0
8/11/2021 19:00	9.74	298.9	5.781	82.6	29.13	0
8/11/2021 19:15	7.632	298.3	6.028	81.9	29.13	0
8/11/2021 19:30	4.897	299.6	13.13	81.2	29.14	0
8/11/2021 19:45	4.81	289.6	5.79	80.6	29.14	0
8/11/2021 20:00	4.234	294.6	15.51	80.3	29.14	0
8/11/2021 20:15	2.768	309.1	14.17	79.54	29.15	0
8/11/2021 20:30	2.397	7.835	17.6	78.67	29.15	0
8/11/2021 20:45	5.001	27.6	6.683	77.49	29.15	0
8/11/2021 21:00	4.769	27.95	6.175	76.25	29.15	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/11/2021 21:15	4.86	48.39	7.036	75.64	29.15	0
8/11/2021 21:30	5.965	41.48	8.79	74.69	29.15	0
8/11/2021 21:45	6.042	24.38	8.05	74.04	29.15	0
8/11/2021 22:00	6.26	23.91	9.04	74.64	29.15	0
8/11/2021 22:15	5.587	19.53	6.52	73.73	29.15	0
8/11/2021 22:30	5.728	12.38	10.25	72.38	29.15	0
8/11/2021 22:45	3.832	343.6	19.3	72.84	29.15	0
8/11/2021 23:00	0.748	352.7	40.58	73.47	29.15	0
8/11/2021 23:15	2.487	22	9.1	72.45	29.15	0
8/11/2021 23:30	5.708	19.53	9.84	70.86	29.15	0
8/11/2021 23:45	6.907	28.3	10.49	70.48	29.15	0
8/12/2021 0:00	5.657	32.22	10.66	69.95	29.15	0
8/12/2021 0:15	6.36	32.38	5.509	69.55	29.15	0
8/12/2021 0:30	6.083	32.07	6.227	69.33	29.15	0
8/12/2021 0:45	5.342	34.95	8.18	69.26	29.15	0
8/12/2021 1:00	5.059	22.43	7.178	68.92	29.15	0
8/12/2021 1:15	5.596	3.772	8.98	68.71	29.15	0
8/12/2021 1:30	5.134	357.8	13.84	69.35	29.15	0
8/12/2021 1:45	4.419	13.51	10.13	68.84	29.15	0
8/12/2021 2:00	3.487	24.25	7.651	68.11	29.15	0
8/12/2021 2:15	4.774	20.66	7.827	66.88	29.14	0
8/12/2021 2:30	5.954	20.18	9.04	67.26	29.14	0
8/12/2021 2:45	7.261	12	11.54	66.84	29.14	0
8/12/2021 3:00	8.33	6.982	15.44	66.61	29.14	0
8/12/2021 3:15	6.271	15	19.82	65.97	29.15	0
8/12/2021 3:30	6.695	21.58	8.29	65.8	29.15	0
8/12/2021 3:45	7.72	28.45	7.383	65.83	29.15	0
8/12/2021 4:00	7.195	19.16	11.71	65.98	29.15	0
8/12/2021 4:15	8.13	13.28	8.74	65.72	29.15	0
8/12/2021 4:30	7.684	8.15	10.3	65.66	29.16	0
8/12/2021 4:45	4.613	7.633	11.36	65.21	29.16	0
8/12/2021 5:00	3.744	7.214	10.93	65.16	29.16	0
8/12/2021 5:15	5.431	18.05	10.82	64.76	29.17	0
8/12/2021 5:30	7.676	19.71	10.9	64.42	29.17	0
8/12/2021 5:45	9.5	20.3	9.01	64.03	29.17	0
8/12/2021 6:00	9.49	20.61	8.59	64.12	29.18	0
8/12/2021 6:15	8.84	22.93	7.692	64.37	29.18	0
8/12/2021 6:30	7.961	15.99	8.86	64.89	29.19	0
8/12/2021 6:45	6.809	21.38	8.68	65.71	29.19	0
8/12/2021 7:00	5.542	20.89	11.6	66.44	29.19	0
8/12/2021 7:15	5.546	21.58	11.31	67.13	29.2	0
8/12/2021 7:30	3.854	34.26	11.54	68.08	29.2	0
8/12/2021 7:45	2.564	30.25	11.62	68.88	29.2	0
8/12/2021 8:00	2.43	25.99	16.88	69.94	29.21	0
8/12/2021 8:15	1.734	19.95	19.95	71.18	29.21	0
8/12/2021 8:30	2.183	43.27	12.87	72.56	29.21	0
8/12/2021 8:45	3.003	26.35	16.71	73.04	29.21	0
8/12/2021 9:00	3.01	21.29	19.3	74.26	29.21	0
8/12/2021 9:15	4.502	22.41	14.62	74.4	29.21	0
8/12/2021 9:30	4.606	28.74	18.16	75.05	29.22	0
8/12/2021 9:45	4.048	28.77	21.01	75.32	29.22	0
8/12/2021 10:00	4.067	41.71	23.33	76.87	29.22	0
8/12/2021 10:15	4.436	28.63	18.7	77.76	29.22	0
8/12/2021 10:30	4.767	36.8	16.03	78.17	29.22	0
8/12/2021 10:45	4.256	31.14	15.01	79.4	29.21	0
8/12/2021 11:00	4.8	31.94	16.27	80.6	29.21	0
8/12/2021 11:15	3.573	24.68	27.12	81.9	29.21	0
8/12/2021 11:30	3.755	6.83	21	83	29.21	0
8/12/2021 11:45	4.208	350.5	23.6	84.6	29.2	0
8/12/2021 12:00	4.175	8.45	28.29	85.4	29.2	0
8/12/2021 12:15	4.142	16.77	19.54	86.6	29.19	0
8/12/2021 12:30	4.586	7.142	34.13	87.2	29.19	0
8/12/2021 12:45	3.901	325	31.53	87.8	29.18	0
8/12/2021 13:00	6.282	20.76	17.57	88.9	29.18	0
8/12/2021 13:15	6.848	30.37	12.91	89.7	29.18	0
8/12/2021 13:30	6.464	16.17	15.31	89.9	29.17	0
8/12/2021 13:45	5.517	10.89	19.91	90.1	29.17	0
8/12/2021 14:00	4.566	327.8	37.85	91.7	29.17	0
8/12/2021 14:15	4.81	340.3	31.65	92.3	29.16	0
8/12/2021 14:30	9.15	10.1	10.23	91.4	29.16	0
8/12/2021 14:45	9.6	16.01	7.433	91.5	29.16	0
8/12/2021 15:00	8.63	19.12	12.81	91.7	29.15	0
8/12/2021 15:15	8.4	12.55	16.17	92.4	29.15	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/12/2021 15:30	9	8.23	14.87	92.6	29.15	0
8/12/2021 15:45	7.773	10.98	15.63	92.9	29.15	0
8/12/2021 16:00	9.13	8.64	14.58	92.8	29.15	0
8/12/2021 16:15	8.3	354.7	14.93	92.9	29.14	0
8/12/2021 16:30	8.75	354.5	19.29	93	29.14	0
8/12/2021 16:45	7.94	2.923	13.93	93.1	29.14	0
8/12/2021 17:00	8.22	359.8	15.14	92.7	29.13	0
8/12/2021 17:15	8.21	347.4	13.55	93	29.13	0
8/12/2021 17:30	9.14	353.3	14.65	92.5	29.13	0
8/12/2021 17:45	9.2	357	14.44	92	29.12	0
8/12/2021 18:00	8.56	6.994	14.05	91.3	29.12	0
8/12/2021 18:15	7.064	4.681	12.59	90.7	29.12	0
8/12/2021 18:30	5.775	359.3	17.55	90.2	29.12	0
8/12/2021 18:45	4.679	350.6	28.34	89.4	29.12	0
8/12/2021 19:00	4	294.4	13.75	88.2	29.12	0
8/12/2021 19:15	1.702	327.4	12.01	86.4	29.13	0
8/12/2021 19:30	3.487	3.365	16.65	84.9	29.13	0
8/12/2021 19:45	6.86	15.35	7.429	83.7	29.13	0
8/12/2021 20:00	6.01	359.6	16.12	83	29.14	0
8/12/2021 20:15	6.617	7.434	12.68	82.1	29.14	0
8/12/2021 20:30	7.268	19.19	9.58	81.3	29.14	0
8/12/2021 20:45	7.903	20.04	9.19	80.5	29.14	0
8/12/2021 21:00	7.022	19.42	9.18	79.73	29.15	0
8/12/2021 21:15	6.877	19.58	8.87	79.13	29.15	0
8/12/2021 21:30	5.88	14.37	7.434	78.18	29.15	0
8/12/2021 21:45	5.338	13.36	8.7	78.08	29.15	0
8/12/2021 22:00	5.629	9.62	6.446	77.6	29.15	0
8/12/2021 22:15	4.609	16.69	6.127	77.13	29.15	0
8/12/2021 22:30	4.268	25.78	4.292	76.38	29.15	0
8/12/2021 22:45	4.404	23.93	5.917	75.71	29.15	0
8/12/2021 23:00	4.588	32.51	6.497	74.93	29.16	0
8/12/2021 23:15	4.315	30.74	4.996	74.77	29.16	0
8/12/2021 23:30	4.854	18.66	7.378	74.73	29.16	0
8/12/2021 23:45	4.88	21.73	7.966	74.4	29.16	0
8/13/2021 0:00	4.239	20.97	9.17	74.84	29.16	0
8/13/2021 0:15	2.472	20.23	5.897	76.09	29.16	0
8/13/2021 0:30	2.354	66.48	31.58	76.23	29.17	0
8/13/2021 0:45	3.993	129.5	8.4	76.42	29.17	0
8/13/2021 1:00	2.787	106.1	18.69	74.84	29.17	0
8/13/2021 1:15	4.381	101.7	6.281	74.4	29.17	0
8/13/2021 1:30	3.471	97.3	2.342	75.25	29.17	0
8/13/2021 1:45	1.961	74.82	5.301	75.65	29.17	0
8/13/2021 2:00	2.055	98.6	28.24	76.1	29.17	0
8/13/2021 2:15	1.766	127.1	9.33	76.84	29.17	0
8/13/2021 2:30	1.11	149.7	10.87	77.3	29.17	0
8/13/2021 2:45	0.277	269.5	28.68	77.71	29.17	0
8/13/2021 3:00	1.005	272	22.45	77	29.17	0
8/13/2021 3:15	1.723	189.6	21.97	76.07	29.18	0
8/13/2021 3:30	0.679	167.8	1.138	75.63	29.18	0
8/13/2021 3:45	4.795	183	6.653	73.66	29.18	0
8/13/2021 4:00	5.307	168.5	9.14	72.56	29.18	0
8/13/2021 4:15	2.67	125.1	10.11	72.69	29.18	0
8/13/2021 4:30	3.343	136.4	7.04	73.64	29.18	0
8/13/2021 4:45	4.422	152.3	12.58	73.34	29.19	0
8/13/2021 5:00	5.279	152.2	7.797	72.45	29.19	0
8/13/2021 5:15	2.829	136.6	11.97	72.54	29.19	0
8/13/2021 5:30	1.729	64.57	34.13	72.52	29.19	0
8/13/2021 5:45	0.731	41.04	18.43	72.82	29.2	0
8/13/2021 6:00	1.633	97.9	26.34	74	29.2	0
8/13/2021 6:15	1.121	101.6	8.89	74.21	29.2	0
8/13/2021 6:30	0.324	96.3	0.503	74.88	29.21	0
8/13/2021 6:45	1.568	171.8	12.19	74.73	29.21	0
8/13/2021 7:00	2.183	170	22.88	74.33	29.21	0
8/13/2021 7:15	0.768	27.56	20.5	74.7	29.21	0
8/13/2021 7:30	1.714	323.3	21.69	74.4	29.22	0
8/13/2021 7:45	1.263	22.71	88.6	75.78	29.22	0
8/13/2021 8:00	0.39	5.916	14.07	77.1	29.22	0
8/13/2021 8:15	2.859	186.4	22.73	77.38	29.22	0
8/13/2021 8:30	1.614	178.5	37.51	77.66	29.22	0
8/13/2021 8:45	2.287	171.6	50.31	78.96	29.22	0
8/13/2021 9:00	2.34	215.4	12.66	78.42	29.22	0
8/13/2021 9:15	2.496	200.5	27.77	79.3	29.22	0
8/13/2021 9:30	2.635	228.2	41.18	80	29.22	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/13/2021 9:45	1.153	220.1	38.7	81.2	29.22	0
8/13/2021 10:00	1.519	91.7	58.9	83.6	29.22	0
8/13/2021 10:15	1.992	206.7	83	83.9	29.22	0
8/13/2021 10:30	2.865	241.5	26.45	84	29.22	0
8/13/2021 10:45	3.925	251.6	20.88	84.4	29.21	0
8/13/2021 11:00	3.52	273.1	30.22	85.4	29.21	0
8/13/2021 11:15	3.821	270.5	24.75	86	29.21	0
8/13/2021 11:30	4.055	261.9	26.84	87.1	29.22	0
8/13/2021 11:45	4.446	241.4	15.74	86.6	29.21	0
8/13/2021 12:00	5.159	272.3	17.87	86.4	29.21	0
8/13/2021 12:15	5.747	262.3	10.52	86.1	29.21	0
8/13/2021 12:30	4.796	263.8	17.07	86.5	29.21	0
8/13/2021 12:45	4.641	267.7	18.67	87.6	29.21	0
8/13/2021 13:00	4.04	271.5	37.13	87.9	29.21	0
8/13/2021 13:15	3.032	271.3	25.8	89.2	29.2	0
8/13/2021 13:30	4.049	268.9	30.43	89.9	29.2	0
8/13/2021 13:45	4.973	266.8	24.03	90.3	29.2	0
8/13/2021 14:00	5.012	242.5	22.09	90.4	29.2	0
8/13/2021 14:15	4.713	238.8	15.55	90.4	29.2	0
8/13/2021 14:30	3.456	265	31.39	91.4	29.19	0
8/13/2021 14:45	2.949	246	46.92	91.9	29.19	0
8/13/2021 15:00	3.963	273.7	28.18	92.4	29.19	0
8/13/2021 15:15	5.408	259.3	17.85	92.1	29.19	0
8/13/2021 15:30	5.102	273	28.86	92.1	29.19	0
8/13/2021 15:45	3.93	259.2	23.6	92.9	29.18	0
8/13/2021 16:00	4.841	269.2	13.18	92.4	29.18	0
8/13/2021 16:15	5.652	264.2	12.9	92	29.18	0
8/13/2021 16:30	5.452	256.4	9.28	92	29.18	0
8/13/2021 16:45	6.154	247.1	15.27	91.9	29.18	0
8/13/2021 17:00	5.468	261.4	12.02	91.2	29.18	0
8/13/2021 17:15	4.715	266.4	10.14	90.8	29.18	0
8/13/2021 17:30	3.815	271.9	8.37	90.4	29.18	0
8/13/2021 17:45	3.706	272.6	6.301	89.5	29.18	0
8/13/2021 18:00	2.848	275.4	5.048	89.1	29.18	0
8/13/2021 18:15	2.849	277.1	5.585	88.4	29.18	0
8/13/2021 18:30	2.962	308.8	22.75	87.4	29.18	0
8/13/2021 18:45	1.834	326	4.003	87.3	29.18	0
8/13/2021 19:00	1.742	315.6	2.779	86.9	29.18	0
8/13/2021 19:15	1.656	332.2	19.81	85.8	29.18	0
8/13/2021 19:30	2.168	22.37	1.244	83.7	29.19	0
8/13/2021 19:45	2.105	351.2	23.12	83.3	29.19	0
8/13/2021 20:00	0.774	331.9	14.11	82.7	29.2	0
8/13/2021 20:15	1.021	6.984	0.329	82.3	29.2	0
8/13/2021 20:30	1.233	16.13	8.23	81.5	29.2	0
8/13/2021 20:45	0.861	100.6	19.58	81.2	29.21	0
8/13/2021 21:00	2.355	133.2	19.35	80.7	29.21	0
8/13/2021 21:15	4.235	167.6	6.679	80.8	29.21	0
8/13/2021 21:30	4.339	177.3	7.054	79.49	29.22	0
8/13/2021 21:45	2.365	140.5	10.42	78.33	29.22	0
8/13/2021 22:00	2.267	105.6	9.67	78.32	29.23	0
8/13/2021 22:15	3.209	144.2	18.84	77.6	29.23	0
8/13/2021 22:30	6.042	186	8.65	76.37	29.23	0
8/13/2021 22:45	5.571	181.9	10.21	75.42	29.24	0
8/13/2021 23:00	5.102	190.5	9.51	74.12	29.24	0
8/13/2021 23:15	4.838	186.4	5.275	74.09	29.24	0
8/13/2021 23:30	4.363	179.1	11.02	74.13	29.25	0
8/13/2021 23:45	4.204	168.3	9.79	73.23	29.25	0
8/14/2021 0:00	4.839	170	8.35	72.29	29.25	0
8/14/2021 0:15	6.255	189.1	5.957	72.09	29.25	0
8/14/2021 0:30	5.566	189	4.678	71.59	29.25	0
8/14/2021 0:45	4.878	187.1	6.107	70.97	29.26	0
8/14/2021 1:00	4.937	196.3	7.167	70.54	29.26	0
8/14/2021 1:15	3.558	181.4	12.03	70.13	29.26	0
8/14/2021 1:30	2.504	124.5	18.34	69.45	29.26	0
8/14/2021 1:45	3.959	164	9.05	68.94	29.26	0
8/14/2021 2:00	5.321	184.7	7.886	68.55	29.26	0
8/14/2021 2:15	5.947	190.3	6.274	68.09	29.26	0
8/14/2021 2:30	6.38	189.6	5.231	67.78	29.26	0
8/14/2021 2:45	5.915	197.5	7.705	67.48	29.27	0
8/14/2021 3:00	3.502	195.6	13.09	67.36	29.27	0
8/14/2021 3:15	1.064	157.7	37.98	66.63	29.26	0
8/14/2021 3:30	1.762	59.78	8.45	65.96	29.26	0
8/14/2021 3:45	1.474	62.86	10.29	65.93	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/14/2021 4:00	1.661	54.35	9.84	66.63	29.27	0
8/14/2021 4:15	0.846	45.46	5.318	66.68	29.27	0
8/14/2021 4:30	0.996	55.64	9.76	66.97	29.27	0
8/14/2021 4:45	2	171	50.28	67.26	29.28	0
8/14/2021 5:00	2.488	204.3	8.95	68.01	29.28	0
8/14/2021 5:15	5.462	214.8	4.655	67.36	29.29	0
8/14/2021 5:30	5.462	207.9	8.25	66.35	29.3	0
8/14/2021 5:45	4.059	187.8	11.54	65.93	29.3	0
8/14/2021 6:00	3.406	182.6	7.348	65.7	29.3	0
8/14/2021 6:15	4.833	200.3	7.711	65.45	29.3	0
8/14/2021 6:30	3.351	199	10.7	65.79	29.3	0
8/14/2021 6:45	4.438	204.8	7.085	66.15	29.31	0
8/14/2021 7:00	4.556	189.7	15.53	66.4	29.31	0
8/14/2021 7:15	4.324	175.2	15.33	66.28	29.31	0
8/14/2021 7:30	3.44	182.1	18.25	66.51	29.31	0
8/14/2021 7:45	3.717	166.5	17.17	67.67	29.31	0
8/14/2021 8:00	4.88	175.3	10.58	67.82	29.31	0
8/14/2021 8:15	4.342	167.1	11.04	68.57	29.31	0
8/14/2021 8:30	5.157	174.9	14.08	69.55	29.31	0
8/14/2021 8:45	4.269	187.9	19.86	70.06	29.31	0
8/14/2021 9:00	4.563	201	18.35	70.92	29.31	0
8/14/2021 9:15	4.928	210.2	29.74	71.38	29.31	0
8/14/2021 9:30	4.125	203.1	26.43	72.49	29.31	0
8/14/2021 9:45	4.794	132.4	47.07	73.79	29.3	0
8/14/2021 10:00	4.635	137.4	30.39	75.22	29.3	0
8/14/2021 10:15	5.173	169.9	25.34	75.07	29.3	0
8/14/2021 10:30	4.571	203.4	39.75	75.85	29.3	0
8/14/2021 10:45	4.219	189.9	27.17	76.33	29.29	0
8/14/2021 11:00	4.636	209.2	16.5	77.35	29.29	0
8/14/2021 11:15	3.98	202.7	29.65	78.59	29.29	0
8/14/2021 11:30	2.804	187	31.4	79.67	29.29	0
8/14/2021 11:45	5.082	165.6	51.15	81.1	29.29	0
8/14/2021 12:00	4.323	199.2	46.37	80.5	29.29	0
8/14/2021 12:15	5.258	235.2	27.34	80.7	29.29	0
8/14/2021 12:30	3.31	256.8	20.04	81	29.29	0
8/14/2021 12:45	4.072	224	33.72	82.4	29.28	0
8/14/2021 13:00	5.437	250.7	17.95	82.4	29.28	0
8/14/2021 13:15	4.25	248.9	40.45	82.4	29.28	0
8/14/2021 13:30	4.798	238.2	27.24	82.3	29.28	0
8/14/2021 13:45	6.407	222.3	37.52	83.2	29.27	0
8/14/2021 14:00	7.072	244.6	14.7	82.9	29.27	0
8/14/2021 14:15	6.614	250.3	15.97	82.8	29.27	0
8/14/2021 14:30	6.27	265	19.62	83	29.27	0
8/14/2021 14:45	6.14	278.4	14.03	83.4	29.27	0
8/14/2021 15:00	5.624	259.8	13.46	83.5	29.26	0
8/14/2021 15:15	5.438	266.6	15.45	84.1	29.26	0
8/14/2021 15:30	6.856	250	12.76	84.1	29.26	0
8/14/2021 15:45	7.99	271.4	8.94	83.6	29.25	0
8/14/2021 16:00	8.82	261	15.7	83.6	29.26	0
8/14/2021 16:15	8.3	246.8	13	83.6	29.26	0
8/14/2021 16:30	5.702	269.9	19.23	83.7	29.26	0
8/14/2021 16:45	5.24	259	18.39	83.2	29.26	0
8/14/2021 17:00	4.482	239.7	21.72	82.9	29.26	0
8/14/2021 17:15	2.965	280.8	25.44	83.5	29.26	0
8/14/2021 17:30	3.625	213.6	19.14	83	29.26	0
8/14/2021 17:45	5.979	175.7	10.98	82.3	29.26	0
8/14/2021 18:00	4.949	179.2	12.06	81.9	29.26	0
8/14/2021 18:15	4.485	160.8	13.71	81.5	29.26	0
8/14/2021 18:30	5.009	162.1	18.77	80.8	29.25	0
8/14/2021 18:45	4.854	176.3	5.488	80.5	29.25	0
8/14/2021 19:00	4.972	175.6	4.971	79.69	29.25	0
8/14/2021 19:15	5.836	172.8	4.792	78.84	29.25	0
8/14/2021 19:30	4.216	185.5	12.43	78.8	29.25	0
8/14/2021 19:45	3.055	207.6	3.354	79.25	29.26	0
8/14/2021 20:00	1.893	182.9	36.75	79.05	29.25	0
8/14/2021 20:15	2.12	52.02	9.18	76.68	29.25	0
8/14/2021 20:30	1.138	38.75	0.377	76.72	29.25	0
8/14/2021 20:45	0.493	41.78	2.798	77.48	29.25	0
8/14/2021 21:00	0.463	42.47	8.81	78.04	29.25	0
8/14/2021 21:15	2.574	348.2	12.46	74.14	29.24	0
8/14/2021 21:30	1.196	348.9	3.079	73.25	29.25	0
8/14/2021 21:45	0.18	9.99	15.55	73.6	29.25	0
8/14/2021 22:00	0.396	44.69	0.172	74.59	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/14/2021 22:15	1.81	147.2	94.2	75.37	29.24	0
8/14/2021 22:30	3.645	210.7	2.274	75.48	29.24	0
8/14/2021 22:45	2.044	225.8	29.23	73.74	29.24	0
8/14/2021 23:00	4.201	199.6	13.31	72	29.24	0
8/14/2021 23:15	3.56	164.7	4.802	71.69	29.24	0
8/14/2021 23:30	4.727	181	7.322	71.37	29.24	0
8/14/2021 23:45	5.612	194.6	8.32	70.47	29.24	0
8/15/2021 0:00	5.561	185.1	11.12	69.95	29.24	0
8/15/2021 0:15	4.502	166.8	6.899	69.06	29.24	0
8/15/2021 0:30	4.278	175.8	7.622	69.31	29.24	0
8/15/2021 0:45	3.966	173.8	7.657	68.75	29.25	0
8/15/2021 1:00	3.427	170.7	4.552	68.32	29.25	0
8/15/2021 1:15	1.867	153.5	8.07	68.18	29.25	0
8/15/2021 1:30	1.563	127.2	1.953	68.22	29.25	0
8/15/2021 1:45	3.855	131.9	12.08	67.63	29.25	0
8/15/2021 2:00	5.032	154	8.85	66.92	29.25	0
8/15/2021 2:15	4.77	162.1	9.23	66.79	29.25	0
8/15/2021 2:30	4.19	187.9	9.7	66.64	29.25	0
8/15/2021 2:45	4.028	214.3	7.542	66.87	29.25	0
8/15/2021 3:00	2.675	175	4.448	66.22	29.25	0
8/15/2021 3:15	2.252	180.9	15.28	66.06	29.25	0
8/15/2021 3:30	1.855	126.7	7.834	65.42	29.25	0
8/15/2021 3:45	1.092	138.9	12.33	65.5	29.25	0
8/15/2021 4:00	3.51	208.7	7.184	66.07	29.25	0
8/15/2021 4:15	3.474	214.7	2.883	65.67	29.25	0
8/15/2021 4:30	3.431	207	9.1	65.36	29.25	0
8/15/2021 4:45	6.067	221	4.152	64.2	29.26	0
8/15/2021 5:00	4.48	227.7	6.167	63.91	29.26	0
8/15/2021 5:15	3.44	267	20.94	63.4	29.27	0
8/15/2021 5:30	2.676	283.8	11.91	63.09	29.27	0
8/15/2021 5:45	3.926	252.9	5.058	62.95	29.27	0
8/15/2021 6:00	5.954	249.3	4.398	62.39	29.28	0
8/15/2021 6:15	4.707	251.2	7.409	62.11	29.28	0
8/15/2021 6:30	1.753	282.5	23.83	62.76	29.28	0
8/15/2021 6:45	2.359	203.6	33.97	62.88	29.29	0
8/15/2021 7:00	2.547	117.3	35.34	64.01	29.28	0
8/15/2021 7:15	2.878	189.8	33.98	63.81	29.29	0
8/15/2021 7:30	3.102	199.3	18.95	64.13	29.29	0
8/15/2021 7:45	3.213	176.8	13.96	64.8	29.29	0
8/15/2021 8:00	3.469	183.8	21.92	65.87	29.29	0
8/15/2021 8:15	3.733	205.5	35.74	66.4	29.28	0
8/15/2021 8:30	3.337	216.4	30.02	66.65	29.28	0
8/15/2021 8:45	3.572	210.2	38.74	67.94	29.28	0
8/15/2021 9:00	2.922	216.6	37.93	68.53	29.27	0
8/15/2021 9:15	3.517	190.1	26.03	69.3	29.27	0
8/15/2021 9:30	4.19	206.8	22.37	70.37	29.27	0
8/15/2021 9:45	4.356	214.3	29.28	71.45	29.26	0
8/15/2021 10:00	4.8	230.1	36.01	72.85	29.26	0
8/15/2021 10:15	4.655	251.2	24	73.04	29.26	0
8/15/2021 10:30	4.27	233.8	16.81	73.7	29.25	0
8/15/2021 10:45	4.266	252.2	28.02	74.32	29.25	0
8/15/2021 11:00	4.931	254.6	22.57	75.74	29.24	0
8/15/2021 11:15	5.027	263.1	16.18	76.79	29.24	0
8/15/2021 11:30	4.992	277.8	19.81	77.16	29.24	0
8/15/2021 11:45	6.833	260.6	13.79	78.3	29.23	0
8/15/2021 12:00	6.988	246.8	15.16	78.69	29.23	0
8/15/2021 12:15	7.476	250.7	15.84	78.82	29.23	0
8/15/2021 12:30	7.478	266.7	18.39	78.74	29.23	0
8/15/2021 12:45	8.58	255.2	12.2	79.05	29.23	0
8/15/2021 13:00	8.47	265.2	8.83	79.21	29.23	0
8/15/2021 13:15	7.467	260.5	19.72	79.46	29.22	0
8/15/2021 13:30	5.921	249.7	20.72	79.64	29.22	0
8/15/2021 13:45	6.576	232.1	27.56	80.3	29.22	0
8/15/2021 14:00	7.699	238.1	25.38	80.5	29.21	0
8/15/2021 14:15	7.512	224.1	21.87	80	29.21	0
8/15/2021 14:30	6.755	232.5	24.61	80.6	29.2	0
8/15/2021 14:45	7.022	224.2	21.45	81	29.2	0
8/15/2021 15:00	8.14	232.1	20.47	80.8	29.19	0
8/15/2021 15:15	10.66	231.4	12.35	81.4	29.19	0
8/15/2021 15:30	9.65	213.6	13.97	80.4	29.19	0
8/15/2021 15:45	9.65	222	16.23	80.4	29.18	0
8/15/2021 16:00	10.01	217.8	7.418	79.81	29.18	0
8/15/2021 16:15	7.988	210.4	13.88	78.65	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/15/2021 16:30	5.883	201.5	17.31	79.22	29.18	0
8/15/2021 16:45	5.269	214.1	22.71	79.28	29.18	0
8/15/2021 17:00	4.369	222.5	19.83	79.29	29.17	0
8/15/2021 17:15	3.552	234.5	20.53	79.83	29.17	0
8/15/2021 17:30	4.119	244.6	30.96	80.1	29.17	0
8/15/2021 17:45	4.843	241.2	20.39	79.55	29.17	0
8/15/2021 18:00	5.097	231.9	15.92	78.95	29.17	0
8/15/2021 18:15	3.545	253	9.51	78.54	29.16	0
8/15/2021 18:30	3.184	167.7	42.84	78.38	29.16	0
8/15/2021 18:45	4.064	178.6	5.466	77.4	29.16	0
8/15/2021 19:00	4.205	214.2	11.96	77.11	29.16	0
8/15/2021 19:15	4.804	240.1	14.93	76.58	29.16	0
8/15/2021 19:30	4.446	288.2	19.43	75.26	29.16	0
8/15/2021 19:45	4.563	318	7.078	74.2	29.17	0
8/15/2021 20:00	2.877	329.5	8.22	74.08	29.16	0
8/15/2021 20:15	3.161	319.1	5.362	74.1	29.16	0
8/15/2021 20:30	2.444	308	4.716	74.29	29.16	0
8/15/2021 20:45	1.599	337.9	9.53	72.87	29.16	0
8/15/2021 21:00	2.406	222.5	9.99	72.11	29.16	0
8/15/2021 21:15	5.144	209.8	6.025	71.53	29.16	0
8/15/2021 21:30	3.951	194.3	7.51	70.16	29.16	0
8/15/2021 21:45	3.771	186.8	7.446	69.73	29.16	0
8/15/2021 22:00	1.875	250.6	48.86	69.4	29.16	0
8/15/2021 22:15	1.963	277.7	34.59	68.45	29.16	0
8/15/2021 22:30	1.752	302.1	19.57	68.41	29.16	0
8/15/2021 22:45	3.936	252.5	9.75	68.18	29.16	0
8/15/2021 23:00	4.844	250.2	5.086	67.4	29.16	0
8/15/2021 23:15	4.922	235.1	5.901	66.92	29.15	0
8/15/2021 23:30	3.846	253.6	12.71	66.24	29.15	0
8/15/2021 23:45	2.671	250.1	20.88	65.45	29.15	0
8/16/2021 0:00	1.814	257	15.44	65.38	29.15	0
8/16/2021 0:15	2.265	248.1	11.78	65.12	29.15	0
8/16/2021 0:30	2.487	213.9	9.76	65.34	29.14	0
8/16/2021 0:45	3.212	224.7	5.404	64.57	29.14	0
8/16/2021 1:00	2.138	254.2	12.28	64.04	29.14	0
8/16/2021 1:15	1.889	212.9	41.77	63.46	29.14	0
8/16/2021 1:30	1.464	180.2	0.821	62.98	29.14	0
8/16/2021 1:45	1.783	169	6.42	62.7	29.14	0
8/16/2021 2:00	1.759	161.6	3.451	62.39	29.14	0
8/16/2021 2:15	2.969	168.2	8.6	62.25	29.14	0
8/16/2021 2:30	3.685	187.9	7.736	62.38	29.14	0
8/16/2021 2:45	3.275	192.3	5.683	62.18	29.14	0
8/16/2021 3:00	3.248	186.9	4.93	61.97	29.14	0
8/16/2021 3:15	3.008	178.7	7.883	61.68	29.14	0
8/16/2021 3:30	2.662	156.3	10.35	61.31	29.14	0
8/16/2021 3:45	3.203	167.4	4.699	61.33	29.14	0
8/16/2021 4:00	2.931	172.1	8.68	61.25	29.13	0
8/16/2021 4:15	3.156	201.2	11.41	61.43	29.13	0
8/16/2021 4:30	3.683	176.4	9.26	61.11	29.13	0
8/16/2021 4:45	3.459	181.7	5.181	61.15	29.13	0
8/16/2021 5:00	3.034	184.5	5.468	61.15	29.13	0
8/16/2021 5:15	3.34	178.3	8.11	60.81	29.14	0
8/16/2021 5:30	4.313	182.3	5.047	60.8	29.14	0
8/16/2021 5:45	3.985	186.1	12.56	60.96	29.14	0
8/16/2021 6:00	3.996	144.8	8.87	60.5	29.14	0
8/16/2021 6:15	4.378	169.8	9.7	60.57	29.14	0
8/16/2021 6:30	5.334	142.3	6.306	60.41	29.14	0
8/16/2021 6:45	5.566	175.9	13.46	60.51	29.14	0
8/16/2021 7:00	5.876	184.7	8.45	60.68	29.14	0
8/16/2021 7:15	5.67	190.7	13.15	60.76	29.14	0
8/16/2021 7:30	6.287	191.5	12.68	60.6	29.14	0
8/16/2021 7:45	6.066	182.9	16.22	60.5	29.14	0
8/16/2021 8:00	6.002	206.8	9.79	60.29	29.14	0
8/16/2021 8:15	5.525	207	14.82	60.5	29.14	0
8/16/2021 8:30	4.437	198.5	16.07	60.45	29.14	0
8/16/2021 8:45	5.09	144.7	23.54	60.94	29.13	0
8/16/2021 9:00	4.895	146	20.71	61.47	29.13	0
8/16/2021 9:15	5.846	170.7	13.86	61.57	29.13	0
8/16/2021 9:30	7.378	172	14.35	61.88	29.13	0
8/16/2021 9:45	7.734	163.8	13.12	62.55	29.13	0
8/16/2021 10:00	7.988	153.8	15.17	63.79	29.12	0
8/16/2021 10:15	8.14	155.3	19.83	63.87	29.12	0
8/16/2021 10:30	9.04	167.6	17.97	64.32	29.12	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/16/2021 10:45	7.316	169.6	23.41	64.71	29.12	0
8/16/2021 11:00	7.357	178.2	22.3	64.95	29.12	0
8/16/2021 11:15	6.48	181.3	23.53	65.25	29.12	0
8/16/2021 11:30	5.684	162.9	20.14	66.19	29.11	0
8/16/2021 11:45	6.519	156.1	19.31	66.05	29.11	0
8/16/2021 12:00	5.111	172.4	31.4	67.72	29.1	0
8/16/2021 12:15	5.813	188.6	25.97	68.75	29.1	0
8/16/2021 12:30	5.742	156	31.49	70.83	29.09	0
8/16/2021 12:45	6.128	163.8	30.7	72.29	29.09	0
8/16/2021 13:00	5.793	205.8	37.93	72.49	29.08	0
8/16/2021 13:15	7.322	207.1	25.33	72.36	29.07	0
8/16/2021 13:30	6.951	226.3	27.22	73.18	29.07	0
8/16/2021 13:45	9.06	259.2	26.25	73.16	29.07	0
8/16/2021 14:00	8.81	278.3	14.23	73.54	29.07	0
8/16/2021 14:15	8.4	242.2	18.25	73.68	29.06	0
8/16/2021 14:30	8.24	268.3	15.7	73.77	29.06	0
8/16/2021 14:45	10.41	237	17.87	73.66	29.05	0
8/16/2021 15:00	8.71	239.7	20.89	73.44	29.05	0
8/16/2021 15:15	12.28	259.7	15.02	72.8	29.05	0
8/16/2021 15:30	13.77	270.5	10.21	70.97	29.05	0
8/16/2021 15:45	13.41	245	12.43	70.64	29.05	0
8/16/2021 16:00	14.27	243.1	11.6	70.81	29.04	0
8/16/2021 16:15	13.86	245.4	13.08	70.07	29.04	0
8/16/2021 16:30	13.58	237.5	10.01	69.05	29.04	0
8/16/2021 16:45	12.81	232.4	9.82	68	29.04	0
8/16/2021 17:00	12.97	232	9.4	67.64	29.04	0
8/16/2021 17:15	12.44	226.2	10.05	67.34	29.04	0
8/16/2021 17:30	12.66	220.9	9.83	67.2	29.04	0
8/16/2021 17:45	11.45	216.6	9.88	66.81	29.04	0
8/16/2021 18:00	11.55	222.8	11.42	66.68	29.03	0
8/16/2021 18:15	12.04	222.8	11.06	66.19	29.03	0
8/16/2021 18:30	9.93	219.5	13.02	65.89	29.03	0
8/16/2021 18:45	11.81	212.8	10.29	65.46	29.04	0
8/16/2021 19:00	10.66	216.2	13.68	65.09	29.04	0
8/16/2021 19:15	9.78	231.5	10.88	64.89	29.04	0
8/16/2021 19:30	11.5	230.2	9.24	64.38	29.04	0
8/16/2021 19:45	14.14	240.3	10.75	63.4	29.04	0
8/16/2021 20:00	10.22	244.9	11.1	62.42	29.04	0
8/16/2021 20:15	11.07	246.4	10.13	61.87	29.04	0
8/16/2021 20:30	8.72	252	13.64	61.39	29.04	0
8/16/2021 20:45	8.57	254.7	12.32	60.9	29.04	0
8/16/2021 21:00	10.15	254.3	13.69	60.32	29.05	0
8/16/2021 21:15	14.46	246.3	10.77	59.7	29.05	0
8/16/2021 21:30	13	247.6	10.32	59.12	29.05	0
8/16/2021 21:45	11.26	251.8	9.34	58.57	29.06	0
8/16/2021 22:00	9.73	244.7	9.99	58.34	29.06	0
8/16/2021 22:15	11.32	226.6	11.87	58.08	29.06	0
8/16/2021 22:30	11.03	227.1	8.79	57.41	29.06	0
8/16/2021 22:45	8.6	233.5	7.894	56.67	29.06	0
8/16/2021 23:00	6.091	242.7	7.774	56.16	29.07	0
8/16/2021 23:15	6.504	220	18.35	56.08	29.07	0
8/16/2021 23:30	8.62	196.1	11.38	56.12	29.08	0
8/16/2021 23:45	9.08	199.6	10.14	55.97	29.08	0
8/17/2021 0:00	6.958	184.2	11.52	55.79	29.08	0
8/17/2021 0:15	8.4	180.8	9.97	55.61	29.08	0
8/17/2021 0:30	8.8	177.6	10.63	55.37	29.09	0
8/17/2021 0:45	9.22	171.8	8.91	55.07	29.09	0
8/17/2021 1:00	8.46	169.6	9.47	54.88	29.09	0
8/17/2021 1:15	6.072	162.1	13.22	54.65	29.09	0
8/17/2021 1:30	5.156	126.9	7.861	54.03	29.1	0
8/17/2021 1:45	4.367	116.3	8.6	53.92	29.1	0
8/17/2021 2:00	4.623	119.9	7.532	53.78	29.1	0
8/17/2021 2:15	4.154	109.7	8.28	53.7	29.1	0
8/17/2021 2:30	4.704	118.2	10.04	53.87	29.1	0
8/17/2021 2:45	4.74	135	6.603	53.93	29.1	0
8/17/2021 3:00	6.372	151.2	11.64	53.67	29.1	0
8/17/2021 3:15	4.222	133.5	6.325	53.21	29.11	0
8/17/2021 3:30	3.222	106.8	9.09	53.27	29.11	0
8/17/2021 3:45	3.665	110.8	12.03	53.21	29.1	0
8/17/2021 4:00	5.766	132.1	15.3	53.22	29.1	0
8/17/2021 4:15	9.49	163.4	9.66	53.46	29.1	0
8/17/2021 4:30	6.931	140.2	14.73	52.98	29.1	0
8/17/2021 4:45	5.308	129.3	8.22	52.88	29.1	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/17/2021 5:00	4.375	131.3	6.838	52.97	29.11	0
8/17/2021 5:15	3.47	127	8.29	53.15	29.11	0
8/17/2021 5:30	3.825	129.1	13.7	53.21	29.11	0
8/17/2021 5:45	3.987	135.3	24.39	53.45	29.12	0
8/17/2021 6:00	3.631	177.7	11.67	53.78	29.12	0
8/17/2021 6:15	6.262	171.9	8.35	53.75	29.12	0
8/17/2021 6:30	5.028	158.6	18.9	53.57	29.13	0
8/17/2021 6:45	7.506	137.2	6.261	53.47	29.13	0
8/17/2021 7:00	5.215	128.6	19.43	53.67	29.14	0
8/17/2021 7:15	6.081	145.2	17.26	53.74	29.14	0
8/17/2021 7:30	7.458	165.9	10.27	54.01	29.14	0
8/17/2021 7:45	6.162	149.2	18.98	54.31	29.14	0
8/17/2021 8:00	6.65	162.2	14.57	54.37	29.15	0
8/17/2021 8:15	6.601	134.6	12.94	54.34	29.15	0
8/17/2021 8:30	5.627	143	10.84	54.32	29.16	0
8/17/2021 8:45	4.412	149.8	23.01	54.16	29.16	0
8/17/2021 9:00	3.833	159.3	23.55	54.49	29.16	0
8/17/2021 9:15	2.623	182.3	30.23	53.94	29.17	0
8/17/2021 9:30	2.454	124.7	21.48	53.5	29.17	0
8/17/2021 9:45	3.059	99.8	17.76	53.31	29.17	0
8/17/2021 10:00	3.45	91.2	17.83	53.38	29.17	0
8/17/2021 10:15	6.111	78.27	13.41	53.48	29.17	0
8/17/2021 10:30	6.013	80.7	9.32	53.29	29.18	0
8/17/2021 10:45	5.415	76.76	9.25	53.84	29.18	0
8/17/2021 11:00	4.507	85.3	17	54.49	29.18	0
8/17/2021 11:15	3.78	80.9	11.58	54.48	29.18	0
8/17/2021 11:30	3.757	77.29	13.49	54.55	29.19	0
8/17/2021 11:45	2.73	133.3	8.12	54.08	29.19	0
8/17/2021 12:00	1.931	108.2	19.92	54.05	29.19	0
8/17/2021 12:15	1.644	87.7	7.897	54.31	29.19	0
8/17/2021 12:30	0.661	46.65	26.72	55.16	29.19	0
8/17/2021 12:45	1.731	132.8	65.54	56.32	29.19	0
8/17/2021 13:00	2.088	125.4	38.94	57.58	29.2	0
8/17/2021 13:15	2.133	307.7	61.91	58.04	29.2	0
8/17/2021 13:30	2.31	37.14	66.48	58.02	29.2	0
8/17/2021 13:45	1.938	81.2	23.47	57.87	29.2	0
8/17/2021 14:00	1.793	78.9	22.61	58.65	29.2	0
8/17/2021 14:15	1.158	199.8	84.6	59.16	29.2	0
8/17/2021 14:30	1.631	248.2	58.61	60.48	29.2	0
8/17/2021 14:45	2.935	28.17	60.66	60.2	29.21	0
8/17/2021 15:00	2.261	56.38	38.45	60.74	29.21	0
8/17/2021 15:15	3.28	75.74	30.71	62	29.2	0
8/17/2021 15:30	3.981	50.51	23.74	63.03	29.21	0
8/17/2021 15:45	5.045	38.92	23.9	62.55	29.21	0
8/17/2021 16:00	2.89	12.5	24.33	62.77	29.2	0
8/17/2021 16:15	5.847	13.96	21.42	63.99	29.2	0
8/17/2021 16:30	4.072	2.386	17.85	63.32	29.2	0
8/17/2021 16:45	5.072	3.817	17.94	62.84	29.21	0
8/17/2021 17:00	4.651	3.467	12.59	63.04	29.21	0
8/17/2021 17:15	4.146	15.79	11.34	63.31	29.21	0
8/17/2021 17:30	2.952	27.27	23.97	62.81	29.21	0
8/17/2021 17:45	1.215	97	13.78	63.16	29.21	0
8/17/2021 18:00	1.928	76.51	13.9	62.83	29.21	0
8/17/2021 18:15	2.148	48.87	8.92	62.37	29.21	0
8/17/2021 18:30	2.341	61.63	17.96	62.03	29.22	0
8/17/2021 18:45	3.183	75.22	9.6	61.88	29.22	0
8/17/2021 19:00	3.845	98.1	13.32	61.58	29.22	0
8/17/2021 19:15	4.039	107.8	7.868	61.42	29.22	0
8/17/2021 19:30	3.373	102.9	9.17	61.13	29.22	0
8/17/2021 19:45	4.02	87.6	6.002	60.65	29.23	0
8/17/2021 20:00	3.699	89	2.92	59.96	29.23	0
8/17/2021 20:15	3.639	73.61	3.773	59.82	29.24	0
8/17/2021 20:30	4.431	75.57	3.633	59.25	29.24	0
8/17/2021 20:45	4.329	79.68	7.109	58.3	29.24	0
8/17/2021 21:00	2.739	74.52	7.949	58.22	29.24	0
8/17/2021 21:15	2.729	119.8	35.78	58.43	29.25	0
8/17/2021 21:30	2.76	142.6	17.86	58.75	29.25	0
8/17/2021 21:45	2.673	133.6	22.1	58.46	29.25	0
8/17/2021 22:00	1.729	79.72	8.68	57.76	29.25	0
8/17/2021 22:15	3.183	84.4	8.04	56.89	29.25	0
8/17/2021 22:30	3.159	88.6	6.233	57.43	29.25	0
8/17/2021 22:45	3.329	86.2	8.16	56.52	29.25	0
8/17/2021 23:00	3.637	88.9	2.986	56.43	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/17/2021 23:15	3.599	116	15.54	57.21	29.25	0
8/17/2021 23:30	2.414	111.2	11.67	57.54	29.25	0
8/17/2021 23:45	2.767	124.9	30.06	56.99	29.26	0
8/18/2021 0:00	3.116	137.3	15.13	57.09	29.25	0
8/18/2021 0:15	3.333	142	10.22	57.44	29.26	0
8/18/2021 0:30	4.057	176.5	19.12	56.56	29.26	0
8/18/2021 0:45	5.34	190.3	8.36	55.19	29.26	0
8/18/2021 1:00	5.837	188.2	5.098	55.38	29.26	0
8/18/2021 1:15	5.693	181.5	8.01	55.08	29.26	0
8/18/2021 1:30	4.717	157.5	7.801	54.24	29.27	0
8/18/2021 1:45	3.467	120.9	17.51	54.34	29.27	0
8/18/2021 2:00	2.496	104.2	9.27	54.24	29.27	0
8/18/2021 2:15	3.64	138.1	12.4	54.39	29.28	0
8/18/2021 2:30	5.072	149.3	10	54.75	29.28	0
8/18/2021 2:45	3.858	150.9	13.25	54.67	29.28	0
8/18/2021 3:00	2.409	141.2	20.56	53.86	29.28	0
8/18/2021 3:15	2.068	92	49.54	53.35	29.28	0
8/18/2021 3:30	3.193	118.1	9.43	54.17	29.28	0
8/18/2021 3:45	2.742	119.1	11.68	55.36	29.28	0
8/18/2021 4:00	3.202	141.5	13.93	55.26	29.28	0
8/18/2021 4:15	4.538	198.4	14.15	54.17	29.29	0
8/18/2021 4:30	3.875	174	8.76	53.93	29.29	0
8/18/2021 4:45	0.897	212.7	39.63	53.73	29.3	0
8/18/2021 5:00	1.152	209.3	56.32	53.55	29.3	0
8/18/2021 5:15	1.88	131	24.99	53.62	29.3	0
8/18/2021 5:30	0.308	68.64	4.118	53.78	29.3	0
8/18/2021 5:45	1.896	139.7	13.63	53.32	29.3	0
8/18/2021 6:00	3.449	154.7	15.17	53.96	29.3	0
8/18/2021 6:15	4.699	142.7	5.935	53.46	29.31	0
8/18/2021 6:30	4.625	160.1	9.93	53.73	29.31	0
8/18/2021 6:45	4.926	162.2	9.06	53.68	29.31	0
8/18/2021 7:00	5.472	147.3	9.62	54.32	29.31	0
8/18/2021 7:15	4.642	170.7	10.88	54.97	29.31	0
8/18/2021 7:30	3.041	171.9	19.54	55.4	29.32	0
8/18/2021 7:45	1.601	206.6	57.61	56.38	29.32	0
8/18/2021 8:00	2.278	194.9	39.6	57.3	29.32	0
8/18/2021 8:15	2.698	207.3	27.71	57.54	29.33	0
8/18/2021 8:30	2.28	228.4	51.74	58.34	29.32	0
8/18/2021 8:45	3.214	192.8	32.47	59.25	29.32	0
8/18/2021 9:00	2.555	194.1	56.23	60.37	29.32	0
8/18/2021 9:15	2.846	186	28.69	61.52	29.32	0
8/18/2021 9:30	2.835	212.3	43.13	61.91	29.32	0
8/18/2021 9:45	2.731	252.6	33.53	62.36	29.32	0
8/18/2021 10:00	2.293	240.9	53.08	63.43	29.31	0
8/18/2021 10:15	2.859	163	50.5	64.73	29.31	0
8/18/2021 10:30	4.375	282.4	38.14	65.52	29.31	0
8/18/2021 10:45	5.972	247	21.89	65.78	29.31	0
8/18/2021 11:00	4.823	255	30.38	66.33	29.3	0
8/18/2021 11:15	4.405	227.1	37.32	67	29.3	0
8/18/2021 11:30	5.879	238.2	18.94	67.98	29.3	0
8/18/2021 11:45	5.771	259.1	24.48	68.23	29.29	0
8/18/2021 12:00	4.431	261.6	48.2	68.91	29.29	0
8/18/2021 12:15	5.253	257.5	34.03	69.43	29.29	0
8/18/2021 12:30	6.156	219.5	23.63	69.55	29.29	0
8/18/2021 12:45	6.119	249.2	24.28	70.71	29.29	0
8/18/2021 13:00	5.7	247.4	34.06	70.82	29.29	0
8/18/2021 13:15	6.862	227.9	25.63	70.68	29.28	0
8/18/2021 13:30	8.14	229.5	24.63	71.77	29.28	0
8/18/2021 13:45	8.5	243.5	23.82	72.49	29.27	0
8/18/2021 14:00	7.86	250.6	21.26	72.85	29.27	0
8/18/2021 14:15	7.022	242.3	25.03	73.59	29.27	0
8/18/2021 14:30	5.993	266.4	32.52	73.7	29.27	0
8/18/2021 14:45	8.08	303.9	17.52	74.43	29.27	0
8/18/2021 15:00	9.82	271.6	13.91	74.43	29.26	0
8/18/2021 15:15	7.719	259.7	18.93	74.62	29.26	0
8/18/2021 15:30	10.29	282.9	12.74	74.94	29.26	0
8/18/2021 15:45	9.42	281.8	16.02	74.28	29.26	0
8/18/2021 16:00	8.29	266.9	15.71	73.47	29.26	0
8/18/2021 16:15	7.087	264.2	10.89	73.49	29.25	0
8/18/2021 16:30	7.364	274.9	10.49	73	29.25	0
8/18/2021 16:45	8.76	257.4	11.88	72.55	29.25	0
8/18/2021 17:00	6.216	258.9	19	72.59	29.25	0
8/18/2021 17:15	6.661	270.3	13.79	72.63	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/18/2021 17:30	7.663	285	7.199	72.36	29.25	0
8/18/2021 17:45	6.36	282.7	11.09	72.49	29.25	0
8/18/2021 18:00	5.706	310.6	11.08	72.1	29.25	0
8/18/2021 18:15	5.121	310.7	5.938	71.79	29.25	0
8/18/2021 18:30	5.439	302.8	8.09	71.47	29.25	0
8/18/2021 18:45	5.181	299	7.613	71.15	29.25	0
8/18/2021 19:00	3.363	317.6	7.496	70.73	29.25	0
8/18/2021 19:15	1.961	4.698	53.94	70.35	29.24	0
8/18/2021 19:30	2.458	104.4	42.44	69.57	29.24	0
8/18/2021 19:45	3.82	291.6	10.18	69.87	29.25	0
8/18/2021 20:00	3.846	289.8	4.413	69.45	29.26	0
8/18/2021 20:15	1.859	332.3	31.78	69.56	29.26	0
8/18/2021 20:30	2.007	14.75	8.36	68.48	29.26	0
8/18/2021 20:45	0.692	25.74	11.58	68.65	29.26	0
8/18/2021 21:00	2.25	27.17	5.294	69.01	29.26	0
8/18/2021 21:15	1.814	351.9	16.02	68.94	29.26	0
8/18/2021 21:30	0.602	24.28	9.72	68.67	29.26	0
8/18/2021 21:45	0.003	29.97	0.002	68.18	29.26	0
8/18/2021 22:00	0.779	30.01	0.033	67.5	29.26	0
8/18/2021 22:15	0.81	55.24	22.18	66.77	29.26	0
8/18/2021 22:30	1.06	97.5	4.65	66.67	29.25	0
8/18/2021 22:45	2.669	278.2	32.57	67.34	29.25	0
8/18/2021 23:00	3.436	218.9	14.53	67.43	29.25	0
8/18/2021 23:15	2.988	217	12.23	67.47	29.25	0
8/18/2021 23:30	1.875	160.6	27.34	66.3	29.25	0
8/18/2021 23:45	3.198	221	8.66	66.21	29.25	0
8/19/2021 0:00	1.673	155.9	34.26	65.69	29.25	0
8/19/2021 0:15	3.497	172.4	21.77	64.94	29.25	0
8/19/2021 0:30	4.097	209.2	8.01	64.74	29.25	0
8/19/2021 0:45	4.461	209.1	6.352	63.96	29.25	0
8/19/2021 1:00	5.609	220.8	4.666	63.6	29.25	0
8/19/2021 1:15	3.533	222.4	13.44	63.21	29.25	0
8/19/2021 1:30	2.667	199.3	8.55	62.47	29.25	0
8/19/2021 1:45	2.234	212.3	8.47	62.2	29.25	0
8/19/2021 2:00	4.447	239.8	11.97	61.7	29.25	0
8/19/2021 2:15	4.914	268.5	7.9	60.79	29.25	0
8/19/2021 2:30	4.583	266.2	8.25	60.52	29.25	0
8/19/2021 2:45	4.336	278	11.73	60.28	29.26	0
8/19/2021 3:00	2.4	287.8	15.34	60.03	29.26	0
8/19/2021 3:15	3.294	246	8.76	60.07	29.26	0
8/19/2021 3:30	3.642	258.7	8.14	59.46	29.26	0
8/19/2021 3:45	3.146	228	11.94	59.4	29.26	0
8/19/2021 4:00	3.695	203.1	7.923	59.3	29.25	0
8/19/2021 4:15	4.388	248.7	19	59.15	29.26	0
8/19/2021 4:30	5.135	263	9.2	58.76	29.26	0
8/19/2021 4:45	5.772	251.3	6.648	58.36	29.27	0
8/19/2021 5:00	4.187	226	10.75	58.06	29.26	0
8/19/2021 5:15	3.854	196.2	9.91	57.79	29.26	0
8/19/2021 5:30	4.588	212.8	17.62	57.31	29.27	0
8/19/2021 5:45	4.463	225.1	6.473	57.23	29.27	0
8/19/2021 6:00	4.065	239.1	7.791	57.09	29.28	0
8/19/2021 6:15	4.147	234.9	8.58	56.82	29.27	0
8/19/2021 6:30	3.559	221.5	7.248	56.67	29.28	0
8/19/2021 6:45	3.422	230.8	10.88	56.6	29.28	0
8/19/2021 7:00	2.899	224.6	28.97	56.61	29.28	0
8/19/2021 7:15	3.302	198.1	20.11	56.66	29.28	0
8/19/2021 7:30	3.862	215.5	13.72	57.06	29.28	0
8/19/2021 7:45	4.216	195.1	16.42	57.38	29.29	0
8/19/2021 8:00	4.474	170	13.47	57.49	29.29	0
8/19/2021 8:15	4.6	168.6	28.36	59.21	29.29	0
8/19/2021 8:30	4.384	210.7	14.06	59.55	29.28	0
8/19/2021 8:45	4.404	177	21.55	60.68	29.29	0
8/19/2021 9:00	3.758	135.4	34.15	62.76	29.28	0
8/19/2021 9:15	4.194	226.4	42.48	63.21	29.28	0
8/19/2021 9:30	4.615	223.2	17.82	62.93	29.28	0
8/19/2021 9:45	5.841	182.1	27.51	64.25	29.27	0
8/19/2021 10:00	5.114	191.3	22.16	64.25	29.27	0
8/19/2021 10:15	3.906	184.6	46.28	65.41	29.27	0
8/19/2021 10:30	3.449	214.9	42.03	66.22	29.27	0
8/19/2021 10:45	3.516	260.2	43.69	67.82	29.27	0
8/19/2021 11:00	4.445	268.2	25.2	68.04	29.27	0
8/19/2021 11:15	3.799	239.1	37.75	69.05	29.26	0
8/19/2021 11:30	3.407	347	48	69.6	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/19/2021 11:45	4.475	101.7	24.57	71.35	29.25	0
8/19/2021 12:00	2.389	184.2	62.07	72.1	29.25	0
8/19/2021 12:15	3.579	13.51	53.82	72.1	29.25	0
8/19/2021 12:30	4.723	43.81	23.2	72.3	29.24	0
8/19/2021 12:45	4.843	45.27	85.4	72.56	29.24	0
8/19/2021 13:00	7.178	262.7	15.35	72.6	29.24	0
8/19/2021 13:15	7.936	259.9	24.26	72.61	29.24	0
8/19/2021 13:30	6.13	260.1	29.83	73.07	29.24	0
8/19/2021 13:45	4.432	307.4	51.35	73.56	29.24	0
8/19/2021 14:00	8.28	20.49	23.3	73.93	29.23	0
8/19/2021 14:15	8.94	27.73	10.25	73.99	29.23	0
8/19/2021 14:30	7.885	39.53	13.21	73.45	29.23	0
8/19/2021 14:45	6.681	23.91	15.35	73.15	29.22	0
8/19/2021 15:00	6.481	23.18	12.3	73.86	29.22	0
8/19/2021 15:15	6.201	11.49	19.44	73.6	29.22	0
8/19/2021 15:30	4.431	324.2	32.28	74.11	29.22	0
8/19/2021 15:45	7.265	343.6	24.07	74.19	29.22	0
8/19/2021 16:00	4.902	342.3	27.59	74.64	29.21	0
8/19/2021 16:15	5.116	334	40.91	75.58	29.21	0
8/19/2021 16:30	5.399	328.7	21.56	75.4	29.21	0
8/19/2021 16:45	3.231	300.9	21.57	75.53	29.2	0
8/19/2021 17:00	2.262	0.171	27.73	75.69	29.2	0
8/19/2021 17:15	2.158	28.88	30.92	76.03	29.2	0
8/19/2021 17:30	5.483	14.24	16.87	74.75	29.2	0
8/19/2021 17:45	4.749	359.1	16.43	74.37	29.19	0
8/19/2021 18:00	6.842	339.8	12.33	74.43	29.19	0
8/19/2021 18:15	5.181	328.4	7.084	74.16	29.19	0
8/19/2021 18:30	4.365	353.1	14.54	73.43	29.19	0
8/19/2021 18:45	3.461	348.7	10.69	72.96	29.19	0
8/19/2021 19:00	4.131	332.3	3.754	72.28	29.19	0
8/19/2021 19:15	3.932	321.6	11.78	71.6	29.19	0
8/19/2021 19:30	5.094	307.2	3.634	70.85	29.19	0
8/19/2021 19:45	6.152	275.4	26.88	70.16	29.19	0
8/19/2021 20:00	10.26	242.8	6.224	67.95	29.19	0
8/19/2021 20:15	7.628	244.6	8.82	66.64	29.19	0
8/19/2021 20:30	5.145	238.3	15.19	65.62	29.2	0
8/19/2021 20:45	3.877	218.7	16.69	64.79	29.2	0
8/19/2021 21:00	3.816	218.2	14.88	64.26	29.21	0
8/19/2021 21:15	5.85	216.9	10.22	63.76	29.21	0
8/19/2021 21:30	6.478	187.3	11.02	62.71	29.21	0
8/19/2021 21:45	6.933	197.9	8.67	61.75	29.21	0
8/19/2021 22:00	6.601	205.2	11.64	61.23	29.21	0
8/19/2021 22:15	7.142	214.5	7.863	60.71	29.21	0
8/19/2021 22:30	4.682	193	11.32	60.1	29.21	0
8/19/2021 22:45	4.894	190.5	10.94	59.62	29.21	0
8/19/2021 23:00	5.001	183	10.8	59.38	29.21	0
8/19/2021 23:15	4.627	187.7	9.62	59.5	29.21	0
8/19/2021 23:30	5.453	185.8	8.55	59.28	29.21	0
8/19/2021 23:45	6.412	184.9	10.22	59.08	29.21	0
8/20/2021 0:00	6.515	181.8	11.41	58.6	29.21	0
8/20/2021 0:15	6.17	172	9.02	58.33	29.2	0
8/20/2021 0:30	6.08	185.5	12.79	58.17	29.2	0
8/20/2021 0:45	7.738	200.4	11.23	57.96	29.2	0
8/20/2021 1:00	8.66	204.8	9.08	57.3	29.2	0
8/20/2021 1:15	7.938	214.2	6.879	56.9	29.21	0
8/20/2021 1:30	6.425	200.7	13.23	56.57	29.21	0
8/20/2021 1:45	4.939	176.9	21.34	56.66	29.21	0
8/20/2021 2:00	4.483	168.9	13.17	56.61	29.21	0
8/20/2021 2:15	3.556	142.3	18.7	56.62	29.2	0
8/20/2021 2:30	4.75	153.6	17.68	56.77	29.2	0
8/20/2021 2:45	6.715	178.7	9.09	56.9	29.2	0
8/20/2021 3:00	6.24	172.6	9.48	56.85	29.2	0
8/20/2021 3:15	5.371	188.9	11	56.9	29.19	0
8/20/2021 3:30	4.499	187.1	10.15	56.86	29.19	0
8/20/2021 3:45	4.497	183.5	13.67	56.76	29.19	0
8/20/2021 4:00	4.195	204.2	15.12	56.83	29.2	0
8/20/2021 4:15	3.989	207.2	9.75	56.54	29.19	0
8/20/2021 4:30	3.865	179.3	21.36	56.42	29.19	0
8/20/2021 4:45	4.613	169.5	10.56	56.34	29.19	0
8/20/2021 5:00	4.947	161.8	11.8	56.21	29.19	0
8/20/2021 5:15	5.013	170.6	10.13	56.13	29.19	0
8/20/2021 5:30	4.754	180.8	19.27	56.08	29.19	0
8/20/2021 5:45	5.128	165.1	8.66	55.99	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/20/2021 6:00	5.384	163.7	10.06	56.15	29.19	0
8/20/2021 6:15	5.305	162.8	10.03	56.24	29.19	0
8/20/2021 6:30	5.723	168.9	11.4	56.44	29.19	0
8/20/2021 6:45	4.296	172.8	20.72	56.46	29.19	0
8/20/2021 7:00	4.669	188.1	12.37	56.82	29.19	0
8/20/2021 7:15	4.212	222.8	21.11	56.9	29.19	0
8/20/2021 7:30	4.585	206.5	13.54	56.48	29.19	0
8/20/2021 7:45	5.024	214.9	10.59	56.65	29.19	0
8/20/2021 8:00	3.866	197.8	18.44	56.73	29.18	0
8/20/2021 8:15	5.092	180.2	11	57.16	29.18	0
