

Bureau of Mining Regulation and Reclamation

GUIDANCE DOCUMENT

ELECTRONIC DATA SUBMISSION

20 September 2022

I. Introduction

As of 28 July 2021, the Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation (Division) has implemented a system for tracking facility monitoring data using a reporting database. This database helps to facilitate the transmission and storage of electronic data related to the Water Pollution Control Permit (WPCP) monitoring program. Reporting, review, and storage of information submitted to the Division for compliance data will be managed in this system. This guidance document outlines the formatting and submittal requirements for characterization data for the WPCP monitoring types including, but not limited to, monitoring wells, piezometers, pit lakes, surface water, mined material, processed material, sumps, leak detections, and climate data.

Characterization data for other WPCP monitoring, including Petroleum Contaminated Soil (PCS) Screening Analyses, such as analyses for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPH); kinetic testing (humidity cell testing [HCT]); hazardous waste determinations; graphically represented data; records of releases and remedial action on the NDEP Form 0490 or equivalent; data in a text format such as summaries, narratives, or lists; photographs; or any other information which cannot be submitted in a spreadsheet, shall be submitted to the Division in an approved electronic format.

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II. Overview

Characterization data for the WPCP monitoring types including, but not limited to, monitoring wells, piezometers, pit lakes, surface water, mined material, processed material, sumps, leak detections, and climate data, shall be submitted as described in Section III of this document. This file will be submitted to the Division via email or other approved means and will be subsequently uploaded to the BMRR database (database). If there are any data encountered during the upload process which are not complete, or which are not in an acceptable format for import, a summary will be provided to the Permittee. Once data are uploaded to the database, they are linked to the specific monitoring locations outlined in Part I.D. of the respective WPCP. Each monitoring location is also linked to a specific geographical location. The specific geographical locations shall be submitted as described in Section IV of this document.

The Division has plans to further improve the database in the future to allow for direct upload by the Permittee of the electronic data to the database for their mine project(s).

III. Compliance Monitoring Data File and Formatting

All characterization data for the WPCP monitoring types <u>compatible</u> with the database shall be submitted according to the requirements as outlined below. Data compatible with the database include, but are not limited to, monitoring wells, piezometers, pit lakes, surface water, mined material, processed material, sumps, leak detections, and climate data.

Data <u>incompatible</u> with the database include, but are not limited to, Petroleum Contaminated Soil (PCS) Screening Analyses, such as analyses for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), and total petroleum hydrocarbons (TPH); kinetic testing (humidity cell testing); hazardous waste determinations; graphically represented data; records of releases and remedial action on the NDEP Form 0490 or equivalent; data in a text format such as summaries, narratives, or lists; photographs; laboratory analytical sheets, or any other information which cannot be submitted in the appropriate spreadsheet format, shall be submitted to the Division in an approved electronic format (i.e. PDF).

File Requirements:

Applicable compliance monitoring data are to be submitted in a single Excel Spreadsheet (.xls or .xlsx) file (the "Excel file") with the compliance monitoring data included in the <u>first tab</u> of the Excel file. In the file name include the Permit number and reporting period (e.g., Q1 2022), and if the submittal is an original, revision, or addendum. An example submittal is provided on the Division website (https://ndep.nv.gov). Submittals which do not adhere to the requirements outlined in this document will generate error messages during the upload process, thereby delaying the review and approval of these submissions.

The Excel file should include the numerical data themselves (e.g., concentrations, flow rates) and metadata required to fully interpret analysis results (e.g., whether or not the sample was filtered). The compliance monitoring data, included in the Excel file, may extend down the sheet as far as necessary to include all applicable data reported in Part I.D of the WPCP. Include only the data required in Part I.D. of the Permit. Limit reported results to the parameters either required by the Permit or included in the NDEP Standard Forms (examples of these forms in a database compatible format are included in Appendix B: Excel Examples). If there are any fields which are not required and are not applicable to a specific monitoring location (e.g., Filter Size for a sample which was not filtered), these fields may be left blank. The Excel file should be limited to only the data that the permittee intends to upload for the reporting field, and data should not be "excluded" from the spreadsheet using the "hide" or "filter" functions in excel, as the database will still upload and store these data.

