

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	01/17/2024	
Media Program:	Water	
Regulatory Program(s)	CWA	
Company Name:	City of Belen	
Facility Name:	Belen Wastewater Treatment Plant	
Facility Physical Location:	1300 Conservancy Rd	
(city, state, zip code)	Belen, NM 87002	
Mailing address:	100 South Main St	
(city, state, zip code)	Belen, NM 87002	
County/Parish:	Valencia County	
Facility Phone Number	505-966-2580	
Facility Contact:	Robert Noblin, Jr.	Robert Noblin, Jr.
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FRS Number:	110001934462	
Identification/Permit Number:	NM0020150	
Media Identifier Number:	Water	
NAICS:	221320, 541380	
SIC:	4952, 8734	
Personnel participating in inspection:		
<i>Name</i>	<i>Affiliation/mailcode</i>	<i>Title</i>
Amy Andrews, P.E.	EPA/6ECD-WM	Engineer/Lead Inspector
Magda Vargas	EPA/6ECD-WR	Inspector
Mariela Reyna	EPA/6EN-WR	Inspector
Nafis Fuad	NMED/SWQB	Inspector/Supervisor
James Andel	NMED/SWQB	Inspector
Jeffrey Gatewood	City of Belen	Wastewater Plant Superintendent
Benjamin Morales	City of Belen	Wastewater Plant Chief Operator
John Ivey	City of Belen	Wastewater Laboratory Technician
EPA Lead Inspector Signature/Date	AMY ANDREWS Amy Andrews AMY ANDREWS c=US, o=U.S. Government, ou=Environmental Protection Agency, cn=AMY ANDREWS, 0.9.2342.19200300.100.1.1=68001003655888 2024.03.19 09:31:36 -06'00'	
		Date
Supervisor Signature/Date	ROBERTO BERNIER Roberto Bernier Digitally signed by ROBERTO BERNIER Date: 2024.03.19 10:53:41 -05'00'	
		Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

Environmental Protection Agency (EPA) Region 6 inspector Amy Andrews and New Mexico Environment Department (NMED) inspectors Nafis Fuad and James Andel arrived at the City of Belen Wastewater Treatment Plant (WWTP) at 8:05 AM on January 17, 2024, for an unannounced inspection. We met with Jeffrey Gatewood, Benjamin Morales, and John Ivey with the City of Belen. I explained to the facility we would be conducting a virtual inspection of their laboratory as part of the on-site inspection of the facility. EPA Region 6 inspectors Magda Vargas and Mariela Reyna were in attendance remotely via Microsoft Teams video call. I presented my credentials to Mr. Gatewood and informed him that this was an EPA inspection to determine compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit and the Clean Water Act (CWA), with an emphasis on the laboratory. The inspection was conducted under the authority of the NPDES permit program, in accordance with the Federal CWA. The scope of the inspection is to evaluate the compliance of the facility's laboratory and sampling requirements as well as the WWTP general operation requirements as prescribed in the CWA and the NPDES Permit. This report is based on information supplied by City of Belen representatives (the permittee), observations made by the EPA inspectors, and records and reports maintained by the permittee and the EPA.

FACILITY DESCRIPTION

The City of Belen WWTP is classified as a major municipal discharger under the CWA, Section 402, of the NPDES permit program and is authorized to discharge up to 1.2 million gallons per day (MGD) based on design flow, with an actual average discharge maintained around 0.4 MGD. The population served is approximately 7,400 residents according to 2020 United States Census. Discharge is to receiving waters named Bosque Drain and thence to the Rio Grande in waterbody segment number 20.6.4.105 (NMAC, State of New Mexico Standards for Interstate and Intrastate Surface Waters) of the Rio Grande Basin. This segment includes the designated uses of irrigation, marginal warmwater aquatic life, livestock watering, public water supply, wildlife habitat and primary contact.

LABORATORY DESCRIPTION

The facility's laboratory is not accredited under national or private programs. There are eight (8) full time wastewater treatment operators, one (1) of which performs the majority of the laboratory analysis with occasional assistance from four (4) others. At the time of the inspection, the facility had three (3) certified operators licensed by the New Mexico Water Quality Control Commission (NMWQCC). The main laboratory technician holds a Wastewater Level 1 (WW1). Of the four (4) support technicians, two (2) do not hold certifications and two (2) hold Wastewater Level 4 (WW4), Wastewater Level 3 (WW3), and Wastewater Lab 2 (WWL2) certifications collectively. The laboratory performs sample analyses of the following parameters for compliance with their respective NPDES permit: Total Residual Chlorine (TRC), Total Suspended Solids (TSS), E. coli, pH, and 5-Day Biochemical Oxygen Demand (5-Day BOD).

Analyses for nitrate and dichlorobromomethane as well as pollutant screening analyses are sent to Eurofins Environmental Testing South Central, LLC (previously Hall Environmental Laboratory), in Albuquerque, NM. Whole effluent testing is sent to Bio-Aquatic Testing, Inc. in Carrollton, TX.

PLANT OPERATIONS DESCRIPTION

The Belen WWTP is an activated sludge facility. The main plant lift station consists of a wet well and four submersible pumps, each rated for 880 gallons per minute. Entrance works include a bar screen and Parshall Flume. All flow from the entrance works goes to the grit tank, where high specific gravity solids are dropped out of the raw wastewater influent in the grit chamber. Slurry from the grit chamber is taken to the grit classifier and de-watered. The grit solids are disposed of in a landfill. The wastewater flow from the grit chamber is split between the two aeration basins, although either of the basins can handle the entire flow for maintenance, if necessary. Flow from the aeration basins is split between two secondary clarifiers. From the clarifier(s), all wastewater flow is treated with chlorine gas through the chlorine contact chamber, chlorine contact time is around 30-45 minutes, and then is dechlorinated using sulfur dioxide. Water is then discharged via a rectangular weir into the Bosque Drain.

Sludge is drawn from the bottom of the secondary clarifiers and pumped to the sludge thickener unit. The sludge is decanted (thickened) in this unit prior to being pumped to the aerobic digesters. Supernatant from the sludge thickener is piped back to the influent wet well and re-introduced to the aeration basins. After digestion, sludge is taken to the sludge drying beds. Drainage from the beds is routed back to the wet well at the Main Plant Lift Station. After drying to approximately 50 percent total solids, the sludge is moved to a sludge composting pad for composting. The sludge is composted after drying without the use of amendment materials. After composting, the sludge is used as a soil conditioner on public and private property.

Section II - OBSERVATIONS

At the opening conference, introductions were made, and the inspection objectives were discussed. I provided a document request list and information to be reviewed as part of the inspection. Facility personnel provided a description of the operational processes of the facility and the laboratory analyses that are conducted on-site. After the opening meeting we toured the WWTP in-house laboratory, with EPA inspectors Magda Vargas and Mariela Reyna participating virtually. After the tour of the laboratory, a tour of the treatment train was conducted beginning with the flow from influent collection at the headworks to the effluent flowing to the Bosque Drain at the outfall.

LABORATORY OBSERVATIONS

During the review of laboratory documents and the laboratory review of the facility, the following observations were made.

Records of Monitoring

The following observations were made on the laboratory's records of monitoring.

1. The records of monitoring were not properly maintained, as detailed below.
 - a) The records of monitoring had been photocopied several times and were barely legible. Some were photocopied sheets that had data erased using white out. It was difficult to determine whether current data had been erased using white out or not. Items on records of monitoring that need to be corrected must have a single line drawn through them and be initialed with the date and time.
 - b) Uncontrolled documents in the form of Post It notes were observed posted on the walls of the laboratory. See Appendix 1, photo 1.
 - c) The methods cited did not clearly cite an approved EPA method, as detailed below.
 - i. The pH records of monitoring cite *Standard Methods of the Treatment of Water and Wastewater* (SM) 22nd Ed, Section 4500H, and does not clearly define which alphabetical section is used.
 - ii. The *E. coli* records of monitoring cite "M E. coli Blue 24." This is an incomplete citation; it appears that the method used is m-ColiBlue24®.
 - d) For all records of monitoring, times are recorded at exactly the ten- and five-minute marks and are consistently at the exact same time every day, with few exceptions. Therefore, it appears that an approximate time is recorded, which is not an accurate representation of the data and analysis of the samples.
 - e) For all records of monitoring, measurements are rounded to significant digits inconsistently and not following standard rounding protocol. These practices produce inaccurate results.
 - f) On several instances no chain of custody was provided to the contract laboratory that performs the nitrate and dichlorobromomethane analysis for the facility.
2. At least one (1) instance was observed where the sample analysis and sample collection for two (2) separate methods were performed at the same time by the same technician. See Appendix 1, photos 2 & 3.
3. At least one (1) instance was observed in which the time and date of analysis as well as analyst signature were filled out in advance of the actual analysis by at least one (1) calendar day. See Appendix 1, photo 4.
4. At least one (1) instance was observed in which the technician had yet to record data for analysis that had been completed five (5) days previous based on their observed methods. See Appendix 1, photo 5.

5. The temperature log does not accurately document the temperature, nor does it demonstrate that the equipment could maintain the required temperature for the duration of the analysis, as detailed below.
 - a) Temperature is recorded on the log once a day. A minimum of two (2) recordings a day is required to ensure the equipment is sustaining the required temperature throughout the day.
 - b) Temperature is recorded at exactly 7am every day. No variation in the day-to-day recorded time suggests that an approximate time is being used. Therefore, it appears that the actual time of the reading is not being recorded.
 - c) The recorded temperatures are consistently the same and are the exact temperature needed for analysis. No variation in the recorded temperature suggests that an approximate temperature is being used. Therefore, it appears that the actual read temperature is not being recorded.
 - i. The inspectors observed the *E. coli* incubator at 35.2°C, different from the 35.1°C that has been previously consistently recorded, see Appendix 1 photo 6.
 - ii. The thermometer in the *E. coli* incubator was observed to be touching the bottom of a glass container in the incubator.
 - iii. The inspectors observed the BOD incubator at 20.2°C, different from the 20.1°C that has been consistently reported, see Appendix 1 photo 7.
6. Records of monitoring for reliable documentation is insufficient for TSS. See Appendix 2 for representative examples.
 - a) The unit of measurement labeled for the initial weight of the sample is grams (g), but the data recorded is in milligrams (mg). The exact time of sample collection is not recorded for individual samples composited.
 - b) The record of temperature for the refrigerator and oven is autogenerated on the record of monitoring prior to analysis and is not an accurate representation of the temperature at the time of sample drying.
 - c) Quality control samples are not included for each analysis. A duplicate is required for all analysis in batches less than or equal to 20 samples. Currently, quality control samples are performed twice a month.
 - d) No variation in the recorded times as noted below suggest that an approximate time is recorded instead of actual time.
 - i. The difference between sample analysis and drying time is the same and exactly five (5) minutes apart, with few exceptions.
 - ii. The difference between the beginning and end of dry time is always exactly one (1) hour.
 - e) There is no start or stop time recorded for the second drying time.
 - f) In the TRC column of the records of monitoring, no value is recorded on the physical document. A value of zero (0) is entered in the electronic document. See Appendix 2 for representative examples.

7. Records of monitoring for reliable documentation is insufficient for *E. coli*. See Appendix 2 for representative examples.
 - a) No variation in the recorded time as noted below suggests that the time recorded is being rounded and is not an accurate representation of the analysis.
 - i. The difference between the recorded time of sample collection and the recorded time of arrival is always five (5) minutes, with few exceptions.
 - ii. On several instances, the difference between recorded time of sample collection and the recorded time of arrival is less than the usual five (5) minutes.
 - iii. The difference between recorded time of arrival and the recorded time of analysis is always 15 minutes, with few exceptions.
 - iv. The difference between the recorded time for start and end of incubation is always exactly 24 hours.
 - b) The pH is recorded on the *E. coli* bench sheet with fewer significant figures than is measured on the instrumentation used.
 - c) Data representation and recording is insufficient.
 - i. Data is not labeled with enough information to distinguish individual samples.
 - ii. Units of measurement are not included.
 - iii. Cells are not properly labeled to represent data.
 - iv. There is a significant amount of empty and unlabeled cells.
 - v. Calculations are not clearly labeled.
 - vi. Results are not written in the designated cell.
 - vii. There is no designated area to record the presence or quantity of colonies that are a color other than blue.
 - d) Measurements are being calculated erroneously. Per the standard method used, if the sample filtered does not produce any colonies, its volume should still be used in the calculation.
8. Records of monitoring for reliable documentation is insufficient for pH. See Appendix 2 for representative examples.
 - a) The difference between recorded time of arrival and the recorded time of analysis is always 5 minutes, with few exceptions. Therefore, it appears that the time recorded is being rounded and is not an accurate representation of the analysis.
 - b) Clarity monitoring as a reference for the quality of standards is autogenerated on the record of monitoring prior to analysis and not manually recorded for each calibration.
 - c) Instantaneous flow is recorded with fewer significant figures than is measured on the instrumentation used and no unit of measurement is used.
9. Records of monitoring for reliable documentation is insufficient for BOD. See Appendix 2 for representative examples.
 - a) The difference between the recorded time for beginning and end of incubation is always the same and exactly 5 days apart. Therefore, it appears that the time recorded is being rounded and is not an accurate representation of the analysis.

- b) The difference between the time of analysis for various sample sets is exactly ten minutes. No variation in the recorded time suggests that the time recorded is being rounded and is not an accurate representation of the analysis.
 - c) The instantaneous flow is recorded with less significant figures than are measured on the instrumentation and no unit of measurement is used.
 - d) The pH is recorded with less significant figures than are measured on the instrumentation used.
 - e) The volume of standard and seed used is autogenerated on the record of monitoring prior to analysis and not an accurate representation of the actual volume.
 - f) Quality control is insufficient to produce accurate and reliable results.
 - i. The temperature of the samples is not recorded. It appears that it is not being measured and thus it cannot be assured that the samples are reaching 20 degrees Celsius before they are measured as is required by the standard method.
 - ii. There is no record of the Dissolved Oxygen meter being calibrated before each measurement. It appears that calibration is not being performed.
 - iii. There is no record of the influent flow being recorded. This data is necessary for the final calculation of BOD.
 - iv. There is no record of the time nor temperature for the start and end of incubation.
10. Records of monitoring for reliable documentation is insufficient for TRC. See Appendix 2 for representative examples.
- a) The difference between sample collection and analysis is always the same, with few exceptions. No variation in the recorded time suggests that the time recorded is being rounded and is not an accurate representation of the analysis.

Reagents, Standards, and Equipment

The following observations were made on the laboratory's reagents, standards, and equipment.

- 11. Reagent bottles were not labeled to accurately represent their contents, such as solution/reagent name, open date, and expiration date. See Appendix 1, photos 8, 9, & 10.
- 12. As of March 14, 2024, the facility did not provide documentation of the National Institute of Standards and Technology (NIST) certified calibration for the following equipment and instrumentation.
 - a) BOD Incubator
 - b) Spectrophotometer
 - c) *E. coli* incubator
 - d) pH meter
 - e) Do meter
 - f) Thermometers
 - g) An invoice was provided which listed yearly service and calibration services rendered to the following instrumentation and equipment. An invoice is not the equivalent of a

calibration certification and therefore is not sufficient documentation of a NIST certified calibration.

