wfec western farmers electric cooperative

PO Box 429 Anadarko, OK 73005 (405) 247-3351 www.wfec.com

April 15, 2022

Ms. Hillary Young, P.E.
Chief Engineer
Land Protection Division
Oklahoma Department of Environmental Quality
707 N. Robinson
P.O. Box 1677
Oklahoma City, OK 73162

Re: Second Report to Monitor Progress of Semi-Annual CMA Sampling at Landfill CCR Unit
Western Farmers Electric Cooperative (WFEC) - Hugo Power Station, Fort Towson, Oklahoma

Dear Ms. Young:

Enclosed, please find a copy of the above referenced report. The DEQ has approved a minimum two-year sample and evaluation period to establish the effectiveness of enhanced dewatering combined with monitored natural attenuation as a corrective measure alternative for molybdenum exceedances associated with WFEC'S Landfill CCR Unit. This report monitors progress of semi-annual sampling conducted to date. A copy of this report will be placed in the facility's operating record and on the facility's publicly accessible internet web-site.

Please notify me at 405-247-4298 or at k_fletcher@wfec.com if you have any questions.

Sincerely,

Kent Fletcher
Environmental Coordinator

cc: John McCreight / Western Farmers Electric Cooperation
Chris Schaefer and Bert Smith / Altamira-US, LLC

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Chief Engineer
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Oklahoma Department of Environmental Quality
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Re: Second Report to Monitor Progress of Semi-Annual CMA Sampling at Landfill CCR Unit
Western Farmers Electric Cooperative – Hugo Power Station, Fort Towson, Oklahoma

Dear Ms. Young:

Assessment Monitoring at Western Farmers Electric Cooperative's (WFEC's) Hugo Power Station (HPS) has indicated molybdenum at statistically significant levels (SSLs) above established groundwater protection standards (GWPSs) in 4 of 10 downgradient monitoring wells associated with its Landfill Coal Combustion Residuals (CCR) Unit. Molybdenum has been indicated at SSLs above the GWPSs at MW-15A, MW-16, MW-18, and MW-19S.

Laboratory testing has been provided to the Oklahoma Department of Environmental Quality (ODEQ) that shows the molybdenum adsorbs to the native rock material and does not leach from the native rock to groundwater. Furthermore, hydrogeologic characterization performed shows very slow groundwater movement with limited transport of molybdenum that has not, and probably will not, leave the HPS site property boundary at concentrations exceeding the GWPSs. A preliminary risk evaluation was performed indicating the groundwater constituents do not pose a hazard to potential on-site or off-site human or ecological receptors.

An Assessment of Corrective Measures Report was submitted to ODEQ on October 27, 2020. Based on evaluations included in the Assessment of Corrective Measures Report, source control via enhanced dewatering combined with monitored natural attenuation (MNA) was proposed as a corrective measure alternative for the molybdenum. A minimum of two years of semi-annual sampling of monitoring wells downgradient of the CCR landfill was proposed to establish the effectiveness of this alternative prior to selection of a final remedy. The Assessment of Corrective Measures Report and the two-year sample and evaluation period were approved by ODEQ on December 29, 2020, contingent upon submittal of semi-annual reports to ODEQ to monitor progress. This submittal constitutes the second semi-annual report for the first year of monitoring (2021).

ACTIVITIES COMPLETED (SECOND HALF OF 2021)

1) Dewatering of the Landfill CCR Unit was initiated in March 2020 and continues as water accumulates in the Landfill CCR Unit following rainfall events. Standing water that accumulates in the Landfill CCR Unit following rainfall is pumped from the north side of the CCR Unit as practicable and conveyed to Impoundment FO8 pursuant to OPDES permit (OK0035327. The Landfill CCR Unit does not contain sufficient standing water to pump during periods of little or no rainfall. Conversely, several consecutive days of pumping may be required to remove standing water from the Landfill CCR Unit after large rainfall events. Through April 4, 2022, records show that a total of 1,122.2 hours of pumping have been conducted to prevent standing water from accumulating in the Landfill CCR Unit since dewatering was initiated in March 2020. WFEC continues to maintain stormwater run-on controls to limit surface water entering into the Landfill CCR Unit.

2) The second semi-annual sampling of select monitoring wells as contained in the approved Assessment of Corrective Measures Report was conducted in October 2021. Wells sampled include the 4 wells where molybdenum had been identified at SSLs above the GWPS (MW-15A, MW-16, MW-18, and MW-19S), and monitoring wells MW-5S, MW-7S, MW-15B, MW-17, MW-22A, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-3B, CM-4A, CM-4B, CM-5A, and CM-5B. The approximate locations of monitoring wells sampled are shown on the figure in **Attachment A**. Monitoring well MW-14A was also sampled to evaluate background conditions.

3) Each of these wells was purged prior to sampling. Purging was accomplished using dedicated submersible pumps (MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-17, MW-18, MW-19S, and MW-22A), dedicated peristaltic pumps (CM-1A, CM-1B, and CM-2) and dedicated bailers (MW-15B, MW-22B, CM-3A, CM-3B, CM-4A, CM-4B, CM-5A, and CM-5B). Field readings of temperature, pH, and conductivity were maintained during purging of the wells. Purging was continued until water was sufficiently clear and field readings stabilized (where using submersible and peristaltic pumps) or until a well was purged dry (when bailing).

4) Groundwater samples were collected after purging. The groundwater samples were collected using dedicated submersible pumps, dedicated peristaltic pumps, or dedicated bailers and placed directly into appropriately preserved laboratory-prepared containers. The samples were labeled as to sample location, placed under chain-of-custody control, packed in ice, and shipped to ALS Environmental Laboratories (Oklahoma Certification 2020-165).

5) Each of the wells was sampled and the samples analyzed for parameters listed in the approved Assessment of Corrective Measures Report. Sampling parameters included molybdenum, dissolved molybdenum, and CCR Appendix III parameters (boron, chloride, pH, TDS, calcium, fluoride, and sulfate). Additionally, wells were monitored for indicator parameters to evaluate monitored natural attenuation (MNA). These indicator parameters included oxidation reduction potential (ORP), pH, specific conductance, total dissolved solids, nitrate, sulfide, total and dissolved iron, total and dissolved ferrous iron (Fe(II)), total and dissolved ferric iron (Fe(III)), dissolved oxygen (DO), and alkalinity. Samples for TDS, sulfide, nitrate, alkalinity, and all of the iron species were analyzed at the laboratory. The ORP and DO for each well were measured in the field. Specific conductance and pH for each well were both measured in the field and analyzed at the laboratory.

EVALUATION OF DATA

Laboratory reports from the October 2021 sampling are included in **Attachment B**. A running and updated tabulation of data to include results from the October 2021 sampling is contained in **Attachment C**. Oxidation-reduction reactions typically dictate molybdenum mobilization with molybdenum increasing in concentration as a result of reducing conditions, pH-induced desorption/dissolution, and microbial dissimilatory processes. Mineral co-precipitation/re-adsorption reactions typically dictate molybdenum immobilization. The data from the October 2021 sampling was compared to previously available data and evaluated to discern changes in molybdenum concentration and changes in the subsurface environment over time and distance. The following observations are made from this evaluation:

1) The October 2021 sampling was the eleventh sampling event for molybdenum (dating to August 2017) at monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-17, MW-18, and MW-19S; the tenth sampling event for molybdenum (dating to August 2017) at monitoring well MW-22A; and the fourth sampling event for molybdenum (dating to July 2020) at monitoring wells MW-15B, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B. Sufficient water was not available to sample CM-3B during the October 2021 sample event. From October 2021 sampling, molybdenum was identified at SSLs above GWPSs at MW-15A, MW-16, MW-18, and MW-19S. Reported molybdenum concentrations at these wells in decreasing order were 0.407 mg/L at MW-19S (east of the southern cell of the Landfill CCR Unit), 0.209 mg/L at MW18 (east of the southern cell of the Landfill CCR Unit), 0.163 mg/L at MW-16 (east of the northern Landfill CCR Unit), and 0.149 mg/L at MW-15A (north of the northern Landfill CCR Unit). Molybdenum concentrations attenuate significantly with distance from the Landfill CCR Unit. These wells had historically seen molybdenum levels above the GWPSs, and no new exceedances of the GWPSs were identified in any of the other wells.

2) Charts showing changes in molybdenum concentration over sampling history for each of the monitoring wells evaluated are included in **Attachment D**. These charts include a line of best fit generated by the Excel Trend Function using the least squares method. In most cases, the molybdenum concentration in site monitoring wells appears to have gone down slightly over the sampling history. The only exceptions are at monitoring wells MW-19S, CM-3B, and CM-5B. At MW-19S, the reported molybdenum concentration for October 2021 sampling is slightly higher but similar to that from the previous sampling event and at CM-5B the reported molybdenum concentration for October 2021 sampling is slightly lower but similar to that from the previous sampling event. At MW-15B, MW-22B, CM-1A, CM-1B, CM-2, CM-3ACM-4A, CM-4B, CM-5A, and CM-5B interpretation of changes in molybdenum concentrations are based on only four sampling events conducted between July/August 2020 and October 2021. At CM-3B, sufficient water was not available in October 2021 for sample collection. Interpretation of changes in molybdenum concentrations for this well are based on only three sampling events conducted between August 2020 and April 2021.

   For monitoring wells with more than four samplings, the mean molybdenum concentration from the four most recent sampling events was compared to the mean molybdenum concentration from sampling prior to the four most recent sampling events. The laboratory reporting level was used for determining mean concentrations where molybdenum was not identified. A comparison of mean molybdenum concentration from the four most recent sample events to that for the prior sampling events for wells evaluated is included in **Attachment E**. At all wells evaluated, except at MW-19S, the mean of the four most recent sampling events for molybdenum is lower than the mean from the prior molybdenum data. At MW-19S, the mean is slightly above but similar to that from the previous data.

   Other analyses to evaluate possible statistical trends from the molybdenum data, such as a combination of the Mann-Kendall test and Sen's Slope Estimator, have not been completed as of this report.

   - MW-5S: Molybdenum concentration from the October 2021 sampling event (0.00387 mg/L) is higher than those reported from the previous few sampling events, but still lower than concentrations historically reported at this well. Over the sampling history, the molybdenum concentration at this well appears to have decreased from 0.00737 mg/L in August 2017 to current levels.

A line of best fit over the sampling period indicates a negative slope (apparent downward trend). Also, the mean molybdenum concentration over the past four sampling events at this well (0.003065 mg/L) is 38% lower than the mean molybdenum concentration reported from sampling at this well conducted between August 2017 and October 2019 (0.0049 mg/L).

- MW-7S: Molybdenum concentration from October 2021 sampling (0.00115 mg/L) is higher than those reported from the previous few sampling events, but still lower than concentrations historically reported at this well. Over the sampling history, the molybdenum concentration at this well appears to have decreased from 0.00171 mg/L in August 2017 to current levels. A line of best fit over the sampling period indicates a negative slope (apparent downward trend). Also, the mean molybdenum concentration over the past four sampling events at this well (0.00100 mg/L) is 58% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.00240 mg/L).

- MW-14A: This monitoring well is an up-gradient background well. Molybdenum was not observed from October 2021 sampling at a concentration above the Method Detection Level (<0.0006 mg/L). Over the sampling history, the molybdenum at this well has decreased from 0.00223 mg/L in August 2017 to <0.0006 mg/L. Molybdenum has not been identified above the Method Detection Level since June 2020 sampling. A line of best fit over the sampling period indicates a negative slope (apparent downward trend). Also, the mean molybdenum concentration over the past four sampling events at this well (0.00064 mg/L) is 83% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.0038 mg/L).

- MW-15A: Molybdenum concentration from October 2021 sampling (0.149 mg/L) is the lowest reported date at this well. The highest molybdenum concentrations over the sampling history are 0.269 mg/L in June 2020 and 0.255 mg/L in August 2017. Prior to October 2019 sampling, molybdenum concentrations were typically greater than 0.2 mg/L at this well. Molybdenum concentrations reported since that time have been below 0.2 mg/L with exception of that reported from June 2020 sampling. A line of best fit over the sampling period indicates a negative slope (apparent downward trend).

Also, the mean molybdenum concentration over the past four sampling events at this well (0.188 mg/L) is 12% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.213 mg/L).

- MW-15B: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at MW-15B (0.0109 mg/L in July 2020, 0.00876 mg/L in October 2020, 0.00571 mg/L in March/April 2021, and 0.00328 mg/L in October 2021).

- MW-16: Molybdenum concentration from October 2021 sampling (0.163 mg/L) is slightly lower than that reported from the previous sampling event and is on the low end of those typically reported at this well. The highest molybdenum concentration to date for this well (0.193 mg/L) occurred in April 2019. A line of best fit over the sampling period indicates a negative slope (apparent downward trend). The mean molybdenum concentration over the past four sampling events at this well (0.163 mg/L) is 3% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.167 mg/L).

- MW-17: Molybdenum was not observed above the laboratory reporting level (<0.0060) during October 2021 sampling and is not typically observed at concentrations above the laboratory reporting level at this well. Molybdenum was most recently observed above the laboratory reporting level during the March/April 2021 sampling event. A line of best fit over the sampling period indicates a negative slope (apparent downward trend) and the mean molybdenum concentration over the past four sampling events at this well (0.0006 mg/L) is 18% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.0008 mg/L). These differences are due primarily to a decrease in the laboratory reporting level.

- MW-18: Molybdenum concentration from October 2021 sampling (0.21 mg/L) is nearly identical to that from the previous sampling event and is on the low end of those previously reported at this well. Over the sampling history, the molybdenum concentration at this well has decreased from 0.39 mg/L in August 2017 to current levels. Concentrations greater than 0.3 mg/L have not been observed since April 2019. A line of best fit over the sampling period indicates a negative slope (apparent downward trend).

Also, the mean molybdenum concentration over the past four sampling events at this well (0.194 mg/L) is 35% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.298 mg/L).

- MW-19S: Molybdenum concentration from October 2021 sampling (0.407 mg/L) is slightly higher but similar to that from the previous sampling event and is on the low end of those previously reported at this well. A line of best fit over the sampling period indicates a slightly positive slope and the mean molybdenum concentration over the past four sampling events at this well (0.394 mg/L) is 1% higher than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.388 mg/L). However, the current reported molybdenum concentration is lower than those reported prior to October 2019 and the highest molybdenum concentration to date for this well (0.472 mg/L) occurred in January 2019.

- MW-22A: Molybdenum was not observed above the laboratory reporting level (<0.0060) during October 2021 sampling and is not typically observed at concentrations above the laboratory reporting level at this well. Molybdenum was most recently observed above the laboratory reporting level during the September 2019 sampling event. A line of best fit over the sampling period indicates a negative slope (apparent downward trend) and the mean molybdenum concentration over the past four sampling events at this well (0.0006 mg/L) is 28% lower than the mean molybdenum concentration reported from sampling conducted at this well between August 2017 and October 2019 (0.0008 mg/L). These differences are due primarily to a decrease in the laboratory reporting level.

- MW-22B: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at MW-22B (0.00878 mg/L in July 2020, 0.00866 mg/L in October 2020, 0.00753 in March/April 2021, and 0.00446 in October 2021).

- CM-1A: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at CM-1A (0.0088 mg/L in July 2020, 0.00198 mg/L in October 2020, 0.00132 in March/April 2021, and 0.00127 mg/L in October 2021).

- CM-1B: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations appear to be decreasing. Reported molybdenum concentrations through four sampling events are 0.0133 mg/L in July 2020, 0.0144 mg/L in October 2020, 0.0113 mg/L in March/April 2021, and 0.00976 in October 2021.

- CM-2: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at CM-2 (0.00209 mg/L in July 2020, 0.00203 mg/L in October 2020, 0.00161 mg/L in March/April 2021, and 0.0012 mg/L in October 2021).

- CM-3A: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at CM-3A (0.0457 mg/L in July 2020, 0.0222 mg/L in October 2020, 0.0153 mg/L in March/April 2021, and 0.00297 in October 2021).

- CM-3B: This well did not contain sufficient water to collect a sample during the October 2021 sampling event. To date, this well has only been sampled three times for molybdenum. Molybdenum concentrations through three sampling events are 0.0327 mg/L in August 2020, 0.0318 mg/L in October 2020, and to 0.0353 mg/L in March/April 2021.

- CM-4A: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations appear to be decreasing. Molybdenum concentrations through four sampling events are 0.0269 mg/L in July 2020, 0.0271 mg/L in October 2020, 0.0212 in March/April 2021, and 0.0105 mg/L in October 2021.

- CM-4B: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events have continually decreased at CM-4B (0.0307 mg/L in July 2020, 0.0306 mg/L in October 2020, 0.0303 in March/April 2021, and 0.0131 in October 2021).

- CM-5A: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations appear to be decreasing. Molybdenum concentrations through four sampling events are 0.0205 mg/L in July 2020, 0.011 mg/L in October 2020, 0.0182 mg/L in March/April 2021, and 0.0058 mg/L in October 2021.

- CM-5B: To date, this well has only been sampled four times for molybdenum. Molybdenum concentrations through four sampling events are 0.04 mg/L in July 2020, 0.0394 mg/L in October 2020, 0.0536 mg/L in March/April 2021, and 0.0448 mg/L in October 2021.

3) The monitoring wells were sampled for CCR Appendix III parameters (boron, chloride, pH, TDS, calcium, fluoride, and sulfate). The October 2021 sampling was the eleventh sampling event for these compounds when sampled concurrently with molybdenum (dating to August 2017) at monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-18, and MW-19S; the tenth sampling event for these compounds when sampled concurrently with molybdenum (dating to August 2017) at monitoring well MW-22A; and the fourth sampling event for these compounds when sampled concurrently with molybdenum (dating to July 2020) at monitoring wells MW-15B, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B. Monitoring well CM-3B did not contain sufficient water to sample during the October 2021 sampling event. Because of limited water availability, field pH and/or lab pH could not be obtained during all sampling events at some of the wells (CM-1B, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B). Also, limited water availability at CM-1B precluded sampling of this well for pH, TDS, fluoride, and sulfate in March/April 2021. Charts comparing changes in concentration over time for CCR Appendix III parameters to changes in molybdenum concentration for each of the monitoring wells evaluated are included in **Attachment F**.

- The monitoring wells exhibiting the highest concentrations for molybdenum also exhibit the highest concentrations of boron. Data to date suggests possible correlations between changes in molybdenum and boron concentrations. Most notably, a decrease in molybdenum concentration at MW-18 appears to correlate to a similar decrease in boron concentrations at this well. Overall, boron concentrations appear to have decreased at most of the wells over the sampling history. However, the overall changes in boron concentrations have generally been minimal.

- Higher concentrations for molybdenum at site monitoring wells do not necessarily appear to correlate to higher or lower concentrations of chloride than those at other wells. The highest chloride concentrations consistently occur at wells away from the Landfill CCR Unit (CM-1B, CM-4A, CM-4B, CM-5A, and CM-5B) and one of the lower chloride concentrations is consistently observed occurs at MW-18. Data to date does suggest possible correlations between changes in chloride and molybdenum concentrations at some of the wells.

Most notably, a decrease in molybdenum concentration at MW-18 appears to correlate to a similar decrease in chloride concentration. Chloride concentrations appear to have slightly decreased at most of the wells over the sampling history.

- The monitoring wells exhibiting the highest concentrations for molybdenum also exhibit the highest pH. Monitoring wells MW-18 and MW-19S consistently register pH above 10 Standard Units. Data to date does not appear to suggest an overall correlation between changes in pH (neither field measured or laboratory reported) and changes in molybdenum concentration. However, possible correlations cannot be ruled out at a few of the monitoring wells.

- Higher concentrations for molybdenum at site monitoring wells do not necessarily appear to correlate to higher or lower TDS concentrations than those at other wells. The highest TDS concentrations consistently occur at wells away from the Landfill CCR Unit (CM-1A, CM-1B, MW-22A, and MW-22B). A possible correlation between changes in TDS and molybdenum concentrations are suggested at a few of the monitoring wells. Most notably, decreases in molybdenum concentrations at MW-15A and MW-18 appear to correlate to similar decreases in TDS concentrations.