8/20/2021 8:30	4.237	174	16.57	57.09	29.18	0
8/20/2021 8:45	5.572	209.1	14.37	57.52	29.18	0
8/20/2021 9:00	4.138	183.7	15.01	56.87	29.18	0
8/20/2021 9:15	6.277	184.2	15.15	57.34	29.18	0
8/20/2021 9:30	5.823	195.9	17.11	57.21	29.18	0
8/20/2021 9:45	5.7	193.7	15.87	56.98	29.18	0
8/20/2021 10:00	5.883	204.3	8.61	56.9	29.18	0
8/20/2021 10:15	7.187	204	10.82	57.01	29.18	0
8/20/2021 10:30	6.798	174.2	16.09	57.8	29.17	0
8/20/2021 10:45	8.14	171.5	14.65	58.44	29.17	0
8/20/2021 11:00	6.895	146.3	13.72	58.92	29.16	0
8/20/2021 11:15	7.092	156.5	13.07	58.82	29.16	0
8/20/2021 11:30	5.219	135.2	18.98	59.46	29.16	0
8/20/2021 11:45	5.062	127.8	11.55	59.23	29.16	0
8/20/2021 12:00	4.961	114.8	12.18	59.3	29.15	0
8/20/2021 12:15	6.34	116.9	14.28	59.41	29.15	0
8/20/2021 12:30	6.108	115.5	12.9	59.42	29.14	0
8/20/2021 12:45	4.19	124.4	18.85	59.82	29.14	0
8/20/2021 13:00	3.649	177.5	24.01	60.07	29.14	0
8/20/2021 13:15	3.388	178.1	17.51	60.53	29.14	0
8/20/2021 13:30	3.883	180.7	22.19	61.17	29.13	0
8/20/2021 13:45	6.122	146	17.55	61.66	29.13	0
8/20/2021 14:00	6.328	159	15.1	61.67	29.13	0
8/20/2021 14:15	4.609	165.8	23.12	61.71	29.12	0
8/20/2021 14:30	4.784	170.8	16.6	61.63	29.12	0
8/20/2021 14:45	3.983	147.2	21.51	62.09	29.12	0
8/20/2021 15:00	5.151	212.9	60.5	61.66	29.12	0
8/20/2021 15:15	9.55	258.3	9.22	60.22	29.11	0
8/20/2021 15:30	8.12	249.9	7.998	60	29.11	0
8/20/2021 15:45	5.145	270.4	14.41	59.96	29.11	0
8/20/2021 16:00	5.355	274.5	11.98	60.06	29.11	0
8/20/2021 16:15	4.249	278	13.26	60.22	29.1	0
8/20/2021 16:30	2.082	281.2	13.08	60.27	29.1	0
8/20/2021 16:45	2.504	286.7	11.1	60.62	29.1	0
8/20/2021 17:00	3.11	298.7	13.17	60.82	29.1	0
8/20/2021 17:15	5.382	276.6	17.02	60.87	29.09	0
8/20/2021 17:30	6.822	274.2	9.36	60.11	29.09	0
8/20/2021 17:45	4.64	280	16.87	59.62	29.09	0
8/20/2021 18:00	2.732	300.1	11.78	59.49	29.08	0
8/20/2021 18:15	2.35	325.7	23.45	59.38	29.08	0
8/20/2021 18:30	3.52	28.68	6.043	59.02	29.08	0
8/20/2021 18:45	4.427	22.24	5.577	58.85	29.08	0
8/20/2021 19:00	5.03	21.87	6.187	58.81	29.07	0
8/20/2021 19:15	4.471	13.98	5.53	58.81	29.07	0
8/20/2021 19:30	4.776	324.3	30.15	58.93	29.07	0
8/20/2021 19:45	7.292	281	8.23	58.98	29.07	0
8/20/2021 20:00	8.98	268.8	8.37	57.5	29.07	0
8/20/2021 20:15	8.43	273	6.751	56.41	29.08	0
8/20/2021 20:30	6.366	280.3	6.777	56.02	29.08	0
8/20/2021 20:45	5.999	298.2	7.047	55.75	29.08	0
8/20/2021 21:00	5.265	299	8.7	55.41	29.08	0
8/20/2021 21:15	4.703	283.4	8.67	55.4	29.08	0
8/20/2021 21:30	4.175	268.7	10.35	55.42	29.07	0
8/20/2021 21:45	5.847	205.3	18.79	55.4	29.07	0
8/20/2021 22:00	2.529	330.4	83.8	55.14	29.07	0
8/20/2021 22:15	3.321	24.68	7.011	54.98	29.07	0
8/20/2021 22:30	2.625	13.26	9.29	54.79	29.06	0
8/20/2021 22:45	2.732	349.2	11.57	54.94	29.06	0
8/20/2021 23:00	2.338	305	12.71	55.36	29.06	0
8/20/2021 23:15	2.789	302.4	5.668	55.61	29.06	0
8/20/2021 23:30	2.71	303.1	12.13	55.44	29.06	0
8/20/2021 23:45	3.067	292.8	7.907	55.36	29.06	0
8/21/2021 0:00	3.144	299.4	5.259	55.29	29.06	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/21/2021 0:15	3.14	298.1	5.821	55.15	29.05	0
8/21/2021 0:30	2.902	258.8	22.51	55.2	29.05	0
8/21/2021 0:45	0.984	61.33	39.78	55.02	29.04	0
8/21/2021 1:00	0.587	45.48	0.235	54.61	29.04	0
8/21/2021 1:15	0.42	45.48	0.071	54.54	29.04	0
8/21/2021 1:30	0.52	53.47	7.393	54.51	29.04	0
8/21/2021 1:45	1.248	77.01	1.513	54.43	29.04	0
8/21/2021 2:00	0.029	76.54	0.005	54.61	29.04	0
8/21/2021 2:15	0.403	76.46	0.091	54.78	29.04	0
8/21/2021 2:30	0.967	76.71	0.318	54.73	29.04	0
8/21/2021 2:45	0.073	76.48	0.272	54.67	29.04	0
8/21/2021 3:00	0.808	179.9	53.15	55.06	29.04	0
8/21/2021 3:15	0.597	321.6	25.11	55.1	29.04	0
8/21/2021 3:30	0.319	316.7	1.052	54.97	29.04	0
8/21/2021 3:45	0.326	300.1	18.13	54.91	29.04	0
8/21/2021 4:00	0	0	0	54.85	29.04	0
8/21/2021 4:15	0.649	322.8	22.88	54.8	29.04	0
8/21/2021 4:30	0.324	0.945	3.365	54.26	29.04	0
8/21/2021 4:45	0.932	1.621	5.781	54.28	29.04	0
8/21/2021 5:00	0.569	0.283	1.731	54.16	29.04	0
8/21/2021 5:15	0.322	48.41	7.045	54.12	29.04	0
8/21/2021 5:30	0.543	49.85	6.753	54.22	29.04	0
8/21/2021 5:45	0.228	33.4	1.294	54.29	29.04	0
8/21/2021 6:00	0.156	46.53	16.86	54.21	29.05	0
8/21/2021 6:15	0.938	347.1	23.91	54.33	29.05	0
8/21/2021 6:30	2.391	356.5	21.43	54.17	29.05	0
8/21/2021 6:45	0.902	37	8.6	54.21	29.05	0
8/21/2021 7:00	0.564	91.5	18.6	54.26	29.05	0
8/21/2021 7:15	0.822	73.76	29.06	54.26	29.05	0
8/21/2021 7:30	1.943	119.5	22.88	54.07	29.05	0
8/21/2021 7:45	1.218	97	15.58	54.3	29.05	0
8/21/2021 8:00	1.784	86.8	23.49	54.35	29.05	0
8/21/2021 8:15	2.168	73.21	12.89	54.38	29.05	0
8/21/2021 8:30	2.856	101.4	17.56	54.34	29.05	0
8/21/2021 8:45	2.376	86.9	9.49	54.63	29.05	0
8/21/2021 9:00	3.413	74.53	6.464	54.73	29.05	0
8/21/2021 9:15	2.922	77.17	12.85	55	29.05	0
8/21/2021 9:30	3.759	80.9	12.76	55.59	29.05	0
8/21/2021 9:45	5.006	90.9	13.92	56.19	29.05	0
8/21/2021 10:00	4.601	92.8	18.52	57.45	29.04	0
8/21/2021 10:15	2.854	133.8	35.38	58.11	29.04	0
8/21/2021 10:30	2.838	197.5	44.23	58.77	29.04	0
8/21/2021 10:45	3.262	249.7	14.29	59.6	29.04	0
8/21/2021 11:00	2.618	230.8	25.72	60.17	29.04	0
8/21/2021 11:15	1.371	307.5	31.24	60.44	29.04	0
8/21/2021 11:30	2.572	284.3	14.68	60.62	29.04	0
8/21/2021 11:45	2.38	314.5	20.76	60.93	29.04	0
8/21/2021 12:00	3.08	312.8	35.74	61.02	29.04	0
8/21/2021 12:15	3.544	289.4	23.34	61.29	29.04	0
8/21/2021 12:30	1.618	317.4	76.29	61.8	29.04	0
8/21/2021 12:45	1.053	320.1	40.85	62.86	29.04	0
8/21/2021 13:00	3.349	68.77	40.61	62.62	29.04	0
8/21/2021 13:15	4.077	77.94	16.75	62.54	29.04	0
8/21/2021 13:30	2.375	67.55	19.29	63.01	29.04	0
8/21/2021 13:45	1.803	339.7	94.2	63.79	29.04	0
8/21/2021 14:00	1.92	265.1	56.76	64.17	29.04	0
8/21/2021 14:15	3.171	267.3	40.03	64.13	29.04	0
8/21/2021 14:30	2.86	273.7	21.87	63.87	29.04	0
8/21/2021 14:45	4.591	215.1	28	63.92	29.04	0
8/21/2021 15:00	3.409	202.4	36.65	64.02	29.04	0
8/21/2021 15:15	3.309	212.8	21.46	64.25	29.03	0
8/21/2021 15:30	4.742	190.5	32.66	64.41	29.03	0
8/21/2021 15:45	6.139	218.6	12.53	64.2	29.04	0
8/21/2021 16:00	5.087	213.9	15	64.06	29.04	0
8/21/2021 16:15	4.22	210.9	14.38	64.28	29.04	0
8/21/2021 16:30	3.566	219.4	21.79	64.31	29.04	0
8/21/2021 16:45	2.353	217.5	42.62	64.2	29.03	0
8/21/2021 17:00	2.245	194.5	23.29	64.34	29.03	0
8/21/2021 17:15	3.124	125.3	27.56	64.2	29.03	0
8/21/2021 17:30	3.214	135.4	13.86	64.02	29.03	0
8/21/2021 17:45	3.973	150.5	16.72	63.91	29.03	0
8/21/2021 18:00	3.303	160.4	12.61	63.76	29.03	0
8/21/2021 18:15	2.829	116.6	13.7	63.37	29.03	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/21/2021 18:30	2.893	102.5	5.316	62.97	29.03	0
8/21/2021 18:45	2.957	106.7	7.098	62.66	29.03	0
8/21/2021 19:00	3.709	122.3	5.454	62.48	29.03	0
8/21/2021 19:15	4.32	122.2	6.295	62.28	29.03	0
8/21/2021 19:30	4.387	124.9	7.21	62.03	29.03	0
8/21/2021 19:45	4.35	147.6	18.03	61.87	29.04	0
8/21/2021 20:00	4.857	188.9	12.87	61.95	29.04	0
8/21/2021 20:15	4.356	147.7	17.44	61.51	29.04	0
8/21/2021 20:30	3.969	130.9	5.628	61.18	29.04	0
8/21/2021 20:45	4.823	129	7.373	61.07	29.04	0
8/21/2021 21:00	4.788	126.5	6.61	61.06	29.04	0
8/21/2021 21:15	5.811	135.3	4.552	60.95	29.05	0
8/21/2021 21:30	4.992	155.4	18.3	60.86	29.05	0
8/21/2021 21:45	5.283	161.8	9.81	60.92	29.05	0
8/21/2021 22:00	2.602	143.9	9.59	60.46	29.05	0
8/21/2021 22:15	3.685	145.1	14.96	60.21	29.05	0
8/21/2021 22:30	3.644	133.2	13.33	59.75	29.05	0
8/21/2021 22:45	4.692	124.4	9.2	59.35	29.05	0
8/21/2021 23:00	3.582	125.2	7.101	58.67	29.05	0
8/21/2021 23:15	3.256	102.7	14.39	57.98	29.05	0
8/21/2021 23:30	1.12	112.4	23.92	57.73	29.05	0
8/21/2021 23:45	3.839	159.3	16.68	58	29.05	0
8/22/2021 0:00	6.486	201.3	10.23	58.87	29.05	0
8/22/2021 0:15	2.676	133.9	22.8	58.2	29.05	0
8/22/2021 0:30	0.598	102.4	20.93	57.68	29.04	0
8/22/2021 0:45	3.169	115.9	14.43	57.5	29.04	0
8/22/2021 1:00	3.895	129.6	8.44	57.38	29.04	0
8/22/2021 1:15	4.099	143.4	5.832	57.29	29.04	0
8/22/2021 1:30	3.685	150.3	8.02	57.37	29.04	0
8/22/2021 1:45	3.238	147.4	8.04	57.52	29.05	0
8/22/2021 2:00	2.293	140.7	19.77	57.43	29.04	0
8/22/2021 2:15	4.753	160.1	7.293	57.64	29.04	0
8/22/2021 2:30	6.195	162.3	8.72	57.76	29.04	0
8/22/2021 2:45	7	164.2	9.1	57.71	29.04	0
8/22/2021 3:00	7.994	157.5	12.72	57.56	29.04	0
8/22/2021 3:15	7.544	147.6	8.29	57.31	29.04	0
8/22/2021 3:30	7.058	144.2	10.36	57.32	29.04	0
8/22/2021 3:45	7.478	138.8	6.935	57.13	29.04	0
8/22/2021 4:00	8.02	144.7	7.469	57.06	29.04	0
8/22/2021 4:15	7.719	145.4	8.58	56.96	29.04	0
8/22/2021 4:30	7.034	151.8	11.22	56.9	29.04	0
8/22/2021 4:45	9.12	160.3	8.91	56.87	29.03	0
8/22/2021 5:00	8.49	153.1	9.42	56.69	29.03	0
8/22/2021 5:15	7.908	167.6	10.86	56.53	29.03	0
8/22/2021 5:30	11.01	173.6	8.08	56.31	29.03	0
8/22/2021 5:45	9.56	170.5	10.2	56.23	29.04	0
8/22/2021 6:00	8.09	170.2	8.98	56.17	29.04	0
8/22/2021 6:15	8.4	172.2	9.12	56.21	29.04	0
8/22/2021 6:30	8.27	178.2	9.72	56.26	29.04	0
8/22/2021 6:45	9.78	175.8	10.19	56.25	29.04	0
8/22/2021 7:00	8.59	191	12.11	56.21	29.04	0
8/22/2021 7:15	7.787	183.9	11.4	56.2	29.04	0
8/22/2021 7:30	8.45	185.2	13.52	56.41	29.04	0
8/22/2021 7:45	8.72	183.6	13.66	56.48	29.04	0
8/22/2021 8:00	9.22	185.9	14.19	56.46	29.04	0
8/22/2021 8:15	9.6	196.9	15.5	56.44	29.04	0
8/22/2021 8:30	6.881	186.7	18.94	56.7	29.04	0
8/22/2021 8:45	7.644	187.3	13.71	56.77	29.05	0
8/22/2021 9:00	9.27	187.2	15.67	56.86	29.04	0
8/22/2021 9:15	10.07	188.3	16.73	56.96	29.05	0
8/22/2021 9:30	8.89	169.5	11.12	57.54	29.05	0
8/22/2021 9:45	11.25	187.6	15.93	57.72	29.05	0
8/22/2021 10:00	10.09	196.2	13.11	58.09	29.06	0
8/22/2021 10:15	10	199.6	14.99	58.78	29.06	0
8/22/2021 10:30	9.57	175.3	13.81	59.49	29.06	0
8/22/2021 10:45	10.57	178.9	13.07	59.15	29.06	0
8/22/2021 11:00	8.97	185.1	13.49	59.5	29.06	0
8/22/2021 11:15	8.97	184	12.56	59.4	29.06	0
8/22/2021 11:30	10.53	224.3	19.7	59.01	29.06	0
8/22/2021 11:45	11.94	226.3	10.04	58.64	29.06	0
8/22/2021 12:00	13.63	210.7	8.07	58.56	29.07	0
8/22/2021 12:15	12.89	212.8	9.22	58.94	29.07	0
8/22/2021 12:30	10.07	200.5	15.54	59.41	29.07	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/22/2021 12:45	10.59	196.3	17.3	60.11	29.07	0
8/22/2021 13:00	10.72	169.3	11.83	60.61	29.07	0
8/22/2021 13:15	12.11	189.1	14.13	60.81	29.07	0
8/22/2021 13:30	10.21	188.4	16.7	60.93	29.08	0
8/22/2021 13:45	9.14	185.5	17.39	61.02	29.08	0
8/22/2021 14:00	9.84	183.7	16.75	61.59	29.07	0
8/22/2021 14:15	9.63	176.6	18.35	62.15	29.07	0
8/22/2021 14:30	9.87	174.8	21.93	62.97	29.07	0
8/22/2021 14:45	10.42	190.5	15.02	63.13	29.07	0
8/22/2021 15:00	12.04	189.7	15.23	62.82	29.07	0
8/22/2021 15:15	10.96	194.8	12.6	62.69	29.07	0
8/22/2021 15:30	8.55	190.4	14.27	62.87	29.07	0
8/22/2021 15:45	7.758	207.5	16.24	63.2	29.06	0
8/22/2021 16:00	7.923	210.4	14.57	62.96	29.06	0
8/22/2021 16:15	8.07	210.8	9.41	63.05	29.06	0
8/22/2021 16:30	8.78	213	9.34	63.21	29.06	0
8/22/2021 16:45	8.51	202.6	13	63.28	29.06	0
8/22/2021 17:00	6.701	226.3	30.65	63.22	29.06	0
8/22/2021 17:15	5.701	255.9	13.14	62.81	29.06	0
8/22/2021 17:30	5.804	249.9	9.58	62.72	29.06	0
8/22/2021 17:45	5.968	255.3	9.86	62.65	29.06	0
8/22/2021 18:00	7.968	252.5	10.03	62.32	29.06	0
8/22/2021 18:15	7.057	255.9	10.58	61.91	29.06	0
8/22/2021 18:30	7.398	257.7	9.69	61.48	29.06	0
8/22/2021 18:45	6.751	253.5	8.9	61.27	29.07	0
8/22/2021 19:00	5.471	256.6	8.87	61.07	29.07	0
8/22/2021 19:15	5.004	252.3	5.825	60.84	29.07	0
8/22/2021 19:30	4.644	251.7	7.898	60.64	29.07	0
8/22/2021 19:45	2.767	309.1	32.88	60.26	29.08	0
8/22/2021 20:00	2.778	15.93	8.58	58.91	29.08	0
8/22/2021 20:15	2.531	11.99	8.97	58.49	29.09	0
8/22/2021 20:30	3.856	262.1	71.17	58.97	29.09	0
8/22/2021 20:45	6.035	224.9	8.11	59.88	29.09	0
8/22/2021 21:00	6.463	231.6	8.91	59.61	29.1	0
8/22/2021 21:15	7.732	222.4	7.831	59.14	29.1	0
8/22/2021 21:30	6.333	231.1	7.755	58.82	29.1	0
8/22/2021 21:45	6.321	239.1	10.39	58.57	29.1	0
8/22/2021 22:00	7.53	230.8	9.67	58.24	29.1	0
8/22/2021 22:15	8.15	220.5	6.56	57.85	29.1	0
8/22/2021 22:30	6.561	218.6	4.928	57.37	29.1	0
8/22/2021 22:45	4.969	188.8	13.04	56.62	29.11	0
8/22/2021 23:00	5.304	188.7	10.54	56.19	29.11	0
8/22/2021 23:15	5.343	172.9	9.41	55.87	29.11	0
8/22/2021 23:30	6.34	184.1	14.2	55.62	29.11	0
8/22/2021 23:45	5.118	191.2	9.31	55.3	29.12	0
8/23/2021 0:00	3.309	159.2	21.66	54.58	29.12	0
8/23/2021 0:15	5.702	151.1	16.86	53.96	29.12	0
8/23/2021 0:30	5.585	130.1	8.19	53.16	29.12	0
8/23/2021 0:45	5.727	131.1	6.477	52.96	29.12	0
8/23/2021 1:00	6.401	134.8	4.964	52.88	29.13	0
8/23/2021 1:15	6.719	137.2	5.372	52.87	29.13	0
8/23/2021 1:30	6.447	142	4.621	52.67	29.13	0
8/23/2021 1:45	6.378	147.7	7.095	52.77	29.13	0
8/23/2021 2:00	6.631	151.7	10.37	52.86	29.13	0
8/23/2021 2:15	7.437	171.1	9.92	52.91	29.14	0
8/23/2021 2:30	6.022	173.4	9.22	52.75	29.14	0
8/23/2021 2:45	5.957	151	14.46	52.57	29.14	0
8/23/2021 3:00	6.614	144.3	7.963	52.28	29.15	0
8/23/2021 3:15	5.766	153.8	16.37	52.14	29.15	0
8/23/2021 3:30	6.835	145.6	15.41	51.91	29.15	0
8/23/2021 3:45	6.576	141.4	8.81	51.85	29.15	0
8/23/2021 4:00	7.501	139.1	7.183	51.63	29.15	0
8/23/2021 4:15	6.835	140	5.457	51.4	29.15	0
8/23/2021 4:30	8.48	139.8	6.656	50.9	29.15	0
8/23/2021 4:45	7.566	137.4	5.106	50.02	29.16	0
8/23/2021 5:00	6.689	133.8	6.89	49.67	29.16	0
8/23/2021 5:15	5.108	120.2	7.381	50.29	29.17	0
8/23/2021 5:30	5.737	122	6.954	50.61	29.16	0
8/23/2021 5:45	5.537	110.8	7.671	50.81	29.16	0
8/23/2021 6:00	4.649	109.4	10.07	51.04	29.17	0
8/23/2021 6:15	4.719	112.9	9.07	51.27	29.17	0
8/23/2021 6:30	3.851	96.1	12.54	51.66	29.18	0
8/23/2021 6:45	4.992	101.9	10.67	52.11	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/23/2021 7:00	4.81	113.9	11.98	52.54	29.19	0
8/23/2021 7:15	5.453	114.4	17.06	53.1	29.19	0
8/23/2021 7:30	6.051	142.2	12.71	53.42	29.2	0
8/23/2021 7:45	4.913	123	13.45	53.56	29.2	0
8/23/2021 8:00	4.545	129	21.26	53.93	29.2	0
8/23/2021 8:15	4.761	138.8	17.15	54.57	29.2	0
8/23/2021 8:30	5.614	167.9	27.45	56.08	29.2	0
8/23/2021 8:45	6.221	173.4	27.39	56.57	29.2	0
8/23/2021 9:00	7.425	167.3	23.89	57.27	29.21	0
8/23/2021 9:15	6.637	181.2	32.49	58.78	29.21	0
8/23/2021 9:30	7.39	204.5	14.5	58.25	29.21	0
8/23/2021 9:45	6.358	188	18.79	57.86	29.21	0
8/23/2021 10:00	5.348	191.7	31.27	59.27	29.21	0
8/23/2021 10:15	6.145	178.6	24.05	59.71	29.21	0
8/23/2021 10:30	3.791	114.1	93.9	60.78	29.21	0
8/23/2021 10:45	5.737	208.1	16.53	60.47	29.21	0
8/23/2021 11:00	3.471	236.9	41.33	61.64	29.21	0
8/23/2021 11:15	4.551	238.7	34.92	62.11	29.21	0
8/23/2021 11:30	6.067	209.3	16.62	62.59	29.21	0
8/23/2021 11:45	6.857	233.9	36.23	64.16	29.21	0
8/23/2021 12:00	4.791	201.6	35.16	63.23	29.21	0
8/23/2021 12:15	7.314	254.9	23.87	63.96	29.21	0
8/23/2021 12:30	4.768	296.8	28.57	63.98	29.21	0
8/23/2021 12:45	9.42	298.9	16.69	64.91	29.21	0
8/23/2021 13:00	7.932	265.1	18.06	65.21	29.21	0
8/23/2021 13:15	6.386	305.5	25.1	65.81	29.21	0
8/23/2021 13:30	7.796	321	26.01	64.81	29.21	0
8/23/2021 13:45	6.149	311.2	26.28	65.1	29.21	0
8/23/2021 14:00	4.951	293.6	42.11	66.02	29.21	0
8/23/2021 14:15	3.131	267	80.1	65.79	29.21	0
8/23/2021 14:30	7.185	302.4	33.22	66.65	29.21	0
8/23/2021 14:45	5.877	344	22.34	65.71	29.21	0
8/23/2021 15:00	4.746	335.8	38.69	67.01	29.21	0
8/23/2021 15:15	4.528	336	20.93	66.25	29.2	0
8/23/2021 15:30	4.771	311.3	49.23	67.4	29.2	0
8/23/2021 15:45	4.405	274.6	30.14	66.93	29.2	0
8/23/2021 16:00	3.394	219.5	77.82	66.68	29.2	0
8/23/2021 16:15	5.971	280.4	16.19	68.02	29.2	0
8/23/2021 16:30	4.522	325.9	26.24	68.11	29.2	0
8/23/2021 16:45	5.351	300.9	28.78	68.57	29.2	0
8/23/2021 17:00	8.68	277.3	20.83	68.12	29.19	0
8/23/2021 17:15	6.812	293.1	19.78	68.1	29.19	0
8/23/2021 17:30	6.682	311.9	8.84	67.73	29.19	0
8/23/2021 17:45	3.885	311.3	40.43	67.93	29.19	0
8/23/2021 18:00	4.581	13.14	17.35	66.57	29.19	0
8/23/2021 18:15	6.438	310.5	13.59	66.33	29.19	0
8/23/2021 18:30	6.357	309.1	8.67	65.51	29.19	0
8/23/2021 18:45	7.898	302.4	7.889	64.46	29.19	0
8/23/2021 19:00	8.31	300.7	5.07	63.44	29.2	0
8/23/2021 19:15	7.304	303.2	4.077	62.48	29.2	0
8/23/2021 19:30	7.107	307.5	5.181	62.23	29.2	0
8/23/2021 19:45	7.083	301.4	5.974	62.13	29.2	0
8/23/2021 20:00	4.966	302.9	22.14	62.33	29.21	0
8/23/2021 20:15	2.869	312	12.26	62.31	29.21	0
8/23/2021 20:30	2.777	21.19	31.11	60.89	29.21	0
8/23/2021 20:45	4.365	23.35	16.34	59.1	29.21	0
8/23/2021 21:00	3.927	13.24	13.91	60.11	29.21	0
8/23/2021 21:15	4.303	7.895	14.91	58.93	29.21	0
8/23/2021 21:30	4.034	358.5	22.74	58.79	29.21	0
8/23/2021 21:45	7.399	348.4	15.26	59.45	29.2	0
8/23/2021 22:00	8.38	357.5	12.97	59.04	29.2	0
8/23/2021 22:15	5.772	15.59	18.05	58.95	29.2	0
8/23/2021 22:30	5.895	46.67	15.72	58.04	29.21	0
8/23/2021 22:45	7.251	51.87	15.7	59.25	29.21	0
8/23/2021 23:00	4.866	25.31	13.66	58.45	29.21	0
8/23/2021 23:15	5.708	29.39	6.377	57.96	29.21	0
8/23/2021 23:30	4.18	22.77	15.74	57.45	29.21	0
8/23/2021 23:45	1.049	27.64	40.37	57.01	29.21	0
8/24/2021 0:00	4.058	172.8	40.38	55.88	29.21	0
8/24/2021 0:15	2.313	183.9	17.02	55.24	29.21	0
8/24/2021 0:30	1.902	192	23.3	55.76	29.21	0
8/24/2021 0:45	2.257	170.1	48.25	54.61	29.21	0
8/24/2021 1:00	1.588	96.9	40.49	53.18	29.21	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/24/2021 1:15	0.946	29.81	5.4	53.82	29.21	0
8/24/2021 1:30	0.8	31.77	3.13	54.23	29.21	0
8/24/2021 1:45	1.66	23.94	8.36	53.55	29.21	0
8/24/2021 2:00	1.171	45.84	4.003	52.77	29.2	0
8/24/2021 2:15	1.149	37.94	2.279	53.46	29.2	0
8/24/2021 2:30	0.783	20.6	4.74	53.34	29.2	0
8/24/2021 2:45	0.766	16.08	1.766	52.3	29.2	0
8/24/2021 3:00	2.052	26.72	3.353	51.79	29.2	0
8/24/2021 3:15	3.014	13.03	8.87	52.13	29.2	0
8/24/2021 3:30	3.305	20.88	6.966	51.41	29.2	0
8/24/2021 3:45	2.865	40.21	13.07	50.39	29.2	0
8/24/2021 4:00	3.363	53.79	4.713	49.85	29.2	0
8/24/2021 4:15	3.446	39.82	14.99	49.39	29.2	0
8/24/2021 4:30	3.881	2.672	13.89	49.71	29.2	0
8/24/2021 4:45	3.465	352.7	12.38	50.97	29.2	0
8/24/2021 5:00	2.891	11.8	10.07	50.65	29.21	0
8/24/2021 5:15	3.261	22.2	5.017	50.04	29.21	0
8/24/2021 5:30	2.684	22.1	5.69	49.3	29.22	0
8/24/2021 5:45	2.695	28.25	6.703	49.52	29.22	0
8/24/2021 6:00	2.031	97.3	33.99	51.16	29.22	0
8/24/2021 6:15	2.977	144.6	12.25	51.35	29.23	0
8/24/2021 6:30	2.065	94.9	11.92	52.16	29.23	0
8/24/2021 6:45	2.252	91.2	18.04	52.85	29.23	0
8/24/2021 7:00	1.752	84.4	16.38	53.55	29.23	0
8/24/2021 7:15	3.085	114.7	19.55	54.57	29.23	0
8/24/2021 7:30	2.997	136.3	27.37	55.23	29.23	0
8/24/2021 7:45	2.937	182.2	28.03	55.71	29.23	0
8/24/2021 8:00	2.16	220.3	26.8	56.46	29.23	0
8/24/2021 8:15	1.537	208.3	43.61	57.63	29.23	0
8/24/2021 8:30	1.918	133.5	45.44	59.77	29.23	0
8/24/2021 8:45	1.989	51.81	40.76	60.64	29.23	0
8/24/2021 9:00	2.31	45.91	42.98	61.29	29.23	0
8/24/2021 9:15	2.853	338.9	25.29	61.74	29.23	0
8/24/2021 9:30	2.765	311.7	32.07	62.44	29.23	0
8/24/2021 9:45	2.458	349.3	55.26	64.33	29.22	0
8/24/2021 10:00	3.689	348.2	39.11	64.95	29.22	0
8/24/2021 10:15	3.864	341.5	27.38	65.72	29.22	0
8/24/2021 10:30	2.89	336.7	45.89	67.14	29.22	0
8/24/2021 10:45	4.436	349.3	34.76	68.43	29.21	0
8/24/2021 11:00	4.556	293.1	30.32	68.51	29.21	0
8/24/2021 11:15	5.129	344.2	42.48	69.83	29.2	0
8/24/2021 11:30	5.811	7.751	23.89	70.64	29.2	0
8/24/2021 11:45	6.906	28.62	19.51	70.58	29.19	0
8/24/2021 12:00	5.217	353.8	42.43	72.16	29.19	0
8/24/2021 12:15	5.05	359.4	42.36	72.68	29.19	0
8/24/2021 12:30	5.869	347.1	22.35	73.54	29.18	0
8/24/2021 12:45	6.606	343.4	25.14	74.55	29.17	0
8/24/2021 13:00	7.837	334.8	36.81	75.6	29.17	0
8/24/2021 13:15	8.3	12.35	17.15	75.19	29.17	0
8/24/2021 13:30	8.96	326.1	23.34	76.21	29.16	0
8/24/2021 13:45	9	298.8	16.66	76.18	29.16	0
8/24/2021 14:00	6.496	340.8	24.17	76.58	29.15	0
8/24/2021 14:15	8.21	354.6	24.34	76.83	29.15	0
8/24/2021 14:30	9.34	321	23.52	77.15	29.14	0
8/24/2021 14:45	8.82	334.6	18.56	76.79	29.14	0
8/24/2021 15:00	8.9	320.9	16.92	76.83	29.14	0
8/24/2021 15:15	9.47	334	20.33	77.17	29.13	0
8/24/2021 15:30	10.89	334.3	25.89	76.57	29.13	0
8/24/2021 15:45	9.24	8.97	16.65	76.11	29.13	0
8/24/2021 16:00	7.685	350.4	20.49	76.36	29.13	0
8/24/2021 16:15	8.81	353	18.32	76.25	29.12	0
8/24/2021 16:30	8.42	347.9	16.1	76.13	29.13	0
8/24/2021 16:45	8.09	328.7	11.4	75.82	29.12	0
8/24/2021 17:00	8.99	329.3	15.38	75.29	29.12	0
8/24/2021 17:15	7.409	335.1	11.5	74.71	29.12	0
8/24/2021 17:30	7.632	300.8	8.23	73.89	29.12	0
8/24/2021 17:45	6.94	301.7	6.914	73.17	29.12	0
8/24/2021 18:00	6.915	313.1	8.29	72.9	29.12	0
8/24/2021 18:15	6.618	314.9	6.767	72.58	29.12	0
8/24/2021 18:30	6.21	312.6	8.3	72.04	29.12	0
8/24/2021 18:45	5.254	305.1	12.26	71.46	29.13	0
8/24/2021 19:00	2.797	343.4	30.69	70.63	29.13	0
8/24/2021 19:15	2.278	3.095	41.51	69.77	29.13	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/24/2021 19:30	5.938	21.07	9.14	67.87	29.13	0
8/24/2021 19:45	6.472	20.41	10.06	66.87	29.14	0
8/24/2021 20:00	4.467	350.4	34.84	66.49	29.14	0
8/24/2021 20:15	1.818	327.5	33.55	66.9	29.15	0
8/24/2021 20:30	2.968	341.4	42.51	66.55	29.15	0
8/24/2021 20:45	4.124	3.467	17.34	65.71	29.16	0
8/24/2021 21:00	7.578	20.91	7.239	64.44	29.16	0
8/24/2021 21:15	7.88	27.21	5.67	64.06	29.16	0
8/24/2021 21:30	8.81	22.19	5.81	63.54	29.15	0
8/24/2021 21:45	7.705	30.29	5.649	63.1	29.15	0
8/24/2021 22:00	8.06	17.05	7.748	62.61	29.15	0
8/24/2021 22:15	6.423	25.29	9.16	61.83	29.15	0
8/24/2021 22:30	8.02	25	6.181	62.21	29.15	0
8/24/2021 22:45	7.051	27.96	6.605	61.65	29.15	0
8/24/2021 23:00	6.725	24.46	6.545	61.77	29.15	0
8/24/2021 23:15	5.671	29.79	7.013	61.27	29.15	0
8/24/2021 23:30	2.225	17.55	15.4	60.52	29.15	0
8/24/2021 23:45	2.603	31.05	12.29	59.99	29.15	0
8/25/2021 0:00	1.416	12.04	18.07	59.52	29.15	0
8/25/2021 0:15	0.184	288.3	29.58	60.91	29.16	0
8/25/2021 0:30	2.482	111.6	26.49	60.44	29.16	0
8/25/2021 0:45	3.057	51.72	8.92	59.16	29.16	0
8/25/2021 1:00	3.072	50.52	20.7	58.42	29.16	0
8/25/2021 1:15	3.433	88.5	9.14	57.8	29.16	0
8/25/2021 1:30	2.831	102.9	19.42	58.28	29.16	0
8/25/2021 1:45	2.038	122.4	15.8	58.28	29.16	0
8/25/2021 2:00	0.81	175.6	26.52	60	29.16	0
8/25/2021 2:15	0.608	343.6	23.06	60.16	29.16	0
8/25/2021 2:30	1.834	357.1	7.568	58.56	29.16	0
8/25/2021 2:45	2.165	19.97	13.03	58.96	29.17	0
8/25/2021 3:00	0.919	24.97	0.265	58.71	29.17	0
8/25/2021 3:15	0.032	25.02	0.008	57.86	29.17	0
8/25/2021 3:30	0.228	7.165	0.501	57.75	29.17	0
8/25/2021 3:45	0.748	10.07	0.421	58.18	29.17	0
8/25/2021 4:00	0.745	9.83	0.302	57.7	29.17	0
8/25/2021 4:15	0.651	92.7	67.43	56.66	29.17	0
8/25/2021 4:30	0	0	0	56.91	29.17	0
8/25/2021 4:45	0	0	0	57.22	29.18	0
8/25/2021 5:00	0.204	70.12	12.97	55.78	29.18	0
8/25/2021 5:15	1.309	70.04	9.67	55.49	29.18	0
8/25/2021 5:30	3.289	91.8	4.835	55.76	29.18	0
8/25/2021 5:45	3.103	108.2	11.66	55.24	29.18	0
8/25/2021 6:00	2.846	139	6.711	56.51	29.18	0
8/25/2021 6:15	3.305	153.3	6.684	57.03	29.19	0
8/25/2021 6:30	3.834	152.5	8.06	57.01	29.19	0
8/25/2021 6:45	3.632	155.8	10.82	56.85	29.19	0
8/25/2021 7:00	4.242	151.1	10.4	57.47	29.19	0
8/25/2021 7:15	3.938	165.8	9.88	59.25	29.2	0
8/25/2021 7:30	3.971	164.3	12.07	59.47	29.2	0
8/25/2021 7:45	3.549	180.3	18.04	59.33	29.2	0
8/25/2021 8:00	4.365	168	17.53	59.55	29.2	0
8/25/2021 8:15	5.229	160.2	25.53	60.63	29.2	0
8/25/2021 8:30	5.426	180.1	18.07	61.07	29.2	0
8/25/2021 8:45	5.33	189.6	16.44	61.77	29.2	0
8/25/2021 9:00	4.002	178.1	33.06	62.98	29.2	0
8/25/2021 9:15	3.75	188.5	32.06	63.96	29.2	0
8/25/2021 9:30	2.991	224	15.74	65.1	29.21	0
8/25/2021 9:45	4.135	156.5	48.6	66.57	29.2	0
8/25/2021 10:00	3.6	145.1	34.69	67.38	29.2	0
8/25/2021 10:15	3.8	184.8	36.26	67.24	29.2	0
8/25/2021 10:30	5.681	153.8	23.2	68.61	29.2	0
8/25/2021 10:45	4.524	192.8	40.86	68.67	29.2	0
8/25/2021 11:00	4.289	183.6	38.83	69.53	29.2	0
8/25/2021 11:15	3.819	169.8	70.95	70.54	29.2	0
8/25/2021 11:30	4.882	220	31.76	70.32	29.2	0
8/25/2021 11:45	4.144	182.5	28.71	71.2	29.19	0
8/25/2021 12:00	5.44	202.9	18.36	71.6	29.19	0
8/25/2021 12:15	4.788	220.9	52.6	72.54	29.19	0
8/25/2021 12:30	6.371	270.8	31.65	72.41	29.19	0
8/25/2021 12:45	7.375	245.4	15.66	73.19	29.19	0
8/25/2021 13:00	8.35	254	28.89	73.02	29.19	0
8/25/2021 13:15	7.73	266.2	18.8	73.17	29.19	0
8/25/2021 13:30	9.39	258.7	13.64	73.23	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/25/2021 13:45	8.77	262.2	16.92	73.1	29.19	0
8/25/2021 14:00	9.83	260.5	8.41	73.03	29.19	0
8/25/2021 14:15	7.541	255.3	15.38	73.24	29.19	0
8/25/2021 14:30	7.297	219.9	13.22	72.89	29.18	0
8/25/2021 14:45	5.935	240.3	29.13	73.24	29.18	0
8/25/2021 15:00	6.743	212.4	22.99	74.05	29.18	0
8/25/2021 15:15	8.15	232.1	9.81	73.23	29.18	0
8/25/2021 15:30	7.923	237.3	9.15	73.35	29.18	0
8/25/2021 15:45	9.14	233.1	10.22	73.12	29.18	0
8/25/2021 16:00	8.85	239.3	11.89	72.67	29.18	0
8/25/2021 16:15	9.92	239.4	8.57	71.57	29.18	0
8/25/2021 16:30	9.92	242.6	7.813	70.95	29.19	0
8/25/2021 16:45	9.11	239.8	8.11	70.76	29.19	0
8/25/2021 17:00	9.39	232.3	10.5	70.56	29.19	0
8/25/2021 17:15	9.33	234.5	11.35	69.91	29.19	0
8/25/2021 17:30	8.59	240.2	11.15	68.83	29.19	0
8/25/2021 17:45	8.47	238.7	9.13	67.88	29.19	0
8/25/2021 18:00	7.296	229.7	10.74	67.23	29.2	0
8/25/2021 18:15	9.67	240	7.075	66.45	29.2	0
8/25/2021 18:30	5.857	235.9	9.1	66.11	29.2	0
8/25/2021 18:45	5.262	219.9	13.3	65.9	29.21	0
8/25/2021 19:00	4.38	233.6	13.06	65.57	29.21	0
8/25/2021 19:15	6.071	218.3	14.18	65.21	29.22	0
8/25/2021 19:30	4.99	211	7.68	64.92	29.22	0
8/25/2021 19:45	7.082	218.6	10.07	64.25	29.23	0
8/25/2021 20:00	5.403	200.4	9.64	63.74	29.23	0
8/25/2021 20:15	5.379	211.4	9.56	63.39	29.23	0
8/25/2021 20:30	5.318	225.8	4.74	63.07	29.24	0
8/25/2021 20:45	5.228	240	11.57	62.48	29.24	0
8/25/2021 21:00	8.45	241.6	5.131	61.4	29.24	0
8/25/2021 21:15	7.978	238	4.61	60.91	29.24	0
8/25/2021 21:30	6.162	234	6.293	60.74	29.24	0
8/25/2021 21:45	5.206	237.8	7.473	60.49	29.24	0
8/25/2021 22:00	1.472	63.15	71.06	59.71	29.24	0
8/25/2021 22:15	0.097	26.22	0.03	59.22	29.24	0
8/25/2021 22:30	0.223	107	22.54	59.33	29.25	0
8/25/2021 22:45	2.194	147.1	19.28	59.3	29.24	0
8/25/2021 23:00	3.439	124	5.557	59.05	29.24	0
8/25/2021 23:15	3.743	121.9	13.93	58.93	29.24	0
8/25/2021 23:30	3.981	137.7	15.75	58.66	29.24	0
8/25/2021 23:45	6.148	136.4	3.953	58.28	29.24	0
8/26/2021 0:00	5.348	118.1	11.53	58.11	29.25	0
8/26/2021 0:15	5.923	132.5	12.94	58.05	29.25	0
8/26/2021 0:30	6.443	152	12.79	58.12	29.25	0
8/26/2021 0:45	7.183	167.7	11.47	58.5	29.25	0
8/26/2021 1:00	7.093	156.9	11.43	58.14	29.25	0
8/26/2021 1:15	8.19	150.4	9.13	57.8	29.25	0
8/26/2021 1:30	7.257	148.5	9.48	57.61	29.26	0
8/26/2021 1:45	6.389	148.9	13.56	57.58	29.26	0
8/26/2021 2:00	6.636	147.1	10.58	57.33	29.26	0
8/26/2021 2:15	6.974	154.9	16.25	57.89	29.26	0
8/26/2021 2:30	5.231	132.1	8.41	57.94	29.26	0
8/26/2021 2:45	4.344	117.7	9.23	57.97	29.26	0
8/26/2021 3:00	4.876	130.6	9.02	58.01	29.26	0
8/26/2021 3:15	6.053	134.3	7.84	57.92	29.26	0
8/26/2021 3:30	5.294	128.2	7.42	57.87	29.27	0
8/26/2021 3:45	4.628	123.6	8.97	57.7	29.27	0
8/26/2021 4:00	3.639	160.9	19.51	57.48	29.27	0
8/26/2021 4:15	5.476	132.8	12.84	56.26	29.27	0
8/26/2021 4:30	5.21	108.2	12.82	55.2	29.27	0
8/26/2021 4:45	5.616	98.6	9.19	54.57	29.27	0
8/26/2021 5:00	5.501	93.8	10.87	54.25	29.26	0
8/26/2021 5:15	5.675	101.9	10.27	54.39	29.26	0
8/26/2021 5:30	6.697	104.7	9.78	54.65	29.26	0
8/26/2021 5:45	7.132	105.9	7.757	54.84	29.26	0
8/26/2021 6:00	5.983	112.9	9.81	55.06	29.27	0
8/26/2021 6:15	5.631	104.9	8.07	55.28	29.26	0
8/26/2021 6:30	4.817	107	8.58	55.49	29.26	0
8/26/2021 6:45	5.85	114.4	7.878	55.73	29.26	0
8/26/2021 7:00	6.099	111	8.59	56.22	29.26	0
8/26/2021 7:15	5.26	115.9	13.25	56.81	29.26	0
8/26/2021 7:30	5.397	122.9	17.35	57.18	29.27	0
8/26/2021 7:45	5.289	120.2	13.44	57.44	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/26/2021 8:00	6.567	131.2	6.476	57.79	29.27	0
8/26/2021 8:15	5.5	133.9	10.01	58.05	29.28	0
8/26/2021 8:30	4.807	116	9.89	58.62	29.28	0
8/26/2021 8:45	5.96	122.3	11.99	59.32	29.27	0
8/26/2021 9:00	6.185	108.1	11.94	59.88	29.27	0
8/26/2021 9:15	5.421	116.5	23.81	60.02	29.27	0
8/26/2021 9:30	4.739	132.4	18.32	60.75	29.28	0
8/26/2021 9:45	4.797	171.9	30.51	60.66	29.28	0
8/26/2021 10:00	5.266	149.3	27.06	61.35	29.28	0
8/26/2021 10:15	6.983	145.7	21.07	62.4	29.28	0
8/26/2021 10:30	6.643	131.9	19.99	62.62	29.27	0
8/26/2021 10:45	6.786	112.2	15.5	62.7	29.27	0
8/26/2021 11:00	4.951	127.4	16.41	62.49	29.26	0
8/26/2021 11:15	4.588	114.3	15.61	62.8	29.26	0
8/26/2021 11:30	4.513	112.4	15.22	63.29	29.26	0
8/26/2021 11:45	3.404	104.8	38.48	64.28	29.26	0
8/26/2021 12:00	3.003	116.6	55.6	65.88	29.27	0
8/26/2021 12:15	5.041	221.2	26.35	65.26	29.27	0
8/26/2021 12:30	4.028	222.9	20.02	65.49	29.26	0
8/26/2021 12:45	4.969	120.6	21.6	66.92	29.25	0
8/26/2021 13:00	3.819	182.5	34.18	67.68	29.25	0
8/26/2021 13:15	5.057	221.5	30.33	66.99	29.25	0
8/26/2021 13:30	5.177	238.4	23.17	67.31	29.25	0
8/26/2021 13:45	8.29	222.1	11.2	67.67	29.25	0
8/26/2021 14:00	7.224	217.3	15.67	67.51	29.25	0
8/26/2021 14:15	7.375	235.8	9.13	67.62	29.25	0
8/26/2021 14:30	9.35	214.7	15.95	66.68	29.24	0
8/26/2021 14:45	11.97	240.8	9.49	65.58	29.24	0
8/26/2021 15:00	9.8	234.6	11.83	65.17	29.24	0
8/26/2021 15:15	10.79	225.1	11.52	65.28	29.24	0
8/26/2021 15:30	12	211.5	9.71	62.62	29.25	0
8/26/2021 15:45	7.688	214.6	9.33	60.72	29.25	0
8/26/2021 16:00	5.408	213	13.35	60.13	29.25	0
8/26/2021 16:15	4.929	149.1	24.21	60.37	29.25	0
8/26/2021 16:30	5.943	133.2	9.73	60.66	29.24	0
8/26/2021 16:45	6.778	130.5	7.808	61.18	29.24	0
8/26/2021 17:00	7.285	118.7	10.8	61.14	29.23	0
8/26/2021 17:15	7.701	124.9	15.51	60.92	29.23	0
8/26/2021 17:30	7.646	134.6	8.92	60.74	29.23	0
8/26/2021 17:45	7.406	145.3	7.849	60.48	29.23	0
8/26/2021 18:00	7.247	147.4	9.08	60.27	29.22	0
8/26/2021 18:15	7.565	133.6	6.483	59.97	29.22	0
8/26/2021 18:30	7.348	132.2	8.68	59.92	29.22	0
8/26/2021 18:45	6.992	147.5	12.27	60.04	29.22	0
8/26/2021 19:00	5.992	167.3	11.05	60.21	29.22	0
8/26/2021 19:15	6.086	178	14.69	60.24	29.22	0
8/26/2021 19:30	6.528	200	14.85	60.43	29.23	0
8/26/2021 19:45	8.07	209.4	9.67	60.36	29.23	0
8/26/2021 20:00	11.02	207.6	11.86	60.29	29.24	0
8/26/2021 20:15	7.798	213.6	10.63	60.13	29.24	0
8/26/2021 20:30	5.324	211.1	8.6	60.07	29.24	0
8/26/2021 20:45	4.964	158.3	20.75	59.72	29.24	0
8/26/2021 21:00	5.61	184.1	11.98	59.53	29.24	0
8/26/2021 21:15	5.178	184.3	9.1	59.45	29.24	0
8/26/2021 21:30	6.294	207.1	14.35	59.39	29.24	0
8/26/2021 21:45	4.541	198.1	22.76	59.38	29.24	0
8/26/2021 22:00	7.397	173	9.98	59.02	29.24	0
8/26/2021 22:15	7.317	171.5	7.513	58.54	29.24	0
8/26/2021 22:30	7.072	176.2	10.24	58.41	29.24	0
8/26/2021 22:45	7.765	185.6	12.79	58.13	29.25	0
8/26/2021 23:00	5.863	177.2	12.24	57.84	29.25	0
8/26/2021 23:15	5.874	167	11.05	57.71	29.26	0
8/26/2021 23:30	6.02	165.9	9.01	57.54	29.26	0
8/26/2021 23:45	4.994	163.2	8.81	57.39	29.26	0
8/27/2021 0:00	3.116	135.6	16.51	56.74	29.26	0
8/27/2021 0:15	4.705	136	9.22	56.29	29.27	0
8/27/2021 0:30	3.562	109	9.35	55.97	29.27	0
8/27/2021 0:45	4.079	102.6	8.18	55.9	29.27	0
8/27/2021 1:00	4.136	96.2	8.69	55.81	29.26	0
8/27/2021 1:15	4.162	99.5	12.33	55.61	29.27	0
8/27/2021 1:30	5.09	116.8	8.2	55.44	29.27	0
8/27/2021 1:45	5.206	112	9.38	55.27	29.27	0
8/27/2021 2:00	5.104	113.8	7.588	55.04	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/27/2021 2:15	4.099	90	13.26	55.02	29.27	0
8/27/2021 2:30	3.923	66.66	13.32	55.02	29.27	0
8/27/2021 2:45	4.493	77.28	12.53	54.94	29.27	0
8/27/2021 3:00	5.068	93.9	13.68	54.77	29.27	0
8/27/2021 3:15	5.184	84.9	14.87	54.41	29.27	0
8/27/2021 3:30	4.054	64.74	20.75	54.37	29.27	0
8/27/2021 3:45	4.209	132.9	16.97	54.38	29.27	0
8/27/2021 4:00	4.469	164	8.71	54.66	29.27	0
8/27/2021 4:15	5.817	155	7.785	54.51	29.27	0
8/27/2021 4:30	5.433	175.5	9.06	54.52	29.27	0
8/27/2021 4:45	4.481	153.7	23.37	54.39	29.27	0
8/27/2021 5:00	3.963	137.3	5.367	54.2	29.27	0
8/27/2021 5:15	2.274	127.4	12.42	54.19	29.28	0
8/27/2021 5:30	1.333	90.2	21.12	54.13	29.28	0
8/27/2021 5:45	2.04	107.5	15.04	54.12	29.28	0
8/27/2021 6:00	1.277	86.3	4.509	54.27	29.28	0
8/27/2021 6:15	0.843	60.46	12.66	54.46	29.29	0
8/27/2021 6:30	1.049	98.2	22.63	54.6	29.29	0
8/27/2021 6:45	3.57	124.7	10.1	54.85	29.3	0
8/27/2021 7:00	4.157	125	12.21	54.89	29.3	0
8/27/2021 7:15	4.495	125	10.68	54.97	29.31	0
8/27/2021 7:30	2.646	117.7	11.97	54.96	29.31	0
8/27/2021 7:45	3.098	125.6	8.24	54.98	29.32	0
8/27/2021 8:00	3.168	169.3	22.09	55.13	29.32	0
8/27/2021 8:15	3.552	181	12.42	55.31	29.32	0
8/27/2021 8:30	2.579	191.4	21.94	55.44	29.33	0
8/27/2021 8:45	2.371	114.8	34.98	55.6	29.33	0
8/27/2021 9:00	3.087	65.12	20.12	55.5	29.33	0
8/27/2021 9:15	2.038	51.7	22.79	55.59	29.33	0
8/27/2021 9:30	2.192	31.11	9.91	55.76	29.34	0
8/27/2021 9:45	1.3	40.82	17.82	56.23	29.33	0
8/27/2021 10:00	1.468	22.34	11.99	56.53	29.34	0
8/27/2021 10:15	3.386	23.31	9.59	56.93	29.33	0
8/27/2021 10:30	3.527	26.09	7.646	56.97	29.34	0
8/27/2021 10:45	4.43	19.34	9.15	57.49	29.34	0
8/27/2021 11:00	6.973	14.88	12.92	57.39	29.34	0
8/27/2021 11:15	6.916	15.67	16.42	58.22	29.33	0
8/27/2021 11:30	8.85	17.17	16.9	59.19	29.33	0
8/27/2021 11:45	10.29	9.97	15.53	59.27	29.34	0
8/27/2021 12:00	9.93	8.5	16.34	59.66	29.34	0
8/27/2021 12:15	11.35	8.1	15.27	59.72	29.34	0
8/27/2021 12:30	11.78	6.921	16.03	59.89	29.34	0
8/27/2021 12:45	11.82	7.847	15.23	60	29.34	0
8/27/2021 13:00	12.02	10.45	14.33	60.69	29.33	0
8/27/2021 13:15	11.52	8.21	13.39	60.74	29.34	0
8/27/2021 13:30	10.94	13.25	14.26	62.32	29.33	0
8/27/2021 13:45	11.05	15.45	10.87	62.1	29.34	0
8/27/2021 14:00	12.86	10.28	11.78	62.51	29.33	0
8/27/2021 14:15	12.49	1.046	17.04	62.56	29.33	0
8/27/2021 14:30	11.71	4.812	14.49	61.65	29.33	0
8/27/2021 14:45	12.55	11.13	12.26	62.04	29.33	0
8/27/2021 15:00	12.11	4.69	16.59	62.16	29.33	0
8/27/2021 15:15	12.9	6.086	16.58	62.01	29.33	0
8/27/2021 15:30	11.12	6.312	15.22	62.36	29.32	0
8/27/2021 15:45	11.1	1.677	16.08	62.92	29.32	0
8/27/2021 16:00	10.57	359.7	16.75	63.06	29.32	0
8/27/2021 16:15	9.17	0.752	16.61	63.3	29.32	0
8/27/2021 16:30	11.07	3.87	15.34	63.15	29.31	0
8/27/2021 16:45	11.02	5.462	12.68	62.83	29.31	0
8/27/2021 17:00	11.13	3.89	14.37	62.84	29.31	0
8/27/2021 17:15	8.81	7.054	14.9	62.69	29.31	0
8/27/2021 17:30	8.63	15.67	12.61	62.4	29.31	0
8/27/2021 17:45	9.89	16.41	10.8	61.91	29.3	0
8/27/2021 18:00	9.17	14.5	9.8	61.34	29.3	0
8/27/2021 18:15	7.643	13.75	13.66	61.05	29.3	0
8/27/2021 18:30	7.847	6.205	11.58	60.6	29.31	0
8/27/2021 18:45	6.929	3.065	12.9	59.96	29.31	0
8/27/2021 19:00	7.133	5.796	12.04	59.55	29.31	0
8/27/2021 19:15	6.72	351.3	15.22	59.85	29.31	0
8/27/2021 19:30	5.383	10.98	15.26	59.52	29.31	0
8/27/2021 19:45	4.869	355.9	20.34	59.56	29.32	0
8/27/2021 20:00	3.856	352.9	15.38	59.4	29.32	0
8/27/2021 20:15	3.398	12.4	13.13	58.23	29.32	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/27/2021 20:30	2.592	356.9	15.43	58.65	29.32	0
8/27/2021 20:45	2.769	353.6	21.64	58.05	29.32	0
8/27/2021 21:00	3.754	2.823	15.49	57.15	29.32	0
8/27/2021 21:15	6.745	353.8	14.98	57.05	29.32	0
8/27/2021 21:30	5.723	4.052	13.87	55.74	29.32	0
8/27/2021 21:45	7.608	358.3	15.2	55.88	29.32	0
8/27/2021 22:00	7.591	348.2	12.41	56.65	29.32	0
8/27/2021 22:15	8.88	1.92	16.05	56.9	29.32	0
8/27/2021 22:30	9.03	5.282	10.5	56.63	29.32	0
8/27/2021 22:45	7.119	0.592	14.24	56.62	29.32	0
8/27/2021 23:00	6.395	7.045	11.47	56.14	29.32	0
8/27/2021 23:15	8.81	351.6	9.76	55.91	29.32	0
8/27/2021 23:30	9.4	356.1	13.96	55.67	29.32	0
8/27/2021 23:45	9.6	1.858	12.49	56.44	29.32	0
8/28/2021 0:00	7.575	2.846	12.7	56.26	29.32	0
8/28/2021 0:15	8.35	4.467	12.03	55.27	29.32	0
8/28/2021 0:30	9.87	10.45	5.811	53.3	29.32	0
8/28/2021 0:45	11.16	5.706	11.7	53.62	29.32	0
8/28/2021 1:00	12.79	5.908	13.25	54.55	29.32	0
8/28/2021 1:15	13.88	8.59	11	56.58	29.31	0
8/28/2021 1:30	11.42	2.666	21.26	56.84	29.32	0
8/28/2021 1:45	8.1	1.044	22.71	56.38	29.32	0
8/28/2021 2:00	6.106	7.449	14.28	53.52	29.32	0
8/28/2021 2:15	7.839	13.63	11.29	53.73	29.31	0
8/28/2021 2:30	6.538	19.09	16.87	52.27	29.31	0
8/28/2021 2:45	2.252	58.91	33.19	50.08	29.31	0
8/28/2021 3:00	1.746	58.64	9.55	49.96	29.31	0
8/28/2021 3:15	3.129	75.04	15.47	50.25	29.31	0
8/28/2021 3:30	2.932	90.9	8.59	50.41	29.31	0
8/28/2021 3:45	2.898	77.95	15.47	51.44	29.31	0
8/28/2021 4:00	1.621	36.45	5.45	52.05	29.31	0
8/28/2021 4:15	1.229	42.96	4.239	52.53	29.31	0
8/28/2021 4:30	0.39	46.71	4.196	52.58	29.31	0
8/28/2021 4:45	0.957	52.75	1.133	52.15	29.31	0
8/28/2021 5:00	0.76	126.3	71.21	51.85	29.31	0
8/28/2021 5:15	1.06	246.5	15.27	50.96	29.32	0
8/28/2021 5:30	1.487	183	12.83	50.54	29.32	0
8/28/2021 5:45	0.427	176.5	0.116	50.13	29.32	0
8/28/2021 6:00	0.107	176.7	0.025	50.54	29.32	0
8/28/2021 6:15	0.704	63.78	4.461	52.08	29.32	0
8/28/2021 6:30	0.171	62.42	0.117	52.3	29.33	0
8/28/2021 6:45	1.528	80.6	12.59	53.64	29.33	0
8/28/2021 7:00	0.997	69.76	2.329	55.61	29.33	0
8/28/2021 7:15	0.463	130	67.33	56.12	29.33	0
8/28/2021 7:30	1.391	84.3	35.37	56.73	29.33	0
8/28/2021 7:45	1.727	54.5	21.77	57.34	29.33	0
8/28/2021 8:00	1.525	98.4	33.34	58.44	29.33	0
8/28/2021 8:15	1.797	268.5	29.13	58.19	29.32	0
8/28/2021 8:30	1.762	251	19.21	59.29	29.32	0
8/28/2021 8:45	2.57	284.4	23.28	59.67	29.32	0
8/28/2021 9:00	2.569	279.6	24.41	60.53	29.32	0
8/28/2021 9:15	2.003	227.2	40.36	60.89	29.32	0
8/28/2021 9:30	1.869	23.02	49.65	62.43	29.32	0
8/28/2021 9:45	2.376	319	28.06	63.09	29.32	0
8/28/2021 10:00	2.532	315.6	62.52	63.87	29.32	0
8/28/2021 10:15	3.911	296.5	29.86	64.44	29.32	0
8/28/2021 10:30	3.504	313.2	28.68	65.69	29.32	0
8/28/2021 10:45	3.53	330.5	63.45	66.76	29.32	0
8/28/2021 11:00	5.424	31.41	20.02	67.05	29.31	0
8/28/2021 11:15	4.838	18.79	27.87	68.04	29.31	0
8/28/2021 11:30	4.324	316.5	54.94	68.48	29.31	0
8/28/2021 11:45	5.918	16.22	15.93	68.78	29.31	0
8/28/2021 12:00	4.195	0.259	42.55	69.41	29.3	0
8/28/2021 12:15	4.238	345	38.74	70.1	29.3	0
8/28/2021 12:30	6.156	286.9	29.65	71.75	29.3	0
8/28/2021 12:45	7.236	262.7	32.39	71.76	29.3	0
8/28/2021 13:00	7.397	284.7	22.14	71.98	29.29	0
8/28/2021 13:15	4.596	290.3	39.06	72.14	29.29	0
8/28/2021 13:30	6.721	0.272	28.35	72.85	29.29	0
8/28/2021 13:45	7.975	23.97	13.8	72.75	29.28	0
8/28/2021 14:00	7.243	10.35	20.1	73.39	29.28	0
8/28/2021 14:15	6.628	16.6	20.13	73.89	29.27	0
8/28/2021 14:30	5.056	351.8	25.16	74.47	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/28/2021 14:45	7.854	16.17	15.52	74.39	29.26	0
8/28/2021 15:00	5.706	340.3	44.99	74.94	29.26	0
8/28/2021 15:15	4.779	309.2	19.96	75.5	29.25	0
8/28/2021 15:30	5.824	350.3	25.44	75.37	29.25	0
8/28/2021 15:45	6.124	310	19.18	75.92	29.25	0
8/28/2021 16:00	7.452	320.8	29.26	76.13	29.24	0
8/28/2021 16:15	8.67	322	14.49	75.55	29.24	0
8/28/2021 16:30	9.01	342.1	16.01	75.3	29.24	0
8/28/2021 16:45	9.65	344	14.84	74.87	29.23	0
8/28/2021 17:00	9.51	333	12.68	74.42	29.23	0
8/28/2021 17:15	8.62	319.6	13.46	74.29	29.23	0
8/28/2021 17:30	8.71	319.3	13.18	73.87	29.23	0
8/28/2021 17:45	8.49	317.1	10.37	73.43	29.23	0
8/28/2021 18:00	7.171	318.4	11.66	72.89	29.23	0
8/28/2021 18:15	6.835	301.2	5.456	72.11	29.22	0
8/28/2021 18:30	7.024	303.6	5.777	71.12	29.22	0
8/28/2021 18:45	6.52	304.2	5.763	70.03	29.22	0
8/28/2021 19:00	6.005	309.3	7.422	68.98	29.22	0
8/28/2021 19:15	7.03	316.1	6.576	68.22	29.22	0
8/28/2021 19:30	6.744	323.3	6.805	67.69	29.22	0
8/28/2021 19:45	2.885	3.558	17.67	67.34	29.22	0
8/28/2021 20:00	3.398	359.6	26.85	66.72	29.22	0
8/28/2021 20:15	6.074	349.2	21.11	66.43	29.22	0
8/28/2021 20:30	7.49	20.43	10.05	64.35	29.22	0
8/28/2021 20:45	7.239	20.83	7.553	63.54	29.22	0
8/28/2021 21:00	8.66	10.22	8.51	63.39	29.21	0