- i. Incubator (unspecified)
 - ii. Spectrophotometer
 - iii. Fume hood
 - iv. Balance
13. None of the temperature-controlled equipment had calibrated thermometers with correction factors with which to monitor the operating temperature. Temperature controlled equipment must have a NIST certified calibration a minimum of annually by a qualified third-party technician.
- a) The equipment used for TSS, BOD, and *E. coli* used built in thermometers, but these thermometers have no record of calibration or evidence that laboratory technicians are checking the thermometers for accuracy and precision. See Appendix 1, photos 6, 7, & 11.
 - b) The *E. coli* incubator had a secondary thermometer which had an expired calibration from 2020. See Appendix 1, photos 12 & 13.
 - c) The refrigerator had a thermometer that had no calibration or correction factor information associated with it.
14. Several reagents housed in the laboratory were expired per the manufacturer's expiration. See Appendix 1, photos 14 & 15.
15. Residue was seen on the bottom of plastic containers used for sample collection and testing. See Appendix 1, photos 16 & 17.
16. The balance is not routinely calibrated before being used for sample analysis.
17. The petri dishes used for analyses of *E. coli* are not sterile as they are stored in an open bag which allows for the possibility of contamination.

Standard Operating Procedures and Supporting Documentation

The following observations were made on the laboratory's standard operating procedures and supporting documentation.

18. The standard operating procedures (SOPs) provided by the facility are not properly maintained, as detailed below.
- a. None of the provided SOPs reference the approved EPA method used.
 - b. There is no review date listed and the documents do not appear to be controlled documents as they do not seem to have been written or updated recently, and or copies of them may not be kept in a controlled location.
19. Data qualifiers and requirements for accurate testing are not included in the procedure for BOD analysis.
- a) No explanation is included on what to do if the initial DO of the dilution water is not at least 7.5 mg/L.
 - b) No explanation is included on what to do if the residual DO is less than 1.0 mg/L and/or if DO depletion is less than 2.0 mg/L.

- c) There is no mention of the need to prevent air bubbles and head space in the bottles being filled with sample.
 - d) Temperature and time requirements of incubation are not included.
 - e) There is no written standard method on how to calibrate the DO meter, nor that the DO meter must be calibrated before sample analysis.
 - f) There is no written standard detailing the volume of sample that is collected for analysis or description of where the sample is collected from.
20. Data qualifiers and requirements for accurate testing are not included in the procedure for TSS analysis.
- a) The required temperature of the oven is not provided.
 - b) There is no explanation of how the results are calculated.
 - c) There is no mention of the requirement to bring the sample to room temperature before measuring or that the temperature, time of incubation, and second weight must be recorded.
 - d) The procedure for filter preparation is not included.
 - e) There is no mention of the need to stir and pipet the sample for proper homogenization of the final composite solution.
 - f) There is no written standard detailing the volume of sample that is collected for analysis.
21. Procedures to ensure accurate testing is missing in the *E. coli* SOP.
- a) There is no mention of how much sample to collect or the sample collection procedures.
 - b) The location of sample collection is not mentioned.
 - c) There is no mention of the requirement to rinse bottles three times.
 - d) The alcohol solution concentration required for sterilization is not specified.
 - e) There is no mention of what to do if the presence of colonies of any color other than blue is observed.
 - f) There is no written standard detailing the volume of sample that is collected for analysis or description of where the sample is collected from.
22. Instructions for the measurement of TRC are insufficient to perform the procedure.
- a) There is no mention of how to conduct the analysis after the sample is placed in the instrument.
 - b) The required wait time after addition of reagents is not specified.
 - c) The instrument's program used for analysis is not specified.
 - d) There is no written standard detailing the volume of sample that is collected for analysis or description of where the sample is collected from.
23. Instructions for the measurement of pH are insufficient to perform the procedure.
- a) There is no written standard detailing the volume of sample collected for analysis or description of where the sample is collected from.
24. There is no written standardized procedure for Biochemical Monitoring sample collection.
25. There is no written standardized procedure for the collection of samples used for nitrate and dichlorobromomethane analysis by contract laboratories.

26. There is no written standardized procedure for the use of the Autoclave to ensure sterilization of items. No device is used to certify sterilization.
27. The facility does not track the internal or external training received by the operators.

Observed Methods

The following observations were made on the observed methods used by the laboratory during the inspection.

28. The method used for TRC differed from the EPA approved method as detailed below.
 - a) The sample volume used in analysis is measured with a beaker and not a volumetric method.
 - b) After the addition of the free chlorine reagent, technicians are waiting three (3) minutes to analyze the sample instead of the two (2) minutes as required by the method.
 - c) Technicians are not adding the free chlorine reagent to the sample and sample cell used to blank the instrument, as required by method.
29. Dichlorobromomethane is a volatile organic compound, and the sample must be taken directly from the source into a volatile organics (VOA) glass sample bottle, see Appendix 1, photo 18, with zero headspace so that the sample doesn't volatilize into the air of the bottle. The permittee reported that they have been collecting the composite sample by hand and storing each aliquot in a small plastic bottle, with headspace in each aliquot, in the laboratory refrigerator. Once they have all the aliquots, they mix them together in a graduated cylinder and pour the sample into the VOA bottles (without headspace). This headspace and mixing allows the pollutant to volatilize into the air inside the bottle. Due to the extra time the samples are exposed to air and mixing, all samples collected to date have been under-reporting the actual amount of pollutant present in the sample. The only way to collect the sample as written in the permit, is for the permittee to collect each aliquot directly into the three (3) VOA bottles and have the contract laboratory composite the samples without headspace and mixing. The permittee is advised to contact their EPA permit writer to request a permit modification of this permit requirement.

PLANT OPERATIONS OBSERVATIONS

After the tour of the laboratory, a tour of the treatment train was conducted following the flow from influent collection at the headworks to the effluent flowing to the Bosque Drain at the outfall.

Observations regarding plant observations and the treatment train include the following:

1. The grit removal system has been down for approximately six (6) months, allowing grit to pass into the treatment basin. The permittee reports that supply chain issues and budget constraints have hampered their ability to get the grit removal system back online. Failing to remove grit may cause significant equipment damage to aeration nozzles, pumps, piping, sludge thickening centrifuges, as well as to treatment basin and digester basin walls. This damage to the plant will cause the facility to incur additional costs to repair equipment.

2. The influent flow primary flowmeter is a Parshall Flume, effluent flow primary flowmeter is a rectangular weir. Facility personnel stated that they verify the secondary flow meters against the primary flow meters daily, twice per day (morning and afternoon). Records of secondary flow meter logs were submitted as part of this inspection, however verification records comparing primary to secondary flow meters were not submitted.
3. The permittee has hired the services of an engineer to design plans for plant renovation. The plant was built originally in 1982, and no renovations to the plant have occurred in at least the last five (5) years. There are no major structural issues with any of the treatment basins, all cracks appear to be cosmetic in nature. Renovations are looking to expand capacity of the plant as well as treat the effluent for nitrate and dichlorobromomethane.
4. The plant has eight total operators, however five (5) of these operators are unlicensed. Unlicensed operators cannot run facility operations without oversight from a licensed operator and the permittee has struggled with getting these operators licensed.
5. Sewage sludge (biosolids) in the drying beds was not fully contained on concrete so as to prevent potential runoff to stormwater. See Appendix 1, photo 19.

Section III – AREAS OF CONCERN

Requirement 1

NPDES Permit NM0020150 Part I. A.1. *Final Effluent Limits:*

POLLUTANT	7-DAY AVERAGE	DAILY MAXIMUM	FREQUENCY	TYPE
Nitrate	Report	10,000 ug/L (*5)	3/Week	6-Hr Composite

*5. Monitoring to begin from the effective date and continue during initial three (3) years of the final permit. After initial three (3) years of monitoring, effluent limits shall be met.

Concern 1

Sampling results for nitrate have been reported incorrectly since February 2022. The laboratory is reporting nitrate results in mg/L however the discharge monitoring report (DMR) form requires the results for nitrate to be converted and reported in µg/L. Effluent limits shown in the table above went into effect July 1, 2023, which would result in DMR exceedances between the months of August 2023 and January 2024. **All nitrate values since February 2022 on the DMRs must be corrected.**

DMR Date	Currently Reported Values		Values Corrected for Units*	
	7 DAY AVG	DAILY MAX	7 DAY AVG	DAILY MAX
08/31/2023	9 ug/L	14 ug/L	9,000 ug/L	14,000 ug/L
09/30/2023	11 ug/L	13 ug/L	11,000 ug/L	13,000 ug/L
10/31/2023	17 ug/L	20 ug/L	17,000 ug/L	20,000 ug/L
11/30/2023	26 ug/L	33 ug/L	26,000 ug/L	33,000 ug/L
12/31/2023	21 ug/L	28 ug/L	21,000 ug/L	28,000 ug/L
01/31/2024	29 ug/L	33 ug/L	29,000 ug/L	33,000 ug/L

* Other corrections to reported values may be necessary, see AOC Requirement 12 below

Requirement 2

NPDES Permit NM0020150 Part I. A.1. *Final Effluent Limits:*

POLLUTANT	7-DAY AVERAGE	DAILY MAXIMUM	FREQUENCY	TYPE
Dichlorobromomethane	Report	5.6 ug/L (*5)	3/Week	6-Ir Composite

*5. Monitoring to begin from the effective date and continue during initial three (3) years of the final permit. After initial three (3) years of monitoring, effluent limits shall be met.

Concern 2A

As reported, the permittee has exceeded the 5.6 ug/L limit for Dichlorobromomethane.

DMR Date	Reported Values
	DAILY MAX
07/31/2023	15 ug/L
08/31/2023	8 ug/L
09/30/2023	7 ug/L
11/30/2023	9 ug/L
12/31/2023	7 ug/L
01/31/2024	8 ug/L

Because dichlorobromomethane is a volatile organic compound, and the permittee is not sampling directly from the source into a VOA glass sample bottle, see Appendix 1, photo 18, with zero headspace, all samples collected to date have been under-reporting the actual amount of pollutant present in the sample.

Concern 2B

Permittee is reporting values incorrectly. Permittee must report values to the same number of significant digits as shown in the permit. For dichlorobromomethane, this would be two digits.

Requirement 3

NPDES Permit NM0020150, Part I: B. Schedules of Compliance: *The permittee shall submit a detailed plan to test for nitrate and dichlorobromomethane (bromodichloromethane) within two (2) months after the effective date of the permit to both EPA and NMED for approval. The plan must also include strategies to control effluent concentrations of dichlorobromomethane (bromodichloromethane) and nitrate in order to meet the NMQWS at the treatment facility. Once approved, the permittee must collect and analyze samples for nitrate and dichlorobromomethane (bromodichloromethane) three (3) times per week or more frequent during first (1), second (2) and third (3) year of the permit. The results of this study shall be attached to the DMR reports to EPA. At the end of third year, the treatment facility shall meet the effluent limitations for both pollutants.*

Concern 3

A detailed plan to test for nitrate and dichlorobromomethane was due September 1, 2020, and has not been received by EPA. Effluent limits went into effect on July 1, 2023; the treatment facility has not met the effluent limitations for both pollutants.

Requirement 4

NPDES Permit NM0020150, Part II: C.2. *The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.*

40 CFR 122.21(j)(6): *Industrial discharges. Applicants must submit the following information about industrial discharges to the POTW: (i) Number of significant industrial users (SIUs) and non-significant categorical industrial users (NSCIUs), as defined at 40 CFR 403.3(v), including SIUs and NSCIUs that truck or haul waste, discharging to the POTW...*

Concern 4

Facility personnel stated that there are no indirect dischargers (also referred to as Industrial Users) within their collection system. However, when the inspector asked about specific commercial entities located within the Belen city limits, facility personnel stated that several of them likely do discharge to the Belen WWTP. It is possible that limit exceedances for nitrate and dichlorobromomethane are caused by passthrough or interference from Industrial Users. Permittee must conduct a full industrial user survey prior to next permit cycle and submit the list of Industrial Users found as part of the permit application.

Requirement 5

NPDES Permit NM0020150, Part III: B.3.a. Proper Operation and Maintenance. *The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit.*

Concern 5A

The grit removal system must be brought back online as quickly as possible to minimize additional repair costs to the system.

Concern 5B

The sewage sludge (biosolids) must be kept entirely within (or moved into) the containment boundaries of the drying beds.

Requirement 6

NPDES Permit NM0020150 Part III.B.3.b. Proper Operation and Maintenance. *The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.*

Concern 6

At the time of this inspection the facility employed three (3) licensed operators and five (5) unlicensed technicians who regularly perform laboratory analysis for regulated pollutants in addition to their plant operational duties. The main laboratory technician is not adequately licensed for the analysis performed in the laboratory. In accordance with NMAC 20.7.4, "operate" is defined as "performing any activity or function or making any process control or system integrity decision regarding water quality or water quantity that has the potential to affect the proper functioning of ... a public wastewater facility or to affect human health, public welfare or the environment." Facility personnel without any operator

certification are not qualified to “operate” the facility nor perform any laboratory analysis including pH and dissolved oxygen without constant oversight from a certified operator. It is the responsibility of the permittee to offer operators a salary commensurate with the tasks of running the WWTP and the laboratory.

Requirement 7

NPDES Permit NM0029351 Part III. C.4. Record Contents. *Records of monitoring information shall include:*

- a. The date, exact place, and time of sampling or measurements;*
- b. The individual(s) who performed the sampling or measurements;*
- c. The date(s) and time(s) analyses were performed;*
- d. The individual(s) who performed the analyses;*
- e. The analytical techniques or methods used; and*
- f. The results of such analyses.*

Concern 7

Several records of monitoring were missing information as required per either the permit or the EPA methods cited or assumed used in the analysis of regulated pollutants. See *Records of Monitoring* section of Laboratory Observations.

Requirement 8

NPDES Permit NM0029351 Part III.C.5.a. Monitoring Procedures. *Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.*

Concern 8A

Several SOPs and observed methods used for the analysis of regulated pollutants deviated from the EPA approved methods that were either cited or assumed used. The facility does not have approval for the use of alternate methods or deviations from methods listed in 40 CFR Part 136 from the Regional Administrator.

Concern 8B

Facility personnel are rounding values obtained during analysis before the final calculation to determine the actual value of analysis for regulated pollutants. This is a deviation from the EPA approved methods and produces an inaccurate value to be reported on the facility's Discharge Monitoring Reports.

Concern 8C

The pH buffer bottles had a written 'received-on' date, but not an 'opened-on' date, see Appendix 1, photo 10. Depending on the manufacturer, many of these buffers should be used within six months and the pH 10 buffer should be used within three months of opening. Permittee must contact the manufacturer of the specific buffers they use to determine appropriate expiration dates. Several other laboratory reagents were also expired. Proper calibration of laboratory equipment cannot be confirmed, and therefore neither can we confirm proper analysis of the pollutant, if the buffers and reagents used for instrumentation calibration are expired.