Formatting Requirements:

The Excel file must be formatted to include the following column headers: Location ID, Sample Date, Sampled By, Sample Number, Laboratory Certification Number, Lab Test Date, Filtration, Filter Size, Parameter, Value, Units, Reporting Limit, and Notes. <u>The column headers are case-sensitive and must</u> <u>match the syntax in this list</u>. Do not include any extra spaces. Failure to include column headers which match this list will result in the submission being flagged as incomplete, even if all other data have been provided.

Within the columns of the Excel file, there are several fields requiring specific inputs that must be in the exact format described below; these instructions are in *bolded italics*. The fields Location ID, Sample Date, Value, and Units, denoted below with an asterisk (*) are required fields and must be populated for the database to accept and upload the electronic data. Every effort should be made to populate all other applicable fields. Missing fields may result in an incomplete submission. Additional information on each field is as follows:

A. Location ID*

Sample location identifier, unique to the location; *This identifier is case-sensitive, space sensitive, and must match the Monitoring ID included within the Water Pollution Control Permit in Part I.D.*

B. Sample Date*

The date on which the sample was collected; format in MM/DD/YYYY. Do not include the time the sample was collected. Do not include any spaces in the entry. If the entry represents a calculation, please use the last day of the quarter as a date. If the sample could not be collected, please document the date sampling was attempted.

C. Sampled By

Initials of the individual of who completed the sample collection.

D. Sample Number

The unique identifier given to the sample by the laboratory. If the sample is not processed in a Statecertified laboratory (examples include, but are not limited, field pH, field temperature, and leak detection accumulation measurements), leave this field blank.

E. Laboratory Certification Number

The unique reference or EPA certification number assigned to the laboratory, which is used to track chain-of custody and other analytical procedures. If the sample is not processed in a State-certified laboratory (examples include, but are not limited, field pH, field temperature, and leak detection accumulation measurements), leave this field blank.

F. Lab Test Date

The date on which the sample was analyzed; format in MM/DD/YYYY, if applicable. Do not include the time the sample was collected; remove any spaces in the entry. If the sample was not processed in a State-certified laboratory, leave this field blank.

G. Filtration

The status of sample filtration for the water-quality sample parameter; If the parameter was filtered, this should be denoted as "Filtered", no spaces. If the parameter was unfiltered, this should be denoted as "Unfiltered", no spaces. If the parameter does not require filtration, leave this field blank.

H. Filter Size

If the parameter was filtered, report the pore size of the filter used in micrometers (e.g., a 0.45 micrometer (μ m) filter shall be recorded as 0.45). If the sample was not filtered, leave this field blank.

I. Parameter*

The name of the parameter that is being reported (e.g., sample results from a Profile I analysis would include parameters such as Aluminum, Arsenic, Antimony, etc.); *Parameters should correspond with the exact syntax included in* Appendix A: Acceptable Parameters and Units. If a parameter is not included in the current list, please contact the Division prior to submitting the electronic data file.

J. <u>Value*</u>

Numerical value (i.e., result) for the appropriate sample, parameter, and sample location/date; Values less than the practical quantitation limit (PQL) shall be reported using the less than "<" sign, followed by the PQL. For any radiological data measured in pCi/L, report only the measured value in this field and provide any uncertainty measurement in the Notes field.

If a sample was missed or not collected for a reporting period, please insert an acceptable code that best defines the reason for the missed sample (**Table 1**) in the "Value" column of the data upload Excel file.

Table 1. List of reason codes for missed samples. These codes may be used in the "Value" column of the data upload Excel file.

Code	Description
DRY	Dry monitoring point
NETS	Not enough to sample
DAM	Damaged monitoring point
INA	Inaccessible monitoring point
NM	Not mined
WNP	Well not pumped
BNU	Basin not used
NCO	Not constructed/commissioned
OTHER	Other reason

K. Units*

Please include the unit of measurement for the parameter of interest; *Units should correspond with the exact syntax and format included in Appendix A*. If a unit is not included in the current list, please contact the Division prior to submitting the electronic data file.