8/28/2021 21:15	7.715	16.28	10.5	62.79	29.21	0
8/28/2021 21:30	6.774	18.51	10.54	62.22	29.21	0
8/28/2021 21:45	7.827	13.32	15.79	62.62	29.21	0
8/28/2021 22:00	8.85	22.12	11.36	62.25	29.21	0
8/28/2021 22:15	9.34	14.76	10.6	61.73	29.21	0
8/28/2021 22:30	7.785	19.63	9.34	61.23	29.21	0
8/28/2021 22:45	9.73	9.47	13.35	61.8	29.21	0
8/28/2021 23:00	8.63	20.43	9.54	60.6	29.21	0
8/28/2021 23:15	9.87	14.96	11.54	60.56	29.2	0
8/28/2021 23:30	10.02	16.66	9.76	59.95	29.2	0
8/28/2021 23:45	10.62	14.02	7.231	59.77	29.2	0
8/29/2021 0:00	9.86	21.85	7.487	59.97	29.2	0
8/29/2021 0:15	7.879	21.23	8.43	59.6	29.2	0
8/29/2021 0:30	7.028	22.58	8.42	59.33	29.2	0
8/29/2021 0:45	6.375	16.79	6.787	58.41	29.2	0
8/29/2021 1:00	5.291	19.5	7.017	57.82	29.2	0
8/29/2021 1:15	5.732	17.4	6.978	57.1	29.2	0
8/29/2021 1:30	7.232	17.48	7.096	56.97	29.2	0
8/29/2021 1:45	8.16	18.15	6.239	56.71	29.19	0
8/29/2021 2:00	5.818	22.22	7.469	56.21	29.19	0
8/29/2021 2:15	6.123	21.24	16.13	57	29.19	0
8/29/2021 2:30	4.329	28.93	7.549	56.14	29.19	0
8/29/2021 2:45	6.118	25.01	6.614	56.02	29.19	0
8/29/2021 3:00	5.56	52.88	15.01	55.46	29.19	0
8/29/2021 3:15	4.074	112.3	16.12	55.5	29.19	0
8/29/2021 3:30	2.318	111.8	17.46	56.19	29.19	0
8/29/2021 3:45	2.517	7.012	19.78	55.53	29.19	0
8/29/2021 4:00	3.437	17.13	4.864	56.21	29.19	0
8/29/2021 4:15	3.225	8.55	10.95	55.31	29.19	0
8/29/2021 4:30	2.75	3.9	9.19	54.32	29.19	0
8/29/2021 4:45	3.441	357.3	13.42	54.65	29.18	0
8/29/2021 5:00	3.069	347.2	7.054	53.41	29.18	0
8/29/2021 5:15	2.655	359.2	8.87	52.85	29.18	0
8/29/2021 5:30	3.036	356.1	13.94	53.78	29.18	0
8/29/2021 5:45	2.913	359.7	17.14	54.53	29.18	0
8/29/2021 6:00	2.279	8.56	3.097	54.48	29.18	0
8/29/2021 6:15	2.592	10.84	3.771	54.54	29.19	0
8/29/2021 6:30	1.795	9.76	7.091	55.67	29.19	0
8/29/2021 6:45	1.557	42.89	7.821	56.59	29.19	0
8/29/2021 7:00	1.118	29.79	13	58.15	29.19	0
8/29/2021 7:15	1.213	51.85	24.53	59.54	29.19	0
8/29/2021 7:30	2.292	157.3	29.93	59.42	29.18	0
8/29/2021 7:45	2.346	215.4	17.36	59.14	29.18	0
8/29/2021 8:00	2.344	226.5	17.29	59.59	29.18	0
8/29/2021 8:15	2.564	245.9	18.21	60.47	29.18	0
8/29/2021 8:30	2.671	253.9	25.64	61.25	29.18	0
8/29/2021 8:45	1.472	260.6	32.17	62.4	29.17	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/29/2021 9:00	2.624	263.7	37.17	63.1	29.17	0
8/29/2021 9:15	3.977	307.4	19.82	63.48	29.17	0
8/29/2021 9:30	2.975	278.3	22.43	64.44	29.17	0
8/29/2021 9:45	2.009	326.6	28.43	65.51	29.17	0
8/29/2021 10:00	2.985	263.3	24.85	66.35	29.17	0
8/29/2021 10:15	2.75	335.1	42.18	66.96	29.17	0
8/29/2021 10:30	3.896	349.5	35.89	68.63	29.17	0
8/29/2021 10:45	4.545	0.291	23.56	68.5	29.16	0
8/29/2021 11:00	4.112	19.5	48.71	69.17	29.16	0
8/29/2021 11:15	5.374	282	52.3	69.78	29.15	0
8/29/2021 11:30	4.371	283.9	29.88	70.79	29.15	0
8/29/2021 11:45	3.045	253.7	53.63	70.99	29.14	0
8/29/2021 12:00	5.59	299.8	57.67	72.01	29.14	0
8/29/2021 12:15	8.64	296.4	19.25	72.67	29.14	0
8/29/2021 12:30	7.473	288.7	19.29	73.01	29.14	0
8/29/2021 12:45	7.231	282.3	17.81	73.19	29.13	0
8/29/2021 13:00	6.534	298.1	17.33	74.09	29.13	0
8/29/2021 13:15	7.169	306.7	19.2	74.79	29.13	0
8/29/2021 13:30	6.91	311.2	22.71	75.2	29.12	0
8/29/2021 13:45	6.561	314.5	23.92	76.01	29.12	0
8/29/2021 14:00	6.095	328.2	33.02	76.34	29.12	0
8/29/2021 14:15	7.997	313.1	18.73	76.22	29.11	0
8/29/2021 14:30	7.53	306	25.39	76.55	29.11	0
8/29/2021 14:45	7.466	318.9	21.13	76.71	29.1	0
8/29/2021 15:00	6.321	327.7	29.65	76.54	29.1	0
8/29/2021 15:15	6.277	310.5	36.65	76.9	29.1	0
8/29/2021 15:30	5.686	350.7	33.51	77.2	29.1	0
8/29/2021 15:45	7.712	313.2	24.78	76.86	29.09	0
8/29/2021 16:00	7.358	305.4	20.81	77.09	29.09	0
8/29/2021 16:15	8.91	315.4	19.58	76.7	29.09	0
8/29/2021 16:30	7.832	303.1	14.82	76.43	29.09	0
8/29/2021 16:45	9.16	298.9	13.72	75.94	29.08	0
8/29/2021 17:00	8.12	297.3	9.87	75.67	29.08	0
8/29/2021 17:15	8.49	295.1	11.08	75.41	29.08	0
8/29/2021 17:30	8.45	301.4	8.6	74.83	29.08	0
8/29/2021 17:45	8.75	304.4	6.235	74.25	29.08	0
8/29/2021 18:00	8.17	305.7	5.632	73.74	29.08	0
8/29/2021 18:15	7.915	306.9	5.631	72.93	29.08	0
8/29/2021 18:30	7.836	307.9	5.451	72.14	29.07	0
8/29/2021 18:45	6.954	315.1	13.7	71.45	29.07	0
8/29/2021 19:00	5.279	342.7	22.04	70.94	29.07	0
8/29/2021 19:15	4.769	358.7	16.38	70.07	29.08	0
8/29/2021 19:30	5.041	351.7	17.27	69.66	29.08	0
8/29/2021 19:45	2.721	2.984	16.31	68.89	29.08	0
8/29/2021 20:00	0.422	31.97	1.201	68.08	29.09	0
8/29/2021 20:15	2.19	13.12	13.69	67.65	29.09	0
8/29/2021 20:30	2.74	353.7	14.69	66.51	29.09	0
8/29/2021 20:45	3.397	9.25	11.48	64.95	29.09	0
8/29/2021 21:00	5.995	17.84	6.318	62.9	29.09	0
8/29/2021 21:15	7.907	15.96	9.35	62.56	29.09	0
8/29/2021 21:30	9.97	14.01	13.45	63.07	29.08	0
8/29/2021 21:45	10.36	14.33	12.37	62.72	29.08	0
8/29/2021 22:00	11.5	9.2	11.91	62.39	29.08	0
8/29/2021 22:15	9.3	11.26	12.97	61.68	29.09	0
8/29/2021 22:30	9.25	23.21	10.09	60.95	29.09	0
8/29/2021 22:45	8.06	26.1	11.37	60.37	29.09	0
8/29/2021 23:00	6.717	25.43	6.896	60.03	29.09	0
8/29/2021 23:15	5.322	40.76	16.38	59.4	29.09	0
8/29/2021 23:30	4.521	87.9	15.34	58.8	29.1	0
8/29/2021 23:45	3.648	104.6	11.49	58.55	29.1	0
8/30/2021 0:00	4.264	138.3	12.93	57.77	29.1	0
8/30/2021 0:15	4.973	144	8.19	57.25	29.1	0
8/30/2021 0:30	4.702	160	6.912	56.48	29.1	0
8/30/2021 0:45	5.326	160.5	13.63	55.98	29.1	0
8/30/2021 1:00	3.968	148.7	16.8	55.5	29.1	0
8/30/2021 1:15	4.364	183.4	6.39	56.02	29.11	0
8/30/2021 1:30	4.796	196.3	12.42	56.25	29.11	0
8/30/2021 1:45	4.126	222.5	12.22	56.59	29.11	0
8/30/2021 2:00	4.215	193.9	15.37	56.23	29.11	0
8/30/2021 2:15	4.284	175.7	11.75	55.95	29.11	0
8/30/2021 2:30	4.787	182.5	11.94	55.66	29.12	0
8/30/2021 2:45	5.059	195.4	8.74	55.51	29.12	0
8/30/2021 3:00	6.356	187.2	8.07	55.22	29.12	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/30/2021 3:15	6.771	192.7	9.52	54.65	29.12	0
8/30/2021 3:30	6.892	176.3	9	54.14	29.12	0
8/30/2021 3:45	6.998	187	7.903	53.79	29.12	0
8/30/2021 4:00	9.4	185.9	11.36	53.04	29.12	0
8/30/2021 4:15	7.777	187.8	8.35	52.71	29.13	0
8/30/2021 4:30	7.752	186.5	8.31	52.65	29.13	0
8/30/2021 4:45	9.69	187.7	11.1	52.14	29.13	0
8/30/2021 5:00	9.02	184.1	9.46	51.21	29.13	0
8/30/2021 5:15	7.202	178.2	11.9	50.85	29.13	0
8/30/2021 5:30	9.25	159.1	10.48	51.03	29.14	0
8/30/2021 5:45	9.59	147.3	7.292	50.95	29.14	0
8/30/2021 6:00	9.87	140.6	8.29	51.12	29.14	0
8/30/2021 6:15	9.98	139	8.38	51.3	29.14	0
8/30/2021 6:30	10.09	139.4	8.15	51.41	29.15	0
8/30/2021 6:45	9.04	137.7	9.12	51.81	29.14	0
8/30/2021 7:00	9.59	146.5	10.01	52.03	29.14	0
8/30/2021 7:15	9.58	140.5	9.08	52.39	29.14	0
8/30/2021 7:30	10.21	144.3	9.15	52.9	29.14	0
8/30/2021 7:45	9.89	157.9	13.52	53.4	29.15	0
8/30/2021 8:00	11.15	151.1	11.88	53.74	29.14	0
8/30/2021 8:15	11.57	151.3	12.88	54.45	29.14	0
8/30/2021 8:30	9.93	155.2	15.25	55.2	29.14	0
8/30/2021 8:45	8.65	172.3	17.58	55.5	29.14	0
8/30/2021 9:00	9.68	163	14.05	55.83	29.13	0
8/30/2021 9:15	7.859	170.3	12.95	56.35	29.13	0
8/30/2021 9:30	9.49	177.2	13.85	56.8	29.13	0
8/30/2021 9:45	10.9	188.5	13.23	57.2	29.13	0
8/30/2021 10:00	11.9	193.9	12.06	58.03	29.13	0
8/30/2021 10:15	13.06	197.5	13.89	58.23	29.14	0
8/30/2021 10:30	13.14	191.1	13.75	58.8	29.14	0
8/30/2021 10:45	13.52	203.3	16.18	58.5	29.14	0
8/30/2021 11:00	13.28	195.7	14.64	58.02	29.14	0
8/30/2021 11:15	13.29	208.9	8.55	57.29	29.14	0
8/30/2021 11:30	9.27	199.9	12.31	57.55	29.15	0
8/30/2021 11:45	7.374	195	16.56	58.06	29.15	0
8/30/2021 12:00	7.606	208.9	20.37	58.24	29.15	0
8/30/2021 12:15	6.702	252.2	19.7	58.11	29.15	0
8/30/2021 12:30	4.653	252.9	19.91	58.33	29.15	0
8/30/2021 12:45	6.552	204.1	24.96	59.39	29.14	0
8/30/2021 13:00	6.508	197.4	23.04	60.9	29.14	0
8/30/2021 13:15	5.202	223.5	30.75	61.26	29.14	0
8/30/2021 13:30	8.2	241.3	12.08	60.95	29.14	0
8/30/2021 13:45	6.6	252.6	13.21	61.24	29.14	0
8/30/2021 14:00	5.24	230	22.27	61.1	29.14	0
8/30/2021 14:15	5.849	210.7	15.62	61.35	29.13	0
8/30/2021 14:30	4.838	213.1	22.8	61.66	29.13	0
8/30/2021 14:45	4.694	224.3	27.55	61.91	29.13	0
8/30/2021 15:00	5.294	234.6	18.33	61.71	29.13	0
8/30/2021 15:15	2.723	279.6	33.98	61.52	29.13	0
8/30/2021 15:30	3.509	276.7	27.47	61.57	29.13	0
8/30/2021 15:45	3.433	279	13.08	61.31	29.12	0
8/30/2021 16:00	3.015	262.8	10.72	61.19	29.12	0
8/30/2021 16:15	2.586	292.9	23.8	61.17	29.12	0
8/30/2021 16:30	4.032	256.4	30.09	60.74	29.12	0
8/30/2021 16:45	3.119	278	20.17	60.08	29.12	0
8/30/2021 17:00	0.74	327.3	59.39	60.26	29.12	0
8/30/2021 17:15	1.549	7.916	13.18	59.85	29.12	0
8/30/2021 17:30	0.925	14.32	6.496	59.52	29.12	0
8/30/2021 17:45	1.528	19.97	8.69	59.13	29.11	0
8/30/2021 18:00	1.58	257.6	40.19	59.35	29.11	0
8/30/2021 18:15	1.74	251.2	17.41	59.41	29.11	0
8/30/2021 18:30	0.693	279.8	9.88	59.24	29.11	0
8/30/2021 18:45	1.418	290.5	21.74	59.08	29.11	0
8/30/2021 19:00	3.19	250	8.42	58.95	29.11	0
8/30/2021 19:15	4.547	262.3	6.353	58.37	29.11	0
8/30/2021 19:30	4.873	276.1	10.77	58.01	29.11	0
8/30/2021 19:45	4.497	291.8	7.53	57.82	29.11	0
8/30/2021 20:00	4.645	298.8	6.844	57.66	29.11	0
8/30/2021 20:15	3.428	331.3	37.75	57.44	29.12	0
8/30/2021 20:30	5.734	16.66	14.88	56.68	29.11	0
8/30/2021 20:45	7.692	7.02	18.33	56.5	29.11	0
8/30/2021 21:00	8.62	9.63	15.94	56.28	29.11	0
8/30/2021 21:15	4.974	356.8	29.14	55.96	29.12	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/30/2021 21:30	5.647	201.8	33.56	54.64	29.12	0
8/30/2021 21:45	4.078	251.3	48.2	53.85	29.12	0
8/30/2021 22:00	7.194	16.84	13.91	53.26	29.12	0
8/30/2021 22:15	3.666	48.8	8.06	51.9	29.11	0
8/30/2021 22:30	3.011	56.34	33.39	51.86	29.11	0
8/30/2021 22:45	2.7	52.72	28.6	51.68	29.12	0
8/30/2021 23:00	1.453	36.09	14.41	51.78	29.12	0
8/30/2021 23:15	1.517	51.94	8.89	51.44	29.12	0
8/30/2021 23:30	0.869	65.24	15.98	51.07	29.12	0
8/30/2021 23:45	1.697	103.8	12.27	50.87	29.12	0
8/31/2021 0:00	3.212	160.6	9.09	51.08	29.12	0
8/31/2021 0:15	3.435	165.6	17.21	51.16	29.12	0
8/31/2021 0:30	3.174	160.2	13.2	51.17	29.12	0
8/31/2021 0:45	3.48	144.4	14.09	50.71	29.12	0
8/31/2021 1:00	3.659	162.3	34.57	50.85	29.12	0
8/31/2021 1:15	3.322	171.2	27.04	50.72	29.13	0
8/31/2021 1:30	2.495	151	25.15	50.85	29.13	0
8/31/2021 1:45	2.316	105.6	38.97	50.71	29.13	0
8/31/2021 2:00	2.137	61.62	12.67	50.29	29.13	0
8/31/2021 2:15	3.027	99	13.58	50.4	29.13	0
8/31/2021 2:30	3.243	98.4	15.45	50.58	29.14	0
8/31/2021 2:45	3.82	117.3	6.6	50.67	29.14	0
8/31/2021 3:00	4.713	116.3	7.703	50.48	29.14	0
8/31/2021 3:15	3.98	106.8	10.85	50.11	29.14	0
8/31/2021 3:30	3.276	100.2	8.75	50	29.14	0
8/31/2021 3:45	3.438	88.3	11.68	49.82	29.14	0
8/31/2021 4:00	3.878	65.93	10.17	49.67	29.14	0
8/31/2021 4:15	2.861	50.38	12.3	49.5	29.14	0
8/31/2021 4:30	2.487	54.57	6.572	49.5	29.14	0
8/31/2021 4:45	3.518	72.91	14	49.6	29.14	0
8/31/2021 5:00	3.979	78.14	8.35	49.53	29.14	0
8/31/2021 5:15	2.664	67.47	11.09	49.55	29.14	0
8/31/2021 5:30	3.328	95.1	9.22	49.52	29.14	0
8/31/2021 5:45	3.192	89.7	10.93	49.56	29.14	0
8/31/2021 6:00	3.035	85.3	7.784	49.6	29.15	0
8/31/2021 6:15	3.709	90.1	9.07	49.5	29.15	0
8/31/2021 6:30	3.011	98.3	9.79	49.63	29.15	0
8/31/2021 6:45	2.73	83.8	10.93	49.77	29.15	0
8/31/2021 7:00	2.751	96.6	8.53	49.93	29.16	0
8/31/2021 7:15	3.61	104.6	9.89	50.14	29.16	0
8/31/2021 7:30	4.33	127.3	14.41	50.65	29.16	0
8/31/2021 7:45	5.365	136.4	12.15	50.98	29.16	0
8/31/2021 8:00	5.756	133.9	11.71	51.26	29.16	0
8/31/2021 8:15	4.712	130.3	13.34	51.79	29.16	0
8/31/2021 8:30	6.597	145.7	13.75	52.41	29.16	0
8/31/2021 8:45	6.31	123.9	14.75	53.11	29.16	0
8/31/2021 9:00	5.323	138.9	17.22	52.92	29.16	0
8/31/2021 9:15	7.731	154.9	21.79	53.8	29.16	0
8/31/2021 9:30	5.76	171.8	24.98	54.55	29.16	0
8/31/2021 9:45	7.116	188.2	13.04	54.14	29.16	0
8/31/2021 10:00	6.681	167.9	9.25	54.29	29.17	0
8/31/2021 10:15	5.771	148	20.37	55.5	29.16	0
8/31/2021 10:30	6.095	165.5	19.99	56.56	29.16	0
8/31/2021 10:45	5.824	197.2	30.28	57.93	29.16	0
8/31/2021 11:00	8.42	201.2	25.7	57.65	29.16	0
8/31/2021 11:15	8.69	169.1	17.24	58.64	29.16	0
8/31/2021 11:30	6.248	167.3	24.54	58.01	29.16	0
8/31/2021 11:45	3.535	161.5	26.42	58.02	29.17	0
8/31/2021 12:00	2.68	208.1	34.18	58.27	29.17	0
8/31/2021 12:15	4.412	232	20.42	58.26	29.17	0
8/31/2021 12:30	2.889	255	29.34	58.78	29.17	0
8/31/2021 12:45	1.513	263.5	38.58	59.03	29.17	0
8/31/2021 13:00	4.09	221.2	34.31	59.77	29.17	0
8/31/2021 13:15	5.282	163.1	28.83	60.3	29.17	0
8/31/2021 13:30	3.943	110.3	80.7	60.37	29.17	0
8/31/2021 13:45	4.733	155.5	69.54	60.42	29.17	0
8/31/2021 14:00	3.943	196.3	34.73	60.6	29.17	0
8/31/2021 14:15	3.04	168.2	35.78	60.32	29.17	0
8/31/2021 14:30	2.953	127.9	36.35	60.54	29.17	0
8/31/2021 14:45	2.077	348.2	72.8	61.08	29.17	0
8/31/2021 15:00	4.098	50.35	18.95	60.92	29.16	0
8/31/2021 15:15	3.796	74.12	21.25	60.44	29.16	0
8/31/2021 15:30	2.73	51.17	20.71	60.67	29.16	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
8/31/2021 15:45	3.591	43.77	16.53	60.75	29.16	0
8/31/2021 16:00	6.588	25.83	13.18	60.86	29.16	0
8/31/2021 16:15	8.59	29.52	10.32	60.11	29.16	0
8/31/2021 16:30	9.61	18.38	11.54	60.64	29.16	0
8/31/2021 16:45	9.16	22.57	13.67	60.72	29.16	0
8/31/2021 17:00	10.31	12.22	13.87	59.15	29.16	0
8/31/2021 17:15	10.93	11.83	14.77	58.63	29.17	0
8/31/2021 17:30	10.21	6.788	14.76	58.16	29.17	0
8/31/2021 17:45	9.84	13.47	13.34	57.68	29.17	0
8/31/2021 18:00	10.47	16.5	10.95	57.15	29.18	0
8/31/2021 18:15	9.19	17.64	12.14	56.77	29.17	0
8/31/2021 18:30	10.11	17.79	13.62	56.65	29.17	0
8/31/2021 18:45	9.23	13.8	14.82	56.51	29.17	0
8/31/2021 19:00	8.2	8.67	17.8	56.38	29.17	0
8/31/2021 19:15	7.616	17.4	15.56	56.07	29.18	0
8/31/2021 19:30	5.648	13.42	17.4	55.87	29.18	0
8/31/2021 19:45	3.961	356.3	30.34	55.96	29.18	0
8/31/2021 20:00	3.27	357.8	29.3	55.5	29.19	0
8/31/2021 20:15	4.437	17.26	15.29	55.04	29.19	0
8/31/2021 20:30	5.479	25.04	8.67	54.44	29.19	0
8/31/2021 20:45	6.374	30.83	6.687	54.23	29.19	0
8/31/2021 21:00	6.518	24.09	5.824	53.73	29.19	0
8/31/2021 21:15	5.95	16.82	10.81	53.53	29.19	0
8/31/2021 21:30	4.317	12.05	12.61	54.05	29.19	0
8/31/2021 21:45	1.901	41.49	11.97	54.83	29.19	0
8/31/2021 22:00	3.21	5.406	33.95	54.53	29.19	0
8/31/2021 22:15	2.053	51.26	22.85	53.36	29.19	0
8/31/2021 22:30	1.505	53.59	9.4	51.6	29.19	0
8/31/2021 22:45	3.397	29.3	14.48	51.47	29.19	0
8/31/2021 23:00	2.958	27.57	5.702	51.7	29.19	0
8/31/2021 23:15	3.23	23.3	3.616	50.91	29.19	0
8/31/2021 23:30	3.938	12.87	8.74	50.55	29.19	0
8/31/2021 23:45	4.202	4.14	9.08	49.38	29.19	0
9/1/2021 0:00	2.682	10.73	10.98	49.65	29.19	0
9/1/2021 0:15	1.872	314.8	14.03	49.28	29.19	0
9/1/2021 0:30	3.415	10.78	16.11	49.24	29.19	0
9/1/2021 0:45	3.78	29.5	6.943	48.29	29.2	0
9/1/2021 1:00	3.419	30.17	8.06	48.55	29.2	0
9/1/2021 1:15	4.206	29.77	10.15	49.48	29.2	0
9/1/2021 1:30	4.144	29.12	5.134	49.54	29.2	0
9/1/2021 1:45	4.026	33.46	5.006	48.83	29.2	0
9/1/2021 2:00	2.907	28.57	3.277	48.37	29.2	0
9/1/2021 2:15	3.026	34.41	6.122	48.35	29.2	0
9/1/2021 2:30	2.478	40.68	10.01	47.59	29.2	0
9/1/2021 2:45	2.624	53.67	14.41	47.09	29.2	0
9/1/2021 3:00	1.988	49.13	8.79	46.22	29.2	0
9/1/2021 3:15	3.069	47.94	4.808	46.94	29.2	0
9/1/2021 3:30	3.164	58.28	4.004	47.7	29.21	0
9/1/2021 3:45	1.244	60.63	0.463	47.77	29.21	0
9/1/2021 4:00	0.35	48.13	6.616	47.91	29.21	0
9/1/2021 4:15	0.142	42.99	5.594	47.69	29.21	0
9/1/2021 4:30	0.054	55.04	0.278	46.05	29.21	0
9/1/2021 4:45	0.871	63.32	8.51	46.87	29.21	0
9/1/2021 5:00	1.64	84.8	3.037	46.83	29.21	0
9/1/2021 5:15	1.507	114.4	21.18	47.49	29.21	0
9/1/2021 5:30	2.203	139.6	5.446	47.47	29.21	0
9/1/2021 5:45	1.587	110.9	13.91	47.19	29.21	0
9/1/2021 6:00	1.438	78.7	7.454	47.45	29.21	0
9/1/2021 6:15	0.328	63.03	5.058	48.62	29.21	0
9/1/2021 6:30	0.597	52.2	0.353	49.07	29.22	0
9/1/2021 6:45	0.686	14.27	15.15	48.83	29.22	0
9/1/2021 7:00	0.548	20.82	10.98	48.99	29.22	0
9/1/2021 7:15	0.558	45.25	9.39	50.64	29.23	0
9/1/2021 7:30	1.778	53.88	13.71	51.24	29.23	0
9/1/2021 7:45	1.555	344.1	63.28	51.4	29.22	0
9/1/2021 8:00	0.766	328.7	42.05	52.73	29.22	0
9/1/2021 8:15	1.884	30.3	22.21	53.51	29.22	0
9/1/2021 8:30	2.16	174.2	25.95	54.19	29.23	0
9/1/2021 8:45	2.483	173.3	38.87	55.01	29.23	0
9/1/2021 9:00	2.462	208.6	67.7	56.18	29.23	0
9/1/2021 9:15	2.04	274.1	49.35	57.09	29.23	0
9/1/2021 9:30	3.119	308.7	32.71	57.27	29.23	0
9/1/2021 9:45	3.184	31.06	47.19	58.84	29.23	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/1/2021 10:00	3.843	23.37	23.51	59.4	29.23	0
9/1/2021 10:15	4.504	311.1	57.2	60.44	29.23	0
9/1/2021 10:30	6.403	13.66	20.9	60.95	29.22	0
9/1/2021 10:45	8.16	27.99	19.39	61.58	29.22	0
9/1/2021 11:00	11.07	25.18	12.33	61.75	29.21	0
9/1/2021 11:15	10.32	27.52	13.99	62.26	29.21	0
9/1/2021 11:30	7.922	11.01	23.28	62.94	29.21	0
9/1/2021 11:45	9.63	5.241	18.18	63.76	29.2	0
9/1/2021 12:00	9.27	355	21.34	63.76	29.2	0
9/1/2021 12:15	8.79	12.25	23.06	64.65	29.2	0
9/1/2021 12:30	8.75	14.43	20.21	65.12	29.19	0
9/1/2021 12:45	9.55	26.28	12.87	65.5	29.19	0
9/1/2021 13:00	7.735	13.44	27.18	65.96	29.19	0
9/1/2021 13:15	7.999	25.1	20.69	66.88	29.19	0
9/1/2021 13:30	7.851	34.56	13.78	66.5	29.19	0
9/1/2021 13:45	7.624	4.551	26.71	67.25	29.18	0
9/1/2021 14:00	6.399	332.2	26.36	67.85	29.18	0
9/1/2021 14:15	6.276	349.7	24.81	67.68	29.18	0
9/1/2021 14:30	7.157	8.72	25.57	68.36	29.17	0
9/1/2021 14:45	7.749	13.71	19.78	67.98	29.17	0
9/1/2021 15:00	7.94	8.51	24.6	68.31	29.17	0
9/1/2021 15:15	6.614	0.826	27.37	68.54	29.17	0
9/1/2021 15:30	6.008	0.563	26.55	68.75	29.17	0
9/1/2021 15:45	7.606	352.7	24.54	68.78	29.17	0
9/1/2021 16:00	7.143	349.8	26.94	68.77	29.17	0
9/1/2021 16:15	6.959	0.608	20.86	68.58	29.16	0
9/1/2021 16:30	7.68	350.8	22.46	68.5	29.16	0
9/1/2021 16:45	9.27	340.7	10.72	68.22	29.16	0
9/1/2021 17:00	7.374	340.3	19.99	68.1	29.16	0
9/1/2021 17:15	9.59	314.2	9.1	67.75	29.16	0
9/1/2021 17:30	7.423	326.4	14.1	67.49	29.16	0
9/1/2021 17:45	8	328.7	16.98	66.78	29.16	0
9/1/2021 18:00	8.77	325.6	8.69	66.19	29.16	0
9/1/2021 18:15	8.21	326.2	10.09	65.46	29.16	0
9/1/2021 18:30	8.39	336.6	10.01	64.59	29.16	0
9/1/2021 18:45	10.25	336.4	13.95	63.99	29.16	0
9/1/2021 19:00	9.55	341.8	7.808	63.35	29.16	0
9/1/2021 19:15	8.88	354.3	14.65	62.62	29.17	0
9/1/2021 19:30	10.92	350.3	13.38	62.67	29.17	0
9/1/2021 19:45	10.05	341.1	8.27	62.4	29.18	0
9/1/2021 20:00	8.63	340.6	9.53	62.01	29.18	0
9/1/2021 20:15	7.736	4.275	16.64	61.27	29.18	0
9/1/2021 20:30	6.667	355.1	15.12	60.93	29.18	0
9/1/2021 20:45	7.322	0.444	17.71	60.53	29.18	0
9/1/2021 21:00	6.31	357	17.28	59.92	29.19	0
9/1/2021 21:15	6.161	3.848	14.22	58.75	29.19	0
9/1/2021 21:30	7.955	3.127	13.91	59.16	29.19	0
9/1/2021 21:45	7.444	6.431	12.2	58.94	29.19	0
9/1/2021 22:00	8.14	6.702	11.36	58.8	29.19	0
9/1/2021 22:15	7.954	9.97	9.4	59.09	29.19	0
9/1/2021 22:30	5.685	1.645	11.09	59.08	29.19	0
9/1/2021 22:45	6.648	8.58	8.33	58.22	29.19	0
9/1/2021 23:00	6.613	12.11	5.501	57.39	29.2	0
9/1/2021 23:15	8.02	9.2	6.651	56.87	29.2	0
9/1/2021 23:30	9.7	14.86	5.964	55.84	29.2	0
9/1/2021 23:45	6.57	356.6	22.2	54.92	29.2	0
9/2/2021 0:00	1.784	12.97	35.12	54.38	29.21	0
9/2/2021 0:15	5.137	331.9	11.97	55.5	29.21	0
9/2/2021 0:30	3.247	345	15.45	54.4	29.21	0
9/2/2021 0:45	1.677	36.32	10.22	53.13	29.21	0
9/2/2021 1:00	2.322	47.73	9.97	53.41	29.21	0
9/2/2021 1:15	2.632	86	10.7	53.25	29.21	0
9/2/2021 1:30	3.395	157.1	7.663	53.16	29.21	0
9/2/2021 1:45	3.537	122.1	12.61	53.35	29.22	0
9/2/2021 2:00	2.514	84.7	20	53.03	29.22	0
9/2/2021 2:15	1.232	38.07	4.564	52.95	29.22	0
9/2/2021 2:30	2.935	19.61	4.394	53.45	29.22	0
9/2/2021 2:45	2.914	42.9	6.849	52.96	29.22	0
9/2/2021 3:00	1.682	59.3	19.46	52.56	29.23	0
9/2/2021 3:15	3.1	99.5	9.98	53.47	29.23	0
9/2/2021 3:30	2.847	44.61	25.68	53.66	29.23	0
9/2/2021 3:45	2.583	38.56	12.19	54.87	29.23	0
9/2/2021 4:00	1.213	137.9	44.83	53.16	29.23	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/2/2021 4:15	0.741	65.27	21.45	53.1	29.24	0
9/2/2021 4:30	1.779	53.91	17.5	52	29.24	0
9/2/2021 4:45	2.504	114	21.5	52.1	29.24	0
9/2/2021 5:00	2.672	134.3	14.26	51.63	29.24	0
9/2/2021 5:15	3.279	141.1	12.4	51.49	29.24	0
9/2/2021 5:30	3.854	141.1	6.235	51.65	29.24	0
9/2/2021 5:45	1.765	112.1	24.55	51.54	29.25	0
9/2/2021 6:00	2.382	311.6	87.9	50.78	29.25	0
9/2/2021 6:15	1.696	226.3	27.3	51.06	29.25	0
9/2/2021 6:30	0.758	229.4	38.09	52.93	29.26	0
9/2/2021 6:45	0.486	163.2	31.7	53.8	29.26	0
9/2/2021 7:00	1.097	178.2	63.66	54.01	29.26	0
9/2/2021 7:15	1.794	268.5	24.67	53.95	29.27	0
9/2/2021 7:30	1.993	247.5	16.33	55.37	29.27	0
9/2/2021 7:45	0.947	26.63	70.76	57.27	29.27	0
9/2/2021 8:00	1.335	284.6	91.9	58.55	29.27	0
9/2/2021 8:15	1.942	231.2	17.42	58.29	29.27	0
9/2/2021 8:30	2.538	218.1	18.89	58.83	29.27	0
9/2/2021 8:45	2.016	239.8	51.21	59.51	29.27	0
9/2/2021 9:00	1.483	45.34	83.9	61.84	29.27	0
9/2/2021 9:15	2.831	224.1	24.87	61.54	29.27	0
9/2/2021 9:30	3.007	204.3	28.51	62.42	29.27	0
9/2/2021 9:45	3.029	257.6	40.98	63.44	29.27	0
9/2/2021 10:00	2.653	326.5	32.86	64.62	29.27	0
9/2/2021 10:15	2.374	269.1	56.71	65.11	29.27	0
9/2/2021 10:30	4.125	307.3	24.19	65.95	29.27	0
9/2/2021 10:45	3.328	340	39.18	65.79	29.27	0
9/2/2021 11:00	4.456	293.2	34.81	66.47	29.27	0
9/2/2021 11:15	3.952	265.4	41.06	66.84	29.27	0
9/2/2021 11:30	3.782	224.6	32.49	67.67	29.27	0
9/2/2021 11:45	4.875	263.8	43.36	68.89	29.27	0
9/2/2021 12:00	4.34	268.2	20.87	69.72	29.26	0
9/2/2021 12:15	5.159	252	39.34	69.63	29.26	0
9/2/2021 12:30	6.964	270.1	16.14	70.73	29.25	0
9/2/2021 12:45	4.733	271.6	38.03	70.96	29.25	0
9/2/2021 13:00	5.147	321	27.52	71.49	29.25	0
9/2/2021 13:15	3.983	313.4	39.47	72.26	29.25	0
9/2/2021 13:30	3.829	2.531	37.28	72.64	29.25	0
9/2/2021 13:45	3.616	46.59	38.9	73.3	29.25	0
9/2/2021 14:00	3.989	312.6	41.74	73.69	29.25	0
9/2/2021 14:15	4.525	296.5	37.49	73.41	29.24	0
9/2/2021 14:30	4.841	298.3	30.38	73.91	29.24	0
9/2/2021 14:45	6.798	344.6	26.78	74.77	29.24	0
9/2/2021 15:00	6.833	328.5	30.81	74.19	29.23	0
9/2/2021 15:15	6.901	5.361	22.26	74.34	29.23	0
9/2/2021 15:30	7.131	4.892	23.71	74.02	29.23	0
9/2/2021 15:45	6.547	21.06	15.62	74.35	29.22	0
9/2/2021 16:00	4.15	13.03	35.36	74.63	29.22	0
9/2/2021 16:15	4.125	343	31.85	74.54	29.22	0
9/2/2021 16:30	5.987	304.7	13.47	74.77	29.22	0
9/2/2021 16:45	4.615	319.3	22.32	74.83	29.22	0
9/2/2021 17:00	5.226	9.45	24.54	74.36	29.22	0
9/2/2021 17:15	7.388	350.2	16.95	73.84	29.22	0
9/2/2021 17:30	6.519	348.5	15.88	73.48	29.22	0
9/2/2021 17:45	5.095	336.2	14.5	73.24	29.22	0
9/2/2021 18:00	5.372	321.5	10.34	72.61	29.22	0
9/2/2021 18:15	5.771	329.3	10.07	71.7	29.22	0
9/2/2021 18:30	5.522	298.7	14.46	70.26	29.22	0
9/2/2021 18:45	5.727	291.5	5.82	69.2	29.22	0
9/2/2021 19:00	5.603	293.9	9.85	67.76	29.22	0
9/2/2021 19:15	3.664	274.7	11.77	67.42	29.22	0
9/2/2021 19:30	1.064	286	13.03	66.91	29.23	0
9/2/2021 19:45	1.255	336	15.6	67.04	29.23	0
9/2/2021 20:00	1.482	33.79	7.149	66.7	29.23	0
9/2/2021 20:15	1.961	14.75	14.24	65.71	29.24	0
9/2/2021 20:30	2.621	3.619	15.73	64.68	29.24	0
9/2/2021 20:45	2.664	50.97	23.83	64.34	29.24	0
9/2/2021 21:00	2.635	62.41	5.092	63.67	29.24	0
9/2/2021 21:15	2.105	53.54	6.229	63.44	29.24	0
9/2/2021 21:30	1.434	72.7	19.64	62.17	29.23	0
9/2/2021 21:45	2.031	115.3	14.79	62.54	29.24	0
9/2/2021 22:00	1.804	111.4	10.55	62.24	29.24	0
9/2/2021 22:15	1.517	142.5	31.63	61.9	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/2/2021 22:30	2.538	154.6	8.93	60.16	29.24	0
9/2/2021 22:45	2.87	119.9	12.22	60.49	29.24	0
9/2/2021 23:00	0.606	78.3	11.43	60.3	29.24	0
9/2/2021 23:15	0.81	67.69	0.543	60.25	29.24	0
9/2/2021 23:30	0.775	57.68	5.347	59.15	29.24	0
9/2/2021 23:45	0.964	7.81	9.13	58.38	29.24	0
9/3/2021 0:00	2.432	60.14	17.98	59.07	29.24	0
9/3/2021 0:15	2.518	63.65	13.77	58.72	29.24	0
9/3/2021 0:30	2.482	93.7	29.61	57.8	29.24	0
9/3/2021 0:45	2.317	129.2	6.71	58.64	29.24	0
9/3/2021 1:00	2.009	153.9	18.21	58.88	29.24	0
9/3/2021 1:15	2.773	148.9	10.7	58.23	29.24	0
9/3/2021 1:30	3.43	125.7	5.428	57.89	29.24	0
9/3/2021 1:45	2.862	126.7	7.844	57.89	29.24	0
9/3/2021 2:00	1.986	102.5	1.827	57.56	29.24	0
9/3/2021 2:15	3.186	142.9	10.86	57.89	29.24	0
9/3/2021 2:30	3.119	154.9	5.3	57.73	29.24	0
9/3/2021 2:45	3.312	153.3	5.193	56.68	29.24	0
9/3/2021 3:00	4.014	172	5.346	55.83	29.24	0
9/3/2021 3:15	3.064	154.3	11.34	55.71	29.23	0
9/3/2021 3:30	1.71	109.2	17.99	56.04	29.23	0
9/3/2021 3:45	1.415	89.8	15.04	55.81	29.24	0
9/3/2021 4:00	1.159	119.8	0.968	55.29	29.24	0
9/3/2021 4:15	1.654	164.4	19.33	53.89	29.24	0
9/3/2021 4:30	3.879	161.8	6.624	54.48	29.24	0
9/3/2021 4:45	4.454	159.7	10.11	55.05	29.23	0
9/3/2021 5:00	3.134	138	3.56	55.61	29.23	0
9/3/2021 5:15	1.923	127.5	7.781	55.66	29.23	0
9/3/2021 5:30	0.348	96.7	28.37	54.76	29.24	0
9/3/2021 5:45	0.428	12.26	0.99	54.37	29.24	0
9/3/2021 6:00	0.214	26.12	8.65	54.46	29.24	0
9/3/2021 6:15	2.079	147.9	17.08	55.57	29.24	0
9/3/2021 6:30	3.349	135.3	12.07	55.8	29.24	0
9/3/2021 6:45	1.948	97.3	17.27	57.54	29.24	0
9/3/2021 7:00	0.876	82.8	18.25	58.94	29.24	0
9/3/2021 7:15	1.228	85.9	62.63	59.33	29.24	0
9/3/2021 7:30	0.787	65.59	21.1	61.19	29.25	0
9/3/2021 7:45	1.796	108.8	28.07	61.81	29.24	0
9/3/2021 8:00	2.119	119.2	27.18	62.66	29.24	0
9/3/2021 8:15	1.31	120.8	24.94	63.36	29.25	0
9/3/2021 8:30	1.466	24.15	57.71	64.51	29.25	0
9/3/2021 8:45	2.738	51.2	17.49	64.53	29.25	0
9/3/2021 9:00	2.616	52.97	16.62	65.32	29.25	0
9/3/2021 9:15	2.66	37.62	23.15	66.47	29.25	0
9/3/2021 9:30	3.554	41.81	17.15	67.98	29.25	0
9/3/2021 9:45	2.704	21.39	18.02	67.89	29.25	0
9/3/2021 10:00	3.055	31.56	17.68	69.45	29.24	0
9/3/2021 10:15	2.737	1.928	30.54	70.75	29.24	0
9/3/2021 10:30	2.469	32.53	21.45	71.47	29.24	0
9/3/2021 10:45	3.293	295.5	51.84	72.76	29.23	0
9/3/2021 11:00	4.575	329.5	45.97	73.06	29.23	0
9/3/2021 11:15	2.837	19	72.9	74.34	29.23	0
9/3/2021 11:30	4.922	8.03	43.13	74.76	29.22	0
9/3/2021 11:45	4.45	15.52	40.43	74.95	29.22	0
9/3/2021 12:00	5.998	306.8	31.44	75.99	29.22	0
9/3/2021 12:15	5.982	317.2	42.75	76.13	29.21	0
9/3/2021 12:30	4.772	334.4	22.82	75.38	29.22	0
9/3/2021 12:45	8.2	278.9	26.06	74.78	29.22	0
9/3/2021 13:00	7.098	294.3	23.14	74.88	29.22	0
9/3/2021 13:15	6.892	305.1	18.35	74.8	29.22	0
9/3/2021 13:30	7.753	291.9	20.45	74.53	29.22	0
9/3/2021 13:45	6.599	357.4	26.2	74.35	29.21	0
9/3/2021 14:00	6.348	13.66	11.53	74.32	29.21	0
9/3/2021 14:15	5.57	21.46	15.97	74.73	29.21	0
9/3/2021 14:30	4.942	350.3	42.95	75.09	29.21	0
9/3/2021 14:45	7.753	303	14.27	75.3	29.21	0
9/3/2021 15:00	7.827	294	12.17	75.57	29.21	0
9/3/2021 15:15	5.785	314.9	20.45	75.34	29.21	0
9/3/2021 15:30	5.288	292.6	25.42	75.51	29.2	0
9/3/2021 15:45	3.726	298.5	28.45	75.05	29.2	0
9/3/2021 16:00	4.893	26.56	12.23	75.43	29.19	0
9/3/2021 16:15	5.253	13.71	9.78	75.3	29.19	0
9/3/2021 16:30	5.643	10.62	10.66	74.4	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/3/2021 16:45	4.479	305.7	43.74	74.36	29.19	0
9/3/2021 17:00	4.089	289.8	26.43	74.15	29.19	0
9/3/2021 17:15	4.382	293.4	29.98	73.62	29.19	0
9/3/2021 17:30	5.298	292	9.55	73.14	29.19	0
9/3/2021 17:45	3.746	313.8	22.23	72.67	29.19	0
9/3/2021 18:00	2.262	7.17	21.56	71.85	29.18	0
9/3/2021 18:15	3.788	309.5	12.23	71.27	29.18	0
9/3/2021 18:30	4.399	353.5	21.55	70.71	29.18	0
9/3/2021 18:45	4.31	8.61	17.56	69.99	29.17	0
9/3/2021 19:00	4.637	18.95	12.09	68.99	29.17	0
9/3/2021 19:15	6.254	21.39	11.44	68.07	29.18	0
9/3/2021 19:30	6.411	22.72	7.707	67.19	29.18	0
9/3/2021 19:45	7.08	27.09	6.888	66.66	29.18	0
9/3/2021 20:00	6.572	27.08	8.06	66.39	29.18	0
9/3/2021 20:15	7.212	35.14	6.285	65.21	29.18	0
9/3/2021 20:30	7.579	29.29	6.234	64.61	29.18	0
9/3/2021 20:45	6.994	25.98	3.999	64.07	29.18	0
9/3/2021 21:00	5.703	16.93	6.049	63.01	29.18	0
9/3/2021 21:15	5.519	11.91	9.72	63.11	29.18	0
9/3/2021 21:30	4.724	21.66	9.71	62.82	29.18	0
9/3/2021 21:45	6.434	30.29	7.646	62.05	29.18	0
9/3/2021 22:00	6.455	37.97	5.19	61	29.18	0
9/3/2021 22:15	7.086	45.07	7.631	60.92	29.17	0
9/3/2021 22:30	6.406	38.25	7.277	60.89	29.17	0
9/3/2021 22:45	5.944	45.68	6.71	60.58	29.17	0
9/3/2021 23:00	5.081	50.35	12.42	61.07	29.16	0
9/3/2021 23:15	4.552	21.24	7.002	62.15	29.16	0
9/3/2021 23:30	3.169	8.91	4.145	61.74	29.16	0
9/3/2021 23:45	0.492	23.04	1.735	59.8	29.16	0
9/4/2021 0:00	1.743	36.47	3.846	60.93	29.16	0
9/4/2021 0:15	0.913	30.95	4.444	60.88	29.16	0
9/4/2021 0:30	1.571	326.7	15.06	60.81	29.16	0
9/4/2021 0:45	1.61	336.8	13.31	60.84	29.16	0
9/4/2021 1:00	0.67	346.9	0.652	59.41	29.16	0
9/4/2021 1:15	0.043	29.63	0.009	59.16	29.16	0
9/4/2021 1:30	0.022	28.35	0.055	59.85	29.17	0
9/4/2021 1:45	0.153	28.26	0.095	60.33	29.17	0
9/4/2021 2:00	0.167	28.65	0.045	59.86	29.16	0
9/4/2021 2:15	0.97	35.23	50.02	60.79	29.16	0
9/4/2021 2:30	2.929	155.6	15.39	59.78	29.16	0
9/4/2021 2:45	3.272	155.6	7.373	58.94	29.16	0
9/4/2021 3:00	3.18	151.3	13.44	58.4	29.16	0
9/4/2021 3:15	4.376	162.9	7.968	57.29	29.16	0
9/4/2021 3:30	5.057	171.2	6.471	56.41	29.15	0
9/4/2021 3:45	5	174	5.345	56.4	29.16	0
9/4/2021 4:00	4.139	153.3	8.86	57.16	29.16	0
9/4/2021 4:15	3.867	139.9	7.394	58.03	29.16	0
9/4/2021 4:30	4.597	127.5	6.66	58.9	29.16	0
9/4/2021 4:45	4.166	150.8	6.87	58.44	29.16	0
9/4/2021 5:00	3.884	152.7	6.339	58.76	29.16	0
9/4/2021 5:15	3.867	152.2	9.65	58.47	29.16	0
9/4/2021 5:30	4.696	166.6	13.22	57.93	29.16	0
9/4/2021 5:45	6.132	183.4	6.822	56.12	29.16	0
9/4/2021 6:00	7.038	190.4	10.68	55.94	29.15	0
9/4/2021 6:15	5.237	179.5	9.23	57.36	29.16	0
9/4/2021 6:30	4.11	176.7	11.82	58.52	29.16	0
9/4/2021 6:45	5.352	178.8	10.75	58.22	29.16	0
9/4/2021 7:00	4.322	183.8	10.56	58.41	29.16	0
9/4/2021 7:15	4.688	187.2	8.84	59.15	29.16	0
9/4/2021 7:30	5.035	192.3	10.29	59.75	29.16	0
9/4/2021 7:45	3.865	163.2	15.48	61.61	29.17	0
9/4/2021 8:00	3.847	162.4	14.33	63.55	29.16	0
9/4/2021 8:15	4.266	182.7	19.44	64.26	29.16	0
9/4/2021 8:30	4.891	182.1	11.93	64.37	29.17	0
9/4/2021 8:45	5.032	186.2	12.88	64.46	29.17	0
9/4/2021 9:00	4.726	187.9	14.79	65.47	29.17	0
9/4/2021 9:15	3.953	199.1	24.59	66.1	29.17	0
9/4/2021 9:30	4.824	193.5	16.01	67.38	29.17	0
9/4/2021 9:45	4.664	182.6	15.53	67.65	29.17	0
9/4/2021 10:00	4.273	200	25.82	68.13	29.17	0
9/4/2021 10:15	4.956	223.3	13.72	68.75	29.17	0
9/4/2021 10:30	3.415	224.3	31.84	69.06	29.18	0
9/4/2021 10:45	3.865	226.4	24.7	70.19	29.18	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/4/2021 11:00	4.837	202.6	15.48	70.45	29.18	0
9/4/2021 11:15	4.971	188.1	20.26	72.34	29.18	0
9/4/2021 11:30	6.822	209	23.2	72.96	29.18	0
9/4/2021 11:45	7.103	202.5	20.29	73.83	29.17	0
9/4/2021 12:00	7.037	210.2	22.78	73.78	29.17	0
9/4/2021 12:15	7.209	210.1	21.74	75.24	29.17	0
9/4/2021 12:30	10.32	203.5	16.32	75.35	29.17	0
9/4/2021 12:45	10.92	209.3	10.82	74.39	29.17	0
9/4/2021 13:00	9.45	202.7	18.03	75.26	29.17	0
9/4/2021 13:15	9.45	192	13.66	75.78	29.17	0
9/4/2021 13:30	10.42	220.9	18.17	76.62	29.16	0
9/4/2021 13:45	9.76	225.6	15.97	75.99	29.16	0
9/4/2021 14:00	6.325	220	37.8	77.39	29.16	0
9/4/2021 14:15	8.72	275	14.17	77.11	29.16	0
9/4/2021 14:30	7.592	271.5	17.67	77.31	29.16	0
9/4/2021 14:45	6.262	245	26.03	77.29	29.16	0
9/4/2021 15:00	9.64	253.2	10.06	76.9	29.16	0
9/4/2021 15:15	8.98	260.2	10.19	75.98	29.16	0
9/4/2021 15:30	6.897	265.2	18.25	74.3	29.16	0
9/4/2021 15:45	7.112	226.2	13.7	74.51	29.16	0
9/4/2021 16:00	4.465	226.5	28.83	74.63	29.15	0
9/4/2021 16:15	4.89	229.3	22.18	75.23	29.15	0
9/4/2021 16:30	4.967	172.6	19.46	75.34	29.15	0
9/4/2021 16:45	4.816	205.4	19.32	75.1	29.15	0
9/4/2021 17:00	6.603	225	16.4	74.92	29.15	0
9/4/2021 17:15	6.923	221.7	7.46	74.21	29.15	0
9/4/2021 17:30	6.074	225	10.83	73.9	29.15	0
9/4/2021 17:45	6.263	252.1	12.72	73.54	29.15	0
9/4/2021 18:00	5.656	261.1	8.07	72.95	29.16	0
9/4/2021 18:15	5.737	248.6	13.56	72.06	29.15	0
9/4/2021 18:30	5.701	227.3	13.36	71.35	29.15	0
9/4/2021 18:45	4.099	198.6	12.34	70.73	29.15	0
9/4/2021 19:00	5.654	196.9	16.14	70.25	29.16	0
9/4/2021 19:15	6.383	218.8	7.403	70.06	29.17	0
9/4/2021 19:30	9.33	211.4	5.583	69.23	29.17	0
9/4/2021 19:45	10.69	213.1	5.122	68.48	29.17	0
9/4/2021 20:00	10.02	216.2	6.251	68	29.18	0
9/4/2021 20:15	8.32	221.7	7.431	67.76	29.18	0
9/4/2021 20:30	6.613	212.3	10.33	67.56	29.18	0
9/4/2021 20:45	5.21	179.8	11.44	67.28	29.18	0
9/4/2021 21:00	4.988	157.1	17.21	66.88	29.18	0
9/4/2021 21:15	4.394	168	18.68	66.75	29.18	0
9/4/2021 21:30	4.586	184.3	12.08	66.73	29.18	0
9/4/2021 21:45	4.524	175.9	7.399	66.48	29.18	0
9/4/2021 22:00	5.217	180.7	11.11	66.36	29.18	0
9/4/2021 22:15	4.625	205.9	10.54	66.26	29.18	0
9/4/2021 22:30	3.521	227.2	12.14	66.03	29.18	0
9/4/2021 22:45	2.528	237.6	15.47	65.9	29.18	0
9/4/2021 23:00	2.649	211.9	11.68	65.84	29.18	0
9/4/2021 23:15	2.087	132.1	11.19	65.07	29.18	0
9/4/2021 23:30	1.624	122.3	2.909	64.94	29.18	0
9/4/2021 23:45	0.148	122.7	0.159	64.99	29.19	0
9/5/2021 0:00	0.351	135	8.32	65.37	29.19	0
9/5/2021 0:15	1.542	143.9	14.16	65.12	29.19	0
9/5/2021 0:30	2.906	178	19.18	64.75	29.19	0
9/5/2021 0:45	4.102	185.8	9.74	64.32	29.19	0
9/5/2021 1:00	4.377	179	14.05	64.1	29.19	0
9/5/2021 1:15	4.032	199.1	14.44	64.21	29.19	0
9/5/2021 1:30	3.27	135.1	44.67	63.99	29.18	0
9/5/2021 1:45	0.764	75.34	10.87	63.25	29.18	0
9/5/2021 2:00	0.583	108.9	27.67	63.64	29.18	0
9/5/2021 2:15	1.818	142.1	5.517	63.56	29.18	0
9/5/2021 2:30	0.326	98.1	34.28	63.62	29.18	0
9/5/2021 2:45	0.052	34.69	0.423	63.82	29.18	0
9/5/2021 3:00	0.015	28.71	0.6	63.95	29.18	0
9/5/2021 3:15	0.716	333.7	41.29	64.26	29.18	0
9/5/2021 3:30	1.482	260.8	10.53	64.03	29.18	0
9/5/2021 3:45	3.333	241.5	7.332	63.51	29.18	0
9/5/2021 4:00	3.653	203.6	10.79	63.39	29.18	0
9/5/2021 4:15	3.431	160.9	17.18	62.83	29.18	0
9/5/2021 4:30	3.167	155.6	25.12	62.34	29.17	0
9/5/2021 4:45	3.309	184.2	10.5	62.57	29.17	0
9/5/2021 5:00	4.608	180.7	14.04	62.3	29.17	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/5/2021 5:15	6.853	151.6	4.816	62.34	29.17	0
9/5/2021 5:30	4.491	149.5	3.002	62.28	29.18	0
9/5/2021 5:45	3.734	175.8	9.99	62.57	29.18	0
9/5/2021 6:00	3.53	157.1	7.273	62.43	29.18	0
9/5/2021 6:15	2.143	174.2	10.45	62.75	29.19	0
9/5/2021 6:30	3.369	203.1	12.47	62.92	29.19	0
9/5/2021 6:45	3.601	173.8	13.97	62.87	29.19	0
9/5/2021 7:00	3.068	166.4	17.17	62.94	29.19	0
9/5/2021 7:15	3.288	188.5	10.84	63.38	29.2	0
9/5/2021 7:30	3.207	153.6	16.91	63.62	29.2	0
9/5/2021 7:45	3.394	153.5	19.37	63.98	29.2	0
9/5/2021 8:00	4.304	138.9	14.32	64.37	29.2	0
9/5/2021 8:15	4.101	149.3	14.32	64.97	29.2	0
9/5/2021 8:30	4.285	156.5	29.74	65.51	29.21	0
9/5/2021 8:45	3.046	119.9	29.46	66.63	29.21	0
9/5/2021 9:00	3.468	188.6	29.3	67	29.21	0
9/5/2021 9:15	4.078	208.9	23.43	67.13	29.21	0
9/5/2021 9:30	4.423	183.4	25.24	67.56	29.21	0
9/5/2021 9:45	4.886	218.5	12.89	67.67	29.21	0
9/5/2021 10:00	3.997	227.4	18.77	68.06	29.21	0
9/5/2021 10:15	3.599	204.3	52.45	69.56	29.21	0
9/5/2021 10:30	4.335	201.4	22.4	69.8	29.21	0
9/5/2021 10:45	4.602	218.6	19.79	69.94	29.21	0
9/5/2021 11:00	5.753	172.3	18.35	71.48	29.21	0
9/5/2021 11:15	5.03	233	33.9	71.66	29.2	0
9/5/2021 11:30	3.251	284.9	72.39	72.42	29.2	0
9/5/2021 11:45	5.536	211	33.21	72.05	29.2	0
9/5/2021 12:00	4.362	194.9	57.66	71.6	29.2	0
9/5/2021 12:15	6.696	266.8	17.96	72.02	29.2	0
9/5/2021 12:30	7.649	282.6	18.8	71.94	29.2	0
9/5/2021 12:45	6.447	269.2	16.07	71.72	29.2	0
9/5/2021 13:00	6.548	282.6	19.1	73.4	29.2	0
9/5/2021 13:15	6.504	264.9	22.45	73.76	29.19	0
9/5/2021 13:30	7.889	261.8	11.64	73.02	29.19	0
9/5/2021 13:45	4.847	264.5	27.62	73.5	29.19	0
9/5/2021 14:00	3.802	262	38.36	73.51	29.19	0
9/5/2021 14:15	5.384	250.4	26.93	74.18	29.19	0
9/5/2021 14:30	7.073	260.4	19.14	75.23	29.18	0
9/5/2021 14:45	7.748	236.3	17.64	75.43	29.18	0
9/5/2021 15:00	7.699	266.6	29.95	75.99	29.18	0
9/5/2021 15:15	7.917	275.6	11.95	75.54	29.18	0
9/5/2021 15:30	8.01	261.6	21.5	75.98	29.18	0
9/5/2021 15:45	5.007	225.7	35.85	75.9	29.17	0
9/5/2021 16:00	7.88	293	11.69	76.4	29.17	0
9/5/2021 16:15	6.952	298.5	21.56	75.73	29.17	0
9/5/2021 16:30	7.989	308.8	13.35	75.31	29.17	0
9/5/2021 16:45	6.922	314.7	11.27	74.82	29.17	0
9/5/2021 17:00	4.174	348.8	22.86	74.96	29.17	0
9/5/2021 17:15	6.081	310.4	10.06	75.07	29.16	0
9/5/2021 17:30	6.874	305.4	9.9	74.43	29.16	0
9/5/2021 17:45	7.27	294.1	20.98	74.49	29.16	0
9/5/2021 18:00	7.917	268.8	8.58	72.94	29.16	0
9/5/2021 18:15	7.002	264	9.29	72.42	29.16	0
9/5/2021 18:30	6.747	260.6	9.85	71.98	29.16	0
9/5/2021 18:45	7.384	275.1	10.34	71.24	29.16	0
9/5/2021 19:00	6.239	290.9	7.808	70.54	29.17	0
9/5/2021 19:15	5.726	278.6	8.76	69.91	29.17	0
9/5/2021 19:30	5.647	270.4	9.64	69.14	29.18	0
9/5/2021 19:45	5.074	291.4	6.802	67.66	29.19	0
9/5/2021 20:00	6.276	278.6	8.47	66.82	29.19	0
9/5/2021 20:15	4.141	269.1	10.04	66.53	29.2	0
9/5/2021 20:30	5.878	271.5	6.933	65.99	29.2	0
9/5/2021 20:45	7.445	264.8	10.11	65.02	29.22	0
9/5/2021 21:00	5.332	282.8	11.05	64.62	29.22	0
9/5/2021 21:15	5.686	282.1	14.71	64.19	29.22	0
9/5/2021 21:30	5.613	290.4	10.12	63.73	29.22	0
9/5/2021 21:45	4.195	313.5	6.704	63.33	29.23	0
9/5/2021 22:00	1.83	263	27.04	63.4	29.23	0
9/5/2021 22:15	2.589	203.8	15.95	63.41	29.23	0
9/5/2021 22:30	4.042	184.3	13.28	63.16	29.23	0
9/5/2021 22:45	4.208	174.7	10.88	63.06	29.24	0
9/5/2021 23:00	4.834	170.3	13.85	62.95	29.23	0
9/5/2021 23:15	4.379	178.9	8.9	62.73	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/5/2021 23:30	5.662	175.5	9.15	62.56	29.24	0
9/5/2021 23:45	5.015	210.4	16.2	62.48	29.24	0
9/6/2021 0:00	4.867	215.8	9.35	62.52	29.24	0
9/6/2021 0:15	4.739	212	13.2	62.44	29.25	0
9/6/2021 0:30	6.239	219	11.91	62.3	29.25	0
9/6/2021 0:45	6.045	244.6	16.83	62.04	29.26	0
9/6/2021 1:00	8.29	252	7.658	61.66	29.26	0
9/6/2021 1:15	5.933	264.9	12.51	61.15	29.27	0
9/6/2021 1:30	5.454	285.8	23.52	60.61	29.27	0
9/6/2021 1:45	3.71	19.79	13.3	58.96	29.27	0
9/6/2021 2:00	6.337	32.97	13.93	58.09	29.27	0
9/6/2021 2:15	5.577	23.14	7.865	57.9	29.27	0
9/6/2021 2:30	3.267	11.14	12.83	58.21	29.28	0
9/6/2021 2:45	3.853	16.85	9.82	58.51	29.28	0
9/6/2021 3:00	1.278	358.2	6.964	58.76	29.29	0
9/6/2021 3:15	2.416	247.1	17.29	59.33	29.29	0
9/6/2021 3:30	4.456	212	10.47	59.49	29.29	0
9/6/2021 3:45	2.726	59.61	79.85	58.85	29.29	0
9/6/2021 4:00	1.201	68.27	20.26	58.15	29.3	0
9/6/2021 4:15	2.48	91.9	11.56	58.24	29.3	0
9/6/2021 4:30	2.013	90.8	12.46	58.22	29.3	0
9/6/2021 4:45	3.994	84.6	10.46	57.91	29.3	0
9/6/2021 5:00	5.224	112.4	14.41	57.21	29.3	0
9/6/2021 5:15	4.37	128.6	11.97	56.85	29.31	0
9/6/2021 5:30	3.663	90	15.27	56.82	29.31	0
9/6/2021 5:45	4.586	83.9	6.608	56.32	29.31	0
9/6/2021 6:00	4.021	87.1	7.594	56.45	29.32	0
9/6/2021 6:15	3.029	62.28	12.26	56.82	29.32	0
9/6/2021 6:30	3.174	32.84	2.885	56.97	29.33	0
9/6/2021 6:45	2.358	32.23	6.891	57.3	29.33	0
9/6/2021 7:00	2.739	37.85	7.751	57.69	29.33	0
9/6/2021 7:15	2.987	39.7	9.19	58	29.34	0
9/6/2021 7:30	3.732	31.36	8.52	58.39	29.34	0
9/6/2021 7:45	1.434	27.13	12.61	59.15	29.33	0
9/6/2021 8:00	0.959	58.99	26.3	60.08	29.33	0
9/6/2021 8:15	2.825	40.44	22.71	60.43	29.33	0
9/6/2021 8:30	2.56	3.965	28.49	60.31	29.33	0
9/6/2021 8:45	1.569	17.96	15.59	60.71	29.34	0
9/6/2021 9:00	2.762	27.83	19	61.17	29.34	0
9/6/2021 9:15	2.403	40.34	23.29	61.41	29.34	0
9/6/2021 9:30	2.744	40.51	21.3	61.93	29.34	0
9/6/2021 9:45	4.008	24.66	21.28	62.52	29.34	0
9/6/2021 10:00	3.501	14.84	15.63	62.84	29.34	0
9/6/2021 10:15	2.5	357.4	13.4	63.23	29.34	0
9/6/2021 10:30	2.7	315.7	44.37	63.59	29.34	0
9/6/2021 10:45	3.486	9.14	40.91	64	29.34	0
9/6/2021 11:00	2.115	234.3	41.31	64.7	29.34	0
9/6/2021 11:15	3.609	293.7	51.56	66.17	29.34	0
9/6/2021 11:30	5.501	289.9	20.39	66.22	29.33	0
9/6/2021 11:45	4.328	282.6	26.04	66.48	29.33	0
9/6/2021 12:00	2.441	285	57.13	67.69	29.33	0
9/6/2021 12:15	5.004	283.1	19.8	68.54	29.32	0
9/6/2021 12:30	3.934	226.8	38.31	69.4	29.32	0