Requirement 9

NPDES Permit NM0029351 Part III.C.5.b. Monitoring Procedures. *The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.*

Concern 9

The facility failed to provide adequate documentation to the NIST certified calibrations for instrumentation and equipment used in the analysis of regulated pollutants. Additionally, the facility failed to perform adequate temperature monitoring on temperature-controlled instrumentation and equipment used in the analysis of regulated pollutants.

Requirement 10

NPDES Permit NM0029351 Part III. C.6. Flow Measurements: *Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Concern 10

Facility personnel were unable to provide documentation proving that they have recorded the staff gauge water levels of the primary flow measurement devices, used the relevant conversion tables, and compared them to the secondary (electronic) flow measurement devices to ensure that the primary and secondary flow measurement devices are within 10% of each other. This comparison must be done monthly to ensure that secondary flow devices remain stable.

Requirement 11

NPDES Permit NM0029351 Part III. D.8. Other Noncompliance. *The permittee shall report all instances of noncompliance not reported under Parts III.D.4 and D.7 ... at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.7.*

NPDES Permit NM0029351 Part III. D.7.a. Twenty-Four Hour Reporting. *The permittee shall report any noncompliance which may endanger health or the environment. Notification shall be made to the EPA at the following e-mail address: R6_NPDES_Reporting@epa.gov, as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. Notification shall also be made to the New Mexico Environment Department at (505) 827-0187 or psrs.program.manager@env.nm.gov as soon as possible, but within 24 hours from the time the permittee becomes aware of the circumstance. A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. The report shall contain the following information: (1) A description of the noncompliance and its cause; (2) The period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and, (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.*

Concern 11

Permittee has not been reporting excursions of dichlorobromomethane nor nitrate properly. DMR reporting must include the count of the number of individual samples that exceeded the permit limit during the reporting period; permittee has been reporting zero exceedances for dichlorobromomethane even though the value reported is above the permit limit. Permittee has not followed the Twenty-Four Hour Reporting regulations listed above for dichlorobromomethane nor for nitrate.

Requirement 12

NPDES Permit NM0029351 Part III. F.22.a. *7-DAY AVERAGE or WEEKLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week. The 7-day average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.*

Concern 12

Permittee is not reporting 7-day averages correctly for any pollutants. The 7-day average must be calculated for each week within a month, and the reported value would be the highest of these weekly averages. For example:

Sample Date	Laboratory-Reported Value (ug/L)	7 DAY AVG
7/4/2023	15	11.2
7/5/2023	8.5	
7/6/2023	10	
7/11/2023	6	6.4
7/12/2023	6.4	
7/13/2023	6.7	
7/18/2023	5.9	5.1
7/19/2023	4.5	
7/20/2023	5	
7/25/2023	4.1	4.1
7/26/2023	4	
7/27/2023	4.3	

←← This value would be reported for 7-day average

Section IV – CLOSING CONFERENCE

EPA Region 6 Inspectors conducted a closing conference for the inspection at the Belen WWTP at 2:03 PM on January 17, 2024. During the closing conference, Inspectors reviewed the Areas of Concern (AOCs) noted during the inspection. Additional AOCs have been noted in this report that were not covered in the closing conferences because they were determined afterward. The inspection was concluded at 2:43 PM on January 17, 2024.

Section V – FOLLOW UP

The following document request was given to the permittee by EPA at the beginning of the inspection on January 17, 2024:

- For the dates January 2023 to December 2023, please provide the following documentation for the analysis of all regulated pollutants per your NPDES permit; (i.e., pH, BOD₅, TSS, E. coli, Total Residual Chlorine, Total Ammonia, Dissolved Oxygen, Whole Effluent Toxicity Testing, and any additional pollutants not listed).
 - Chain of Custody documents for all incoming samples to the laboratory.
 - Bench sheets and all recorded data (records of monitoring).
 - All calibration reports for instrumentation used in analysis.
 - Meters, mass balances, etc.
 - Temperature records for all equipment and instrumentation used in analysis.
 - Incubators, refrigerators used for storage, ovens, etc.
 - Submitted and signed DMRs.
- All National Institute of Standards and Technology (NIST) calibration certificates for laboratory instrumentation used in the analysis of regulated pollutants.
- Influent and effluent flow measurements from January 2023 to December 2023.
 - Calibration records for influent and effluent flow meters
- Laboratory Quality Control and Quality Assurance records from January 2023 to December 2023.
 - Preliminary batch testing for disposable sampling and analysis equipment. For example, pre-weighed filters for TSS analysis, Colilert trays for E. coli testing.
 - Blank testing of glassware or other equipment and instrumentation to ensure proper preparation, for example cleaning or sterilization.
- Certifications and/or training documents for all technicians who perform analysis or sample preparation for regulated pollutants.
- All standard operating procedures for the analysis, sample gathering, sample preparation, sample disposal, equipment and instrument preparation, and calibration of equipment for the analysis of regulated pollutants.
- Excursion, Overflow or Bypass Summary Report(s).
- Latest Sludge DMR with metals, pathogens, and vector report.
 - Sludge sampling results.
- SPCC Plan (Spill Prevention, Control and Countermeasure Plan), required if aggregate capacity of above-ground oil storage containers greater than 1,320 gallons, or buried storage tanks greater than 42,000 gallons.
- Storm Water Permits (Construction, Multi-Sector, and/or General Baseline).
- Pollution Prevention Program documents, as required by your NPDES Permit.

Requested documents were received from City of Belen representatives via GoAnywhere Managed File Transfer on January 24, 25, 29 and 31, and February 1, 2024. All requested documents were provided unless the document did not exist.

Section VI – LIST OF APPENDICES

Appendix 1 – Photograph Log – 19 photos taken January 17, 2024

Appendix 2 – Selected Bench Sheets Submitted by City of Belen Representatives

Appendix 1

Photograph Log

19 photos taken January 17, 2024



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Photograph Log

Photo No. 1

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

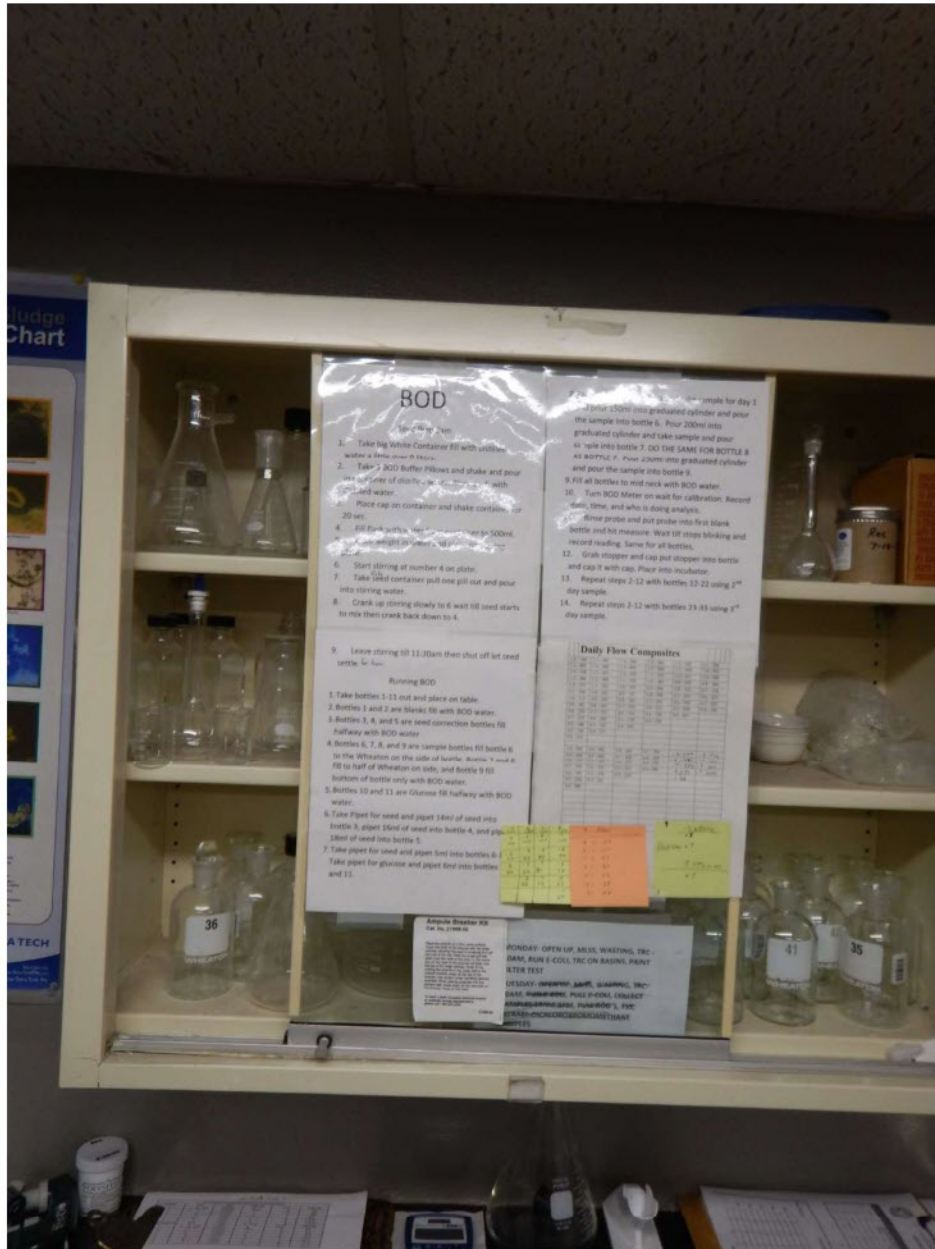


Photo File Name: DSCN2218.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:47 AM

Photographer: Amy Andrews

Description: Uncontrolled documents in the form of post-it notes found in the laboratory



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

Belen Wastewater Treatment Plant
PH Worksheet

Date of Sampling: 1-11-24
Time of Sampling: 10:03am

Method Used: Standard Methods 22nd Ed.
Section 4500H 4-65 4-69
Make and Model of PH Meter: Thermal Scientific 3 Star Orion

Exact Sampling Location: Effluent Outfall to Receiving Stream

Type of Sample: X (Grab)

Instantaneous Flow EFF: 0.5

EFF. Sample Temperature: 14.9 °C

Signature of Sampler: AA
Signature of Analyst: AA

PH Meter Calibration

Date of Calibration: 1-11-24 by AA Time of Calibration: 9:35am

PH Meter Buffer adjusted to Sample Temp A.T.C °C

First PH Buffer used to check standardization PH 7 Meter Reading 7.03

Lot Number 847220912 Date Opened 1-3-24 Clarity OK Expiration Date 8-2-24

Second PH Buffer used to check standardization PH 4 Meter Reading 4.00

Lot Number 847220912 Date Opened 1-3-24 Clarity OK Expiration Date 9-12-24

Third PH Buffer used to check standardization PH 10 Meter Reading 10.03

Lot Number 850880917 Date Opened 1-3-24 Clarity OK Expiration Date 9-7-24

Sample Data

Time of Analysis: 10:06am

PH Reading Effluent: 7.20

Second PH Reading Effluent: 7.20

PH Brand NCL NORTH CENTRAL LABORATORIES: PH Temp (7) 17.1 (4) 16.9 (10) 16.9
Please note that PH is temperature dependent. This buffer will give PH values accurate to ± 0.01
At the following temperatures. Refer to chart on bottle.

Photo File Name: DSCN2294.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:04 AM

Photographer: Amy Andrews

Description: Record of monitoring in which sample analysis and sample collection for two (2) separate methods were performed at the same time by the same technician, 1 of 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

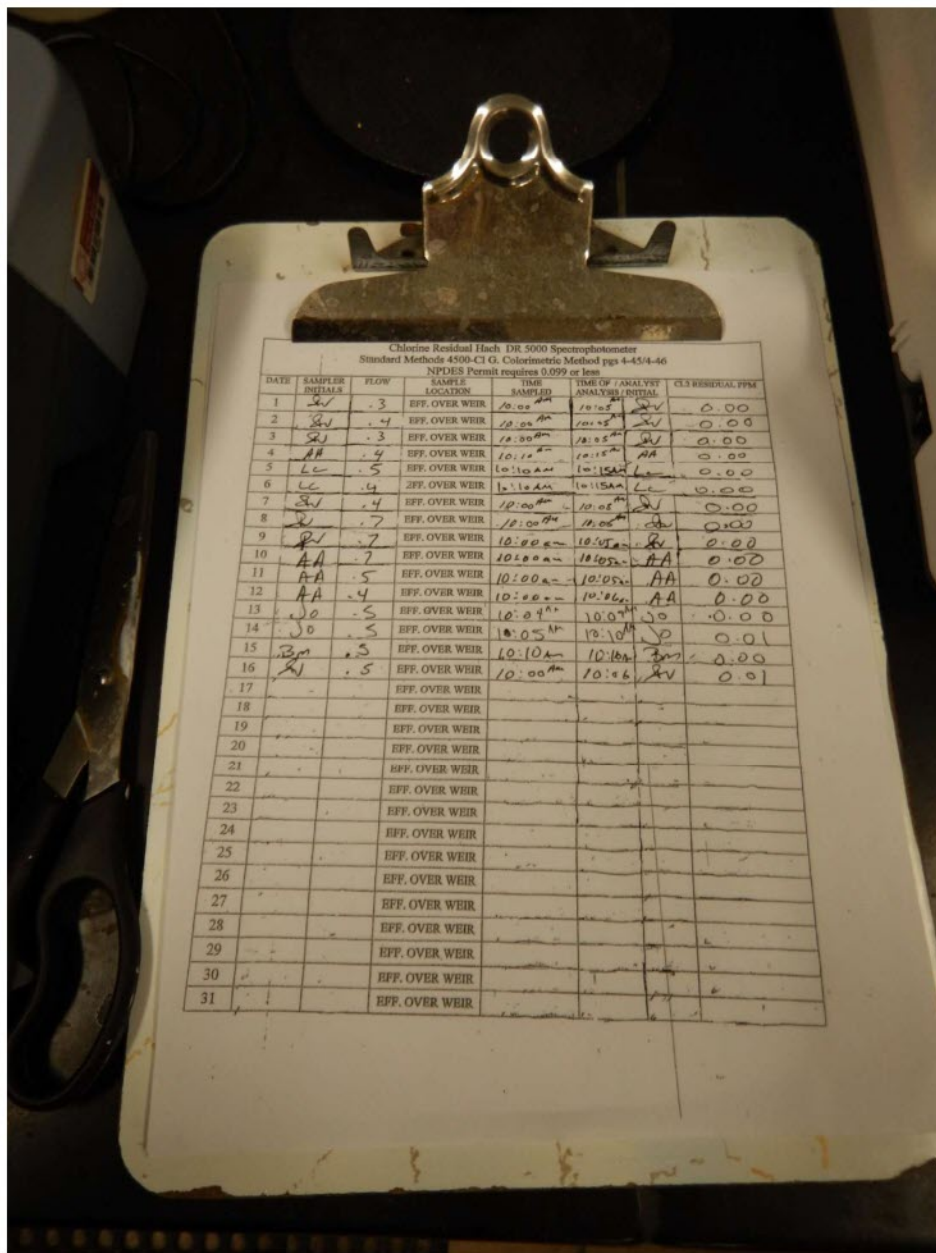


Photo File Name: DSCN2287.JPG

Date of Photo: 01/17/2024

Time of Photo: 9:45 AM

Photographer: Amy Andrews

Description: Record of monitoring in which sample analysis and sample collection for two (2) separate methods were performed at the same time by the same technician, 2 of 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