L. Reporting Limit

Provide the laboratory reporting limit for the analytical method completed, if applicable. The reporting limit must be a number, and cannot include any symbols such as commas, less than or greater than signs, or text. If there is no reporting limit, leave this field blank. <u>Notes</u>

Any additional information necessary for review of sample results, including but not limited to, laboratory flag codes for the sample or parameter set (e.g., "HT" for a sample analyzed outside the allowable hold time), or specifying the use of an appropriate reason code in the value field. The Notes field may not be left blank when any of the following reason codes are used: "NETS", "DAM", "INA" or "OTHER". If the reason codes "NETS", "DAM", "INA" or "OTHER" are used, a description of the reason a sample could not be collected must be provided or the data will not be accepted. For any radiological data measured in pCi/L, provide any uncertainty measurement in this field.

IV. Monitoring Location Data Formatting

Each distinct monitoring location outlined in Part I.D. of the Permit, including active, inactive, proposed, or closed locations, must be entered into the BMRR database using the submission requirements outlined below and in Part II.C.5 of the Permit. An example submittal is provided on the Division website (https://ndep.nv.gov). The location data shall be provided with each Permit renewal, as-built report, and monitoring plan update, as applicable. Additionally, any changes to monitoring locations shall be submitted in the annual report, per section II.B.2, as applicable.

File Requirements:

Applicable monitoring location data are to be submitted in a single Excel Spreadsheet (.xls or .xlsx) (the "location Excel file") file with the location data included in the first tab of the location Excel file. In the file name include the permit number.

Formatting Requirements:

All fields below are required for submission of Monitoring Location Data. Fields that require an exact syntax format are outlined in *bolded italics*. Additional information on each field is as follows:

A. Permit No

Water Pollution Control Number (NEVXXXXXX)

B. Location ID

Sample location identifier, unique to the location; required field; *This identifier is case sensitive and must match the Monitoring ID included within the Water Pollution Control Permit in Part I.D.* The Location ID cannot match a previously submitted Location ID for the same WPCP Number. For pit lakes where samples are required to be collected at various depths, please contact project staff for the preferred naming convention.

C. Easting

Spatial location of sampling point (Universal Transverse Mercator [UTM], North American Datum [NAD] 1983, Zone 11N, in meters). Easting must be a numeric value between 239650 and 756640 and accurate to two decimal points (ref. NRS 327.030.b).

D. Northing

Spatial location of sampling point (UTM NAD 1983, Zone 11N, in meters); Northing must be a numeric value between 3875990 and 4653330 and accurate to two decimal points (ref. NRS 327.030.b).

E. Notes

Text field to describe the monitoring point location (e.g., "Upgradient well for HLP", "Ore stockpiled on site"). *This field should match the Identification field in Part I.D of the WPCP*.

F. TypeID

Type of monitoring location (e.g., monitoring well, surface water, etc.). This identifier will be filled out by the BMRR.

G. Status

Identify if the monitoring point is "Active", "Proposed", "Closed", or "Inactive".

V. Electronic Monitoring Data Checklist

Below is a checklist to provide additional a resource for checking data prior to submittal and to provide additional guidance regarding the requirements for the BMRR database.

- Data are included in the first tab of the Excel file, only.
- □ The Excel file only includes data for the reporting period.
- □ The Excel file only includes data which are required per Section I.D of the Permit.
- □ Column headers exactly match the names provided in Section III, including capitalization and spaces.
- □ The required fields (Location ID, Sample Date, Value, and Units) include the appropriate information, and have not been left blank.
- □ Location IDs match the Monitoring ID included within the Water Pollution Control Permit in Part I.D (including capitalization and spaces).
- □ The Sample Date is in the MM/DD/YYYY format.
- □ Parameter exactly matches one of the accepted parameters, specified in Appendix A (including capitalization).
- □ The parameters reported are parameters which are either required by the Permit or included in the NDEP Standard Forms (Appendix B).
- □ Value is entered as one of the following: a number (including for radiological data reported in pCi/L, any uncertainty for these measurements should be reported in the Notes field), a "<" sign, followed by the PQL, or using one of the accepted reason codes (e.g., "DRY").
- □ Units exactly match one of the accepted units, specified in Appendix A (including capitalization).
- □ Notes have been included for any entry which had one of the following reason codes recorded in the value field "NETS", "DAM", "INA" or "OTHER".
- □ Notes have been included for any radiological data which specify the uncertainty for the measurement (e.g., 2.7 ± 0.1).
- □ Excel file is free from formatting errors such as copy paste errors, or drag and drop errors (e.g., dates of 01/01/2022, 01/02/2022, 01/03/2022 resulting from using the drag and drop functionality in Excel).
- □ Data incompatible with the database, described in Section III of this document, are not reported in the Excel file, and instead these are reported to the Division in an approved format.