9/6/2021 12:45	4.389	243.2	64.11	70.54	29.32	0
9/6/2021 13:00	5.311	328.3	40.22	69.96	29.32	0
9/6/2021 13:15	4.759	277.4	42.72	70.58	29.31	0
9/6/2021 13:30	5.058	285.8	39.19	71.46	29.31	0
9/6/2021 13:45	5.134	297.7	32.2	71.65	29.3	0
9/6/2021 14:00	4.247	297.2	59	72.1	29.3	0
9/6/2021 14:15	6.39	295.5	23.54	72.54	29.29	0
9/6/2021 14:30	2.868	334.5	50.39	72.21	29.29	0
9/6/2021 14:45	4.496	345.3	34.38	72.46	29.28	0
9/6/2021 15:00	5.81	298	28.93	72.83	29.28	0
9/6/2021 15:15	4.748	299	36.05	72.54	29.28	0
9/6/2021 15:30	6.365	288.6	26.34	73.1	29.27	0
9/6/2021 15:45	5.65	300.7	28.24	73.01	29.27	0
9/6/2021 16:00	4.511	290.4	23.16	73.44	29.27	0
9/6/2021 16:15	4.077	335	28.76	73.29	29.27	0
9/6/2021 16:30	7.308	10.38	17.11	72.85	29.26	0
9/6/2021 16:45	9.05	347.2	12.89	72.75	29.26	0
9/6/2021 17:00	9.12	346.1	14.72	72.43	29.25	0
9/6/2021 17:15	7.338	351.4	19.06	72.07	29.25	0
9/6/2021 17:30	7.082	344.4	13.52	71.75	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/6/2021 17:45	6.757	325.5	15.51	71.34	29.25	0
9/6/2021 18:00	6.481	318.8	16.7	70.72	29.25	0
9/6/2021 18:15	7.031	300.5	13.09	69.88	29.25	0
9/6/2021 18:30	6.774	302.1	11.47	68.98	29.25	0
9/6/2021 18:45	6.654	320.8	21.79	68.13	29.25	0
9/6/2021 19:00	5.696	335.6	20.47	67.45	29.26	0
9/6/2021 19:15	6.596	349	16.66	66.86	29.26	0
9/6/2021 19:30	5.884	354.2	14.44	66.42	29.26	0
9/6/2021 19:45	6.571	2.706	18.66	65.55	29.27	0
9/6/2021 20:00	8.32	9.16	14.71	65.17	29.27	0
9/6/2021 20:15	6.689	25.29	14.17	64.18	29.28	0
9/6/2021 20:30	8.5	14.57	13.02	64.01	29.28	0
9/6/2021 20:45	9.79	12.71	11.71	63.88	29.28	0
9/6/2021 21:00	8.71	24.73	12.85	63.61	29.27	0
9/6/2021 21:15	7.242	33.85	16.96	63.43	29.27	0
9/6/2021 21:30	8.36	17.79	10.94	62.86	29.27	0
9/6/2021 21:45	9.43	20.5	13.61	62.81	29.27	0
9/6/2021 22:00	8.15	30.34	12.47	62.37	29.27	0
9/6/2021 22:15	6.936	25.28	9.12	61.43	29.27	0
9/6/2021 22:30	8.11	21.22	11.88	60.84	29.27	0
9/6/2021 22:45	9.45	22.92	6.791	60.02	29.27	0
9/6/2021 23:00	10.74	29.84	7.265	59.77	29.27	0
9/6/2021 23:15	11.36	21.66	5.629	59.53	29.27	0
9/6/2021 23:30	10.51	27.12	6.636	59.04	29.27	0
9/6/2021 23:45	10.32	22.29	8.6	58.49	29.27	0
9/7/2021 0:00	8.9	23.49	8.8	58	29.27	0
9/7/2021 0:15	8.46	24.35	9.79	57.82	29.27	0
9/7/2021 0:30	7.555	23.77	8.04	57.36	29.27	0
9/7/2021 0:45	6.465	30.22	8.74	56.99	29.27	0
9/7/2021 1:00	6.608	35.68	8.47	56.36	29.27	0
9/7/2021 1:15	5.653	36.59	6.252	55.81	29.27	0
9/7/2021 1:30	6.202	33.26	5.356	56.03	29.27	0
9/7/2021 1:45	4.755	30.76	5.332	55.97	29.27	0
9/7/2021 2:00	3.027	20.77	5.586	56.14	29.27	0
9/7/2021 2:15	3.345	16.64	6.851	56.08	29.27	0
9/7/2021 2:30	3.879	6.96	4.767	56	29.27	0
9/7/2021 2:45	2.966	10.08	4.888	56.05	29.27	0
9/7/2021 3:00	3.316	19.35	4.087	56.3	29.27	0
9/7/2021 3:15	3.562	21.14	4.493	55.32	29.27	0
9/7/2021 3:30	3.137	19.2	3.743	55.25	29.27	0
9/7/2021 3:45	3.166	31.88	4.2	54.85	29.27	0
9/7/2021 4:00	2.748	32.63	6.976	54.69	29.27	0
9/7/2021 4:15	3.647	10.05	8.88	55.49	29.27	0
9/7/2021 4:30	3.272	13.02	7.569	55.59	29.26	0
9/7/2021 4:45	2.305	28.28	5.096	55.44	29.26	0
9/7/2021 5:00	2.572	28.38	5.625	55.8	29.26	0
9/7/2021 5:15	2.508	28.56	4.302	55.54	29.26	0
9/7/2021 5:30	1.411	45.28	7.599	54.89	29.26	0
9/7/2021 5:45	0.899	47.18	2.291	54.11	29.26	0
9/7/2021 6:00	1.032	19.94	12.55	54.69	29.26	0
9/7/2021 6:15	0.053	10.42	0.018	55.48	29.26	0
9/7/2021 6:30	0.146	10.78	0.301	56.14	29.26	0
9/7/2021 6:45	0.557	10.53	1.067	57.58	29.26	0
9/7/2021 7:00	0.926	339.8	15.1	57.97	29.27	0
9/7/2021 7:15	2.259	324	16.61	57.61	29.27	0
9/7/2021 7:30	2.878	20.59	12.64	56.63	29.27	0
9/7/2021 7:45	2.55	8.71	12.56	56.94	29.27	0
9/7/2021 8:00	2.438	22.55	15.47	58.37	29.26	0
9/7/2021 8:15	1.537	12.61	20.2	59.31	29.26	0
9/7/2021 8:30	2.684	31.1	24.65	61.48	29.26	0
9/7/2021 8:45	1.97	41.3	12.85	61.75	29.26	0
9/7/2021 9:00	2.512	60.97	22.46	63.18	29.26	0
9/7/2021 9:15	0.815	353.2	46.87	64.58	29.25	0
9/7/2021 9:30	2.543	10.2	25.65	65.11	29.25	0
9/7/2021 9:45	2.868	16.14	21.81	65.59	29.25	0
9/7/2021 10:00	4.587	25.87	15.97	66.76	29.24	0
9/7/2021 10:15	4.331	31.77	13.46	67.56	29.24	0
9/7/2021 10:30	3.037	28.83	43.32	69.05	29.23	0
9/7/2021 10:45	4.04	18.04	21.3	70.77	29.23	0
9/7/2021 11:00	6.409	28.07	19.87	71.53	29.23	0
9/7/2021 11:15	8.9	20.33	13.63	71.73	29.22	0
9/7/2021 11:30	10.63	20.49	10.89	72.17	29.21	0
9/7/2021 11:45	10.03	22.92	10.78	73.01	29.21	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/7/2021 12:00	10.86	17.08	9.89	73.74	29.2	0
9/7/2021 12:15	11.01	14.59	11.71	74.48	29.19	0
9/7/2021 12:30	11.44	17.95	10.39	75.35	29.19	0
9/7/2021 12:45	9.9	19.7	10.51	76.47	29.19	0
9/7/2021 13:00	11.21	19.22	8.45	76.95	29.18	0
9/7/2021 13:15	10.88	19.79	7.521	77.72	29.17	0
9/7/2021 13:30	10.6	23.2	10.17	78.25	29.17	0
9/7/2021 13:45	10.25	17.51	11.75	78.64	29.16	0
9/7/2021 14:00	9.99	18.1	10.06	79.56	29.16	0
9/7/2021 14:15	9.72	16.82	13.02	80.2	29.15	0
9/7/2021 14:30	10.06	18.68	10.29	79.83	29.15	0
9/7/2021 14:45	8.59	9.53	16.6	80.7	29.15	0
9/7/2021 15:00	8.71	13.84	14.23	80.5	29.14	0
9/7/2021 15:15	9.84	12.8	13.74	80.3	29.13	0
9/7/2021 15:30	9.3	9.94	12.92	80.2	29.13	0
9/7/2021 15:45	9.05	11.34	15.71	80.3	29.12	0
9/7/2021 16:00	8.15	2.413	15.67	80.5	29.12	0
9/7/2021 16:15	7.859	8.49	17.49	80.4	29.12	0
9/7/2021 16:30	8.34	1.768	13.39	79.62	29.12	0
9/7/2021 16:45	7.155	353.5	15.53	79.54	29.12	0
9/7/2021 17:00	8.34	359.3	14.9	78.77	29.11	0
9/7/2021 17:15	8.27	4.94	16.12	78.12	29.11	0
9/7/2021 17:30	5.658	344.4	28.8	77.72	29.11	0
9/7/2021 17:45	3.696	291.8	15.58	76.88	29.11	0
9/7/2021 18:00	2.9	340.3	32.29	76.08	29.11	0
9/7/2021 18:15	4.767	8.8	15.77	75.2	29.11	0
9/7/2021 18:30	6.841	10.79	9.59	74.4	29.1	0
9/7/2021 18:45	6.437	15.27	10.59	73.64	29.1	0
9/7/2021 19:00	5.714	24.54	8.67	72.04	29.1	0
9/7/2021 19:15	6.722	28.84	7.612	71.32	29.1	0
9/7/2021 19:30	6.243	34.19	10.2	71.13	29.11	0
9/7/2021 19:45	6.075	51.83	6.612	70.3	29.11	0
9/7/2021 20:00	5.972	37.51	8.37	69.14	29.11	0
9/7/2021 20:15	5.943	41.58	9.4	68.76	29.1	0
9/7/2021 20:30	6.178	35.52	9.5	69.02	29.11	0
9/7/2021 20:45	5.195	32.74	8.58	68.35	29.11	0
9/7/2021 21:00	5.817	24.97	11.55	67.06	29.1	0
9/7/2021 21:15	5.306	23.56	6.421	66.99	29.1	0
9/7/2021 21:30	4.516	33.96	6.273	67.02	29.11	0
9/7/2021 21:45	3.232	30.08	5.929	66.76	29.11	0
9/7/2021 22:00	0.236	62.19	8.6	66.45	29.12	0
9/7/2021 22:15	2.759	177.5	15.56	67.11	29.12	0
9/7/2021 22:30	4.248	173.5	7.6	66.71	29.12	0
9/7/2021 22:45	5.477	153.1	5.152	65.75	29.13	0
9/7/2021 23:00	5.695	145	5.017	65.43	29.13	0
9/7/2021 23:15	7.271	152.6	3.355	65.88	29.13	0
9/7/2021 23:30	6.529	144.8	5.686	65.73	29.14	0
9/7/2021 23:45	7.791	145.7	5.345	66.04	29.15	0
9/8/2021 0:00	7.49	148.4	9.28	66.26	29.15	0
9/8/2021 0:15	7.385	166.3	6.873	66.4	29.16	0
9/8/2021 0:30	6.516	147.8	5.909	66.22	29.16	0
9/8/2021 0:45	7.494	154.7	11.1	65.84	29.16	0
9/8/2021 1:00	9.1	145.5	6.038	66.6	29.16	0
9/8/2021 1:15	9.43	145.3	7.024	67.12	29.17	0
9/8/2021 1:30	7.729	147.3	12.33	67.38	29.18	0
9/8/2021 1:45	6.617	132.4	7.551	67.23	29.19	0
9/8/2021 2:00	5.222	117.5	13.44	67.08	29.18	0
9/8/2021 2:15	5.304	112.1	14.81	67.38	29.18	0
9/8/2021 2:30	4.634	131.2	11.16	67.65	29.18	0
9/8/2021 2:45	7.036	99.2	15.11	67.73	29.18	0
9/8/2021 3:00	9.92	80.2	25.7	67.83	29.14	0
9/8/2021 3:15	2.875	55.53	45.26	68.23	29.11	0
9/8/2021 3:30	5.517	93.3	22.38	70.41	29.1	0
9/8/2021 3:45	5.631	87.4	12.04	71.41	29.1	0
9/8/2021 4:00	8.2	278.3	81.2	70.24	29.1	0
9/8/2021 4:15	14.39	253.2	6.996	67.85	29.12	0
9/8/2021 4:30	6.737	282.9	23.45	66.9	29.13	0
9/8/2021 4:45	2.549	319	25.13	66.33	29.14	0
9/8/2021 5:00	2.377	162.6	53.19	66.05	29.15	0
9/8/2021 5:15	4.969	160.1	20.68	65.8	29.15	0
9/8/2021 5:30	7.708	181.8	10.14	65.72	29.16	0
9/8/2021 5:45	7.145	163.9	11.69	65.6	29.16	0
9/8/2021 6:00	6.527	158.6	12.85	65.55	29.17	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/8/2021 6:15	2.155	147.1	30.57	65.62	29.17	0
9/8/2021 6:30	1.501	179.1	32.88	65.73	29.18	0
9/8/2021 6:45	3.749	209.2	12.93	66.44	29.18	0
9/8/2021 7:00	7.036	210.6	7.012	66.25	29.19	0
9/8/2021 7:15	6.898	189	13.02	65.28	29.19	0
9/8/2021 7:30	5.934	184.1	8.77	65.27	29.19	0
9/8/2021 7:45	5.306	213.6	10.69	65.7	29.2	0
9/8/2021 8:00	4.864	179.6	27.39	66.96	29.2	0
9/8/2021 8:15	7.581	130.9	17.84	69.07	29.19	0
9/8/2021 8:30	9.39	135.2	16.34	68.83	29.19	0
9/8/2021 8:45	9.72	164.8	18.2	69.17	29.2	0
9/8/2021 9:00	9.13	189.5	20.24	69.37	29.2	0
9/8/2021 9:15	9.68	182.7	12.29	70.03	29.21	0
9/8/2021 9:30	9.58	177	14.79	70.97	29.21	0
9/8/2021 9:45	9.59	179.1	20.66	71.53	29.2	0
9/8/2021 10:00	10.8	198.4	17.02	71.54	29.21	0
9/8/2021 10:15	9.72	201.6	12.99	71.6	29.21	0
9/8/2021 10:30	10.24	200.5	15.66	71.76	29.21	0
9/8/2021 10:45	10.92	223.8	18.08	72.57	29.2	0
9/8/2021 11:00	6.711	219.1	27.2	72.72	29.2	0
9/8/2021 11:15	7.174	231.5	20.13	73.25	29.2	0
9/8/2021 11:30	6.069	232.9	23.12	73.45	29.2	0
9/8/2021 11:45	7.414	233.6	18.54	74.74	29.19	0
9/8/2021 12:00	7.072	213	31.98	75.25	29.19	0
9/8/2021 12:15	9.08	236	16.91	75.56	29.19	0
9/8/2021 12:30	12.24	230	22.42	75.77	29.19	0
9/8/2021 12:45	8.57	262.2	27.55	76.05	29.19	0
9/8/2021 13:00	8.22	280.5	18.75	75.85	29.2	0
9/8/2021 13:15	8.51	260.8	22	76.78	29.2	0
9/8/2021 13:30	6.164	258.6	26.08	76.3	29.2	0
9/8/2021 13:45	7.238	250.9	26.68	76.69	29.2	0
9/8/2021 14:00	6.994	238.7	30.31	76.47	29.2	0
9/8/2021 14:15	7.04	225.4	25.32	77.38	29.19	0
9/8/2021 14:30	7.595	257.6	27.38	77.33	29.19	0
9/8/2021 14:45	7.852	227	31.41	77.32	29.19	0
9/8/2021 15:00	4.352	262.8	27.77	77.32	29.19	0
9/8/2021 15:15	5.073	272.4	29.26	77.4	29.18	0
9/8/2021 15:30	8.46	256.1	21.06	76.68	29.18	0
9/8/2021 15:45	8.87	270.6	15.46	76.3	29.19	0
9/8/2021 16:00	6.549	253.1	15.43	76.18	29.18	0
9/8/2021 16:15	4.718	229.8	13.31	76.19	29.18	0
9/8/2021 16:30	5.127	264.2	23.31	76.77	29.18	0
9/8/2021 16:45	5.222	261.8	19.33	76.81	29.18	0
9/8/2021 17:00	3.955	299.8	47.05	77	29.18	0
9/8/2021 17:15	2.798	335.7	36.87	76.78	29.18	0
9/8/2021 17:30	4.591	308.3	10.58	76.47	29.17	0
9/8/2021 17:45	2.998	331.5	14.3	76.06	29.16	0
9/8/2021 18:00	4.571	9.99	11.4	74.17	29.16	0
9/8/2021 18:15	2.723	354.4	13.28	73.15	29.15	0
9/8/2021 18:30	3.939	324.6	13.98	73.13	29.16	0
9/8/2021 18:45	4.293	305.4	2.955	72.68	29.15	0
9/8/2021 19:00	3.537	341.7	17.38	71.71	29.15	0
9/8/2021 19:15	2.611	335.8	11.9	71.59	29.15	0
9/8/2021 19:30	2.381	342.4	14.02	71.35	29.15	0
9/8/2021 19:45	2.948	349.7	23.4	70.5	29.15	0
9/8/2021 20:00	2.449	17.29	7.361	69.43	29.16	0
9/8/2021 20:15	2.531	18.92	8.64	69.42	29.16	0
9/8/2021 20:30	3.867	14.48	9.36	67.93	29.15	0
9/8/2021 20:45	3.552	4.614	7.501	67.49	29.15	0
9/8/2021 21:00	1.747	8.76	21.98	67.06	29.16	0
9/8/2021 21:15	0.395	17.4	40.73	66.9	29.16	0
9/8/2021 21:30	3.92	46.67	38.38	66.34	29.16	0
9/8/2021 21:45	5.758	21.48	8.82	65.62	29.16	0
9/8/2021 22:00	7.403	27.03	6.4	65.08	29.15	0
9/8/2021 22:15	6.976	35.26	8.64	64.84	29.15	0
9/8/2021 22:30	6.697	28.68	7.366	64.84	29.15	0
9/8/2021 22:45	6.518	29.29	6.027	64.37	29.14	0
9/8/2021 23:00	6.094	33.77	9.39	63.94	29.14	0
9/8/2021 23:15	4.936	25.01	7.003	63.37	29.14	0
9/8/2021 23:30	1.761	74.59	24.68	63.01	29.14	0
9/8/2021 23:45	0.821	79.3	30.91	64.03	29.13	0
9/9/2021 0:00	0.315	39.5	1.049	64.4	29.13	0
9/9/2021 0:15	0.06	30.21	4.023	65.14	29.13	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/9/2021 0:30	0.511	16.3	21.04	63.13	29.12	0
9/9/2021 0:45	0.771	46.02	5.217	62.57	29.12	0
9/9/2021 1:00	3.043	129.1	25.65	62.34	29.11	0
9/9/2021 1:15	3.605	165.8	4.076	62.75	29.11	0
9/9/2021 1:30	3.032	174.5	13.8	62.35	29.11	0
9/9/2021 1:45	3.833	194.5	7.332	62.15	29.11	0
9/9/2021 2:00	3.341	270.2	38.34	60.97	29.11	0
9/9/2021 2:15	3.583	299.3	15.72	60.5	29.11	0
9/9/2021 2:30	3.682	319.8	3.753	60.91	29.11	0
9/9/2021 2:45	2.458	4.71	16.33	60.31	29.11	0
9/9/2021 3:00	3.849	13.15	7.144	59.53	29.11	0
9/9/2021 3:15	3.931	5.684	10.86	59.08	29.11	0
9/9/2021 3:30	3.244	33.22	9.79	58.82	29.11	0
9/9/2021 3:45	2.358	47.32	6.492	58.46	29.11	0
9/9/2021 4:00	2.046	56.29	25.51	59.09	29.11	0
9/9/2021 4:15	3.66	135.7	15.06	59.6	29.11	0
9/9/2021 4:30	2.449	122.5	19.08	60.12	29.11	0
9/9/2021 4:45	2.14	104.4	8.92	60.4	29.11	0
9/9/2021 5:00	2.276	96.3	18.69	59.44	29.11	0
9/9/2021 5:15	1.586	14.84	10.9	58.64	29.1	0
9/9/2021 5:30	2.667	15.22	5.558	58.21	29.1	0
9/9/2021 5:45	2.53	12.55	9.59	58.93	29.1	0
9/9/2021 6:00	3.346	353	11.86	59.54	29.11	0
9/9/2021 6:15	2.784	330.6	7.71	59.83	29.11	0
9/9/2021 6:30	0.885	332.4	8.18	60.83	29.11	0
9/9/2021 6:45	0	0	0	64.3	29.11	0
9/9/2021 7:00	0.615	131.2	67.3	64.38	29.12	0
9/9/2021 7:15	2.172	143.1	7.825	61.81	29.12	0
9/9/2021 7:30	1.888	165.8	15.74	62.47	29.11	0
9/9/2021 7:45	2.439	220.8	7.622	62.86	29.11	0
9/9/2021 8:00	1.757	247.7	19.89	63.84	29.11	0
9/9/2021 8:15	1.651	289.6	87.5	66.46	29.11	0
9/9/2021 8:30	1.584	166.3	58.4	67.91	29.11	0
9/9/2021 8:45	2.169	222.2	18.82	67.75	29.11	0
9/9/2021 9:00	1.774	200.3	39.16	68.57	29.11	0
9/9/2021 9:15	3.165	208.5	26.02	68.34	29.11	0
9/9/2021 9:30	2.938	212.6	20.33	68.9	29.11	0
9/9/2021 9:45	2.89	236	18.23	68.76	29.11	0
9/9/2021 10:00	2.496	247.3	42.33	69.77	29.1	0
9/9/2021 10:15	3.452	219.8	21.76	70.24	29.1	0
9/9/2021 10:30	2.411	209.7	36.52	71.52	29.1	0
9/9/2021 10:45	2.878	167.5	34.14	72.34	29.1	0
9/9/2021 11:00	3.486	197.3	35.84	71.61	29.09	0
9/9/2021 11:15	4.106	195.6	18.88	71.89	29.09	0
9/9/2021 11:30	3.098	183.1	34.42	73.15	29.08	0
9/9/2021 11:45	3.908	186.9	42.67	74.31	29.09	0
9/9/2021 12:00	3.808	187.3	44.51	74.01	29.08	0
9/9/2021 12:15	4.551	243.8	17.24	74.26	29.08	0
9/9/2021 12:30	3.515	180.5	73.59	76.24	29.08	0
9/9/2021 12:45	5.945	217.4	14.32	75.13	29.08	0
9/9/2021 13:00	3.749	217	49	76.34	29.08	0
9/9/2021 13:15	6.305	209.6	26.31	77.47	29.08	0
9/9/2021 13:30	5.306	197	29.71	77.07	29.07	0
9/9/2021 13:45	7.228	246.9	17.05	77.43	29.08	0
9/9/2021 14:00	7.055	236.1	14.63	77.2	29.08	0
9/9/2021 14:15	6.572	233.1	18.66	77.72	29.07	0
9/9/2021 14:30	4.168	244.2	30.11	77.78	29.07	0
9/9/2021 14:45	7.163	279	16.33	77.62	29.07	0
9/9/2021 15:00	7.689	266	10.3	77.87	29.06	0
9/9/2021 15:15	5.615	265.8	22.84	78.62	29.06	0
9/9/2021 15:30	6.793	226.9	19.39	78.38	29.06	0
9/9/2021 15:45	7.408	207.3	18.73	77.85	29.06	0
9/9/2021 16:00	6.825	251.2	14.22	77.51	29.06	0
9/9/2021 16:15	6.963	249.5	15.58	77.46	29.06	0
9/9/2021 16:30	8.29	259.8	13.31	77.38	29.06	0
9/9/2021 16:45	6.891	255.2	16.78	77.68	29.06	0
9/9/2021 17:00	8.14	260.7	14.09	77.22	29.06	0
9/9/2021 17:15	8.14	260.1	12.63	76.98	29.06	0
9/9/2021 17:30	9.5	234	10.23	76.23	29.07	0
9/9/2021 17:45	8.45	242.6	13.19	75.88	29.07	0
9/9/2021 18:00	8.41	249.1	10.23	74.65	29.07	0
9/9/2021 18:15	8.66	257.6	9.93	73.57	29.07	0
9/9/2021 18:30	5.309	230.9	13.47	73.08	29.07	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/9/2021 18:45	5.414	226.5	7.673	72.28	29.08	0
9/9/2021 19:00	7.84	212.3	4.819	71.55	29.08	0
9/9/2021 19:15	10.52	231.4	9.24	70.64	29.08	0
9/9/2021 19:30	9.79	234.4	7.005	69.73	29.09	0
9/9/2021 19:45	8.81	224.4	7.199	69.22	29.09	0
9/9/2021 20:00	7.239	231.8	5.788	68.42	29.1	0
9/9/2021 20:15	6.014	237.4	10.13	67.56	29.11	0
9/9/2021 20:30	6.711	227.2	17.24	66.61	29.11	0
9/9/2021 20:45	4.093	232.5	14.7	66.33	29.11	0
9/9/2021 21:00	2.809	256.6	9.54	65.62	29.12	0
9/9/2021 21:15	2.499	210.9	11.49	65.46	29.12	0
9/9/2021 21:30	3.853	211.3	9.34	65.03	29.12	0
9/9/2021 21:45	5.125	216.7	4.208	64.31	29.12	0
9/9/2021 22:00	5.53	221.6	6.327	63.74	29.12	0
9/9/2021 22:15	5.701	217.1	7.596	63.5	29.12	0
9/9/2021 22:30	3.352	179	16.4	62.92	29.12	0
9/9/2021 22:45	1.811	132.6	12	62.05	29.12	0
9/9/2021 23:00	2.763	177.5	11.48	61.79	29.13	0
9/9/2021 23:15	2.865	212.5	10.95	62.15	29.12	0
9/9/2021 23:30	2.077	152.8	40.28	61.9	29.12	0
9/9/2021 23:45	2.684	138.7	9.79	61.48	29.13	0
9/10/2021 0:00	2.287	163	9.3	61.25	29.12	0
9/10/2021 0:15	2.236	172.9	20	61.31	29.12	0
9/10/2021 0:30	4.048	188.9	10.68	60.95	29.13	0
9/10/2021 0:45	3.908	183.4	11.74	60.66	29.13	0
9/10/2021 1:00	4.384	167.4	9.12	60.97	29.13	0
9/10/2021 1:15	3.511	198.2	20.36	61.04	29.13	0
9/10/2021 1:30	3.055	215.7	10.34	60.82	29.12	0
9/10/2021 1:45	1.552	218.9	17.09	60.54	29.12	0
9/10/2021 2:00	3.547	152.6	7.312	59.9	29.12	0
9/10/2021 2:15	4.251	171.6	12.18	60.22	29.12	0
9/10/2021 2:30	1.594	145.5	36.06	60	29.12	0
9/10/2021 2:45	3.924	139.4	24.51	59.91	29.13	0
9/10/2021 3:00	3.126	144.9	17.73	59.77	29.13	0
9/10/2021 3:15	2.273	147.5	19.36	59.85	29.12	0
9/10/2021 3:30	1.803	136.1	18.65	59.8	29.12	0
9/10/2021 3:45	3.618	146.6	14.51	59.78	29.12	0
9/10/2021 4:00	3.967	127.2	10.84	59.49	29.12	0
9/10/2021 4:15	3.07	124	8.98	59.32	29.12	0
9/10/2021 4:30	3.498	139.1	7.238	59.23	29.12	0
9/10/2021 4:45	3.156	121.3	9.29	59	29.12	0
9/10/2021 5:00	2.057	96.3	8.53	58.58	29.12	0
9/10/2021 5:15	2.252	98	8.37	58.4	29.13	0
9/10/2021 5:30	0.914	81.3	0.872	58.24	29.13	0
9/10/2021 5:45	2.181	179.1	16.3	58.28	29.13	0
9/10/2021 6:00	4.109	173.5	6.523	58.2	29.14	0
9/10/2021 6:15	3.242	173.3	7.336	58.09	29.14	0
9/10/2021 6:30	3.286	156.8	6.37	57.95	29.14	0
9/10/2021 6:45	3.871	170.8	7.555	58.05	29.15	0
9/10/2021 7:00	3.59	171.7	6.663	58.21	29.15	0
9/10/2021 7:15	3.393	158.3	11.51	58.33	29.15	0
9/10/2021 7:30	2.462	152.7	20.24	58.36	29.15	0
9/10/2021 7:45	3.075	183.9	15.43	58.49	29.15	0
9/10/2021 8:00	3.409	223.3	8.74	58.52	29.15	0
9/10/2021 8:15	5.036	253.7	10.2	58.26	29.16	0
9/10/2021 8:30	4.301	271.6	8.37	57.9	29.16	0
9/10/2021 8:45	3.578	269.7	15.3	58.14	29.16	0
9/10/2021 9:00	3.342	274	17.87	58.6	29.15	0
9/10/2021 9:15	2.744	267.7	17.3	58.75	29.15	0
9/10/2021 9:30	4.622	262.5	11.65	58.83	29.16	0
9/10/2021 9:45	7.428	260.5	7.007	58.47	29.16	0
9/10/2021 10:00	6.358	264.5	7.401	58.46	29.16	0
9/10/2021 10:15	5.72	237.6	12.25	58.67	29.17	0
9/10/2021 10:30	4.405	224.2	7.263	58.6	29.17	0
9/10/2021 10:45	3.529	209.5	17.13	58.92	29.18	0
9/10/2021 11:00	5.236	202.6	12.16	59.03	29.18	0
9/10/2021 11:15	6.043	212.4	8.3	58.56	29.18	0
9/10/2021 11:30	6.806	213.9	8.79	58.46	29.19	0
9/10/2021 11:45	6.263	210.3	8.02	58.15	29.18	0
9/10/2021 12:00	5.092	196.7	9.76	58.55	29.19	0
9/10/2021 12:15	5.263	205.1	17.33	58.82	29.19	0
9/10/2021 12:30	3.934	186.8	26.53	58.54	29.19	0
9/10/2021 12:45	3.144	139	14.12	58.53	29.2	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/10/2021 13:00	3.037	121.2	15.84	58.57	29.2	0
9/10/2021 13:15	3.151	129.2	14.25	58.7	29.2	0
9/10/2021 13:30	4.059	110	8.46	58.74	29.2	0
9/10/2021 13:45	4.363	101.2	12.97	58.74	29.2	0
9/10/2021 14:00	5.307	101.8	7.878	58.44	29.2	0
9/10/2021 14:15	5.058	84.9	8.77	58.58	29.2	0
9/10/2021 14:30	5.012	82	10.2	58.61	29.2	0
9/10/2021 14:45	5.093	100.9	13.64	59.04	29.2	0
9/10/2021 15:00	4.454	104.5	12.24	59.68	29.2	0
9/10/2021 15:15	5.417	132.5	8.99	59.85	29.21	0
9/10/2021 15:30	4.27	124.3	11.44	60.04	29.21	0
9/10/2021 15:45	4.061	129.4	11.04	60.43	29.22	0
9/10/2021 16:00	4.605	132.4	13.12	59.95	29.22	0
9/10/2021 16:15	4.691	102.7	15.75	59.43	29.22	0
9/10/2021 16:30	4.539	64.84	15.18	59.06	29.22	0
9/10/2021 16:45	3.686	64.33	14.17	59.29	29.22	0
9/10/2021 17:00	5.032	92.1	13.89	59.83	29.23	0
9/10/2021 17:15	5.641	94	10.05	60.34	29.23	0
9/10/2021 17:30	5.44	89.7	8.6	60.54	29.23	0
9/10/2021 17:45	5.952	94.6	9.19	60.76	29.24	0
9/10/2021 18:00	6.141	97.1	8.08	60.77	29.24	0
9/10/2021 18:15	5.516	98.1	8.56	60.8	29.25	0
9/10/2021 18:30	6.301	99	9.85	60.8	29.25	0
9/10/2021 18:45	5.885	103.3	10.63	60.82	29.25	0
9/10/2021 19:00	3.196	214.3	56.33	60.56	29.26	0
9/10/2021 19:15	4.457	253.7	18.99	60.79	29.26	0
9/10/2021 19:30	8.88	257.9	10.66	60.65	29.27	0
9/10/2021 19:45	9.04	248.3	10.57	60.39	29.27	0
9/10/2021 20:00	7.2	242.8	8.89	60.17	29.28	0
9/10/2021 20:15	5.38	240.3	9.81	59.92	29.28	0
9/10/2021 20:30	5.429	229.3	9.08	59.77	29.28	0
9/10/2021 20:45	4.866	221.6	9.34	59.61	29.29	0
9/10/2021 21:00	5.727	228.8	10.45	59.46	29.29	0
9/10/2021 21:15	6.105	210.7	8.05	59.43	29.29	0
9/10/2021 21:30	5.641	212.8	5.445	59.36	29.29	0
9/10/2021 21:45	3.968	179.1	19.36	59.04	29.3	0
9/10/2021 22:00	4.271	154.9	14.33	58.14	29.3	0
9/10/2021 22:15	6.77	168	7.063	57.97	29.3	0
9/10/2021 22:30	7.162	178.9	8.54	57.74	29.3	0
9/10/2021 22:45	6.824	191.4	8.95	57.35	29.31	0
9/10/2021 23:00	7.77	182.4	8.42	57.04	29.31	0
9/10/2021 23:15	7.418	173.7	7.336	56.37	29.31	0
9/10/2021 23:30	7.449	181	8.54	56.19	29.32	0
9/10/2021 23:45	8.41	179.2	7.308	56.11	29.33	0
9/11/2021 0:00	6.204	174.4	5.84	55.63	29.33	0
9/11/2021 0:15	6.114	153.6	9.74	55.25	29.33	0
9/11/2021 0:30	7.363	153.1	8.39	55.5	29.34	0
9/11/2021 0:45	8.16	154.2	10.14	55.56	29.34	0
9/11/2021 1:00	7.499	145.4	11.76	55.68	29.34	0
9/11/2021 1:15	8.29	141.5	6.286	55.63	29.35	0
9/11/2021 1:30	7.707	139.3	6.289	55.59	29.35	0
9/11/2021 1:45	7.222	134.9	6.597	55.61	29.35	0
9/11/2021 2:00	7.222	128.8	7.893	55.62	29.36	0
9/11/2021 2:15	4.671	104.7	24.04	55.55	29.36	0
9/11/2021 2:30	6.02	125.4	9.8	55.57	29.36	0
9/11/2021 2:45	6.638	132	6.985	55.56	29.36	0
9/11/2021 3:00	8.15	130.8	7.373	55.55	29.36	0
9/11/2021 3:15	6.214	125.4	14.63	55.5	29.37	0
9/11/2021 3:30	4.654	104.6	14.61	55.4	29.36	0
9/11/2021 3:45	4.939	113.7	12.67	55.33	29.36	0
9/11/2021 4:00	6.395	128.6	8.44	55.32	29.37	0
9/11/2021 4:15	5.893	126.7	8.13	55.27	29.37	0
9/11/2021 4:30	6.291	123.7	8.24	55.21	29.37	0
9/11/2021 4:45	6.847	127.3	7.808	55.16	29.36	0
9/11/2021 5:00	5.864	118.9	10.3	55.04	29.36	0
9/11/2021 5:15	4.724	109.3	7.606	54.99	29.36	0
9/11/2021 5:30	4.398	114.9	9.52	54.83	29.36	0
9/11/2021 5:45	4.317	114.5	8.65	54.71	29.36	0
9/11/2021 6:00	4.357	105.1	7.215	54.5	29.36	0
9/11/2021 6:15	4.737	117.7	8.17	54.66	29.37	0
9/11/2021 6:30	4.912	122.3	6.978	55.42	29.37	0
9/11/2021 6:45	5.53	128.6	7.056	56.17	29.37	0
9/11/2021 7:00	5.564	129.8	10.01	56.91	29.37	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/11/2021 7:15	5.979	133.5	7.975	56.44	29.37	0
9/11/2021 7:30	5.128	130.7	9.24	56.5	29.38	0
9/11/2021 7:45	3.984	137.6	19.64	57.04	29.38	0
9/11/2021 8:00	3.829	136.8	23.42	57.67	29.38	0
9/11/2021 8:15	4.848	122.2	14.62	58.1	29.38	0
9/11/2021 8:30	6.176	111.3	12.72	58.21	29.38	0
9/11/2021 8:45	7.115	160.5	18.85	58.29	29.39	0
9/11/2021 9:00	6.27	159.2	13.81	58.57	29.39	0
9/11/2021 9:15	4.726	109	23.65	60.77	29.38	0
9/11/2021 9:30	3.241	162.9	29.35	59.81	29.38	0
9/11/2021 9:45	5.986	185.7	26.77	60.58	29.38	0
9/11/2021 10:00	5.266	164.3	39.67	62.26	29.38	0
9/11/2021 10:15	4.604	194.7	32.58	62.5	29.38	0
9/11/2021 10:30	3.978	229.2	57.78	62.57	29.38	0
9/11/2021 10:45	4.582	234.9	26.93	62.88	29.38	0
9/11/2021 11:00	3.906	189.6	24.08	64.02	29.37	0
9/11/2021 11:15	2.561	237	52.18	64.77	29.37	0
9/11/2021 11:30	2.755	251.3	42.6	65.5	29.36	0
9/11/2021 11:45	4.307	175.5	47.48	66.43	29.36	0
9/11/2021 12:00	4.793	219.2	33.15	66.8	29.36	0
9/11/2021 12:15	2.298	334.7	76.27	67.28	29.36	0
9/11/2021 12:30	3.401	184	40.16	68.39	29.36	0
9/11/2021 12:45	4.62	207.6	43.18	68.81	29.35	0
9/11/2021 13:00	5.41	232.6	35.33	69.39	29.35	0
9/11/2021 13:15	4.35	159.1	55.7	69.04	29.34	0
9/11/2021 13:30	4.642	193.5	47.7	69.8	29.34	0
9/11/2021 13:45	6.71	235.9	26.76	70.06	29.34	0
9/11/2021 14:00	5.853	254.5	21.21	70.84	29.33	0
9/11/2021 14:15	6.428	265.2	23	70.64	29.33	0
9/11/2021 14:30	3.669	280.7	38.6	70.33	29.33	0
9/11/2021 14:45	5.64	270	21.92	70.33	29.33	0
9/11/2021 15:00	6.743	296.6	25.42	70.37	29.33	0
9/11/2021 15:15	7.234	310.1	12.28	69.72	29.32	0
9/11/2021 15:30	6.272	294.4	13.34	69.98	29.32	0
9/11/2021 15:45	5.648	309.5	13.7	69.85	29.32	0
9/11/2021 16:00	5.613	303.9	24.2	70.01	29.32	0
9/11/2021 16:15	6.538	315	15.3	69.67	29.32	0
9/11/2021 16:30	5.133	340.6	17.41	69.16	29.32	0
9/11/2021 16:45	5.596	356	16.49	68.28	29.32	0
9/11/2021 17:00	6.375	355.8	12.16	67.61	29.31	0
9/11/2021 17:15	5.129	325.6	18.22	67.61	29.31	0
9/11/2021 17:30	6.038	305.8	11.24	68.09	29.31	0
9/11/2021 17:45	5.688	304.3	9.31	67.56	29.31	0
9/11/2021 18:00	5.591	303.9	8.24	67.04	29.31	0
9/11/2021 18:15	5.03	319.4	15.93	66.54	29.31	0
9/11/2021 18:30	2.199	5.19	10.5	65.85	29.3	0
9/11/2021 18:45	3.344	6.499	14.56	65.32	29.3	0
9/11/2021 19:00	4.641	7.385	17.28	64.7	29.3	0
9/11/2021 19:15	5.454	14.33	7.961	64.09	29.3	0
9/11/2021 19:30	7.653	16.6	9.1	63.45	29.3	0
9/11/2021 19:45	6.863	24.52	10.17	63.06	29.3	0
9/11/2021 20:00	6.288	22.2	5.817	62.73	29.29	0
9/11/2021 20:15	4.827	23.75	6.63	62.51	29.3	0
9/11/2021 20:30	4.932	23.66	8.57	62.21	29.29	0
9/11/2021 20:45	4.69	13.45	8.4	61.83	29.3	0
9/11/2021 21:00	2.498	17.83	10.42	61.67	29.29	0
9/11/2021 21:15	3.286	10.78	7.436	61.28	29.29	0
9/11/2021 21:30	2.306	14.47	13.6	61.05	29.29	0
9/11/2021 21:45	3.771	35.22	8.49	60.59	29.28	0
9/11/2021 22:00	1.867	15.99	34.71	60.85	29.28	0
9/11/2021 22:15	1.715	91.5	35.27	61.09	29.28	0
9/11/2021 22:30	1.861	71.22	15.71	61.1	29.29	0
9/11/2021 22:45	2.748	10.71	18.74	60.71	29.28	0
9/11/2021 23:00	2.006	342.1	6.805	60.35	29.28	0
9/11/2021 23:15	1.429	333.9	3.548	60.24	29.28	0
9/11/2021 23:30	0.742	15.99	14.4	59.89	29.28	0
9/11/2021 23:45	0.733	52.16	4.033	59.35	29.28	0
9/12/2021 0:00	2.419	81.7	4.07	58.97	29.28	0
9/12/2021 0:15	1.313	74.15	10.88	59.82	29.28	0
9/12/2021 0:30	2.572	51.71	12.55	59.53	29.27	0
9/12/2021 0:45	1.259	63.33	0.867	59.6	29.27	0
9/12/2021 1:00	0.21	62.99	0.036	60.76	29.27	0
9/12/2021 1:15	0.457	63.31	0.321	59.91	29.27	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/12/2021 1:30	0.064	62.97	0.15	58.25	29.27	0
9/12/2021 1:45	1.51	75.16	20.03	58.7	29.26	0
9/12/2021 2:00	2.904	151.5	16.04	59.28	29.26	0
9/12/2021 2:15	4.466	167.6	14.3	59.19	29.27	0
9/12/2021 2:30	3.287	128.6	51.49	58.69	29.27	0
9/12/2021 2:45	0.567	1.707	1.686	58.01	29.27	0
9/12/2021 3:00	1.635	194.3	43.96	57.9	29.27	0
9/12/2021 3:15	3.547	158.7	9.28	57.88	29.26	0
9/12/2021 3:30	4.746	144.3	13.74	57.6	29.26	0
9/12/2021 3:45	5.264	172.4	10.82	57.7	29.26	0
9/12/2021 4:00	2.999	135.4	23.38	57.5	29.26	0
9/12/2021 4:15	3.584	134.1	5.824	57.44	29.26	0
9/12/2021 4:30	3.695	155.7	14.31	57.67	29.26	0
9/12/2021 4:45	3.591	124.2	11.84	57.49	29.26	0
9/12/2021 5:00	2.963	117.1	11.79	57.3	29.26	0
9/12/2021 5:15	5.484	128.3	5.78	57.61	29.26	0
9/12/2021 5:30	4.523	141.7	13.06	57.96	29.26	0
9/12/2021 5:45	3.331	148.9	13.39	58.21	29.26	0
9/12/2021 6:00	3.221	148.5	7.935	58.19	29.27	0
9/12/2021 6:15	4.61	154.9	13.96	57.79	29.27	0
9/12/2021 6:30	3.404	160	11.09	57.3	29.27	0
9/12/2021 6:45	3.401	127	7.758	56.77	29.27	0
9/12/2021 7:00	2.663	109.2	9.89	56.68	29.27	0
9/12/2021 7:15	2.45	110.1	9.4	56.78	29.28	0
9/12/2021 7:30	3.126	125.4	7.298	56.57	29.28	0
9/12/2021 7:45	2.206	129.9	16.74	56.54	29.28	0
9/12/2021 8:00	1.878	60.99	34.83	56.61	29.29	0
9/12/2021 8:15	0.598	344.6	9.21	56.59	29.29	0
9/12/2021 8:30	1.184	22.81	2.967	56.62	29.29	0
9/12/2021 8:45	2.919	33.12	7.584	56.75	29.29	0
9/12/2021 9:00	4.264	17.21	10.49	56.58	29.29	0
9/12/2021 9:15	7.31	12.51	13.82	55.95	29.29	0
9/12/2021 9:30	9.39	8.94	9.31	55.68	29.29	0
9/12/2021 9:45	11	5.142	14.77	55.87	29.29	0
9/12/2021 10:00	10.72	359.6	14.78	55.58	29.3	0
9/12/2021 10:15	11.87	0.68	13.9	55.32	29.3	0
9/12/2021 10:30	13.03	2.801	15.7	54.91	29.3	0
9/12/2021 10:45	13.14	2.665	15.14	54.62	29.3	0
9/12/2021 11:00	10.66	6.174	15.23	55.27	29.3	0
9/12/2021 11:15	11.15	6.435	13.42	55.24	29.3	0
9/12/2021 11:30	10.23	11.64	10.65	55.33	29.31	0
9/12/2021 11:45	9.57	8.23	14.86	55.16	29.31	0
9/12/2021 12:00	9.03	4.3	13.62	55.44	29.31	0
9/12/2021 12:15	9.43	3.072	15.01	55.59	29.31	0
9/12/2021 12:30	5.412	1.364	13.99	55.92	29.32	0
9/12/2021 12:45	2.03	353.8	21.63	56.6	29.32	0
9/12/2021 13:00	3.961	3.198	16.14	56.32	29.32	0
9/12/2021 13:15	6.001	12.61	9.44	56.52	29.32	0
9/12/2021 13:30	4.524	13.63	14.22	57.48	29.32	0
9/12/2021 13:45	4.773	10.89	10.76	57.99	29.32	0
9/12/2021 14:00	5.722	18.92	12.19	58.02	29.32	0
9/12/2021 14:15	6.332	26.01	10.21	58.29	29.32	0
9/12/2021 14:30	6.274	24.2	9.86	59.28	29.32	0
9/12/2021 14:45	6.292	28.11	9.4	59.68	29.32	0
9/12/2021 15:00	4.798	27.85	15.3	59.63	29.32	0
9/12/2021 15:15	3.571	62.18	21.17	59.72	29.31	0
9/12/2021 15:30	4.486	37.52	21.48	60.2	29.31	0
9/12/2021 15:45	4.068	36.22	24.47	61.55	29.31	0
9/12/2021 16:00	3.811	45.48	29.98	61.35	29.31	0
9/12/2021 16:15	4.323	26.68	17.79	61.34	29.31	0
9/12/2021 16:30	5.839	16.59	10.72	61.3	29.31	0
9/12/2021 16:45	5.64	7.702	8.86	61.37	29.31	0
9/12/2021 17:00	6.173	12.24	7.173	60.4	29.31	0
9/12/2021 17:15	5.679	13.47	8.25	59.64	29.31	0
9/12/2021 17:30	5.209	2.487	9.35	59.76	29.31	0
9/12/2021 17:45	3.586	16.16	11.27	59.5	29.31	0
9/12/2021 18:00	5.181	25.4	8.55	58.9	29.31	0
9/12/2021 18:15	5.26	17.44	8.34	58.48	29.31	0
9/12/2021 18:30	4.252	14.81	13.06	58.33	29.31	0
9/12/2021 18:45	5.602	6.334	15.48	58.33	29.31	0
9/12/2021 19:00	4.844	9.02	15.51	58.39	29.31	0
9/12/2021 19:15	3.996	23.29	10.21	57.49	29.31	0
9/12/2021 19:30	5.286	17.82	10.38	57.2	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/12/2021 19:45	5.757	19.4	11.94	57.24	29.31	0
9/12/2021 20:00	5.659	0.502	15.7	57.83	29.31	0
9/12/2021 20:15	6.864	358	13.94	58.28	29.32	0
9/12/2021 20:30	6.825	8.51	12.99	58.2	29.32	0
9/12/2021 20:45	6.875	14.76	20.93	58.11	29.32	0
9/12/2021 21:00	4.803	32.18	18.54	57.83	29.32	0
9/12/2021 21:15	3.714	21.93	16.17	57.66	29.32	0
9/12/2021 21:30	6.639	18.78	13.9	57.99	29.32	0
9/12/2021 21:45	10.48	14.36	17.16	58.05	29.32	0
9/12/2021 22:00	12.73	13.51	12.9	57.74	29.32	0
9/12/2021 22:15	12.73	14.88	13.15	57.11	29.32	0
9/12/2021 22:30	11.59	22.58	14.88	56.71	29.32	0
9/12/2021 22:45	12.86	19.59	11.1	56.49	29.32	0
9/12/2021 23:00	12.34	17.93	12.19	56.32	29.33	0
9/12/2021 23:15	12.34	13.63	13.46	56.13	29.33	0
9/12/2021 23:30	12.38	17.93	13.3	55.95	29.32	0
9/12/2021 23:45	12.82	19.14	11.55	56	29.32	0
9/13/2021 0:00	11.43	21.24	11.64	55.81	29.33	0
9/13/2021 0:15	10.77	19.8	12.24	55.5	29.32	0
9/13/2021 0:30	7.115	24.5	18.53	55.14	29.33	0
9/13/2021 0:45	6.176	36.22	17.76	55.01	29.33	0
9/13/2021 1:00	6.456	42.91	20.64	54.74	29.33	0
9/13/2021 1:15	6.302	52.31	23.93	54.62	29.34	0
9/13/2021 1:30	3.618	54.53	27.97	54.52	29.34	0
9/13/2021 1:45	2.417	84.4	31.45	54.53	29.34	0
9/13/2021 2:00	2.939	71.43	29.16	54.53	29.34	0
9/13/2021 2:15	4.259	20.85	23.15	54.5	29.34	0
9/13/2021 2:30	8.2	9.85	11.34	54.24	29.34	0
9/13/2021 2:45	7.679	17.13	14.26	53.96	29.34	0
9/13/2021 3:00	7.833	31.27	13.97	54.05	29.34	0
9/13/2021 3:15	3.726	22.33	26.97	54.05	29.35	0
9/13/2021 3:30	2.718	22.82	26.44	54.04	29.35	0
9/13/2021 3:45	2.996	10.9	33.86	54.02	29.35	0
9/13/2021 4:00	5.795	28.13	12.89	53.47	29.35	0
9/13/2021 4:15	7.35	18.06	13.51	53.38	29.35	0
9/13/2021 4:30	7.12	18.23	14.36	53.41	29.35	0
9/13/2021 4:45	5.268	8.94	19.56	53.25	29.35	0
9/13/2021 5:00	4.214	8.25	24.54	53.64	29.36	0
9/13/2021 5:15	3.91	341.4	34.14	53.7	29.35	0
9/13/2021 5:30	3.285	293.6	36.12	53.76	29.36	0
9/13/2021 5:45	3.058	277.8	45.97	53.94	29.36	0
9/13/2021 6:00	1.294	324.8	43.97	53.69	29.37	0
9/13/2021 6:15	2.763	358.7	33.13	53.5	29.37	0
9/13/2021 6:30	3.737	30.47	22.61	53.58	29.37	0
9/13/2021 6:45	5.059	1.816	24.41	54.43	29.37	0
9/13/2021 7:00	6.856	11.88	20.93	54.89	29.37	0
9/13/2021 7:15	6.618	11.48	23.65	55.74	29.38	0
9/13/2021 7:30	7.697	2.295	15.97	56.31	29.38	0
9/13/2021 7:45	7.356	9.44	14.9	56.68	29.38	0
9/13/2021 8:00	9.25	20.84	14.39	57.99	29.38	0
9/13/2021 8:15	8.52	24.33	14.76	57.69	29.38	0
9/13/2021 8:30	8.65	20.37	15.91	58.59	29.38	0
9/13/2021 8:45	7.927	11.22	18.11	57.47	29.38	0
9/13/2021 9:00	6.643	9.52	12.93	57.35	29.38	0
9/13/2021 9:15	7.509	9.51	14	57.13	29.38	0
9/13/2021 9:30	8.36	9.6	12.51	57.79	29.39	0
9/13/2021 9:45	8.06	15.72	14.64	58.5	29.39	0
9/13/2021 10:00	8.73	17.07	16.38	59.74	29.39	0
9/13/2021 10:15	8.27	22.28	15.54	59.69	29.39	0
9/13/2021 10:30	8.25	357.4	28.23	60.29	29.39	0
9/13/2021 10:45	8.52	20.1	16.68	60.65	29.39	0
9/13/2021 11:00	6.979	5.506	27.14	60.09	29.39	0
9/13/2021 11:15	6.813	335.3	26.02	61.38	29.39	0
9/13/2021 11:30	5.791	323.6	26.93	61.01	29.39	0
9/13/2021 11:45	6.74	3.923	22.46	61.45	29.39	0
9/13/2021 12:00	6.425	344.9	34.56	62.43	29.38	0
9/13/2021 12:15	5.129	329.1	32.11	62.23	29.38	0
9/13/2021 12:30	5.291	20.52	23.93	62.76	29.38	0
9/13/2021 12:45	6.556	6.089	34.61	63.8	29.37	0
9/13/2021 13:00	6.911	21.02	13.51	63.3	29.37	0
9/13/2021 13:15	6.46	357.4	46.95	64.59	29.37	0
9/13/2021 13:30	8.15	10.27	10.7	63.86	29.37	0
9/13/2021 13:45	8.3	15.84	11.64	63.8	29.37	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/13/2021 14:00	7.629	353.6	15.82	64.39	29.37	0
9/13/2021 14:15	4.693	346	44.19	65.38	29.36	0
9/13/2021 14:30	7.644	15.86	17.34	64.91	29.36	0
9/13/2021 14:45	8.47	6.487	17.37	65.11	29.36	0
9/13/2021 15:00	5.285	1.036	20.95	66.08	29.36	0
9/13/2021 15:15	5.921	15.74	19.17	66.26	29.36	0
9/13/2021 15:30	6.229	0.704	22.96	65.61	29.36	0
9/13/2021 15:45	7.673	323.3	22.65	65.86	29.35	0
9/13/2021 16:00	6.772	313.5	14.92	65.48	29.35	0
9/13/2021 16:15	4.756	329.3	35.48	65.32	29.35	0
9/13/2021 16:30	4.799	5.293	27.55	65.31	29.35	0
9/13/2021 16:45	4.618	13.24	21.59	64.66	29.34	0
9/13/2021 17:00	4.766	356.9	17.84	64.68	29.35	0
9/13/2021 17:15	5.659	318.4	19.54	64.03	29.35	0
9/13/2021 17:30	6.709	307.8	7.063	64.01	29.35	0
9/13/2021 17:45	6.892	301.5	6.698	63.95	29.34	0
9/13/2021 18:00	5.989	293.7	5.918	63.29	29.34	0
9/13/2021 18:15	5.935	289.8	4.81	62.35	29.34	0
9/13/2021 18:30	5.964	292.1	3.664	61.39	29.34	0
9/13/2021 18:45	4.644	314	30.47	60.85	29.34	0
9/13/2021 19:00	3.014	340.1	13.27	60.89	29.34	0
9/13/2021 19:15	1.544	27.54	5.387	59.7	29.34	0
9/13/2021 19:30	3.341	27.7	10.15	59.44	29.35	0
9/13/2021 19:45	4.449	16.27	8.19	59.27	29.35	0
9/13/2021 20:00	4.59	14.03	5.763	58.17	29.35	0
9/13/2021 20:15	4.236	16.51	5.346	57.76	29.35	0
9/13/2021 20:30	4.636	19.19	6.523	57.38	29.35	0
9/13/2021 20:45	2.569	29.58	10.74	57.46	29.35	0
9/13/2021 21:00	2.49	29.85	10.43	56.81	29.35	0
9/13/2021 21:15	5.265	28.27	10.71	55.92	29.35	0
9/13/2021 21:30	6.242	10.92	5.782	55.57	29.35	0
9/13/2021 21:45	3.899	33.7	12.02	55.56	29.34	0
9/13/2021 22:00	5.201	39.67	9.75	56.03	29.34	0
9/13/2021 22:15	5.426	47.13	12.14	56.22	29.34	0
9/13/2021 22:30	3.292	58.61	14.22	56.27	29.33	0
9/13/2021 22:45	1.963	68.17	16.81	55.79	29.33	0
9/13/2021 23:00	1.503	38.12	12.55	56.28	29.33	0
9/13/2021 23:15	1.164	28.9	4.912	54.38	29.33	0
9/13/2021 23:30	0.104	31.18	3.101	54.76	29.32	0
9/13/2021 23:45	1.383	358.5	10.71	53.7	29.32	0
9/14/2021 0:00	1.286	0.577	14.24	53.59	29.32	0
9/14/2021 0:15	2.436	29.97	6.405	53.19	29.32	0
9/14/2021 0:30	2.219	46.21	9.22	52.44	29.32	0
9/14/2021 0:45	2.952	34.76	6.446	52.33	29.32	0
9/14/2021 1:00	2.991	28.66	6.714	52.38	29.32	0
9/14/2021 1:15	1.555	46.47	5.466	52.31	29.32	0
9/14/2021 1:30	2.231	63.23	6.533	53.11	29.32	0
9/14/2021 1:45	1.352	71.7	34.56	53.53	29.31	0
9/14/2021 2:00	3.564	187.1	11.8	52.66	29.31	0
9/14/2021 2:15	4.473	172.7	7.411	51.75	29.31	0
9/14/2021 2:30	3.659	147	18.67	51.48	29.31	0
9/14/2021 2:45	1.753	93	5.659	51.44	29.3	0
9/14/2021 3:00	2.493	145.5	13	51.88	29.3	0
9/14/2021 3:15	4.067	161.8	7.278	51.29	29.3	0
9/14/2021 3:30	4.136	160	4.851	51.52	29.3	0
9/14/2021 3:45	4.973	146.9	6.524	51.52	29.3	0
9/14/2021 4:00	3.668	135.9	9.85	51.11	29.3	0
9/14/2021 4:15	1.966	90.8	17.32	50.99	29.29	0
9/14/2021 4:30	2.202	99.3	24.88	50.76	29.29	0
9/14/2021 4:45	4.041	148.3	3.368	50.58	29.29	0
9/14/2021 5:00	2.336	127.5	20.42	49.87	29.28	0
9/14/2021 5:15	1.489	121.7	16.59	50.15	29.28	0
9/14/2021 5:30	2.917	146.7	8.68	50.4	29.28	0
9/14/2021 5:45	4.167	137.6	11.7	49.97	29.28	0
9/14/2021 6:00	4.946	106.7	11.23	49.54	29.28	0
9/14/2021 6:15	4.121	107.3	11.5	49.66	29.28	0
9/14/2021 6:30	2.795	111.9	13.74	51.33	29.27	0
9/14/2021 6:45	3.757	114.7	12.92	52.65	29.27	0
9/14/2021 7:00	3.446	126.1	13.31	52.76	29.27	0
9/14/2021 7:15	2.746	128.4	12.21	53.96	29.27	0
9/14/2021 7:30	2.853	111.5	14.54	55.76	29.27	0
9/14/2021 7:45	3.844	103.9	17.17	56.82	29.26	0
9/14/2021 8:00	2.562	97.7	25.08	57.98	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/14/2021 8:15	2.409	137.2	30.62	59.25	29.25	0
9/14/2021 8:30	2.564	154.1	51.95	60.2	29.25	0
9/14/2021 8:45	3.566	185.2	20.11	59.21	29.25	0
9/14/2021 9:00	3.768	181.7	17.33	59.8	29.24	0
9/14/2021 9:15	3.409	199.5	28.42	60.1	29.25	0
9/14/2021 9:30	3.534	185.4	18.88	60.84	29.24	0
9/14/2021 9:45	5.103	183.6	18.17	62.4	29.24	0
9/14/2021 10:00	5.812	168.7	22.39	62.82	29.24	0
9/14/2021 10:15	4.702	144.8	31.96	63.6	29.23	0
9/14/2021 10:30	4.564	203.1	17.89	63.85	29.23	0
9/14/2021 10:45	4.625	204.9	16.81	63.99	29.23	0
9/14/2021 11:00	3.386	139	39.5	65.5	29.22	0
9/14/2021 11:15	4.123	160.8	24.45	66.05	29.22	0
9/14/2021 11:30	4.802	186	17.32	65.87	29.22	0
9/14/2021 11:45	4.043	197.5	20	66.03	29.22	0
9/14/2021 12:00	3.668	215.9	22.94	66.08	29.21	0
9/14/2021 12:15	3.839	181.9	24.13	66.43	29.21	0
9/14/2021 12:30	4.596	223.7	13.96	66.33	29.21	0
9/14/2021 12:45	3.407	213.3	20.44	66.64	29.21	0
9/14/2021 13:00	3.828	188.7	21.71	66.78	29.21	0
9/14/2021 13:15	3.162	198.8	21.49	66.92	29.21	0
9/14/2021 13:30	4.052	170.9	11.93	67.09	29.2	0
9/14/2021 13:45	2.64	162.8	51.61	67.38	29.2	0
9/14/2021 14:00	2.879	158	16.43	67.36	29.2	0
9/14/2021 14:15	4.245	105.5	15.94	67	29.2	0
9/14/2021 14:30	5.131	117.6	50.06	66.3	29.19	0
9/14/2021 14:45	6.83	125.1	18.64	66.57	29.19	0
9/14/2021 15:00	7.325	98.3	13.89	65.87	29.19	0
9/14/2021 15:15	8.79	106.1	10.61	64.87	29.18	0
9/14/2021 15:30	7.925	108.8	13.97	64.04	29.18	0
9/14/2021 15:45	6.892	117.5	13.49	63.93	29.18	0
9/14/2021 16:00	8.65	110.2	17	64.08	29.18	0
9/14/2021 16:15	10.34	129.9	14.42	64.39	29.18	0
9/14/2021 16:30	8.77	127.8	12.41	64.18	29.17	0
9/14/2021 16:45	6.782	125.7	13.73	64.37	29.17	0
9/14/2021 17:00	6.952	147.5	15.74	64.76	29.17	0
9/14/2021 17:15	8.04	110.6	11.9	63.6	29.17	0
9/14/2021 17:30	9.68	110.5	7.852	61.15	29.17	0
9/14/2021 17:45	8.16	105.4	8.54	60.78	29.18	0
9/14/2021 18:00	7.274	95.6	10.42	60.75	29.18	0
9/14/2021 18:15	6.164	116.3	10.71	60.98	29.18	0
9/14/2021 18:30	6.188	111.7	8.92	60.24	29.18	0
9/14/2021 18:45	8.08	115.5	8.36	59.67	29.17	0
9/14/2021 19:00	6.329	119.5	12.77	59.29	29.18	0
9/14/2021 19:15	6.349	103.3	8.53	59.15	29.18	0
9/14/2021 19:30	6.244	132.4	15.46	59.3	29.18	0
9/14/2021 19:45	5.991	173.7	18.22	59.34	29.18	0
9/14/2021 20:00	5.734	188	12.26	59.16	29.18	0
9/14/2021 20:15	3.628	152.8	10.74	58.95	29.18	0
9/14/2021 20:30	2.719	130.5	15.93	58.83	29.18	0
9/14/2021 20:45	1.1	83.1	13.2	58.99	29.18	0
9/14/2021 21:00	1.416	181.7	65.87	59.03	29.18	0
9/14/2021 21:15	4.658	229.4	16.93	58.91	29.18	0
9/14/2021 21:30	4.48	228.1	12.62	58.99	29.18	0
9/14/2021 21:45	5.826	236.3	6.01	58.87	29.18	0
9/14/2021 22:00	4.517	239.3	9.64	58.79	29.17	0
9/14/2021 22:15	5.025	230.6	9.18	58.69	29.17	0
9/14/2021 22:30	5.086	220.2	10.51	58.53	29.17	0
9/14/2021 22:45	2.863	215.4	10.26	58.53	29.17	0
9/14/2021 23:00	3.068	210.7	7.553	58.52	29.17	0
9/14/2021 23:15	3.056	194.1	26.61	58.49	29.17	0
9/14/2021 23:30	3.509	225	12.14	58.56	29.17	0
9/14/2021 23:45	4.663	233.8	9.91	58.48	29.17	0
9/15/2021 0:00	5.875	240.3	7.559	58.31	29.18	0
9/15/2021 0:15	6.366	248.3	8.49	58.16	29.18	0
9/15/2021 0:30	7.709	246.5	11.14	58.01	29.18	0
9/15/2021 0:45	8.98	231.6	8.85	57.9	29.18	0
9/15/2021 1:00	7.63	237.5	15	57.83	29.18	0
9/15/2021 1:15	6.565	248.4	8.63	57.61	29.19	0
9/15/2021 1:30	8.25	230.4	8.15	57.49	29.19	0
9/15/2021 1:45	6.079	234	11.73	57.32	29.19	0
9/15/2021 2:00	7.764	234.4	10.45	57.11	29.19	0
9/15/2021 2:15	6.642	248.7	14.65	56.82	29.19	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/15/2021 2:30	6.232	259.7	13.22	56.5	29.2	0
9/15/2021 2:45	5.834	262.6	10.43	56.34	29.2	0