Belton Wastewater Treatment Plant
B.O.D. 5 Worksheet

Sampling Date: 01/17/24
Time of Sampling: 9:03 AM
Time of Analysis: 9:03 AM
Sample ID: 1300
Sample Date: 01/17/24
Type of Sample: Wastewater
Sample Preservation: Refrigerator

Date of Analysis: 01/17/24
Time of Analysis: 9:03 AM
Method Used: Standard Methods 5210 B
Sample Temperature at Time of Analysis: 20°C
Sample Temperature at Time of Incubation: 20°C
Incubation Time: 5 days
Incubation Temperature: 20°C

Prepared Preparation Date: 01/17/24
Prepared Preparation Time: 9:03 AM
Prepared Preparation Location: 1300 Conservancy Rd
Prepared Preparation Operator: Amy Andrews

Sample Number: 1300
Sample Date: 01/17/24
Sample Time: 9:03 AM
Sample Location: 1300 Conservancy Rd
Sample Operator: Amy Andrews

Dilution Water Blanks

Bottle #	DO Initial	DO Final	Difference
1	8.1	8.1	0.0
2	8.1	8.1	0.0

Sample Data

Bottle #	DO Initial	DO Final	Difference
1	8.1	8.1	0.0
2	8.1	8.1	0.0

BOD Record

Time	DO	BOD
10:00	8.1	3.57
11:00	8.1	3.57
12:00	8.1	4.07

Photo File Name: DSCN2243.JPG

Date of Photo: 01/17/2024

Time of Photo: 9:03 AM

Photographer: Amy Andrews

Description: Record of monitoring in which the time and date of analysis as well as analyst signature were filled out in advance of the actual analysis by at least one (1) calendar day. A BOD record of monitoring is filled out for January 18, 2024, analysis at the time of picture on January 17, 2024.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

WASTEWATER TREATMENT PLANT
TOTAL SUSPENDED SOLIDS WORKSHEET

Sample ID: AA Accepted By: AA
Time of sampling: 1-11-24
Exact Sampling Location: 10:00am - 2:00pm
Sample Preparation: OT after Redoximeter West
Type of Sample: 100% (Dilution: 0)
Type of Filter: 100mm (Dish: 0)
Time of arrival: 3:00pm Time of Analysis: 3:05pm
Date of analysis: 1-11-24

Methods Used: Standard Methods 22nd Edition
Section 2540D: 2.45, 2.47

Redoximeter sample at 10:00 in the time of analysis

Sample Number	#1	#2	Duplicate #3	Influent #4	#5
1st Drying Start Time	<u>3:10pm</u>	<u>10:00</u>			
1st Drying Stop Time	<u>4:10pm</u>	<u>10:00</u>			
Sample Volume (ml)					
1st Wt of Dry Sample + Filter & Dish (gm)	<u>1.3795</u>	<u>1.3729</u>	<u>1.3657</u>		
Wt of Filter & Dish (gm) (Tare)	<u>1.3793</u>	<u>1.3724</u>	<u>1.3661</u>		
1st Wt of Dry Sample (gm)					
2nd Wt of Dry Sample + Filter & Dish (gm)					
Wt of Filter & Dish (gm)					
2nd Wt of dry Sample (gm)					
2nd Drying Start Time					
2nd Drying Stop Time					
TOTAL SUSPENDED SOLIDS (TSS) (mg/L)					
Average TSS (mg/L)					
Blank					
Dish Number					
Sample Volume (ml)					
1st Wt of Dry Sample + Filter & Dish (gm)					
Wt of Filter & Dish (gm) (Tare)					
1st Wt. Dry Sample (gm)					
2nd Wt. of Dry Sample + Filter & Dish (gm)					
Wt of Filter & Dish (gm) (Tare)					
2nd Wt. Dry Sample (gm)					
Total Suspended Solids (TSS) (mg/L)					
TSS, mg/L Final VLR Grams, Initial x 1,000,000					
Sample volume, ml					

Photo File Name: DSCN2318.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:19 AM

Photographer: Amy Andrews

Description: Record of monitoring in which the technician had yet to record data for analysis that had been completed five (5) days previous based on their observed methods. A TSS record of monitoring with sample collected on 1/11/2024 with no data recorded for the second dry weight, which should have happened on 1/12/2024 per the facility's method.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2213.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:46 AM

Photographer: Amy Andrews

Description: *E. coli* incubator at 35.2°C, different from the 35.1°C that has been previously consistently recorded on the temperature log.

Laboratory equipment with built-in thermometers that did not have additional calibration, 1 of 3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 7

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2321.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:24 AM

Photographer: Amy Andrews

Description: The BOD incubator at 20.2°C, different from the 20.1°C that has been consistently reported on the temperature log.

Laboratory equipment with built-in thermometers that did not have additional calibration, 2 of 3



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

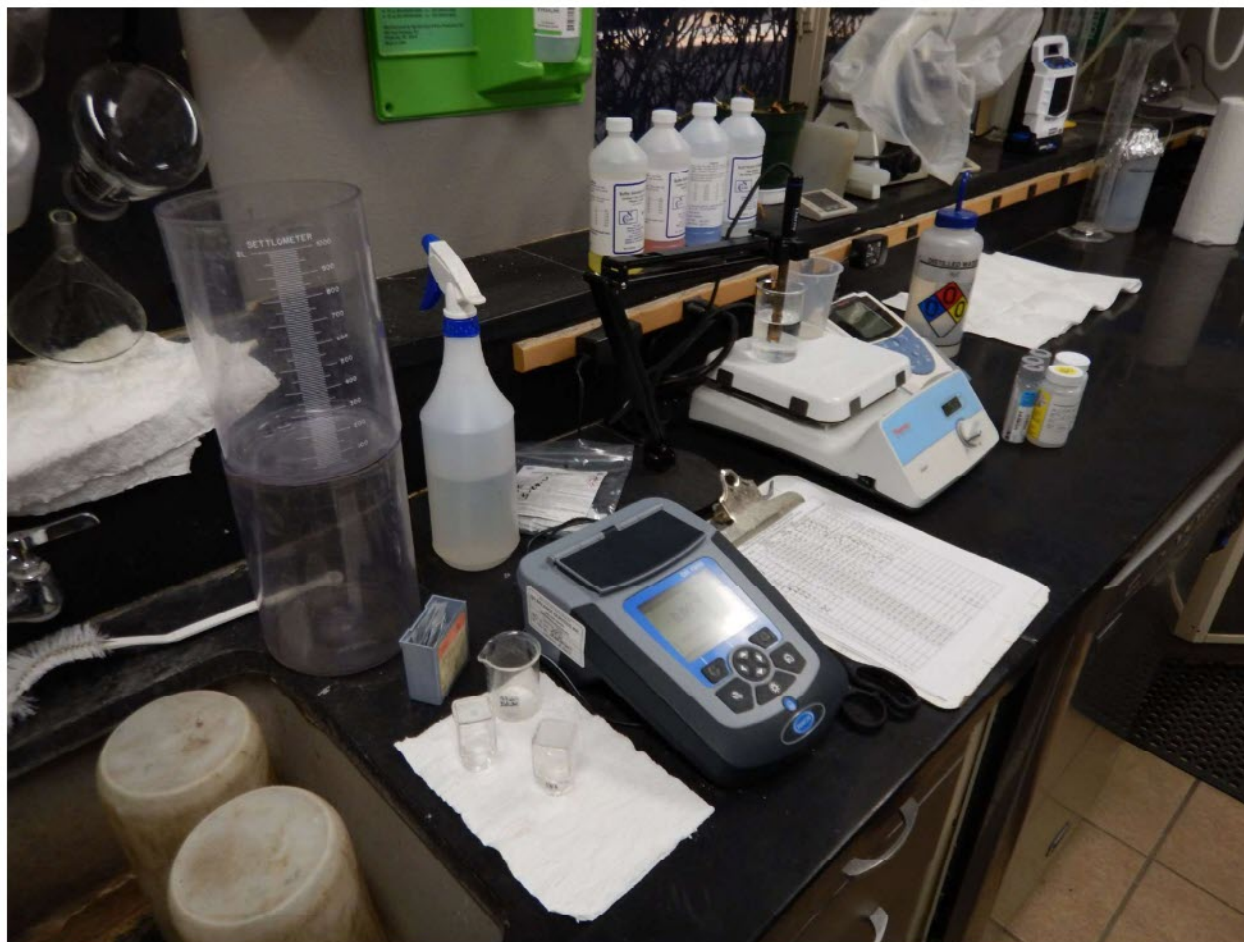


Photo File Name: DSCN2214.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:46 AM

Photographer: Amy Andrews

Description: Reagent bottles are not labeled with solution/reagent name, open date, and expiration date, 1 of 3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2216.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:47 AM

Photographer: Amy Andrews

Description: Reagent bottles are not labeled with solution/reagent name, open date, and expiration date, 2 of 3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2217.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:47 AM

Photographer: Amy Andrews

Description: Reagent bottles are not labeled with solution/reagent name, open date, and expiration date, 3 of 3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2211.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:46 AM

Photographer: Amy Andrews

Description: Laboratory equipment with built-in thermometers that did not have additional calibration, 3 of 3.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2321.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:24 AM

Photographer: Amy Andrews

Description: The thermometer in the *E. coli* incubator was expired with an expiration year of 2020, 1 of 2.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2275.JPG

Date of Photo: 01/17/2024

Time of Photo: 9:33 AM

Photographer: Amy Andrews

Description: The thermometer in the *E. coli* incubator was expired with an expiration year of 2020, 2 of 2.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2223.JPG

Date of Photo: 01/17/2024

Time of Photo: 8:49 AM

Photographer: Amy Andrews

Description: Expired reagents, 1 of 2.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2399.JPG

Date of Photo: 01/17/2024

Time of Photo: 1:53 PM

Photographer: Amy Andrews

Description: Expired reagents, 2 of 2.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2295.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:05 AM

Photographer: Amy Andrews

Description: Residue was seen on the bottom of plastic containers used for sample collection and testing, 1 of 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2280.JPG

Date of Photo: 01/17/2024

Time of Photo: 9:41 AM

Photographer: Amy Andrews

Description: Residue was seen on the bottom of plastic containers used for sample collection and testing, 2 of 2



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico

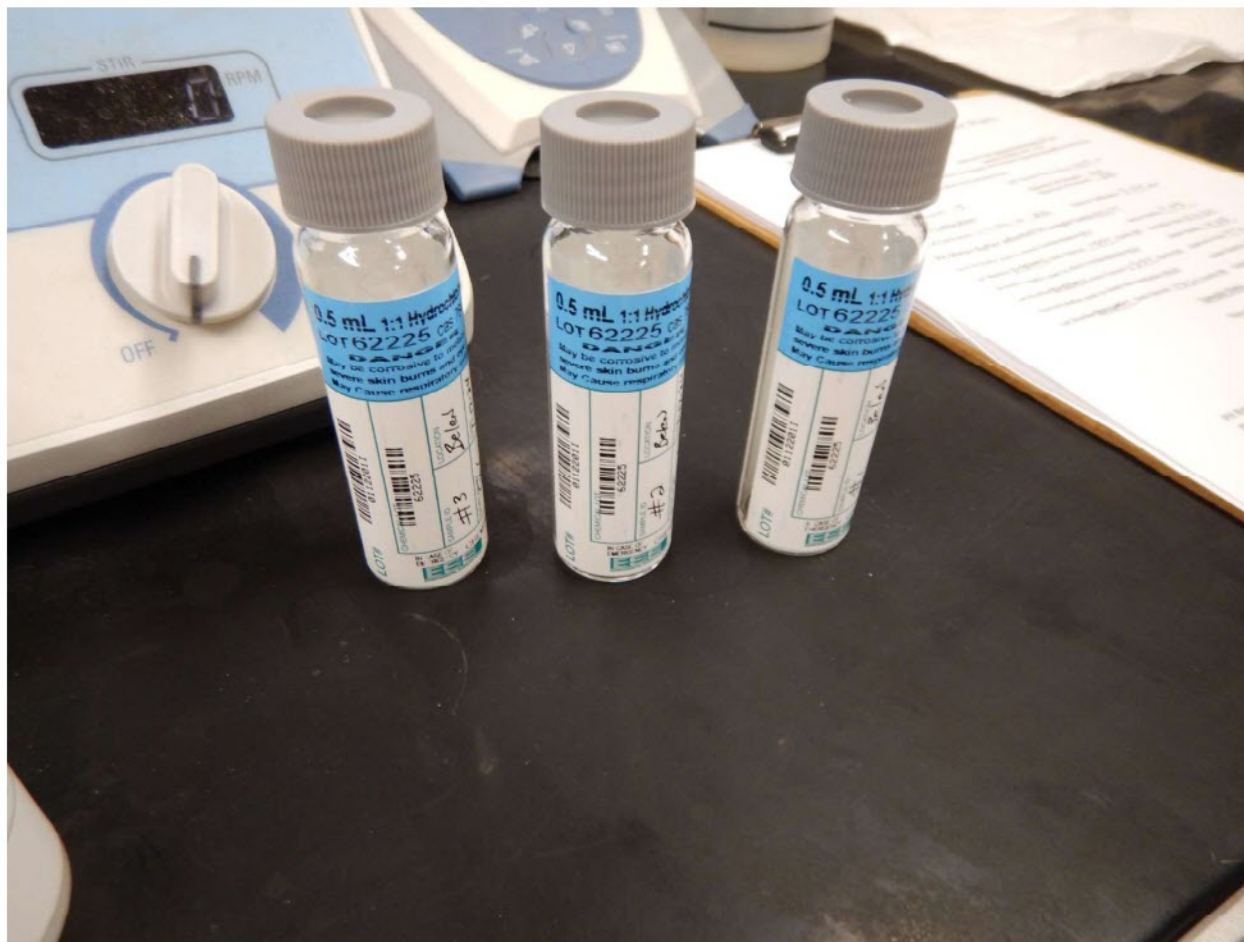


Photo File Name: DSCN2325.JPG

Date of Photo: 01/17/2024

Time of Photo: 10:35 AM

Photographer: Amy Andrews

Description: Volatile organics (VOA) glass sample bottle used in the analysis of dichlorobromomethane.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: 1300 Conservancy Rd		
City: Belen	County/Parish: Valencia County	State: New Mexico



Photo File Name: DSCN2379.JPG

Date of Photo: 01/17/2024

Time of Photo: 1:14 PM

Photographer: Amy Andrews

Description: Sewage sludge in the drying beds is not fully contained on concrete so as to prevent potential runoff to stormwater

Appendix 2
City of Belen Wastewater Treatment Plant
Records of Monitoring Excerpts

Belen Wastewater Treatment Plant B.O.D. 5 Worksheet

Sampling Done By IV Date of Analysis 3/9/23
 Date of Sampling 3/7/23 Time of arrival 3:01pm
 Time Of Sampling 10:00am To 3:00pm Method Used: Standard Methods 22nd Ed.
 Exact Sampling Loc: EFF after Rectangular weir Section 5210-B 5-5 5-10
 Sample: Grab Composite X Sample temperature at time of analysis should be
 Type of flow: Instantaneous Daily X warmed to 20°C before analysis. if stored over 2
 Sample preservation Refrigerator hours must be refrigerated to 4°C.