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Appendix A: Acceptable Parameters and Units

The table below provides a list of parameters and units that are accepted by the BMRR database. The parameters and units reported to the Division are to be entered as specified in Section III of this document (Compliance Monitoring Data File and Formatting Requirements). If your permit contains a parameter that is not listed in the table below, please contact the Division.

Parameter	Unit
(Weight of) Dry test sample	grams (g)
226Radium	pico Curies per liter (pCi/L)
226Radium + 228Radium	pCi/L
228Radium	pCi/L
230Thorium	pCi/L
Acid Generating Potential (AGP)	tons per kiloton (T/kT)
Acid Neutralizing Potential (ANP)	T/kT
Acidity, Total	milligrams per liter (mg/L)
Acidity, Total	mg/L as calcium carbonate (CaCO ₃)
Adjusted Gross Alpha	pCi/L
Alkalinity Carbonate	mg/L
Alkalinity Carbonate	mg/L as CaCO ₃
Alkalinity, Bicarbonate (as CaCO ₃)	mg/L
Alkalinity, Bicarbonate (as CaCO ₃)	mg/L as CaCO ₃
Alkalinity, Hydroxide (as CaCO ₃)	mg/L
Alkalinity, Hydroxide (as CaCO ₃)	mg/L as CaCO ₃
Alkalinity, Total (as CaCO ₃)	mg/L
Alkalinity, Total (as CaCO ₃)	mg/L as CaCO ₃
Aluminum	mg/L
Ammonia	mg/L
Amount	pounds
Amount processed	cubic feet
Amount processed	cubic yards
Amount processed	tons
Annual precipitation	inches
Annual precipitation	millimeters (mm)
ANP/AGP	-
ANP/AGP	no units
ANP/AGP	T/kT
Antimony	micrograms per liter (µg/L)
Antimony	mg/L
Application rate	gallons per day (gpd)

Parameter	Unit					
Application rate	gallons per minute (gpm)					
Area	acres					
Arsenic	µg/L					
Arsenic	mg/L					
Average accumulation	gallons (gal)					
Average accumulation	gpd					
Average accumulation	gallons per year (gpy)					
Average air temperature	degrees Fahrenheit (°F)					
Barium	mg/L					
Beryllium	µg/L					
Beryllium	mg/L					
Bismuth	mg/L					
Boron	µg/L					
Boron	mg/L					
Cadmium	µg/L					
Cadmium	mg/L					
Calcium	mg/L					
Chloride	mg/L					
Chromium	µg/L					
Chromium	mg/L					
Chromium (III)	µg/L					
Chromium (III)	mg/L					
Chromium (VI)	µg/L					
Chromium (VI)	mg/L					
Cobalt	mg/L					
Collar elevation	feet above mean sea level (AMSL)					
Color	Platinum Cobalt Unit (PCU)					
Conductivity	microSiemens per centimeter (µS/cm)					
Continuous field temperature	°F					
Copper	µg/L					
Copper	mg/L					
Crush Strength	pounds per square inch (psi)					
Cyanide, Free	µg/L					
Cyanide, Free	mg/L					
Days Used	days					
Depth at Staff Gauge	ft					
Depth at Staff Gauge	inches					
Depth below collar	feet below ground surface (bgs)					