9/15/2021 3:00	4.845	261.4	10.57	56.23	29.2	0
9/15/2021 3:15	4.323	259.5	10.63	56.2	29.2	0
9/15/2021 3:30	2.847	262.5	11.23	56.09	29.2	0
9/15/2021 3:45	2.435	253.7	43.33	56.04	29.2	0
9/15/2021 4:00	3.079	1.131	38.85	55.69	29.2	0
9/15/2021 4:15	11.18	14.98	13.2	54.14	29.2	0
9/15/2021 4:30	9.81	7.486	11.28	52.97	29.21	0
9/15/2021 4:45	5.802	2.165	12.14	52.62	29.21	0
9/15/2021 5:00	3.374	345.8	24.86	52.69	29.21	0
9/15/2021 5:15	5.222	323.1	26.05	53.05	29.21	0
9/15/2021 5:30	2.371	335	48.72	52.87	29.21	0
9/15/2021 5:45	5.392	260.6	30.65	53.24	29.22	0
9/15/2021 6:00	3.058	318.1	31.94	52.99	29.23	0
9/15/2021 6:15	4.583	300.4	11.96	52.7	29.23	0
9/15/2021 6:30	4.456	304.6	13.89	52.56	29.23	0
9/15/2021 6:45	4.779	298.6	10.23	52.47	29.23	0
9/15/2021 7:00	4.409	347.6	18.1	52.61	29.23	0
9/15/2021 7:15	1.532	25.46	16.53	52.36	29.23	0
9/15/2021 7:30	3.095	250.9	20.49	52.67	29.23	0
9/15/2021 7:45	2.746	263.6	62.44	52.94	29.24	0
9/15/2021 8:00	2.739	129.2	12.88	52.63	29.24	0
9/15/2021 8:15	3.422	147.6	25.15	52.89	29.24	0
9/15/2021 8:30	3.138	198.8	57.1	53.19	29.24	0
9/15/2021 8:45	5.015	292.9	11.88	53.65	29.25	0
9/15/2021 9:00	4.845	288.4	9.42	53.62	29.25	0
9/15/2021 9:15	2.606	290.1	17.22	53.89	29.26	0
9/15/2021 9:30	2.81	282.2	15.71	54.27	29.26	0
9/15/2021 9:45	4.626	283.4	8.18	54.27	29.27	0
9/15/2021 10:00	4.649	292.7	13.89	54.29	29.27	0
9/15/2021 10:15	4.391	299	14.93	54.41	29.27	0
9/15/2021 10:30	3.162	0.78	14.14	54.32	29.27	0
9/15/2021 10:45	3.544	16.17	12.66	54.26	29.27	0
9/15/2021 11:00	1.369	319.5	32.45	54.96	29.27	0
9/15/2021 11:15	1.899	296.1	18.49	55.59	29.27	0
9/15/2021 11:30	1.959	315.5	31.22	55.85	29.28	0
9/15/2021 11:45	3.555	279.7	70.03	55.92	29.28	0
9/15/2021 12:00	1.226	5.015	29.76	56.81	29.27	0
9/15/2021 12:15	2.595	298.3	31.57	56.81	29.27	0
9/15/2021 12:30	1.876	297.7	58.68	56.77	29.27	0
9/15/2021 12:45	2.849	274.4	33.51	57.01	29.27	0
9/15/2021 13:00	2.279	275	22.8	57.49	29.27	0
9/15/2021 13:15	3.955	281.9	30.8	58.5	29.27	0
9/15/2021 13:30	3.699	253.6	48.86	58.27	29.26	0
9/15/2021 13:45	3.334	292.8	39.61	59.85	29.26	0
9/15/2021 14:00	4.298	324.1	21.8	60.27	29.26	0
9/15/2021 14:15	3.794	250.9	21.19	60.56	29.26	0
9/15/2021 14:30	4.359	240.8	27.01	60.59	29.26	0
9/15/2021 14:45	4.25	296.7	24.37	60.38	29.25	0
9/15/2021 15:00	5.309	313	10.29	59.53	29.25	0
9/15/2021 15:15	3.447	340.8	23.78	59.41	29.25	0
9/15/2021 15:30	4.823	340.4	23.45	59.76	29.25	0
9/15/2021 15:45	5.183	312	17.07	59.94	29.25	0
9/15/2021 16:00	5.647	310.1	11.84	60.17	29.25	0
9/15/2021 16:15	6.555	307.8	7.141	60.23	29.25	0
9/15/2021 16:30	5.222	310.9	14.85	60.76	29.24	0
9/15/2021 16:45	3.564	346.4	53.65	61.34	29.24	0
9/15/2021 17:00	6.107	12.73	10.28	59.96	29.24	0
9/15/2021 17:15	6.298	5.562	12.03	58.51	29.24	0
9/15/2021 17:30	5.278	5.018	13.24	57.89	29.24	0
9/15/2021 17:45	5.931	6.437	7.69	57.38	29.24	0
9/15/2021 18:00	6.188	1.239	13.26	57.34	29.24	0
9/15/2021 18:15	3.926	343.6	13.96	57.4	29.23	0
9/15/2021 18:30	3.511	308.8	16.4	57.53	29.23	0
9/15/2021 18:45	4.98	300.1	8.39	57.47	29.23	0
9/15/2021 19:00	4.872	317	27.38	57.22	29.23	0
9/15/2021 19:15	3.032	347	20.63	56.45	29.23	0
9/15/2021 19:30	3.048	352.7	17.06	55.94	29.24	0
9/15/2021 19:45	2.556	325.2	32.65	55.58	29.24	0
9/15/2021 20:00	6.852	3.362	16.64	54.83	29.24	0
9/15/2021 20:15	11.52	6.528	13.91	54.33	29.24	0
9/15/2021 20:30	9.85	2.937	17.39	54.42	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/15/2021 20:45	4.365	338.5	27.38	54.02	29.25	0
9/15/2021 21:00	3.6	341.6	40.17	53.46	29.26	0
9/15/2021 21:15	5.974	7.057	26.94	52.65	29.26	0
9/15/2021 21:30	12.23	3.699	19.5	52.51	29.26	0
9/15/2021 21:45	10.97	5.502	18.3	52.49	29.27	0
9/15/2021 22:00	10.39	2.658	20.81	52.17	29.27	0
9/15/2021 22:15	9.59	350.7	23.45	51.87	29.28	0
9/15/2021 22:30	8.49	5.721	19.53	51.51	29.28	0
9/15/2021 22:45	5.501	320	37.64	51.48	29.28	0
9/15/2021 23:00	3.105	228.1	30.16	51.45	29.29	0
9/15/2021 23:15	3.578	219.1	15.32	51.43	29.29	0
9/15/2021 23:30	4.212	179.9	28.57	52.14	29.3	0
9/15/2021 23:45	3.933	53.22	52.98	52.59	29.3	0
9/16/2021 0:00	2.533	35.08	59.22	52.53	29.3	0
9/16/2021 0:15	4.418	13.16	32.21	52.44	29.3	0
9/16/2021 0:30	6.272	21.46	16.32	51.47	29.3	0
9/16/2021 0:45	1.533	311.7	63.84	49.97	29.3	0
9/16/2021 1:00	2.427	67.68	59.34	50.51	29.3	0
9/16/2021 1:15	3.221	3.507	23.84	49.62	29.29	0
9/16/2021 1:30	2.968	38.99	13.41	48.49	29.29	0
9/16/2021 1:45	3.05	24.09	11.26	48.23	29.3	0
9/16/2021 2:00	1.763	19.86	14.86	47.98	29.3	0
9/16/2021 2:15	0.492	5.872	8.89	48.02	29.31	0
9/16/2021 2:30	1.72	26.72	10.47	47.95	29.31	0
9/16/2021 2:45	2.137	37.27	3.516	47.95	29.32	0
9/16/2021 3:00	1.782	357.8	41.25	47.4	29.32	0
9/16/2021 3:15	0.862	27.58	24.08	47.03	29.32	0
9/16/2021 3:30	2.473	182.6	47.8	47.17	29.33	0
9/16/2021 3:45	3.875	227.1	11.72	46.54	29.33	0
9/16/2021 4:00	1.751	168.7	11.74	46.35	29.33	0
9/16/2021 4:15	0.603	305.2	54.67	47.06	29.33	0
9/16/2021 4:30	0.793	346.6	15.26	47.33	29.33	0
9/16/2021 4:45	1.276	15.22	6.525	45.84	29.33	0
9/16/2021 5:00	0.468	30.15	18.77	46.98	29.33	0
9/16/2021 5:15	0.858	49.05	18.63	46.8	29.33	0
9/16/2021 5:30	1.046	186.1	30.85	45.57	29.33	0
9/16/2021 5:45	0.23	54.69	29.41	45.58	29.32	0
9/16/2021 6:00	0.614	300.2	60.41	44.28	29.32	0
9/16/2021 6:15	1.686	188.1	36.3	45.08	29.32	0
9/16/2021 6:30	0.658	134.5	31.75	46.73	29.32	0
9/16/2021 6:45	1.923	321.3	13.86	47.75	29.33	0
9/16/2021 7:00	1.084	329.1	21.38	48.77	29.33	0
9/16/2021 7:15	1.202	21.06	16.98	49.5	29.33	0
9/16/2021 7:30	1.108	154.4	76.12	49.95	29.33	0
9/16/2021 7:45	3.671	318.8	10.1	50.66	29.33	0
9/16/2021 8:00	5.216	330.3	20.97	50.88	29.34	0
9/16/2021 8:15	4.729	7.855	15.6	50.37	29.34	0
9/16/2021 8:30	4.697	350.3	19.25	51.35	29.33	0
9/16/2021 8:45	2.296	325.2	23.51	52.65	29.34	0
9/16/2021 9:00	5.525	20.31	9.27	53.4	29.34	0
9/16/2021 9:15	5.57	5.82	16.74	54.19	29.33	0
9/16/2021 9:30	5.51	359.9	17.79	55.47	29.33	0
9/16/2021 9:45	8.29	5.956	12.4	56.39	29.33	0
9/16/2021 10:00	8.83	7.143	15.09	57.16	29.32	0
9/16/2021 10:15	10.88	13.75	12.8	58.04	29.32	0
9/16/2021 10:30	10.52	14.14	11.33	58.76	29.31	0
9/16/2021 10:45	9.31	1.698	17.4	59.4	29.3	0
9/16/2021 11:00	8.92	4.516	19	60.34	29.29	0
9/16/2021 11:15	8.85	16.32	10.98	60.76	29.28	0
9/16/2021 11:30	6.916	15.09	13.54	61.36	29.28	0
9/16/2021 11:45	7.725	17.1	11.56	61.98	29.27	0
9/16/2021 12:00	4.987	355.5	48.76	62.44	29.27	0
9/16/2021 12:15	7.518	351.5	34.03	63.33	29.27	0
9/16/2021 12:30	7.397	320.4	16.65	63.89	29.27	0
9/16/2021 12:45	4.68	319.1	37.46	64.22	29.27	0
9/16/2021 13:00	4.54	283.8	42.92	64.72	29.26	0
9/16/2021 13:15	6.944	343.7	25.7	64.35	29.26	0
9/16/2021 13:30	6.726	14.94	21.11	65.06	29.25	0
9/16/2021 13:45	4.712	19.48	24.98	65.18	29.25	0
9/16/2021 14:00	5.473	347	29.89	65.83	29.25	0
9/16/2021 14:15	5.547	314.4	21.14	65.71	29.24	0
9/16/2021 14:30	5.17	356.1	41.04	65.93	29.23	0
9/16/2021 14:45	4.884	351.9	36.08	66	29.22	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/16/2021 15:00	4.554	5.493	16.5	65.69	29.21	0
9/16/2021 15:15	5.401	4.934	16.35	65.93	29.21	0
9/16/2021 15:30	4.597	324	47.49	65.61	29.21	0
9/16/2021 15:45	6.129	311.8	45.48	65.39	29.2	0
9/16/2021 16:00	5.233	317.4	23.11	64.92	29.2	0
9/16/2021 16:15	6.448	294.4	10.47	64.52	29.2	0
9/16/2021 16:30	5.705	304.2	17.18	63.98	29.19	0
9/16/2021 16:45	7.356	297.2	7.168	63.52	29.19	0
9/16/2021 17:00	6.06	305.1	9.48	62.98	29.18	0
9/16/2021 17:15	4.801	323.7	14.53	62.66	29.18	0
9/16/2021 17:30	3.9	340.1	19.13	62.13	29.17	0
9/16/2021 17:45	3.871	2.719	20.35	61.85	29.16	0
9/16/2021 18:00	3.743	2.181	17.85	61.01	29.15	0
9/16/2021 18:15	2.696	7.264	17.78	60.57	29.15	0
9/16/2021 18:30	3.485	10.27	17.8	60.51	29.14	0
9/16/2021 18:45	3.273	25.74	9.24	59.54	29.14	0
9/16/2021 19:00	4.399	25.12	8.22	58.63	29.13	0
9/16/2021 19:15	4.642	20.1	5.049	58.08	29.13	0
9/16/2021 19:30	3.268	31.74	5.722	57.89	29.13	0
9/16/2021 19:45	2.785	67.69	17.42	58.56	29.13	0
9/16/2021 20:00	1.43	111.1	16.43	57.7	29.13	0
9/16/2021 20:15	2.313	142.3	34.37	56.92	29.12	0
9/16/2021 20:30	3.999	170.8	17.82	57.59	29.11	0
9/16/2021 20:45	2.686	131.2	29.28	56.65	29.1	0
9/16/2021 21:00	0.409	115.7	10.71	56.62	29.1	0
9/16/2021 21:15	0.115	68.83	3.71	57.1	29.1	0
9/16/2021 21:30	0.483	73.65	1.793	56.84	29.09	0
9/16/2021 21:45	0.488	53.22	7.182	56.69	29.08	0
9/16/2021 22:00	0.02	40.6	0.67	57.16	29.08	0
9/16/2021 22:15	0.131	5.487	0.149	56.85	29.08	0
9/16/2021 22:30	1.042	329.3	10.85	57.05	29.07	0
9/16/2021 22:45	2.202	294.3	11.48	55.93	29.07	0
9/16/2021 23:00	3.255	311.6	7.402	55.48	29.07	0
9/16/2021 23:15	2.445	338.2	14.66	56.16	29.07	0
9/16/2021 23:30	2.041	320.9	11.82	56.17	29.07	0
9/16/2021 23:45	0.853	307.4	19.04	55.74	29.07	0
9/17/2021 0:00	1.263	14.9	18.66	55.89	29.06	0
9/17/2021 0:15	3.104	87.2	8.08	54.28	29.06	0
9/17/2021 0:30	4.024	93.7	8.97	54.06	29.06	0
9/17/2021 0:45	5.69	113.2	7.267	55.52	29.05	0
9/17/2021 1:00	7.019	109.1	5.885	57.01	29.04	0
9/17/2021 1:15	7.992	122.4	10.55	57.86	29.04	0
9/17/2021 1:30	8.11	140.8	8.25	58.05	29.03	0
9/17/2021 1:45	8.77	156.2	13.8	58.98	29.03	0
9/17/2021 2:00	7.362	156.3	11.98	57.62	29.03	0
9/17/2021 2:15	5.934	161.4	19.98	57.43	29.03	0
9/17/2021 2:30	6.27	166	12.73	57.15	29.03	0
9/17/2021 2:45	7.073	198.7	13.5	57.15	29.02	0
9/17/2021 3:00	7.098	222.8	16.41	57.16	29.02	0
9/17/2021 3:15	5.936	190.5	12.14	58.34	29.02	0
9/17/2021 3:30	5.573	201.5	8.55	57.35	29.02	0
9/17/2021 3:45	6.622	220	5.246	56.04	29.03	0
9/17/2021 4:00	4.872	205.7	13.31	56.21	29.03	0
9/17/2021 4:15	2.613	200.8	14.77	55.88	29.03	0
9/17/2021 4:30	2.662	158.8	22.72	54.89	29.03	0
9/17/2021 4:45	2.522	96.3	8.93	53.91	29.03	0
9/17/2021 5:00	3.385	112.7	16.87	53.23	29.03	0
9/17/2021 5:15	3.511	122.1	4.201	53.72	29.02	0
9/17/2021 5:30	2.842	120.4	6.533	53.68	29.02	0
9/17/2021 5:45	1.893	107.8	8.28	54.13	29.01	0
9/17/2021 6:00	2.422	81.9	9.92	54.28	29.01	0
9/17/2021 6:15	3.225	94.3	6.339	53.85	29.01	0
9/17/2021 6:30	2.296	90.1	9.29	54.14	29	0
9/17/2021 6:45	1.649	116.2	15.83	54.48	29	0
9/17/2021 7:00	2.228	121.7	10.61	54.95	29	0
9/17/2021 7:15	1.525	165.7	42.4	55.18	29	0
9/17/2021 7:30	3.013	191.9	8.55	55.22	29	0
9/17/2021 7:45	2.416	191.3	17.22	54.64	29	0
9/17/2021 8:00	2.213	169.4	23.96	54.35	29	0
9/17/2021 8:15	1.237	155.4	22.99	53.88	29	0
9/17/2021 8:30	0.594	71.96	17.71	53.6	29	0
9/17/2021 8:45	2.454	161.2	15.38	53.51	29	0
9/17/2021 9:00	0.965	113.1	39.75	53.09	29	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/17/2021 9:15	2.569	143.4	37.48	52.94	29	0
9/17/2021 9:30	3.735	108.8	15.89	52.65	28.99	0
9/17/2021 9:45	4.115	102.4	12.3	52.44	28.99	0
9/17/2021 10:00	4.275	114.7	14.8	52.28	28.99	0
9/17/2021 10:15	4.091	113.8	19.57	52.36	28.98	0
9/17/2021 10:30	5.815	117.4	17.9	52.39	28.97	0
9/17/2021 10:45	5.466	128.7	16.82	52.87	28.96	0
9/17/2021 11:00	5.061	140.6	12.79	53.45	28.96	0
9/17/2021 11:15	6.018	154	29.66	53.86	28.96	0
9/17/2021 11:30	5.442	123.8	13.39	54.39	28.95	0
9/17/2021 11:45	6.097	122.6	14.34	54.61	28.94	0
9/17/2021 12:00	6.523	127.5	11.19	54.62	28.94	0
9/17/2021 12:15	7.638	127.2	8.39	54.9	28.93	0
9/17/2021 12:30	7.76	134.4	8.6	54.87	28.93	0
9/17/2021 12:45	6.759	130.7	12.16	54.82	28.92	0
9/17/2021 13:00	7.82	131.4	14.37	55.19	28.91	0
9/17/2021 13:15	9.65	126.7	10.2	55.9	28.9	0
9/17/2021 13:30	10.03	124.7	9.63	56.92	28.9	0
9/17/2021 13:45	9.27	130.4	9.96	57.82	28.9	0
9/17/2021 14:00	9.24	126	9.42	58.82	28.89	0
9/17/2021 14:15	9.72	128.2	9.85	60.15	28.89	0
9/17/2021 14:30	10.25	140.2	7.583	60.8	28.89	0
9/17/2021 14:45	12.63	144.2	6.705	60.87	28.89	0
9/17/2021 15:00	12.74	143.7	6.942	61.18	28.89	0
9/17/2021 15:15	11.26	140.4	6.924	61.45	28.88	0
9/17/2021 15:30	10.3	138.1	7.101	61.72	28.87	0
9/17/2021 15:45	10.44	140.4	7.021	61.95	28.87	0
9/17/2021 16:00	9.87	144.2	8.11	62.47	28.87	0
9/17/2021 16:15	11.09	145.9	9.01	63.13	28.86	0
9/17/2021 16:30	13.3	158.8	9.76	64.09	28.85	0
9/17/2021 16:45	15.06	165.6	9.39	65.07	28.84	0
9/17/2021 17:00	14.43	163.9	8.75	65.51	28.83	0
9/17/2021 17:15	15.68	164.2	9.89	66.17	28.83	0
9/17/2021 17:30	15.22	163.6	8.9	66.5	28.82	0
9/17/2021 17:45	15.21	159.2	8.9	66.87	28.81	0
9/17/2021 18:00	15.55	161.8	10.04	67.09	28.8	0
9/17/2021 18:15	15.76	172.5	9.88	67.4	28.79	0
9/17/2021 18:30	14.41	174.7	9.32	67.5	28.79	0
9/17/2021 18:45	14.47	172.8	9.94	67.52	28.78	0
9/17/2021 19:00	17.26	169.3	10.7	67.81	28.77	0
9/17/2021 19:15	18.67	171.2	10.36	67.91	28.77	0
9/17/2021 19:30	18.81	169.4	9.59	67.99	28.76	0
9/17/2021 19:45	17.32	169.5	9.09	67.99	28.75	0
9/17/2021 20:00	18.12	172.7	10.04	68.22	28.75	0
9/17/2021 20:15	19.14	170.9	9.03	68.32	28.74	0
9/17/2021 20:30	20.02	173.8	9.83	68.58	28.73	0
9/17/2021 20:45	18.61	174.8	9.47	68.69	28.71	0
9/17/2021 21:00	17.76	172.4	9.07	69.03	28.7	0
9/17/2021 21:15	18.34	170.8	9.36	69.4	28.69	0
9/17/2021 21:30	16.39	172	9.42	69.76	28.68	0
9/17/2021 21:45	21.21	197.3	34.24	68.49	28.69	0
9/17/2021 22:00	27.17	251.8	11.84	58.84	28.73	0
9/17/2021 22:15	24.12	240.6	8.61	57.44	28.76	0
9/17/2021 22:30	20.32	233.2	10.53	57.04	28.77	0
9/17/2021 22:45	17.38	219	10.21	56.92	28.79	0
9/17/2021 23:00	16.08	199.1	12.3	56.52	28.82	0
9/17/2021 23:15	13.4	175.8	10.2	55.99	28.83	0
9/17/2021 23:30	14.59	178.5	8.45	55.67	28.85	0
9/17/2021 23:45	13.16	169	10.42	55.36	28.86	0
9/18/2021 0:00	13.28	174.3	9.63	55.06	28.86	0
9/18/2021 0:15	10.36	172.6	8.59	54.96	28.87	0
9/18/2021 0:30	13.37	165.4	10.25	54.83	28.88	0
9/18/2021 0:45	15.92	165.7	8.74	54.71	28.88	0
9/18/2021 1:00	15.42	164.3	7.015	54.51	28.88	0
9/18/2021 1:15	14.85	165.7	8.45	54.35	28.89	0
9/18/2021 1:30	12.65	151.7	10.51	54.11	28.88	0
9/18/2021 1:45	13.66	151.6	8.79	53.9	28.87	0
9/18/2021 2:00	13.92	150.4	8.77	53.76	28.87	0
9/18/2021 2:15	12.12	144.1	9.92	53.58	28.86	0
9/18/2021 2:30	10.76	135.9	12.41	53.5	28.86	0
9/18/2021 2:45	8.08	135.2	9.11	53.36	28.86	0
9/18/2021 3:00	8.2	141.9	8.74	53.27	28.87	0
9/18/2021 3:15	7.557	144	9.46	53.23	28.87	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/18/2021 3:30	7.209	112.2	9.68	53.06	28.86	0
9/18/2021 3:45	8.52	117.4	8.92	52.92	28.86	0
9/18/2021 4:00	6.935	135.8	11.25	53.05	28.87	0
9/18/2021 4:15	7.663	125.4	11.72	52.92	28.86	0
9/18/2021 4:30	6.716	171.8	21.67	53.04	28.87	0
9/18/2021 4:45	8.07	174.4	14.19	52.59	28.87	0
9/18/2021 5:00	9.1	174.8	13.72	52.27	28.87	0
9/18/2021 5:15	8.63	196.6	12.53	52.43	28.87	0
9/18/2021 5:30	10.03	218.6	9.51	52.48	28.87	0
9/18/2021 5:45	10.68	218.4	12.01	52.44	28.88	0
9/18/2021 6:00	8.76	215.9	15.67	52.36	28.88	0
9/18/2021 6:15	7.845	182.4	11.42	52.17	28.88	0
9/18/2021 6:30	6.063	173.4	11.31	52.27	28.89	0
9/18/2021 6:45	5.731	130.3	17.8	52.2	28.88	0
9/18/2021 7:00	7.739	125.5	8.86	52.21	28.89	0
9/18/2021 7:15	7.366	148.4	15.09	52.5	28.89	0
9/18/2021 7:30	6.405	135.8	9.93	52.87	28.9	0
9/18/2021 7:45	5.679	130.3	8.96	52.99	28.89	0
9/18/2021 8:00	6.974	140.5	7.605	53.38	28.89	0
9/18/2021 8:15	6.943	148.8	7.083	53.6	28.9	0
9/18/2021 8:30	6.145	142.1	10.37	54.11	28.9	0
9/18/2021 8:45	4.883	133.7	9.62	54.5	28.9	0
9/18/2021 9:00	5.197	159	16.05	54.52	28.9	0
9/18/2021 9:15	6.758	154.5	11.83	54.91	28.9	0
9/18/2021 9:30	7.378	149.3	10.42	55.98	28.9	0
9/18/2021 9:45	7.766	150.3	10.55	56.66	28.9	0
9/18/2021 10:00	7.376	153.5	9.61	55.83	28.91	0
9/18/2021 10:15	7.274	156.2	9.57	55.81	28.92	0
9/18/2021 10:30	6.472	152	11.43	56.11	28.91	0
9/18/2021 10:45	5.795	162	8.99	56.38	28.92	0
9/18/2021 11:00	4.448	138.3	14.02	56.92	28.92	0
9/18/2021 11:15	3.094	90.4	20.43	57.3	28.91	0
9/18/2021 11:30	4.696	133.3	24.72	58.16	28.92	0
9/18/2021 11:45	5.735	146.4	20.74	59.95	28.92	0
9/18/2021 12:00	6.367	170.9	31.62	60.86	28.91	0
9/18/2021 12:15	5.339	195.3	24.57	60.53	28.91	0
9/18/2021 12:30	4.88	198.2	26.19	60.81	28.91	0
9/18/2021 12:45	8.2	155.6	17.1	63.01	28.9	0
9/18/2021 13:00	9.14	165	22.03	62.58	28.9	0
9/18/2021 13:15	11.19	179.6	13.72	62.38	28.9	0
9/18/2021 13:30	12.15	199.7	11.62	62.01	28.9	0
9/18/2021 13:45	12.46	256.6	37.73	59.96	28.91	0
9/18/2021 14:00	12.33	292.7	12.42	55.65	28.92	0
9/18/2021 14:15	14.31	298.5	7.205	52.98	28.93	0
9/18/2021 14:30	11.47	298.4	8.36	52.06	28.94	0
9/18/2021 14:45	8.1	309.4	14.45	51.76	28.94	0
9/18/2021 15:00	6.081	342.4	14.28	51.51	28.94	0
9/18/2021 15:15	4.72	334.1	21.57	51.61	28.94	0
9/18/2021 15:30	3.846	52.95	18.35	51.75	28.94	0
9/18/2021 15:45	3.233	48.22	7.634	51.96	28.95	0
9/18/2021 16:00	3.562	78.4	51.17	52.64	28.95	0
9/18/2021 16:15	7.517	134	12.46	52.62	28.95	0
9/18/2021 16:30	8.19	135.2	9.7	52.63	28.95	0
9/18/2021 16:45	7.155	122	8.19	52.53	28.95	0
9/18/2021 17:00	7.828	122.1	8.06	52.56	28.95	0
9/18/2021 17:15	7.791	120.6	8.73	52.72	28.95	0
9/18/2021 17:30	8.35	120.2	7.416	52.84	28.95	0
9/18/2021 17:45	7.688	121.9	7.826	52.83	28.94	0
9/18/2021 18:00	7.783	122.1	7.452	52.89	28.94	0
9/18/2021 18:15	8.01	129.6	8.83	53.11	28.94	0
9/18/2021 18:30	6.711	136.5	9.16	53.11	28.94	0
9/18/2021 18:45	7.14	138.9	10.39	53.09	28.93	0
9/18/2021 19:00	7.243	135.7	7.472	53.07	28.93	0
9/18/2021 19:15	6.007	134.2	8.22	53.23	28.94	0
9/18/2021 19:30	5.183	130.6	8.8	53.01	28.94	0
9/18/2021 19:45	5.446	135.9	8.35	52.88	28.94	0
9/18/2021 20:00	5.638	138.9	7.801	52.67	28.94	0
9/18/2021 20:15	5.879	143.9	6.357	52.72	28.94	0
9/18/2021 20:30	5.252	145.2	7.961	52.82	28.94	0
9/18/2021 20:45	5.236	137.4	8.33	53.27	28.94	0
9/18/2021 21:00	3.852	144.4	17.39	53.32	28.94	0
9/18/2021 21:15	5.465	203	19.59	52.5	28.95	0
9/18/2021 21:30	7.565	207.7	18.07	51.32	28.97	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/18/2021 21:45	8.17	158.3	13.48	50.78	28.97	0
9/18/2021 22:00	8.37	152.2	6.656	50.57	28.98	0
9/18/2021 22:15	8.69	142	9.37	50.44	28.98	0
9/18/2021 22:30	7.766	138.6	10.67	50.22	28.99	0
9/18/2021 22:45	7.711	124.8	8.83	50.16	28.99	0
9/18/2021 23:00	6.437	122.9	8.31	50.25	28.99	0
9/18/2021 23:15	5.301	125	14.85	50.25	28.99	0
9/18/2021 23:30	5.565	129	16.27	50.37	28.99	0
9/18/2021 23:45	7.067	132.5	7.582	50.6	28.99	0
9/19/2021 0:00	5.418	148.7	13.57	50.79	28.99	0
9/19/2021 0:15	4.361	169.3	12.92	51.06	29	0
9/19/2021 0:30	4.724	149.3	24.47	51.03	29	0
9/19/2021 0:45	3.896	135	20.14	50.97	29	0
9/19/2021 1:00	2.942	111.7	10.91	50.7	29	0
9/19/2021 1:15	4.566	131	9.53	51.56	28.99	0
9/19/2021 1:30	4.117	140.1	24.17	51.95	29	0
9/19/2021 1:45	2.722	137.1	6.939	52.43	29	0
9/19/2021 2:00	3.989	140	5.971	52.52	29	0
9/19/2021 2:15	3.26	168.7	18.59	52.55	29	0
9/19/2021 2:30	4.83	184.1	15.9	52.34	29.01	0
9/19/2021 2:45	3.667	163.3	11.46	51.74	29.01	0
9/19/2021 3:00	1.837	98.1	17.58	51.39	29.02	0
9/19/2021 3:15	3.273	156	23.01	51.09	29.02	0
9/19/2021 3:30	4.145	143.5	12.37	51.13	29.02	0
9/19/2021 3:45	5.552	134.8	6.511	51.14	29.03	0
9/19/2021 4:00	5.306	153.4	11.93	51.62	29.03	0
9/19/2021 4:15	5.284	161.1	10.1	51.76	29.04	0
9/19/2021 4:30	4.871	182.6	11.52	51.94	29.04	0
9/19/2021 4:45	3.91	172.3	15.52	51.79	29.05	0
9/19/2021 5:00	3.804	169.1	11.87	51.79	29.05	0
9/19/2021 5:15	4.136	152.1	15.73	51.48	29.06	0
9/19/2021 5:30	4.769	153.3	19.79	51.61	29.06	0
9/19/2021 5:45	4.717	169	10.55	51.61	29.07	0
9/19/2021 6:00	5.348	173.4	7.845	51.75	29.08	0
9/19/2021 6:15	5.765	176.4	14.07	51.89	29.09	0
9/19/2021 6:30	5.194	190.6	8.64	51.85	29.1	0
9/19/2021 6:45	3.836	168.3	14.36	51.59	29.1	0
9/19/2021 7:00	2.496	138.2	29.61	51.14	29.1	0
9/19/2021 7:15	5.186	163	14.55	51.5	29.11	0
9/19/2021 7:30	6.423	167.8	10.85	51.76	29.12	0
9/19/2021 7:45	5.294	155.7	13.09	52	29.12	0
9/19/2021 8:00	4.739	134.6	13.28	52.32	29.13	0
9/19/2021 8:15	4.866	135.3	14.54	52.75	29.13	0
9/19/2021 8:30	7.305	178.6	10.75	52.96	29.14	0
9/19/2021 8:45	7.579	183.8	8.77	53.24	29.15	0
9/19/2021 9:00	8.18	182.9	11.22	53.85	29.16	0
9/19/2021 9:15	8.89	178.9	10.96	54.42	29.16	0
9/19/2021 9:30	10.14	181.2	10.68	54.55	29.17	0
9/19/2021 9:45	10.78	179.7	11.44	55.17	29.17	0
9/19/2021 10:00	9.39	182.5	10.57	55.73	29.18	0
9/19/2021 10:15	11.04	182.2	10.19	56.2	29.18	0
9/19/2021 10:30	10.22	185.1	10.38	56.4	29.19	0
9/19/2021 10:45	10.4	198.9	16.19	57.71	29.19	0
9/19/2021 11:00	10.33	193.4	14.86	58.25	29.2	0
9/19/2021 11:15	12.7	202.8	9.63	58.59	29.2	0
9/19/2021 11:30	10.26	196.2	10.95	58.11	29.21	0
9/19/2021 11:45	10.11	204.6	9.73	58.19	29.21	0
9/19/2021 12:00	10.22	203.7	11.45	58.35	29.22	0
9/19/2021 12:15	9.15	193.7	12.96	58.91	29.22	0
9/19/2021 12:30	10.5	202.4	13.21	58.69	29.22	0
9/19/2021 12:45	8.96	193.2	13.09	57.86	29.23	0
9/19/2021 13:00	7.815	179.6	9.31	57.61	29.23	0
9/19/2021 13:15	8.53	155.2	10.56	58.11	29.24	0
9/19/2021 13:30	13.58	190.1	19.15	56.47	29.24	0
9/19/2021 13:45	9.87	170.2	17.89	54.88	29.25	0
9/19/2021 14:00	7.094	144.7	11.77	55.69	29.25	0
9/19/2021 14:15	6.862	141	11.6	55.9	29.25	0
9/19/2021 14:30	8.82	146.2	7.899	56.43	29.25	0
9/19/2021 14:45	7.933	141.4	11.84	57.14	29.25	0
9/19/2021 15:00	10.79	149.3	11.18	58.36	29.25	0
9/19/2021 15:15	12.93	174	11.08	58.04	29.25	0
9/19/2021 15:30	13.89	165.8	9.68	58.4	29.25	0
9/19/2021 15:45	13	165.7	10.56	58.73	29.25	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/19/2021 16:00	12.06	167	11.7	58.44	29.25	0
9/19/2021 16:15	10.71	180.3	12.21	58.12	29.26	0
9/19/2021 16:30	11.85	179.7	9.71	58.31	29.26	0
9/19/2021 16:45	11.03	180.8	9.52	58.31	29.26	0
9/19/2021 17:00	11.66	186.1	13.2	58.5	29.27	0
9/19/2021 17:15	12.77	188.4	10.24	58.42	29.27	0
9/19/2021 17:30	11.97	185.9	9.06	57.96	29.27	0
9/19/2021 17:45	10.66	187	9.46	57.52	29.28	0
9/19/2021 18:00	9.75	178.5	8.81	57.39	29.29	0
9/19/2021 18:15	8.76	188.7	10.09	57.34	29.29	0
9/19/2021 18:30	10.48	191.7	8.89	57.1	29.3	0
9/19/2021 18:45	10.85	192.1	7.742	56.81	29.31	0
9/19/2021 19:00	9.89	188	7.751	56.54	29.31	0
9/19/2021 19:15	9.48	186.7	8.55	56.25	29.32	0
9/19/2021 19:30	8.2	191.7	8.37	56.04	29.33	0
9/19/2021 19:45	8.69	193.8	8.73	55.91	29.34	0
9/19/2021 20:00	7.661	196.5	10.94	55.86	29.35	0
9/19/2021 20:15	6.864	187.3	10.41	55.68	29.36	0
9/19/2021 20:30	6.309	177	9.83	55.36	29.37	0
9/19/2021 20:45	6.774	182.8	9.96	55.07	29.37	0
9/19/2021 21:00	7.195	181.4	8.73	54.83	29.37	0
9/19/2021 21:15	6.599	181.5	12.04	54.67	29.38	0
9/19/2021 21:30	5.175	195.4	10.76	54.59	29.39	0
9/19/2021 21:45	5.108	199	11.53	54.58	29.39	0
9/19/2021 22:00	4.673	192	10.31	54.51	29.39	0
9/19/2021 22:15	6.006	188.6	12.15	54.42	29.4	0
9/19/2021 22:30	7.549	190.6	9.17	54.35	29.4	0
9/19/2021 22:45	6.915	192.7	7.319	54.3	29.41	0
9/19/2021 23:00	6.409	194.7	8.78	54.21	29.42	0
9/19/2021 23:15	6.256	197.4	11.9	54.09	29.43	0
9/19/2021 23:30	6.032	198.2	11.88	54.02	29.43	0
9/19/2021 23:45	7.336	194.2	10.81	53.87	29.43	0
9/20/2021 0:00	6.156	183.1	9.42	53.76	29.43	0
9/20/2021 0:15	6.05	179.1	11.64	53.69	29.43	0
9/20/2021 0:30	7.049	174.6	8.66	53.69	29.43	0
9/20/2021 0:45	7.082	174.5	7.567	53.68	29.44	0
9/20/2021 1:00	7.395	171.3	7.674	53.79	29.44	0
9/20/2021 1:15	7.397	167.7	9.1	53.84	29.45	0
9/20/2021 1:30	4.515	145.7	8.72	53.67	29.45	0
9/20/2021 1:45	2.794	138.2	16.11	53.63	29.45	0
9/20/2021 2:00	3.08	138.4	17.49	53.57	29.46	0
9/20/2021 2:15	2.063	124.3	8.44	53.58	29.46	0
9/20/2021 2:30	1.549	141.6	10.49	53.53	29.46	0
9/20/2021 2:45	4.707	167.1	8.35	53.83	29.47	0
9/20/2021 3:00	6.028	170.6	6.17	54.05	29.47	0
9/20/2021 3:15	4.615	179.7	8.05	54	29.47	0
9/20/2021 3:30	7.417	181.5	9.22	53.94	29.47	0
9/20/2021 3:45	6.468	196.7	10.04	53.82	29.48	0
9/20/2021 4:00	5.316	199.1	8.8	53.71	29.48	0
9/20/2021 4:15	6.545	206.8	7.775	53.59	29.48	0
9/20/2021 4:30	6.871	209	8.79	53.59	29.49	0
9/20/2021 4:45	4.849	197.1	12.83	53.4	29.49	0
9/20/2021 5:00	3.713	175.6	10.87	53.15	29.49	0
9/20/2021 5:15	3.849	171.6	10.2	52.82	29.49	0
9/20/2021 5:30	3.083	176.3	27.17	52.63	29.5	0
9/20/2021 5:45	2.803	181.7	24.52	52.9	29.5	0
9/20/2021 6:00	0.626	102.6	8.92	52.64	29.5	0
9/20/2021 6:15	1.599	124.2	12.87	52.78	29.5	0
9/20/2021 6:30	1.987	98.5	12.83	53.07	29.51	0
9/20/2021 6:45	2.628	79.23	6.265	52.91	29.51	0
9/20/2021 7:00	3.025	89.6	6.576	53.99	29.52	0
9/20/2021 7:15	1.832	100.6	11.16	55	29.53	0
9/20/2021 7:30	3.778	169.3	20.9	55.57	29.53	0
9/20/2021 7:45	4.149	189.1	10.63	55.34	29.54	0
9/20/2021 8:00	4.619	196.7	10.56	55.77	29.54	0
9/20/2021 8:15	4.529	195.4	14.48	55.61	29.54	0
9/20/2021 8:30	5.616	170.9	22.07	57.3	29.54	0
9/20/2021 8:45	6.344	136.9	6.308	56.84	29.54	0
9/20/2021 9:00	3.858	153	17.07	56.08	29.54	0
9/20/2021 9:15	5.325	145.3	17.66	58.38	29.54	0
9/20/2021 9:30	6.625	184.9	29.32	58.88	29.54	0
9/20/2021 9:45	7.308	169.9	12.67	59.04	29.54	0
9/20/2021 10:00	5.529	191.8	26.67	57.89	29.55	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/20/2021 10:15	4.458	203.8	16.79	58.98	29.55	0
9/20/2021 10:30	5.11	214.5	21.57	59.79	29.55	0
9/20/2021 10:45	5.767	194.5	20.65	60.94	29.54	0
9/20/2021 11:00	5.069	205.4	20.34	60.97	29.53	0
9/20/2021 11:15	4.333	244.3	39.47	61.75	29.54	0
9/20/2021 11:30	3.514	218.2	64.26	62.57	29.54	0
9/20/2021 11:45	4.351	273.3	41	61.88	29.54	0
9/20/2021 12:00	2.924	311.8	50.18	62.16	29.54	0
9/20/2021 12:15	4.701	288.2	20.64	63.05	29.54	0
9/20/2021 12:30	4.012	338.6	48.74	63.78	29.54	0
9/20/2021 12:45	4.481	289.4	59.99	64.42	29.54	0
9/20/2021 13:00	3.859	336.7	40.36	64.82	29.54	0
9/20/2021 13:15	3.885	306.6	30.43	63.88	29.54	0
9/20/2021 13:30	2.869	349.6	22.8	63.28	29.53	0
9/20/2021 13:45	3.396	340.4	30.49	64.5	29.53	0
9/20/2021 14:00	6.337	322.9	14.79	64.93	29.53	0
9/20/2021 14:15	4.539	319.8	16.08	64.73	29.52	0
9/20/2021 14:30	3.609	308.5	24.3	65.18	29.52	0
9/20/2021 14:45	2.056	301.9	21.54	64.91	29.52	0
9/20/2021 15:00	1.31	261.8	80.4	65.97	29.52	0
9/20/2021 15:15	4.439	305.7	46.93	67	29.52	0
9/20/2021 15:30	3.957	349.9	35.73	66.08	29.52	0
9/20/2021 15:45	4.265	327	19.52	66.05	29.52	0
9/20/2021 16:00	4.21	332.3	22.21	66.33	29.52	0
9/20/2021 16:15	5.897	290.3	11.87	66.32	29.52	0
9/20/2021 16:30	4.241	334.2	35.43	66.39	29.51	0
9/20/2021 16:45	3.177	332	30.05	66.44	29.51	0
9/20/2021 17:00	4.419	314.3	16.72	66.02	29.51	0
9/20/2021 17:15	2.896	10.28	19.61	65.3	29.51	0
9/20/2021 17:30	3.085	4.911	16.28	64.42	29.51	0
9/20/2021 17:45	4.206	314.6	10.52	64.37	29.51	0
9/20/2021 18:00	5.693	311.9	4.542	63.32	29.51	0
9/20/2021 18:15	4.39	330.7	19.77	62.37	29.51	0
9/20/2021 18:30	3.24	350.7	30.7	61.6	29.51	0
9/20/2021 18:45	2.012	24.15	7.562	60.57	29.51	0
9/20/2021 19:00	1.617	11.39	10.45	59.27	29.52	0
9/20/2021 19:15	2.106	6.932	15.69	59.43	29.52	0
9/20/2021 19:30	2.994	25.42	9.03	58.3	29.52	0
9/20/2021 19:45	6.555	28.24	5.59	57.29	29.52	0
9/20/2021 20:00	7.418	23.32	7.681	57.24	29.53	0
9/20/2021 20:15	10.23	28.17	10.64	58.46	29.52	0
9/20/2021 20:30	7.141	22.47	7.088	57.51	29.53	0
9/20/2021 20:45	6.456	17.83	7.377	56.45	29.52	0
9/20/2021 21:00	7.775	24.64	5.797	55.53	29.52	0
9/20/2021 21:15	8.01	25.33	9.49	55.88	29.52	0
9/20/2021 21:30	5.053	45.25	10.6	55.38	29.51	0
9/20/2021 21:45	4.91	52.51	9.97	55.1	29.51	0
9/20/2021 22:00	3.36	62.52	22.79	55.49	29.51	0
9/20/2021 22:15	0.777	47.2	24.22	55.64	29.51	0
9/20/2021 22:30	1.461	24.13	20.71	54.9	29.5	0
9/20/2021 22:45	3.701	58.2	6.596	53.51	29.5	0
9/20/2021 23:00	2.337	37.07	27.06	52.65	29.5	0
9/20/2021 23:15	2.872	63.86	18.55	53.17	29.5	0
9/20/2021 23:30	3.174	48.98	9.04	53.3	29.49	0
9/20/2021 23:45	2.925	40.16	4.921	53.25	29.49	0
9/21/2021 0:00	2.781	34.2	9.06	52.72	29.48	0
9/21/2021 0:15	2.415	39.82	8.22	52.3	29.48	0
9/21/2021 0:30	2.91	46.49	4.508	51.99	29.48	0
9/21/2021 0:45	3.108	21.49	14.06	51.83	29.47	0
9/21/2021 1:00	2.544	349.6	2.954	52.7	29.48	0
9/21/2021 1:15	3.561	2.826	10.85	51.9	29.47	0
9/21/2021 1:30	2.928	18.08	3.854	51.79	29.47	0
9/21/2021 1:45	3.773	22.73	2.009	51.89	29.46	0
9/21/2021 2:00	3.966	25.3	4.182	50.66	29.46	0
9/21/2021 2:15	4.14	18.8	7.617	50.21	29.45	0
9/21/2021 2:30	3.827	35.77	4.519	49.76	29.45	0
9/21/2021 2:45	1.092	33.29	9.19	50.68	29.44	0
9/21/2021 3:00	2.968	5.049	10.46	51.1	29.44	0
9/21/2021 3:15	3.085	1.692	13.79	50.4	29.44	0
9/21/2021 3:30	2.865	9.36	15.49	50.62	29.43	0
9/21/2021 3:45	3.897	18.08	9.68	48.93	29.43	0
9/21/2021 4:00	4.477	11.32	7.078	48.72	29.42	0
9/21/2021 4:15	4.496	12.2	7.604	48.72	29.42	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/21/2021 4:30	4.482	32.07	7.558	47.39	29.41	0
9/21/2021 4:45	4.227	24.58	8.61	47.03	29.41	0
9/21/2021 5:00	4.407	19.54	7.281	46.74	29.41	0
9/21/2021 5:15	4.684	14.82	3.741	47.15	29.41	0
9/21/2021 5:30	4.345	29.14	7.519	47.44	29.41	0
9/21/2021 5:45	4.403	25.83	6.819	47.11	29.4	0
9/21/2021 6:00	5.232	16.83	7.496	46.88	29.4	0
9/21/2021 6:15	5.696	15.93	7.005	46.61	29.4	0
9/21/2021 6:30	6.214	17.96	6.888	46.6	29.4	0
9/21/2021 6:45	4.785	15.15	7.579	47.81	29.4	0
9/21/2021 7:00	4.346	22.36	5.511	48.88	29.39	0
9/21/2021 7:15	4.186	19.76	8.79	49.38	29.39	0
9/21/2021 7:30	3.049	1.105	13.95	52.2	29.39	0
9/21/2021 7:45	2.703	321.6	12.94	54.29	29.39	0
9/21/2021 8:00	2.42	343.6	25.31	54.21	29.39	0
9/21/2021 8:15	2.891	9.25	17.67	53.73	29.38	0
9/21/2021 8:30	3.151	345.8	18.53	54.32	29.38	0
9/21/2021 8:45	3.078	330	13.42	56.68	29.38	0
9/21/2021 9:00	3.823	329.4	12.77	58.63	29.37	0
9/21/2021 9:15	2.83	319.8	18.86	59.8	29.37	0
9/21/2021 9:30	1.114	290.8	28.49	61.85	29.36	0
9/21/2021 9:45	1.435	336.7	31.66	63.36	29.36	0
9/21/2021 10:00	4.279	343.7	22.22	64.18	29.36	0
9/21/2021 10:15	5.137	349.4	18.86	63.97	29.35	0
9/21/2021 10:30	4.742	12.66	28.41	64.91	29.35	0
9/21/2021 10:45	4.667	25.18	15.84	65.39	29.34	0
9/21/2021 11:00	4.495	24.87	14.09	66.51	29.34	0
9/21/2021 11:15	5.339	31.73	10.88	67.56	29.33	0
9/21/2021 11:30	4.702	24.49	14.2	68.55	29.32	0
9/21/2021 11:45	4.143	29.76	17.42	69.23	29.31	0
9/21/2021 12:00	4.552	32.27	11.28	70.16	29.31	0
9/21/2021 12:15	4.929	28.18	18.58	70.88	29.3	0
9/21/2021 12:30	4.346	44.48	22.26	71.56	29.29	0
9/21/2021 12:45	3.917	25.77	18.61	72.4	29.29	0
9/21/2021 13:00	4.322	28.46	13.4	73.01	29.28	0
9/21/2021 13:15	3.469	337.1	46.24	74.43	29.27	0
9/21/2021 13:30	4.246	293.9	16.95	75.09	29.26	0
9/21/2021 13:45	5.356	270.1	15.9	75.29	29.25	0
9/21/2021 14:00	4.927	280	19.89	75.77	29.25	0
9/21/2021 14:15	6.523	276.9	12.51	76.08	29.24	0
9/21/2021 14:30	6.175	276.8	13.79	76.17	29.24	0
9/21/2021 14:45	6.582	276.9	11.97	76.51	29.23	0
9/21/2021 15:00	6.377	274.4	9.86	76.11	29.23	0
9/21/2021 15:15	3.992	290.7	18.5	77.17	29.22	0
9/21/2021 15:30	4.654	275.3	17.96	77.02	29.22	0
9/21/2021 15:45	6.971	268	8.39	76.15	29.22	0
9/21/2021 16:00	6.104	270.8	7.8	75.8	29.21	0
9/21/2021 16:15	4.442	270.3	9.56	75.85	29.21	0
9/21/2021 16:30	6.034	259.3	7.941	74.79	29.21	0
9/21/2021 16:45	7.572	264.2	5.519	73.4	29.2	0
9/21/2021 17:00	8.32	266.9	5.275	72.45	29.2	0
9/21/2021 17:15	7.308	263.9	5.764	71.81	29.21	0
9/21/2021 17:30	6.236	253.3	6.689	71.24	29.21	0
9/21/2021 17:45	5.728	253.4	6.354	70.5	29.21	0
9/21/2021 18:00	5.177	254.1	5.592	69.57	29.21	0
9/21/2021 18:15	4.455	250.4	4.006	68.56	29.21	0
9/21/2021 18:30	3.972	252.5	2.877	68.58	29.21	0
9/21/2021 18:45	3.164	262.1	2.807	68.68	29.21	0
9/21/2021 19:00	1.509	346.2	22.13	68.56	29.21	0
9/21/2021 19:15	1.841	360	9.29	67.32	29.21	0
9/21/2021 19:30	3.323	18.8	7.535	66.75	29.22	0
9/21/2021 19:45	4.729	36.95	4.151	64.79	29.22	0
9/21/2021 20:00	5.594	35.48	3.985	63.65	29.22	0
9/21/2021 20:15	6.419	31.23	7.944	62.79	29.22	0
9/21/2021 20:30	7.097	33.41	7.275	62.62	29.22	0
9/21/2021 20:45	6.105	24.57	7.299	61.81	29.22	0
9/21/2021 21:00	4.832	21.42	10.87	61.94	29.22	0
9/21/2021 21:15	4.23	15.62	11.69	61.27	29.21	0
9/21/2021 21:30	3.618	23.44	12.63	61.11	29.22	0
9/21/2021 21:45	4.547	25.21	5.443	60.44	29.21	0
9/21/2021 22:00	4.795	24.23	14.01	60.4	29.21	0
9/21/2021 22:15	3.772	15.98	9.19	60.65	29.21	0
9/21/2021 22:30	3.231	22.25	7.803	60.94	29.21	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/21/2021 22:45	2.45	22.59	13.81	61.08	29.2	0
9/21/2021 23:00	0.93	41.29	56.71	60.86	29.2	0
9/21/2021 23:15	0.672	53.01	50.2	60.09	29.2	0
9/21/2021 23:30	1.397	109.7	18.94	60.83	29.2	0
9/21/2021 23:45	0.304	76.64	17.22	61.22	29.2	0
9/22/2021 0:00	2.473	137.2	5.322	62.33	29.2	0
9/22/2021 0:15	2.894	135.8	7.258	61.58	29.2	0
9/22/2021 0:30	1.105	123.1	3.456	61.29	29.2	0
9/22/2021 0:45	1.902	147.7	23.11	61.47	29.2	0
9/22/2021 1:00	4.907	167.4	8.24	60.67	29.19	0
9/22/2021 1:15	6.414	158.3	7.379	60.63	29.19	0
9/22/2021 1:30	6.172	153.3	4.77	60.54	29.19	0
9/22/2021 1:45	3.682	165.5	11.67	61.21	29.19	0
9/22/2021 2:00	3.549	162.6	9.91	61.71	29.19	0
9/22/2021 2:15	5.736	183.8	8.38	60.41	29.19	0
9/22/2021 2:30	7.008	183.3	6.911	61.03	29.2	0
9/22/2021 2:45	2.719	122.6	79.52	60.86	29.2	0
9/22/2021 3:00	1.792	208.7	27.36	60.1	29.2	0
9/22/2021 3:15	4.934	216.3	7.478	59.99	29.2	0
9/22/2021 3:30	3.809	213.9	9.24	60.69	29.2	0
9/22/2021 3:45	1.15	299.2	56.01	59.08	29.21	0
9/22/2021 4:00	2.248	328.4	32.62	57.98	29.21	0
9/22/2021 4:15	2.814	17.49	23.8	57.37	29.21	0
9/22/2021 4:30	3.732	15.16	8.98	55.87	29.22	0
9/22/2021 4:45	2.965	354.7	16.05	56.29	29.22	0
9/22/2021 5:00	0.371	339.3	8.68	57.07	29.23	0
9/22/2021 5:15	3.03	33.12	4.766	56.36	29.22	0
9/22/2021 5:30	4.255	306.7	52.99	55.9	29.23	0
9/22/2021 5:45	5.806	271.7	6.822	55.99	29.24	0
9/22/2021 6:00	3.007	354.1	35	55.26	29.24	0
9/22/2021 6:15	5.385	20.72	9.31	53.76	29.25	0
9/22/2021 6:30	5.931	17.49	8.23	53.62	29.26	0
9/22/2021 6:45	6.434	23.71	13.1	54.02	29.26	0
9/22/2021 7:00	8.25	11.79	16.8	55.53	29.26	0
9/22/2021 7:15	6.622	336.1	14.36	57.61	29.27	0
9/22/2021 7:30	4.879	2.397	25.34	58.8	29.28	0
9/22/2021 7:45	6.49	28.27	20.79	56.54	29.29	0
9/22/2021 8:00	10.46	16.15	10.21	57.95	29.29	0
9/22/2021 8:15	9.54	18.42	9.51	58.25	29.3	0
9/22/2021 8:30	10.2	17.91	9.74	58.93	29.3	0
9/22/2021 8:45	7.759	13.15	13.88	59.05	29.3	0
9/22/2021 9:00	8.42	21.72	15.7	60.63	29.31	0
9/22/2021 9:15	7.698	36.53	16.68	61.99	29.31	0
9/22/2021 9:30	5.424	33.56	18.1	61.62	29.32	0
9/22/2021 9:45	1.594	17.58	30.03	61.19	29.32	0
9/22/2021 10:00	3.685	185.6	21.99	61.19	29.33	0
9/22/2021 10:15	5.913	150.5	18.49	61.76	29.33	0
9/22/2021 10:30	5.919	171.4	27.47	61.66	29.33	0
9/22/2021 10:45	6	187.4	14.59	61.59	29.34	0
9/22/2021 11:00	7.932	191.1	10.74	61.52	29.35	0
9/22/2021 11:15	6.193	191.7	12.41	61.7	29.35	0
9/22/2021 11:30	5.156	193.6	15.99	61.6	29.35	0
9/22/2021 11:45	5.002	238	19.89	61.64	29.36	0
9/22/2021 12:00	5.368	207.9	12	61.53	29.35	0
9/22/2021 12:15	8.24	239.9	15.62	60.97	29.36	0
9/22/2021 12:30	8.47	258.7	11.41	60.15	29.37	0
9/22/2021 12:45	6.097	250.9	9	60.22	29.37	0
9/22/2021 13:00	3.852	280.7	16.65	60.67	29.37	0
9/22/2021 13:15	5.565	293.4	12.69	61.06	29.38	0
9/22/2021 13:30	6.126	296.1	11.28	61.53	29.38	0
9/22/2021 13:45	3.467	292.3	20.33	62.57	29.37	0
9/22/2021 14:00	3.039	320.5	39.09	63.27	29.38	0
9/22/2021 14:15	2.665	308.7	13.21	62.4	29.39	0
9/22/2021 14:30	1.93	3.262	34.38	62.22	29.4	0
9/22/2021 14:45	1.601	104.4	21.27	61.86	29.4	0
9/22/2021 15:00	4.845	157.7	13.71	61.84	29.4	0
9/22/2021 15:15	6.601	182.7	7.079	61.67	29.4	0
9/22/2021 15:30	6.099	179.8	8.74	61.48	29.4	0
9/22/2021 15:45	5.638	178.9	10.06	61.38	29.4	0
9/22/2021 16:00	5.693	174.4	7.282	61.16	29.41	0
9/22/2021 16:15	4.479	150.4	15.69	61.44	29.41	0
9/22/2021 16:30	4.182	132.3	11.19	61.1	29.41	0
9/22/2021 16:45	3.802	121.4	13.38	60.96	29.42	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/22/2021 17:00	3.297	125.8	7.419	60.85	29.42	0
9/22/2021 17:15	3.192	133.1	9.04	60.71	29.42	0
9/22/2021 17:30	4.165	127.6	5.425	60.32	29.41	0
9/22/2021 17:45	4.191	115.6	11.39	60.27	29.42	0
9/22/2021 18:00	4.253	126.5	6.991	59.73	29.41	0
9/22/2021 18:15	4.01	124.8	8.69	59.4	29.41	0
9/22/2021 18:30	3.711	129.6	7.098	59.21	29.41	0
9/22/2021 18:45	2.563	124.8	4.988	59.05	29.42	0
9/22/2021 19:00	2.109	166.7	16.51	59.1	29.43	0
9/22/2021 19:15	1.327	192.8	2.94	59.22	29.43	0
9/22/2021 19:30	0.725	296.2	50.44	59.18	29.44	0
9/22/2021 19:45	0.087	24.35	9.88	58.62	29.44	0
9/22/2021 20:00	1.843	69.96	3.73	57.99	29.44	0
9/22/2021 20:15	2.203	68.54	7.264	57.44	29.45	0
9/22/2021 20:30	1.404	53.23	6.564	57.01	29.45	0
9/22/2021 20:45	2.479	100.8	20.23	56.63	29.45	0
9/22/2021 21:00	2.665	138.6	10.24	56.88	29.45	0
9/22/2021 21:15	2.629	151.5	8.72	56.68	29.45	0
9/22/2021 21:30	2.419	136.8	16.39	56.5	29.45	0
9/22/2021 21:45	1.069	46.48	20.93	55.86	29.45	0
9/22/2021 22:00	2.443	95.9	15.08	55.32	29.44	0
9/22/2021 22:15	3.151	110	7.457	55.61	29.44	0
9/22/2021 22:30	2.345	93.2	8.42	55.75	29.44	0
9/22/2021 22:45	1.878	70.16	23.3	55.52	29.45	0
9/22/2021 23:00	0.779	44.45	6.401	55.56	29.45	0
9/22/2021 23:15	0.028	29.86	0.141	55.71	29.45	0
9/22/2021 23:30	0.373	25.16	13.17	55.31	29.45	0
9/22/2021 23:45	0	0	0	55.4	29.45	0
9/23/2021 0:00	0.593	25.06	6.945	55.34	29.45	0
9/23/2021 0:15	1.615	26.8	4.975	54.8	29.45	0
9/23/2021 0:30	2.302	46.16	6.683	54.73	29.45	0
9/23/2021 0:45	1.438	37.2	1.624	55.01	29.45	0
9/23/2021 1:00	0.013	51.39	0.041	55.12	29.45	0
9/23/2021 1:15	0	0	0	55.38	29.46	0
9/23/2021 1:30	0.001	48.11	0	55.22	29.46	0
9/23/2021 1:45	0.041	23.33	3.058	54.88	29.46	0
9/23/2021 2:00	1.104	18.32	3.68	54.6	29.46	0
9/23/2021 2:15	1.825	1.114	9.74	54.97	29.47	0
9/23/2021 2:30	2.116	14.15	9.44	55.36	29.47	0
9/23/2021 2:45	2.523	14.57	13.4	54.94	29.47	0
9/23/2021 3:00	1.977	0.895	15.99	55.96	29.47	0
9/23/2021 3:15	2.187	127.5	54.92	54.62	29.47	0
9/23/2021 3:30	2.922	252.7	20.92	53.94	29.47	0
9/23/2021 3:45	2.133	271.4	23.45	54.7	29.47	0
9/23/2021 4:00	0.77	33.09	27.69	53.73	29.47	0
9/23/2021 4:15	0.144	13.92	0.428	53.77	29.47	0
9/23/2021 4:30	1.389	337.7	33.15	53.69	29.47	0
9/23/2021 4:45	0.196	288.2	22.77	53.41	29.46	0
9/23/2021 5:00	1.868	309.1	8.08	53.8	29.47	0
9/23/2021 5:15	1.101	356.1	11.15	53.4	29.47	0
9/23/2021 5:30	2.088	12.51	16.32	53.35	29.47	0
9/23/2021 5:45	1.064	13.58	4.003	52.64	29.47	0
9/23/2021 6:00	0.559	293.9	20.29	53.04	29.47	0
9/23/2021 6:15	0.384	6.035	7.522	52.85	29.48	0
9/23/2021 6:30	1.052	84.4	20.32	52.84	29.48	0
9/23/2021 6:45	0.717	32.36	17.64	52.87	29.48	0
9/23/2021 7:00	1.806	157.8	57.96	53.56	29.48	0
9/23/2021 7:15	1.91	42.05	64.81	53.25	29.48	0
9/23/2021 7:30	0.78	20.12	10.22	53.05	29.48	0
9/23/2021 7:45	2.445	33.41	7.391	53.63	29.49	0
9/23/2021 8:00	3.303	11.54	11.59	54.02	29.49	0
9/23/2021 8:15	3.273	19.64	20.48	53.99	29.49	0
9/23/2021 8:30	2.798	37.16	17.73	54.18	29.49	0
9/23/2021 8:45	3.485	54.46	14.74	54.72	29.48	0
9/23/2021 9:00	3.379	63.01	13.48	56.2	29.48	0
9/23/2021 9:15	0.54	63.21	43.2	58.26	29.48	0
9/23/2021 9:30	1.521	249.8	22.45	59.48	29.47	0
9/23/2021 9:45	1.774	224.5	40.25	60.1	29.46	0
9/23/2021 10:00	2.452	290.9	15.56	60.07	29.47	0
9/23/2021 10:15	4.099	359	62.93	62.18	29.46	0
9/23/2021 10:30	4.409	297.6	24.64	61.59	29.46	0
9/23/2021 10:45	4.348	309.1	18.88	61.51	29.46	0
9/23/2021 11:00	4.762	310.4	33.53	62.77	29.45	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/23/2021 11:15	8.03	312.2	16.56	63.37	29.45	0
9/23/2021 11:30	6.502	327.4	26.32	63.61	29.45	0
9/23/2021 11:45	5.951	330.2	18.32	64.2	29.45	0
9/23/2021 12:00	7.576	7.503	36.25	64.78	29.45	0
9/23/2021 12:15	8.43	10.23	23.89	65.75	29.45	0
9/23/2021 12:30	9.03	3.704	26.58	65.6	29.46	0
9/23/2021 12:45	7.489	350.3	26.79	66.22	29.46	0
9/23/2021 13:00	7.864	359.3	25.83	66.49	29.46	0
9/23/2021 13:15	9.11	18.84	14.08	66.54	29.46	0
9/23/2021 13:30	6.987	9.91	22.88	66.31	29.45	0
9/23/2021 13:45	7.957	342.8	21.09	66.89	29.46	0
9/23/2021 14:00	7.549	346.4	20.94	67.01	29.45	0
9/23/2021 14:15	8.75	9.13	26.11	67.54	29.45	0
9/23/2021 14:30	6.983	353.1	22.34	67.38	29.45	0
9/23/2021 14:45	7.656	352.8	20.12	67.63	29.45	0
9/23/2021 15:00	6.843	350.4	21.33	67.95	29.45	0
9/23/2021 15:15	6.028	25.28	17.91	67.74	29.44	0
9/23/2021 15:30	5.641	344.9	27.72	68.02	29.44	0