- In general, site monitoring wells with the highest concentrations for molybdenum exhibit lower concentrations of calcium than those at other wells. Data to date suggests possible correlations between changes in molybdenum and calcium concentrations. Most notably, decreases in molybdenum concentrations at MW-15A, MW-16, MW-18, and MW-19S appear to correlate to similar decreases in calcium concentrations at these wells.

- In general, site monitoring wells with the highest concentrations for molybdenum also exhibit higher concentrations of fluoride than those at other wells. Data to date does not appear to suggest an overall correlation between changes in fluoride and molybdenum concentrations. Fluoride concentrations appear to have slightly increased at MW-18 and MW-19S and slightly decreased at other wells over the sampling history. The overall changes in fluoride concentrations have generally been minimal.

- Higher concentrations for molybdenum at site monitoring wells do not necessary appear to correlate to higher or lower sulfate concentrations than those at other wells. However, sulfate concentrations at MW-18 are typically low compared to those observed at most of the other monitoring wells and sulfate concentrations appear to be decreasing significantly at this well. Data to date does not appear to suggest an overall correlation between changes in sulfate molybdenum concentrations.

4) The monitoring wells were sampled for indicator parameters for MNA including ORP (field measured), DO (field measured), specific conductance (field measured and laboratory reported), nitrate, sulfide, and alkalinity. For ORP, DO, and specific conductance at monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-18, MW-19S, and MW-22A the October 2021 sampling was the eleventh sampling event concurrent with sampling for molybdenum (dating to August 2017). For nitrate at monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-18, MW-19S, and MW-22A the October 2021 sampling was the eighth sampling event concurrent with sampling for molybdenum (dating to October 2018). For alkalinity at monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-18, MW-19S, and MW-22A the October 2021 sampling was either the fifth or sixth sampling event concurrent with sampling for molybdenum (dating to August 2017). For the other parameters at MW-15B, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B, the October 2021 sampling event was the fourth sampling concurrent with sampling for molybdenum (dating to July 2020). Monitoring well CM-3B did not contain sufficient water to sample during the October 2021 sampling event. Because of limited water availability samples for ORP, DO, specific conductance, nitrate, sulfide, and/or alkalinity could not be obtained during all sampling events at some of the wells (CM-1B, CM-3A, CM-3B, CM-4A, CM-4B, CM-5A, and CM-5B). Charts comparing changes in concentration over time for these parameters to changes in molybdenum concentration for each of the monitoring wells evaluated are included in **Attachment G**.

- Data to date does not appear to suggest an overall correlation between changes in ORP and changes in molybdenum concentrations. However, the monitoring wells exhibiting the highest concentrations for molybdenum (MW-18 and MW-19S) appear to be more often associated negative ORP (under reducing conditions) and wells away from the Landfill CCR Unit to the east appear to be more often associated with positive ORP.

- Data to date appears to suggest a possible correlation at some wells between changes in DO and changes in molybdenum concentrations. The higher DO concentrations at some wells (MW-15B, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B) may be associated with the use of bailers for purging/sample collection.

- Higher concentrations for molybdenum at site monitoring wells do not necessarily appear to correlate to higher or lower specific conductance than at other wells. Data to date does suggest possible correlations between changes in specific conductance and molybdenum concentrations at some of the wells. Most notably, a decrease in molybdenum concentration at MW-18 appears to correlate to a similar decrease in specific conductance (both as measured in the field and at the laboratory).

- Higher concentrations for molybdenum at site monitoring wells do not necessarily appear to correlate to higher or lower nitrate concentrations and data to date does not appear to suggest an overall correlation between changes in nitrate and molybdenum concentrations. In many of the wells the nitrate is often not identified above the laboratory reporting levels. In general, higher nitrate concentrations are reported in the monitoring wells and wells away from the Landfill CCR Unit to the east.

- Data to date does not appear to suggest an overall correlation between changes in sulfide and changes in molybdenum concentrations. Sulfide has been detected periodically in several of the monitoring wells, but is generally below laboratory reporting levels (1 mg/L). Sulfide can be indicative of reducing conditions.

- Data to date does not appear to suggest an overall correlation between changes in total alkalinity and molybdenum concentrations. However, whereas most of the monitoring wells contain alkalinity only in the bicarbonate form the monitoring wells exhibiting the highest concentrations for molybdenum (MW-18 and MW-19S) typically contain both carbonate and hydroxide alkalinity and do not contain alkalinity in the bicarbonate form.

5) The wells were sampled for total and dissolved iron, total and dissolved ferrous iron (Fe(II)), and total and dissolved ferric iron (Fe(III)) to facilitate future evaluation of MNA. The October 2021 sampling was the fourth sampling event for total iron, dissolved iron, and total ferrous iron (dating to July 2020). The October 2021 sampling was the second sampling event for dissolved ferrous iron and total and dissolved ferric iron. Limited water availability at CM-3B in October 2021 precluded sampling at this well.

Because of limited water availability samples for ferrous and or ferric iron could not be obtained during all sampling events at some of the wells. A chart showing changes in iron concentrations over time for each of the monitoring wells evaluated is included in **Attachment H**. Observations from October 2021 sampling of iron are as follows:

- Reported iron concentrations (total and dissolved forms) are low or below laboratory reporting levels in samples collected from MW-18 (a well with higher molybdenum concentrations) and MW-17.

- Less than 10% of iron reported in samples collected from MW-5S, MW-15B, MW-22B, CM-1B, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5B was in dissolved form (indicating that the iron may be predominantly insoluble or associated with sediment entrained in these samples).

- For samples collected from MW-7S, MW-14A, MW-15A, MW-15B, MW-16, MW-19S, CM-22A, CM-1A, and CM-2 more than 10% of the iron identified was in dissolved form, indicating that iron is partly soluble at these locations. At each of these locations, the dissolved iron was ferric iron and ferrous iron was not identified in dissolved form at any of the monitoring wells. Dissolved ferrous iron is indicative of reducing conditions.

COMPARISON TO DRINKING WATER STANDARDS AND GROUNDWATER QUALITY

Of the constituents discussed herein, only fluoride has a published Federal Drinking Water Standard / Maximum Contaminant Level (MCL). The MCL for fluoride is 4 mg/L. Secondary MCLs have been published for chloride (250 mg/L), fluoride (2 mg/L), iron (0.3 mg/L), pH (6.5-8.5 Standard Units), sulfate (250 mg/L), and TDS (500 mg/L). The EPA has developed a heath based groundwater protection standard for molybdenum (0.1 mg/L). In none of the wells discussed herein did the reported fluoride concentration exceed the MCL or Secondary MCL. Also, chloride was not identified in any of the monitoring wells at concentrations exceeding the Secondary MCL. Sulfate and TDS were above the Secondary MCLs in most of the HPS monitoring wells, including up-gradient background monitoring wells. Reported pH was above the range of the Secondary MCLs at MW-18 and MW-19S. Reported dissolved iron was at concentrations above the Secondary MCL at MW-14A, MW-15A, and MW-22A. Reported molybdenum was above the health-risk GWPS as established by EPA at MW-15A, MW-16, MW-18, and MW-19S.

Natural groundwater in the region of the HPS is of poor quality. From Hydrologic Atlas Number 9, Reconnaissance of the Water Resources of the McAlester and Texarkana Quadrangles,

Southeastern Oklahoma (Marcher, V. Melvin Bergman, L. DeRoy, U.S. Geological Survey, 1983), results from chemical analysis of water from undifferentiated rocks of Cretaceous age in southeastern Oklahoma indicate that sulfate occurs naturally up to concentrations as high as 845 mg/L and that total dissolved solids (TDS) occur naturally up to concentrations of 1,900 mg/L. These naturally occurring levels for both sulfate and TDS exceed the Secondary Standards for these compounds as established by EPA (250 mg/L for sulfate and 500 mg/L for TDS). WFEC has been monitoring several wells for groundwater quality at its HPS facility as part of its CCR Program. This monitoring consistently yields sulfate at concentrations between 1,300 mg/L and 2,000 mg/L and TDS at concentrations between 2,100 mg/L and 2,700 mg/L in upgradient wells at the HPS. These sulfate and TDS levels are naturally occurring.

GROUNDWATER FLOW AND RISK EVALUATION

As presented in the Assessment of Corrective Measures Report, soils/rock that underlie the HPS are predominantly tight clays and hard shale exhibiting very low horizontal hydraulic conductivities (geometric mean of 3.43×10^{-6} cm/second) and well yields of less than 0.01 gallons per minute. Based on the estimated well yields and hydraulic conductivities it appears that near-surface groundwater at the HPS are perched non-contiguous groundwater zones and well yields are such that formations containing shallow perched groundwater would not generally be considered a usable water bearing unit and not considered a major groundwater aquifer under Oklahoma Standards.

To the southeast, the nearest property boundary is more than 1,000 feet from identified molybdenum in groundwater over the GWPS. To the east and northeast, the nearest property boundaries are at least 7,500 feet from identified molybdenum in groundwater over the GWPS. From the Assessment of Corrective Measures Report, it would take approximately 498 years to reach the nearest property boundary to the southeast and it would take approximately 3,730 years to reach the property boundaries to the northeast and east. A risk evaluation was previously submitted (Risk Evaluation for Shallow Perched Groundwater; Planned Impoundment FO-08, Nancy Coleman, March 19, 2020). It was concluded that the constituents present in shallow perched groundwater at designated wells downgradient of the Landfill CCR Unit do not pose a hazard to potential on-site or off-site human or ecological receptors.

CONCLUSIONS/RECOMMENDATIONS

Based on evaluations included in the ODEQ approved Assessment of Corrective Measures Report, source control via enhanced dewatering combined with monitored natural attenuation was proposed as a corrective measure alternative for the molybdenum. A minimum of two years of semi-annual sampling of monitoring wells downgradient of the Landfill CCR Unit was proposed to establish the effectiveness of this alternative prior to selection of a final remedy. Dewatering of the Landfill CCR Unit was initiated in March 2020 and continues as water accumulates in the landfill following rainfall events. As of April 4, 2022, a total of 1,122.2 hours of pumping have been conducted to prevent standing water from accumulating in the Landfill CCR Unit since dewatering was initiated in March 2020.

The second semi-annual sampling of select monitoring wells as contained in the approved Assessment of Corrective Measures Report was conducted in October 2021. Wells sampled included MW-5S, MW-7S, MW-14A, MW-15A, MW-15B, MW-16, MW-17, MW-18, MW-19S, MW-22A, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-4A, CM-4B, CM-5A, and CM-5. Limited water availability at CM-3B in October 2021 precluded sampling at this well. Samples were collected from each of these wells for analysis of molybdenum. These wells were also sampled for (and/or measured in the field) parameters to facilitate future evaluation of MNA. Conclusions from this sampling are:

1) Molybdenum was identified at SSLs above GWPSs at four wells proximal to the Landfill CCR Unit (GW-15A, MW-16, MW-18, and MW-19S). This is consistent with previous sampling.

2) A comparison of October 2021 data to historic data suggests that molybdenum concentrations have gone down over the sampling history for most of the wells sampled (including MW-15A, MW-16, MW-18, and MW-19S).

3) It remains evident that molybdenum concentrations attenuate significantly with increased distance from the CCR Landfill.

4) A comparison of October 2021 data to historic data suggests possible correlations between molybdenum and boron and calcium. Possible correlations between molybdenum and pH, chloride, TDS, conductivity and DO are also suggested at some wells.

5) No new exceedances of the GWPSs were identified in any of the other wells during this latest sampling event.

6) Natural groundwater in the region is of poor quality, with sulfate at concentrations between 1,300 mg/L and 2,000 mg/L and TDS at concentrations between 2,100 mg/L and 2,700 mg/L in upgradient wells at the HPS. These sulfate and TDS levels are naturally occurring.

7) It appears that near-surface groundwater at the HPS are perched non-contiguous groundwater zones, that it would take molybdenum in groundwater approximately 498 years to reach the nearest property boundary to the southeast and it would take approximately 3,730 years to reach the property boundaries to the northeast and east. and that constituents present in shallow perched groundwater downgradient of the Landfill CCR Unit do not pose a hazard to potential on-site or off-site human or ecological receptors.

It is recommended that WFEC continue with its two-year semi-annual sampling as per the approved Assessment of Corrective Measures Report. The third semi-annual sampling event is scheduled to occur in April 2022. It is recommended that the data continue to be reviewed and evaluated to identify potential trends, correlations, and/or other information that could aid in determining the fate of molybdenum in the subsurface environment and that a summary report be submitted to ODEQ following evaluation of the data. It is also recommended that WFEC continue with its dewatering of the Landfill CCR Unit as per the approved Assessment of Corrective Measures Report.

If you have any questions, please feel free to contact me at (405) 842-1066 or at chris.schaefer@altamira-us.com.

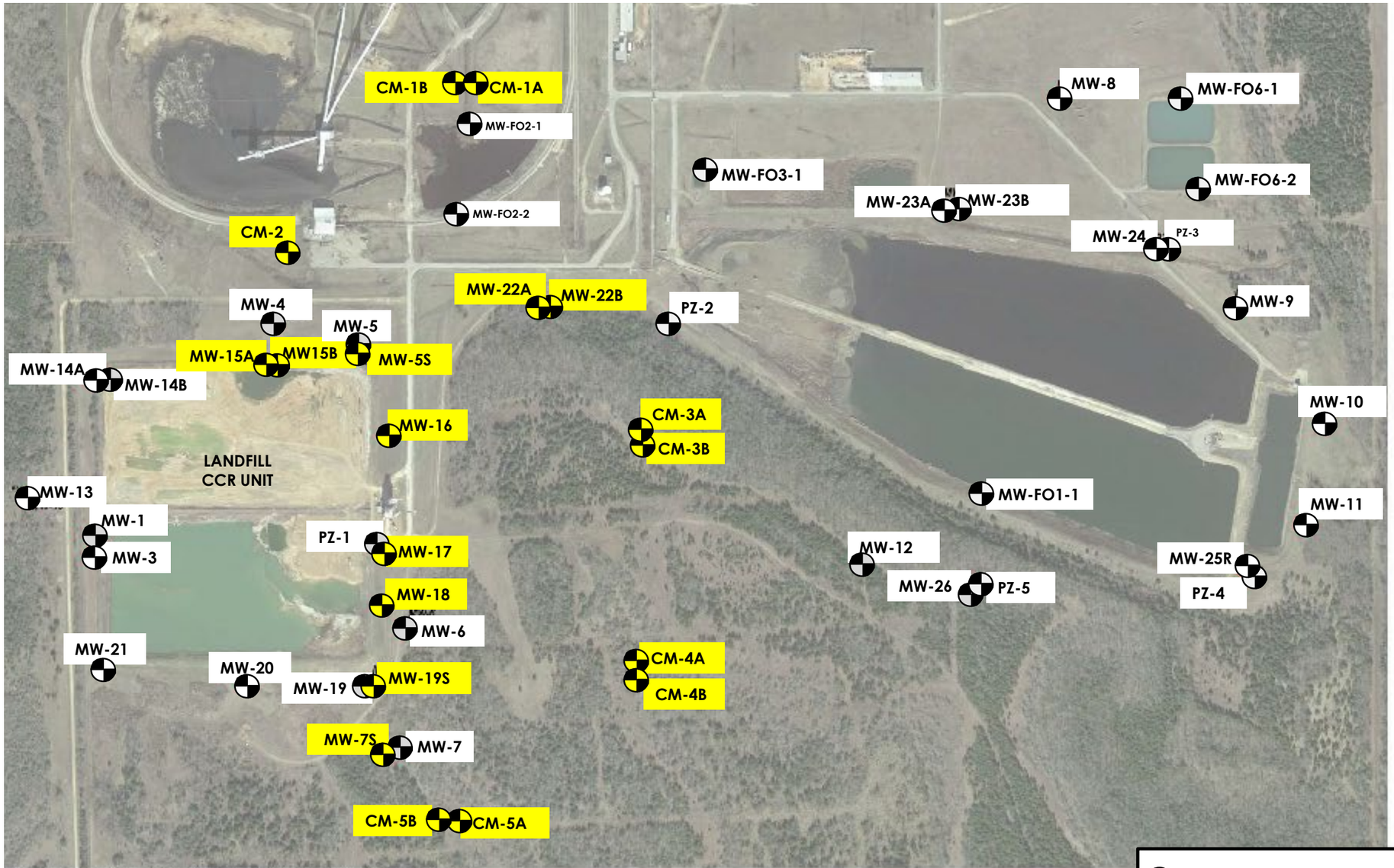
Sincerely,
Altamira-US, LLC.

Christopher S. Schaefer, P.E.
Project Engineer

cc: Kent Flethcer and John McCreight / Western Farmers Electric Cooperation
Chris Schaefer and Bert Smith / Altamira-US, LLC

ATTACHMENT A

MONITORING WELL LOCATION MAP



Base Map: AERIAL PHOTOGRAPH DATED FEBRUARY 1, 2015, GEOREFERENCED SCREEN CAPTURE FROM GOOGLE EARTH PRO

Location of monitoring wells sampled semi-annually to monitor proposed corrective measures alternative of source control via enhanced dewatering combined with monitored natural attenuation (Approximate)

Location of other site monitoring wells/piezometers (Approximate)

One inch approximately 500 ft

ATTACHMENT A – LOCATIONS OF MONITORING WELLS SAMPLED TO MONITOR PROPOSED CORRECTIVE MEASURES ALTERNATIVE

PROJECT

WESTERN FARMERS ELECTRIC COOPERATIVE

LOCATION

HUGO POWER STATION (HPS)

PREPARED FOR

WESTERN FARMERS ELECTRIC COOPERATIVE

DRAWING TITLE

ATTACHMENT A
LOCTIONS OF MONITORING WELLS SAMPLED TO MONITOR PROPOSED CORRECTIVE MEASURES ALTERNATIVE

Project No.	WFEE160019
Drawn By	CSS
Checked By	BS
Date:	9/7/21
Scale	1" – 500' (Approximate)
Issued For.	Western Farmers Elect. Coop.
Figure No.	

ALTAMIRA

525 Central Park Drive
Suite 500
Oklahoma City, OK 73105
Phone 405.842.1066 Fax 405.843.4687

ATTACHMENT B

ANALYTICAL REPORTS (OCTOBER 2021 SAMPLING)

- Included is a condensed report for monitoring wells MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-17, MW-18, MW-19S, and MW-22A such to contain only those parameters sampled to evaluate monitored natural attenuation. The laboratory provided analytical report for these wells (which also contained monitoring wells and parameters associated with assessment monitoring) was provided in a previous submittal (2021 Annual Groundwater and Corrective Action Report, January 26, 2021)

- Included is the laboratory provided analytical report for monitoring wells sampled to evaluate monitored natural attenuation outside of assessment monitoring CM-1A, CM-1B, CM-2, CM-3A, CM-3B, CM-4A, CM-4B, CM-5A, CM-5B, MW-15B, MW-22B).