Parameter	Unit
Depth below collar	ft
Depth below surface	feet bgs
Depth below surface	ft
Depth of sample	ft
Depth of solution	feet bgs
Depth of solution	ft
Depth of solution	inches
Depth of water	feet bgs
Depth of water	ft
Depth to groundwater	feet bgs
Depth to groundwater	ft
Discharge distance	ft
Dissolved Oxygen	mg/L
Distance from embankment	ft
Duration	hours
Evaporation	gpd
Evaporation	inches
Evaporation	mm
Evapotranspiration (ET)	inches
field Eh	millivolts (mV)
field Eh	Volts (V)
Field ORP	mV
field pH	standard units (S.U.)
Field Specific Conductance	µS/cm
Field Temperature	degrees Celsius (°C)
Field Temperature	°F
Filter Cake WAD Cyanide	milligrams per kilogram (mg/kg)
Flow Rate	cubic feet per second (cfs)
Flow Rate	gpd
Flow Rate	gpm
Flow Rate	million gallons per day (MGD)
Fluoride	mg/L
Freeboard	ft
Gallium	mg/L
Gallons conveyed	gal
Gallons pumped	gal
Gallons pumped	gpd
Gallons pumped	gpm

Parameter	Unit				
Gross Alpha	pCi/L				
Gross Beta	pCi/L				
Groundwater elevation	feet AMSL				
Groundwater elevation	ft				
Hardness	mg/L				
Hardness	mg/L as CaCO ₃				
HCL Rinse Residue	%				
HNO3 Rinse Residue	%				
Hot Water Rinse Residue	%				
Hydraulic head	ft				
Hydroxide (OH)	mg/L				
Hydroxide (OH)	mg/L as CaCO ₃				
Hydroxide (OH)	mg/L as OH				
Iron	mg/L				
Lake area	acres				
Lake depth	ft				
Lake surface elevation	feet AMSL				
Lake volume	acre-foot				
Lead	µg/L				
Lead	mg/L				
Lithium	mg/L				
Magnesium	mg/L				
Manganese	µg/L				
Manganese	mg/L				
Maximum air temperature	°F				
Maximum Flow Rate	cfs				
Maximum Flow Rate	gpd				
Maximum Flow Rate	gpm				
Maximum lake depth	ft				
Mercury	µg/L				
Mercury	mg/L				
Minimum air temperature	°F				
Moisture content	%				
Molybdenum	mg/L				
NAG pH-S1	S.U.				
NAG Sample Weight	g				
NaOH Normality-S1	N				
Net Neutralization Potential (NNP)	T/kT				

Parameter	Unit				
Nickel	µg/L				
Nickel	mg/L				
Nitrate (as N)	mg/L				
Nitrate + Nitrite (as N)	mg/L				
Nitrite (as N)	mg/L				
Nitrogen, Total (as N)	mg/L				
Nitrogen, Total Kjeldahl	mg/L				
Non-Extractable Sulfur	%				
Non-Potentially Acid Generating (PAG) material	tons				
Non-Water Soluble Sulfate	%				
Number of wells	-				
Ore Shipped	tons				
Ore Stockpiled	tons				
Oxidation Reduction Potential (ORP)	mV				
Paste pH	S.U.				
Percent aggregate	%				
Percent Binder	%				
Percent Portland cement in binder	%				
pH	S.U.				
Phosphorus	µg/L				
Phosphorus	mg/L				
Pit floor elevation	feet AMSL				
Potassium	mg/L				
Potential Acid Generating Sulfur	%				
Potentially Acid Generating (PAG) material	tons				
Precipitation (rain + snow)	inches				
Precipitation (rain + snow)	mm				
Precipitation (total)	inches				
Precipitation (total)	mm				
Pumping rate	gpd				
Pumping rate	gpm				
Pyritic Sulfur	%				
Relative humidity	%				
Scandium	mg/L				
Selenium	μg/L				
Selenium	mg/L				
Silver	µg/L				
Silver	mg/L				