9/23/2021 15:45	8.93	335.3	24.95	67.75	29.43	0
9/23/2021 16:00	6.551	357	19.72	67.65	29.43	0
9/23/2021 16:15	6.416	336.4	28.84	67.81	29.43	0
9/23/2021 16:30	6.629	2.327	24.1	67.3	29.42	0
9/23/2021 16:45	5.668	340.7	19.11	66.98	29.42	0
9/23/2021 17:00	6.373	342.3	15.73	66.43	29.42	0
9/23/2021 17:15	5.371	347	15.38	65.58	29.42	0
9/23/2021 17:30	5.28	346.6	17.67	64.72	29.42	0
9/23/2021 17:45	3.954	350.7	21.67	63.56	29.42	0
9/23/2021 18:00	4.063	355.1	12.73	62.23	29.42	0
9/23/2021 18:15	5.407	352.7	12.16	61.43	29.42	0
9/23/2021 18:30	4.789	6.131	13.53	60.6	29.42	0
9/23/2021 18:45	5.51	6.712	13.7	59.75	29.41	0
9/23/2021 19:00	6.122	15.66	17.01	60.01	29.41	0
9/23/2021 19:15	9.17	15.54	8.42	60.04	29.41	0
9/23/2021 19:30	9.37	17.05	10.13	59.5	29.4	0
9/23/2021 19:45	9	11.02	11.8	59.27	29.41	0
9/23/2021 20:00	8.31	7.045	14.15	59.34	29.41	0
9/23/2021 20:15	10.52	14.38	11.62	58.97	29.41	0
9/23/2021 20:30	11.08	14.62	10.03	58.78	29.41	0
9/23/2021 20:45	11.19	14.02	10.69	58.79	29.41	0
9/23/2021 21:00	10.94	10.35	12.31	58.83	29.4	0
9/23/2021 21:15	8.84	18.74	11.51	58.53	29.4	0
9/23/2021 21:30	9.18	20.38	11.42	58.23	29.4	0
9/23/2021 21:45	9.61	30.93	6.878	57.06	29.4	0
9/23/2021 22:00	10.18	25.68	8.87	56.86	29.4	0
9/23/2021 22:15	8.16	30.64	6.882	56.26	29.39	0
9/23/2021 22:30	8.89	36.22	8.03	55.96	29.39	0
9/23/2021 22:45	9.3	28.95	8.35	55.61	29.39	0
9/23/2021 23:00	7.109	26.12	9.72	55.38	29.39	0
9/23/2021 23:15	7.437	30.6	12.15	54.92	29.39	0
9/23/2021 23:30	8.05	11.72	17.46	54.81	29.38	0
9/23/2021 23:45	5.249	1.63	18.21	54.5	29.39	0
9/24/2021 0:00	6.113	1.781	17.28	54.21	29.38	0
9/24/2021 0:15	7.414	13.41	11.07	53.53	29.38	0
9/24/2021 0:30	7.151	24.6	7.908	53.09	29.37	0
9/24/2021 0:45	7.133	23.1	9.63	52.6	29.37	0
9/24/2021 1:00	6.497	27.57	8.71	52.37	29.37	0
9/24/2021 1:15	6.274	11.99	12.8	52.2	29.37	0
9/24/2021 1:30	5.515	23.5	9.13	52.25	29.36	0
9/24/2021 1:45	5.303	37.25	8.87	51.66	29.36	0
9/24/2021 2:00	7.958	8.02	10.86	51.53	29.35	0
9/24/2021 2:15	8.1	16.78	7.887	51.35	29.35	0
9/24/2021 2:30	6.032	17.74	8.46	50.89	29.34	0
9/24/2021 2:45	5.617	16.77	12.47	50.78	29.34	0
9/24/2021 3:00	5.928	24.39	8.22	50.74	29.34	0
9/24/2021 3:15	6.27	20.76	10.19	50.66	29.34	0
9/24/2021 3:30	7.475	21.63	9.35	50.61	29.33	0
9/24/2021 3:45	8.02	30.87	8.93	50.58	29.33	0
9/24/2021 4:00	7.269	26.12	8.52	50.3	29.33	0
9/24/2021 4:15	6.165	20.09	9.02	50.08	29.32	0
9/24/2021 4:30	6.06	18.36	9.88	49.88	29.32	0
9/24/2021 4:45	7.154	24.14	9.03	49.66	29.32	0
9/24/2021 5:00	7.608	24.87	8.84	49.49	29.31	0
9/24/2021 5:15	5.933	14.23	10.63	49.48	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/24/2021 5:30	5.445	13.05	7.189	49.51	29.31	0
9/24/2021 5:45	5.83	21.04	8.78	49.38	29.31	0
9/24/2021 6:00	6.166	24.88	9.01	49.31	29.3	0
9/24/2021 6:15	9.69	21.89	8.39	49.28	29.29	0
9/24/2021 6:30	6.425	27.76	10.82	49.09	29.29	0
9/24/2021 6:45	5.699	35.9	9.14	48.79	29.29	0
9/24/2021 7:00	2.967	346.9	24.93	48.89	29.29	0
9/24/2021 7:15	1.212	321.3	8.91	49.97	29.29	0
9/24/2021 7:30	0.709	126.4	46.97	50.91	29.29	0
9/24/2021 7:45	3.175	160.9	10.85	51.05	29.29	0
9/24/2021 8:00	2.42	140.1	24.56	51.15	29.29	0
9/24/2021 8:15	2.536	57.87	20.51	51.05	29.29	0
9/24/2021 8:30	2.773	33.3	12.77	51.38	29.28	0
9/24/2021 8:45	2.987	28.1	24.84	52.35	29.28	0
9/24/2021 9:00	1.816	307.2	75.32	53.31	29.28	0
9/24/2021 9:15	1.333	251.3	24.21	54.95	29.28	0
9/24/2021 9:30	1.789	268.2	26.51	56.53	29.27	0
9/24/2021 9:45	2.613	341.8	40.06	57.95	29.27	0
9/24/2021 10:00	2.658	6.657	32.84	59.2	29.26	0
9/24/2021 10:15	3.896	10.18	34.36	61.12	29.26	0
9/24/2021 10:30	3.912	46.94	16.02	60.79	29.26	0
9/24/2021 10:45	3.089	35.01	15.52	62.54	29.25	0
9/24/2021 11:00	3.879	28.72	16.46	63.32	29.24	0
9/24/2021 11:15	3.558	35.41	21.92	64.7	29.24	0
9/24/2021 11:30	5.692	38.48	21.69	65.78	29.24	0
9/24/2021 11:45	5.24	28.66	19.42	66.6	29.23	0
9/24/2021 12:00	5.44	24.03	16.47	67.15	29.22	0
9/24/2021 12:15	6.049	26.08	16.44	68.24	29.22	0
9/24/2021 12:30	5.752	32.03	14.74	68.55	29.21	0
9/24/2021 12:45	6.718	25.5	9.48	69.4	29.21	0
9/24/2021 13:00	6.713	31.23	12.75	70.09	29.2	0
9/24/2021 13:15	6.541	26.56	14.87	70.43	29.19	0
9/24/2021 13:30	7.472	19.86	13.92	71.2	29.18	0
9/24/2021 13:45	6.23	27.48	15.44	71.34	29.18	0
9/24/2021 14:00	7.576	24.3	9.27	72.21	29.17	0
9/24/2021 14:15	8.13	18.7	10.84	72.65	29.16	0
9/24/2021 14:30	8.52	14.95	10.87	72.88	29.15	0
9/24/2021 14:45	6.872	14.02	13.09	73.96	29.15	0
9/24/2021 15:00	7.61	16.76	9.79	74.06	29.14	0
9/24/2021 15:15	8.03	14.93	8.9	74.1	29.13	0
9/24/2021 15:30	7.382	14.59	12.03	74.64	29.13	0
9/24/2021 15:45	8.69	10.94	11.94	73.99	29.12	0
9/24/2021 16:00	7.697	2.277	17.9	73.83	29.11	0
9/24/2021 16:15	5.9	356.2	22.23	73.62	29.11	0
9/24/2021 16:30	3.784	278.1	18.35	72.5	29.1	0
9/24/2021 16:45	2.406	300.7	28.17	71.17	29.09	0
9/24/2021 17:00	4.467	10.45	15.52	71.19	29.09	0
9/24/2021 17:15	2.442	266.9	31.94	70.39	29.09	0
9/24/2021 17:30	1.5	242.1	68.9	69.5	29.08	0
9/24/2021 17:45	4.656	15.85	10.59	69.64	29.08	0
9/24/2021 18:00	3.031	31.74	14.34	68.51	29.07	0
9/24/2021 18:15	0.324	18.42	10.33	67.91	29.07	0
9/24/2021 18:30	0.979	33.18	55.49	67.4	29.07	0
9/24/2021 18:45	3.693	251.4	18.73	66.57	29.07	0
9/24/2021 19:00	0.768	12.74	18.74	65.78	29.07	0
9/24/2021 19:15	0.475	21.64	14.4	65.69	29.07	0
9/24/2021 19:30	4.396	259	19.22	64.9	29.07	0
9/24/2021 19:45	4.115	303.5	11.02	63.8	29.07	0
9/24/2021 20:00	2.712	346.2	22.2	63.76	29.07	0
9/24/2021 20:15	4.798	27.64	9.01	63.45	29.07	0
9/24/2021 20:30	6.92	27.3	8.9	62.27	29.07	0
9/24/2021 20:45	5.075	23.54	8.94	61.19	29.07	0
9/24/2021 21:00	4.922	19.27	4.042	60.38	29.07	0
9/24/2021 21:15	4.031	4.294	9.56	60.84	29.07	0
9/24/2021 21:30	4.35	28.13	11.86	61.3	29.07	0
9/24/2021 21:45	5.342	33.89	9.99	60.62	29.06	0
9/24/2021 22:00	5.438	8.64	9.69	60	29.06	0
9/24/2021 22:15	4.498	11.57	4.607	59.37	29.06	0
9/24/2021 22:30	5.202	354.5	16.77	59.5	29.06	0
9/24/2021 22:45	3.804	11.83	10.7	60.07	29.06	0
9/24/2021 23:00	3.848	20.99	15.19	59.6	29.06	0
9/24/2021 23:15	5.258	14.61	13.4	59.72	29.06	0
9/24/2021 23:30	4.083	20.17	10.02	58.64	29.07	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/24/2021 23:45	3.338	30.89	12.32	58.24	29.07	0
9/25/2021 0:00	4.097	39.35	13.38	56.19	29.07	0
9/25/2021 0:15	6.477	20.76	9.13	56.58	29.07	0
9/25/2021 0:30	6.622	22.78	9.06	56.2	29.06	0
9/25/2021 0:45	5.796	15.27	6.765	56.4	29.06	0
9/25/2021 1:00	5.44	18.73	10.16	56.99	29.06	0
9/25/2021 1:15	3.492	49.27	9.14	56.06	29.06	0
9/25/2021 1:30	3.463	13.3	18.62	56.98	29.06	0
9/25/2021 1:45	2.32	46.53	24.73	57.44	29.06	0
9/25/2021 2:00	1.433	104.9	54.96	58.23	29.06	0
9/25/2021 2:15	2.639	260.8	8.65	59.12	29.06	0
9/25/2021 2:30	0.528	306.5	22.4	58.88	29.06	0
9/25/2021 2:45	1.586	205.9	46.33	58.16	29.05	0
9/25/2021 3:00	3.053	145.7	8.18	57.48	29.05	0
9/25/2021 3:15	4.299	180.2	11.75	57.07	29.05	0
9/25/2021 3:30	4.204	197.3	16.5	56.16	29.05	0
9/25/2021 3:45	2.085	119.1	21.31	55.59	29.05	0
9/25/2021 4:00	3.13	145.7	18.51	56.25	29.05	0
9/25/2021 4:15	4.944	210.4	9.56	57.08	29.05	0
9/25/2021 4:30	3.551	251.6	41.46	56.99	29.06	0
9/25/2021 4:45	3.739	324.9	12.65	56.23	29.06	0
9/25/2021 5:00	3.354	15.77	9.55	54.28	29.06	0
9/25/2021 5:15	3.261	26.56	7.287	54.83	29.06	0
9/25/2021 5:30	1.614	16.1	3.383	56.05	29.06	0
9/25/2021 5:45	0.488	11.72	3.905	57.86	29.06	0
9/25/2021 6:00	1.78	91.5	19.78	57.05	29.06	0
9/25/2021 6:15	1.724	101.4	0.124	56.82	29.06	0
9/25/2021 6:30	0.603	87.9	31.78	57.8	29.06	0
9/25/2021 6:45	2.673	121.7	15.07	59.11	29.06	0
9/25/2021 7:00	4.954	136.5	4.787	59.02	29.06	0
9/25/2021 7:15	4.642	144.6	4.018	59.71	29.06	0
9/25/2021 7:30	4.878	157.7	9.82	61.3	29.06	0
9/25/2021 7:45	5.289	168.5	8.64	62.24	29.07	0
9/25/2021 8:00	3.663	166.9	9.88	62.73	29.07	0
9/25/2021 8:15	2.644	182.6	16.72	63.37	29.07	0
9/25/2021 8:30	1.953	225.2	18.28	64.05	29.07	0
9/25/2021 8:45	1.913	231.7	17.8	64.02	29.07	0
9/25/2021 9:00	2.865	194.7	25.5	64.62	29.08	0
9/25/2021 9:15	3.785	169	18.3	65.55	29.08	0
9/25/2021 9:30	4.849	174.9	14.74	66.43	29.08	0
9/25/2021 9:45	5.198	146.9	11.54	67.86	29.08	0
9/25/2021 10:00	4.459	182.4	32.21	68.7	29.08	0
9/25/2021 10:15	5.098	193	15.7	68.81	29.08	0
9/25/2021 10:30	4.343	192.4	16.02	69.85	29.08	0
9/25/2021 10:45	3.155	195.9	27.32	70.71	29.08	0
9/25/2021 11:00	5.251	204.3	20.44	71	29.08	0
9/25/2021 11:15	4.47	205	39.42	71.87	29.08	0
9/25/2021 11:30	5.213	218.5	28.14	72.3	29.07	0
9/25/2021 11:45	6.748	194.3	18.45	72.75	29.07	0
9/25/2021 12:00	8.74	219.3	13.61	72.9	29.07	0
9/25/2021 12:15	8.46	231.6	11.57	73.1	29.07	0
9/25/2021 12:30	7.614	235.2	15.17	73.63	29.06	0
9/25/2021 12:45	5.555	216.3	29.64	74.31	29.06	0
9/25/2021 13:00	5.221	213.6	22.09	74.85	29.05	0
9/25/2021 13:15	7.711	207.9	18.37	74.97	29.05	0
9/25/2021 13:30	6.777	203.1	25.4	75.9	29.04	0
9/25/2021 13:45	5.045	217.3	24.71	75.85	29.04	0
9/25/2021 14:00	6.135	199.6	25.39	76.28	29.04	0
9/25/2021 14:15	5.764	258.5	16.52	76.41	29.04	0
9/25/2021 14:30	5.774	198.8	26.37	76.8	29.03	0
9/25/2021 14:45	5.903	204.7	43.26	76.87	29.03	0
9/25/2021 15:00	6.1	265.5	19.71	76.63	29.03	0
9/25/2021 15:15	6.34	278.1	10.65	76.16	29.02	0
9/25/2021 15:30	5.705	271.5	15.89	75.93	29.02	0
9/25/2021 15:45	6.62	275.7	14.36	76.03	29.02	0
9/25/2021 16:00	6.69	252.4	13.24	75.94	29.01	0
9/25/2021 16:15	5.607	251.6	15.26	75.73	29.01	0
9/25/2021 16:30	5.707	266.9	15.83	75.25	29.01	0
9/25/2021 16:45	6.476	263.7	16.1	74.86	29.01	0
9/25/2021 17:00	7.579	268.1	7.638	74.09	29.01	0
9/25/2021 17:15	7.439	262.5	11.85	73.52	29.01	0
9/25/2021 17:30	7.961	244.5	7.679	72.6	29.01	0
9/25/2021 17:45	6.024	249.7	8.68	71.66	29	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/25/2021 18:00	8.61	235.5	4.416	70.79	29	0
9/25/2021 18:15	9.17	232	4.901	70.1	29	0
9/25/2021 18:30	9.31	236	5.418	69.41	29	0
9/25/2021 18:45	8.76	229.5	6.281	68.65	29.01	0
9/25/2021 19:00	7.948	216.4	6.19	68.17	29.02	0
9/25/2021 19:15	8.66	230.8	6.73	67.74	29.02	0
9/25/2021 19:30	6.111	215.9	10.11	66.81	29.02	0
9/25/2021 19:45	4.916	189	11.98	65.91	29.02	0
9/25/2021 20:00	6.214	169.7	8.6	64.62	29.02	0
9/25/2021 20:15	7.276	188.2	5.521	64.38	29.02	0
9/25/2021 20:30	6.636	161.3	8.95	63.43	29.02	0
9/25/2021 20:45	8	150	4.446	63.01	29.01	0
9/25/2021 21:00	7.319	176.1	11.98	62.79	29.02	0
9/25/2021 21:15	6.111	193.6	10.21	62.58	29.02	0
9/25/2021 21:30	4.374	182.6	14.22	62.43	29.02	0
9/25/2021 21:45	4.306	209.7	18.68	61.93	29.02	0
9/25/2021 22:00	5.444	249.5	7.989	61.83	29.02	0
9/25/2021 22:15	7.247	233.3	8.97	61.46	29.02	0
9/25/2021 22:30	8.39	256.9	16.44	60.5	29.03	0
9/25/2021 22:45	5.882	268.4	9.69	58.19	29.04	0
9/25/2021 23:00	3.614	256.4	19.29	57.27	29.04	0
9/25/2021 23:15	0.39	325.5	45.61	56.64	29.04	0
9/25/2021 23:30	2.511	180.6	58.52	56.37	29.04	0
9/25/2021 23:45	5.279	191	6.755	56.13	29.05	0
9/26/2021 0:00	5.731	184.8	6.783	56.05	29.05	0
9/26/2021 0:15	4.913	178.2	8.16	55.43	29.05	0
9/26/2021 0:30	7.738	179.5	6.401	54.88	29.05	0
9/26/2021 0:45	6.976	177.3	6.592	54.14	29.05	0
9/26/2021 1:00	6.826	174.2	6.292	53.61	29.06	0
9/26/2021 1:15	6.403	165.1	5.931	52.85	29.06	0
9/26/2021 1:30	5.958	151.8	8.2	51.99	29.06	0
9/26/2021 1:45	6.038	157.7	11.93	51.72	29.06	0
9/26/2021 2:00	5.888	157.4	10.26	51.49	29.06	0
9/26/2021 2:15	6.253	156.3	12.91	51.87	29.07	0
9/26/2021 2:30	7.238	134.8	5.647	51.98	29.06	0
9/26/2021 2:45	8.45	150.6	7.378	52.45	29.06	0
9/26/2021 3:00	8.29	149.6	5.828	52.5	29.06	0
9/26/2021 3:15	10.66	145	7.294	52.28	29.06	0
9/26/2021 3:30	10.44	144.7	8.42	51.93	29.06	0
9/26/2021 3:45	9.51	144.4	7.163	51.73	29.07	0
9/26/2021 4:00	7.974	147.6	6.25	51.54	29.07	0
9/26/2021 4:15	7.917	144	5.782	51.22	29.07	0
9/26/2021 4:30	8.37	143.2	7.144	51.85	29.07	0
9/26/2021 4:45	7.619	130.7	7.794	52.21	29.07	0
9/26/2021 5:00	7.76	125.8	8.7	52.22	29.07	0
9/26/2021 5:15	8.07	133.2	9.89	52.5	29.08	0
9/26/2021 5:30	9.48	133.6	11.68	53.02	29.07	0
9/26/2021 5:45	8.93	131.5	11.23	53.29	29.07	0
9/26/2021 6:00	8.42	128.1	9.44	53.31	29.07	0
9/26/2021 6:15	9.95	137.6	8.76	53.44	29.07	0
9/26/2021 6:30	8.75	134.7	9.16	53.48	29.06	0
9/26/2021 6:45	8.18	144.1	8.58	53.61	29.07	0
9/26/2021 7:00	7.662	135.7	11.09	53.73	29.07	0
9/26/2021 7:15	6.512	134.6	11.17	54.01	29.06	0
9/26/2021 7:30	7.049	141.9	8.07	54.37	29.07	0
9/26/2021 7:45	7.074	142.9	10.1	54.55	29.07	0
9/26/2021 8:00	6.841	132.6	11.26	54.89	29.07	0
9/26/2021 8:15	7.318	135.7	10.61	54.91	29.06	0
9/26/2021 8:30	6.378	128	13.37	55.2	29.06	0
9/26/2021 8:45	5.661	126.2	11.53	55.39	29.07	0
9/26/2021 9:00	4.989	132.4	19.06	56.54	29.06	0
9/26/2021 9:15	4.234	123.5	31.26	57.29	29.06	0
9/26/2021 9:30	3.071	116.6	21.71	57.53	29.06	0
9/26/2021 9:45	3.109	193.2	48.28	59.17	29.06	0
9/26/2021 10:00	3.685	211.4	26.59	58.67	29.05	0
9/26/2021 10:15	2.575	198.7	66.11	59.92	29.05	0
9/26/2021 10:30	3.031	116.5	41.35	61.06	29.04	0
9/26/2021 10:45	3.128	90	18.62	61.16	29.03	0
9/26/2021 11:00	4.867	235.6	36.08	61.86	29.03	0
9/26/2021 11:15	4.988	208.5	27.39	62.04	29.02	0
9/26/2021 11:30	3.952	209.7	20.53	62.9	29.01	0
9/26/2021 11:45	4.861	193.5	20.51	63.46	29.01	0
9/26/2021 12:00	3.344	203.2	31.02	63.28	29	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/26/2021 12:15	4.839	224	15.46	63.36	29.01	0
9/26/2021 12:30	3.206	253.1	21.09	63.77	29	0
9/26/2021 12:45	6.016	264.8	12.43	63.07	28.99	0
9/26/2021 13:00	7.063	270.7	9.98	62.18	28.99	0
9/26/2021 13:15	7.777	272.6	6.984	61.22	28.99	0
9/26/2021 13:30	8.56	274.4	8.47	59.77	28.99	0
9/26/2021 13:45	8.68	294.7	6.496	58.65	28.99	0
9/26/2021 14:00	7.893	298.8	7.971	58.46	28.98	0
9/26/2021 14:15	6.688	320	18.41	58.47	28.98	0
9/26/2021 14:30	5.386	318.5	10.87	58.07	28.96	0
9/26/2021 14:45	5.735	312.1	10.37	57.64	28.95	0
9/26/2021 15:00	5.217	295.6	7.417	57.62	28.94	0
9/26/2021 15:15	5.734	306.9	10.54	57.66	28.93	0
9/26/2021 15:30	9.39	283.8	6.332	57.26	28.93	0
9/26/2021 15:45	10.8	299.4	9.87	56.68	28.93	0
9/26/2021 16:00	7.152	334.4	27.1	56.24	28.92	0
9/26/2021 16:15	3.223	328.5	35.9	56.04	28.92	0
9/26/2021 16:30	4.379	274.8	10.4	55.86	28.92	0
9/26/2021 16:45	5.35	340.5	40.12	55.58	28.91	0
9/26/2021 17:00	8.4	32.43	14.08	55.03	28.9	0
9/26/2021 17:15	9.44	50.53	28.52	54.8	28.87	0
9/26/2021 17:30	6.888	44.68	19.88	54.99	28.87	0
9/26/2021 17:45	6.465	299.1	42.92	55.52	28.9	0
9/26/2021 18:00	9.12	262	14.09	55.07	28.92	0
9/26/2021 18:15	3.947	335.5	52.64	54.92	28.92	0
9/26/2021 18:30	5.598	86.6	30.48	54.7	28.9	0
9/26/2021 18:45	9.82	113.8	8.24	54.89	28.89	0
9/26/2021 19:00	9.69	128.8	10.9	55.49	28.9	0
9/26/2021 19:15	10.01	124.6	9.18	55.65	28.89	0
9/26/2021 19:30	10.34	131.4	8.18	55.82	28.88	0
9/26/2021 19:45	8.72	131.5	8.1	55.94	28.87	0
9/26/2021 20:00	10.89	129.5	9.92	56.29	28.86	0
9/26/2021 20:15	11.75	131	8.2	57.36	28.86	0
9/26/2021 20:30	11.16	135.5	7.748	58.35	28.86	0
9/26/2021 20:45	11.64	136.7	6.178	59.39	28.87	0
9/26/2021 21:00	11.48	140.3	5.962	59.89	28.87	0
9/26/2021 21:15	10.88	143.4	5.368	60.44	28.87	0
9/26/2021 21:30	10.98	150	11.63	60.63	28.87	0
9/26/2021 21:45	12.3	165.2	7.369	60.96	28.87	0
9/26/2021 22:00	11.31	165	7.203	60.8	28.88	0
9/26/2021 22:15	9.98	176.2	17.07	60.74	28.88	0
9/26/2021 22:30	11.48	201.6	8.48	60.49	28.89	0
9/26/2021 22:45	10.4	191.5	12.57	60.08	28.9	0
9/26/2021 23:00	8.14	171.7	9.7	59.75	28.9	0
9/26/2021 23:15	7.908	174.7	9.7	59.75	28.89	0
9/26/2021 23:30	6.269	159.4	20.93	59.79	28.9	0
9/26/2021 23:45	5.922	157.5	16.69	59.62	28.9	0
9/27/2021 0:00	7.568	180.1	12.35	59.76	28.9	0
9/27/2021 0:15	4.585	208.6	12.22	59.37	28.9	0
9/27/2021 0:30	10.3	203.8	12.85	59.39	28.91	0
9/27/2021 0:45	12.55	201.6	12.54	58.88	28.91	0
9/27/2021 1:00	10.61	182.4	11.17	58.37	28.91	0
9/27/2021 1:15	10.3	171.3	11.05	58.02	28.91	0
9/27/2021 1:30	7.896	164.8	7.626	58.07	28.91	0
9/27/2021 1:45	7.788	164.1	8.48	58.28	28.91	0
9/27/2021 2:00	16.05	225.1	18.73	57.66	28.92	0
9/27/2021 2:15	15.49	224.6	8.49	57.07	28.93	0
9/27/2021 2:30	13.61	217.6	12.04	56.67	28.94	0
9/27/2021 2:45	10.08	193.4	21.66	56.18	28.95	0
9/27/2021 3:00	10.04	152	9.98	55.49	28.96	0
9/27/2021 3:15	8.95	137.7	11.14	54.65	28.96	0
9/27/2021 3:30	8.55	125.6	9.29	54.21	28.96	0
9/27/2021 3:45	10.18	138.9	9.3	53.9	28.97	0
9/27/2021 4:00	9.08	134.3	8.06	53.64	28.97	0
9/27/2021 4:15	9.24	131.2	10.32	53.7	28.97	0
9/27/2021 4:30	9.62	139.3	8.42	53.61	28.97	0
9/27/2021 4:45	10.56	133.7	9.45	53.6	28.97	0
9/27/2021 5:00	8.36	124.2	10.64	53.08	28.96	0
9/27/2021 5:15	7.773	118.9	9.11	52.57	28.96	0
9/27/2021 5:30	7.817	120.6	9.58	52.23	28.96	0
9/27/2021 5:45	7.035	127.8	10.17	52.17	28.96	0
9/27/2021 6:00	7.685	123.5	8.07	52.35	28.96	0
9/27/2021 6:15	5.399	132	7.648	52.24	28.96	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/27/2021 6:30	4.58	132.6	7.994	52.26	28.96	0
9/27/2021 6:45	5.154	126.7	7.728	52.93	28.96	0
9/27/2021 7:00	4.877	129	16.81	53.73	28.96	0
9/27/2021 7:15	4.737	150.9	25.26	54.2	28.96	0
9/27/2021 7:30	5.785	148.6	23.71	54.3	28.96	0
9/27/2021 7:45	9.02	166.5	11.07	55.31	28.96	0
9/27/2021 8:00	5.459	150	14.14	55.27	28.96	0
9/27/2021 8:15	7.501	161.2	16.88	55.59	28.97	0
9/27/2021 8:30	7.701	126.7	13.01	54.87	28.96	0
9/27/2021 8:45	7.124	128.7	13.41	55.39	28.98	0
9/27/2021 9:00	6.037	119.3	12.3	55.66	28.98	0
9/27/2021 9:15	7.622	138.7	13.81	55.96	28.98	0
9/27/2021 9:30	8.03	168.5	10.63	56.04	28.98	0
9/27/2021 9:45	4.134	103.4	41.18	55.57	28.97	0
9/27/2021 10:00	3.543	87.7	13.66	55.26	28.96	0
9/27/2021 10:15	3.651	146.7	29.93	55.4	28.97	0
9/27/2021 10:30	4.451	169.5	16.05	55.37	28.98	0
9/27/2021 10:45	5.172	133.8	18.7	55.15	28.98	0
9/27/2021 11:00	4.384	117.4	28.22	54.74	28.98	0
9/27/2021 11:15	3.917	85.5	15.81	54.5	28.97	0
9/27/2021 11:30	4.13	98.3	17.68	54.66	28.97	0
9/27/2021 11:45	4.098	97	14.17	55.11	28.97	0
9/27/2021 12:00	4.747	104.5	16.44	55.47	28.96	0
9/27/2021 12:15	5.758	188.4	41.14	56.22	28.96	0
9/27/2021 12:30	4.111	209.9	13.4	56.01	28.96	0
9/27/2021 12:45	3.97	187.2	14.07	56.31	28.96	0
9/27/2021 13:00	3.07	171.3	29.98	56.76	28.96	0
9/27/2021 13:15	3.964	128.9	14.32	57.84	28.95	0
9/27/2021 13:30	5.116	134.2	11.63	58.29	28.95	0
9/27/2021 13:45	7.417	147.3	11.63	58.25	28.95	0
9/27/2021 14:00	7.133	173.1	17.42	58.26	28.94	0
9/27/2021 14:15	7.823	205.9	13.94	58.15	28.95	0
9/27/2021 14:30	8.64	207.2	12.25	58.02	28.95	0
9/27/2021 14:45	10.32	179.3	13.52	57.85	28.96	0
9/27/2021 15:00	10.57	226.8	33.8	56.15	28.97	0
9/27/2021 15:15	7.711	218.2	16.06	55.92	28.97	0
9/27/2021 15:30	10.27	176	12.52	56.85	28.97	0
9/27/2021 15:45	11.7	160.8	9.93	56.72	28.97	0
9/27/2021 16:00	12.5	162.7	10.41	56.3	28.98	0
9/27/2021 16:15	12.48	141.6	8.59	55.53	28.99	0
9/27/2021 16:30	12.55	139.1	8.83	54.49	28.99	0
9/27/2021 16:45	13.05	136.8	8.94	54.14	28.99	0
9/27/2021 17:00	11.23	138.7	8.03	53.94	28.99	0
9/27/2021 17:15	10.79	146.4	7.17	53.82	28.99	0
9/27/2021 17:30	9.51	141.5	7.506	53.79	29	0
9/27/2021 17:45	8.32	135.3	9.88	53.72	28.99	0
9/27/2021 18:00	9.53	138.6	12.63	53.7	29	0
9/27/2021 18:15	11.47	212.6	11.92	52.24	29.01	0
9/27/2021 18:30	5.219	161.7	22.19	51.3	29.02	0
9/27/2021 18:45	3.239	125.1	16.82	50.72	29.02	0
9/27/2021 19:00	4.725	126	20.47	50.6	29.03	0
9/27/2021 19:15	6.478	116.3	6.921	50.35	29.03	0
9/27/2021 19:30	6.702	125.4	9.59	50.57	29.03	0
9/27/2021 19:45	6.483	140.5	10.46	50.53	29.04	0
9/27/2021 20:00	6.41	135.2	6.736	50.38	29.04	0
9/27/2021 20:15	6.317	133.3	7	50.48	29.04	0
9/27/2021 20:30	5.014	127.8	9.74	50.23	29.03	0
9/27/2021 20:45	6.355	106.7	14.15	49.72	29.04	0
9/27/2021 21:00	7.781	123	11.07	50.28	29.04	0
9/27/2021 21:15	9.72	126.2	8.77	51.02	29.04	0
9/27/2021 21:30	10.37	134.1	9.65	51.35	29.05	0
9/27/2021 21:45	8.71	145.5	6.128	51.63	29.06	0
9/27/2021 22:00	6.538	134.6	7.251	51.07	29.05	0
9/27/2021 22:15	4.821	121	8.18	50.84	29.05	0
9/27/2021 22:30	7.519	130.1	6.825	50.8	29.06	0
9/27/2021 22:45	7.962	126.8	9.95	50.33	29.06	0
9/27/2021 23:00	7.85	134.7	13.24	50.1	29.06	0
9/27/2021 23:15	11.65	150.9	10.18	50.54	29.06	0
9/27/2021 23:30	9.75	140.8	7.65	49.93	29.06	0
9/27/2021 23:45	7.272	131.9	10.53	49.75	29.07	0
9/28/2021 0:00	5.854	129.6	8.76	49.71	29.07	0
9/28/2021 0:15	7.535	134.9	7.661	49.69	29.07	0
9/28/2021 0:30	7.98	135.9	7.827	49.85	29.07	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/28/2021 0:45	7.938	142.1	7.891	49.93	29.07	0
9/28/2021 1:00	6.134	141	15.61	49.61	29.08	0
9/28/2021 1:15	5.16	126.4	8.19	49.3	29.08	0
9/28/2021 1:30	5.264	129.9	8.49	49.45	29.08	0
9/28/2021 1:45	6.46	136.6	5.827	49.48	29.08	0
9/28/2021 2:00	7.165	140.1	8.02	49.68	29.08	0
9/28/2021 2:15	7.85	147.7	7.536	49.88	29.09	0
9/28/2021 2:30	8.17	152	6.776	50.04	29.08	0
9/28/2021 2:45	7.836	159.2	6.281	49.96	29.08	0
9/28/2021 3:00	7.899	160.4	7.712	50.07	29.08	0
9/28/2021 3:15	6.401	142.9	7.17	49.51	29.08	0
9/28/2021 3:30	4.351	135.1	9.93	49.44	29.08	0
9/28/2021 3:45	4.486	139.2	12.68	49.53	29.08	0
9/28/2021 4:00	7.968	141.5	5.758	49.7	29.08	0
9/28/2021 4:15	9.72	149.2	6.483	49.93	29.08	0
9/28/2021 4:30	8.73	158.4	8.03	50.56	29.08	0
9/28/2021 4:45	9.59	165.4	6.498	50.8	29.09	0
9/28/2021 5:00	8.22	167.3	7.651	50.91	29.09	0
9/28/2021 5:15	8.21	170.2	7.205	50.93	29.1	0
9/28/2021 5:30	8.5	162.1	9.68	51.12	29.1	0
9/28/2021 5:45	5.602	144.1	8.51	50.49	29.11	0
9/28/2021 6:00	7.073	150.7	8.93	50.72	29.11	0
9/28/2021 6:15	8.16	166.3	7.489	51.27	29.11	0
9/28/2021 6:30	9.96	169.6	10.69	51.46	29.11	0
9/28/2021 6:45	9.88	177.2	10.04	51.49	29.12	0
9/28/2021 7:00	10.67	174.2	10.38	51.51	29.12	0
9/28/2021 7:15	9.71	170.1	11.04	51.54	29.13	0
9/28/2021 7:30	9.14	173.7	8.97	51.46	29.13	0
9/28/2021 7:45	10.3	172.3	8.97	51.67	29.13	0
9/28/2021 8:00	9.76	171.4	8.8	51.8	29.14	0
9/28/2021 8:15	10.29	171.8	9.63	52.14	29.14	0
9/28/2021 8:30	10.78	180.1	10.69	52.4	29.15	0
9/28/2021 8:45	10.44	180.2	9.97	52.54	29.16	0
9/28/2021 9:00	9.38	192.4	19.75	52.67	29.16	0
9/28/2021 9:15	8.06	202.5	15.53	52.73	29.17	0
9/28/2021 9:30	11.42	174.5	9.22	52.56	29.17	0
9/28/2021 9:45	10.4	181.3	9.85	52.77	29.18	0
9/28/2021 10:00	10.61	186	10.89	53.14	29.18	0
9/28/2021 10:15	8.74	189.6	11.51	53.67	29.18	0
9/28/2021 10:30	8.98	177.6	11.91	54.34	29.18	0
9/28/2021 10:45	10.44	199.7	19.13	54.8	29.19	0
9/28/2021 11:00	10.05	223.8	12.22	54.93	29.19	0
9/28/2021 11:15	12.72	204.1	11.21	56.16	29.19	0
9/28/2021 11:30	13.65	193.3	13.09	56.5	29.19	0
9/28/2021 11:45	11.67	199.2	15.49	56.65	29.19	0
9/28/2021 12:00	13.57	204.3	14.43	57.04	29.19	0
9/28/2021 12:15	15.52	197.8	12.17	57.27	29.19	0
9/28/2021 12:30	14.3	198.5	11.13	57.34	29.2	0
9/28/2021 12:45	12.16	199.6	10.26	57.52	29.2	0
9/28/2021 13:00	15.27	209	11.07	56.97	29.2	0
9/28/2021 13:15	16.1	205.8	9.38	56.43	29.2	0
9/28/2021 13:30	16.12	195.3	11.3	55.99	29.21	0
9/28/2021 13:45	14.99	181.6	9.42	54.7	29.21	0
9/28/2021 14:00	13.01	176.1	8.72	54.75	29.22	0
9/28/2021 14:15	14.36	172.2	12.09	56.06	29.22	0
9/28/2021 14:30	12.98	163.1	10.7	55.66	29.22	0
9/28/2021 14:45	12.92	166.4	9.17	54.35	29.22	0
9/28/2021 15:00	13.63	156.3	10.35	55.55	29.23	0
9/28/2021 15:15	11.87	164.4	16.85	56.33	29.23	0
9/28/2021 15:30	10.17	165.6	11.45	55.94	29.23	0
9/28/2021 15:45	11	163.3	11.32	55.6	29.23	0
9/28/2021 16:00	10.42	151	12.41	55.22	29.23	0
9/28/2021 16:15	9.92	150.4	12.77	53.92	29.24	0
9/28/2021 16:30	7.695	146.9	13.17	52.68	29.24	0
9/28/2021 16:45	5.943	134.1	10.33	51.82	29.25	0
9/28/2021 17:00	4.444	122.6	14.85	51.69	29.25	0
9/28/2021 17:15	6.128	119.4	11.89	51.23	29.25	0
9/28/2021 17:30	6.277	128.7	7.137	51.3	29.25	0
9/28/2021 17:45	5.419	149.8	15.8	51.33	29.25	0
9/28/2021 18:00	6.976	170.3	10.79	51.84	29.25	0
9/28/2021 18:15	4.667	157.8	7.65	51.1	29.25	0
9/28/2021 18:30	5.647	147.3	11.09	50.68	29.25	0
9/28/2021 18:45	5.634	141.6	10.1	50.21	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/28/2021 19:00	4.204	133.9	10.08	50.05	29.26	0
9/28/2021 19:15	4.259	125.9	9.86	49.93	29.26	0
9/28/2021 19:30	3.774	113.2	9.4	49.88	29.27	0
9/28/2021 19:45	4.839	122.4	6.507	49.82	29.27	0
9/28/2021 20:00	5.198	126	7.413	49.76	29.27	0
9/28/2021 20:15	5.577	136.1	6.422	49.65	29.27	0
9/28/2021 20:30	7.663	141.2	5.719	49.51	29.27	0
9/28/2021 20:45	6.695	140.9	6.207	49.6	29.27	0
9/28/2021 21:00	5.898	135	10.88	49.43	29.27	0
9/28/2021 21:15	4.542	120.9	7.01	49.04	29.28	0
9/28/2021 21:30	4.422	129.2	7.674	49.12	29.28	0
9/28/2021 21:45	5.427	137.4	8.63	48.79	29.28	0
9/28/2021 22:00	5.151	138.3	9.24	48.85	29.29	0
9/28/2021 22:15	4.32	129.9	7.138	48.64	29.29	0
9/28/2021 22:30	4.252	118.9	10.89	48.78	29.29	0
9/28/2021 22:45	3.714	119.8	11.8	48.91	29.29	0
9/28/2021 23:00	4.375	148.9	11.11	49.26	29.29	0
9/28/2021 23:15	4.798	139.6	6.514	49.28	29.29	0
9/28/2021 23:30	5.618	146	6.954	49.29	29.29	0
9/28/2021 23:45	5.567	144.9	5.576	49.25	29.28	0
9/29/2021 0:00	5.33	127.1	7.489	49.42	29.28	0
9/29/2021 0:15	5.111	115.8	8.55	49.75	29.28	0
9/29/2021 0:30	6.025	121.4	7.275	49.97	29.29	0
9/29/2021 0:45	6.476	124.8	7.174	50.58	29.29	0
9/29/2021 1:00	7.844	138.1	6.412	50.46	29.28	0
9/29/2021 1:15	6.948	140.9	6.25	50.32	29.29	0
9/29/2021 1:30	7.494	141.3	6.437	50.28	29.28	0
9/29/2021 1:45	8.01	153.3	10.97	50.34	29.28	0
9/29/2021 2:00	6.277	141.2	8.32	50.05	29.28	0
9/29/2021 2:15	5.365	133.9	6.202	50.12	29.28	0
9/29/2021 2:30	5.349	130.4	5.736	50.47	29.28	0
9/29/2021 2:45	5.987	132	6.873	50.67	29.28	0
9/29/2021 3:00	6.421	136.3	5.875	50.73	29.28	0
9/29/2021 3:15	5.856	134.8	5.992	50.81	29.28	0
9/29/2021 3:30	6.34	133.4	6.148	50.87	29.28	0
9/29/2021 3:45	6.012	133.1	6.88	50.61	29.28	0
9/29/2021 4:00	6.193	135.4	6.896	50.34	29.27	0
9/29/2021 4:15	6.464	130.4	6.664	50.33	29.27	0
9/29/2021 4:30	7.251	130.1	8.54	50.37	29.27	0
9/29/2021 4:45	7.593	129.8	8.56	51	29.27	0
9/29/2021 5:00	6.465	121.3	9.31	51.43	29.26	0
9/29/2021 5:15	6.396	135.9	11.88	51.13	29.26	0
9/29/2021 5:30	7.961	129.4	10.91	51.14	29.26	0
9/29/2021 5:45	8.21	138.7	15.3	50.66	29.26	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/29/2021 6:00	8.28	126.7	8.55	51.02	29.26	0
9/29/2021 6:15	7.555	142.7	13.84	50.98	29.26	0
9/29/2021 6:30	8.06	128	10.85	50.66	29.26	0
9/29/2021 6:45	8.35	121.9	9.45	51.36	29.26	0
9/29/2021 7:00	7.735	132.7	10.57	51.54	29.27	0
9/29/2021 7:15	8.71	120.7	9.1	52.36	29.27	0
9/29/2021 7:30	8.24	126.3	8.49	52.95	29.27	0
9/29/2021 7:45	7.63	127.2	10.65	53.49	29.27	0
9/29/2021 8:00	7.967	121	9.62	53.74	29.27	0
9/29/2021 8:15	7.311	115.1	12.48	53.79	29.27	0
9/29/2021 8:30	8.94	118.3	8.85	53.88	29.27	0
9/29/2021 8:45	7.894	120.7	8.98	54.44	29.27	0
9/29/2021 9:00	6.996	124.4	11.02	54.86	29.27	0
9/29/2021 9:15	7.222	129	9.47	55.6	29.27	0
9/29/2021 9:30	7.482	125.2	10.66	56.06	29.27	0
9/29/2021 9:45	7.604	134.9	15.77	56.38	29.27	0
9/29/2021 10:00	7.492	145.5	15.89	56.37	29.28	0
9/29/2021 10:15	5.682	156.8	15.87	56.62	29.28	0
9/29/2021 10:30	6.367	147.7	9.31	57.04	29.28	0
9/29/2021 10:45	6.15	130.3	18.34	57.55	29.27	0
9/29/2021 11:00	5.948	135.3	12.85	58.4	29.28	0
9/29/2021 11:15	5.934	139.5	16.03	58.72	29.28	0
9/29/2021 11:30	5.316	159	19.45	58.38	29.28	0
9/29/2021 11:45	5.968	127.9	15.74	58.71	29.27	0
9/29/2021 12:00	5.019	123.3	26.46	58.88	29.27	0
9/29/2021 12:15	4.376	153.3	25.33	59	29.27	0
9/29/2021 12:30	5.004	159.6	22.17	59.7	29.28	0
9/29/2021 12:45	5.203	182.4	24.74	59.68	29.28	0
9/29/2021 13:00	5.276	202.5	9.07	59.27	29.27	0
9/29/2021 13:15	6.169	195.5	7.181	59.31	29.27	0
9/29/2021 13:30	5.517	190.9	12.72	59.46	29.27	0
9/29/2021 13:45	6.533	176.7	19.97	59.32	29.28	0
9/29/2021 14:00	8.69	173.2	21.3	58.26	29.28	0
9/29/2021 14:15	8.47	168.3	17.63	57.92	29.28	0
9/29/2021 14:30	8.18	128.2	10.55	57.57	29.28	0
9/29/2021 14:45	5.982	114	10.75	57.62	29.28	0
9/29/2021 15:00	5.046	95.2	13.1	57.8	29.28	0
9/29/2021 15:15	4.595	106.4	12.84	57.92	29.28	0
9/29/2021 15:30	3.852	102.5	10.02	57.65	29.28	0
9/29/2021 15:45	4.092	98.2	8.05	57.34	29.27	0
9/29/2021 16:00	4.025	108.9	8.4	57.15	29.27	0
9/29/2021 16:15	4.352	130.7	11.1	57.15	29.27	0
9/29/2021 16:30	4.49	132.7	25.37	56.67	29.27	0
9/29/2021 16:45	2.556	103.7	15.74	56.84	29.27	0
9/29/2021 17:00	3.026	140.3	18.1	56.94	29.26	0
9/29/2021 17:15	4.073	146.6	13.37	56.96	29.26	0
9/29/2021 17:30	3.834	139.4	11.73	56.71	29.26	0
9/29/2021 17:45	4.305	131.1	6.369	56.27	29.25	0
9/29/2021 18:00	5.647	119.4	11.01	55.96	29.25	0
9/29/2021 18:15	5.482	116.1	9.01	56.01	29.25	0
9/29/2021 18:30	8.21	121.4	7.474	56.21	29.25	0
9/29/2021 18:45	10.58	121.7	9.96	56.19	29.24	0
9/29/2021 19:00	11.67	121.1	11.17	55.64	29.24	0
9/29/2021 19:15	11.78	112.9	9.91	55.56	29.24	0
9/29/2021 19:30	10.46	119.8	10.74	55.93	29.24	0
9/29/2021 19:45	11.42	125.9	10.24	56.41	29.24	0
9/29/2021 20:00	12.72	119.9	9.79	56.75	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/29/2021 20:15	12.56	117.5	9.91	57.39	29.23	0
9/29/2021 20:30	13.88	115.7	9.92	58.26	29.22	0
9/29/2021 20:45	14.07	117.1	10.69	58.46	29.22	0
9/29/2021 21:00	15.86	121	10.12	58.67	29.22	0
9/29/2021 21:15	14.63	117.3	9.93	59.06	29.22	0
9/29/2021 21:30	11.85	141.7	14.21	58.45	29.23	0
9/29/2021 21:45	13.86	124.9	10.7	57.89	29.23	0
9/29/2021 22:00	11.16	125.3	10.06	57.63	29.23	0
9/29/2021 22:15	11.01	129.7	11.65	57.63	29.23	0
9/29/2021 22:30	11.33	127.7	9.92	57.27	29.23	0
9/29/2021 22:45	11.24	119.8	10.25	57.24	29.23	0
9/29/2021 23:00	9.93	143.5	14.55	57.3	29.23	0
9/29/2021 23:15	10.46	134	11.33	56.96	29.23	0
9/29/2021 23:30	9.14	136.1	9	56.92	29.24	0
9/29/2021 23:45	8.9	143.4	9.33	56.42	29.24	0
9/30/2021 0:00	9.22	127.7	10.23	56.15	29.24	0
9/30/2021 0:15	8.4	147.2	18.87	55.9	29.24	0
9/30/2021 0:30	9.63	145.4	23.09	55.65	29.25	0
9/30/2021 0:45	8.9	137.2	11.16	54.68	29.25	0
9/30/2021 1:00	7.744	135.6	7.986	54.63	29.26	0
9/30/2021 1:15	8.84	143.7	7.603	54.33	29.26	0
9/30/2021 1:30	9.94	127	10.11	54.45	29.25	0
9/30/2021 1:45	10.1	135.8	8.74	54.37	29.25	0
9/30/2021 2:00	11.19	137.6	11.11	54.2	29.25	0
9/30/2021 2:15	11.21	128.6	9.72	54.17	29.25	0
9/30/2021 2:30	10.73	126	9.51	54.65	29.25	0
9/30/2021 2:45	10.71	130.1	8.86	55.16	29.24	0
9/30/2021 3:00	9.95	130.8	9.11	55.59	29.24	0
9/30/2021 3:15	8.98	134.5	11.21	55.85	29.25	0
9/30/2021 3:30	9.77	123.1	8.03	56.16	29.24	0
9/30/2021 3:45	8.46	131.4	10.95	56.17	29.24	0
9/30/2021 4:00	8.57	123.2	8.27	56.24	29.25	0
9/30/2021 4:15	8.92	116.6	8.29	56.6	29.24	0
9/30/2021 4:30	8.55	127.5	10.39	56.95	29.24	0
9/30/2021 4:45	8.96	117.3	8.36	57.05	29.24	0
9/30/2021 5:00	8.22	128.8	16.19	57.34	29.25	0
9/30/2021 5:15	7.901	141.8	13.19	56.82	29.24	0
9/30/2021 5:30	10.21	114.9	8.8	57.38	29.23	0
9/30/2021 5:45	9.52	139.2	13.66	57.55	29.23	0
9/30/2021 6:00	7.652	153.6	22.15	57.31	29.24	0
9/30/2021 6:15	9.02	134.5	13	56.84	29.24	0
9/30/2021 6:30	9.94	125.1	12.27	57.56	29.24	0
9/30/2021 6:45	9.87	129.9	13.08	57.96	29.23	0
9/30/2021 7:00	7.871	142.2	12.9	58	29.23	0
9/30/2021 7:15	8.09	138.3	21.67	58.1	29.23	0
9/30/2021 7:30	8.05	136.4	17.43	58.65	29.23	0
9/30/2021 7:45	9	137.9	10.7	59.34	29.23	0
9/30/2021 8:00	5.55	134.1	12.21	59.74	29.24	0
9/30/2021 8:15	5.639	139.3	8.88	60.41	29.24	0
9/30/2021 8:30	4.911	148.1	16.37	60.26	29.24	0
9/30/2021 8:45	4.548	138.5	12.1	60.59	29.24	0
9/30/2021 9:00	4.502	143.1	22.09	61.18	29.25	0
9/30/2021 9:15	5.412	164.1	14.94	60.32	29.25	0
9/30/2021 9:30	12.23	215.6	47.07	58.81	29.27	0
9/30/2021 9:45	17.47	231.3	8.95	57.46	29.28	0
9/30/2021 10:00	12.04	219.1	11.11	56.82	29.29	0
9/30/2021 10:15	9.18	233.9	16.89	56.9	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/30/2021 10:30	9.73	248.4	16.05	56.52	29.32	0
9/30/2021 10:45	3.616	264.2	29.16	55.99	29.33	0
9/30/2021 11:00	5.49	212.5	20.39	55.81	29.34	0
9/30/2021 11:15	5.152	176.5	34.92	55.63	29.35	0
9/30/2021 11:30	6.567	221.4	22.27	55.03	29.36	0
9/30/2021 11:45	4.178	140.3	24.85	54.39	29.36	0
9/30/2021 12:00	5.799	121.8	8.88	54.26	29.36	0
9/30/2021 12:15	8.61	131.3	9.39	53.56	29.37	0
9/30/2021 12:30	10.55	134.6	8.77	53.07	29.38	0
9/30/2021 12:45	8.34	130.5	9.71	52.87	29.38	0
9/30/2021 13:00	11.13	130.5	11.19	52.48	29.38	0
9/30/2021 13:15	11.38	132.8	8.21	52.08	29.38	0
9/30/2021 13:30	10.05	131.7	10.27	51.91	29.37	0
9/30/2021 13:45	9.29	124	10.85	52.17	29.37	0
9/30/2021 14:00	8.22	142.9	7.712	52.3	29.38	0
9/30/2021 14:15	7.419	145.1	9.65	52.41	29.38	0
9/30/2021 14:30	6.627	165.3	13.33	52.59	29.38	0
9/30/2021 14:45	5.413	148.8	12.93	53.18	29.38	0
9/30/2021 15:00	6.431	140.4	8.78	53.49	29.38	0
9/30/2021 15:15	5.028	136.7	11	53.47	29.39	0
9/30/2021 15:30	4.57	174.2	16.18	53.71	29.39	0
9/30/2021 15:45	2.586	147.1	24.79	53.99	29.39	0
9/30/2021 16:00	3.867	155.4	16	54.02	29.38	0
9/30/2021 16:15	4.249	128.1	12.69	54.4	29.39	0
9/30/2021 16:30	4.279	163.7	16.13	55.33	29.39	0
9/30/2021 16:45	5.247	183.8	16.1	54.88	29.39	0
9/30/2021 17:00	3.894	177.1	13.3	54.91	29.39	0
9/30/2021 17:15	4.28	158.7	19.42	54.64	29.39	0
9/30/2021 17:30	4.516	168.4	14.65	54.27	29.39	0
9/30/2021 17:45	4.286	142.1	6.813	53.12	29.39	0
9/30/2021 18:00	4.066	135.7	5.216	52.75	29.4	0
9/30/2021 18:15	3.702	133.8	3.565	52.88	29.4	0
9/30/2021 18:30	3.847	122.2	14.35	52.98	29.4	0
9/30/2021 18:45	3.84	116.5	15.22	53.1	29.4	0
9/30/2021 19:00	2.553	95.9	13	53.27	29.41	0
9/30/2021 19:15	1.841	103.2	14.13	53.19	29.41	0
9/30/2021 19:30	1.262	42.79	18.91	52.99	29.42	0
9/30/2021 19:45	1.442	44.42	27.33	52.27	29.42	0
9/30/2021 20:00	3.032	126.3	7.352	52.6	29.42	0
9/30/2021 20:15	2.384	116.5	12.27	52.99	29.42	0
9/30/2021 20:30	3.251	122.4	6.492	52.71	29.43	0
9/30/2021 20:45	3.345	122.6	8.88	52.69	29.43	0
9/30/2021 21:00	2.367	95.4	23.41	52.84	29.44	0
9/30/2021 21:15	3.287	98.3	28.91	52.32	29.43	0
9/30/2021 21:30	4.034	113.3	14.95	53.01	29.44	0
9/30/2021 21:45	3.019	100.7	12.28	52.69	29.44	0
9/30/2021 22:00	2.047	88.4	5.908	52.9	29.44	0
9/30/2021 22:15	0.813	73.8	6.033	52.64	29.44	0
9/30/2021 22:30	1.904	157.6	30.48	53.03	29.45	0
9/30/2021 22:45	3.544	161.9	31.91	52.71	29.45	0
9/30/2021 23:00	3.808	114.7	4.47	53.14	29.45	0
9/30/2021 23:15	1.758	148.4	24.52	52.41	29.45	0
9/30/2021 23:30	2.658	169.9	17.27	51.97	29.45	0
9/30/2021 23:45	2.421	144.9	12.04	52.33	29.46	0
10/1/2021 0:00	1.844	121.5	10.17	52.47	29.46	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/29/2021 6:00	8.28	126.7	8.55	51.02	29.26	0
9/29/2021 6:15	7.555	142.7	13.84	50.98	29.26	0
9/29/2021 6:30	8.06	128	10.85	50.66	29.26	0
9/29/2021 6:45	8.35	121.9	9.45	51.36	29.26	0
9/29/2021 7:00	7.735	132.7	10.57	51.54	29.27	0
9/29/2021 7:15	8.71	120.7	9.1	52.36	29.27	0
9/29/2021 7:30	8.24	126.3	8.49	52.95	29.27	0
9/29/2021 7:45	7.63	127.2	10.65	53.49	29.27	0
9/29/2021 8:00	7.967	121	9.62	53.74	29.27	0
9/29/2021 8:15	7.311	115.1	12.48	53.79	29.27	0
9/29/2021 8:30	8.94	118.3	8.85	53.88	29.27	0
9/29/2021 8:45	7.894	120.7	8.98	54.44	29.27	0
9/29/2021 9:00	6.996	124.4	11.02	54.86	29.27	0
9/29/2021 9:15	7.222	129	9.47	55.6	29.27	0
9/29/2021 9:30	7.482	125.2	10.66	56.06	29.27	0
9/29/2021 9:45	7.604	134.9	15.77	56.38	29.27	0
9/29/2021 10:00	7.492	145.5	15.89	56.37	29.28	0
9/29/2021 10:15	5.682	156.8	15.87	56.62	29.28	0
9/29/2021 10:30	6.367	147.7	9.31	57.04	29.28	0
9/29/2021 10:45	6.15	130.3	18.34	57.55	29.27	0
9/29/2021 11:00	5.948	135.3	12.85	58.4	29.28	0
9/29/2021 11:15	5.934	139.5	16.03	58.72	29.28	0
9/29/2021 11:30	5.316	159	19.45	58.38	29.28	0
9/29/2021 11:45	5.968	127.9	15.74	58.71	29.27	0
9/29/2021 12:00	5.019	123.3	26.46	58.88	29.27	0
9/29/2021 12:15	4.376	153.3	25.33	59	29.27	0
9/29/2021 12:30	5.004	159.6	22.17	59.7	29.28	0
9/29/2021 12:45	5.203	182.4	24.74	59.68	29.28	0
9/29/2021 13:00	5.276	202.5	9.07	59.27	29.27	0
9/29/2021 13:15	6.169	195.5	7.181	59.31	29.27	0
9/29/2021 13:30	5.517	190.9	12.72	59.46	29.27	0
9/29/2021 13:45	6.533	176.7	19.97	59.32	29.28	0
9/29/2021 14:00	8.69	173.2	21.3	58.26	29.28	0
9/29/2021 14:15	8.47	168.3	17.63	57.92	29.28	0
9/29/2021 14:30	8.18	128.2	10.55	57.57	29.28	0
9/29/2021 14:45	5.982	114	10.75	57.62	29.28	0
9/29/2021 15:00	5.046	95.2	13.1	57.8	29.28	0
9/29/2021 15:15	4.595	106.4	12.84	57.92	29.28	0
9/29/2021 15:30	3.852	102.5	10.02	57.65	29.28	0
9/29/2021 15:45	4.092	98.2	8.05	57.34	29.27	0
9/29/2021 16:00	4.025	108.9	8.4	57.15	29.27	0
9/29/2021 16:15	4.352	130.7	11.1	57.15	29.27	0
9/29/2021 16:30	4.49	132.7	25.37	56.67	29.27	0
9/29/2021 16:45	2.556	103.7	15.74	56.84	29.27	0
9/29/2021 17:00	3.026	140.3	18.1	56.94	29.26	0
9/29/2021 17:15	4.073	146.6	13.37	56.96	29.26	0
9/29/2021 17:30	3.834	139.4	11.73	56.71	29.26	0
9/29/2021 17:45	4.305	131.1	6.369	56.27	29.25	0
9/29/2021 18:00	5.647	119.4	11.01	55.96	29.25	0
9/29/2021 18:15	5.482	116.1	9.01	56.01	29.25	0
9/29/2021 18:30	8.21	121.4	7.474	56.21	29.25	0
9/29/2021 18:45	10.58	121.7	9.96	56.19	29.24	0
9/29/2021 19:00	11.67	121.1	11.17	55.64	29.24	0
9/29/2021 19:15	11.78	112.9	9.91	55.56	29.24	0
9/29/2021 19:30	10.46	119.8	10.74	55.93	29.24	0
9/29/2021 19:45	11.42	125.9	10.24	56.41	29.24	0
9/29/2021 20:00	12.72	119.9	9.79	56.75	29.24	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/29/2021 20:15	12.56	117.5	9.91	57.39	29.23	0
9/29/2021 20:30	13.88	115.7	9.92	58.26	29.22	0
9/29/2021 20:45	14.07	117.1	10.69	58.46	29.22	0
9/29/2021 21:00	15.86	121	10.12	58.67	29.22	0
9/29/2021 21:15	14.63	117.3	9.93	59.06	29.22	0
9/29/2021 21:30	11.85	141.7	14.21	58.45	29.23	0
9/29/2021 21:45	13.86	124.9	10.7	57.89	29.23	0
9/29/2021 22:00	11.16	125.3	10.06	57.63	29.23	0
9/29/2021 22:15	11.01	129.7	11.65	57.63	29.23	0
9/29/2021 22:30	11.33	127.7	9.92	57.27	29.23	0
9/29/2021 22:45	11.24	119.8	10.25	57.24	29.23	0
9/29/2021 23:00	9.93	143.5	14.55	57.3	29.23	0
9/29/2021 23:15	10.46	134	11.33	56.96	29.23	0
9/29/2021 23:30	9.14	136.1	9	56.92	29.24	0
9/29/2021 23:45	8.9	143.4	9.33	56.42	29.24	0
9/30/2021 0:00	9.22	127.7	10.23	56.15	29.24	0
9/30/2021 0:15	8.4	147.2	18.87	55.9	29.24	0
9/30/2021 0:30	9.63	145.4	23.09	55.65	29.25	0
9/30/2021 0:45	8.9	137.2	11.16	54.68	29.25	0
9/30/2021 1:00	7.744	135.6	7.986	54.63	29.26	0
9/30/2021 1:15	8.84	143.7	7.603	54.33	29.26	0
9/30/2021 1:30	9.94	127	10.11	54.45	29.25	0
9/30/2021 1:45	10.1	135.8	8.74	54.37	29.25	0
9/30/2021 2:00	11.19	137.6	11.11	54.2	29.25	0
9/30/2021 2:15	11.21	128.6	9.72	54.17	29.25	0
9/30/2021 2:30	10.73	126	9.51	54.65	29.25	0
9/30/2021 2:45	10.71	130.1	8.86	55.16	29.24	0
9/30/2021 3:00	9.95	130.8	9.11	55.59	29.24	0
9/30/2021 3:15	8.98	134.5	11.21	55.85	29.25	0
9/30/2021 3:30	9.77	123.1	8.03	56.16	29.24	0
9/30/2021 3:45	8.46	131.4	10.95	56.17	29.24	0
9/30/2021 4:00	8.57	123.2	8.27	56.24	29.25	0
9/30/2021 4:15	8.92	116.6	8.29	56.6	29.24	0
9/30/2021 4:30	8.55	127.5	10.39	56.95	29.24	0
9/30/2021 4:45	8.96	117.3	8.36	57.05	29.24	0
9/30/2021 5:00	8.22	128.8	16.19	57.34	29.25	0
9/30/2021 5:15	7.901	141.8	13.19	56.82	29.24	0
9/30/2021 5:30	10.21	114.9	8.8	57.38	29.23	0
9/30/2021 5:45	9.52	139.2	13.66	57.55	29.23	0
9/30/2021 6:00	7.652	153.6	22.15	57.31	29.24	0
9/30/2021 6:15	9.02	134.5	13	56.84	29.24	0
9/30/2021 6:30	9.94	125.1	12.27	57.56	29.24	0
9/30/2021 6:45	9.87	129.9	13.08	57.96	29.23	0
9/30/2021 7:00	7.871	142.2	12.9	58	29.23	0
9/30/2021 7:15	8.09	138.3	21.67	58.1	29.23	0
9/30/2021 7:30	8.05	136.4	17.43	58.65	29.23	0
9/30/2021 7:45	9	137.9	10.7	59.34	29.23	0
9/30/2021 8:00	5.55	134.1	12.21	59.74	29.24	0
9/30/2021 8:15	5.639	139.3	8.88	60.41	29.24	0
9/30/2021 8:30	4.911	148.1	16.37	60.26	29.24	0
9/30/2021 8:45	4.548	138.5	12.1	60.59	29.24	0
9/30/2021 9:00	4.502	143.1	22.09	61.18	29.25	0
9/30/2021 9:15	5.412	164.1	14.94	60.32	29.25	0
9/30/2021 9:30	12.23	215.6	47.07	58.81	29.27	0
9/30/2021 9:45	17.47	231.3	8.95	57.46	29.28	0
9/30/2021 10:00	12.04	219.1	11.11	56.82	29.29	0
9/30/2021 10:15	9.18	233.9	16.89	56.9	29.31	0