Sample Pretreatment Polyseed Preparation: Date 3/9/23 Time 9:10 am
 Time of Analysis 1:05 pm
 Let Seed Settle for at least 1/2 hour, decant & continue stirring
 Sample PH 7.4 CL2 present NO mg/l; De CL2 TRC READING 0
 Sample PH Adjusted to Date of sodium sulfite
 Volume of sodium sulfite
H2SO4 NaOH(6.5 7.5) Sample rechecked to CL2
 Dechlorinated with: Sulfur Dioxide
 (DR/3000 Spectrophotometer)

Dilution Water Blanks

Bottle #	#1	#2	Seed Correction					
D.O. Initial	9.01	9	Bottle Number		#3	#4	#5	
D.O. Final	9.01	9	ml Seed Used		14	16	18	
Difference	0.0	0.0	D.O. Initial		8.91	8.97	8.97	
			D.O. Final		6.35	6.19	5.87	
			Difference		2.56	2.78	3.1	
			D.O. Used/ml Seed		5	5	5	
			Seed correction		0.9	0.9	0.9	
	Glucose Glutamic							
Bottle Number	#10	#11	Sample Data					
ml Standard	6	6	Bottle number		#6	#7	#8	#9
ml Seed used	5	5	ml Standard		150	200	200	250
D.O. Initial	8.97	9.01	ml Seed used		5	5	5	5
D.O. final	3.83	3.89	D.O. Initial		9.31	9.38	9.33	9.49
Difference	5.14	5.12	D.O. Final		7.26	7.27	7.26	6.8
Seed Correction	0.7	0.7	Difference		2.05	2.11	2.07	2.69
Corrected Diff	4.4	4.42	Seed Correction		0.7	0.7	0.7	0.7
BOD mg/l	222	221	Corrected Difference		1.4	1.41	1.37	1.99
GC should be 198 + - 30.5			BOD mg/l		2.7	2.1	2.1	2.388
			mg/l-Day		2.401 or		2.0	mg/L

Analysis (Preparer) IV Date 3/9/23 Time 1.10 pm
 Analysis (Reading) IV Date 3/14/23 Time 1.10 pm
 supervised by RM
 Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation
 produce the most reliable results.
 Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

	Flows			Flows	
10:00	0.5	500	1:00	0.5	500
11:00	0.5	500	2:00	0.5	500
12:00	0.5	500	3:00	0.5	500

Belen Wastewater Treatment Plant B.O.D. 5 Worksheet

Sampling Done By SW
 Date of Sampling 3-7-23
 Time Of Sampling 10:00am To 3:00pm
 Exact Sampling Loc: EFF after Rectangular weir
 Sample: Grab ☐ Composite ☒ X
 Type of flow: Instantaneous ☐ Daily ☒ X
 Sample preservation Refrigerator

Date of Analysis 3-9-23
 Time of arrival 3:01 PM
 Method Used: Standard Methods 22nd Ed.
 Section 5210-B 5-5 5-10
 Sample temperature at time of analysis should be
 warmed to 20°C before analysis. if stored over 2
 hours must be refrigerated to 4°C.

Sample Pretreatment
 Time of Analysis 1:05 pm
 Sample PH 7.4
 Sample PH Adjusted to _____

Polyseed Preparation: Date 3-9-23 Time 9:10 am
 Let Seed Settle for at least 1/2 hour, decant & continue stirring
 CL2 present 10 mg/l; De CL2 _____ TRC READING _____
 Date of sodium sulfite _____
 Volume of sodium sulfite _____
 H2SO4 _____ NaOH (6.5 7.5) Sample rechecked to CL2 _____
 Dechlorinated with: Sulfur Dioxide
 (DR/3000 Spectrophotometer)

Dilution Water Blanks

Bottle #	#1	#2
D.O. Initial	9.01	9.00
D.O. Final	9.01	9.00
Difference	0.0	0.0

Seed Correction

Bottle Number	#3	#4	#5
ml Seed Used	14	16	18
D.O. Initial	8.91	8.97	8.97
D.O. Final	6.35	6.19	5.87
Difference	2.56	2.78	3.1
D.O. Used/ml Seed	5	5	5
Seed correction	0.9	0.9	0.9

Glucose Glutamic

Bottle Number	#10	#11
ml Standard	6	6
ml Seed used	5	5
D.O. Initial	8.97	9.01
D.O. final	3.83	3.89
Difference	5.14	5.12
Seed Correction	0.7	0.7
Corrected Diff	4.4	4.42
BOD mg/l	222	221
GC should be 198 + - 30.5		

Sample Data

Bottle number	#6	#7	#8	#9
ml Standard	150	200	200	250
ml Seed used	5	5	5	5
D.O. Initial	9.31	9.38	9.33	9.49
D.O. Final	7.26	7.27	7.26	6.80
Difference	2.05	2.11	2.07	2.69
Seed Correction	0.7	0.7	0.7	0.7
Corrected Difference	1.4	1.41	1.37	1.99
BOD mg/l	2.7	2.1	2.1	2.388
mg/l-Day	2.4010	or	2.0	0.0 mg/L

Analysis (Preparer) SW Date 3-9-23 Time 1:10 pm
 Analysis (Reading) SW Date 3-14-23 Time 1:10 pm

supervised by _____

Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation produce the most reliable results.
 Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

		Flows			Flows				
10:00	.5	500	1:00	.5	500				
11:00	.5	500	2:00	.5	500				
12:00	.5	500	3:00	.5	500				

Belen Wastewater Treatment Plant B.O.D. 5 Worksheet	
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Sampling Done By IV _____ Date of Analysis 3/9/23 _____
 Date of Sampling 3/8/23 _____ Time of arrival 3:01pm _____
 Time Of Sampling 10:00am To 3:00pm Method Used: Standard Methods 22nd Ed.
 Exact Sampling Loc: EFF after Rectangular weir Section 5210-B 5-5 5-10
 Sample: Grab _____ Composite X Sample temperature at time of analysis should be
 Type of flow: Instantaneous _____ Daily X warmed to 20°C before analysis. if stored over 2
 Sample preservation Refrigerator hours must be refrigerated to 4°C.

Sample Pretreatment Polyseed Preparation: Date 3/9/23 Time 9.10 am

Time of Analysis 1:15 pm
Sample PH 7.5
Sample PH Adjusted to
H2SO4 NAOH(6.5 7.5)
Let Seed Settle for at least 1/2 hour, decant & continue stirring
CL2 present_NO mg/l; De CL2 TRC READING 0
Date of sodium sulfite
Volume of sodium sulfite
Sample rechecked to CL2
Dechlorinated with: Sulfur Dioxide
(DR/3000 Spectrophotometer)

[illegible]

Bottle #	#12	#13		Seed Correction					
D.O. Initial	8.92	8.94		Bottle Number	#14	#15	#16		
D.O. Final	8.92	8.94		ml Seed Used	14	16	18		
Difference	0.0	0.0		D.O. Initia	8.88	8.89	8.93		
				D.O. Final	6.53	6.44	5.85		
				Difference	2.35	2.45	3.08		
				D.O. Used/ml Seed	5	5	5		
				Seed correction	0.8	0.8	0.9		
	Glucose Glutamic								
Bottle Number	#21	#22		Sample Data					
ml Standard	6	6		Bottle number	#17	#18	#19	#20	
ml Seed used	5	5		ml Standard	150	200	200	250	
D.O. Initial	8.94	8.93		ml Seed used	5	5	5	5	
D.O. final	3.83	3.79		D.O. Initial	9.04	9.07	9.1	9.18	
Difference	5.11	5.14		D.O. Final	7.01	6.98	6.84	6.59	
Seed Correction	0.7	0.7		Difference	2.03	2.09	2.26	2.59	
Corrected Diff	4.4	4.44		Seed Correction	0.7	0.7	0.7	0.7	
BOD mg/l	220.5	222		Corrected Difference	1.3	1.39	1.56	1.89	
GC should be 198 + - 30.5				BOD mg/l	2.7	2.1	2.3	2.268	
				mg/l-Day	2.3376667 or		2.0 mg/L		

Analysis (Preparer)_IV____ Date 3/9/23 Time 1.20 pm
Analysis (Reading)_IV____ Date 3/14/23 Time 1.20 pm

Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation produce the most reliable results.

Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

[illegible]

Belen Wastewater Treatment Plant B.O.D. 5 Worksheet

Sampling Done By SV
 Date of Sampling 3-8-23
 Time Of Sampling 10:00am To 3:00pm
 Exact Sampling Loc: EFF after Rectangular weir
 Sample: Grab ☐ Composite ☒ X
 Type of flow: Instantaneous ☐ Daily ☒ X
 Sample preservation Refrigerator ☐

Date of Analysis 3-9-23
 Time of arrival 3:01 pm
 Method Used: Standard Methods 22nd Ed.
 Section 5210-B 5-5 5-10
 Sample temperature at time of analysis should be
 warmed to 20°C before analysis. If stored over 2
 hours must be refrigerated to 4°C.

Sample Pretreatment
 Time of Analysis 1:15 pm
 Sample PH 7.5
 Sample PH Adjusted to _____

Polyseed Preparation: Date 3-9-23 Time 9:10 am
 Let Seed Settle for at least 1/2 hour, decant & continue stirring
 CL2 present NO mg/l; De CL2 _____ TRC READING _____
 Date of sodium sulfite _____
 Volume of sodium sulfite _____
 H2SO4 _____ NaOH(6.5 7.5) Sample rechecked to CL2 _____
 Dechlorinated with: Sulfur Dioxide
 (DR/3000 Spectrophotometer)

Dilution Water Blanks									
Bottle #	#12	#13	Seed Correction						
D.O. Initial	8.92	8.94	Bottle Number	#14	#15	#16			
D.O. Final	8.92	8.94	ml Seed Used	14	16	18			
Difference	0.0	0.0	D.O. Initial	8.88	8.89	8.93			
			D.O. Final	6.53	6.44	5.85			
			Difference	2.35	2.45	3.08			
			D.O. Used/ml Seed	5	5	5			
			Seed correction	0.8	0.8	0.9			
Glucose Glutamic									
Bottle Number	#21	#22	Sample Data						
ml Standard	6	6	Bottle number	#17	#18	#19	#20		
ml Seed used	5	5	ml Standard	150	200	200	250		
D.O. Initial	8.94	8.93	ml Seed used	5	5	5	5		
D.O. final	3.83	3.79	D.O. Initial	9.04	9.07	9.10	9.18		
Difference	5.11	5.14	D.O. Final	7.01	6.98	6.84	6.59		
Seed Correction	0.7	0.7	Difference	2.03	2.09	2.26	2.59		
Corrected Diff	4.4	4.44	Seed Correction	0.7	0.7	0.7	0.7		
BOD mg/l	220.5	222	Corrected Difference	1.3	1.39	1.56	1.89		
GC should be 198 + - 30.5			BOD mg/l	2.7	2.1	2.3	2.268		
			mg/l-Day	2.37667	or	2.0	mg/L		
Analysis (Preparer)									

Analysis (Preparer) SV Date 3-9-23 Time 1:20 pm
 Analysis (Reading) SV Date 3-14-23 Time 1:20 pm
 supervised by _____

Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation produce the most reliable results.
 Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

	Flows			Flows				
10:00	.5	416	1:00	.6	500			
11:00	.5	416	2:00	.6	500			
12:00	.6	500	3:00	.6	500			

Belen Wastewater Treatment Plant B.O.D. 5 Worksheet

Sampling Done By IV Date of Analysis 3/9/23
 Date of Sampling 3/9/23 Time of arrival 3:01 pm
 Time Of Sampling 10:00am To 3:00pm Method Used: Standard Methods 22nd Ed.
 Exact Sampling Loc: EFF after Rectangular weir Section 5210-B 5-5 5-10
 Sample: Grab Composite X Sample temperature at time of analysis should be
 Type of flow: Instantaneous Daily X warmed to 20°C before analysis. if stored over 2
 Sample preservation Refrigerator hours must be refrigerated to 4°C.

Sample Pretreatment Polyseed Preparation: Date 3/9/23 Time 9.10 am
 Time of Analysis 3:05 pm Let Seed Settle for at least 1/2 hour, decant & continue stirring
 Sample PH 7.4 CL2 present NO mg/l; De CL2 TRC READING 0
 Sample PH Adjusted to _____ Date of sodium sulfite _____
 Volume of sodium sulfite _____
H2SO4 NAOH(6.5 7.5) Sample rechecked to CL2 _____
 Dechlorinated with: Sulfur Dioxide
(DR/3000 Spectrophotometer)

Dilution Water Blanks

Bottle #	#23	#24	Seed Correction				
D.O. Initial	9.03	9.01	Bottle Number	#25	#26	#27	
D.O. Final	9.03	9.01	ml Seed Used	14	16	18	
Difference	0.0	0.0	D.O. Intial	8.84	8.85	8.87	
			D.O. Final	6.55	6.47	6.09	
			Difference	2.29	2.38	2.78	
			D.O. Used/ml Seed	5	5	5	
			Seed correction	0.8	0.7	0.8	
	Glucose Glutamic						
Bottle Number	#32	#33	Sample Data				
ml Standard	6	6	Bottle number	#28	#29	#30	#31
ml Seed used	5	5	ml Standard	150	200	200	250
D.O. Initial	8.98	8.97	ml Seed used	5	5	5	5
D.O. final	3.83	3.81	D.O. Initial	9.02	9.04	9.11	9.17
Difference	5.15	5.16	D.O. Final	6.98	6.84	6.86	6.51
Seed Correction	0.7	0.7	Difference	2.04	2.2	2.25	2.59
Corrected Diff	4.5	4.46	Seed Correction	0.7	0.7	0.7	0.7
BOD mg/l	222.5	223	Corrected Difference	1.3	1.5	1.55	1.89
GC should be 198 + - 30.5			BOD mg/l	2.7	2.3	2.3	2.268
			mg/l-Day	2.3993333	or		2.0 mg/L

Analysis (Preparer) IV Date 3/9/23 Time 3:10 pm
 Analysis (Reading) IV Date 3/14/23 Time 3:10 pm

Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation produce the most reliable results.
 Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

	Flows			Flows	
10:00	0.5	500	1:00	0.5	500
11:00	0.5	500	2:00	0.5	500
12:00	0.5	500	3:00	0.5	500

**Belen Wastewater Treatment Plant
B.O.D. 5 Worksheet**

Sampling Done By SV
 Date of Sampling 3-9-23
 Time Of Sampling 10:00am To 3:00pm
 Exact Sampling Loc: EFF after Rectangular weir
 Sample: Grab ☐ Composite ☒ X
 Type of flow: Instantaneous ☐ Daily ☒ X
 Sample preservation Refrigerator ☐

Date of Analysis 3-9-23
 Time of arrival 3:01 pm
 Method Used: Standard Methods 22nd Ed.
 Section 5210-B 5-5 5-10
 Sample temperature at time of analysis should be
 warmed to 20°C before analysis, if stored over 2
 hours must be refrigerated to 4°C.