Parameter	Unit					
Slump	inches					
Snow Water Equivalent SWE	inches					
Snow Water Equivalent SWE	mm					
Sodium	mg/L					
Sodium Adsorption Ratio (SAR)	milliequivalent per liter (mEq/L)					
Specific Conductance	micromhos per centimeter (µmhos/cm)					
Specific Conductance	μS/cm					
Storm duration	hours					
Strontium	mg/L					
Sulfate	mg/L					
Sulfide	µg/L					
Sulfide	mg/L					
Temperature	°C					
Temperature	°F					
Thallium	µg/L					
Thallium	mg/L					
Thickness of solid sediment	ft					
Tin	mg/L					
Titanium	mg/L					
Tons of material placed	tons					
Tons of material removed	tons					
Total Dissolved Solids	mg/L					
Total NAG (calcium carbonate CaCO ₃)	kg CaCO ₃ /ton					
Total NAG (sulfuric acid H ₂ SO ₄)	kg H ₂ SO ₄ /ton					
Total Organic Carbon	mg/L					
Total Sulfur	%					
Total Suspended Solids	mg/L					
ТРН-Е	mg/kg					
ТРН-Е	mg/L					
ТРН-Р	mg/kg					
ТРН-Р	mg/L					
Turbidity	NTU					
Uranium	mg/L					
Uranium	pCi/L					
Uranium + 230Thorium	pCi/L					
Vanadium	mg/L					
Volume	gal					
Volume added	cubic feet					

Parameter	Unit
Volume added	cubic yards
Volume evacuated	gal
Volume evacuated	gpd
Volume NaOH-S1	mL
Volume of water used	mL
Volume shipped offsite	cubic yards
WAD Cyanide	mg/kg
WAD Cyanide	mg/L
Water elevation	feet AMSL
Water elevation	feet bgs
Water elevation	ft
Water/Extraction addition time	hours
Water-Soluble Sulfates	%
Wind Speed	mph
Zinc	µg/L
Zinc	mg/L

Note: Monitoring must be conducted in accordance permit requirements. If a parameter is not included in the above list, but is required to be monitored per permit requirements, please contact the project staff, as the reporting requirement is not exempt.

Appendix B: Excel Examples

The Excel Examples are for specific sample types.

Profile I

Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
TEST								Acidity, Total		mg/L as CaCO3			pH < 5.0 SU
TEST								Alkalinity, Bicarbonate (as CaCO3)		mg/L as CaCO3			pH > 4.5 SU
TEST								Alkalinity, Total (as CaCO3)		mg/L as CaCO3			pH > 4.5 SU
TEST								Aluminum		mg/L			
TEST								Antimony		mg/L			
TEST								Arsenic		mg/L			
TEST								Barium		mg/L			
TEST								Beryllium		mg/L			
TEST								Cadmium		mg/L			
TEST								Calcium		mg/L			
TEST								Chloride		mg/L			
TEST								Chromium		mg/L			
TEST								Copper		mg/L			
TEST								Fluoride		mg/L			
TEST								Gross Alpha		pCi/L			
TEST								Iron		mg/L			
TEST								Lead		mg/L			
TEST								Magnesium		mg/L			
TEST								Manganese		mg/L			
TEST								Mercury		mg/L			
TEST								Nitrate + Nitrite (as N)		mg/L			
TEST								Nitrogen, Total (as N)		mg/L			
TEST								рН		SU			
TEST								Potassium		mg/L			
TEST								Selenium		mg/L			
TEST								Silver		mg/L			
TEST								Sodium		mg/L			
TEST								Sulfate		mg/L			
TEST								Thallium		mg/L			
TEST								Total Dissolved Solids		mg/L			
TEST								Uranium		mg/L			
TEST								WAD Cyanide		mg/L			
TEST								Zinc		mg/L			