Meteorological Data

Date/Time	Wind Speed (Average)	Wind Direction	Sigma Theta	Temperature (Average)	Barometric Pressure	Precipitation
	Miles per Hour	Degrees	Degrees	° C	inches-Hg	inches
9/30/2021 10:30	9.73	248.4	16.05	56.52	29.32	0
9/30/2021 10:45	3.616	264.2	29.16	55.99	29.33	0
9/30/2021 11:00	5.49	212.5	20.39	55.81	29.34	0
9/30/2021 11:15	5.152	176.5	34.92	55.63	29.35	0
9/30/2021 11:30	6.567	221.4	22.27	55.03	29.36	0
9/30/2021 11:45	4.178	140.3	24.85	54.39	29.36	0
9/30/2021 12:00	5.799	121.8	8.88	54.26	29.36	0
9/30/2021 12:15	8.61	131.3	9.39	53.56	29.37	0
9/30/2021 12:30	10.55	134.6	8.77	53.07	29.38	0
9/30/2021 12:45	8.34	130.5	9.71	52.87	29.38	0
9/30/2021 13:00	11.13	130.5	11.19	52.48	29.38	0
9/30/2021 13:15	11.38	132.8	8.21	52.08	29.38	0
9/30/2021 13:30	10.05	131.7	10.27	51.91	29.37	0
9/30/2021 13:45	9.29	124	10.85	52.17	29.37	0
9/30/2021 14:00	8.22	142.9	7.712	52.3	29.38	0
9/30/2021 14:15	7.419	145.1	9.65	52.41	29.38	0
9/30/2021 14:30	6.627	165.3	13.33	52.59	29.38	0
9/30/2021 14:45	5.413	148.8	12.93	53.18	29.38	0
9/30/2021 15:00	6.431	140.4	8.78	53.49	29.38	0
9/30/2021 15:15	5.028	136.7	11	53.47	29.39	0
9/30/2021 15:30	4.57	174.2	16.18	53.71	29.39	0
9/30/2021 15:45	2.586	147.1	24.79	53.99	29.39	0
9/30/2021 16:00	3.867	155.4	16	54.02	29.38	0
9/30/2021 16:15	4.249	128.1	12.69	54.4	29.39	0
9/30/2021 16:30	4.279	163.7	16.13	55.33	29.39	0
9/30/2021 16:45	5.247	183.8	16.1	54.88	29.39	0
9/30/2021 17:00	3.894	177.1	13.3	54.91	29.39	0
9/30/2021 17:15	4.28	158.7	19.42	54.64	29.39	0
9/30/2021 17:30	4.516	168.4	14.65	54.27	29.39	0
9/30/2021 17:45	4.286	142.1	6.813	53.12	29.39	0
9/30/2021 18:00	4.066	135.7	5.216	52.75	29.4	0
9/30/2021 18:15	3.702	133.8	3.565	52.88	29.4	0
9/30/2021 18:30	3.847	122.2	14.35	52.98	29.4	0
9/30/2021 18:45	3.84	116.5	15.22	53.1	29.4	0
9/30/2021 19:00	2.553	95.9	13	53.27	29.41	0
9/30/2021 19:15	1.841	103.2	14.13	53.19	29.41	0
9/30/2021 19:30	1.262	42.79	18.91	52.99	29.42	0
9/30/2021 19:45	1.442	44.42	27.33	52.27	29.42	0
9/30/2021 20:00	3.032	126.3	7.352	52.6	29.42	0
9/30/2021 20:15	2.384	116.5	12.27	52.99	29.42	0
9/30/2021 20:30	3.251	122.4	6.492	52.71	29.43	0
9/30/2021 20:45	3.345	122.6	8.88	52.69	29.43	0
9/30/2021 21:00	2.367	95.4	23.41	52.84	29.44	0
9/30/2021 21:15	3.287	98.3	28.91	52.32	29.43	0
9/30/2021 21:30	4.034	113.3	14.95	53.01	29.44	0
9/30/2021 21:45	3.019	100.7	12.28	52.69	29.44	0
9/30/2021 22:00	2.047	88.4	5.908	52.9	29.44	0
9/30/2021 22:15	0.813	73.8	6.033	52.64	29.44	0
9/30/2021 22:30	1.904	157.6	30.48	53.03	29.45	0
9/30/2021 22:45	3.544	161.9	31.91	52.71	29.45	0
9/30/2021 23:00	3.808	114.7	4.47	53.14	29.45	0
9/30/2021 23:15	1.758	148.4	24.52	52.41	29.45	0
9/30/2021 23:30	2.658	169.9	17.27	51.97	29.45	0
9/30/2021 23:45	2.421	144.9	12.04	52.33	29.46	0
10/1/2021 0:00	1.844	121.5	10.17	52.47	29.46	0

APPENDIX D

Area 5 Top Deck Report

CEDAR HILLS REGIONAL LANDFILL AREA 5 TOP DECK MONITORING REPORT

Third Quarter 2021



Department of Natural Resources and Parks
Solid Waste Division

November 2021
Printed on recycled paper

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Figure 1 Area 5 Settlement Monitoring Locations

Figure 2 Area 5 Top Deck Stormwater Monitoring Locations

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AREA 5 TOP DECK MONITORING QUARTERLY REPORT

THIRD QUARTER 2021

I. REPORT OVERVIEW

This report provides the quarterly performance analysis of the interim soil cover system over Area 5 in the Cedar Hills Regional Landfill (CHRLF). The intent of the report is to demonstrate that the top deck cover system is functioning to limit infiltration of rainwater, protect surface water quality, and control landfill gas emissions. Monitoring of surface emissions, leachate quantity, and stormwater quality is conducted, and results are presented in this report.

II. LEACHATE MONITORING

Leachate monitoring is performed to demonstrate that the landfill cover system is effectively limiting rainwater infiltration and therefore leachate production.

King County Solid Waste Division (KCSWD) is no longer able to monitor leachate volume solely from Area 5. KCSWD staff continues to evaluate leachate volumes collected throughout the landfill. Table 1 presents a historical account of leachate generation at the site since 1986. The evaluation accounts for variations in rainfall by normalizing the leachate flows in terms of gallons discharged per inch of rainfall. The flow has also been normalized relative to pounds of waste in-place. These normalized values for the entire site are also included in Table 1.

**TABLE 1
CEDAR HILLS REGIONAL LANDFILL LEACHATE PRODUCTION for THIRD QUARTER of 2021**

Time	Leachate	Surface Area of Refuse	Refuse In Place	Precipitation	Flow			
					(year)	(MG/yr)	(Acres)	(lbs)
1986	163.03	138.5	11,328,841,100	54.79	1,177,112	21,484	0.0144	0.00026
1987	139.53	138.5	12,927,926,300	39.6	1,007,422	25,440	0.0108	0.00027
1988	169.67	161.9	14,525,504,000	48.63	1,048,009	21,551	0.0117	0.00024
1989	176	161.9	16,203,204,000	44.12	1,087,110	24,640	0.0109	0.00025
1990	294.75	161.9	17,965,254,000	71.6	1,820,594	25,427	0.0164	0.00023
1991	224.27	221.4	19,778,412,000	45.85	1,012,967	22,093	0.0113	0.00025
1992	156.46	221.4	21,454,600,000	38.64	706,694	18,289	0.0073	0.00019
1993	150.83	221.4	23,051,348,000	35.01	681,264	19,459	0.0065	0.00019
1994	159.8	221.4	24,657,528,000	38.55	721,764	18,723	0.0065	0.00017
1995	201.11	221.4	26,294,654,000	48.4	908,376	18,768	0.0076	0.00016
1996	243.03	221.4	27,946,704,000	57.08	1,097,714	19,231	0.0087	0.00015
1997	239.23	221.4	29,665,380,000	57.24	1,080,511	18,877	0.0081	0.00014
1998	202.8	221.4	31,432,828,000	42.82	916,006	21,392	0.0065	0.00015
1999	219.15	283.42	33,273,828,000	45.9	773,229	16,848	0.0066	0.00014
2000	148.82	283.42	35,167,828,000	33.15	525,102	15,840	0.0042	0.00013
2001	174.08	283.42	37,041,828,000	47.28	614,194	12,991	0.0047	0.0001
2002	133.4	283.42	38,919,828,000	35.13	470,690	13,399	0.0034	0.0001
2003	181.6	283.42	40,877,828,000	46.39	640,761	13,812	0.0044	0.0001
2004	185.72	328.72	42,889,828,000	34.08	564,983	16,578	0.0043	0.00013
2005	175.31	328.72	44,867,538,000	40.75	533,313	13,087	0.0039	0.0001
2006	264.95	328.72	46,820,938,000	52.94	806,009	15,225	0.0057	0.00011
2007	161.48	328.72	47,129,756,000	38.68	491,239	16,143	0.0034	0.000112
2008	126.02	328.72	48,990,990,000	42.32	383,366	9,059	0.0026	0.00006
2009	172.16	328.72	49,414,219,997	42.42	523,741	12,347	0.0035	0.00008
2010	199.4	335.72	51,076,043,997	49.25	593,959	12,060	0.0039	0.00008
2011	180.2	353.12*	52,701,411,694	51.05	510,308	9,996	0.0034	0.00007
2012	202.3	353.12*	54,315,239,773	58.16	572,972	9,852	0.0037	0.00006
2013	156.4	353.12*	55,933,569,773	47.77	442,923	9,272	0.0028	0.00006
2014	189.14	353.12*	57,638,062,970	64.07	535,631	8,360	0.0033	0.00005
2015	176.26	353.12*	59,401,111,988	51.39	499,159	9,713	0.0030	0.00006
2016	180.32	353.12*	61,277,452,914	51.43	510,659	9,929	0.0029	0.00006
2017	218.18	353.12*	63,183,738,844	57.54	617,853	10,738	0.0035	0.00006
2018	175.71	353.12*	64,999,044,304	33.83	497,597	14,709	0.0027	0.00008
2019	165.27	353.12*	66,781,588,304	45.71	468,018	10,239	0.0025	0.00005
2020	185.95	353.12*	68,272,638,304	51.63	526,603	10,200	0.0027	0.00005
2021	101.25	353.12*	69,609,850,304	26.40	286,724	10,861	0.0015	0.00006

2021: Refuse in place, precipitation and leachate through 3rd Quarter of 2021.

* The 353.12 acre value was a plan view area calculated by AUTOCAD, using the area inquiry feature of a closed polyline.

III. SURFACE MONITORING

KCSWD's plan for monitoring the surface of the Area 5 Top Deck is comprised of three (3) components:

1. Landfill gas inspections and surface emissions monitoring;
2. Top Deck Surface Inspections; and,
3. Settlement monitoring.

The purpose of this monitoring is to detect any conditions affecting the cover system that may permit landfill gas emissions, leachate seeps, or excessive or differential settlement.

Landfill Gas Inspections

Each quarter, monthly inspections of the gas system, stormwater system, and cover system of Area 5 are performed by the KCSWD staff. During the third quarter of 2021 all inspections and maintenance work was performed by KCSWD staff as planned. A summary of this work can be found in Appendix A: Inspection Reports.

Also, throughout the third quarter of 2021, KCSWD staff performed monthly Landfill Facility Site Inspections. These inspections are also included in Appendix A. During the third quarter, erosion control measures continued to be implemented and/or maintained to mitigate runoff effects from on-going construction activities at the landfill.

In addition to KCSWD inspections, inspections were performed by Public Health – Seattle & King County (PHSKC) this quarter. The inspection reports can be viewed in Appendix A.

Air Quality Criteria

Each quarter, surface emission monitoring is conducted across the Area 5 Top Deck and its side slopes to verify that methane gas emissions are below regulatory criteria. The third quarter of 2021 surface emission monitoring was conducted in September, 2021. The results from the third quarter of 2021 surface emission monitoring can be found in Appendix B: Gas Monitoring Reports, along with a plot of GPS generated track lines.

Top Deck Surface Inspections

Visual inspections for indications of leachate seeps are conducted each quarter by KCSWD personnel in conjunction with the surface emissions monitoring and monthly inspections. No indications of leachate seeps were recorded during the third quarter of 2021 by KCSWD staff, or by PHSKC personnel.

Settlement Monitoring

Settlement of Area 5 is evaluated both through visual inspections and through topographic surveys at control points on the top deck. Due to the work for the closure of Area 7 and the opening on Area 8, all previously surveyed control points in Area 5 were covered. Recently added monitoring location PMX2015 was added as a replacement for PMX20074. Other alternate locations are currently being evaluated as survey control points in order to continue settlement monitoring within Area 5. Monitoring locations can be viewed in figure 1.

The most recent settlement levels for Area 5 were measured on February 22nd, 2021. The survey data is given in Table 2, and the settlement at each point is given in Table 3. Although settlement is proceeding at a very low rate, there is no indication that any differential settlement is occurring, nor any concern to cover system integrity.

TABLE 2
CEDAR HILLS REGIONAL LANDFILL AREA 5 SURFACE SURVEY DATA for THIRD QUARTER of 2021

A5SM-1 ^a		A5SM-2		A5SM-3 ^b		PMX20074 ^c		PMX2015 ^d	
Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
10/4/2005	699.18	10/4/2005	785.17	--	--	--	--	--	--
2/1/2006	697.7	2/1/2006	782.52	--	--	--	--	--	--
6/27/2006	696.51	6/27/2006	780.48	--	--	--	--	--	--
2/14/2007	694.53	--	--	2/14/2007	786.4	--	--	--	--
--	--	4/20/2007	776.95	4/20/2007	786.25	--	--	--	--
7/24/2007	693.34	7/24/2007	775.63	7/24/2007	785.68	8/16/2007	781.56	--	--
2/29/2008	691.77	2/29/2008	773.44	2/29/2008	784.87	2/29/2008	780.1	--	--
7/29/2008	691.26	7/29/2008	772.2	7/29/2008	784.31	7/29/2008	779.13	--	--
11/24/2008	690.61	11/24/2008	771.29	11/24/2008	783.76	11/24/2008	778.21	--	--
4/6/2009	690.16	4/6/2009	770.35	4/6/2009	783.35	4/6/2009	777.41	--	--
7/9/2009	689.77	7/9/2009	769.79	7/9/2009	783.05	7/9/2009	776.99	--	--
12/22/2009	689.13	12/22/2009	768.6	12/22/2009	782.44	12/22/2009	776.1	--	--
3/1/2010	688.77	3/1/2010	768.05	3/1/2010	782.08	3/1/2010	775.81	--	--
8/2/2010	688.6	8/2/2010	767.28	8/2/2010	781.78	8/2/2010	775.29	--	--
12/21/2010	688.1	12/21/2010	766.53	12/21/2010	781.25	12/21/2010	774.79	--	--
4/6/2011	687.83	4/6/2011	765.86	4/6/2011	780.94	4/6/2011	774.42	--	--
8/8/2011	687.46	8/8/2011	765.34	8/8/2011	780.66	8/8/2011	774.19	--	--
1/23/2012	687.19	1/23/2012	764.53	1/23/2012	780.26	1/23/2012	773.79	--	--
5/18/2012	686.78	5/18/2012	763.99	5/18/2012	779.9	5/18/2012	773.41	--	--
7/12/2012	686.69	7/12/2012	763.83	7/12/2012	779.69	7/12/2012	773.26	--	--
11/2/2012	686.55	11/6/2012	763.35	11/2/2012	779.56	--	--	--	--
5/22/2013	686.09	5/22/2013	762.77	5/22/2013	779.09	--	--	--	--
--	--	8/8/2013	762.53	9/5/2013	779.66	--	--	--	--
--	--	2/19/2014	762.06	2/19/2014	777.68	--	--	--	--
--	--	2/9/2015	761.09	2/9/2015	777.63	--	--	--	--
--	--	4/6/2015	761.11	4/6/2015	777.51	--	--	4/6/2015	770.48
--	--	7/2/2015	760.96	7/2/2015	777.38	--	--	7/2/2015	770.31
--	--	10/27/2015	760.62	10/27/2015	777.12	--	--	10/27/2015	770.1
--	--	2/3/2016	760.35	2/3/2016	776.83	--	--	2/3/2016	769.87
--	--	4/12/2016	760.35	4/12/2016	776.87	--	--	4/12/2016	769.86
--	--	7/11/2016	760.15	7/11/2016	776.68	--	--	7/11/2016	769.76
--	--	12/21/2016	759.85	12/21/2016	776.43	--	--	12/21/2016	769.57
--	--	5/31/2017	759.56	5/31/2017	776.23	--	--	5/31/2017	769.27
--	--	8/28/2017	759.38	--	--	--	--	8/28/2017	769.16
--	--	11/27/2017	759.28	--	--	--	--	11/27/2017	769
--	--	2/15/2018	759.10	--	--	--	--	2/15/2018	768.96
--	--	9/4/2018	758.61	--	--	--	--	9/4/2018	768.6
--	--	12/15/2018	758.55	--	--	--	--	12/15/2018	768.6
--	--	2/10/2019	758.44	--	--	--	--	2/10/2019	768.54
--	--	10/31/2019	757.94	--	--	--	--	10/31/2019	768.17
--	--	3/3/2020	757.71	--	--	--	--	3/3/2020	767.98
--	--	5/28/2020	757.63	--	--	--	--	5/28/2020	767.91
--	--	8/12/2020	757.49	--	--	--	--	8/12/2020	767.83
--	--	11/19/2020	757.36	--	--	--	--	11/19/2020	767.67
--	--	2/22/2021	757.47	--	--	--	--	2/22/2021	767.75

^a A5SM-1 was destroyed by filling Area 7 during Lift 4.

^b A5SM-3 NEW as of 2/14/2007. Destroyed by Area 8 excavation stockpile in 08/2017.

^c PMX20074 was destroyed during Phase 3 of Area 6.

^d PMX2015 NEW 04/06/2015; it's the same location as PMX20074

TABLE 3

CEDAR HILLS REGIONAL LANDFILL AREA 5 SETTLEMENT for THIRD QUARTER of 2021

Settlement Monitoring Locations	Units	SETTLEMENT DATE RANGE (MM/YYYY)														
		06/2006 - 07/2007	07/2007 - 07/2008	07/2008 - 07/2009	07/2009 - 08/2010	08/2010 - 08/2011	08/2011 - 07/2012	07/2012- 05/2013	05/2013- 02/2014	02/2014- 02/2015	02/2015- 02/2016	02/2016- 05/2017	05/2017- 02/2018	02/2018- 02/2019	02/2019- 03/2020	03/2020- 02/2021
^a ASSM-1	Feet	3.17	2.08	1.49	1.17	1.14	0.77	0.60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ASSM-2	Feet	4.85	3.43	2.41	2.51	1.94	1.51	1.06	0.71	0.97	0.74	0.79	0.46	0.66	0.73	0.24
^b ASSM-3	Feet	N/A	1.37	1.26	1.27	1.12	0.97	0.60	1.41	0.05	0.8	0.6	N/A	N/A	N/A	N/A
^c PMX20074	Feet	N/A	2.43	2.14	1.7	1.1	0.93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
^d PMX2015	Feet	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.6	0.31	0.42	0.56	0.23
Average Settlement for Area 5	Feet/Date Range	4.01	2.33	1.83	1.66	1.33	1.05	0.75	1.06	0.51	0.77	0.66	0.38	0.54	0.64	0.24
	Feet/Month	0.33	0.19	0.17	0.14	0.11	0.10	0.08	0.13	0.05	0.07	0.04	0.05	0.05	0.05	0.02

^a ASSM-1 was destroyed by filling Area 7 during Lift 4.

^b ASSM-3 NEW as of 2/14/2007. Destroyed by Area 8 excavation stockpile in 08/2017.

^c PMX20074 was destroyed during Phase 3 of Area 6.

^d PMX2015 NEW 04/06/2015; it's the same location as PMX20074

IV. STORMWATER SAMPLING

Collection of Samples

No samples were collected from the Area 5 Top Deck stormwater monitoring stations SW-SW-TD4, and SW-TD6 during the third quarter of 2021 with exception of one sample collected at SW-TD1. This was due to multiple factors including low precipitation throughout the third quarter. Figure 2 shows the Area 5 Top Deck stormwater monitoring station locations.

Third Quarter 2021 comparison stormwater samples were not taken, as monthly monitoring of surface water sites was discontinued as of January 1st, 2016 per the new Sampling & Analysis Plan (SAP) for the CHRLF. To address this lack of comparative data, the decision was made that the most recent full-year (2015) data available from surface water site SW-S1 would be averaged and used as the comparison basis.

SW-TD1 sample was collected and analyzed in accordance with the Area 5 Top Deck Stormwater Runoff Monitoring Plan.

Stormwater Sample Evaluation

Stormwater runoff monitoring locations, field measurements, and laboratory analyses evaluated in this report are intended to assess whether the stormwater runoff from the top deck has been contaminated by the underlying waste. Stormwater was attempted to be collected either during or following significant storm events from four locations on or near the top deck of Area 5. These data are compared to surface water data collected from a location upstream of waste placement activities (monitoring location SW-S1 2015 averaged data).

Stormwater quality is also compared to the leachate quality as collected from the inflow into the aeration ponds (LAPI).

The analytes for the top deck stormwater runoff are iron, sulfate, chemical oxygen demand, total organic carbon, alkalinity, and chloride. The stormwater quality results are screened against existing surface water quality criteria (WAC 173-201A) and Benchmarks for the Washington State Industrial Stormwater General Permit. Applicable criteria/benchmarks are listed in Table 4.

TABLE 4		
Water Quality Criteria/Benchmarks For Applicable Parameters		
Parameter	Numerical Criterion	Source
pH	6.5 to 8.5	WAC 173-201A-200
	5 to 9	Industrial Stormwater General Permit
Turbidity	Less than 10 NTU above background if background turbidity is 50 NTU or less, or a 10% increase in turbidity when the background is > 50 NTU.	WAC 173-201A-200
	25 NTU	Industrial Stormwater General Permit
Temperature	20°C	WAC 173-201A-200
Iron	1.0 mg/L	EPA 440/5-86-001 Quality Criteria for Water 1986

A. RESULTS DISCUSSION

Field measurements and analytical results from the stormwater sampling and analyses performed as part of this monitoring plan are summarized in Tables 5 and 6. Leachate results are presented in Table 7.

The following is a parameter by parameter discussion of the top deck monitoring results. For each parameter, its importance in evaluating surface water, comparison to other onsite surface water, and comparison to representative leachate is discussed.

pH - pH levels in surface water can be affected by many factors, especially photosynthetic activity and the respiration of waterborne flora. This process can potentially decrease the night-time pH level to 4.5 and during peak daytime activity can drive the pH levels above 10.

The benchmark range for pH is 6.5 to 8.5 standard pH Units.

- pH result for SW-TD1 location was within the designated limit per the applicable water quality criteria.

Specific Conductance - Specific Conductance is the ability of water to conduct electrical current. This property is related to dissolved ion concentration, charge, ion mobility, and water temperature. Specific conductance measurements can provide indications of water contamination by a non-specific measure of increased ionic solute load.

There are no benchmarks or criteria for specific conductance.

Temperature - Water temperature criteria are established for the protection of aquatic life and vary between bodies of water based on use categories designated.

Temperature criteria are established for the protection of aquatic life and vary between bodies of water based on use categories designated, per WAC 173-201A-200.

- Temperature result for SW-TD1 location was below the designated limit per the applicable water quality criteria.

Turbidity - Turbidity is one of the indicators used to assess the environmental health of water bodies. Turbidity is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms.

Turbidity criteria are established for the protection of aquatic life and vary between bodies of water based on use categories designated, per WAC 173-201A-200.

The Industrial Stormwater General Permit (ISGP) benchmark for turbidity is 25 NTU.

- Turbidity at SW-TD1 was measured above the designated water quality criteria (see Table 4 and Table 5). Turbidity for ISGP monitoring stations were monitored according to the SWPPP.

Chemical Oxygen Demand - Chemical Oxygen Demand (COD) is used to indirectly measure the amount of organic compounds in water.

There are no benchmarks or criteria for COD.

Total Organic Carbon - Total organic carbon (TOC) is the amount of carbon bound in an organic compound and is often used as a non-specific indicator of water quality. While COD is the measurement of all substances in the water that can be oxidized, TOC is the measurement of organically bound carbon.

There are no benchmarks or criteria for TOC.

Alkalinity - Alkalinity is the measure of the capacity of water to neutralize acids (aka buffer capacity). The alkalinity of natural waters is controlled primarily by the equilibria of the carbonate system. It is produced by dissolved CO₂ acting upon alkaline materials in the soil to produce bicarbonate (HCO₃⁻) and carbonate (CO₃²⁻). The source(s) of CO₂ can vary, including: atmospheric; respiration of water borne organisms or decay of organic matter; or contribution from landfill gas. Increased turbidity can also potentially increase alkalinity.

There are no benchmarks or criteria for alkalinity.

Chloride - Chloride is a conservative anion; that is, processes of adsorption, ion exchange, or biological uptake do generally not retard transport of chloride. Chloride is the best indicator for determining impacts from leachate. Chloride is one of the major anions to be found in water and sewage. Potable water should not exceed 250 mg/L of chloride.

There are no benchmarks or criteria for chloride.

Sulfate - Sulfate (SO₄²⁻) can be found in almost all natural water and is one of the major dissolved components of rain. It is formed by the oxidation of sulfite ores and is a component in industrial and domestic waste waters. There are few elements that will form insoluble salts with sulfate, thus; once in solution, it remains so unless it is anaerobically reduced to sulfide.

There are no benchmarks or criteria for sulfate.

Iron - Iron is the fourth most abundant element in the earth's crust and the most abundant heavy metal. It is present in the environment mainly as Fe (II) or Fe (III). Iron is more soluble in the reduced state than it is in the oxidized state, where it often occurs as an iron oxide mineral (Fe₂O₃). At a pH above 7, iron exists mostly as insoluble salts which settle out or are adsorbed onto surfaces. The concentration of iron in well-aerated waters is seldom high. Under reducing conditions, which are most commonly caused by oxidation reactions involving organic matter, water will have higher concentrations of dissolved iron.

- SW-TD1 sample monitoring result was higher the designated limit for total iron per the water quality criteria (see Table 4 and Table 5).

B. RESULTS COMPARISON

The Top Deck stormwater runoff exhibited similar average values versus historical surface water samples for most parameters in the third quarter of 2021. Upon comparison with surface water and leachate samples, overall the runoff from the Top Deck more closely resembles surface water than leachate.

Also considered during evaluation is the possible impact of landfill gas on water quality. Elevated alkalinity (i.e. over 150 mg/L) can indicate a landfill gas contribution to the sample (due to the dissolution of carbon dioxide in water). The alkalinity at SW-TD1 was significantly less than this screening criteria during the third quarter of 2021. The serpentine monitoring for LFG emissions did not show any continued detections in this area. KCSWD will continue to monitor for any continuance of elevated alkalinity. Generally, analysis of the data indicates that landfill gas and leachate are not contributing to increases in parameters; however, continued exposed soil runoff is likely impacting water quality.

TABLE 5													
Area 5 Top Deck - 3Q2021 Stormwater Monitoring Results													
Location	Date	Sample ID	Specific Conductance	pH units	Temp	Turbidity	Alkalinity	Chemical Oxygen Demand	Chloride	Dissolved Iron	Total Iron	Sulfate	Total Organic Carbon
			µmhos/cm	pH units	deg °C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SW-TD1	9/30/2021	STD1210930-	370.9	7.29	14.99	198	40	17 T	2.26	0.0248	6.23	143	7.69
Average Value =			371	7.29	15.0	198	40.0	17.0	2.26	0.025	6.2	143.0	7.7
U = UNDETECTED, ANALYTE CONCENTRATION <MDL													

TABLE 6													
SW-S1 - 2015 Stormwater Comparison Monitoring Results													
Location	Date	Sample ID	Specific Conductance (Field)	pH units (Field)	Temp (Field)	Turbidity (Field)	Alkalinity	Chemical Oxygen Demand	Chloride	Dissolved Iron	Total Iron	Sulfate	Total Organic Carbon
			µmhos/cm	pH units	deg °C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SW-S1	1/20/2015	SSI-150120Q	55	7.32	6.7	1.07	11.3	5	2.28	0.012	0.02	2.15	3.27
SW-S1	2/23/2015	SSI-150223M	52	7.31	5.4	0.6	13.4	6.1	2.32	0.01	0.023	2.24	2.2
SW-S1	3/16/2015	SSI-150316M	49	7.13	8.8	2.14	11.9	8.4	1.7	0.027	0.05	1.86	3
SW-S1	4/22/2015	SSI-150422Q	49	6.83	9.4	3.16	17.5	5.7	2.18	0.014	0.029	1.85	2.78
SW-S1	5/19/2015	SSI-150519M	53	6.71	12.4	2.08	19.7	5.5	2.2	0.036	0.0582	0.919	3.34
SW-S1	11/18/2015	SSI-151118Q	65	6.44	8.1	0.42	8.11	9.2	2.69	0.014	0.018	3.32	4.47
SW-S1	12/14/2015	SSI-151214M	53	6.47	7	0.58	7.44	8.6	2.6	0.012	0.017	2.43	3.74
Average Value =			54	6.9	8.3	1.4	12.8	6.9	2.3	0.018	0.03	2.1	3.3
U = UNDETECTED, ANALYTE CONCENTRATION <MDL													

TABLE 7													
Leachate Pond Inflow - 3Q2021 Monitoring Results													
Location	Date	Sample ID	Specific Conductance (Field)	pH units (Field)	Temp (Field)	Turbidity (Field)	Alkalinity	Chemical Oxygen Demand	Chloride	Dissolved Iron	Total Iron	Sulfate	Total Organic Carbon
			µmhos/cm	pH units	deg °C	NTU	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LS-VIA	7/7/2021	LVIA210707M	19457	8.43	26.8	-	5640	5800	1390	2.9	4.33	33.3	2180
LS-VIA	8/4/2021	LVIA210804M	18432	8.33	26.4	-	7720	8560 S	1920	4.77	69.6	41.5	3230
LS-VIA	9/8/2021	LVIA210908M	19356	8.24	32.1	-	10200	11300 S	2640	4.96	15.4 D	72.9	3900 S
Average Value =			19082	8	28	-	7853	8553	1983	4	30	49	3103
S = INDICATES A SAMPLE HANDLING OR HOLD TIME ERROR													
NOTE: LEACHATE IS NOT TYPICALLY ANALYZED (NA) FOR TURBIDITY													

V. CONCLUSION

A stormwater sample for the Area 5 Top Deck were collected at monitoring location SW-TD1 during the third quarter of 2021. There was no significant water quality exceedances with respect to the applicable water quality criteria for the SW-TD1 stormwater sampling location. Additionally, when the overall results were compared to 2015 averaged surface water sampling data at SW- S1 (table 6), and leachate effluent samples from LV1A (table 7), the Top Deck stormwater runoff exhibited similar than average values versus historical surface water samples for most parameters in the third quarter of 2021. Figure 2 shows the Area 5 Top Deck stormwater monitoring station locations of the Area 5. The SW-TD1 sample monitoring result was higher the designated limit for total iron per the water quality criteria. Sample monitoring result for LS-V1A can also be found at Table 7.

Stormwater samples for the Area 5 Top Deck were not collected at other monitoring locations due to multiple factors, including lack of sufficient precipitation during the quarter.

The inspection reports for the third quarter of 2021 showed no issues with the interim cover system for Area 5 and no indication of LFG presence.

Due to survey control points being covered, there is no recent settlement survey data for third quarter of 2021. New survey points will be assessed for future monitoring.

The recent compliant historical performance trend for Area 5, coupled with ongoing inspection results verifying the integrity of the cover all provides evidence that the Area 5 Top Deck Interim Cover System continues to function to prevent interaction between refuse and storm water runoff

Figures

FIGURE 1
AREA 5 SETTLEMENT MONITORING LOCATIONS



200 100 50 0 200 400
GRAPHIC SCALE IN FEET

A4SM-3

PP-6A

PP-23A

13HUB

(DESTROYED 2007)

PMX2015

REPLACED PMX2074

PMX2074

(DESTROYED 2012)

AIRHUB

PP-5

A5SM-2

A5SM-3

(DESTROYED 8-2007)

CONCBLK

A5SM-1

(DESTROYED 2012)

A6SM-1

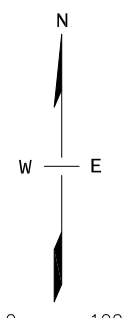
(DESTROYED 8-2014)

A6SM-2

(DESTROYED 8-2014)

LEGEND:
○ MONITORING STATION

P:\ACAD\PROJECT\King County Expansion Proposal\CARLA WORK\Figure 1.dwg Aug 01, 2007 3:18pm



AREA 5 TOP DECK STORMWATER MONITORING STATION

STATION NUMBER	STATION DESCRIPTION
SW-A5TD1	NORTHEAST PORTION OF AREA 5 TOP DECK WHERE RUNOFF FROM THE TOP DECK EXITS AN 18-INCH CULVERT. SAMPLING TO BE PERFORMED AT THE OUTLET OF THE CULVERT.
SW-A5TD2	NORTH SLOPE OF AREA 5 WHERE RUNOFF, FROM THE NORTH SLOPE FLOWING IN A ROADSIDE DITCH, DRAINS INTO A 12-INCH CULVERT. SAMPLING TO BE PERFORMED AT THE OUTLET OF THE CULVERT.
SW-A5TD3*	WEST OF THE AREA 5 TOP DECK, WITHIN THE SCRAPER ROAD 5 ROADSIDE DITCH AT THE OUTLET END OF A TEMPORARY 12-INCH PIPE. THE TEMPORARY 12-INCH PIPE IS IN PLACE, BECAUSE THE WEST SIDESLOPE GEOMEMBRANE DOES NOT CURRENTLY HAVE COVER SOIL. ONCE THE COVER SOIL IS IN PLACE, THE PIPE WILL BE REMOVED AND THE SAMPLE LOCATION WILL NO LONGER BE SAMPLED.
SW-A5TD4	CENTER OF THE WEST PORTION OF AREA 5 TOP DECK WHERE RUNOFF FROM THE TOP DECK DRAINS INTO THE "VALLEY" RUNNING EAST TO WEST. SAMPLING TO BE PERFORMED AT THE INLET OF THE "VALLEY" DITCH.
SW-A5TD5*	THE OUTLET END OF A TEMPORARY 12-INCH HDPE PIPE THAT CONVEYS RUNOFF FROM THE SOUTHWEST CORNER OF THE AREA 5 TOP DECK. THE TEMPORARY 12-INCH PIPE IS IN PLACE, BECAUSE THE SOUTH SIDESLOPE GEOMEMBRANE DOES NOT CURRENTLY HAVE COVER SOIL. ONCE THE COVER SOIL IS IN PLACE, THE PIPE WILL BE REMOVED AND THE SAMPLE LOCATION WILL NO LONGER BE SAMPLED, BECAUSE FLOW IN THE ROADSIDE DITCH AT THIS LOCATION WILL NO LONGER CONTAIN RUNOFF FROM THE AREA 5 TOP DECK.
SW-A5TD6	WEST OF THE AREA 5 TOP DECK, WITHIN THE SCRAPER ROAD 5 ROADSIDE DITCH, THIS SAMPLE POINT RECEIVES TOP DECK FLOW FROM TWO SIDESLOPE DITCHES THAT INTERSECT AT THE SAMPLE LOCATION.

*STATIONS SW-A5TD3 AND SW-A5TD5 WERE TEMPORARY STORMWATER MONITORING STATIONS THAT CEASED TO EXIST AS OF JULY 16, 2007.

LEGEND:

STORMWATER MONITORING STATION

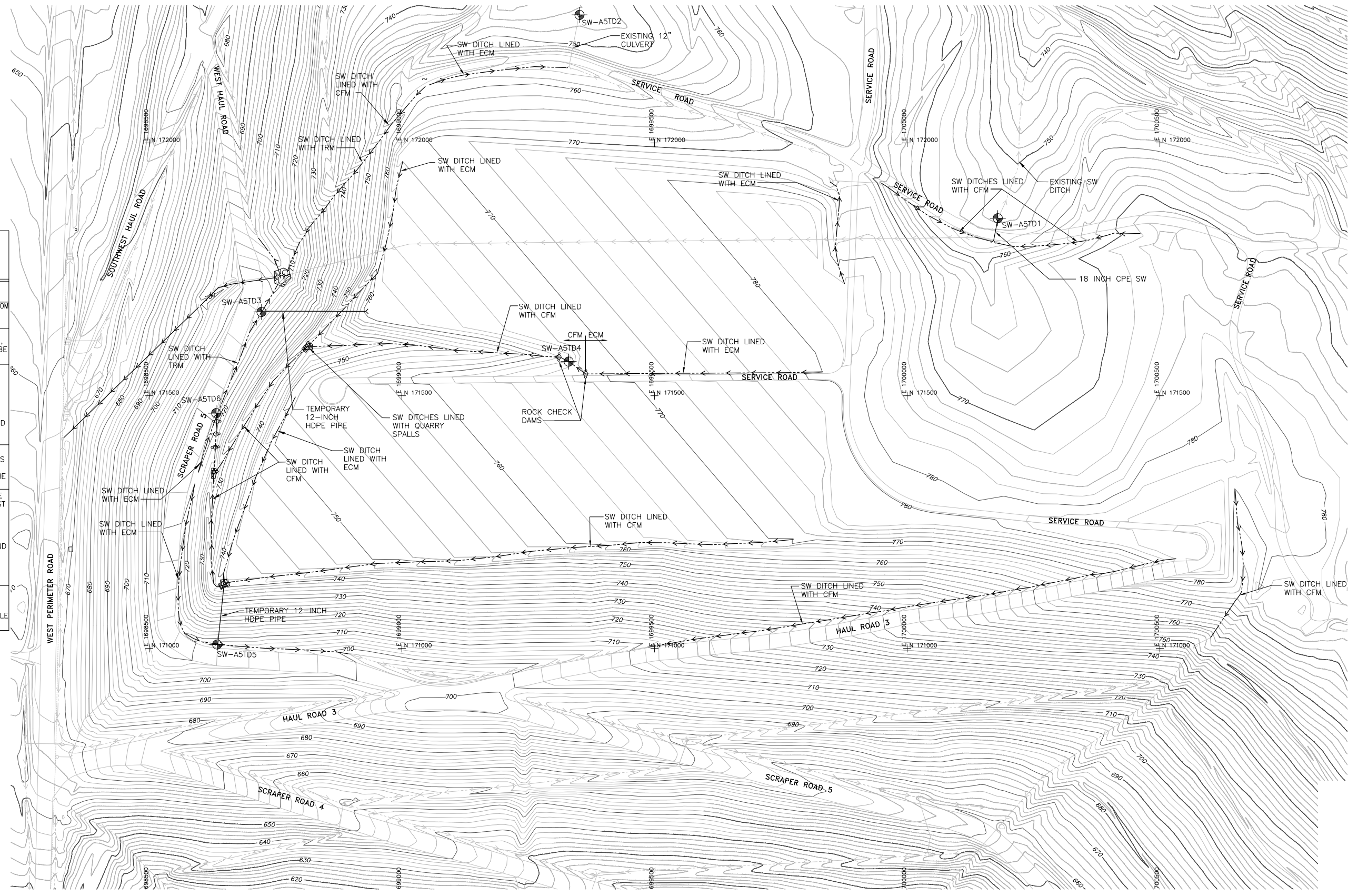


Figure 2
Area 5 Top Deck
Stormwater Monitoring Stations

Cedar Hills Regional Landfill
Area 5 Stage 4 Final Closure
King County, Washington

Appendix A: Inspection Reports

SOLID WASTE DIVISION

Cedar Hills Regional Landfill Monthly Facility Inspection

Site Inspection: Permit Compliance

Inspected By: Sterling Bath Date: 7/23/2021

Location: Cedar Hills Ambient Temperature: (59°F) Weather Condition: Sunny

ACTION CODES

A. Gas System	Good	Fair	Poor	C. Landfill Operations	Good	Fair	Poor	E. Roadway System	Good	Fair	Poor
1. Pipe Penetrations	X			1. Fueling Stations	X			1. Road Sweeping	X		
2. Collection Piping	X			2. Vehicle Wash Stations	X			2. Access Roads	X		
3. Extraction Wells	X			3. Equipment	X			3. Road Erosion	X		
4. Monitoring Probes	X			4. Perimeter Fences	X			4. Road Pavement	X		
5. Valve Stations	X			5. Vegetation		X		5. Lane Striping	X		
6. North Flare Station	X			6. Landfill Cover		X					
7. Migration Flare	X			7. Drain Rock	X						
8. Noise Control	X			8. Air Quality	X			F. Other Items	X		
9. Air Compressors	X			9. Stockpiles	X						
				10. Vectors	X						
B. Leachate System				11. Litter	X						
1. Pump Station 1	X			12. Dust Control	X						
2. Pump Station 2	X			13. Other	X						
3. Pump Station 3	X										
4. Pump Station 4	X			D. Stormwater System							
5. Lagoon Facilities	X			1. CSW Pond	X						
6. Lagoon Aerators	X			2. North Siltation Pond	X						
7. Collection System:				3. North SW Lagoon	X						
a. Collection Pipes	X			4. South SW Lagoon	X						
b. Force Mains	X			5. South Siltation Pond	X						
c. Manholes	X			6. Sand Filter		X					
d. Cleanouts	X			7. CB/ Control Structures	X						
8. Generators	X			8. Pipes/Culverts	X						
9. Extraction Wells	X			9. Trash Racks	X						
10. Valves/Cleanouts	X			10. Ditches		X					
11. Groundwater	X			11. Best Management	X						
				12. Compliance Points		X					
				13. Other	X						

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor", include remedy to get item to 'Good'	Date Corrective Action Implemented
		Area	Map	Good	Fair	Poor		
1	D10	A2/3	C4		X		Damaged stormwater ditch on northeast corner of Area 2/3 needs to be repaired.	
2	D12	A6			X		Silt built-up behind silt fences north of Area 6. Remove silt and repair fences.	
3	D12	A6			X		Damaged silt fences north of Area 6 needs to be repaired.	
4	D12	A6			X		Stormwater drain on south side of Area 6 is clogged and should be unclogged.	
5	D12	A6			X		Old silt dikes on south slope of Area 6 are no longer needed and should be removed.	
6	D12	A6			X		Body of water on south slope of Area 6. Slope should be graded to drain this area.	
7	D12		I3		X		Silt fence by Pump Station 4 is damaged and needs to be repaired.	
8	D6		I2		X		Cage over sand filter valve is too small and needs to be resized.	
9	D12		G5		X		Stormwater drains around shop building are difficult to read and need marking.	
10	C5/6	A6			X		Bare patch on south slope of Area 6. Excavate and investigate to find possible cover damage.	

AREA CODES (Cedar Hills):

Area 2/3 = A2/3

Area 7 = A7

East Main Hill = EMH

Southwest Main Hill = SWMH

Area 4 = A4

Area 8 = A8

Leachate Lagoon = LL

Stockpile = SP

Area 5 = A5

Central Pit = CP

North Flare Station = NFS

Area 6 = A6

CSW Lagoon = CSW

Southeast Pit Area = SEPA

State the needs of the repairs in the suggested remedy box.

1. *Emergency*
2. *Regulatory Priority*
3. *Safety Priority*
4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. There is a damaged stormwater ditch on the northeast corner of Areas 2/3. This should be repaired to prevent erosion to hillside. On the north side of Area 6 sediment has built-up behind silt fences. This should be removed to improve the performance of these silt fences. On the north side of Area 6 and by Pump Station 4 there are damaged silt fences that should be repaired to mitigate sediment flow. A stormwater drain on the south side of Area 6 is clogged and needs to be unclogged to ensure proper stormwater flow in this area. Old silt dikes on the south side of Area 6 are longer needed and should be removed. There is a body of water on the south side of Area 6. The slope in this area should be modified to prevent the formation of this water body. A larger cage should be created to fit over the sand filter valve. Stormwater drains around the shop building are difficult to read and should have new stormwater markers installed by them. There is a bare patch on the south slope of Area 6. Excavate and investigation for any damaged to the cover.

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\07 - Jul\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle **Y** or **N**)
If Y, log changes in Appendix I of SWPPP

Potential Pollutant Sources **Y / N**

Site Map **Y / N**

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 7/23/2021

SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

X *The site is in compliance with the terms and conditions of the SWPPP and the ISGP.*

 The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: _____ Date: 8/18/2021

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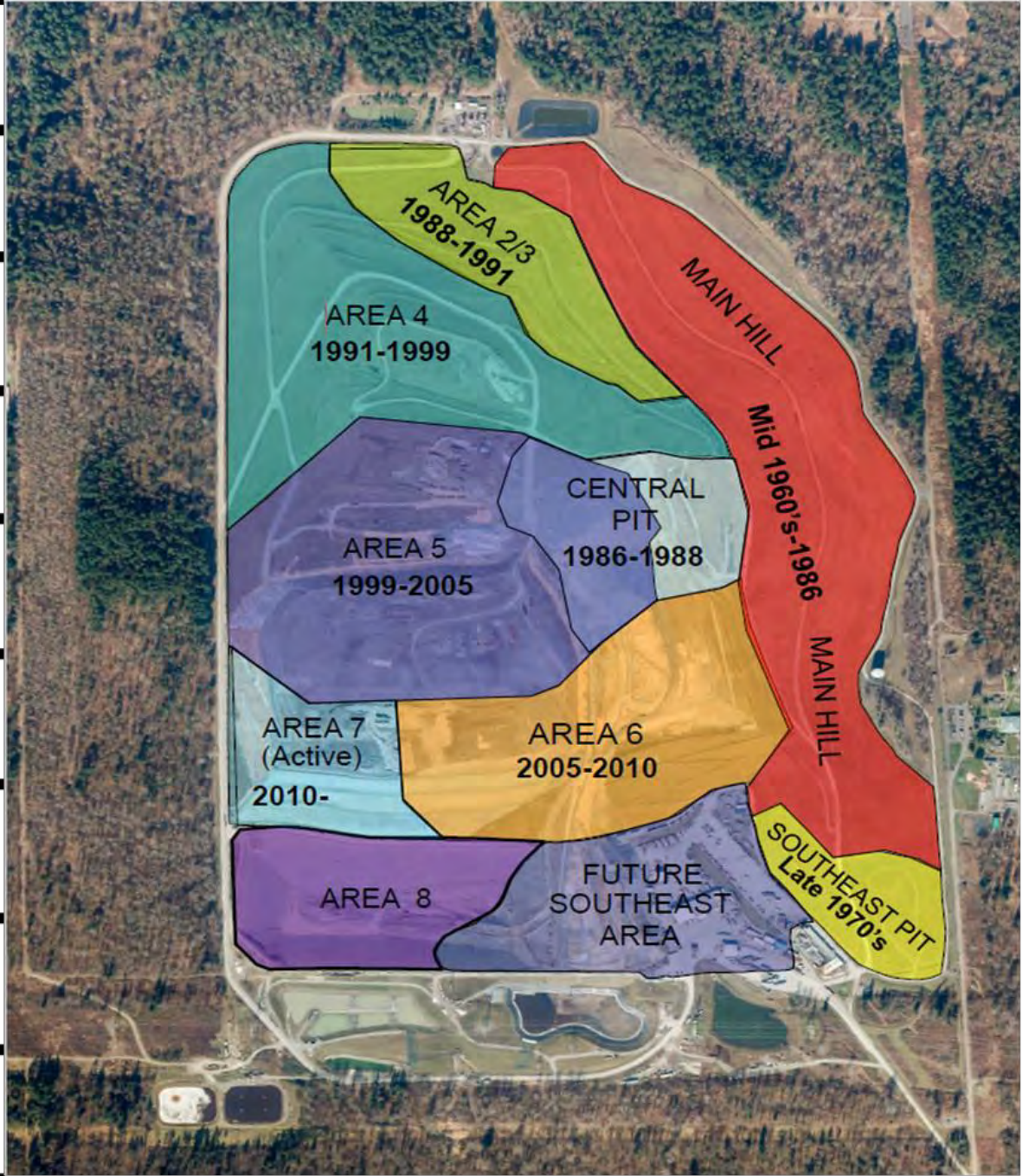
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SOLID WASTE DIVISION

Cedar Hills Regional Landfill Monthly Facility Inspection

Site Inspection: Stormwater Permit Compliance (ISGP Permit # WAR000756)

Inspected By: Sterling Bath Date: 7/23/2021

Location: Cedar Hills Ambient Temperature: (59°F) Weather Condition: Sunny

Inspection Requirements

1. Observations of the discharge points where stormwater leaves the site (N4, GS1, and SL3)
2. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in stormwater leaving site (See field sheets for that information)
3. Observations for the presence of an illicit discharge
4. Verification that the descriptions of potential pollutant sources in this SWPPP are accurate
5. Verification that the site map in this SWPPP is accurate
6. Assessment of BMPs for effectiveness, maintenance needs, and any deficiencies warranting new or different BMP's than those implemented at the time of the inspection.

Stormwater System	Good	Fair	Poor	Comments
A. CSW Pond	X			
B. North Siltation Pond	X			
C. North SW Lagoon	X			
D. South SW Lagoon	X			
E. South Siltation Pond	X			
F. Sand Filter		X		Cage over sand filter valve is too small.
G. CB/ Control Structures	X			
H. Pipes/Culverts	X			
I. Trash Racks	X			
J. Ditches		X		Damaged stormwater ditch on northwest corner of Area 2/3.
K. Best Management Practices		X		Damaged silt fence north of Area 6 and by Pump Station 4. Built-up silt behind silt fence north of Area 6. Clogged stormwater drain on south slope of Area 6. Old silt dikes on south slope of Area 6 no longer needed. Stormwater drains by shop have labels that are hard to read. Body of water on south slope of Area 6.
L. Compliance Points:	X			
a. SW-N4	X			
b. SW-GS1	X			
c. SW-SL3	X			
M. Other:	X			

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor", include remedy to get item to 'Good'	Date Corrective Action Implemented
		Area	Map	Good	Fair	Poor		
1	J	A2/3	C4		X		Damaged stormwater ditch on northeast corner of Area 2/3 needs to be repaired.	
2	K	A6			X		Silt built-up behind silt fences north of Area 6. Remove silt and repair fences.	
3	K	A6			X		Damaged silt fences north of Area 6 needs to be repaired.	
4	K	A6			X		Stormwater drain on south side of Area 6 is clogged and should be unclogged.	
5	K	A6			X		Old silt dikes on south slope of Area 6 are no longer needed and should be removed.	
6	K	A6			X		Body of water on south slope of Area 6. Slope should be graded to drain this area.	
7	K		I3		X		Silt fence by Pump Station 4 is damaged and needs to be repaired.	
8	F		I2		X		Cage over sand filter valve is to small and needs to be resized.	
9	K		G5		X		Stormwater drains around shop building are difficult to read and need marking.	
10								

AREA CODES (Cedar Hills):

Area 2/3 = A2/3

Area 7 = A7

East Main Hill = EMH

Southwest Main Hill = SWMH

Area 4 = A4

Area 8 = A8

Leachate Lagoon = LL

Stockpile = CP

Area 5 = A5

Central Pit = CP

North Flare Station = NFS

Area 6 = A6

CSW Lagoon = CSW

Southeast Pit Area = SEPA

State the needs of the repairs in the suggested remedy box.

1. *Emergency*

- 2. *Regulatory Priority*
- 3. *Safety Priority*
- 4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. There is a damaged stormwater ditch on the northeast corner of Areas 2/3. This should be repaired to prevent erosion to hillside. On the north side of Area 6 sediment has built-up behind silt fences. This should be removed to improve the performance of these silt fences. On the north side of Area 6 and by Pump Station 4 there are damaged silt fences that should be repaired to mitigate sediment flow. A stormwater drain on the south side of Area 6 is clogged and needs to be unclogged to ensure proper stormwater flow in this area. Old silt dikes on the south side of Area 6 are longer needed and should be removed. There is a body of water on the south side of Area 6. The slope in this area should be modified to prevent the formation of this water body. A larger cage should be created to fit over the sand filter valve. Stormwater drains around the shop building are difficult to read and should have new stormwater markers installed by them.