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-5S**	**Lab ID: HS21100884-06**
Sample Date:	**10/14/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**1,820**	umhos/cm @ 25.0 °C	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**8.16 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**21.6 H**	pH Units	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**1,140**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**26.4**	mg/L	1	MDL	0.200	0.500
Fluoride	**1.57**	mg/L	1	MDL	0.0500	0.100
Nitrogen, Nitrate (As N)	**0.0984 J**	mg/L	1	MDL	0.0300	0.100
Sulfate	**499**	mg/L	20	MDL	4.00	10.00
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**460**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	**9.52**	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**470**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Ferric Iron	**0.0270 J**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Ferric Iron, Dissolved	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**1.82**	mg/L	10	MDL	0.110	0.200
Sodium	**243**	mg/L	10	MDL	0.140	2.00
Potassium	**3.96**	mg/L	1	MDL	0.0180	0.200
Magnesium	**4.60**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.00387 J**	mg/L	1	MDL	0.000600	0.00500
Iron	**0.0270 J**	mg/L	1	MDL	0.0120	0.200
Calcium	**21.0**	mg/L	1	MDL	0.0340	0.500
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.00296 J**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	<0.0120	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

ALTAMIRA

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-7S**	**Lab ID: HS21100884-07**
Sample Date:	**10/15/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**1,860**	umhos/cm @ 25.0 °C	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**7.84 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**21.6 H**	pH Units	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**1,290**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**16.8**	mg/L	1	MDL	0.200	0.500
Fluoride	**0.746**	mg/L	1	MDL	0.0500	0.100
Nitrogen, Nitrate (As N)	**0.0940 J**	mg/L	1	MDL	0.0300	0.100
Sulfate	**690**	mg/L	20	MDL	4.00	10.00
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**343**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**343**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.207**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Ferric Iron	**0.103**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Ferric Iron, Dissolved	**0.134**	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**2.18**	mg/L	10	MDL	0.110	0.200
Sodium	**261**	mg/L	10	MDL	0.140	2.00
Potassium	**5.14**	mg/L	1	MDL	0.0180	0.200
Magnesium	**12.2**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.00115 J**	mg/L	1	MDL	0.000600	0.00500
Iron	**0.310**	mg/L	1	MDL	0.0120	0.200
Calcium	**97.1**	mg/L	1	MDL	0.0340	0.500
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.00121 J**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.134 J**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-14A**	**Lab ID: HS21100884-02**
Sample Date:	**10/13/2022**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**3,320**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	**3.08**	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**6.74 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**21.5 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**2,630**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**12.8**	mg/L	2	MDL	0.400	1.00
Fluoride	**0.221**	mg/L	2	MDL	0.100	0.200
Nitrogen, Nitrate (As N)	<0.0600	mg/L	2	MDL	0.0600	0.200
Sulfate	**1,690**	mg/L	20	MDL	4.00	10.0
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**348**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**348**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.285**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	**0.935**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	**0.357**	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**0.857**	mg/L	1	MDL	0.0110	0.0200
Sodium	**388**	mg/L	20	MDL	0.280	4.00
Potassium	**7.84**	mg/L	1	MDL	0.0180	0.200
Magnesium	**26.5**	mg/L	1	MDL	0.0100	0.200
Molybdenum	<0.000600	mg/L	1	MDL	0.000600	0.00500
Iron	**1.22**	mg/L	1	MDL	0.0120	0.200
Calcium	**263**	mg/L	20	MDL	0.680	10.0
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	<0.000600	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.357**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-15A**	**Lab ID: HS21100884-03**
Sample Date:	**10/13/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**3,370**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**7.45 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**22.2 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**2,370**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**25.7**	mg/L	2	MDL	0.400	1.00
Fluoride	**1.01**	mg/L	2	MDL	0.100	0.200
Nitrogen, Nitrate (As N)	**0.0704 J**	mg/L	2	MDL	0.0600	0.200
Sulfate	**1,580**	mg/L	20	MDL	4.00	10.0
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**226**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**226**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.284**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	**0.0840**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	**0.590**	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**2.14**	mg/L	20	MDL	0.220	0.400
Sodium	**421**	mg/L	20	MDL	0.280	4.00
Potassium	**4.97**	mg/L	1	MDL	0.0180	0.200
Magnesium	**10.2**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.149**	mg/L	1	MDL	0.000600	0.00500
Iron	**0.368**	mg/L	1	MDL	0.0120	0.200
Calcium	**96.6**	mg/L	1	MDL	0.0340	0.500
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.181**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.590**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-16**	**Lab ID: HS21100884-09**
Sample Date:	**10/14/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**2,340**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**7.75 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**21.2 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**1,590**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**16.2**	mg/L	2	MDL	0.400	1.00
Fluoride	**0.964**	mg/L	2	MDL	0.100	0.200
Nitrogen, Nitrate (As N)	<0.0300	mg/L	2	MDL	0.0600	0.200
Sulfate	**1,110**	mg/L	20	MDL	4.00	10.0
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**264**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**264**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.191**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	**0.178**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	**0.190**	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**1.61**	mg/L	10	MDL	0.110	0.200
Sodium	**295**	mg/L	10	MDL	0.140	2.00
Potassium	**3.18**	mg/L	1	MDL	0.0180	0.200
Magnesium	**7.38**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.163**	mg/L	1	MDL	0.000600	0.00500
Iron	**0.369**	mg/L	1	MDL	0.0120	0.200
Calcium	**158**	mg/L	10	MDL	0.340	5.00
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.189**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.190 J**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-17**	**Lab ID: HS21100884-10**
Sample Date:	**10/14/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**2,390**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	**1.12**	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**7.12 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**22.0 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**2,210**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**4.02**	mg/L	2.00	MDL	0.4	1
Fluoride	**0.317**	mg/L	2.00	MDL	0.1	0.2
Nitrogen, Nitrate (As N)	<0.0600	mg/L	2.00	MDL	0.06	0.2
Sulfate	**1,390**	mg/L	50.00	MDL	10	25
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**288**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**288**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**0.700**	mg/L	1	MDL	0.0110	0.0200
Sodium	**32.5**	mg/L	1	MDL	0.0140	0.200
Potassium	**4.94**	mg/L	1	MDL	0.0180	0.200
Magnesium	**34.6**	mg/L	1	MDL	0.0100	0.200
Molybdenum	<0.000600	mg/L	1	MDL	0.000600	0.00500
Iron	<0.0120	mg/L	1	MDL	0.0120	0.200
Calcium	**428**	mg/L	10	MDL	0.340	5.00
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	<0.000600	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.0198 J**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

ALTAMIRA

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-18**	**Lab ID: HS21100884-11**
Sample Date:	**10/14/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**2,040**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**9.95 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**22.7 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**1,320**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**4.20**	mg/L	1.00	MDL	0.2	0.5
Fluoride	**1.71**	mg/L	1.00	MDL	0.05	0.1
Nitrogen, Nitrate (As N)	<0.0300	mg/L	1.00	MDL	0.03	0.1
Sulfate	**904**	mg/L	20.00	MDL	4	10
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	**55.8**	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	**17.9**	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**73.8**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**4.61**	mg/L	10	MDL	0.110	0.200
Sodium	**329**	mg/L	10	MDL	0.140	2.00
Potassium	**15.0**	mg/L	1	MDL	0.0180	0.200
Magnesium	**0.152 J**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.209**	mg/L	1	MDL	0.000600	0.00500
Iron	<0.0120	mg/L	1	MDL	0.0120	0.200
Calcium	**19.3**	mg/L	10	MDL	0.340	5.00
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.211**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	<0.0120	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-19S**	**Lab ID: HS21100884-12**
Sample Date:	**10/15/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**3,370**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	<1.00	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**10.8 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**22.0 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**2,290**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**13.6**	mg/L	2	MDL	0.400	1.00
Fluoride	**1.57**	mg/L	2	MDL	0.100	0.200
Nitrogen, Nitrate (As N)	<0.0600	mg/L	2	MDL	0.0600	0.200
Sulfate	**1,570**	mg/L	20	MDL	4.00	10.0
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	**77.3**	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	**73.0**	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**150**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.0450 J**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	**0.0210 J**	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**5.88**	mg/L	10	MDL	0.110	0.200
Sodium	**462**	mg/L	10	MDL	0.140	2.00
Potassium	**34.6**	mg/L	1	MDL	0.0180	0.200
Magnesium	**0.0415 J**	mg/L	1	MDL	0.0100	0.200
Molybdenum	**0.407**	mg/L	1	MDL	0.000600	0.00500
Iron	**0.0509 J**	mg/L	1	MDL	0.0120	0.200
Calcium	**41.6**	mg/L	10	MDL	0.340	5.00
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.440**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**0.0210 J**	mg/L	1	MDL	0.0120	0.200

Laboratory :
ALS Environmental
10450 Stancliff Rd, Suite 210
Houston, TX 77099

ALTAMIRA

Date: 1/14/2022

Consulting:
Altamira-US, LLC
525 Central Park Drive, Suite 500
Oklahoma City, OK 73105

Client:	**Altamira**	**ANALYTICAL REPORT**
Project:	**WFEC / MNA Program**	**Work Order: HS21100884**

Sample ID:	**MW-22A**	**Lab ID: HS21100769-09**
Sample Date:	**10/13/2021**	**Matrix: Water**

ANALYTE	RESULT	UNITS	DILUTION	RESULT REPORTED TO	MDL	RL
Analysis : SPECIFIC CONDUCTIVITY by SM2540C				**Method:**	**M2540C**	
Specific Conductivity	**3,250**	mg/L	1	MDL	5.00	5.00
Analysis : SULFIDE by SM500 S2-F				**Method:**	**SM4500 S2-F**	
Sulfide	**2.08**	mg/L	1	MDL	1.00	1.00
Analysis : pH by SM4500h+ B				**Method:**	**SM4500H+ B**	
pH	**7.32 H**	pH Units	1	MDL	0.100	0.100
Temp Deg C @pH	**22.3 H**	°C	1	MDL	0	0
Analysis : DISSOLVED SOLIDS by SM2540C				**Method:**	**M2540C**	
Total Dissolved Solids (Residue, Filterable)	**3,010**	mg/L	1	MDL	5.00	10.0
Analysis : ANIONS by E300.0				**Method:**	**E300**	
Chloride	**2.06 J**	mg/L	5	MDL	1.00	2.50
Fluoride	**0.608**	mg/L	5	MDL	0.250	0.500
Nitrogen, Nitrate (As N)	<0.150	mg/L	5	MDL	0.150	0.500
Sulfate	**2,020**	mg/L	50	MDL	10.0	25.0
Analysis : ALKALINITY by SM2320B				**Method:**	**SM2320B**	
Alkalinity, Bicarbonate (As CaCO3)	**315**	mg/L	1	MDL	5.00	5.00
Alkalinity, Carbonate (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Hydroxide (As CaCO3)	<5.00	mg/L	1	MDL	5.00	5.00
Alkalinity, Total (As CaCO3)	**315**	mg/L	1	MDL	5.00	5.00
Analysis : FERROUS IRON by SM3500 FE B				**Method:**	**SM3500FED**	
Ferrous Iron	**0.904**	mg/L	1	MDL	0.0200	0.0500
Analysis : FERROUS IRON by SM3500 FE D				**Method:**	**SM3500FED (dissolved)**	
Ferrous Iron, Dissolved	<0.0200 H	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED**	
Iron, Ferric	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : FERRIC IRON-BY CALCULATION by SM3500FED				**Method:**	**SM3500FED (dissolved)**	
Iron, Ferric, Dissolved	<0.0200	mg/L	1	MDL	0.0200	0.0500
Analysis : ICP-MS METALS by SW6020A				**Method:**	**SW6020**	
Boron	**1.76**	mg/L	10	MDL	0.110	0.200
Sodium	**158**	mg/L	1	MDL	0.0140	0.200
Potassium	**16.7**	mg/L	1	MDL	0.0180	0.200
Magnesium	**96.2**	mg/L	1	MDL	0.0100	0.200
Molybdenum	<0.000600	mg/L	1	MDL	0.000600	0.00500
Iron	**0.660**	mg/L	1	MDL	0.0120	0.200
Calcium	**515**	mg/L	10	MDL	0.340	5.00
Analysis : DISSOLVED METALS by SW6020A				**Method:**	**SW6020 (dissolved)**	
Molybdenum, Dissolved	**0.0328**	mg/L	1	MDL	0.000600	0.00500
Iron, Dissolved	**1.00**	mg/L	1	MDL	0.0120	0.200

Acronyms & Qualifiers

H : Analyzed outside of holding time. pH is an immediate test.

MDL : Method Detection Limit.

RL : Reporting Limit.

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

October 31, 2021

Bert Smith
Altamira
525 central park Dr
Suite 500
Oklahoma City, OK 73013

Work Order: **HS21100807**

Laboratory Results for: **WFEC / MNA Program**

Dear Bert Smith,

ALS Environmental received 10 sample(s) on Oct 14, 2021 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Ragen Giga
Project Manager

Client: Altamira
Project: WFEC / MNA Program
Work Order: HS21100807

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS21100807-01	CM-4A	Water		13-Oct-2021 12:30	14-Oct-2021 10:00	☐
HS21100807-02	CM-4B	Water		13-Oct-2021 12:00	14-Oct-2021 10:00	☐
HS21100807-03	CM-5A	Water		13-Oct-2021 11:25	14-Oct-2021 10:00	☐
HS21100807-04	CM-5B	Water		13-Oct-2021 11:00	14-Oct-2021 10:00	☐
HS21100807-05	CM-3A	Water		14-Oct-2021 10:30	15-Oct-2021 10:20	☐
HS21100807-06	MW-15B	Water		14-Oct-2021 11:40	15-Oct-2021 10:20	☐
HS21100807-07	MW-22B	Water		14-Oct-2021 11:15	15-Oct-2021 10:20	☐
HS21100807-08	CM-1A	Water		14-Oct-2021 18:46	16-Oct-2021 09:20	☐
HS21100807-09	CM-1B	Water		14-Oct-2021 17:55	16-Oct-2021 09:20	☐
HS21100807-10	CM-2	Water		15-Oct-2021 12:22	16-Oct-2021 09:20	☐

Client: Altamira **CASE NARRATIVE**
Project: WFEC / MNA Program
Work Order: HS21100807

Work Order Comments

• Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.

The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

Metals by Method SM3500FED

Batch ID: R394454,R394455,R393566,R393740,R393899

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Metals by Method SW6020A

Batch ID: 171725

Sample ID: HS21100809-02MS

• MS/MSD and DUPs are for an unrelated sample

Batch ID: 171817

Sample ID: HS21100769-09MS

• MS and MSD are for an unrelated sample

Wet Chemistry by Method E300

Batch ID: R393664

Sample ID: HS21100876-02MS

• MS and MSD are for an unrelated sample

Batch ID: R394568

Sample ID: HS21100769-01MS

• MS and MSD are for an unrelated sample

WetChemistry by Method SM4500H+ B

Batch ID: R394287

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira **CASE NARRATIVE**
Project: WFEC / MNA Program
Work Order: HS21100807

WetChemistry by Method SM3500FED

Batch ID: R394434

Sample ID: CM-1A (HS21100807-08)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-1B (HS21100807-09)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-2 (HS21100807-10)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-3A (HS21100807-05)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-4A (HS21100807-01)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-4B (HS21100807-02)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-5A (HS21100807-03)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: CM-5B (HS21100807-04)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-15B (HS21100807-06)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

Sample ID: MW-22B (HS21100807-07)

- Sample was analyzed outside of the holding time due to laboratory error. Sample results should be considered estimated.

WetChemistry by Method M2510 B

Batch ID: R394420

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method M2540C

Batch ID: R393922,R393933,R394028

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira **CASE NARRATIVE**
Project: WFEC / MNA Program
Work Order: HS21100807

WetChemistry by Method SM4500 S2-F

Batch ID: R393819,R393988

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E300

Batch ID: R393664

Sample ID: MW-15B (HS21100807-06)

• Sample ran at 5X due to high concentration of Sulfate

Sample ID: MW-22B (HS21100807-07)

• Sample ran at 5X due to high concentration of Sulfate

Batch ID: R393484

Sample ID: CM-4A (HS21100807-01)

• Sample ran at 5X due to high concentration of Sulfate

Sample ID: CM-5A (HS21100807-03)

• Sample ran at 5X due to high concentration of Sulfate

Sample ID: CM-5B (HS21100807-04)

• Sample ran at 5X due to high concentration of Sulfate

Batch ID: R394412

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method SM2320B

Batch ID: R393445,R393972

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-4A
Collection Date: 13-Oct-2021 12:30

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**4.10**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**3.56**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:05
Calcium	**66.5**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:05
Iron	**4.64**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 15:30
Magnesium	**16.4**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:05
Molybdenum	**0.0105**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 15:30
Potassium	**7.82**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 15:30
Sodium	**709**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 18:05
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 18:27
Molybdenum	**0.0194**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 18:27
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**90.2**		**1.00**	**2.50**	**mg/L**	5	15-Oct-2021 02:54
Fluoride	**0.737**		**0.250**	**0.500**	**mg/L**	5	15-Oct-2021 02:54
Nitrogen, Nitrate (As N)	**21.6**		**0.150**	**0.500**	**mg/L**	5	15-Oct-2021 02:54
Sulfate	**1,160**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 14:22
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,030**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,830**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 15:35
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**605**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:30
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:30
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:30
Alkalinity, Total (As CaCO3)	**605**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:30
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**0.544**		**0.0200**	**0.0500**	**mg/L**	1	14-Oct-2021 20:47
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	20-Oct-2021 12:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-4A
Collection Date: 13-Oct-2021 12:30

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-01
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**8.14**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.2**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-4B
Collection Date: 13-Oct-2021 12:00

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-02
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**11.4**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**3.79**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:07
Calcium	**79.1**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:07
Iron	**13.0**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 15:34
Magnesium	**17.8**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:07
Molybdenum	**0.0131**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 15:34
Potassium	**8.42**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 15:34
Sodium	**865**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 18:07
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0134**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:21
Molybdenum	**0.0235**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:21
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**113**		**1.00**	**2.50**	**mg/L**	5	15-Oct-2021 03:01
Fluoride	**1.05**		**0.250**	**0.500**	**mg/L**	5	15-Oct-2021 03:01
Nitrogen, Nitrate (As N)	**22.2**		**0.150**	**0.500**	**mg/L**	5	15-Oct-2021 03:01
Sulfate	**1,590**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 14:44
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,400**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,980**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 15:35
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**589**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:38
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:38
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:38
Alkalinity, Total (As CaCO3)	**589**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:38
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**1.64**		**0.100**	**0.250**	**mg/L**	5	14-Oct-2021 20:47
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	20-Oct-2021 12:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-4B
Collection Date: 13-Oct-2021 12:00

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-02
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**8.04**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-5A
Collection Date: 13-Oct-2021 11:25

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-03
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**10.9**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**4.57**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:15
Calcium	**143**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:15
Iron	**13.6**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 15:35
Magnesium	**29.9**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:15
Molybdenum	**0.00580**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 15:35
Potassium	**11.5**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 15:35
Sodium	**749**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:21
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 19:23
Molybdenum	**0.0165**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:23
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**134**		**1.00**	**2.50**	**mg/L**	5	15-Oct-2021 03:24
Fluoride	**0.682**		**0.250**	**0.500**	**mg/L**	5	15-Oct-2021 03:24
Nitrogen, Nitrate (As N)	**24.4**		**0.150**	**0.500**	**mg/L**	5	15-Oct-2021 03:24
Sulfate	**1,480**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 14:51
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,130**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,900**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 15:35
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**538**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:45
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:45
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:45
Alkalinity, Total (As CaCO3)	**538**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:45
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**2.72**		**0.100**	**0.250**	**mg/L**	5	14-Oct-2021 20:47
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	20-Oct-2021 12:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-5A
Collection Date: 13-Oct-2021 11:25

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-03
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.75**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-5B
Collection Date: 13-Oct-2021 11:00

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-04
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**2.97**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**4.37**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:17
Calcium	**56.8**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:17
Iron	**3.61**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:11
Magnesium	**18.8**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:17
Molybdenum	**0.0448**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:11
Potassium	**10.1**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:11
Sodium	**836**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:23
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 19:25
Molybdenum	**0.0418**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:25
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**141**		**1.00**	**2.50**	**mg/L**	5	15-Oct-2021 03:31
Fluoride	**0.925**		**0.250**	**0.500**	**mg/L**	5	15-Oct-2021 03:31
Nitrogen, Nitrate (As N)	**59.8**		**0.150**	**0.500**	**mg/L**	5	15-Oct-2021 03:31
Sulfate	**1,310**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 14:59
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,250**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,910**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 15:35
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**613**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:52
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:52
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	14-Oct-2021 20:52
Alkalinity, Total (As CaCO3)	**613**		**5.00**	**5.00**	**mg/L**	1	14-Oct-2021 20:52
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**0.641**		**0.0200**	**0.0500**	**mg/L**	1	14-Oct-2021 20:47
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	**1.28**		**1.00**	**1.00**	**mg/L**	1	20-Oct-2021 12:50

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-5B
Collection Date: 13-Oct-2021 11:00