Profile III

Location ID	Sample Date	Sampled	Sample	Laboratory Certification	Lab Test Date	Filtration	Filter Size Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
Location ib	Sample Date	Ву	Number	Number		Intration	The size Talance	Value	Office		Notes	contingent opon
TEST							Acidity, Total		mg/L as CaCO3			pH < 5.0 SU
TEST							Alkalinity, Bicarbonate (as CaCO3)		mg/L as CaCO3			pH > 4.5 SU
TEST							Alkalinity, Total (as CaCO3)		mg/L as CaCO3			pH > 4.5 SU
TEST							Aluminum		mg/L			
TEST							Antimony		mg/L			
TEST							Arsenic		mg/L			
TEST							Barium		mg/L			
TEST							Beryllium		mg/L			
TEST							Boron		mg/L			
TEST							Cadmium		mg/L			
TEST							Calcium		mg/L			
TEST							Chloride		mg/L			
TEST							Chromium		mg/L			
TEST							Copper		mg/L			
TEST							Fluoride		mg/L			
TEST							Iron		mg/L			
TEST							Lead		mg/L			
TEST							Lithium		mg/L			
TEST							Magnesium		mg/L			
TEST							Manganese		mg/L			
TEST							Mercury		mg/L			
TEST							Molybdenum		mg/L			
TEST							Nickel		mg/L			
TEST							Nitrate + Nitrite (as N)		mg/L			
TEST							Nitrogen, Total (as N)		mg/L			
TEST							bH		SU			
TEST							Phosphorus		mg/L			
TEST							Potassium		mg/L			
TEST							Selenium		mg/L			
TEST							Sodium		mg/L			
TEST							Strontium		mg/L			
TEST							Sulfate		mg/L			
TEST							Thallium		mg/L			
TEST							Tin		mg/L			
TEST							Total Dissolved Solids		mg/L			
TEST							Total Suspended Solids		mg/L			
TEST							Uranium		mg/L			
TEST							Vanadium		mg/L			
TEST							Zinc		mg/L			

Profile R

Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
TEST								226Radium		pCi/L			
TEST								226Radium + 228Radium		pCi/L			
TEST								228Radium		pCi/L			
TEST								Adjusted Gross Alpha		pCi/L			
TEST								Gross Alpha		pCi/L			

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Nevada Modified Sobek Procedure

Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
TEST								Paste pH		SU			
TEST								Acid Neutralizing Potential (ANP)		T/kT			
TEST								Total Sulfur		%			
TEST								Hot Water Rinse Residue		%			
TEST								HCL Rinse Residue		%			
TEST								HNO3 Rinse Residue		%			
TEST								Water-Soluble Sulfates		%			
TEST								Non-Water Soluble Sulfate		%			
TEST								Pyritic Sulfur		%			
TEST								Non-Extractable Sulfur		%			
TEST								Potential Acid Generating Sulfur		%			
TEST								Acid Generating Potential (AGP)		T/kT			
TEST								Net Neutralization Potential (NNP)		T/kT			
TEST								ANP/AGP					

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Net Acid Generation

Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
TEST								NAG Sample Weight		g			
TEST								NAG pH-S1		SU			
TEST								NaOH Normality-S1		Ν			
TEST								Volume NaOH-S1		mL			
TEST								NAG-S1		kg H2SO4/ton			
TEST								NAG pH-S2		SU			
TEST								NaOH Normality-S2		Ν			
TEST								Volume NaOH-S2		mL			
TEST								NAG-S2		kg H2SO4/ton			
TEST								NAG pH-S3		SU			
TEST								NaOH Normality-S3		Ν			
TEST								Volume NaOH-S3		mL			
TEST								NAG-S3		kg H2SO4/ton			
TEST								NAG pH-S4		SU			
TEST								NaOH Normality-S4		Ν			
TEST								Volume NaOH-S4		mL			
TEST								NAG-S4		kg H2SO4/ton			
TEST								NAG pH-S5		SU			
TEST								NaOH Normality-S5		Ν			
TEST								Volume NaOH-S5		mL			
TEST								NAG-S5		kg H2SO4/ton			
TEST								NAG pH-S6		SU			
TEST								NaOH Normality-S6		Ν			
TEST								Volume NaOH-S6		mL			
TEST								NAG-S6		kg H2SO4/ton			
TEST								NAG pH-S7		SU			
TEST								NaOH Normality-S7		Ν			
TEST								Volume NaOH-S		mL			
TEST								NAG-S7		kg H2SO4/ton			
TEST								NAG pH-S8		SU			
TEST								NaOH Normality-S8		Ν			
TEST								Volume NaOH-S8		mL			
TEST								NAG-S8		kg H2SO4/ton			
TEST								NAG pH-S9		SU			
TEST								NaOH Normality-S9		Ν			
TEST								Volume NaOH-S9		mL			
TEST								NAG-S9		kg H2SO4/ton			
TEST								Total NAG (H2SO4)		kg H2SO4/ton			
TEST								Total NAG (CaCO3)		kg CaCO3/ton			

* Depending on the sample only one sequential addition may be needed. Please do not include any of the rows that do not have data since they are not needed and would cause errors in the upload process.