Sample Pretreatment
 Time of Analysis 3:05 pm
 Sample PH 7.4
 Sample PH Adjusted to _____

Polyseed Preparation: Date 3-9-23 Time 9:10 am
 Let Seed Settle for at least 1/2 hour, decant & continue stirring
 CL2 present NO mg/l; De CL2 _____ TRC READING _____
 Date of sodium sulfite _____
 Volume of sodium sulfite _____
 H2SO4 _____ NaOH(6.5 7.5) Sample rechecked to CL2 _____
 Dechlorinated with: Sulfur Dioxide
 (DR/3000 Spectrophotometer)

Dilution Water Blanks

Bottle #	#23	#24
D.O. Initial	9.03	9.01
D.O. Final	9.03	9.01
Difference	0.0	0.0

Seed Correction

Bottle Number	#25	#26	#27
ml Seed Used	14	16	18
D.O. Initial	8.84	8.85	8.87
D.O. Final	6.55	6.47	6.09
Difference	2.29	2.38	2.78
D.O. Used/ml Seed	5	5	5
Seed correction	0.8	0.7	0.8

Glucose Glutamic

Bottle Number	#32	#33
ml Standard	6	6
ml Seed used	5	5
D.O. Initial	8.98	8.97
D.O. final	3.83	3.81
Difference	5.15	5.16
Seed Correction	0.7	0.7
Corrected Diff	4.5	4.46
BOD mg/l	222.5	223
GC should be 198 + - 30.5		

Sample Data

Bottle number	#28	#29	#30	#31
ml Standard	150	200	200	250
ml Seed used	5	5	5	5
D.O. Initial	9.02	9.04	9.11	9.17
D.O. Final	6.98	6.84	6.86	6.51
Difference	2.04	2.2	2.25	2.59
Seed Correction	0.7	0.7	0.7	0.7
Corrected Difference	1.3	1.5	1.55	1.89
BOD mg/l	2.7	2.3	2.3	2.268
mg/l-Day	2.3993333	or	2.0	mg/L

Analysis (Preparer) SV Date 3-9-23 Time 3:10 pm
 Analysis (Reading) SV Date 3-14-23 Time 3:10 pm

supervised by _____

Dilutions that result in a residual D.C. of at least 1 mg/l and a D.O. uptake of at least 2 mg/l after 5 days of incubation produce the most reliable results.
 Before seed is used it should be allowed to settle for at least 1 hr. and no longer than 36 hours at 20°C before use.

		Flows			Flows			
10:00	.5	500	1:00	.5	500			
11:00	.5	500	2:00	.5	500			
12:00	.5	500	3:00	.5	500			

E. coli

Name of Facility: City of Belen

Date of Sampling: 2-1-23

Time of Sampling 10:05 Am

Sample location: Out Fall

Sample preservation: ice ☐ refrigerated ☒

Signature of Sampler Sc

Date of Arrival: 2-1-23

Time of Arrival: 10:10 Am

Method Used: M-E-Col. Blue
24

Time of Analysis: 10:25 Am

Analysis: *[Signature]*

		MPH Asset in Continuous Growth	
Date of Purchase		7-18-22	
Lot number		A2159	
Date of Expiration		July/23	
pH		7.0	

Ray Anderson	
Time In: 10:35 AM	Time Out: 10:35 AM
Temp In: 35.1	Temp Out: 35.1
Date In: 2-1-23	Date Out: 2-2-23
Analysis SV	SV

Filter Funnel Sterilized: yes | Work area disinfected: yes

[illegible]

NOTEN INDEX

E. coli

400 ml

$$7 \div 110 = 0.06 \times 100 = \boxed{6}$$

E. coli

Name of Facility: City of Belen

Date of Sampling: 2-6-23

Time of Sampling: 2-8-23
10:00 AM

Sample Location: OUT Fall

Sample preservation: ice ☐ refig ☒

Signature of Sampler

Date of Arrival: 2-6-23

Time of Arrival: 10:05 PM

Method Used: M-E-Coli Blue
24

Time of Analysis: 10:20 Am

Analyst: EJ

		MTCC Asset	
Date of Purchase		MTCC Invoice Profit	
Lot number		7-18-22	
Date of Expiration		A 2159	
pH		July/23	
		7.0	

Time In:	Time Out:
Temp In:	Temp Out:
Date In:	Date Out:
Analysis	

Filter Pumped Sterilized: yes | Work area disinfected: yes

[illegible]

IGMP Indices

$$5 \div 100 = 0.05 \times 100 = \boxed{5} \text{ E. coli}$$

400 ml

E. coli

Name of Facility: City of Belen
Date of Sampling: 2-7-23
Time of Sampling: 10:33 AM
Sample location: Out Fall
Sample preservation: ☐ ice ☒ refrigerant
Signature of Sampler: _____

Date of Arrival: 2-7-23
Time of Arrival: 10:35
Method Used: M-E-Col. Blue
24
Time of Analysis: 10:50 AM
Analyst: [Signature]

		MTG Agar in Colistina Broth	
Date of Purchase		7-18-22	
Lot number		A2159	
Date of Expiration		July/23	
pH		7.0	

Day: 27/08/2023	
Time In: 11:00 AM	Time Out: 11:08 AM
Temp In: 35.1	Temp Out: 35.1
Date In: 2-7-23	Date Out: 2-8-23
Analysis: [Signature]	[Signature]

Filter Funnel Sterilized: yes | Work area disinfected: yes

[illegible]

TOPIC Index

E. coli

100 ml

$$7 \div 110 = 0.06 \times 100 = \boxed{6}$$

E. coli

Name of Facility: City of Belen
Date of Sampling: 2-8-23
Time of Sampling: 10:00 AM
Sample location: out fall
Sample preservation: ice ☐ refriger ☒
Signature of Sampler: EV

Date of Arrival: 2-8-23
Time of Arrival: 10:05 AM
Method Used: M-E-Col. Blue
24
Time of Analysis: 10:20 AM
Analyst: [Signature]

		MEC Assay	
Date of Purchase		in Colloidal Form	
Lot number		7-18-22	
Date of Expiration		A2159	
pH		July/23	
		7.0	

Day: 28 incubation	
Time In: 10:30 AM	Time Out: 10:30 AM
Temp In: 35.1	Temp Out: 35.1
Date In: 2-8-23	Date Out: 2-9-23
Analysis: EV	EV

Filter Funnel Sterilized: yes | Work area disinfected: yes

[illegible]

NOTES

E. coli

$$5 \div 100 = 0.05 \times 100 = \boxed{5}$$

2100 ml

E. coli

Name of Facility: City of Belen
Date of Sampling: 2-13-23
Time of Sampling: 10:00 AM
Sample location: Out Fall
Sample preservation: 100 ml
Signature of Sampler: [Signature]

Date of Arrival: 2-13-23
Time of Arrival: 10:05 AM
Method Used: M-E-Coli Blue
24
Time of Analysis: 10:20 AM
Analyst: 81

		MPCC Acar m. Col. Blue. Brown	
Date of Purchase		7-18-22	
Lot number		A2159	
Date of Expiration		July/23	
pH		7.0	

Ray Analyzer	
Time In: 10:30 AM	Time Out: 10:30 AM
Temp In: 35.1	Temp Out: 35.1
Date In: 2-13-23	Date Out: 2-14-23
Analysis: RV	RV

Filter Funnel Sterilized: yes Work area disinfected: yes

[illegible]

Index

E. coli

$$.6 \div 110 = 0.05 \times 100 = \boxed{5}$$

4100 ml

E. coli

Name of Facility: City of Belen
 Date of Sampling: 2-14-23
 Time of Sampling: 10:00 AM
 Sample Location: Out Fall
 Sample preservation: ☒ ice ☐ refrigerant
 Signature of Sampler: [Signature]

Date of Arrival: 2-14-23
Time of Arrival: 10:05 AM
Method Used: M-E-Coli Blue
24
Time of Analysis: 10:20 AM
Analyst: SV

		MTG Agar in Colture Broth	
Date of Purchase		7-18-20	
Lot number		A2159	
Date of Expiration		July/23	
pH		7.0	

Time In:	Time Out:
10:30 AM	10:30 AM
Temp In:	Temp Out:
35.1	35.1
Date In:	Date Out:
2-14-23	2-15-23
Analysis	
2U	AA

Filter Funnel Sterilized: yes Work area disinfected: yes

[illegible]

IGPM Index

E. coli

400 ml

$$7 \div 110 = 0.06 \times 100 = \boxed{6}$$

E. coli

Name of Facility: City of Biele

Date of Sampling: 2-15-73

Time of Sampling: 10:00 a.m.

Sample location: Out Fall

Sample preservation: ice ☒ to 10°C ☒

Signature of Satorler AA

Date of Arrival: 2-15-23

Time of Arrival: 10:05 a.m.

Method Used: M-E-Coli Blue
24

Time of Analysis: 10:20 am

Analyst: AA

		INTERACAR in Coliform Broth	
Date of Purchase		7-18-22	
Lot number		A2159	
Date of Expiration		July/23	
pH		7.0	

Day: April 14, 1964	
Time In: 10:30 am	Time Out: 10:30 AM
Temp In: 35.1	Temp Out: 35.1
Date In: 2-15-23	Date Out: 2-16-23
Analysis: AA	EW

Filter Funnel Sterilized: yes | Work area disinfected: yes

[illegible]

MPN Index

E. coli

400 ml

$$6 \div 110 = 0.05 \times 100 = \boxed{5}$$



*Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

August 03, 2023

John Ivey
City of Belen WWTP
100 South Main
Belen, NM 87002
TEL: (505) 864-6081
FAX: (505) 864-0211

RE: Nitrate Bromodichloromethane

OrderNo.: 2307A11

Dear John Ivey:

Hall Environmental Analysis Laboratory received 2 sample(s) on 7/21/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2307A11**

Date Reported: **8/3/2023**

CLIENT: City of Belen WWTP

Client Sample ID: Nitrate / Bromodichloromethane

Project: Nitrate Bromodichloromethane

Collection Date: 7/19/2023 3:01:00 PM

Lab ID: 2307A11-001

Matrix: AQUEOUS

Received Date: 7/21/2023 9:29:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 624.1 - VOCS							Analyst: CCM
Bromodichloromethane	4.5	1.0		µg/L	1	7/21/2023 8:19:00 PM	W98398
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	7/21/2023 8:19:00 PM	W98398
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	7/21/2023 8:19:00 PM	W98398
Surr: Dibromofluoromethane	111	70-130		%Rec	1	7/21/2023 8:19:00 PM	W98398
Surr: Toluene-d8	108	70-130		%Rec	1	7/21/2023 8:19:00 PM	W98398
EPA METHOD 300.0: ANIONS							Analyst: SNS
Nitrate+Nitrite as N	8.3	1.0		mg/L	5	7/28/2023 1:38:06 PM	R98598

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **2307A11**

Date Reported: **8/3/2023**

CLIENT: City of Belen WWTP

Client Sample ID: Nitrate / Bromodichloromethane

Project: Nitrate Bromodichloromethane

Collection Date: 7/20/2023 3:01:00 PM

Lab ID: 2307A11-002

Matrix: AQUEOUS

Received Date: 7/21/2023 9:29:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 624.1 - VOCS							Analyst: CCM
Bromodichloromethane	5.0	1.0		µg/L	1	7/21/2023 8:44:00 PM	W98398
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	7/21/2023 8:44:00 PM	W98398
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	7/21/2023 8:44:00 PM	W98398
Surr: Dibromofluoromethane	113	70-130		%Rec	1	7/21/2023 8:44:00 PM	W98398
Surr: Toluene-d8	106	70-130		%Rec	1	7/21/2023 8:44:00 PM	W98398
EPA METHOD 300.0: ANIONS							Analyst: SNS
Nitrate+Nitrite as N	8.5	1.0		mg/L	5	7/28/2023 1:50:26 PM	R98598

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307A11

03-Aug-23

Client: City of Belen WWTP
Project: Nitrate Bromodichloromethane

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R98598	RunNo: 98598								
Prep Date:	Analysis Date: 7/28/2023	SeqNo: 3590685 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R98598	RunNo: 98598								
Prep Date:	Analysis Date: 7/28/2023	SeqNo: 3590686 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.5	0.20	3.500	0	98.6	90	110			

Sample ID: MB	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBW	Batch ID: R98598	RunNo: 98598								
Prep Date:	Analysis Date: 7/28/2023	SeqNo: 3590736 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: LCS	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSW	Batch ID: R98598	RunNo: 98598								
Prep Date:	Analysis Date: 7/28/2023	SeqNo: 3590737 Units: mg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	98.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307A11

03-Aug-23

Client: City of Belen WWTP

Project: Nitrate Bromodichloromethane

Sample ID: 100NG 624 LCS		SampType: LCS		TestCode: EPA Method 624.1 - VOCs						
Client ID: LCSW		Batch ID: W98398		RunNo: 98398						
Prep Date:		Analysis Date: 7/21/2023		SeqNo: 3582007		Units: µg/L				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	21	1.0	20.00	0	104	65	135			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	12		10.00		117	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	11		10.00		113	70	130			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 624.1 - VOCs							
Client ID: PBW	Batch ID: W98398		RunNo: 98398							
Prep Date:	Analysis Date: 7/21/2023		SeqNo: 3583497		Units: µg/L					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	11		10.00		115	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: City of Belen WWTP

Work Order Number: 2307A11

RcptNo: 1

Received By: Juan Rojas

7/21/2023 9:29:00 AM

Juan Rojas

Completed By: Desiree Dominguez

7/21/2023 9:38:44 AM

DD

Reviewed By:

ju 7/21/23

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

2

<2 or >12 unless noted)

Adjusted?

NO

Checked by

scm 07/21/23

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

Email/Fax, Phone number, and Project Manager are not provided on COC- DAD 7/21/23

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.4	Good	Not Present	Morty		

Chain-of-Custody Record

Client: City of Belen

Mailing Address: 100 South main st

Belen NM 87002

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 4.4-0=4.4 (°C)

Container Type and #

Preservative Type

HEAL No.