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-04
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.92**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.2**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-3A
Collection Date: 14-Oct-2021 10:30

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-05
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**5.27**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.0291**	J	**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**2.72**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:19
Calcium	**67.6**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:19
Iron	**6.76**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:13
Magnesium	**10.7**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:19
Molybdenum	**0.00297**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:13
Potassium	**6.38**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:13
Sodium	**447**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:25
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0291**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:27
Molybdenum	**0.0120**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:27
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**42.5**		**0.200**	**0.500**	**mg/L**	1	15-Oct-2021 18:35
Fluoride	**0.801**		**0.0500**	**0.100**	**mg/L**	1	15-Oct-2021 18:35
Nitrogen, Nitrate (As N)	**7.07**		**0.0300**	**0.100**	**mg/L**	1	15-Oct-2021 18:35
Sulfate	**635**		**4.00**	**10.0**	**mg/L**	20	29-Oct-2021 15:06
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,410**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**1,560**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**630**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:31
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:31
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:31
Alkalinity, Total (As CaCO3)	**630**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:31
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**1.49**		**0.0200**	**0.0500**	**mg/L**	1	15-Oct-2021 15:29
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	**2.12**		**1.00**	**1.00**	**mg/L**	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-3A
Collection Date: 14-Oct-2021 10:30

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-05
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.73**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: MW-15B
Collection Date: 14-Oct-2021 11:40

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-06
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**6.69**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.0794**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**4.78**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:21
Calcium	**52.8**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:21
Iron	**8.51**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:37
Magnesium	**15.9**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:21
Molybdenum	**0.00328**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:37
Potassium	**8.29**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:37
Sodium	**866**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:27
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0794**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:29
Molybdenum	**0.00679**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:29
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**56.0**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 18:57
Fluoride	**1.15**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 18:57
Nitrogen, Nitrate (As N)	**18.3**		**0.0600**	**0.200**	**mg/L**	2	15-Oct-2021 18:57
Sulfate	**1,580**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 15:14
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,410**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,990**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**802**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:39
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:39
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:39
Alkalinity, Total (As CaCO3)	**802**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:39
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**1.82**		**0.0200**	**0.0500**	**mg/L**	1	15-Oct-2021 15:29
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	**3.31**		**1.00**	**1.00**	**mg/L**	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: MW-15B
Collection Date: 14-Oct-2021 11:40

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-06
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.59**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: MW-22B
Collection Date: 14-Oct-2021 11:15

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-07
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**4.22**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**3.17**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:24
Calcium	**82.7**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:24
Iron	**6.04**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:39
Magnesium	**26.0**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:24
Molybdenum	**0.00446**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:39
Potassium	**10.2**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:39
Sodium	**848**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:29
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0138**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:31
Molybdenum	**0.00723**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:31
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**55.0**		**0.400**	**1.00**	**mg/L**	2	15-Oct-2021 19:05
Fluoride	**1.21**		**0.100**	**0.200**	**mg/L**	2	15-Oct-2021 19:05
Nitrogen, Nitrate (As N)	**0.958**		**0.0600**	**0.200**	**mg/L**	2	15-Oct-2021 19:05
Sulfate	**2,090**		**20.0**	**50.0**	**mg/L**	100	29-Oct-2021 15:21
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**4,690**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**3,290**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**435**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:45
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:45
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:45
Alkalinity, Total (As CaCO3)	**435**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:45
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: AP
Ferrous Iron	**1.82**		**0.0200**	**0.0500**	**mg/L**	1	15-Oct-2021 15:29
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: MW-22B
Collection Date: 14-Oct-2021 11:15

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-07
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.59**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.4**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-1A
Collection Date: 14-Oct-2021 18:46

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-08
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.0640**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.0382**	J	**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**0.883**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:26
Calcium	**531**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:26
Iron	**0.115**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:41
Magnesium	**77.6**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:26
Molybdenum	**0.00127**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:41
Potassium	**11.9**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:41
Sodium	**198**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:31
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.0382**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:33
Molybdenum	**0.00121**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:33
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**21.2**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 15:17
Fluoride	**0.399**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 15:17
Nitrogen, Nitrate (As N)	U		0.0300	0.100	mg/L	1	16-Oct-2021 15:17
Sulfate	**1,940**		**20.0**	**50.0**	**mg/L**	100	29-Oct-2021 15:28
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**3,300**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**3,030**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**356**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:51
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:51
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:51
Alkalinity, Total (As CaCO3)	**356**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:51
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.0510**		**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-1A
Collection Date: 14-Oct-2021 18:46

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-08
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.73**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-1B
Collection Date: 14-Oct-2021 17:55

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-09
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.0435**	J	**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	U		0.0200	0.0500	mg/L	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**3.48**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:28
Calcium	**119**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:28
Iron	**0.0865**	J	**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:44
Magnesium	**45.1**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:28
Molybdenum	**0.00976**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:44
Potassium	**13.6**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:44
Sodium	**951**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:33
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	U		0.0120	0.200	mg/L	1	27-Oct-2021 19:35
Molybdenum	**0.0108**		**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:35
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**113**		**0.400**	**1.00**	**mg/L**	2	16-Oct-2021 15:24
Fluoride	**0.789**		**0.100**	**0.200**	**mg/L**	2	16-Oct-2021 15:24
Nitrogen, Nitrate (As N)	U		0.0600	0.200	mg/L	2	16-Oct-2021 15:24
Sulfate	**2,300**		**20.0**	**50.0**	**mg/L**	100	29-Oct-2021 15:51
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**5,110**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**3,670**		**5.00**	**10.0**	**mg/L**	1	20-Oct-2021 20:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**424**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:57
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:57
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 00:57
Alkalinity, Total (As CaCO3)	**424**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 00:57
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.0430**	J	**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-1B
Collection Date: 14-Oct-2021 17:55

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-09
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**8.03**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-2
Collection Date: 15-Oct-2021 12:22

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-10
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
FERRIC IRON - BY CALCULATION BY SM3500FED		**Method:SM3500FED**					Analyst: JHD
Ferric Iron	**0.0970**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED		**Method:SM3500FED (dissolved)**					Analyst: JHD
Ferric Iron, Dissolved	**0.237**		**0.0200**	**0.0500**	**mg/L**	1	28-Oct-2021 17:32
ICP-MS METALS BY SW6020A		**Method:SW6020A**			Prep:SW3010A / 26-Oct-2021		Analyst: JHD
Boron	**0.744**		**0.110**	**0.200**	**mg/L**	10	26-Oct-2021 18:30
Calcium	**487**		**0.340**	**5.00**	**mg/L**	10	26-Oct-2021 18:30
Iron	**0.232**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 16:46
Magnesium	**29.5**		**0.100**	**2.00**	**mg/L**	10	26-Oct-2021 18:30
Molybdenum	**0.00120**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 16:46
Potassium	**7.56**		**0.0180**	**0.200**	**mg/L**	1	27-Oct-2021 16:46
Sodium	**107**		**0.140**	**2.00**	**mg/L**	10	26-Oct-2021 21:35
DISSOLVED METALS BY SW6020A		**Method:SW6020A (dissolved)**			Prep:SW3010A / 27-Oct-2021		Analyst: JHD
Iron	**0.237**		**0.0120**	**0.200**	**mg/L**	1	27-Oct-2021 19:38
Molybdenum	**0.00136**	J	**0.000600**	**0.00500**	**mg/L**	1	27-Oct-2021 19:38
ANIONS BY E300.0, REV 2.1, 1993		**Method:E300**					Analyst: YP
Chloride	**3.15**		**0.200**	**0.500**	**mg/L**	1	16-Oct-2021 15:32
Fluoride	**0.526**		**0.0500**	**0.100**	**mg/L**	1	16-Oct-2021 15:32
Nitrogen, Nitrate (As N)	**0.0497**	J	**0.0300**	**0.100**	**mg/L**	1	16-Oct-2021 15:32
Sulfate	**1,370**		**10.0**	**25.0**	**mg/L**	50	29-Oct-2021 15:58
SPECIFIC CONDUCTANCE BY SM 2510B-2011		**Method:M2510 B**					Analyst: MZD
Specific Conductivity	**2,500**		**5.00**	**5.00**	**umhos/cm @ 25.0 °C**	1	28-Oct-2021 14:05
TOTAL DISSOLVED SOLIDS BY SM2540C -2011		**Method:M2540C**					Analyst: SH
Total Dissolved Solids (Residue, Filterable)	**2,210**		**5.00**	**10.0**	**mg/L**	1	21-Oct-2021 15:00
ALKALINITY BY SM 2320B-2011		**Method:SM2320B**					Analyst: TH
Alkalinity, Bicarbonate (As CaCO3)	**353**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 01:04
Alkalinity, Carbonate (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 01:04
Alkalinity, Hydroxide (As CaCO3)	U		5.00	5.00	mg/L	1	22-Oct-2021 01:04
Alkalinity, Total (As CaCO3)	**353**		**5.00**	**5.00**	**mg/L**	1	22-Oct-2021 01:04
FERROUS IRON BY SM3500 FE B		**Method:SM3500FED**					Analyst: TH
Ferrous Iron	**0.135**		**0.0200**	**0.0500**	**mg/L**	1	16-Oct-2021 12:30
FERROUS IRON BY SM3500 FE D		**Method:SM3500FED (dissolved)**					Analyst: AP
Ferrous Iron, Dissolved	U	H	0.0200	0.0500	mg/L	1	27-Oct-2021 20:36
SULFIDE BY SM4500 S2-F-2011		**Method:SM4500 S2-F**					Analyst: MZD
Sulfide	U		1.00	1.00	mg/L	1	21-Oct-2021 16:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Altamira
Project: WFEC / MNA Program
Sample ID: CM-2
Collection Date: 15-Oct-2021 12:22

ANALYTICAL REPORT
WorkOrder:HS21100807
Lab ID:HS21100807-10
Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
PH BY SM4500H+ B-2011	**Method:SM4500H+ B**						Analyst: SH
pH	**7.37**	H	**0.100**	**0.100**	**pH Units**	1	27-Oct-2021 12:00
Temp Deg C @pH	**22.3**	H	**0**	**0**	**°C**	1	27-Oct-2021 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

Batch ID: 171725 **Start Date:** 26 Oct 2021 08:00 **End Date:** 26 Oct 2021 12:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100807-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-10		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 171817 **Start Date:** 27 Oct 2021 12:30 **End Date:** 27 Oct 2021 16:30
Method: DISS METALS PREP - WATER - SW3010A **Prep Code:** 3010A DISS

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100807-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS21100807-10		10 (mL)	10 (mL)	1	120 plastic HNO3

Batch ID: 171897 **Start Date:** 26 Oct 2021 09:08 **End Date:**
Method: SAMPLE FILTRATION - 0.45 MICRON FILTER **Prep Code:** FILTRATION - WET CHEM

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS21100807-01		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-02		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-03		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-04		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-05		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-06		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-07		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-08		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-09		50 (mL)	50 (mL)	1	500 mL plastic, Neat
HS21100807-10		50 (mL)	50 (mL)	1	500 mL plastic, Neat

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 171725 (0)	**Test Name :** ICP-MS METALS BY SW6020A				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30		26 Oct 2021 12:00	27 Oct 2021 15:30	1
HS21100807-01	CM-4A	13 Oct 2021 12:30		26 Oct 2021 12:00	26 Oct 2021 18:05	10
HS21100807-02	CM-4B	13 Oct 2021 12:00		26 Oct 2021 12:00	27 Oct 2021 15:34	1
HS21100807-02	CM-4B	13 Oct 2021 12:00		26 Oct 2021 12:00	26 Oct 2021 18:07	10
HS21100807-03	CM-5A	13 Oct 2021 11:25		26 Oct 2021 12:00	27 Oct 2021 15:35	1
HS21100807-03	CM-5A	13 Oct 2021 11:25		26 Oct 2021 12:00	26 Oct 2021 21:21	10
HS21100807-03	CM-5A	13 Oct 2021 11:25		26 Oct 2021 12:00	26 Oct 2021 18:15	10
HS21100807-04	CM-5B	13 Oct 2021 11:00		26 Oct 2021 12:00	27 Oct 2021 16:11	1
HS21100807-04	CM-5B	13 Oct 2021 11:00		26 Oct 2021 12:00	26 Oct 2021 21:23	10
HS21100807-04	CM-5B	13 Oct 2021 11:00		26 Oct 2021 12:00	26 Oct 2021 18:17	10
HS21100807-05	CM-3A	14 Oct 2021 10:30		26 Oct 2021 12:00	27 Oct 2021 16:13	1
HS21100807-05	CM-3A	14 Oct 2021 10:30		26 Oct 2021 12:00	26 Oct 2021 21:25	10
HS21100807-05	CM-3A	14 Oct 2021 10:30		26 Oct 2021 12:00	26 Oct 2021 18:19	10
HS21100807-06	MW-15B	14 Oct 2021 11:40		26 Oct 2021 12:00	27 Oct 2021 16:37	1
HS21100807-06	MW-15B	14 Oct 2021 11:40		26 Oct 2021 12:00	26 Oct 2021 21:27	10
HS21100807-06	MW-15B	14 Oct 2021 11:40		26 Oct 2021 12:00	26 Oct 2021 18:21	10
HS21100807-07	MW-22B	14 Oct 2021 11:15		26 Oct 2021 12:00	27 Oct 2021 16:39	1
HS21100807-07	MW-22B	14 Oct 2021 11:15		26 Oct 2021 12:00	26 Oct 2021 21:29	10
HS21100807-07	MW-22B	14 Oct 2021 11:15		26 Oct 2021 12:00	26 Oct 2021 18:24	10
HS21100807-08	CM-1A	14 Oct 2021 18:46		26 Oct 2021 12:00	27 Oct 2021 16:41	1
HS21100807-08	CM-1A	14 Oct 2021 18:46		26 Oct 2021 12:00	26 Oct 2021 21:31	10
HS21100807-08	CM-1A	14 Oct 2021 18:46		26 Oct 2021 12:00	26 Oct 2021 18:26	10
HS21100807-09	CM-1B	14 Oct 2021 17:55		26 Oct 2021 12:00	27 Oct 2021 16:44	1
HS21100807-09	CM-1B	14 Oct 2021 17:55		26 Oct 2021 12:00	26 Oct 2021 21:33	10
HS21100807-09	CM-1B	14 Oct 2021 17:55		26 Oct 2021 12:00	26 Oct 2021 18:28	10
HS21100807-10	CM-2	15 Oct 2021 12:22		26 Oct 2021 12:00	27 Oct 2021 16:46	1
HS21100807-10	CM-2	15 Oct 2021 12:22		26 Oct 2021 12:00	26 Oct 2021 21:35	10
HS21100807-10	CM-2	15 Oct 2021 12:22		26 Oct 2021 12:00	26 Oct 2021 18:30	10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 171817 (0)	**Test Name :** DISSOLVED METALS BY SW6020A				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30		27 Oct 2021 16:30	27 Oct 2021 18:27	1
HS21100807-02	CM-4B	13 Oct 2021 12:00		27 Oct 2021 16:30	27 Oct 2021 19:21	1
HS21100807-03	CM-5A	13 Oct 2021 11:25		27 Oct 2021 16:30	27 Oct 2021 19:23	1
HS21100807-04	CM-5B	13 Oct 2021 11:00		27 Oct 2021 16:30	27 Oct 2021 19:25	1
HS21100807-05	CM-3A	14 Oct 2021 10:30		27 Oct 2021 16:30	27 Oct 2021 19:27	1
HS21100807-06	MW-15B	14 Oct 2021 11:40		27 Oct 2021 16:30	27 Oct 2021 19:29	1
HS21100807-07	MW-22B	14 Oct 2021 11:15		27 Oct 2021 16:30	27 Oct 2021 19:31	1
HS21100807-08	CM-1A	14 Oct 2021 18:46		27 Oct 2021 16:30	27 Oct 2021 19:33	1
HS21100807-09	CM-1B	14 Oct 2021 17:55		27 Oct 2021 16:30	27 Oct 2021 19:35	1
HS21100807-10	CM-2	15 Oct 2021 12:22		27 Oct 2021 16:30	27 Oct 2021 19:38	1
Batch ID: R393445 (0)	**Test Name :** ALKALINITY BY SM 2320B-2011				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			14 Oct 2021 20:30	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			14 Oct 2021 20:38	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			14 Oct 2021 20:45	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			14 Oct 2021 20:52	1
Batch ID: R393484 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			15 Oct 2021 02:54	5
HS21100807-02	CM-4B	13 Oct 2021 12:00			15 Oct 2021 03:01	5
HS21100807-03	CM-5A	13 Oct 2021 11:25			15 Oct 2021 03:24	5
HS21100807-04	CM-5B	13 Oct 2021 11:00			15 Oct 2021 03:31	5
Batch ID: R393566 (0)	**Test Name :** FERROUS IRON BY SM3500 FE B				**Matrix:** Water	
HS21100807-08	CM-1A	14 Oct 2021 18:46			16 Oct 2021 12:30	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			16 Oct 2021 12:30	1
HS21100807-10	CM-2	15 Oct 2021 12:22			16 Oct 2021 12:30	1
Batch ID: R393664 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100807-05	CM-3A	14 Oct 2021 10:30			15 Oct 2021 18:35	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			15 Oct 2021 18:57	2
HS21100807-07	MW-22B	14 Oct 2021 11:15			15 Oct 2021 19:05	2
Batch ID: R393740 (0)	**Test Name :** FERROUS IRON BY SM3500 FE B				**Matrix:** Water	
HS21100807-05	CM-3A	14 Oct 2021 10:30			15 Oct 2021 15:29	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			15 Oct 2021 15:29	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			15 Oct 2021 15:29	1
Batch ID: R393819 (0)	**Test Name :** SULFIDE BY SM4500 S2-F-2011				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			20 Oct 2021 12:50	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			20 Oct 2021 12:50	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			20 Oct 2021 12:50	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			20 Oct 2021 12:50	1

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R393899 (0)	**Test Name :** FERROUS IRON BY SM3500 FE B				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			14 Oct 2021 20:47	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			14 Oct 2021 20:47	5
HS21100807-03	CM-5A	13 Oct 2021 11:25			14 Oct 2021 20:47	5
HS21100807-04	CM-5B	13 Oct 2021 11:00			14 Oct 2021 20:47	1
Batch ID: R393922 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS21100807-05	CM-3A	14 Oct 2021 10:30			20 Oct 2021 20:00	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			20 Oct 2021 20:00	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			20 Oct 2021 20:00	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			20 Oct 2021 20:00	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			20 Oct 2021 20:00	1
Batch ID: R393933 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			20 Oct 2021 15:35	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			20 Oct 2021 15:35	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			20 Oct 2021 15:35	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			20 Oct 2021 15:35	1
Batch ID: R393972 (0)	**Test Name :** ALKALINITY BY SM 2320B-2011				**Matrix:** Water	
HS21100807-05	CM-3A	14 Oct 2021 10:30			22 Oct 2021 00:31	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			22 Oct 2021 00:39	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			22 Oct 2021 00:45	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			22 Oct 2021 00:51	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			22 Oct 2021 00:57	1
HS21100807-10	CM-2	15 Oct 2021 12:22			22 Oct 2021 01:04	1
Batch ID: R393988 (0)	**Test Name :** SULFIDE BY SM4500 S2-F-2011				**Matrix:** Water	
HS21100807-05	CM-3A	14 Oct 2021 10:30			21 Oct 2021 16:45	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			21 Oct 2021 16:45	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			21 Oct 2021 16:45	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			21 Oct 2021 16:45	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			21 Oct 2021 16:45	1
HS21100807-10	CM-2	15 Oct 2021 12:22			21 Oct 2021 16:45	1
Batch ID: R394028 (0)	**Test Name :** TOTAL DISSOLVED SOLIDS BY SM2540C-2011				**Matrix:** Water	
HS21100807-10	CM-2	15 Oct 2021 12:22			21 Oct 2021 15:00	1