MWMP-Profile I

Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter		Units	Reporting Limit	Notes	Contingent Upon
TEST								(Weight of) Dry test sample		g			
TEST								Volume of water used		mL			
TEST								Water/Extraction addition time		hours			
TEST								Acidity, Total		mg/L			pH < 5.0 SU
TEST								Alkalinity, Bicarbonate (as CaCO3)		mg/L			
TEST								Alkalinity, Total (as CaCO3)		mg/L			
TEST								Aluminum		mg/L			
TEST								Antimony		mg/L			
TEST								Arsenic		mg/L			
TEST								Barium		mg/L			
TEST								Beryllium		mg/L			
TEST								Cadmium		mg/L			
TEST								Calcium		mg/L			
TEST								Chloride		mg/L			
TEST								Chromium		mg/L			
TEST								Copper		mg/L			
TEST								Fluoride		mg/L			
TEST								Iron		mg/L			
TEST								Lead		mg/L			
TEST								Magnesium		mg/L			
TEST								Manganese		mg/L			
TEST								Mercury		mg/L			
TEST								Nitrate + Nitrite (as N)		mg/L			
TEST								Nitrogen, Total (as N)		mg/L			
TEST								рН		SU			
TEST								Potassium		mg/L			
TEST								Selenium		mg/L			
TEST								Silver		mg/L			
TEST								Sodium		mg/L			
TEST								Sulfate		mg/L			
TEST								Thallium		mg/L			
TEST								Total Dissolved Solids		mg/L			
TEST								Uranium		mg/L			
TEST								WAD Cyanide		mg/L			
TEST								Zinc		mg/L			
TEST								Uranium		mg/L			
TEST								Gross Alpha		pCi/L			Uranium > 0.03 mg/L
TEST								Adjusted Gross Alpha		pCi/L			Uranium > 0.03 mg/L
TEST								226Radium		pCi/L			Uranium > 0.03 mg/L
TEST								228Radium		pCi/L			Uranium > 0.03 mg/L
TEST								226Radium + 228Radium		pCi/L			Uranium > 0.03 mg/L

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Location ID	Sample Date	Sampled By	Sample Number	Laboratory Certification Number	Lab Test Date	Filtration	Filter Size	Parameter	Value	Units	Reporting Limit	Notes	Contingent Upon
TEST								Acidity, Total		mg/L as CaCO3			
TEST								Alkalinity, Total (as CaCO3)	mg/L				
TEST								Ammonia	mg/L				
TEST								Antimony		μg/L			
TEST								Arsenic		μg/L			
TEST								Barium		mg/L			
TEST								Beryllium		μg/L			
TEST								Boron		μg/L			
TEST								Cadmium		μg/L			
TEST								Calcium		mg/L			
TEST								Chloride		mg/L			
TEST								Chromium		μg/L			
TEST								Chromium (III)		μg/L			
TEST								Chromium (VI)		μg/L			
TEST								Color		PCU			
TEST								Copper		μg/L			
TEST								Cyanide Free		μg/L			
TEST								Dissolved Oxygen	mg/L				
TEST								Fluoride		mg/L			
TEST								Hardness		mg/L			
TEST								Iron		mg/L			
TEST								Lead		μg/L			
TEST								Magnesium		mg/L			
TEST								Manganese		μg/L			
TEST								Mercury		μg/L			
TEST								Molybdenum		mg/L			
TEST								Nickel		μg/L			
TEST								Nitrate (as N)		mg/L			
TEST								Nitrite (as N)		mg/L			
TEST								рН		SU			
TEST								Phosphorus		μg/L			
TEST								Selenium		μg/L			
TEST								Silver		μg/L			
TEST								Sodium Adsorption Ratio (SAR)		mEq/L			
TEST								Sulfate	mg/L				
TEST								Sulfide	μg/L				
TEST								Thallium	μg/L				
TEST								Total Dissolved Solids	mg/L				
TEST								Total Suspended Solids	mg/L				
TEST								Turbidity		NTU			
TEST								Zinc		μg/L			

Surface Water Profile (Example based on NAC 445A.1236, may have additional constituents depending on water body, please see Permit issued for specifics)

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