Plastic

ICE

-001

glass

ICE

I

plastic

ICE

-002

glass

ICE

I

Date: 7/19/03

Time: 3:01 PM

Matrix: X2

Sample Name: Nitrate

Date: 7/19/03

Time: 3:01 PM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/20/03

Time: 3:01 PM

Matrix: X2

Sample Name: Nitrate

Date: 7/20/03

Time: 3:01 PM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/21/03

Time: 9:29 AM

Matrix: X2

Sample Name: Nitrate

Date: 7/21/03

Time: 9:29 AM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/21/03

Time: 9:29 AM

Matrix: X2

Sample Name: Nitrate

Date: 7/21/03

Time: 9:29 AM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/21/03

Time: 9:29 AM

Matrix: X2

Sample Name: Nitrate

Date: 7/21/03

Time: 9:29 AM

Matrix: X3

Sample Name: Dichloromethane

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Sample Name: Nitrate

Date: 7/21/03

Time: 9:29 AM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/21/03

Time: 9:29 AM

Matrix: X2

Sample Name: Nitrate

Date: 7/21/03

Time: 9:29 AM

Matrix: X3

Sample Name: Dichloromethane

Date: 7/21/03

Time: 9:29 AM

Matrix: X2

Sample Name: Nitrate

Date: 7/21/03

Time: 9:29

Belen Wastewater Treatment Plant

PH Worksheet

Date of Sampling 1-26-23
Time of Sampling 10:00 AM

Method Used Standard Methods 22nd Ed.

Section 4500H 4-65 4-69

Make and Model of PH Meter Thermal Scientific 3 Star Orion

Exact Sampling Location Effluent Outfall to Receiving Stream

Type of Sample X (Grab).

EFF. Sample Temperature 18.6 *C

Instantaneous Flow EFF: .5

Signature of Sampler: [Signature]

Signature of Analyst: [Signature]

PH Meter Calibration

Date of Calibration; 1-26-23 by [Signature]

Time of Calibration 9:50 AM

PH Meter Buffer adjusted to Sample Temp A.T.C *C

First PH Buffer used to check standardization PH.7

Meter Reading 7.05

Lot Number B472108 Date Opened 12-1-22 Clarity OK

Expiration Date 8-17-23

Second PH Buffer used to check standardization PH.4

Meter Reading 4.00

Lot Number B44211019 Date Opened 12-1-22 Clarity OK

Expiration Date 10-19-23

Third PH Buffer used to check standardization PH.10

Meter Reading 10.07

Lot Number B5021092 Date Opened 12-1-22 Clarity OK

Expiration Date 9-21-23

Sample Data

Time of Analysis 10:05 AM

PH Reading Effluent. 7.36

Second PH Reading Effluent. 7.36

PH Brand NCL NORTH CENTRAL LABORATORIES: PH Temp (7) 18.5 (4) 18.4 (10) 18.4
Please note that PH is temperature dependent. This buffer will give PH values accurate to ± 0.01
At the following temperatures. Refer to chart on bottle.

TEMPERATURES

MONTH

Feb

YEAR

2023

DATE	TIME	REFRIGERATOR 4.0°C +/- 1.0°C	BOD INCUBATOR 20.0 +/- 1.0°C	DRYING OVEN 104.0 +/- 1.0°C	E-COLI INCUBATOR 35°C +/- .5°C	INITIALS	COMMENTS
1	7:00 Am	4.0	20.1	104	35.1	RV	Ø
2	7:00 Am	4.0	20.1	104	35.1	RV	Ø
3	7:00 Am	4.0	20.1	104	35.1	RV	Ø
4							
5							
6	7:00 Am	4.0	20.1	104	35.1	RV	Ø
7	7:00 Am	4.0	20.1	104	35.1	RV	Ø
8	7:00 Am	4.0	20.1	104	35.1	RV	Ø
9	7:00 Am	4.0	20.1	104	35.1	RV	Ø
10	7:00 Am	4.0	20.1	104	35.1	RV	Ø
11							
12							
13	7:00 Am	4.0	20.1	104	35.1	RV	Ø
14	7:00 Am	4.0	20.1	104	35.1	RV	Ø
15	7:00 Am	4.0	20.1	104	35.1	RV	Ø
16	7:00 Am	4.0	20.1	104	35.1	RV	Ø
17	7:00 Am	4.0	20.1	104	35.1	RV	Ø
18							
19							
20	7:00 Am	4.0	20.1	104	35.1	RV	Ø
21	7:00 Am	4.0	20.1	104	35.1	RV	Ø
22	7:00 Am	4.0	20.1	104	35.1	RV	Ø
23	7:00 Am	4.0	20.1	104	35.1	RV	Ø
24	7:00 Am	4.0	20.1	104	35.1	RV	Ø
25							
26							
27	7:00 Am	4.0	20.1	104	35.1	AA	Ø
28	7:00 Am	4.0	20.1	104	35.1	AA	Ø
29							
30							
31							

TEMPERATURES

MONTH

Jan

YEAR

2023

DATE	TIME	REFRIGERATOR 4.0°C +/- 1.0°C	BOD INCUBATOR 20.0 +/- 1.0°C	DRYING OVEN 104.0 +/- 1.0°C	E-COLI INCUBATOR 35°C +/- .5°C	INITIALS	COMMENTS
1							
2							
3	7:00 AM	4.0	20.1	104	35.1	RV	Ø
4	7:00 AM	4.0	20.1	104	35.1	RV	Ø
5	7:00 AM	4.0	20.1	104	35.1	RV	Ø
6	7:00 AM	4.0	20.1	104	35.1	RV	Ø
7							
8							
9	7:00 AM	4.0	20.1	104	35.1	RV	Ø
10	7:00 AM	4.0	20.1	104	35.1	RV	Ø
11	7:00 AM	4.0	20.1	104	35.1	RV	Ø
12	7:00 AM	4.0	20.1	104	35.1	RV	Ø
13	7:00 AM	4.0	20.1	104	35.1	RV	Ø
14							
15							
16	7:00 AM	4.0	20.1	104	35.1	RV	Ø
17	7:00 AM	4.0	20.1	104	35.1	RV	Ø
18	7:00 AM	4.0	20.1	104	35.1	RV	Ø
19	7:00 AM	4.0	20.1	104	35.1	RV	Ø
20	7:00 AM	4.0	20.1	104	35.1	RV	Ø
21							
22							
23	7:00 AM	4.0	20.1	104	35.1	RV	Ø
24	7:00 AM	4.0	20.1	104	35.1	RV	Ø
25	7:00 AM	4.0	20.1	104	35.1	RV	Ø
26	7:00 AM	4.0	20.1	104	35.1	RV	Ø
27	7:00 AM	4.0	20.1	104	35.1	RV	Ø
28							
29							
30	7:00 AM	4.0	20.1	104	35.1	RV	Ø
31	7:00 AM	4.0	20.1	104	35.1	RV	Ø

TEMPERATURES

MONTH

March

YEAR

2023

DATE	TIME	REFRIGERATOR 4.0°C +/- 1.0°C	BOD INCUBATOR 20.0 +/- 1.0°C	DRYING OVEN 104.0 +/- 1.0°C	E-COLI INCUBATOR 35°C +/- .5°C	INITIALS	COMMENTS
1	7:00 am	4.0	20.1	104	35.1	AA	Ø
2	7:00 am	4.0	20.1	104	35.1	AA	Ø
3	7:00 am	4.0	20.1	104	35.1	AA	Ø
4							
5							
6	7:00 Am	4.0	20.1	104	35.1	RV	Ø
7	7:00 Am	4.0	20.1	104	35.1	RV	Ø
8	7:00 Am	4.0	20.1	104	35.1	RV	Ø
9	7:00 Am	4.0	20.1	104	35.1	RV	Ø
10	7:00 Am	4.0	20.1	104	35.1	RV	Ø
11							
12							
13	7:00 Am	4.0	20.1	104	35.1	RV	Ø
14	7:00 Am	4.0	20.1	104	35.1	RV	Ø
15	7:00 Am	4.0	20.1	104	35.1	RV	Ø
16	7:00 Am	4.0	20.1	104	35.1	RV	Ø
17	7:00 Am	4.0	20.1	104	35.1	RV	Ø
18							
19							
20	7:00 Am	4.0	20.1	104	35.1	RV	Ø
21	7:00 Am	4.0	20.1	104	35.1	RV	Ø
22	7:00 Am	4.0	20.1	104	35.1	RV	Ø
23	7:00 Am	4.0	20.1	104	35.1	RV	Ø
24	7:00 Am	4.0	20.1	104	35.1	RV	Ø
25							
26							
27	7:00 Am	4.0	20.1	104	35.1	RV	Ø
28	7:00 Am	4.0	20.1	104	35.1	RV	Ø
29	7:00 Am	4.0	20.1	104	35.1	RV	Ø
30	7:00 Am	4.0	20.1	104	35.1	RV	Ø
31	7:00 Am	4.0	20.1	104	35.1	RV	Ø

MONTH Apr. 2023

TEMPERATURES

YEAR 2023

DATE	TIME	REFRIGERATOR 4.0°C +/- 1.0°C	BOD INCUBATOR 20.0 +/- 1.0°C	DRYING OVEN 104.0 +/- 1.0°C	E-COLI INCUBATOR 35°C +/- .5°C	INITIALS	COMMENTS
1	7:00 am	4.0	20.1	104	35.1	AA	X
2	7:00 am	4.0	20.1	104	35.1	AA	X
3	7:00 am	4.0	20.1	104	35.1	AA	X
4	7:00 am	4.0	20.1	104	35.1	AA	X
5	7:00 am	4.0	20.1	104	35.1	AA	X
6	7:00 am	4.0	20.1	104	35.1	RV	Ø
7						RV	Ø
8							
9							
10	7:00 am	4.0	20.1	104	35.1	RV	Ø
11	7:00 am	4.0	20.1	104	35.1	RV	Ø
12	7:00 am	4.0	20.1	104	35.1	RV	Ø
13	7:00 am	4.0	20.1	104	35.1	RV	Ø
14	7:00 am	4.0	20.1	104	35.1	RV	Ø
15						RV	Ø
16							
17	7:00 am	4.0	20.1	104	35.1	RV	Ø
18	7:00 am	4.0	20.1	104	35.1	RV	Ø
19	7:00 am	4.0	20.1	104	35.1	RV	Ø
20	7:00 am	4.0	20.1	104	35.1	RV	Ø
21	7:00 am	4.0	20.1	104	35.1	RV	Ø
22						RV	Ø
23							
24	7:00 am	4.0	20.1	104	35.1	RV	Ø
25	7:00 am	4.0	20.1	104	35.1	RV	Ø
26	7:00 am	4.0	20.1	104	35.1	RV	Ø
27	7:00 am	4.0	20.1	104	35.1	RV	Ø
28	7:00 am	4.0	20.1	104	35.1	RV	Ø
29						RV	Ø
30							
31							

TRC (TOTAL RESIDUAL CHLORINE) BENCH SHEET

Month JAN Year 2023

Chlorine Residual Hach DR 5000 Spectrophotometer
Standard Methods 4500-Cl G. Colorimetric Method pgs 4-45/4-46

NPDES Permit requires 0.099 or less

DATE	SAMPLER INITIALS	FLOW	SAMPLE LOCATION	TIME SAMPLED	TIME OF ANALYST ANALYSIS / INITIAL	CL2 RESIDUAL PPM
1	Jo	.6	EFF. OVER WEIR	10:04	10:09 Jo	0.01
2	Jo	.4	EFF. OVER WEIR	10:00	10:05 Jo	0.01
3	SV	.4	EFF. OVER WEIR	10:05 AM	10:10 SV	0.00
4	SV	.4	EFF. OVER WEIR	10:06 AM	10:05 SV	0.00
5	SV	.6	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
6	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
7	AA	.4	EFF. OVER WEIR	10:06 AM	10:12 AA	0.00
8	AA	.4	EFF. OVER WEIR	10:05 AM	10:10 AA	0.00
9	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
10	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
11	SV	.5	EFF. OVER WEIR	10:05 AM	10:10 SV	0.00
12	SV	.5	EFF. OVER WEIR	10:05 AM	10:10 SV	0.00
13	AA	.5	EFF. OVER WEIR	10:00 AM	10:05 AA	0.00
14	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
15	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
16	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.00
17	Jo	.4	EFF. OVER WEIR	10:02 AM	10:07 Jo	0.01
18	SV	.5	EFF. OVER WEIR	10:05 AM	10:10 SV	0.00
19	SV	.5	EFF. OVER WEIR	10:05 AM	10:10 SV	0.00
20	SV	.7	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
21	Lc	.5	EFF. OVER WEIR	10:00 AM	10:05 Lc	0.00
22	Lc	.4	EFF. OVER WEIR	10:10 AM	10:15 Lc	0.01
23	SV	.4	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
24	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
25	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
26	SV	.7	EFF. OVER WEIR	10:05 AM	10:10 SV	0.01
27	Jo	.4	EFF. OVER WEIR	10:04 AM	10:09 Jo	0.01
28	Jo	.4	EFF. OVER WEIR	10:02 AM	10:07 Jo	0.01
29	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
30	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01
31	SV	.5	EFF. OVER WEIR	10:00 AM	10:05 SV	0.01

0.00

0.00

0.00

TRC (TOTAL RESIDUAL CHLORINE) BENCH SHEET

Month Feb Year 2023

Chlorine Residual Hach DR 5000 Spectrophotometer
Standard Methods 4500-Cl G. Colorimetric Method pgs 4-45/4-46

NPDES Permit requires 0.099 or less

DATE	SAMPLER INITIALS	FLOW	SAMPLE LOCATION	TIME SAMPLED	TIME OF ANALYSIS / ANALYST INITIAL	CL2 RESIDUAL PPM
1	RV	.5	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.01
2	RV	.5	EFF. OVER WEIR	10:06 AM	10:05 AM RV	0.00
3	RV	.5	EFF. OVER WEIR	10:08 AM	10:05 AM RV	0.00
4	RN	.4	EFF. OVER WEIR	10:07	10:09 RN	0.00
5	RN	.4	EFF. OVER WEIR	10:08	10:09 RN	0.00
6	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
7	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
8	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.01
9	RV	.4	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
10	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
11	AA	.4	EFF. OVER WEIR	10:00 AM	10:05 AM AA	0.00
12	AA	.4	EFF. OVER WEIR	10:05 AM	10:10 AM AA	0.00
13	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
14	RV	.6	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
15	AA	.4	EFF. OVER WEIR	10:00 AM	10:05 AM AA	0.01
16	RV	.5	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
17	RV	.5	EFF. OVER WEIR	10:07 AM	10:13 AM RV	0.01
18	RV	.4	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
19	RV	.4	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
20	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
21	RV	.6	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
22	LC	.8	EFF. OVER WEIR	10:05 AM	10:10 AM LC	0.01
23	RV	.4	EFF. OVER WEIR	10:10 AM	10:15 AM RV	0.00
24	RV	.5	EFF. OVER WEIR	10:20 AM	10:25 AM RV	0.00
25	LC	.5	EFF. OVER WEIR	10:10 AM	10:15 AM LC	0.01
26	LC	.6	EFF. OVER WEIR	10:10 AM	10:15 AM LC	0.00
27	AA	.5	EFF. OVER WEIR	10:00 AM	10:06 AM AA	0.00
28	AA	.5	EFF. OVER WEIR	10:00 AM	10:07 AM AA	0.00
29			EFF. OVER WEIR			
30			EFF. OVER WEIR			
31			EFF. OVER WEIR			