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R394287 (0)	**Test Name :** PH BY SM4500H+ B-2011				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			27 Oct 2021 12:00	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			27 Oct 2021 12:00	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			27 Oct 2021 12:00	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			27 Oct 2021 12:00	1
HS21100807-05	CM-3A	14 Oct 2021 10:30			27 Oct 2021 12:00	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			27 Oct 2021 12:00	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			27 Oct 2021 12:00	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			27 Oct 2021 12:00	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			27 Oct 2021 12:00	1
HS21100807-10	CM-2	15 Oct 2021 12:22			27 Oct 2021 12:00	1
Batch ID: R394412 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100807-08	CM-1A	14 Oct 2021 18:46			16 Oct 2021 15:17	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			16 Oct 2021 15:24	2
HS21100807-10	CM-2	15 Oct 2021 12:22			16 Oct 2021 15:32	1
Batch ID: R394420 (0)	**Test Name :** SPECIFIC CONDUCTANCE BY SM 2510B-2011				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			28 Oct 2021 14:05	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			28 Oct 2021 14:05	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			28 Oct 2021 14:05	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			28 Oct 2021 14:05	1
HS21100807-05	CM-3A	14 Oct 2021 10:30			28 Oct 2021 14:05	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			28 Oct 2021 14:05	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			28 Oct 2021 14:05	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			28 Oct 2021 14:05	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			28 Oct 2021 14:05	1
HS21100807-10	CM-2	15 Oct 2021 12:22			28 Oct 2021 14:05	1
Batch ID: R394434 (0)	**Test Name :** FERROUS IRON BY SM3500 FE D				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			27 Oct 2021 20:36	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			27 Oct 2021 20:36	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			27 Oct 2021 20:36	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			27 Oct 2021 20:36	1
HS21100807-05	CM-3A	14 Oct 2021 10:30			27 Oct 2021 20:36	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			27 Oct 2021 20:36	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			27 Oct 2021 20:36	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			27 Oct 2021 20:36	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			27 Oct 2021 20:36	1
HS21100807-10	CM-2	15 Oct 2021 12:22			27 Oct 2021 20:36	1

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R394454 (0)	**Test Name :** FERRIC IRON - BY CALCULATION BY SM3500FED				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			28 Oct 2021 17:32	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			28 Oct 2021 17:32	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			28 Oct 2021 17:32	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			28 Oct 2021 17:32	1
HS21100807-05	CM-3A	14 Oct 2021 10:30			28 Oct 2021 17:32	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			28 Oct 2021 17:32	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			28 Oct 2021 17:32	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			28 Oct 2021 17:32	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			28 Oct 2021 17:32	1
HS21100807-10	CM-2	15 Oct 2021 12:22			28 Oct 2021 17:32	1
Batch ID: R394455 (0)	**Test Name :** FERRIC IRON (DISS)- BY CALCULATION BY SM3500FED				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			28 Oct 2021 17:32	1
HS21100807-02	CM-4B	13 Oct 2021 12:00			28 Oct 2021 17:32	1
HS21100807-03	CM-5A	13 Oct 2021 11:25			28 Oct 2021 17:32	1
HS21100807-04	CM-5B	13 Oct 2021 11:00			28 Oct 2021 17:32	1
HS21100807-05	CM-3A	14 Oct 2021 10:30			28 Oct 2021 17:32	1
HS21100807-06	MW-15B	14 Oct 2021 11:40			28 Oct 2021 17:32	1
HS21100807-07	MW-22B	14 Oct 2021 11:15			28 Oct 2021 17:32	1
HS21100807-08	CM-1A	14 Oct 2021 18:46			28 Oct 2021 17:32	1
HS21100807-09	CM-1B	14 Oct 2021 17:55			28 Oct 2021 17:32	1
HS21100807-10	CM-2	15 Oct 2021 12:22			28 Oct 2021 17:32	1
Batch ID: R394568 (0)	**Test Name :** ANIONS BY E300.0, REV 2.1, 1993				**Matrix:** Water	
HS21100807-01	CM-4A	13 Oct 2021 12:30			29 Oct 2021 14:22	50
HS21100807-02	CM-4B	13 Oct 2021 12:00			29 Oct 2021 14:44	50
HS21100807-03	CM-5A	13 Oct 2021 11:25			29 Oct 2021 14:51	50
HS21100807-04	CM-5B	13 Oct 2021 11:00			29 Oct 2021 14:59	50
HS21100807-05	CM-3A	14 Oct 2021 10:30			29 Oct 2021 15:06	20
HS21100807-06	MW-15B	14 Oct 2021 11:40			29 Oct 2021 15:14	50
HS21100807-07	MW-22B	14 Oct 2021 11:15			29 Oct 2021 15:21	100
HS21100807-08	CM-1A	14 Oct 2021 18:46			29 Oct 2021 15:28	100
HS21100807-09	CM-1B	14 Oct 2021 17:55			29 Oct 2021 15:51	100
HS21100807-10	CM-2	15 Oct 2021 12:22			29 Oct 2021 15:58	50

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: 171725 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

MBLK Sample ID: **MBLK-171725** Units: **mg/L** Analysis Date: **26-Oct-2021 21:09**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339366** PrepDate: **26-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	U	0.0200								
Calcium	U	0.500								
Iron	U	0.200								
Magnesium	U	0.200								
Molybdenum	U	0.00500								
Potassium	U	0.200								
Sodium	U	0.200								

LCS Sample ID: **LCS-171725** Units: **mg/L** Analysis Date: **26-Oct-2021 17:04**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339265** PrepDate: **26-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.4286	0.0200	0.5	0	85.7	80 - 120				
Calcium	4.563	0.500	5	0	91.3	80 - 120				
Iron	4.616	0.200	5	0	92.3	80 - 120				
Magnesium	5.125	0.200	5	0	103	80 - 120				
Molybdenum	0.04725	0.00500	0.05	0	94.5	80 - 120				
Potassium	4.847	0.200	5	0	96.9	80 - 120				
Sodium	5.23	0.200	5	0	105	80 - 120				

MS Sample ID: **HS21100809-02MS** Units: **mg/L** Analysis Date: **26-Oct-2021 17:12**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339269** PrepDate: **26-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.646	0.0200	0.5	0.1752	94.2	80 - 120				
Calcium	550.9	0.500	5	552.4	-31.4	80 - 120				SEO
Iron	7.407	0.200	5	2.82	91.8	80 - 120				
Magnesium	124.8	0.200	5	123.1	33.2	80 - 120				SO
Molybdenum	0.05121	0.00500	0.05	0.000862	101	80 - 120				
Potassium	6.096	0.200	5	1.154	98.8	80 - 120				
Sodium	909.5	0.200	5	928.6	-382	80 - 120				SEO

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: 171725 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

MSD Sample ID: **HS21100809-02MSD** Units: **mg/L** Analysis Date: **26-Oct-2021 17:14**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339270** PrepDate: **26-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.6395	0.0200	0.5	0.1752	92.9	80 - 120	0.646	1.01	20	
Calcium	537.2	0.500	5	552.4	-306	80 - 120	550.9	2.52	20	SEO
Iron	7.298	0.200	5	2.82	89.6	80 - 120	7.407	1.48	20	
Magnesium	123	0.200	5	123.1	-3.20	80 - 120	124.8	1.47	20	SO
Molybdenum	0.04895	0.00500	0.05	0.000862	96.2	80 - 120	0.05121	4.51	20	
Potassium	5.922	0.200	5	1.154	95.3	80 - 120	6.096	2.9	20	
Sodium	889.9	0.200	5	928.6	-773	80 - 120	909.5	2.17	20	SEO

PDS Sample ID: **HS21100809-02PDS** Units: **mg/L** Analysis Date: **27-Oct-2021 15:28**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341205** PrepDate: **26-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.4395	0.0200	0.25	0.1752	106	75 - 125				
Iron	11.94	0.200	10	2.82	91.2	75 - 125				
Magnesium	124.5	0.200	10	123.1	13.5	75 - 125				SO
Molybdenum	0.09732	0.00500	0.1	0.000862	96.5	75 - 125				
Potassium	10.68	0.200	10	1.154	95.2	75 - 125				

PDS Sample ID: **HS21100809-02PDS** Units: **mg/L** Analysis Date: **26-Oct-2021 21:15**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339369** PrepDate: **26-Oct-2021** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	1398	50.0	1000	522.9	87.5	75 - 125				
Sodium	1692	20.0	1000	834.7	85.8	75 - 125				

SD Sample ID: **HS21100809-02SD** Units: **mg/L** Analysis Date: **26-Oct-2021 21:13**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339368** PrepDate: **26-Oct-2021** DF: **500**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Calcium	535.2	250					522.9	2.34	10	
Sodium	852.4	100					834.7	2.11	10	

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: 171725 (0) **Instrument: ICPMS06** **Method: ICP-MS METALS BY SW6020A**

SD Sample ID: **HS21100809-02SD** Units: **mg/L** Analysis Date: **26-Oct-2021 17:10**
Client ID: Run ID: **ICPMS06_394199** SeqNo: **6339268** PrepDate: **26-Oct-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Iron	2.887	1.00					2.82	2.39	10	
Magnesium	122.5	1.00					123.1	0.508	10	
Molybdenum	U	0.0250					0.000862	0	10	

SD Sample ID: **HS21100809-02SD** Units: **mg/L** Analysis Date: **27-Oct-2021 15:26**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341204** PrepDate: **26-Oct-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Potassium	1.185	1.00					1.154	2.72	10	

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: 171817 (0) **Instrument: ICPMS06** **Method: DISSOLVED METALS BY SW6020A (DISSOLVED)**

MBLK Sample ID: **MBLK-171817** Units: **mg/L** Analysis Date: **27-Oct-2021 18:22**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341637** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	U	0.200								
Molybdenum	U	0.00500								

LCS Sample ID: **LCS-171817** Units: **mg/L** Analysis Date: **27-Oct-2021 18:24**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341638** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	4.966	0.200	5	0	99.3	80 - 120				
Molybdenum	0.04967	0.00500	0.05	0	99.4	80 - 120				

MS Sample ID: **HS21100769-09MS** Units: **mg/L** Analysis Date: **27-Oct-2021 19:11**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341657** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	6.128	0.200	5	1.004	102	75 - 125				
Molybdenum	0.05395	0.00500	0.05	0.03278	42.4	75 - 125				S

MSD Sample ID: **HS21100769-09MSD** Units: **mg/L** Analysis Date: **27-Oct-2021 19:13**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341658** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	6.115	0.200	5	1.004	102	75 - 125	6.128	0.218	20	
Molybdenum	0.05302	0.00500	0.05	0.03278	40.5	75 - 125	0.05395	1.75	20	S

PDS Sample ID: **HS21100769-09PDS** Units: **mg/L** Analysis Date: **27-Oct-2021 19:15**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341659** PrepDate: **27-Oct-2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Molybdenum	0.1307	0.00500	0.1	0.03278	97.9	75 - 125				

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: 171817 (0) **Instrument: ICPMS06** **Method: DISSOLVED METALS BY SW6020A (DISSOLVED)**

SD Sample ID: **HS21100769-09SD** Units: **mg/L** Analysis Date: **27-Oct-2021 19:09**
Client ID: Run ID: **ICPMS06_394320** SeqNo: **6341656** PrepDate: **27-Oct-2021** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Iron	1.041	1.00					1.004	3.62	10	
Molybdenum	0.03191	0.0250					0.03278	2.64	10	

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393445 (0) **Instrument: ManTech01** **Method: ALKALINITY BY SM 2320B-2011**

MBLK Sample ID: **WBLKW1-211014** Units: **mg/L** Analysis Date: **14-Oct-2021 18:35**
Client ID: Run ID: **ManTech01_393445** SeqNo: **6319811** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	5.00								
Alkalinity, Carbonate (As CaCO3)	U	5.00								
Alkalinity, Hydroxide (As CaCO3)	U	5.00								
Alkalinity, Total (As CaCO3)	U	5.00								

LCS Sample ID: **LCS1-211014** Units: **mg/L** Analysis Date: **14-Oct-2021 18:43**
Client ID: Run ID: **ManTech01_393445** SeqNo: **6319812** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1005	5.00	1000	0	100	85 - 115				
Alkalinity, Total (As CaCO3)	1015	5.00	1000	0	101	85 - 115				

LCSD Sample ID: **LCSD1-211014** Units: **mg/L** Analysis Date: **14-Oct-2021 18:52**
Client ID: Run ID: **ManTech01_393445** SeqNo: **6319813** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1008	5.00	1000	0	101	85 - 115	1005	0.322	20	
Alkalinity, Total (As CaCO3)	1022	5.00	1000	0	102	85 - 115	1015	0.729	20	

DUP Sample ID: **HS21100801-02DUP** Units: **mg/L** Analysis Date: **14-Oct-2021 19:05**
Client ID: Run ID: **ManTech01_393445** SeqNo: **6319815** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	177.1	5.00					159	10.7	20	
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Hydroxide (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Total (As CaCO3)	177.1	5.00					159	10.7	20	

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393445 (0) **Instrument: ManTech01** **Method: ALKALINITY BY SM 2320B-2011**

DUP Sample ID: **HS21100767-05DUP** Units: **mg/L** Analysis Date: **14-Oct-2021 19:27**
Client ID: Run ID: **ManTech01_393445** SeqNo: **6319818** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	853.7	5.00					848	0.673	20	
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Hydroxide (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Total (As CaCO3)	853.7	5.00					848	0.673	20	

The following samples were analyzed in this batch: HS21100807-01 HS21100807-02 HS21100807-03 HS21100807-04

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393484 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **15-Oct-2021 04:30**
Client ID: Run ID: **ICS-Integrion_393484** SeqNo: **6320594** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **15-Oct-2021 04:38**
Client ID: Run ID: **ICS-Integrion_393484** SeqNo: **6320595** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.58	0.500	20	0	97.9	90 - 110				
Fluoride	4.095	0.100	4	0	102	90 - 110				
Nitrogen, Nitrate (As N)	3.858	0.100	4	0	96.4	90 - 110				

MS Sample ID: **HS21100807-02MS** Units: **mg/L** Analysis Date: **15-Oct-2021 03:09**
Client ID: **CM-4B** Run ID: **ICS-Integrion_393484** SeqNo: **6320586** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	159.3	2.50	50	112.7	93.1	80 - 120				
Fluoride	11.64	0.500	10	1.05	106	80 - 120				
Nitrogen, Nitrate (As N)	31.49	0.500	10	22.2	92.9	80 - 120				

MS Sample ID: **HS21100772-01MS** Units: **mg/L** Analysis Date: **14-Oct-2021 22:42**
Client ID: Run ID: **ICS-Integrion_393484** SeqNo: **6320571** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	28.83	0.500	10	18.75	101	80 - 120				
Fluoride	2.14	0.100	2	0.0956	102	80 - 120				
Nitrogen, Nitrate (As N)	2.158	0.100	2	0.1676	99.5	80 - 120				

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393484 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY E300.0, REV 2.1, 1993

MSD Sample ID: **HS21100807-02MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 03:16**
Client ID: **CM-4B** Run ID: **ICS-Integrion_393484** SeqNo: **6320587** PrepDate: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	157.4	2.50	50	112.7	89.4	80 - 120	159.3	1.17	20	
Fluoride	11.39	0.500	10	1.05	103	80 - 120	11.64	2.16	20	
Nitrogen, Nitrate (As N)	31.12	0.500	10	22.2	89.2	80 - 120	31.49	1.18	20	

MSD Sample ID: **HS21100772-01MSD** Units: **mg/L** Analysis Date: **14-Oct-2021 22:50**
Client ID: Run ID: **ICS-Integrion_393484** SeqNo: **6320572** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	28.38	0.500	10	18.75	96.3	80 - 120	28.83	1.57	20	
Fluoride	2.1	0.100	2	0.0956	100	80 - 120	2.14	1.87	20	
Nitrogen, Nitrate (As N)	2.122	0.100	2	0.1676	97.7	80 - 120	2.158	1.69	20	

The following samples were analyzed in this batch: HS21100807-01 HS21100807-02 HS21100807-03 HS21100807-04

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393566 (0) **Instrument: UV-2450** **Method: FERROUS IRON BY SM3500 FE B**

MBLK Sample ID: **MBLK-R393566** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322634** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	U	0.0500				80 - 120				

LCS Sample ID: **LCS-R393566** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322633** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.25	0.0500	0.25	0	100	80 - 120				

MS Sample ID: **HS21100884-06MS** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322636** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.246	0.0500	0.25	0.009	94.8	75 - 125				

MSD Sample ID: **HS21100884-06MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 12:30**
Client ID: Run ID: **UV-2450_393566** SeqNo: **6322635** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.245	0.0500	0.25	0.009	94.4	75 - 125	0.246	0.407	20	

The following samples were analyzed in this batch: HS21100807-08 HS21100807-09 HS21100807-10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393664 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **15-Oct-2021 14:00**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324764** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **15-Oct-2021 14:08**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324765** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.88	0.500	20	0	99.4	90 - 110				
Fluoride	4.254	0.100	4	0	106	90 - 110				
Nitrogen, Nitrate (As N)	3.919	0.100	4	0	98.0	90 - 110				

MS Sample ID: **HS21100884-04MS** Units: **mg/L** Analysis Date: **15-Oct-2021 15:37**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324772** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	41.08	1.00	20	21.49	98.0	80 - 120				
Fluoride	4.591	0.200	4	0.4108	105	80 - 120				
Nitrogen, Nitrate (As N)	4.104	0.200	4	0.2074	97.4	80 - 120				

MS Sample ID: **HS21100876-02MS** Units: **mg/L** Analysis Date: **15-Oct-2021 20:41**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324795** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	104.2	0.500	10	96.76	74.4	80 - 120				SEO
Fluoride	2.881	0.100	2	0.9764	95.2	80 - 120				
Nitrogen, Nitrate (As N)	1.913	0.100	2	0.0184	94.7	80 - 120				

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393664 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MSD Sample ID: **HS21100884-04MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 15:44**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324773** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	40.92	1.00	20	21.49	97.2	80 - 120	41.08	0.4	20	
Fluoride	4.541	0.200	4	0.4108	103	80 - 120	4.591	1.1	20	
Nitrogen, Nitrate (As N)	4.101	0.200	4	0.2074	97.3	80 - 120	4.104	0.0731	20	

MSD Sample ID: **HS21100876-02MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 20:49**
Client ID: Run ID: **ICS-Integrion_393664** SeqNo: **6324796** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	106.8	0.500	10	96.76	101	80 - 120	104.2	2.51	20	EO
Fluoride	2.951	0.100	2	0.9764	98.7	80 - 120	2.881	2.42	20	
Nitrogen, Nitrate (As N)	1.962	0.100	2	0.0184	97.2	80 - 120	1.913	2.52	20	

The following samples were analyzed in this batch: HS21100807-05 HS21100807-06 HS21100807-07

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393740 (0) **Instrument: UV-2450** **Method: FERROUS IRON BY SM3500 FE B**

MBLK Sample ID: **MBLK-R393740** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326907** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	U	0.0500				80 - 120				

LCS Sample ID: **LCS-R393740** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326906** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.238	0.0500	0.25	0	95.2	80 - 120				

MS Sample ID: **HS21100884-03MS** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326909** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.524	0.0500	0.25	0.284	96.0	75 - 125				

MSD Sample ID: **HS21100884-03MSD** Units: **mg/L** Analysis Date: **15-Oct-2021 15:29**
Client ID: Run ID: **UV-2450_393740** SeqNo: **6326908** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.519	0.0500	0.25	0.284	94.0	75 - 125	0.524	0.959	20	

The following samples were analyzed in this batch: HS21100807-05 HS21100807-06 HS21100807-07

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393819 (0) **Instrument: WetChem_HS** **Method: SULFIDE BY SM4500 S2-F-2011**

MBLK Sample ID: **MBLK-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328708** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	U	1.00								

LCS Sample ID: **LCS-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328707** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.08	1.00	25	0	88.3	85 - 115				

LCSD Sample ID: **LCSD-R393819** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328706** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.28	1.00	25	0	89.1	85 - 115	22.08	0.902	20	