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\07 - Jul\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle **Y** or **N**) Potential Pollutant Sources **Y / N** Site Map **Y / N**
If Y, log changes in Appendix I of SWPPP

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 7/23/2021 SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: Digitally signed by Bath, Sterling Date: 2021.08.11 15:21:01-07'00' Date: 8/11/2021

DULY AUTHORIZED REPRESENTATIVE

Based on professional judgment, which of the following statements is true: (select one)

The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Bill Berni, Operations Manager

Signature:  Date: 8/18/2021

Signed on behalf of Bill Berni . . . SCOTT BARDEN

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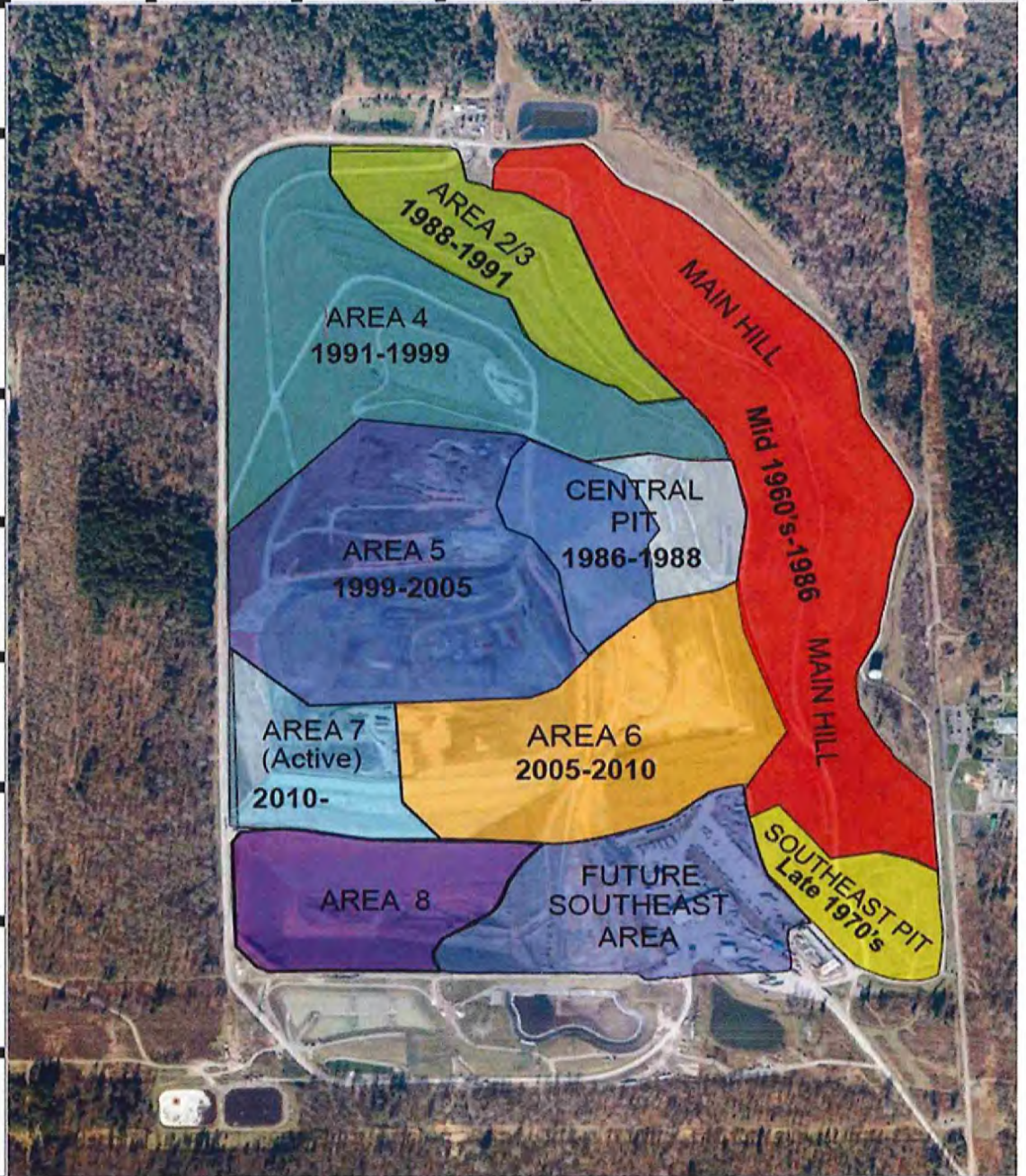
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SOLID WASTE DIVISION

Cedar Hills Regional Landfill Monthly Facility Inspection

Site Inspection: Stormwater Permit Compliance (ISGP Permit # WAR000756)

Inspected By: Sterling Bath Date: 8/13/2021

Location: Cedar Hills Ambient Temperature: (65°F) Weather Condition: Sunny

Inspection Requirements

1. Observations of the discharge points where stormwater leaves the site (N4, GS1, and SL3)
2. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in stormwater leaving site (See field sheets for that information)
3. Observations for the presence of an illicit discharge
4. Verification that the descriptions of potential pollutant sources in this SWPPP are accurate
5. Verification that the site map in this SWPPP is accurate
6. Assessment of BMPs for effectiveness, maintenance needs, and any deficiencies warranting new or different BMP's than those implemented at the time of the inspection.

Stormwater System	Good	Fair	Poor	Comments
A. CSW Pond	X			Damaged CSW lagoon baffle fence.
B. North Siltation Pond	X			
C. North SW Lagoon	X			
D. South SW Lagoon	X			
E. South Siltation Pond	X			
F. Sand Filter		X		Missing a sand filter valve cover.
G. CB/ Control Structures	X			
H. Pipes/Culverts		X		Screens over two south Area 6 stormwater pipes are clogged.
I. Trash Racks	X			
J. Ditches		X		Damaged stormwater ditch on Northwest corner of Area 2/3.
K. Best Management Practices		X		3 unnecessary silt dikes on the south slope of Area 6. Body of water on the south slope of Area 6. Silt fences north of Area 6 need repair and are backed with sediment. Damaged construction and sediment fences in the southwest corner of Area 8. Stormwater drains around Cedar Hills facilitates need to have stormwater labels on them.
L. Compliance Points:				
a. SW-N4	X			
b. SW-GS1	X			
c. SW-SL3	X			
M. Other:	X			

Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor", include remedy to get item to "Good"	Date Corrective Action Implemented
		Area	Map	Good	Fair	Poor		
1	F		I3		X		Missing sand filter valve cover. Install new valve cover.	
2	H	A6			X		Screens over two south Area 6 stormwater pipes are clogged. The blockages should be removed.	
3	K	A6			X		3 unnecessary silt dikes on the south slope of Area 6. Remove as they are no longer necessary.	
4	K	A6			X		Body of water on the south slope of Area 6. Area should be graded to prevent formation of water body.	
5	K	A6			X		Silt fences north of Area 6 are backed up with sediment and need some repair. Remove sediment and repair fences.	
6	J	A2/3			X		Damaged stormwater ditch on the northwest side of Area 2/3. Should be repaired to ensure proper stormwater conveyance.	
7	K	A8			X		Damaged construction and sediment fences by the southwest corner of Area 8. Should be removed.	
8	A	CSW		X			Damaged CSW lagoon baffle fence. CSW lagoon baffle fence has been repaired before this report was finalized.	
9	K		G/H5		X		Stormwater drains around Cedar Hills support facilitates need new Stormwater labels.	

AREA CODES (Cedar Hills):

Area 2/3 = A2/3

Area 7 = A7

East Main Hill = EMH

Southwest Main Hill = SWMH

Area 4 = A4

Area 8 = A8

Leachate Lagoon = LL

Stockpile = CP

Area 5 = A5

Central Pit = CP

North Flare Station = NFS

Area 6 = A6

CSW Lagoon = CSW

Southeast Pit Area = SEPA

State the needs of the repairs in the suggested remedy box.

1. *Emergency*
2. *Regulatory Priority*
3. *Safety Priority*
4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. The sand filter valve is missing a valve cover it will need a new one to be installed. Two of the stormwater pipes on the south slope of Area 6 have clogged screens over them, these should be unclogged. Three unnecessary triangular silt dikes were found on the south slope of Area 6 these should be removed. A body of water forms on the south slope of Area 6 during the wetter seasons the area should be regraded to prevent the accumulation of water. Some silt fences on the north side of Area 6 need to be repaired and have sediment removed from them. Damaged stormwater ditch on the northwest side of Area 2/3 is damaged and should be repaired to ensure proper stormwater conveyance. There are unnecessary construction and sediment fences by the southwest of corner of Area 8 that should be removed. The baffle wall in the CSW lagoon was damaged during the inspection and has been repaired since. A handful of stormwater drains around Cedar Hills facilities need labeling such as "Only rain down the drain".

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\08 - Aug\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle **Y** or **N**)
 If **Y**, log changes in Appendix I of SWPPP

Potential Pollutant Sources **Y / N**

Site Map **Y / N**

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 8/13/2021 SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: _____ Date: _____

DULY AUTHORIZED REPRESENTATIVE

Based on professional judgment, which of the following statements is true: (select one)

The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Bill Berni, Operations Manager

Signature:  Date: 9/24/2021

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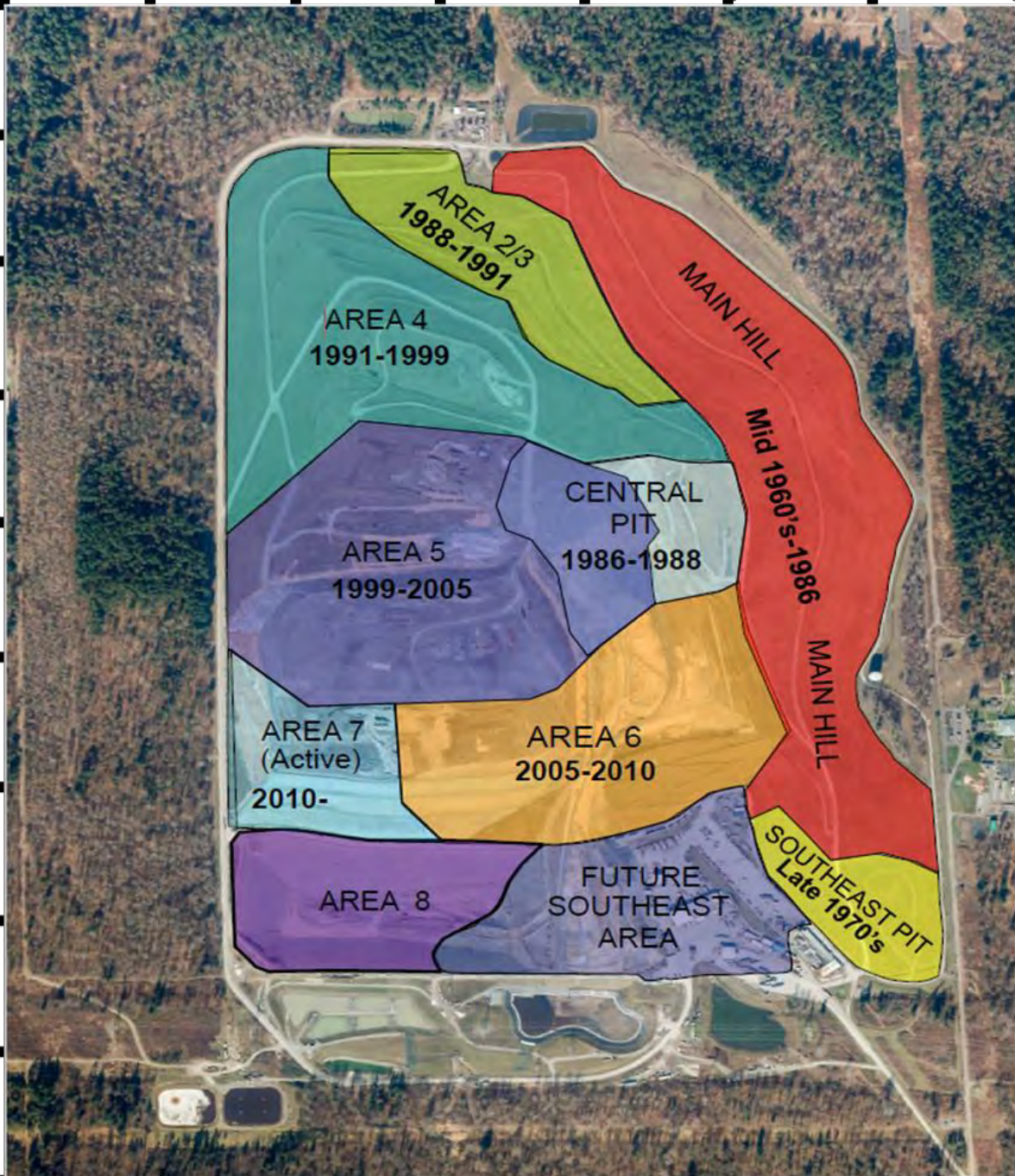
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Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map		Status			State Reason if "Fair or Poor", include remedy to get item to 'Good'	Date Corrective Action Implemented
				Good	Fair	Poor		
1	D9		I3		X		Missing sand filter valve cover. Install new valve cover.	
2	A2	SEPA	H6		X		Damaged flex pipe on condensate header at Southeast Pit Area. Replace or repair damaged flex pipe.	
3	D8	A6			X		Screens over two south Area 6 stormwater pipes are clogged. The blockages should be removed.	
4	D11	A6			X		3 unnecessary silt dikes on the south slope of Area 6. Remove as they are no longer necessary.	
5	D11	A6			X		Body of water on the south slope of Area 6. Area should be graded to prevent formation of water body.	
6	C5	A6			X		Brush on the south slope of Area 6. Should be removed to protect the cover.	
7	D11	A6			X		Silt fences north of Area 6 are backed up with sediment and need some repair. Remove sediment and repair fences.	
8	D10	A2/3			X		Damaged stormwater ditch on the northwest side of Area 2/3. Should be repaired to ensure proper stormwater conveyance.	
9	D11	A8			X		Damaged construction and sediment fences by the southwest corner of Area 8. Should be removed.	
10	D1	CSW		X			Damaged CSW lagoon baffle fence. CSW lagoon baffle fence has been repaired before this report was finalized.	

11	D11		G/H5		X		Stormwater drains around Cedar Hills support facilities need new Stormwater labels.	
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AREA CODES (Cedar Hills):

Area 2/3 = A2/3	Area 7 = A7	East Main Hill = EMH	Southwest Main Hill = SWMH
Area 4 = A4	Area 8 = A8	Leachate Lagoon = LL	Stockpile = SP
Area 5 = A5	Central Pit = CP	North Flare Station = NFS	
Area 6 = A6	CSW Lagoon = CSW	Southeast Pit Area = SEPA	

State the needs of the repairs in the suggested remedy box.

1. *Emergency*
2. *Regulatory Priority*
3. *Safety Priority*
4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. The sand filter valve is missing a valve cover it will need a new one to be installed. There is damaged flex pipe on a condensate header. This flex pipe should be repaired or replaced. Two of the stormwater pipes on the south slope of Area 6 have clogged screens over them, these should be unclogged. Three unnecessary triangular silt dikes were found on the south slope of Area 6 these should be removed. A body of water forms on the south slope of Area 6 during the wetter seasons the area should be regraded to prevent the accumulation of water. Brush on the south slope of Area 6 should be cleared. Some silt fences on the north side of Area 6 need to be repaired and have sediment removed from them. Damaged stormwater ditch on the northwest side of Area 2/3 is damaged and should be repaired to ensure proper stormwater conveyance. There are unnecessary construction and sediment fences by the southwest of corner of Area 8 that should be removed. The baffle wall in the CSW lagoon was damaged during the inspection and has been repaired since. A handful of stormwater drains around Cedar Hills facilities need labeling such as "Only rain down the drain".

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\08 - Aug\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle **Y** or **N**) Potential Pollutant Sources **Y / N** Site Map **Y / N**
If Y, log changes in Appendix I of SWPPP

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 8/13/2021

SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

X *The site is in compliance with the terms and conditions of the SWPPP and the ISGP.*

 The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: _____ Date: _____

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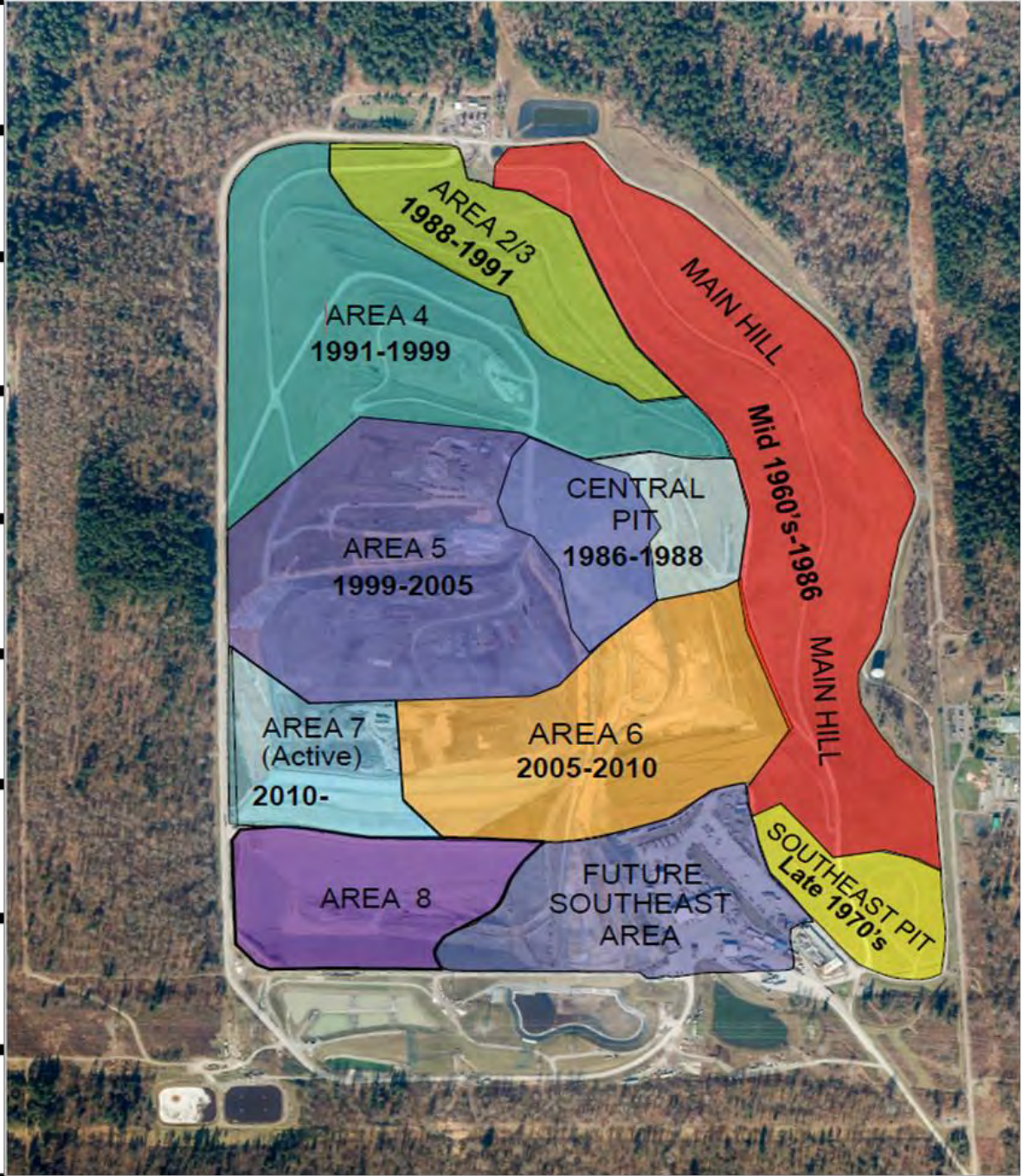
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SOLID WASTE DIVISION

Cedar Hills Regional Landfill Monthly Facility Inspection

Site Inspection: Stormwater Permit Compliance (ISGP Permit # WAR000756)

Inspected By: Sterling Bath Date: 9/24/2021

Location: Cedar Hills Ambient Temperature: (58°F) Weather Condition: Cloudy

Inspection Requirements

1. Observations of the discharge points where stormwater leaves the site (N4, GS1, and SL3)
2. Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in stormwater leaving site (See field sheets for that information)
3. Observations for the presence of an illicit discharge
4. Verification that the descriptions of potential pollutant sources in this SWPPP are accurate
5. Verification that the site map in this SWPPP is accurate
6. Assessment of BMPs for effectiveness, maintenance needs, and any deficiencies warranting new or different BMP's than those implemented at the time of the inspection.

Stormwater System	Good	Fair	Poor	Comments
A. CSW Pond	X			
B. North Siltation Pond	X			
C. North SW Lagoon	X			
D. South SW Lagoon	X			
E. South Siltation Pond	X			
F. Sand Filter		X		Missing a sand filter valve cover.
G. CB/ Control Structures	X			
H. Pipes/Culverts		X		Screens over two south Area 6 stormwater pipes are clogged.
I. Trash Racks	X			
J. Ditches		X		Damaged stormwater ditch on Northwest corner of Area 2/3.
K. Best Management Practices		X		Unnecessary silt dikes on the south slope of Area 6. Body of water on the south slope of Area 6. A silt fences north of Area 6 needs repair. Damaged construction and sediment fences in the southwest corner of Area 8. Stormwater drains around Cedar Hills facilitates need to have stormwater labels on them. One stormwater drain needs a new drain sock.
L. Compliance Points:				
a. SW-N4	X			
b. SW-GS1	X			
c. SW-SL3	X			
M. Other:	X			

Item No.	Action Code(s)	Area Code(s) (See below or over for map) Area Map		Status			State Reason if "Fair or Poor", include remedy to get item to 'Good'	Date Corrective Action Implemented
				Good	Fair	Poor		
1	H	A6			X		Clogged stormwater pipes on the south slope of Area 6 need to be unclogged.	
2	K	A6			X		Need to remove degraded triangular silt dikes on the south slope of Area 6.	
3	K	A6			X		Body of water on Area 6. The area should be regraded to that proper drainage can occur on this slope.	
4	K	A6			X		Silt fence north of Area 6 need to be repaired.	
5	J	A2/3			X		Stormwater ditch northwest of Area 2/3 needs to be repaired or removed.	
6	F		I3		X		Screen over sand filter valve needs to be refitted to go over sand filter valve.	
7	K	A8			X		Construction fences southwest of Area 8 should be removed.	
8	K		G5		X		Need "Only Rain Down the Drain" signage around the shop buildings.	
9	K		G5		X		Need to replace drain sock at a stormwater drain.	

AREA CODES (Cedar Hills):

Area 2/3 = A2/3

Area 7 = A7

East Main Hill = EMH

Southwest Main Hill = SWMH

Area 4 = A4

Area 8 = A8

Leachate Lagoon = LL

Stockpile = CP

Area 5 = A5

Central Pit = CP

North Flare Station = NFS

Area 6 = A6

CSW Lagoon = CSW

Southeast Pit Area = SEPA

State the needs of the repairs in the suggested remedy box.

1. *Emergency*
2. *Regulatory Priority*
3. *Safety Priority*
4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. The sand filter valve is missing a valve cover and it will need the existing one to be refitted. Two of the stormwater pipes on the south slope of Area 6 have clogged screens over them, these should be unclogged. Unnecessary triangular silt dikes were found on the south slope of Area 6 these should be removed. A body of water forms on the south slope of Area 6 during the wetter seasons, the area should be regraded to prevent the accumulation of water. A silt fences on the north side of Area 6 need to be repaired. Damaged stormwater ditch on the northwest side of Area 2/3 is should be repaired to ensure proper stormwater conveyance. There are unnecessary construction and sediment fences by the southwest of corner of Area 8 that should be removed. A handful of stormwater drains around Cedar Hills facilities need labeling such as "Only rain down the drain". A drain sock in a stormwater drain should be replaced.

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\09 - Sep\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle Y or N)
If Y, log changes in Appendix I of SWPPP

Potential Pollutant Sources Y / N

Site Map Y / N

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 9/24/2021 SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

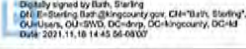
The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: Bath, Sterling  Date: 11/18/2021

DULY AUTHORIZED REPRESENTATIVE

Based on professional judgment, which of the following statements is true: (select one)

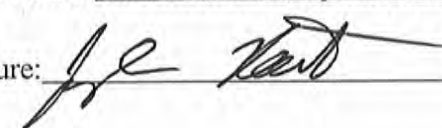
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The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed name: Mark Monteiro, Operations Manager

Signature:  Date: 11/18/2021

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A

B

C

D

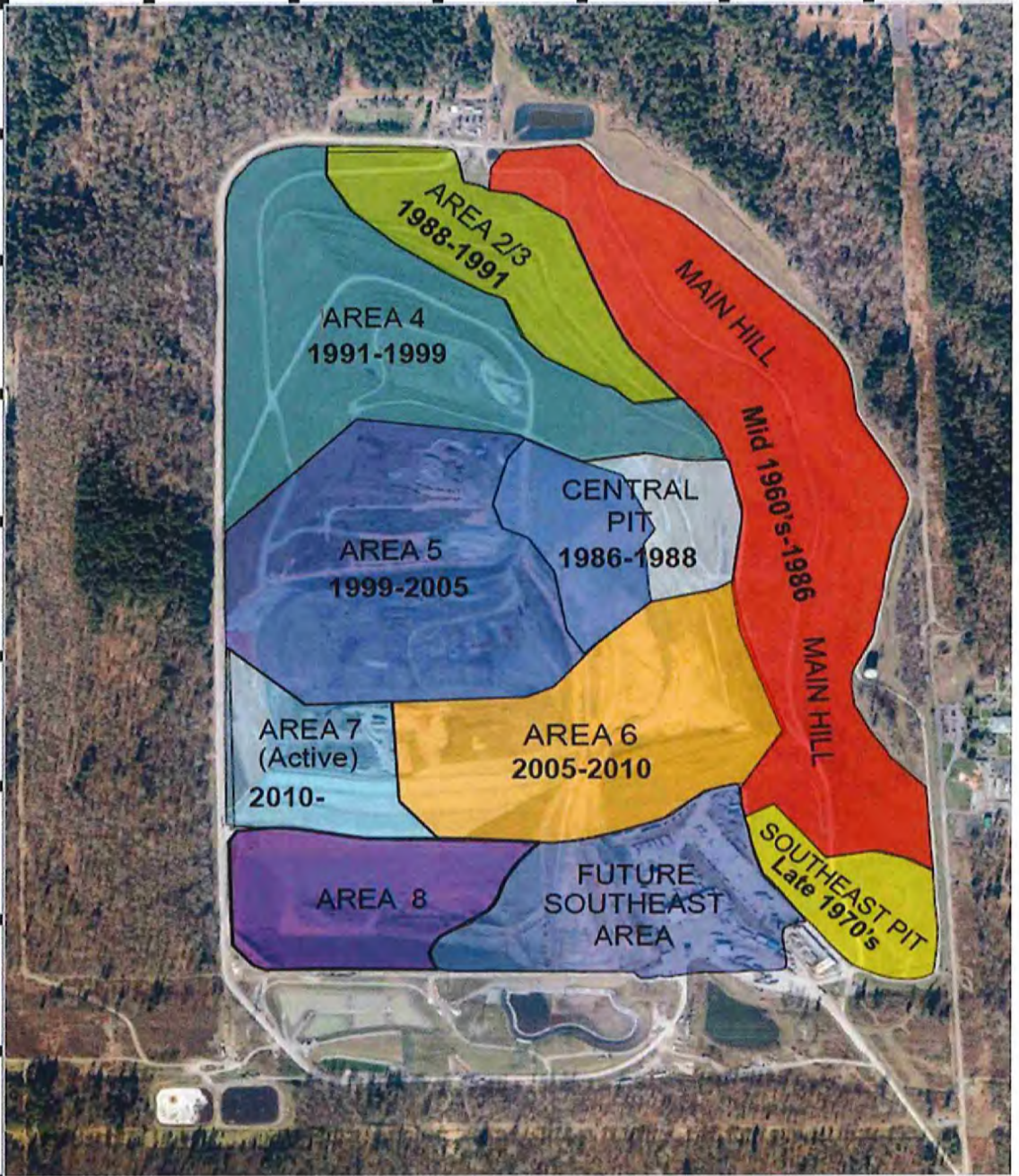
E

F

G

H

I



Item No.	Action Code(s)	Area Code(s) (See below or over for map)		Status			State Reason if "Fair or Poor", include remedy to get item to "Good"	Date Corrective Action Implemented
		Area	Map	Good	Fair	Poor		
1	D8	A6			X		Clogged stormwater pipes on the south slope of Area 6 need to be unclogged.	
2	D11	A6			X		Need to remove degraded triangular silt dikes on the south slope of Area 6.	
3	C5	A6			X		Vegetation on south slope of Area 6 should be removed.	
4	D11	A6			X		Body of water on Area 6. The area should be regraded to that proper drainage can occur on this slope.	
5	D11	A6			X		Silt fence north of Area 6 need to be repaired.	
6	D10	A2/3			X		Stormwater ditch northwest of Area 2/3 needs to be repaired or removed.	
7	D6		I3		X		Screen over sand filter valve needs to be refitted to go over sand filter valve.	
8	D11	A8			X		Construction fences southwest of Area 8 should be removed.	
9	D11		G5		X		Need "Only Rain Down the Drain" signage around the shop buildings.	
10	D11		G5		X		Need to replace drain sock at a stormwater drain.	

AREA CODES (Cedar Hills):

Area 2/3 = A2/3

Area 7 = A7

East Main Hill = EMH

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Stockpile = SP

Area 5 = A5

Central Pit = CP

North Flare Station = NFS

Area 6 = A6

CSW Lagoon = CSW

Southeast Pit Area = SEPA

State the needs of the repairs in the suggested remedy box.

1. *Emergency*
2. *Regulatory Priority*
3. *Safety Priority*
4. *Maintenance Priority*
 - a. *Urgent*
 - b. *Routine*
 - c. *Deferred*

Overall site description day of site inspection: Overall the site is maintained. Vegetation on the south slope of Area 6 should be removed. The sand filter valve is missing a valve cover and it will need the existing one to be refitted. Two of the stormwater pipes on the south slope of Area 6 have clogged screens over them, these should be unclogged. Unnecessary triangular silt dikes were found on the south slope of Area 6 these should be removed. A body of water forms on the south slope of Area 6 during the wetter seasons, the area should be regraded to prevent the accumulation of water. A silt fences on the north side of Area 6 need to be repaired. Damaged stormwater ditch on the northwest side of Area 2/3 is should be repaired to ensure proper stormwater conveyance. There are unnecessary construction and sediment fences by the southwest of corner of Area 8 that should be removed. A handful of stormwater drains around Cedar Hills facilities need labeling such as "Only rain down the drain". A drain sock in a stormwater drain should be replaced.

Photos taken during the site inspection can be found at: P:\SWPublic\CHL_Public\CH Monthly Site Inspections\SW Inspections\SW Inspection 21\09 - Sep\Photos

<i>Category number:</i>	Action to be Completed. Suggested Remedy:
<i>Category number:</i>	Action to be Completed. Suggested Remedy:

SWPPP Modifications Necessary? (Circle **Y** or **N**)
If Y, log changes in Appendix I of SWPPP

Potential Pollutant Sources **Y / N**

Site Map **Y / N**

INSPECTION REPORT SIGNATURE PAGE

INSPECTION DATE: 9/24/2021

SITE: Cedar Hills Regional Landfill

INSPECTOR / QUALIFIED PERSONNEL

Based on professional judgment, which of the following statements is true: (select one)

The site is in compliance with the terms and conditions of the SWPPP and the ISGP.

The site is NOT in compliance with the terms and conditions of the SWPPP and the ISGP.*

* Immediately notify Environmental Compliance Coordinator

I certify that this report is true, accurate and complete, to the best of my knowledge and belief.

Printed name: Sterling Bath

Signature: _____ Date: _____

1

2

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6

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A

B

C

D

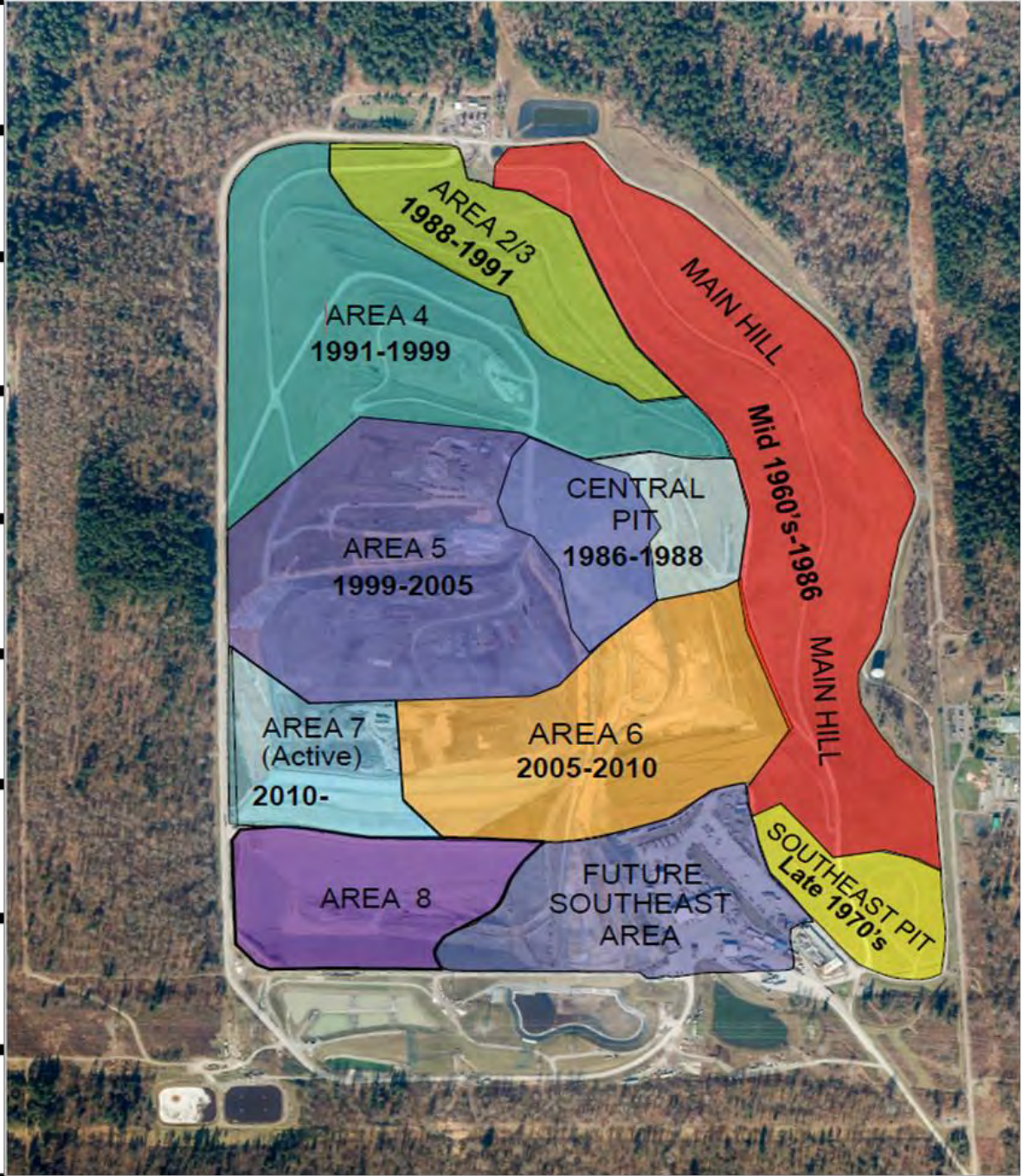
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SOLID WASTE INSPECTION REPORT

PUBLIC HEALTH - SEATTLE & KING COUNTY Downtown Office 401 - 5th Ave., Ste 1100 Seattle, WA 98104 206-263-9566	PURPOSE OF VISIT: Routine Inspection/Field Review of a Municipal Landfill establishment (PE=1006)
ESTABLISHMENT INFORMATION: CEDAR HILLS SANITARY LAND CEDAR HILLS SANITARY LAND 16645 228TH AV SE MAPLE VALLEY, WA 98038 206-296-4385 Program Record: PR0015736	INSPECTION INFORMATION: Date of Inspection: Wednesday, July 28, 2021 Time In: 11:30 am Time Out: 1:50 pm Inspector: Darshan Dhillon Result: COMPLETE

VIOLATIONS OBSERVED (if any)

OVERALL INSPECTION COMMENTS:

1.0 ACTIONS AND RECOMMENDATIONS:

- 1.1 Litter strewn on the north slope of the contaminated storm water (CSW) pond. Litter from the north slope of the CSW pond needs to be picked by August 5, 2021.
- 1.2 Lid of the CSW leak detection manhole left open. Lid needs to be replaced to prevent animals from falling into the leak detection well August 5, 2021.
- 1.3 Parts of the temporary fence around the contaminated soil removal area fell down and portions are missing, ensure that fence panels are upright position and missing portion needs to be replaced by August 5, 2021.
- 1.4 Metal covers of two sewer line valve wells located on the northeast portion of the landfill left open. These sewer wells are located close to groundwater monitoring well number 85. Please replace well lids by August 5, 2021.

2.0 OBSERVATIONS:

- 2.1 Anchor pad to hold south slope of area 7 is being built and a trench to bury landfill gas header is being dug.
- 2.2 Landfill gas laterals are being connected with the landfill gas header.
- 2.3 No water observed in the sand filter.
- 2.4 Turbidity in the storm water pond appeared to be less than 25 NTU.
- 2.5 Traffic safety measures have been in place to ensure workers safety at site. Speed signs have been posted and being observed.
- 2.6 Tipped waste is being spread and compacted by compactors.
- 2.7 Area 6 being used for screening stock piles.
- 2.8 Fire line has been built on the southwest portion under the high voltage power lines.
- 2.9 No landfill gas (LFG) exceedances were detected during LFG measurements.
- 2.10 Workers were wearing required PPE.
- 2.11 All wells were secured with padlocks.
- 2.12 Perimeter fence was kept in good repair.

NEW ENVIRONMENTAL HEALTH SERVICES OFFICE HOURS effective February 3, 2020:

- Monday, Wednesday and Friday, 8:00 am to 3:00 pm
 - Tuesdays and Thursdays, 10:30 am to 3:00 pm
- Chinook (Seattle) 206-263-9566
Eastgate (Bellevue) 206-477-8050

Dhillon

Darshan Dhillon

HEI III

PIC Phone #: 206-491-4084

Bard

Mark Monterio

Ops. Manager

Scott Barden

Email: Mark.Monterio@kingcounty.gov

INSPECTION CHECKLIST

The following items are evaluated during inspections.
Violations cited as out of compliance during this inspection are highlighted below.

Out=out of compliance

OUT**Additional Operating Criteria WAC 173-351-220(1)**

- 0837-Road dust must be controlled
- 0838-Litter must be controlled
- 0839-Scavenging must be prohibited
- 0840-Staffing must be a minimum 2 personnel on site with one at the active portion when open
- 0841-Certification of operators of solid waste landfills must be current
- 0842-Reserve operational equipment must be available and adequate
- 0843-Active area boundaries must be clearly marked
- 0844-Must compact solid waste before succeeding layers are added per WAC
- 0845-Maintain monitoring systems for groundwater, explosive gas and other monitoring per permit
- 0846-Provide orderly and sanitary recycling methods to general public unless alternatives provided
- 0847-Prohibit disposal of dangerous waste unless DWR are met
- 0848-Must allow inspections by public health

Annual Report

- 0828-Annual report due April 1st

Closure and post-closure care WAC 173-351-500

- 0852-Equipment used for groundwater monitoring is maintained
- 0856-Final cover installed to minimize, infiltration and erosion per design
- 0857-Closure plan followed for areas of the MSWLF unit within 30 days of final receipt of wa-stes
- 0858-For closed areas, closure activities must be completed within 180 days
- 0859-For closed areas post closure care must be conducted per post-closure plan and WAC
- 0860-Final cover for closed areas must be maintained (vegetation, settlement, erosion,# run on/off)
- 0861-Leachate collection systems maintained and operated per post-closure plan and WAC 173-351-300
- 0862-Gas monitoring systems maintained and operated per post-closure plan and WAC 173-351-200

Design Criteria New MSWLF expansion 173-351-300

- 0849-New MSWLF units and expansions have approved liner & leachate collection system construction

Groundwater sampling and analysis requirements WAC**173-351-410**

- 0853-Roundwater monitoring must be accordance with an approved sampling / analysis document

Liquids Restrictions

- 0826-Containers holding liquid waste may not be placed in a MSWLF unit unless meet 200 (9)(b)(i-iii)

MSLF Groundwater reporting WAC 173-351-415

- 0854-Annual groundwater report due by April 1st
- 0855-Quarterly groundwater monitoring reports submitted

MSLF Leachate Managementfor Surface Impoundments**WAC 173-350-330****Design Standards - Surface Impoundments**

- 0740-Embankments and slopes must be maintained and be in good condition
- 0741-Freeboard for the surface impoundment is > 18 inches or as specified per the permit

Ground Water monitoring requirment for surface impoundment and tanks

- 0766-Surface impoundments not equipped with a leak detection layer must meet WAC 173-350-500
- 0767-Surface impoundments w/a leak detection layer are subject to WAC 173-350-040 (5), 173-350-330(b)

OUT**Operating standards - Surface Impoundments and tanks**

- 0750-Must prevent overflowing and maintain required freeboard = 18 inches from wave action/precip
- 0751-Must control access to the site
- 0752-Must control nuisance odors for wastes or liquids
- 0753-Must control birds at impoundments storing wastes capable of attracting birds
- 0754-Records kept of weekly inspections and liner inspections at least every 5 years
- 0755-Daily records kept on-site of the quantity and type of wastes removed for at least 5 years

Operating Criteria WAC 173-351-200**Access Restriction**

- 0819-Lockable gate at each entry must be maintained and in good condition

Air Criteria

- 0816-MSWLF units must meet all applicable air standards
- 0817-Open burning of garbage is prohibited. Other types of burning only under appropriate permit
- 0818-Access must be controlled (public /animal/vehicle). Barriers must be maintained.

Cover Material Requirements

- 0806-Approved cover material must be applied at a depth of 6 in# at the end of the day or as needed
- 0807-Only approved alternative cover materials are in use and are applied at an approved depth

Disease Vectors Controlled

- 0808-Procedures must be in place to control disease vectors e g. (rodents, flies, mosquitoes, other)

Explosive Gases Control

- 0809-Methane gas must not exceed 25% of lower explosive limit for facility structures
- 0810-Methane gas concentration must not exceed lower explosive limit at the property boundary-beyond
- 0811-Methane gas concentration must not exceed 100ppm/volume of methane in offsite structures
- 0812-Explosive gases must be controlled and a routine methane monitoring program in place
- 0813-Monitoring for explosive gas occurs quarterly at a minimum
- 0814-Required measures must be taken if methane gas levels exceed limits (notify, monitor, evacuate)
- 0815-Must have procedures for methane gas level exceedance (gas levels, interim steps, remediation)

Incoming Waste Management

- 0800-Procedures must be in place for excluding the receipt of prohibited waste
- 0801-Random inspections must be conducted for incoming loads to prevent receipts of prohibited waste
- 0802-Record must be kept of random inspections of incoming loads to prevent prohibited waste
- 0803-Facility personnel must be trained to recognize prohibited wastes and training logs kept
- 0804-Immediate notification to Public Health and Ecology for any prohibited waste discovered

Performance Standards

- 0290-Must not pose a threat to human health or environment
- 0291-Protects from ground water contamination
- 0292-The facility must conform to the approved local comprehensive solid waste management plan
- 0293-Complies with RCW 70.94 Emission or ambient air quality standards

- 0294-Complies with all other local/state/federal laws and regulations

Performance Standards for groundwater monitoring

System Design

- 0850-All groundwater monitoring system must be designed and maintained per WAC 173-351-405
- 0851-All wells must be clearly labeled, capped and locked

Permit Requirements

- 0863-Permit Required

Plan of Operation

- 0829-Plan of operation is current, complete and a hard copy present at the permit approved location
- 0830-Operators handle solid waste as described in plan of operations
- 0831-Operators conducting inspections per plan of operation
- 0832-Plan of operation procedures followed for fire or explosion
- 0833-Plan of operation procedures followed for actions to take for sudden releases of gas, leachate
- 0834-Maintain and operate leachate and gas collection equipment per plan of operation
- 0835-Safety equipment listed in plan of operation must be on-site and working (shower, eyewash)
- 0836-Any additional requirements by Public Health are followed as outlined on the plan of operation

Record Keeping

- 0827-Operating record is available at the approved location and is complete for all required records

Run-on/runoff Control Systems

- 0820-Prevent run-on to the active portion of the landfill during the peak discharge from 25yr storm
- 0821-Must provide runoff control for active portions to collect & control water vol. 24hr/25yr storm
- 0822-Runoff from active portion of the landfill must be handled in accordance w. WAC 173-351-200(8)

Surface Water Requirements

- 0823-MSWLF units must not discharge pollutants into waters of the state
- 0824-Must not cause the discharge of a nonpoint source pollution to waters of the state
- 0825-Bulk or non-containerized liquid waste may not be placed in MSWLF unit unless exceptions allow

Cedar Hills Landfill Storm Water Pollution Prevention Plan Maintenance

for the period 07/01/2021 to 09/30/2021

Click the blue 'Y' to see notes

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
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Catch Basins

	Cedar Hills	0000050965	CLOSED	PMM	07/04/2021	N
	Cedar Hills	0000051233	CLOSED	PMM	08/03/2021	N
	Cedar Hills	0000051647	CLOSED	PMM	09/17/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

Control Structures

	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N
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Trash Racks

	Cedar Hills	0000050964	CLOSED	PMW	07/04/2021	N
	Cedar Hills	0000051057	CLOSED	PMW	07/12/2021	N
	Cedar Hills	0000051108	CLOSED	PMW	07/19/2021	N
	Cedar Hills	0000051187	CLOSED	PMW	07/25/2021	Y
	Cedar Hills	0000051225	CLOSED	PMW	08/03/2021	N
	Cedar Hills	0000051352	CLOSED	PMW	08/09/2021	N
	Cedar Hills	0000051438	CLOSED	PMW	08/15/2021	N
	Cedar Hills	0000051480	CLOSED	PMW	08/24/2021	N
	Cedar Hills	0000051572	CLOSED	PMW	08/31/2021	N
	Cedar Hills	0000051576	CLOSED	PMW	09/07/2021	N
	Cedar Hills	0000051646	CLOSED	PMW	09/17/2021	N
	Cedar Hills	0000051783	CLOSED	PMW	09/21/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

Ditches

	Cedar Hills	0000050417	CLOSED	PMQ	07/23/2021	N
	Cedar Hills	0000050964	CLOSED	PMW	07/04/2021	N
	Cedar Hills	0000050965	CLOSED	PMM	07/04/2021	N
	Cedar Hills	0000051057	CLOSED	PMW	07/12/2021	N
	Cedar Hills	0000051108	CLOSED	PMW	07/19/2021	N
	Cedar Hills	0000051187	CLOSED	PMW	07/25/2021	Y

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	Cedar Hills	0000051576	CLOSED	PMW	09/07/2021	N
	Cedar Hills	0000051646	CLOSED	PMW	09/17/2021	N
	Cedar Hills	0000051647	CLOSED	PMM	09/17/2021	N
	Cedar Hills	0000051783	CLOSED	PMW	09/21/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

Pipes/Culverts

	Cedar Hills	0000050417	CLOSED	PMQ	07/23/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

Ponds/Lagoons

	Cedar Hills	0000050417	CLOSED	PMQ	07/23/2021	N
	Cedar Hills	0000050964	CLOSED	PMW	07/04/2021	N
	Cedar Hills	0000051057	CLOSED	PMW	07/12/2021	N
	Cedar Hills	0000051108	CLOSED	PMW	07/19/2021	N
	Cedar Hills	0000051187	CLOSED	PMW	07/25/2021	Y
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	Cedar Hills	0000051438	CLOSED	PMW	08/15/2021	N
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	Cedar Hills	0000051783	CLOSED	PMW	09/21/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

General

	Cedar Hills	0000050417	CLOSED	PMQ	07/23/2021	N
	Cedar Hills	0000050964	CLOSED	PMW	07/04/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
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	Cedar Hills	0000051783	CLOSED	PMW	09/21/2021	N
	Cedar Hills	0000051890	CLOSED	After Storm	09/30/2021	N

Leachate System

	LEPS	0000050981	CLOSED	PMW	07/06/2021	N
	LEPS	0000050990	CLOSED	PMM	07/14/2021	Y
	LEPS	0000051040	CLOSED	PMW	07/12/2021	N
	LEPS	0000051118	CLOSED	PMW	07/19/2021	N
	LEPS	0000051178	CLOSED	PMW	07/26/2021	N
	LEPS	0000051235	CLOSED	PMW	08/02/2021	N
	LEPS	0000051244	CLOSED	PMM	08/04/2021	Y
	LEPS	0000051343	CLOSED	PMW	08/09/2021	N
	LEPS	0000051427	CLOSED	PMW	08/15/2021	N
	LEPS	0000051464	CLOSED	PMW	08/23/2021	N
	LEPS	0000051522	CLOSED	PMW	08/30/2021	N
	LEPS	0000051531	CLOSED	PMW	09/07/2021	N
	LEPS	0000051627	CLOSED	PMW	09/17/2021	N
	LEPS	0000051635	CLOSED	PMM	09/14/2021	Y
	LEPS	0000051790	CLOSED	PMW	09/21/2021	Y
	LEPS	0000051822	CLOSED	PMW	09/26/2021	N
	Cedar Hills	0000050417	CLOSED	PMQ	07/23/2021	N
	CHPS1	0000051047	CLOSED	PMW	07/12/2021	N
	CHPS1	0000051125	CLOSED	PMW	07/20/2021	N
	CHPS1	0000051185	CLOSED	PMW	07/26/2021	N
	CHPS1	0000051241	CLOSED	PMW	08/02/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPS1	0000051350	CLOSED	PMW	08/09/2021	Y
	CHPS1	0000051434	CLOSED	PMW	08/15/2021	N
	CHPS1	0000051471	CLOSED	PMW	08/23/2021	N
	CHPS1	0000051529	CLOSED	PMW	08/30/2021	N
	CHPS1	0000051538	CLOSED	PMW	09/07/2021	N
	CHPS1	0000051633	CLOSED	PMW	09/17/2021	N
	CHPS1	0000051798	CLOSED	PMW	09/22/2021	N
	CHPS1	0000051828	CLOSED	PMW	09/26/2021	N
	CHPS1	0000050988	CLOSED	PMW	07/06/2021	N
	CHPS2	0000050987	CLOSED	PMW	07/06/2021	Y
	CHPS2	0000051046	CLOSED	PMW	07/12/2021	N
	CHPS2	0000051124	CLOSED	PMW	07/20/2021	N
	CHPS2	0000051184	CLOSED	PMW	07/26/2021	N
	CHPS2	0000051240	CLOSED	PMW	08/02/2021	N
	CHPS2	0000051349	CLOSED	PMW	08/09/2021	N
	CHPS2	0000051433	CLOSED	PMW	08/15/2021	Y
	CHPS2	0000051470	CLOSED	PMW	08/23/2021	Y
	CHPS2	0000051528	CLOSED	PMW	08/30/2021	N
	CHPS2	0000051537	CLOSED	PMW	09/07/2021	N
	CHPS2	0000051796	CLOSED	PMW	09/17/2021	N
	CHPS2	0000051830	CLOSED	PMW	09/21/2021	N
	CHPS2	0000051831	CLOSED	PMW	09/26/2021	N
	CHPS3	0000050985	CLOSED	PMW	07/06/2021	N
	CHPS3	0000051044	CLOSED	PMW	07/12/2021	N
	CHPS3	0000051122	CLOSED	PMW	07/19/2021	N
	CHPS3	0000051182	CLOSED	PMW	07/26/2021	N
	CHPS3	0000051238	CLOSED	PMW	08/02/2021	N
	CHPS3	0000051347	CLOSED	PMW	08/09/2021	N
	CHPS3	0000051431	CLOSED	PMW	08/15/2021	N
	CHPS3	0000051468	CLOSED	PMW	08/23/2021	N
	CHPS3	0000051526	CLOSED	PMW	08/30/2021	N
	CHPS3	0000051535	CLOSED	PMW	09/07/2021	N
	CHPS3	0000051631	CLOSED	PMW	09/17/2021	N
	CHPS3	0000051794	CLOSED	PMW	09/22/2021	N
	CHPS3	0000051826	CLOSED	PMW	09/26/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHPS4	0000050984	CLOSED	PMW	07/06/2021	N
	CHPS4	0000051043	CLOSED	PMW	07/12/2021	N
	CHPS4	0000051121	CLOSED	PMW	07/19/2021	Y
	CHPS4	0000051181	CLOSED	PMW	07/26/2021	N
	CHPS4	0000051243	CLOSED	PMW	08/02/2021	N
	CHPS4	0000051346	CLOSED	PMW	08/09/2021	N
	CHPS4	0000051430	CLOSED	PMW	08/15/2021	N
	CHPS4	0000051467	CLOSED	PMW	08/23/2021	Y
	CHPS4	0000051525	CLOSED	PMW	08/30/2021	Y
	CHPS4	0000051534	CLOSED	PMW	09/07/2021	Y
	CHPS4	0000051630	CLOSED	PMW	09/17/2021	N
	CHPS4	0000051793	CLOSED	PMW	09/21/2021	Y
	CHPS4	0000051825	CLOSED	PMW	09/26/2021	N

Landfill Cover

	CHSTOCKPILE	0000024641	CLOSED	PMV	08/01/2021	N
	CHAPONDS	0000024642	CLOSED	PMV	08/01/2021	N
	CHAREA4	0000024643	CLOSED	PMV	08/01/2021	N
	CHAREA5	0000024644	CLOSED	PMV	08/01/2021	N
	CHAREA6	0000024645	CLOSED	PMV	08/01/2021	N
	CHAREAS23	0000024648	CLOSED	PMV	08/01/2021	N
	CHCENTRALPIT	0000024649	CLOSED	PMV	08/01/2021	N
	CHEMH	0000024650	CLOSED	PMV	08/01/2021	N
	CHSEPA	0000024651	CLOSED	PMV	08/01/2021	N
	CHSSWA	0000024652	CLOSED	PMV	08/01/2021	N
	CHSWMH	0000024653	CLOSED	PMV	08/01/2021	N
	CHNFLARESTN	0000024654	CLOSED	PMV	08/01/2021	N
	CHSTOCKPILE	0000024779	CLOSED	PMV	08/13/2021	N
	CHAPONDS	0000024780	CLOSED	PMV	08/13/2021	N
	CHAREA4	0000024781	CLOSED	PMV	08/13/2021	N
	CHAREA5	0000024782	CLOSED	PMV	08/13/2021	N
	CHAREA6	0000024783	CLOSED	PMV	08/13/2021	N
	CHAREAS23	0000024786	CLOSED	PMV	08/13/2021	N
	CHCENTRALPIT	0000024787	CLOSED	PMV	08/13/2021	N
	CHEMH	0000024788	CLOSED	PMV	08/13/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHSEPA	0000024789	CLOSED	PMV	08/13/2021	N
	CHSSWA	0000024790	CLOSED	PMV	08/13/2021	N
	CHSWMH	0000024791	CLOSED	PMV	08/13/2021	N
	CHNFLARESTN	0000024792	CLOSED	PMV	08/13/2021	N
	CHSTOCKPILE	0000024918	CLOSED	PMV	09/24/2021	N
	CHAPONDS	0000024919	CLOSED	PMV	09/24/2021	N
	CHAREA4	0000024920	CLOSED	PMV	09/24/2021	N
	CHAREA5	0000024921	CLOSED	PMV	09/25/2021	N
	CHAREA6	0000024922	CLOSED	PMV	09/25/2021	N
	CHAREAS23	0000024926	CLOSED	PMV	09/25/2021	N
	CHCENTRALPIT	0000024927	CLOSED	PMV	09/25/2021	N
	CHEMH	0000024928	CLOSED	PMV	09/25/2021	N
	CHSEPA	0000024929	CLOSED	PMV	09/25/2021	N
	CHSSWA	0000024930	CLOSED	PMV	09/25/2021	N
	CHSWMH	0000024931	CLOSED	PMV	09/25/2021	N
	CHNFLARESTN	0000024932	CLOSED	PMV	09/25/2021	N

Landfill Gas

	CHAREA5W	0000024593	CLOSED	PMW	07/10/2021	N
	CHAREA5W	0000024677	CLOSED	PMW	07/19/2021	N
	CHAREA5W	0000024736	CLOSED	PMW	08/27/2021	N
	CHAREA5W	0000024815	CLOSED	PMW	08/27/2021	N
	CHAREA5W	0000024875	CLOSED	PMW	09/13/2021	N
	CHAREA5W	0000024955	CLOSED	PMW	09/20/2021	N
	CHEMH	0000024622	CLOSED	PMW	07/14/2021	N
	CHEMH	0000024693	CLOSED	PMW	07/28/2021	N
	CHEMH	0000024759	CLOSED	PMW	08/04/2021	N
	CHEMH	0000024831	CLOSED	PMW	08/18/2021	N
	CHEMH	0000024899	CLOSED	PMW	09/14/2021	N
	CHEMH	0000024971	CLOSED	PMW	09/29/2021	N
	CHAREAS23	0000024604	CLOSED	PMW	07/26/2021	N
	CHAREAS23	0000024684	CLOSED	PMW	07/27/2021	N
	CHAREAS23	0000024746	CLOSED	PMW	08/02/2021	N
	CHAREAS23	0000024822	CLOSED	PMW	08/09/2021	N
	CHAREAS23	0000024887	CLOSED	PMW	09/02/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHAREAS23	0000024962	CLOSED	PMW	09/16/2021	N
	CHAREA6	0000024561	CLOSED	PMW	07/26/2021	N
	CHAREA6	0000024656	CLOSED	PMW	07/27/2021	N
	CHAREA6	0000024703	CLOSED	PMW	08/01/2021	N
	CHAREA6	0000024794	CLOSED	PMW	08/31/2021	N
	CHAREA6	0000024840	CLOSED	PMW	09/01/2021	N
	CHAREA6	0000024840	CLOSED	PMW	09/03/2021	N
	CHAREA6	0000024934	CLOSED	PMW	09/28/2021	N
	CHSEPA	0000024582	CLOSED	PMW	07/09/2021	N
	CHSEPA	0000024669	CLOSED	PMW	07/23/2021	N
	CHSEPA	0000024724	CLOSED	PMW	08/09/2021	N
	CHSEPA	0000024807	CLOSED	PMW	08/16/2021	N
	CHSEPA	0000024863	CLOSED	PMW	09/01/2021	N
	CHSEPA	0000024947	CLOSED	PMW	09/28/2021	N
	CHCMH	0000024626	CLOSED	PMW	07/06/2021	N
	CHCMH	0000024626	CLOSED	PMW	07/08/2021	N
	CHCMH	0000024694	CLOSED	PMW	07/21/2021	N
	CHCMH	0000024694	CLOSED	PMW	07/22/2021	N
	CHCMH	0000024694	CLOSED	PMW	07/28/2021	N
	CHCMH	0000024764	CLOSED	PMW	08/02/2021	N
	CHCMH	0000024764	CLOSED	PMW	08/03/2021	N
	CHCMH	0000024764	CLOSED	PMW	08/04/2021	N
	CHCMH	0000024764	CLOSED	PMW	08/05/2021	N
	CHCMH	0000024832	CLOSED	PMW	08/25/2021	N
	CHCMH	0000024832	CLOSED	PMW	08/29/2021	N
	CHCMH	0000024832	CLOSED	PMW	08/30/2021	N
	CHCMH	0000024903	CLOSED	PMW	09/02/2021	N
	CHCMH	0000024903	CLOSED	PMW	09/03/2021	N
	CHCMH	0000024903	CLOSED	PMW	09/04/2021	N
	CHCMH	0000024972	CLOSED	PMW	09/15/2021	N
	CHAREA5E	0000024592	CLOSED	PMW	07/08/2021	N
	CHAREA5E	0000024676	CLOSED	PMW	07/19/2021	N
	CHAREA5E	0000024734	CLOSED	PMW	08/07/2021	N
	CHAREA5E	0000024814	CLOSED	PMW	08/21/2021	N
	CHAREA5E	0000024874	CLOSED	PMW	09/13/2021	N

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
	CHAREA5E	0000024954	CLOSED	PMW	09/20/2021	N

Landfill Roads

CHSTOCKPILE	0000024641	CLOSED	PMR	08/01/2021	N
CHSTOCKPILE	0000024779	CLOSED	PMR	08/13/2021	N
CHSTOCKPILE	0000024918	CLOSED	PMR	09/24/2021	N
CHACTIVEAREA	0000024632	CLOSED	PMR	08/01/2021	N
CHACTIVEAREA	0000024770	CLOSED	PMR	08/13/2021	N
CHACTIVEAREA	0000024909	CLOSED	PMR	09/25/2021	N
CHPSR	0000024634	CLOSED	PMR	08/01/2021	N
CHPSR	0000024772	CLOSED	PMR	08/13/2021	N
CHPSR	0000024911	CLOSED	PMR	09/25/2021	N
CHMAINGATE	0000024633	CLOSED	PMR	08/01/2021	N
CHMAINGATE	0000024771	CLOSED	PMR	08/13/2021	N
CHMAINGATE	0000024910	CLOSED	PMR	09/25/2021	N

Landfill Roads

Sweeper	0	see Equipment Operator Spreadsheet	NA	0	N
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Equipment

Click the word 'Equipment' to see Work Order Numbers

Cedar Hills Area 5 Maintenance

for the period 07/01/2021 to 09/30/2021

Click the blue 'Y' to see notes

Item	Location	Work Order Number	Work Order Status	PM/Repair Type	Completion Date	Work Order Has Notes
Area 5						
	CHAREA5	0000024644	CLOSED	Monthly Gas System PM	08/01/2021	N
	CHAREA5	0000024644	CLOSED	Monthly Stormwater PM	08/01/2021	N
	CHAREA5	0000024644	CLOSED	Monthly Cover System PM	08/01/2021	N
	CHAREA5	0000024782	CLOSED	Monthly Gas System PM	08/13/2021	N
	CHAREA5	0000024782	CLOSED	Monthly Stormwater PM	08/13/2021	N
	CHAREA5	0000024782	CLOSED	Monthly Cover System PM	08/13/2021	N
	CHAREA5	0000024921	CLOSED	Monthly Gas System PM	09/25/2021	N
	CHAREA5	0000024921	CLOSED	Monthly Stormwater PM	09/25/2021	N
	CHAREA5	0000024921	CLOSED	Monthly Cover System PM	09/25/2021	N
	CHAREA5E	0000024595	CLOSED	Monthly Header PM	07/08/2021	N
	CHAREA5E	0000024735	CLOSED	Monthly Header PM	08/07/2021	N
	CHAREA5E	0000024877	CLOSED	Monthly Header PM	09/29/2021	N
	CHAREA5W	0000024594	CLOSED	Monthly Header PM	07/10/2021	N
	CHAREA5W	0000024737	CLOSED	Monthly Header PM	08/14/2021	N
	CHAREA5W	0000024876	CLOSED	Monthly Header PM	09/13/2021	N

Appendix B:
Gas Monitoring Reports

DNRP / King County Solid Waste Serpentine Surface Monitoring Data

Landfill Site: Cedar Hills

Date: 9-28-21

Cal. Time: 8:20am

Calibration : SEM
Test Instrument used: ~~DIA~~ 5000

Technician: RB

Surveyor RS

Cal. Gas Lot No: 106191

Cal Gas Used:

CH₄ 500 ppm
O₂ zero

Barometric Pressure	Time
Start <u>29.86</u>	<u>8:30am</u>
Stop <u>29.97</u>	<u>29.97 3:55pm</u>

90% response time in seconds:

1 2 seconds
2 3 seconds
3 2 seconds
avg. 2 seconds

Weather Conditions: Mostly cloudy

Wind Speed &
Direction (out of): 9 mph SW

Northing (UTM #)	Easting (10 T #)	Time	Comments
			No Exceedances detected

~~11-15-21-1113 3257001~~
~~11-15-21-1113 3257001~~



A5IW3
600 PPM
21-SEP-2021
2.3 PPM
01-OCT-2021
3 PPM
21-OCT-2021



E-31
500 PPM
20-SEP-2021
48 PPM
30-SEP-2021
2.5 PPM
20-OCT-2021



ROCK
STOCK
PILE AREA

SOIL
STOCK
PILE

AREA 7 UNDER
CONSTRUCTION

AREA 8

 COVER PENETRATION EMISSION SOURCE
 AREA EMISSION SOURCE

 AREAS WHERE PATH DOES NOT CHANGE
 AREAS WHERE PATH MAY CHANGE DUE TO CONSTRUCTION