0.00

0.00

0.00

TRC (TOTAL RESIDUAL CHLORINE) BENCH SHEET

Month Nov Year 2023

Chlorine Residual Hach DR 5000 Spectrophotometer
Standard Methods 4500-Cl G. Colorimetric Method pgs 4-45/4-46

NPDES Permit requires 0.099 or less

DATE	SAMPLER INITIALS	FLOW	SAMPLE LOCATION	TIME SAMPLED	TIME OF ANALYSIS / ANALYST INITIAL	CL2 RESIDUAL PPM
1	AA	.6	EFF. OVER WEIR	10:00 am	10:06 am AA	0.00
2	AA	.5	EFF. OVER WEIR	10:00 am	10:07 am AA	0.00
3	AA	.5	EFF. OVER WEIR	10:01 am	10:16 am AA	0.00
4	JO	.4	EFF. OVER WEIR	10:10 am	10:17 am JO	0.05
5	JO	.5	EFF. OVER WEIR	10:20 am	10:25 am JO	0.01
6	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
7	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.01
8	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.01
9	RV	.5	EFF. OVER WEIR	10:10 AM	10:15 AM RV	0.00
10	RV	.5	EFF. OVER WEIR	10:40 AM	10:45 AM RV	0.00
11	RV	.4	EFF. OVER WEIR	10:21 AM	10:26 AM RV	0.00
12	RV	.3	EFF. OVER WEIR	10:15 AM	10:20 AM RV	0.00
13	RV	.5	EFF. OVER WEIR	10:10 AM	10:15 AM RV	0.00
14	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
15	AA	.5	EFF. OVER WEIR	10:00 am	10:07 am AA	0.00
16	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
17	RV	.5	EFF. OVER WEIR	10:30 AM	10:35 AM RV	0.00
18	AA	.4	EFF. OVER WEIR	10:06 am	10:12 am AA	0.00
19	AA	.4	EFF. OVER WEIR	10:05 am	10:10 am AA	0.00
20	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
21	RV	.5	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
22	RV	.6	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.01
23	RV	.4	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
24	RV	.5	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.01
25	RV	.4	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
26	RV	.3	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
27	RV	.6	EFF. OVER WEIR	10:05 AM	10:10 AM RV	0.00
28	RV	.5	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
29	AA	.5	EFF. OVER WEIR	10:00 am	10:06 am AA	0.00
30	RV	.8	EFF. OVER WEIR	10:00 AM	10:05 AM RV	0.00
31	RV	.4	EFF. OVER WEIR	10:10 AM	10:15 AM RV	0.00

TRC (TOTAL RESIDUAL CHLORINE) BENCH SHEET

Month April Year 2023

Chlorine Residual Hach DR 5000 Spectrophotometer
Standard Methods 4500-Cl G. Colorimetric Method pgs 4-45/4-46

NPDES Permit requires 0.099 or less

DATE	SAMPLER INITIALS	FLOW	SAMPLE LOCATION	TIME SAMPLED	TIME OF ANALYSIS / ANALYST INITIAL	CL2 RESIDUAL PPM
1	JO	.7	EFF. OVER WEIR	10:03	10:08	0.01
2	JO	.5	EFF. OVER WEIR	10:00	10:05	0.01
3	AA	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
4	AA	.5	EFF. OVER WEIR	10:00am	10:06am	0.00
5	AA	.5	EFF. OVER WEIR	10:00am	10:06am	0.00
6	SV	.6	EFF. OVER WEIR	10:00am	10:05am	0.00
7	Bm	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
8	LC	.5	EFF. OVER WEIR	10:05am	10:10am	0.01
9	AA	.5	EFF. OVER WEIR	10:05am	10:10am	0.00
10	SV	.5	EFF. OVER WEIR	10:05am	10:10am	0.00
11	SV	.6	EFF. OVER WEIR	10:10am	10:15am	0.01
12	AA	.5	EFF. OVER WEIR	10:06am	10:12am	0.00
13	SV	.6	EFF. OVER WEIR	10:00am	10:05am	0.00
14	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.01
15	Bm	.4	EFF. OVER WEIR	10:08am	10:13am	0.00
16	Bm	.5	EFF. OVER WEIR	10:08am	10:10am	0.00
17	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
18	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
19	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
20	SV	.6	EFF. OVER WEIR	10:00am	10:05am	0.00
21	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
22	SV	.5	EFF. OVER WEIR	10:00am	10:06am	0.00
23	SV	.4	EFF. OVER WEIR	10:00am	10:07am	0.00
24	SV	.4	EFF. OVER WEIR	10:00am	10:10am	0.00
25	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
26	SV	.4	EFF. OVER WEIR	10:00am	10:05am	0.00
27	SV	.5	EFF. OVER WEIR	10:00am	10:05am	0.01
28	JO	.5	EFF. OVER WEIR	10:00am	10:05am	0.00
29	AA	.4	EFF. OVER WEIR	10:05am	10:10am	0.01
30	AA	.4	EFF. OVER WEIR	10:05am	10:10am	0.00
31			EFF. OVER WEIR	10:05am	10:11am	0.00

0.00

0.00

0.00

CITY OF BELEN

WASTEWATER TREATMENT PLANT

TOTAL SUSPENDED SOLIDS WORKSHEET

Sample By: IV	Analysis By: IV					
	01/03/23					
Time of sampling :	10:00am - 3:00pm					
Exact Sampling Location :	Eff. After Rectangular Weir					
Sample Preservation :	4c Refrigerator					
Type of Sample : (Grab: Composite : X)						
Type of Flow : (Instantaneous: Daily Avg.: X)						
Time of arrival:	3:01pm					
Date of analysis:	01/03/23	Time of Analysis:	3:05pm			
Methods Used: Standard Methods 22nd Edition						
Section 2540D 2-66 2-67						
Refrigerate sample at 4c up to the time of analysis						
Sample Number	#1	#2	Duplicate #3	Influent #5	#6	
1st Drying Start Time	3:10pm	104*				
1st Drying Stop Time	4:10pm	104*				
Sample Volume (mL)	100	250	250	100	25	
1st Wt Dry Sample + Filter & Dish (gm)	1.3637	1.3658	1.3664			
Wt of Filter & Dish (gm) (Tare)	1.3634	1.3651	1.3657			
1st Wt Dry Sample (gm)	0.3	0.7	0.7			
2nd Wt of Dry Sample + Filter & Dish (gm)	1.3637	1.3658	1.3664			
Wt of Filter & Dish (gm)	1.3634	1.3651	1.3657			
2nd Wt of dry Sample (gm)	0.3	0.7	0.7			
2nd Drying Start Time						
2nd Drying Stop Time : Date:						
TOTAL SUSPENDED SOLIDS (TSS) (mg/L)	3.00	2.80	2.80			
Average TSS (mg/l)	2.9	or	3.0	mg/L		
<u>Blanks</u>						
Dish Number	#4	#7				
Sample Volume (ml)	100	100				
1st Wt of Dry Sample + Filter & Dish (gm)	1.3655					
Wt of Filter & Dish (gm) (Tare)	1.3655					
1st. Wt. Dry Sample (gm)	0	0				
2nd Wt. Of Dry Sample + Filter & Dish (gm)	1.3655					
Wt of Filter & Dish (gm) (Tare)	1.3655	0				
2nd Wt. Dry Sample (gm)	0	#VALUE!				
Total Suspended Solids (TSS) (mg/l)	0	#VALUE!				
<u>TSS, mg/l - Final Wt. Grams - Initial x 1,000,000</u>						
Sample volume,ml						

CITY OF BELEN

WASTEWATER TREATMENT PLANT

TOTAL SUSPENDED SOLIDS WORKSHEET

Sample By: <i>SV</i>	Analysis By: <i>SV</i>				
Time of sampling: 10:00am - 3:00pm	1-3-23				
Exact Sampling Location: Eff. After Rectangular Weir					
Sample Preservation: 4c Refrigerator					
Type of Sample: (Grab: Composite: X)					
Type of Flow: (Instantaneous: Daily Avg.: X)					
Time of arrival: 3:01 PM					
Date of analysis: 1-3-23	Time of Analysis: 3:05 PM				
Methods Used: Standard Methods 22nd Edition Section 2540D 2-66 2-67					
Refrigerate sample at 4c up to the time of analysis					
Sample Number	#1	#2	Duplicate #3	Influent #5	#6
1st Drying Start Time	3:10 PM	104*			
1st Drying Stop Time	4:10 PM	104*			
Sample Volume (mL)	100	250	250	100	25
1st Wt Dry Sample + Filter & Dish (gm)	1.3637	1.3658	1.3664		
Wt of Filter & Dish (gm) (Tare)	1.3634	1.3651	1.3657		
1st Wt Dry Sample (gm)	0.3	0.7	0.7		
2nd Wt of Dry Sample + Filter & Dish (gm)	1.3637	1.3658	1.3664		
Wt of Filter & Dish (gm)	1.3634	1.3651	1.3657		
2nd Wt of dry Sample (gm)	0.3	0.7	0.7		
2nd Drying Start Time					
2nd Drying Stop Time: Date:					
TOTAL SUSPENDED SOLIDS (TSS) (mg/L)	3.00	2.80	2.80		
Average TSS (mg/l)	2.9	or	3.0	mg/L	
<u>Blanks</u>					
Dish Number	#4	#7			
Sample Volume (ml)	100	100			
1st Wt of Dry Sample + Filter & Dish (gm)	1.3655				
Wt of Filter & Dish (gm) (Tare)	1.3655				
1st. Wt. Dry Sample (gm)	0	0			
2nd Wt. Of Dry Sample + Filter & Dish (gm)	1.3655				
Wt of Filter & Dish (gm) (Tare)	1.3655	0			
2nd Wt. Dry Sample (gm)	0	0	#VALUE!		
Total Suspended Solids (TSS) (mg/l)	0	0	#VALUE!		
TSS, mg/l - Final Wt. Grams - Initial x 1,000,000					
Sample volume, ml					

CITY OF BELEN

WASTEWATER TREATMENT PLANT

TOTAL SUSPENDED SOLIDS WORKSHEET

Sample By: IV	Analysis By: IV					
	01/04/23					
Time of sampling :	10:00am - 3:00pm					
Exact Sampling Location :	Eff. After Rectangular Weir					
Sample Preservation :	4c Refrigerator					
Type of Sample: (Grab: Composite : X)						
Type of Flow : (Instantaneous: Daily Avg.: X)						
Time of arrival:	3:01pm					
Date of analysis:	01/04/23	Time of Analysis:	3:05pm			
Methods Used: Standard Methods 22nd Edition						
Section 2540D 2-66 2-67						
Refrigerate sample at 4c up to the time of analysis						
		Duplicate	Influent			
Sample Number	#1	#2	#3	#5	#6	
1st Drying Start Time	3:10pm	104*				
1st Drying Stop Time	4:10pm	104*				
Sample Volume (mL)	100	250	250	100	25	
1st Wt Dry Sample + Filter & Dish (gm)	1.3635	1.3681	1.3648			
Wt of Filter & Dish (gm) (Tare)	1.3633	1.3675	1.3642			
1st Wt Dry Sample (gm)	0.2	0.6	0.6			
2nd Wt of Dry Sample + Filter & Dish (gm)	1.3635	1.3681	1.3648			
Wt of Filter & Dish (gm)	1.3633	1.3675	1.3642			
2nd Wt of dry Sample (gm)	0.2	0.6	0.6			
2nd Drying Start Time						
2nd Drying Stop Time : Date:						
TOTAL SUSPENDED SOLIDS (TSS) (mg/L)	2.00	2.40	2.40			
Average TSS (mg/l)	2.3	or	2.0 mg/L			
<u>Blanks</u>						
Dish Number	#4	#7				
Sample Volume (ml)	100	100				
1st Wt of Dry Sample + Filter & Dish (gm)						
Wt of Filter & Dish (gm) (Tare)						
1st. Wt. Dry Sample (gm)	0	0				
2nd Wt. Of Dry Sample + Filter & Dish (gm)						
Wt of Filter & Dish (gm) (Tare)		0				
2nd Wt. Dry Sample (gm)	0	#VALUE!				
Total Suspended Solids (TSS) (mg/l)	0	#VALUE!				
<u>TSS, mg/l - Final Wt. Grams - Initial x 1,000,000</u>						
Sample volume,ml						

CITY OF BELEN

WASTEWATER TREATMENT PLANT

TOTAL SUSPENDED SOLIDS WORKSHEET

Sample By: <u>SV</u>	Analysis By: <u>SV</u>				
Time of sampling: <u>1-4-23</u>	10:00am - 3:00pm				
Exact Sampling Location: <u>Eff. After Rectangular Weir</u>					
Sample Preservation: <u>4c Refrigerator</u>					
Type of Sample: (Grab: ☐ Composite: ☒)					
Type of Flow: (Instantaneous: ☐ Daily Avg.: ☒)					
Time of arrival: <u>3:01 PM</u>					
Date of analysis: <u>1-4-23</u>	Time of Analysis: <u>3:05 PM</u>				
Methods Used: Standard Methods 22nd Edition					
Section 2540D 2-66 2-67					
Refrigerate sample at 4c up to the time of analysis					
Sample Number	#1	#2	Duplicate #3	Influent #5	#6
1st Drying Start Time	<u>3:10 PM</u>	<u>104*</u>			
1st Drying Stop Time	<u>4:10 PM</u>	<u>104*</u>			
Sample Volume (mL)	100	250	250	100	25
1st Wt Dry Sample + Filter & Dish (gm)	<u>1.3635</u>	<u>1.3681</u>	<u>1.3648</u>		
Wt of Filter & Dish (gm) (Tare)	<u>1.3633</u>	<u>1.3675</u>	<u>1.3642</u>		
1st Wt Dry Sample (gm)	<u>0.2</u>	<u>0.6</u>	<u>0.6</u>		
2nd Wt of Dry Sample + Filter & Dish (gm)	<u>1.3635</u>	<u>1.3681</u>	<u>1.3648</u>		
Wt of Filter & Dish (gm)	<u>1.3633</u>	<u>1.3675</u>	<u>1.3642</u>		
2nd Wt of dry Sample (gm)	<u>0.2</u>	<u>0.6</u>	<u>0.6</u>		
2nd Drying Start Time					
2nd Drying Stop Time: Date:					
TOTAL SUSPENDED SOLIDS (TSS) (mg/L)	<u>2.00</u>	<u>2.40</u>	<u>2.40</u>		
Average TSS (mg/l)	<u>2.3</u>	or	<u>2.0</u>	mg/L	
<u>Blanks</u>					
Dish Number	#4	#7			
Sample Volume (ml)	100	100			
1st Wt of Dry Sample + Filter & Dish (gm)					
Wt of Filter & Dish (gm) (Tare)					
1st. Wt. Dry Sample (gm)	0	0			
2nd Wt. Of Dry Sample + Filter & Dish (gm)					
Wt of Filter & Dish (gm) (Tare)		0			
2nd Wt. Dry Sample (gm)	0	#VALUE!			
Total Suspended Solids (TSS) (mg/l)	0	#VALUE!			
TSS, mg/l - Final Wt. Grams - Initial x 1,000,000					
Sample volume, ml					