MS Sample ID: **HS21100727-01MS** Units: **mg/L** Analysis Date: **20-Oct-2021 12:50**
Client ID: Run ID: **WetChem_HS_393819** SeqNo: **6328709** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.68	1.00	25	-0.92	94.4	80 - 120				

The following samples were analyzed in this batch: HS21100807-01 HS21100807-02 HS21100807-03 HS21100807-04

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393899 (0) **Instrument: UV-2450** **Method: FERROUS IRON BY SM3500 FE B**

MBLK Sample ID: **MBLK-R393899** Units: **mg/L** Analysis Date: **14-Oct-2021 20:47**
Client ID: Run ID: **UV-2450_393899** SeqNo: **6330752** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	U	0.0500				80 - 120				

LCS Sample ID: **LCS-R393899** Units: **mg/L** Analysis Date: **14-Oct-2021 20:47**
Client ID: Run ID: **UV-2450_393899** SeqNo: **6330751** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.238	0.0500	0.25	0	95.2	80 - 120				

MS Sample ID: **HS21100807-01MS** Units: **mg/L** Analysis Date: **14-Oct-2021 20:47**
Client ID: **CM-4A** Run ID: **UV-2450_393899** SeqNo: **6330754** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.798	0.0500	0.25	0.544	102	75 - 125				

MSD Sample ID: **HS21100807-01MSD** Units: **mg/L** Analysis Date: **14-Oct-2021 20:47**
Client ID: **CM-4A** Run ID: **UV-2450_393899** SeqNo: **6330753** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron	0.784	0.0500	0.25	0.544	96.0	75 - 125	0.798	1.77	20	

The following samples were analyzed in this batch: HS21100807-01 HS21100807-02 HS21100807-03 HS21100807-04

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393922 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WBLK-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331367** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0								

LCS Sample ID: **WLCS-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331368** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	924	10.0	1000	0	92.4	85 - 115				

DUP Sample ID: **HS21100884-04DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331364** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	2682	10.0					2656	0.974	5	

DUP Sample ID: **HS21100781-01DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 20:00**
Client ID: Run ID: **Balance1_393922** SeqNo: **6331347** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	716	10.0					726	1.39	5	

The following samples were analyzed in this batch: HS21100807-05 HS21100807-06 HS21100807-07 HS21100807-08 HS21100807-09

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393933 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WBLK-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 15:35**
Client ID: Run ID: **Balance1_393933** SeqNo: **6331533** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0								

LCS Sample ID: **WLCS-102021** Units: **mg/L** Analysis Date: **20-Oct-2021 15:35**
Client ID: Run ID: **Balance1_393933** SeqNo: **6331534** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	932	10.0	1000	0	93.2	85 - 115				

DUP Sample ID: **HS21100833-02DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 15:35**
Client ID: Run ID: **Balance1_393933** SeqNo: **6331521** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1258	10.0					1240	1.44	5	

DUP Sample ID: **HS21100748-01DUP** Units: **mg/L** Analysis Date: **20-Oct-2021 15:35**
Client ID: Run ID: **Balance1_393933** SeqNo: **6331512** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1370	10.0					1364	0.439	5	

The following samples were analyzed in this batch: HS21100807-01 HS21100807-02 HS21100807-03 HS21100807-04

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393972 (0) **Instrument: ManTech01** **Method: ALKALINITY BY SM 2320B-2011**

MBLK Sample ID: **WBLKW2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 23:05**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332728** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	U	5.00								
Alkalinity, Carbonate (As CaCO3)	U	5.00								
Alkalinity, Hydroxide (As CaCO3)	U	5.00								
Alkalinity, Total (As CaCO3)	U	5.00								

LCS Sample ID: **WLCS2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 22:32**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332724** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	994.3	5.00	1000	0	99.4	85 - 115				
Alkalinity, Total (As CaCO3)	1014	5.00	1000	0	101	85 - 115				

LCSD Sample ID: **WLCSD2-211021** Units: **mg/L** Analysis Date: **21-Oct-2021 22:41**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332725** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Carbonate (As CaCO3)	1007	5.00	1000	0	101	85 - 115	994.3	1.24	20	
Alkalinity, Total (As CaCO3)	1013	5.00	1000	0	101	85 - 115	1014	0.0878	20	

DUP Sample ID: **HS21100884-02DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 23:18**
Client ID: Run ID: **ManTech01_393972** SeqNo: **6332730** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	350.4	5.00					347.6	0.785	20	
Alkalinity, Carbonate (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Hydroxide (As CaCO3)	U	5.00					0	0	20	
Alkalinity, Total (As CaCO3)	350.4	5.00					347.6	0.785	20	

The following samples were analyzed in this batch: HS21100807-05 HS21100807-06 HS21100807-07 HS21100807-08 HS21100807-09 HS21100807-10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R393988 (0) **Instrument: WetChem_HS** **Method: SULFIDE BY SM4500 S2-F-2011**

MBLK Sample ID: **MBLK-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333104** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	U	1.00								

LCS Sample ID: **LCS-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333103** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.12	1.00	25	0	88.5	85 - 115				

LCSD Sample ID: **LCSD-R393988** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333102** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	22.32	1.00	25	0	89.3	85 - 115	22.12	0.9	20	

MS Sample ID: **HS21101110-01MS** Units: **mg/L** Analysis Date: **21-Oct-2021 16:45**
Client ID: Run ID: **WetChem_HS_393988** SeqNo: **6333105** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfide	21.72	1.00	25	-1.48	92.8	80 - 120				

The following samples were analyzed in this batch: HS21100807-05 HS21100807-06 HS21100807-07 HS21100807-08 HS21100807-09 HS21100807-10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394028 (0) **Instrument:** Balance1 **Method:** TOTAL DISSOLVED SOLIDS BY SM2540C-2011

MBLK Sample ID: **WBLK-102121** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333952** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	U	10.0								

LCS Sample ID: **WLCS-102121** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333953** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	964	10.0	1000	0	96.4	85 - 115				

DUP Sample ID: **HS21100945-05DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333945** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1714	10.0					1712	0.117	5	

DUP Sample ID: **HS21100884-07DUP** Units: **mg/L** Analysis Date: **21-Oct-2021 15:00**
Client ID: Run ID: **Balance1_394028** SeqNo: **6333933** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Filterable)	1292	10.0					1294	0.155	5	

The following samples were analyzed in this batch: HS21100807-10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394287 (0) **Instrument:** WetChem_HS **Method:** PH BY SM4500H+ B-2011

DUP Sample ID: **HS21100804-07DUP** Units: **pH Units** Analysis Date: **27-Oct-2021 12:00**
Client ID: Run ID: **WetChem_HS_394287** SeqNo: **6340501** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.15	0.100					7.17	0.279	10	
Temp Deg C @pH	22.7	0					22.7	0	10	

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394412 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **16-Oct-2021 11:46**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343271** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	U	0.500								
Fluoride	U	0.100								
Nitrogen, Nitrate (As N)	U	0.100								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **16-Oct-2021 11:53**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343272** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	18.3	0.500	20	0	91.5	90 - 110				
Fluoride	3.861	0.100	4	0	96.5	90 - 110				
Nitrogen, Nitrate (As N)	3.604	0.100	4	0	90.1	90 - 110				

MS Sample ID: **HS21100884-07MS** Units: **mg/L** Analysis Date: **16-Oct-2021 13:48**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343279** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	26.48	0.500	10	16.77	97.1	80 - 120				
Fluoride	2.798	0.100	2	0.7461	103	80 - 120				
Nitrogen, Nitrate (As N)	2.155	0.100	2	0.094	103	80 - 120				

MS Sample ID: **HS21100884-06MS** Units: **mg/L** Analysis Date: **16-Oct-2021 13:26**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343276** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	35.63	0.500	10	26.4	92.3	80 - 120				
Fluoride	3.668	0.100	2	1.568	105	80 - 120				
Nitrogen, Nitrate (As N)	2.146	0.100	2	0.0984	102	80 - 120				

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394412 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MSD Sample ID: **HS21100884-07MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 13:55**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343280** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	26.1	0.500	10	16.77	93.4	80 - 120	26.48	1.43	20	
Fluoride	2.744	0.100	2	0.7461	99.9	80 - 120	2.798	1.96	20	
Nitrogen, Nitrate (As N)	2.126	0.100	2	0.094	102	80 - 120	2.155	1.33	20	

MSD Sample ID: **HS21100884-06MSD** Units: **mg/L** Analysis Date: **16-Oct-2021 13:33**
Client ID: Run ID: **ICS-Integrion_394412** SeqNo: **6343277** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	35.38	0.500	10	26.4	89.8	80 - 120	35.63	0.684	20	
Fluoride	3.609	0.100	2	1.568	102	80 - 120	3.668	1.61	20	
Nitrogen, Nitrate (As N)	2.13	0.100	2	0.0984	102	80 - 120	2.146	0.762	20	

The following samples were analyzed in this batch: HS21100807-08 HS21100807-09 HS21100807-10

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394420 (0) **Instrument:** WetChem_HS **Method:** SPECIFIC CONDUCTANCE BY SM 2510B-2011

MBLK Sample ID: **MBLK-R394420** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:05**
Client ID: Run ID: **WetChem_HS_394420** SeqNo: **6343490** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	U	5.00								

LCS Sample ID: **LCS-R394420** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:05**
Client ID: Run ID: **WetChem_HS_394420** SeqNo: **6343489** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	1398	5.00	1413	0	98.9	80 - 120				

DUP Sample ID: **HS21100807-10DUP** Units: **umhos/cm @ 25.0 °C** Analysis Date: **28-Oct-2021 14:05**
Client ID: **CM-2** Run ID: **WetChem_HS_394420** SeqNo: **6343491** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductivity	2492	5.00					2496	0.16	20	

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394434 (0) **Instrument:** UV-2450 **Method:** FERROUS IRON BY SM3500 FE D (DISSOLVED)

MBLK Sample ID: **MBLK-R394434** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343864** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	U	0.0500								

LCS Sample ID: **LCS-R394434** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: Run ID: **UV-2450_394434** SeqNo: **6343863** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.247	0.0500	0.25	0	98.8	80 - 120				

MS Sample ID: **HS21100807-03MS** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: **CM-5A** Run ID: **UV-2450_394434** SeqNo: **6343854** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.25	0.0500	0.25	-0.001	100	80 - 120				

MSD Sample ID: **HS21100807-03MSD** Units: **mg/L** Analysis Date: **27-Oct-2021 20:36**
Client ID: **CM-5A** Run ID: **UV-2450_394434** SeqNo: **6343853** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ferrous Iron, Dissolved	0.242	0.0500	0.25	-0.001	97.2	80 - 120	0.25	3.25	20	

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: HS21100807

QC BATCH REPORT

Batch ID: R394568 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY E300.0, REV 2.1, 1993**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **29-Oct-2021 14:07**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346930** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	U	0.500								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **29-Oct-2021 14:14**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346931** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	18.72	0.500	20	0	93.6	90 - 110				

MS Sample ID: **HS21101156-08MS** Units: **mg/L** Analysis Date: **29-Oct-2021 17:42**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346957** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	32	0.500	10	23.08	89.2	80 - 120				

MS Sample ID: **HS21100769-01MS** Units: **mg/L** Analysis Date: **29-Oct-2021 16:13**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346945** PrepDate: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	1958	10.0	400	1658	75.0	80 - 120				SO

MSD Sample ID: **HS21101156-08MSD** Units: **mg/L** Analysis Date: **29-Oct-2021 17:49**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346958** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	31.83	0.500	10	23.08	87.5	80 - 120	32	0.543	20	

MSD Sample ID: **HS21100769-01MSD** Units: **mg/L** Analysis Date: **29-Oct-2021 16:20**
Client ID: Run ID: **ICS-Integrion_394568** SeqNo: **6346946** PrepDate: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	1912	10.0	400	1658	63.6	80 - 120	1958	2.37	20	SO

The following samples were analyzed in this batch:

HS21100807-01	HS21100807-02	HS21100807-03	HS21100807-04
HS21100807-05	HS21100807-06	HS21100807-07	HS21100807-08
HS21100807-09	HS21100807-10		

Client: Altamira
Project: WFEC / MNA Program
WorkOrder: **HS21100807**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
Date	

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	21-022-0	26-Mar-2022
Dept of Defense	PJLA L20-507-R2	22-Dec-2021
Florida	E87611-33	30-Jun-2022
Illinois	2000322021-7	09-May-2022
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2021-2022	30-Apr-2022
Louisiana	03087, 2021-2022	30-Jun-2022
North Carolina	624-2021	31-Dec-2021
Texas	T104704231-21-28	30-Apr-2022

Client: Altamira
Project: WFEC / MNA Program
Work Order: HS21100807

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS21100807-01	CM-4A	Login	10/14/2021 5:04:05 PM	JRM	MET014
HS21100807-01	CM-4A	Login	10/14/2021 5:04:05 PM	JRM	WET220

Sample Receipt Checklist

Work Order ID: HS21100807 **Date/Time Received:** **14-Oct-2021 10:00**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	*/S/ Jared R. Makan*	14-Oct-2021 16:29	**Reviewed by:**	*/S/ Ragen Giga*	15-Oct-2021 20:04
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.4°C UC/C	IR31
Cooler(s)/Kit(s):	47550	
Date/Time sample(s) sent to storage:	10/14/2021 16:30	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Sample Receipt Checklist

Work Order ID: HS21100807 **Date/Time Received:** **14-Oct-2021 10:00**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	/S/ Jared R. Makan	15-Oct-2021 13:28	**Reviewed by:**	/S/ Ragen Giga	18-Oct-2021 15:18
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	0.8°C, 1.1°C UC/C	IR31
Cooler(s)/Kit(s):	47345, 46495	
Date/Time sample(s) sent to storage:	10/15/2021 13:30	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

Sample Receipt Checklist

Work Order ID: HS21100807 **Date/Time Received:** **14-Oct-2021 10:00**

Client Name: Enviro Clean Services-Tulsa **Received by:** **Jared R. Makan**

Completed By:	/S/ Jared R. Makan	16-Oct-2021 10:16	**Reviewed by:**	/S/ Ragen Giga	18-Oct-2021 15:19
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.5°C, 1.2°C UC/C	IR31
Cooler(s)/Kit(s):	46825, 45672	
Date/Time sample(s) sent to storage:	10/16/2021 10:20	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY RECORD

ALTAMIRA
formerly known as Enviro Clean Cardinal

PROJECT NUMBER: WFEE160021/2003

PROJECT NAME: (ALL WELLS ON SAME NO) WFEC / MNA PROGRAM

COC: 1 of X

CLIENT CONTACT: HEATHER TIFFANY

CLIENT EMAIL: HEATHER.TIFFANY@ALTAMIRA-US.COM LABDATA

CLIENT PHONE: 405-618-2021

LABORATORY / LAB PM: ALS / RAGEN GIGA

CLIENT ADDRESS: 525 CENTRAL PARK DR. #500 OKC, OK 73105

TAT: STND

LAB ADDRESS: 10450 STANCLIFF RD STE 210 HOUSTON, TX 77099

SPECIAL INSTRUCTIONS: * short hold *

SHIPMENT METHOD: FEDEX

TRACKING:

PARAMETERS

NO.	SAMPLE DESCRIPTION	DATE	TIME	MATRIX	PRES.	NUMBER OF CONTAINERS	FIELD FILTERED (YES / NO)	APPENDIX A	NO3 As N *	SPEC. COND.	Fe & Mo, TOTAL	FERROUS Fe (FERRIC BY CALC) *	DISSOLVED FERROUS Fe	DISSOLVED Fe, Mo FERRIC Fe	K, Mg, Na	SULFIDE	HCO3, CO3, TOTAL & HYDROXIDE ALK	HOLD
1	~~CM-1A~~			W	1,2A,9	5	N	X	X	X	X	X	X	X	X	X	X	
2	~~CM-1B~~							X	X	X	X	X	X	X	X	X	X	
3	~~CM-2~~							X	X	X	X	X	X	X	X	X	X	
4	~~CM-3A~~							X	X	X	X	X	X	X	X	X	X	
5	CM-3B							X	X	X	X	X	X	X	X	X	X	
6	CM-4A	10/13/21	1230					X	X	X	X	X	X	X	X	X	X	
7	CM-4B	10/13/21	1200					X	X	X	X	X	X	X	X	X	X	
8	CM-5A	10/13/21	1125					X	X	X	X	X	X	X	X	X	X	
9	CM-5B	10/13/21	1100					X	X	X	X	X	X	X	X	X	X	
10	~~CM-15B~~							X	X	X	X	X	X	X	X	X	X	
11	~~CM-22B~~							X	X	X	X	X	X	X	X	X	X	
12	Temp Blank																	
13																		
14																		
15																		

SAMPLER(S) NAME: Bradley VanCleave

DATE: 10/13/21 TIME: 1300

Total # of Containers:

SAMPLER(S) SIGNATURE: Bradley VanCleave

DATE: 10/13/21 TIME: 1300

RELINQUISHED BY: Bradley VanCleave DATE: 10/13/21 TIME: 1300

RECEIVED BY: J. Hustead DATE: 10/14/21 TIME: 10:30

LOGGED BY:

PRESERVATION KEY: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7- 4 Degrees C 8-9035 9-Other

POINT OF ORIGIN: ☐ Norman ☒ Oklahoma City ☐ Tulsa ☐ Yukon ☐ Midland ☐ C

HS21100807
Altamira
WFEC / MNA Program

ALTAMIRA-US, LLC

CHAIN OF CUSTODY ORD

ALTAMIRA
formerly known as Envir Clean Cardinal

PROJECT NUMBER: WFEC160021/2003

PROJECT NAME: (ALL WELLS ON SAME WO) WFEC/MNA PROGRAM

COC: 2 of X

CLIENT CONTACT: HEATHER TIFFANY

CLIENT EMAIL: HEATHER.TIFFANY@ALTAMIRA-US.COM LABDATA

CLIENT PHONE: 405-618-2021

LABORATORY / LAB PM: ALS/RAGEN GIGA

CLIENT ADDRESS: 525 CENTRAL PARK DR #500 OKC, OK 73105

TAT: STND

LAB ADDRESS: 10450 STANCLIFF RD #210 HOUSTON, TX 77099

SPECIAL INSTRUCTIONS: * SHORT HOLD *

SHIPMENT METHOD: FED EX

TRACKING:

PARAMETERS

NO.	SAMPLE DESCRIPTION	DATE	TIME	MATRIX	PRES.	NUMBER OF CONTAINERS	FIELD FILTERED (YES / NO)	APPENDIX A	NO3 AS N *	SPEC COND.	Fe & Mn, TOTAL	Fe, FERROUS & FERRIC	DISSOLVED Fe, DISSOLVED FERROUS Fe	DISSOLVED Fe, Mn, FERRIC Fe	K, Mg, Na	SULFIDE	HCO3, CO3, TOTAL ALK & HYDROXIDE ALK			HOLD
1	~~CM-1A~~			W	1,2,4,9	5	N	X	X	X	X	X	X	X	X	X	X			
2	~~CM-1B~~							X	X	X	X	X	X	X	X	X	X			
3	~~CM-2~~							X	X	X	X	X	X	X	X	X	X			
4	CM-3A	10/14/21	1030				Y	X	X	X	X	X	X	X	X	X	X			
5	~~CM-3B~~							X	X	X	X	X	X	X	X	X	X			
6	~~CM-4A~~							X	X	X	X	X	X	X	X	X	X			
7	~~CM-4B~~							X	X	X	X	X	X	X	X	X	X			
8	~~CM-5A~~							X	X	X	X	X	X	X	X	X	X			
9	~~CM-5B~~							X	X	X	X	X	X	X	X	X	X			
10	MW~~CM~~-15B	10/14/21	1140				Y	X	X	X	X	X	X	X	X	X	X			
11	MW~~CM~~-22B	10/14/21	1115				Y	X	X	X	X	X	X	X	X	X	X			
12	Temp Blank	—	—	W	—	1	W													
13																				
14																				
15																				

SAMPLER(S) NAME: Bradley VanCleave

DATE: 10/14/21 TIME: 1400

Total # of Containers: 1

SAMPLER(S) SIGNATURE:

DATE: 10/14/21 TIME: 1400

RELINQUISHED BY: Bradley VanCleave DATE: 10/14/21 TIME: 1400

RECEIVED BY: J. Pinson DATE: 10/15/21 TIME: 10:20

LOGGED BY: DATE: TIME:

COOLER TEMP:

PRESERVATION KEY: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7- 4 Degrees C 8-9035 9-Other :

POINT OF ORIGIN: ☐ Norman ☒ Oklahoma City ☐ Tulsa ☐ Yukon ☐ Midland ☐ Other :

HS21100807
Altamira
WFEC / MNA Program

ALTAMIRA-US, LLC

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL

Date: 10/13/21 Time: 1400
Name:
Company: Alterrar

Seal Broken By:
Date: 10/14/21

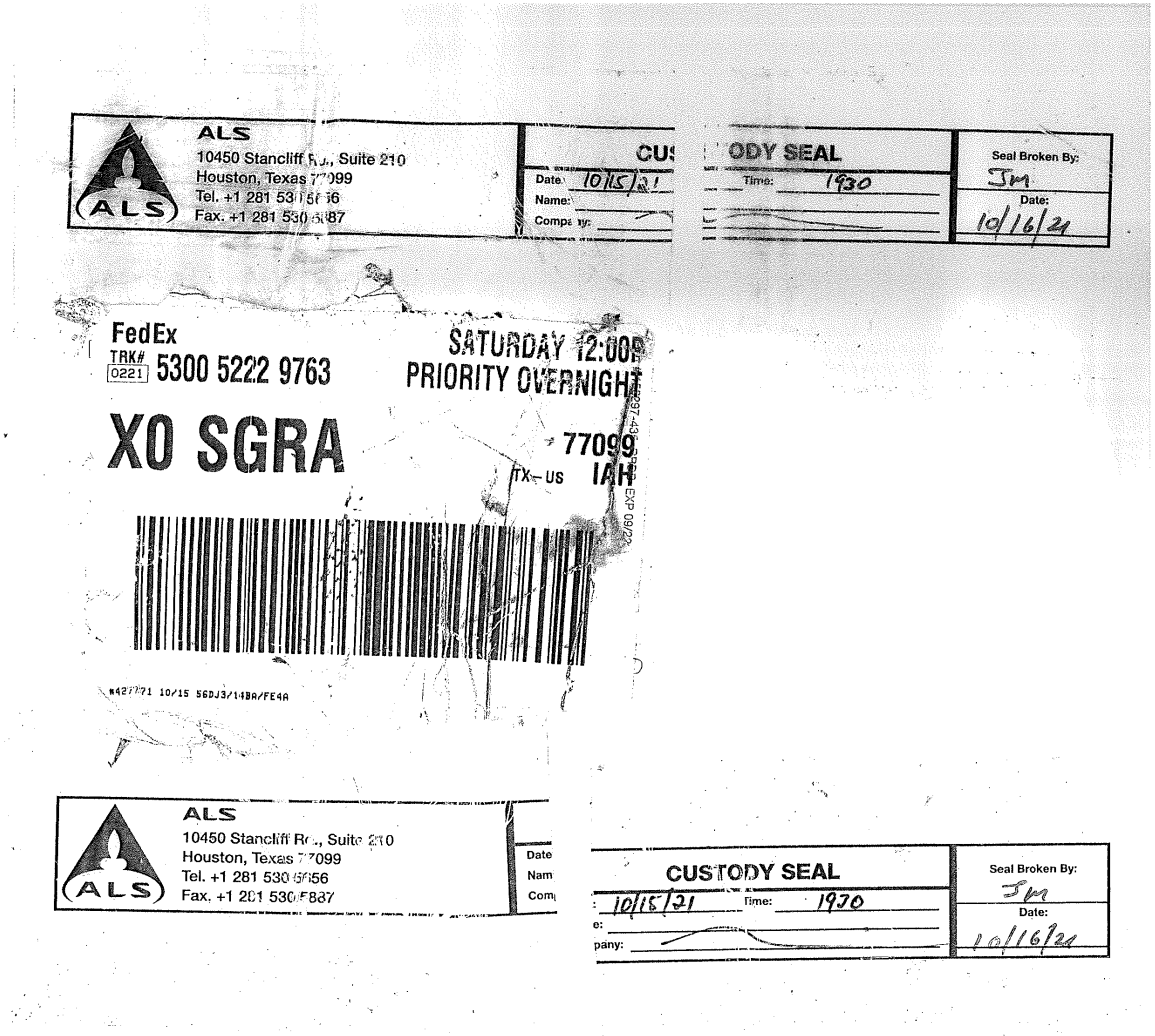
ALS
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

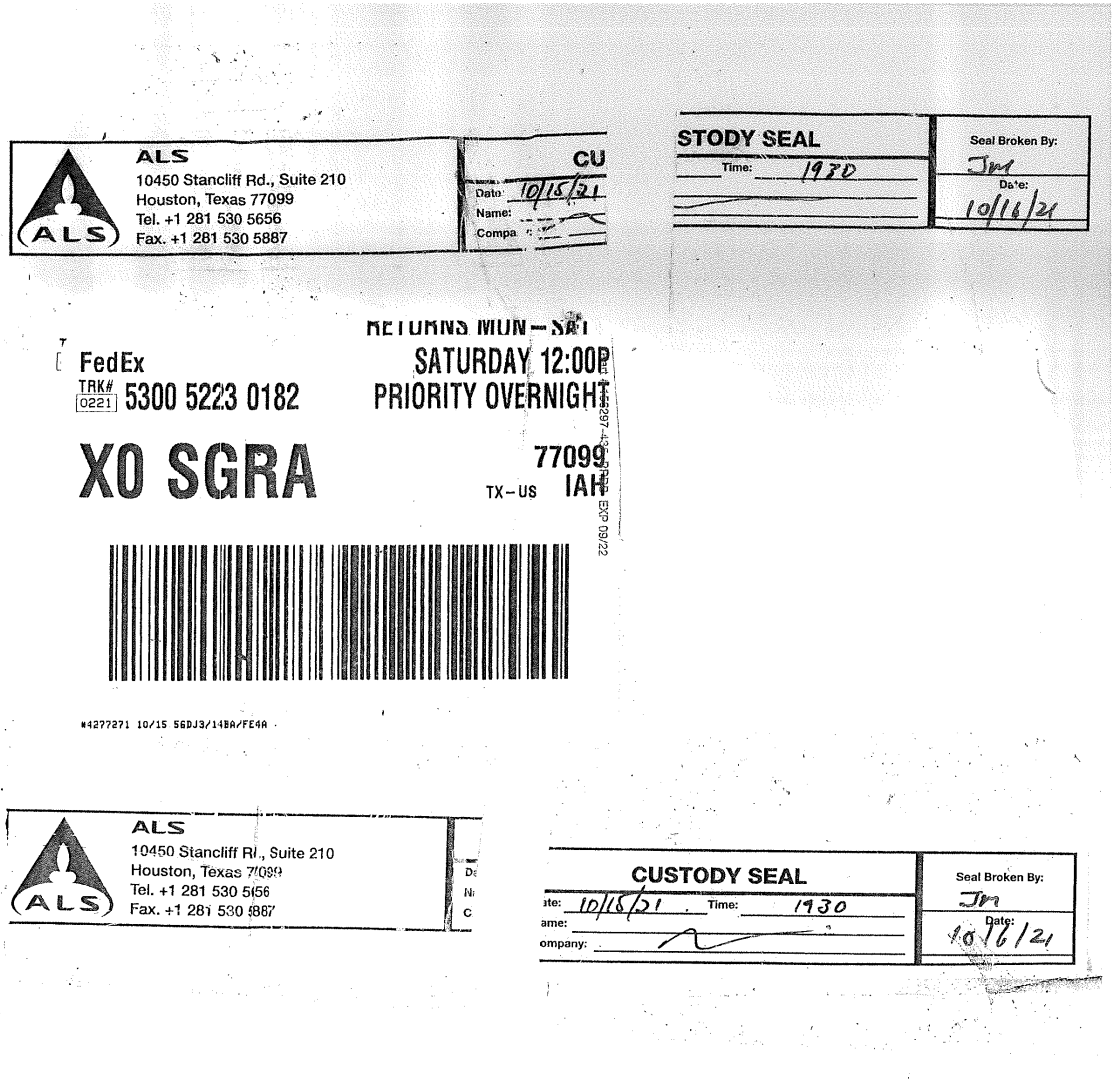
CUSTODY SEAL

Date: 10/13/21 Time: 1400
Name
Company: Alterra

Seal Broken By:
Date: 10/14/21

47550
→ shipping tag
10 west [illegible]
salvage





ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CU
Date: 10/15/21
Name:
Compa

STODY SEAL
Time: 1930
Seal Broken By:
Jm
Date:
10/16/21

RETURNS MON – SAT
FedEx
TRK# 0221 5300 5223 0182
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO SGRA
77099
TX-US IAH
EXP 09/22

#4277271 10/15 56DJ3/14BA/FE4A

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 10/15/21 Time: 1930
Name:
Company:
Seal Broken By:
Jm
Date:
10/16/21

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

C..S
Date: 10/4/21
Name:
Company:

TODY SEAL
Time: 1400

Seal Broken By: JM
Date: 10/15/20

FedEx.
TRK# 0221 5300 5222 9730

FRI - 15 OCT AA
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

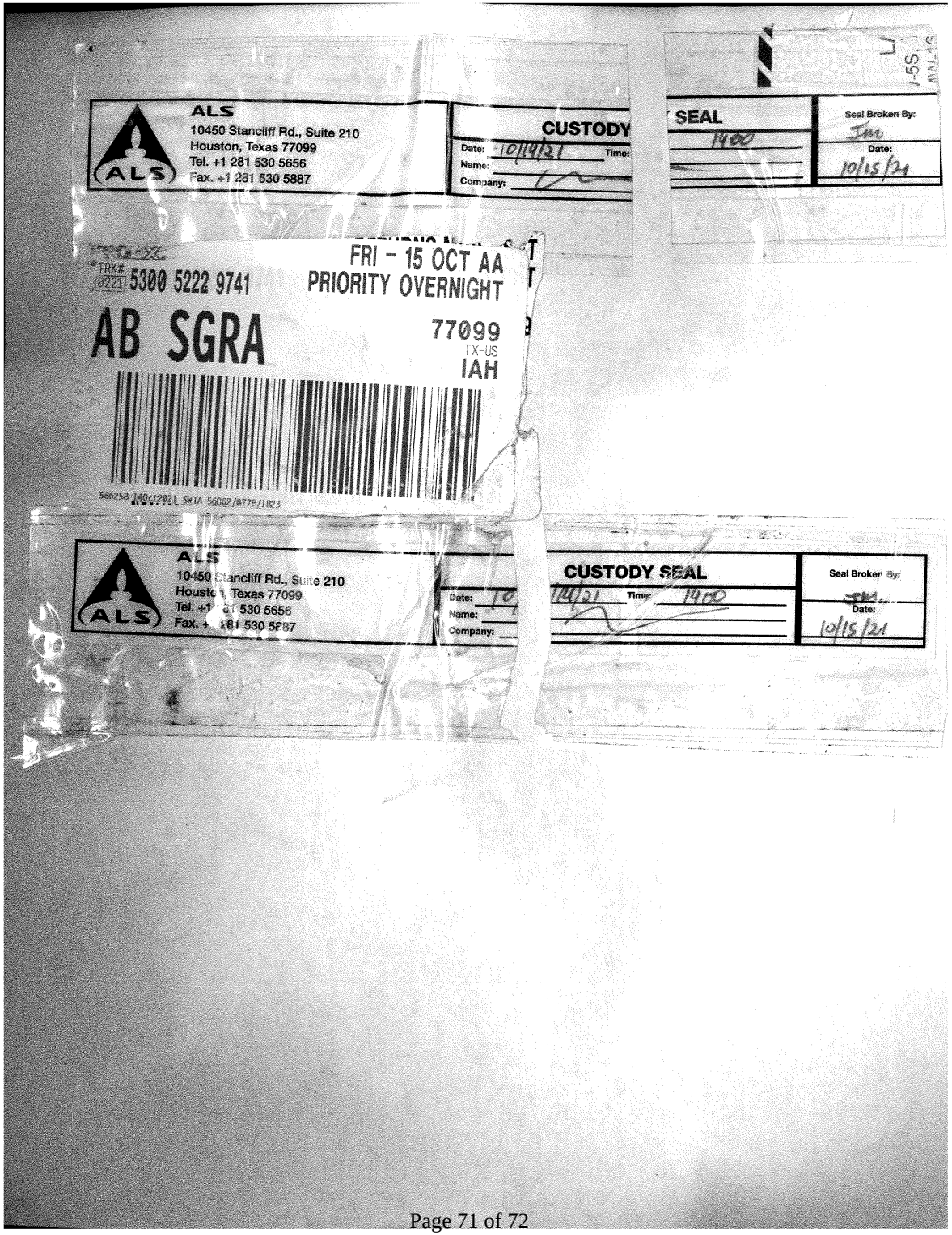
586258 140cl2021 S 1 560G2/0778/1023

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

Date: 10/
Name:
Company:

CUSTODY SEAL
10/4/21 Time: 1400

Seal Broken By: JM
Date: 10/15/20



ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CU
Date: 10/14/2
Name:
Company:

STODY SEAL
Time: 1400

Seal Broken By:
JM
Date:
10/15/21

FedEx.
TRK# 6221 5300 5222 9719

FRI - 15 OCT AA
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
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ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 10/14/21 Time: 1400
Name:
Company:

Seal Broken By:
JM
Date:
10/15/21

ATTACHMENT C

TABULATION OF DATA

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
Parameters	**Sample ID:**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**	**MW-5S**
	Sample Date:	**14-Aug-17**	**22-May-18**	**1-Aug-18**	**10-Aug-18**	**2-Oct-18**	**10-Jan-19**	**23-Apr-19**	**2-Oct-19**	**18-Jun-20**	**12-Oct-20**	**1-Apr-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	418	---	---	---	---	---	---	---	412	444	405	470
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	---	---	---	15	20.5	<5	9.52
Bicarbonate Alkalinity as CaCO3	mg/L	418	---	---	---	---	---	---	---	397	424	405	460
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	---	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	1.29	1.05	1.06	3.09	2.82	2.73	1.87	2.49	0.811	2.57	2.04	1.82
Calcium	mg/L	46.6	74.7	59.1	24.9 J	25	27.7	57	22.5	68.2	19.6	33.4	21.0
Chloride	mg/L	18.7	25	18.7	26.1	28.3	30.5	21.8	25.1	19.5	25.6	23.9	26.4
Dissolved Oxygen (field)	mg/L	0.05	0.13	5.05	1.37	0.21	0.63	0.85	0.45	1.89	0.32	0.81	0.36
Fluoride	mg/L	1.17	1.38	1.02	1.5	1.54	1.54	1.11	1.54	0.824	1.51	1.24	1.57
Iron, Total	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	0.0170 J	0.0270 J
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	<0.0120	<0.0120
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	<0.020	0.0270 J
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.020	<0.0200
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0290 J	<0.0200	<0.020	<0.0200
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.020	<0.0200 H
Magnesium	mg/L	5.19	---	---	---	---	5.73	---	---	5.16	4.38	4.53	4.60
Molybdenum, Total	mg/L	0.00737	---	0.00497	0.00387	<0.005	0.00512	0.00485 J	0.00315 J	0.00361 J	0.00244 J	0.00234 J	0.00387 J
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.00335 J	---	---	0.00308 J	0.00244 J	0.00287 J	0.00296 J
Nitrate as N	mg/L	---	---	---	---	0.089 J	0.964	0.665	0.212	<0.0300	<0.0300	0.631	0.0984 J
Oxidation-Reduction Potential (field)	mV	21.5	-104.7	142.8	-40.1	-125.1	-30.9	19.7	-54.1	-48.2	168.1	283.3	-59.9
pH (laboratory)	S.U.	7.5	7.6	7.7	8	8.7	7.65	8.11	7.55	7.65	8.21	7.9	8.16
pH (field)	S.U.	7.79	7.85	7.19	7.62	7.61	7.56	7.95	7.91	7.9	7.83	7.74	7.85
Potassium	mg/L	4.14	---	---	---	---	4.49	---	---	3.48	3.94	3.25	3.96
Sodium	mg/L	307	---	---	---	---	405	---	---	277	335	312	243
Specific Conductance (laboratory)	umhos/cm	----	---	---	---	1730	1870	---	---	---	1960	1770	1820
Specific Conductance (field)	µmhos/cm	1760	1516	1516	1843	1871	1791	1669	1826	1665	1794	1745	1863
Sulfate	mg/L	301	369	294	384	447	457	394	434	408	485	477	499
Sulfide	mg/L	---	---	---	---	---	---	---	---	<1.00	<1.00	<1.00	<1.00
Temperature (field)	ºC	22.46	20.24	25.07	23.59	25.3	13.4	18.78	25.18	24.37	21.5	14.7	23.7
Total Dissolved Solids	mg/L	980	950	880	1150	1140	1120	1090	1180	904	1080	1140	1140
Turbidity (field)	NTU	1.14	0.41	0.02	1.12	3.3	4.51	1.16	0.94	2.88	1.97	2.85	2.16
Filtered Turbidity (field)	NTU	---	---	---	---	---	1.27	---	---	---	1.97	1.19	1.91

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
Parameters	**Sample ID:**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**	**MW-7S**
	Sample Date:	**10-Aug-17**	**17-May-18**	**3-Aug-18**	**10-Aug-18**	**4-Oct-18**	**10-Jan-19**	**23-Apr-19**	**1-Oct-19**	**17-Jun-20**	**9-Oct-20**	**30-Mar-21**	**15-Oct-21**
Total Alkalinity as CaCO3	mg/L	311	---	---	---	---	222	---	---	264	315	180	343
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	311	---	---	---	---	222	---	---	264	315	180	343
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	2.21	1.25	0.283	3.31	2.7	0.839	0.848	1.99	1.33	2.29	0.677	2.18
Calcium	mg/L	80.6	178	90.3	142	76	277	271	81	160	90.2	254	97.1
Chloride	mg/L	16.2	17.6	16.4	17	16.1	18.7	19.7	16.3	18	16.9	20.5	16.8
Dissolved Oxygen (field)	mg/L	0.08	0.22	1.61	2.95	0.45	0.23	0.84	0.51	0.49	0.33	0.31	0.30
Fluoride	mg/L	0.744	0.509	0.771	0.664	0.764	0.422	0.376	0.729	0.479	0.713	0.444	0.746
Iron, Total	mg/L	---	---	---	---	---	---	---	---	0.278	0.111 J	0.0145 J	0.310
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	0.0340 J	0.235	0.0154 J	0.134 J
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	0.103
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	0.134
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.306	0.216	<0.02	0.207
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	<0.0200 H
Magnesium	mg/L	10.7	---	---	---	---	19	---	---	17.1	12	16.9	12.2
Molybdenum, Total	mg/L	0.00171 J	---	0.00127 J	<0.001	<0.01	0.00105 J	0.000952 J	0.000798 J	0.00105 J	0.00106 J	0.000755 J	0.00115 J
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.00107 J	---	---	0.000987 J	0.00103 J	0.000846 J	0.00121 J
Nitrate as N	mg/L	---	---	---	---	0.118	0.557	<0.03	<0.03	<0.0300	<0.0300	<0.06	0.0940 J
Oxidation-Reduction Potential (field)	mV	57.6	-58.8	-20.8	-30.7	-129.1	-6.3	-61.6	-133.8	-67.6	-90.1	83.3	-107.8
pH (laboratory)	S.U.	7.4	7.6	7.6	7.7	8	7.34	7.82	7.39	7.55	7.79	7.32	7.84
pH (field)	S.U.	7.22	7.4	6.92	7.22	7.35	7.08	7.42	7.53	7.37	7.52	7.24	7.47
Potassium	mg/L	4.95	---	---	---	---	4.67	---	---	5.33	5.1	4.06	5.14
Sodium	mg/L	273	---	---	---	---	274	---	---	313	272	230	261
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	1610	2240	---	---	---	2110	2380	1860
Specific Conductance (field)	µmhos/cm	1680	2101	1822	1932	1887	2180	2326	1944	2097	1945	2377	1973
Sulfate	mg/L	450	860	545	623	1600	1200	1040	633	970	759	1200	690
Sulfide	mg/L	---	---	---	---	---	---	---	---	<1.00	1.48	<1.00	<1.00
Temperature (field)	ºC	24.46	19.6	29.34	25.21	25	12.8	17.92	25.27	21.95	23.1	16.8	22.5
Total Dissolved Solids	mg/L	1120	1600	1210	1330	1230	1670	1890	1270	1680	1340	2060	1290
Turbidity (field)	NTU	3.45	2.29	3.37	1.76	8.01	0.67	0.71	0.88	2.49	0.85	5.81	3.15
Filtered Turbidity (field)	NTU	---	---	---	---	---	0.64	---	---	---	0.85	---	1.83

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
	Sample ID:	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A	MW-14A
Parameters	**Sample Date:**	**9-Aug-17**	**17-May-18**	**1-Aug-18**	**9-Aug-18**	**4-Oct-18**	**11-Jan-19**	**24-Apr-19**	**2-Oct-19**	**17-Jun-20**	**8-Oct-20**	**31-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	280	---	---	---	---	---	---	---	327	327	332	348
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	---	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	280	---	---	---	---	---	---	---	327	327	332	348
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	---	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	0.764	1.14	0.925	1.8	1.18	1.42	1.23	0.98	0.907	0.882	0.839	0.857
Calcium	mg/L	672	313	341	746	319	402	314	306	280	278	298	263
Chloride	mg/L	13.8	15.3	15	16	14.2	14	13.5	14.2	13.3	14.9	14.3	12.8
Dissolved Oxygen (field)	mg/L	0.1	0.24	252	1.65	0.31	0.19	1.45	0.62	0.79	0.59	0.34	0.40
Fluoride	mg/L	0.312	0.292	0.333	0.296	0.281	0.269	0.377 J	0.286	0.23	0.254 J	0.284	0.221
Iron, Total	mg/L	---	---	---	---	---	---	---	---	0.0771 J	0.236	0.162 J	1.22
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	0.169 J	0.150 J	0.357
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	0.107	0.935
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	0.116	0.357
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.098	0.184	0.055	0.285
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	0.034 J	<0.0200 H
Magnesium	mg/L	24.4	---	---	---	---	---	---	---	26.6	26.2	25.9	26.5
Molybdenum, Total	mg/L	0.00223	---	<0.001	<0.01	<0.01	0.00170 J	0.00104 J	0.000709 J	0.000760 J	<0.000600	<0.000600	<0.000600
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.00143 J	---	---	0.000768 J	0.000621 J	0.00165 J	<0.000600
Nitrate as N	mg/L	---	---	---	---	0.087 J	0.478	1.64	<0.03	0.316	<0.150	<0.0600	<0.0600
Oxidation-Reduction Potential (field)	mV	97.7	-48.5	0.2	68.3	13.1	19.5	4.6	27.7	-45.7	107.1	20.5	-128.9
pH (laboratory)	S.U.	6.9	7.4	7.3	7.1	7.6	7.28	7.61	7.18	7.44	7.41	7.7	6.74
pH (field)	S.U.	6.75	7.1	6.82	6.47	6.93	6.9	7.28	7.1	7.04	7.1	7.33	7.00
Potassium	mg/L	7.88	---	---	---	---	8.64	---	---	7.66	7.94	7.87	7.84
Sodium	mg/L	518	---	---	---	---	516	---	---	382	388	413	388
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	3000	3270	---	---	---	3660	3260	3320
Specific Conductance (field)	µmhos/cm	3186	3301	3415	3410	3491	3251	3386	3435	3107	3394	4453	2989
Sulfate	mg/L	1420	1790	1580	1600	1650	1660	1540	1580	1650	1770	1680	1690
Sulfide	mg/L	---	---	---	---	---	---	---	---	<1.00	<1.00	<1.00	3.08
Temperature (field)	ºC	21.41	22.9	25.6	21.33	23.1	16.2	17.75	24.4	21	23.7	15.84	20.0
Total Dissolved Solids	mg/L	2680	2700	2700	2730	2710	2590	2680	2750	2780	2630	2680	2630
Turbidity (field)	NTU	0.71	0.37	1.53	0.02	3.17	4.89	2.06	3.88	4.71	2.96	3.52	9.38
Filtered Turbidity (field)	NTU	---	---	---	---	---	0.94	---	---	---	2.96	---	2.37

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
Parameters	**Sample ID:**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**	**MW-15A**
	Sample Date:	**9-Aug-17**	**24-May-18**	**1-Aug-18**	**10-Aug-18**	**2-Oct-18**	**10-Jan-19**	**25-Apr-19**	**2-Oct-19**	**18-Jun-20**	**8-Oct-20**	**31-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	160	---	---	---	---	149	---	---	209	204	196	226
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	130	---	---	---	---	149	---	---	209	204	196	226
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	3.38	4.83	3.7	4.14	3.76	3.52	3.61	3.19	4.57	3.33	3.35	2.14
Calcium	mg/L	156	160	93.4	129	170	129	92	82.4	141	89.8	78.6	96.6
Chloride	mg/L	25.7	26.9	26.6	26.5	26.6	26.3	21.9	25.9	26.3	26.5	27.3	25.7
Dissolved Oxygen (field)	mg/L	0.06	0.14	1.62	1.23	0.21	0.41	1.24	0.71	1.39	0.28	4.47	0.38
Fluoride	mg/L	1.37	1.76	1.2	1.17	1.21	1.22	1.02	1.24	0.86	1.14	1.13	1.01
Iron, Total	mg/L	---	---	---	---	---	---	---	---	0.0535 J	0.0496 J	0.0492 J	0.368
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	0.165 J	0.133 J	0.590
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	0.0840
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	0.101	0.590
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0410 J	0.0210 J	0.054	0.284
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	0.032 J	<0.0200 H
Magnesium	mg/L	9.36	---	---	---	---	12.4	---	---	16.5	11	10.9	10.2
Molybdenum, Total	mg/L	0.255	---	0.202	0.182	0.233	0.205	0.219	0.196	0.269	0.167	0.168	0.149
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.244	---	---	0.168	0.153	0.159	0.181
Nitrate as N	mg/L	---	---	---	---	0.068 J	1.42	1.72	0.287	<0.0600	<0.150	1.14	0.0704 J
Oxidation-Reduction Potential (field)	mV	43.1	-101.3	133.1	140.8	-69.9	98	-22.1	-79.5	-50.3	167.2	13.8	-59.9
pH (laboratory)	S.U.	7.5	7.6	7.8	7.8	8.2	7.02	8.02	7.58	7.68	7.77	7.93	7.45
pH (field)	S.U.	7.42	7.72	7.42	7.43	7.53	7.45	7.82	7.71	7.73	7.71	7.82	7.61
Potassium	mg/L	5.28	---	---	---	---	5.98	---	---	8.24	5.15	5.47	4.97
Sodium	mg/L	541	---	---	---	---	746	---	---	1040	627	594	421
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	3490	3540	---	---	---	3780	3400	3370
Specific Conductance (field)	µmhos/cm	3524	3505	3548	3578	3563	3449	3544	3575	3337	3422	4645	3431
Sulfate	mg/L	1720	1690	1510	1490	1570	1610	1310	1510	1680	1650	1590	1580
Sulfide	mg/L	---	---	---	---	---	---	---	---	1.12	<1.00	<1.00	<1.00
Temperature (field)	ºC	22.68	21.24	25.05	23.28	23.1	18.5	20.72	27.05	24.09	22.2	16.37	22.4
Total Dissolved Solids	mg/L	2710	2660	2490	2610	2650	2590	2570	2500	2520	2460	2420	2370
Turbidity (field)	NTU	1.31	0.39	5.5	1.68	4.11	1.13	0.55	0.84	2.6	1.73	0.88	3.34
Filtered Turbidity (field)	NTU	---	---	---	---	---	1.09	---	---	---	0.61	---	2.23

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**MW-15B**	**MW-15B**	**MW-15B**	**MW-15B**
	Sample Date:	**24-Jul-20**	**13-Oct-20**	**31-Mar-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	680	724	771	802
Carbonate Alkalinity as CaCO3	mg/L	38.1	14.8	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	642	709	771	802
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	4.27	5.08	3.67	4.78
Calcium	mg/L	39.3	38.3	35.1	52.8
Chloride	mg/L	60.1	57	57.2	56.0
Dissolved Oxygen (field)	mg/L	4.21	5.04	2.4	9.52
Fluoride	mg/L	1.23	0.96	1.14	1.15
Iron, Total	mg/L	22.7	1.51	7.89	8.51
Iron, Dissolved	mg/L	2.11	<0.0120	0.0212 J	0.0794 J
Iron, Ferric	mg/L	---	---	7.21	6.69
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	0.0794
Iron, Ferrous	mg/L	2.67	7.52	0.68	1.82
Iron, Ferrous, Dissolved	mg/L	---	---	0.235	<0.0200 H
Magnesium	mg/L	13.2	11.5	10.2	15.9
Molybdenum, Total	mg/L	0.0109	0.00876	0.00571	0.00328 J
Molybdenum, Dissolved	mg/L	0.016	0.00762	0.00814	0.00679
Nitrate as N	mg/L	---	36.2	29.4	18.3
Oxidation-Reduction Potential (field)	mV	224.1	236.6	211.3	240.1
pH (laboratory)	S.U.	7.66	7.87	7.66	7.59
pH (field)	S.U.	7.91	7.88	7.43	7.58
Potassium	mg/L	10.3	6.72	8.19	8.29
Sodium	mg/L	713	836	625	866
Specific Conductance (laboratory)	umhos/cm	---	4520	4300	4410
Specific Conductance (field)	µmhos/cm	3513	2486	4208	4285
Sulfate	mg/L	1280	1340	1560	1580
Sulfide	mg/L	3	5	<1.00	3.31
Temperature (field)	ºC	21.7	20.7	18	20.4
Total Dissolved Solids	mg/L	2390	2940	3080	2990
Turbidity (field)	NTU	568	80.1	>1,000	>1000
Filtered Turbidity (field)	NTU	0.72	1.69	0.72	22.4

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
	Sample ID:	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
Parameters	**Sample Date:**	**11-Aug-17**	**22-May-18**	**1-Aug-18**	**10-Aug-18**	**2-Oct-18**	**16-Jan-19**	**23-Apr-19**	**3-Oct-19**	**18-Jun-20**	**13-Oct-20**	**1-Apr-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	238	---	---	---	---	256	---	---	232	233	228	264
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	238	---	---	---	---	256	---	---	232	233	228	264
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	1.79	1.95	1.9	2.39 J	2.05	2.23	1.85	1.53	1.43	1.78	1.57	1.61
Calcium	mg/L	238	122	159	185	221	215	192	149	186	166	140	158
Chloride	mg/L	18	21.3	20.6	29.6	18	19	15.8	23.8	14.7	14.8	14.4	16.2
Dissolved Oxygen (field)	mg/L	0.16	0.37	1.59	2.7	0.25	1.37	0.83	3.67	2.18	1.99	0.46	3.3
Fluoride	mg/L	0.817	1.01	0.963	1.17	0.832	0.82	0.741	1.07	0.694	0.893	0.916	0.964
Iron, Total	mg/L	---	---	---	---	---	---	---	---	0.0358 J	0.125 J	0.0536 J	0.369
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	0.0160 J	0.0694 J	0.0140 J	0.190 J
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	0.0536	0.178
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	0.190
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0380 J	0.0240 J	<0.02	0.191
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	<0.0200 H
Magnesium	mg/L	10.3	---	---	---	---	---	---	---	8.44	7.59	7.65	7.38
Molybdenum, Total	mg/L	0.181	---	0.145	0.154	0.169	0.18	0.193	0.149	0.172	0.149	0.166	0.163
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.18	---	---	0.173	0.16	0.18	0.189
Nitrate as N	mg/L	---	---	---	---	0.133	<0.03	0.854	<0.03	<0.0600	<0.0600	0.687	<0.0300
Oxidation-Reduction Potential (field)	mV	60.3	-83.7	186.4	150.4	-131.8	278.9	28.7	-191.5	-56.9	60.2	57.7	-167.2
pH (laboratory)	S.U.	7.2	7.5	7.5	7.8	8.2	7.33	7.88	7.01	7.6	7.63	7.83	7.75
pH (field)	S.U.	7.09	7.57	7.11	7.3	7.53	7.21	7.56	7.82	7.66	7.69	8.12	7.74
Potassium	mg/L	3.33	---	---	---	---	4.18	---	---	2.85	3.09	3.12	3.18
Sodium	mg/L	272	---	---	---	---	405	---	---	309	316	325	295
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	2420	2340	---	---	---	2400	2420	2340
Specific Conductance (field)	µmhos/cm	2330	2463	2436	2678	2816	2273	2330	2836	2438	2615	3178	2699
Sulfate	mg/L	1020	933	938	998	959	1020	974	1020	1030	929	1070	1110
Sulfide	mg/L	---	---	---	---	---	---	---	---	<1.00	1.4	<1.00	<1.00
Temperature (field)	ºC	24.61	22.87	23.7	23.74	25.4	14.8	19.31	24.89	21.9	23.5	16.32	23
Total Dissolved Solids	mg/L	1710	1820	1810	1930	1780	1740	1740	1810	1610	1610	1790	1590
Turbidity (field)	NTU	1.11	1.21	3.49	2.96	2.89	6.82	2.53	1.48	3.09	0.75	2.16	4.38
Filtered Turbidity (field)	NTU	---	---	---	---	---	1.03	---	---	---	0.75	---	2.21

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
Parameters	**Sample ID:**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**	**MW-17**
	Sample Date:	**10-Aug-17**	**21-May-18**	**1-Aug-18**	**10-Aug-18**	**3-Oct-18**	**10-Jan-19**	**25-Apr-19**	**3-Oct-19**	**18-Jun-20**	**12-Oct-20**	**31-Mar-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	260	---	---	---	---	280	---	---	284	273	269	288
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	260	---	---	---	---	280	---	---	284	273	269	288
Hydroxide Alkalinity	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	0.666	0.588	0.659	0.845 J	0.567	0.766	0.796	0.622	0.652	0.64	0.539	0.700
Calcium	mg/L	528	436	549	787	461	591	499	555	494	453	467	428
Chloride	mg/L	3.28	3.15	3.84	3.27	4.81	3.44	3.65	3.75	4.29	4.04	4.06	4.02
Dissolved Oxygen (field)	mg/L	0.29	0.21	5.57	4.59	0.44	0.51	1.8	0.8	1.35	0.41	0.45	0.52
Fluoride	mg/L	0.328	0.324	0.47	0.317	0.393	0.337	0.392 J	0.37	0.211	0.366	0.412	0.317
Iron, Total	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	0.0541 J	<0.0120
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	<0.0120#	0.0198 J
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	0.0541#	<0.0200
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02#	<0.0200
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0200 J	<0.0200	<0.02#	<0.0200
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02#	<0.0200 H
Magnesium	mg/L	36.6	---	---	---	---	38.1	---	---	37.8	30.9	29.3	34.6
Molybdenum, Total	mg/L	<0.001	---	<0.001	<0.001	<0.001	<0.0006	0.000671 J	<0.0006	<0.000600	<0.000600	0.000950 J	<0.000600
Molybdenum, Dissolved	mg/L	---	---	---	---	---	<0.0006	---	---	0.00123 J	<0.000600	0.00292 J #	<0.000600
Nitrate as N	mg/L	---	---	---	---	0.276	<0.03	<0.150	<0.03	<0.0600	<0.0600	<0.0300	<0.0600
Oxidation-Reduction Potential (field)	mV	65.7	-49.2	172.9	209.4	237.5	57.8	2.4	148.3	-28.1	129.9	37.4	61.7
pH (laboratory)	S.U.	6.9	6.9	7.2	7	7.5	6.59	7.53	6.37	7.38	7.51	7.34	7.12
pH (field)	S.U.	6.69	6.92	6.64	6.8	6.7	6.67	7.09	6.88	6.8	6.88	7.14	6.90
Potassium	mg/L	5.15	---	---	---	---	5.37	---	---	5.15	4.42	4.19	4.94
Sodium	mg/L	34.5	---	---	---	---	35.7	---	---	35.6	29.2	28.2	32.5
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	1920	2450	---	---	---	2610	2460	2390
Specific Conductance (field)	µmhos/cm	2417	2416	2606	2569	2548	2416	2470	2458	2344	2393	3256	2467
Sulfate	mg/L	1450	1140	1310	1340	821	1480	1100	1310	1390	1,220 H	1310	1390
Sulfide	mg/L	---	---	---	----	----	----	----	----	<1.00	<1.00	<1.00#	1.12
Temperature (field)	ºC	21.98	20.98	25.04	22.3	23.3	15.9	19.26	23.63	21.2	23.2	18.75	22.9
Total Dissolved Solids	mg/L	2140	2360	2340	2380	1670	2300	2400	2160	2230	2160	2200	2210
Turbidity (field)	NTU	0.81	0.52	4.63	14.5	5.4	1.24	0.63	0.65	2.28	0.58	0.64	1.80
Filtered Turbidity (field)	NTU	---	---	---	---	---	0.69	---	---	---	0.58	---	---

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.
13. # : samples for sulfide, dissolved iron, dissolved molybdenum, total and dissolved ferrous iron, and total and dissolved ferric iron were collected on 4/6/21

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING										CMA SAMPLING	
	Sample ID:	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Parameters	**Sample Date:**	**10-Aug-17**	**18-May-18**	**2-Aug-18**	**10-Aug-18**	**3-Oct-18**	**14-Jan-19**	**25-Apr-19**	**1-Oct-19**	**17-Jun-20**	**12-Oct-20**	**31-Mar-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	77.9	---	---	---	---	75.1	---	---	71	69.9	65.5	73.8
Carbonate Alkalinity as CaCO3	mg/L	52.6	---	---	---	---	42.2	---	---	60.6	64.3	46.8	55.8
Bicarbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Hydroxide Alkalinity	mg/L	25.3	---	---	---	---	32.9	---	---	10.4	5.63	18.7	17.9
Boron	mg/L	6.51	6.71	4.86	6.65	5.77	6.89	6.05	5.29	5.49	5.43	4.32	4.61
Calcium	mg/L	28.7	28.1	36.1	31.1	25.1	31.8	33.1	25.6	21.6	20	19.3	19.3
Chloride	mg/L	6.1	5.19	8.04	5.33	5.5	5.59	4.79	5.07	4.06	4.22	4.2	4.39
Dissolved Oxygen (field)	mg/L	0.03	0.17	4.03	0.9	0.21	0.36	1.44	0.33	0.55	0.24	0.39	0.36
Fluoride	mg/L	1.38	1.37	1.26	1.35	1.37	1.32	1.25	1.47	1.28	1.66	1.71	1.90
Iron, Total	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	<0.0120	<0.0120
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	<0.0120	<0.0120
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---		<0.02	<0.0200
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---		<0.02	<0.0200
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0200 J	<0.0200	<0.02	<0.0200
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	<0.02	<0.0200 H
Magnesium	mg/L	<0.220	---	---	---	---	---	---	---	0.141 J	0.27	0.426	0.152 J
Molybdenum, Total	mg/L	0.39	---	0.113	0.319	0.33	0.333	0.342	0.257	0.194	0.18	0.195	0.209
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.332	---	---	0.18	0.166	0.215	0.211
Nitrate as N	mg/L	---	---	---	---	0.053 J	0.075 J	<0.05	<0.03	<0.0600	<0.0300	<0.0300	0.0606 J
Oxidation-Reduction Potential (field)	mV	28.2	-139.8	-65.1	-119.7	130.1	174.9	-152.8	-71.2	-140.3	-80.5	-49.7	-9.7
pH (laboratory)	S.U.	10.7	10.1	7.8	10.2	9.8	10.4	10.2	10.3	9.35	10.2	10.5	9.95
pH (field)	S.U.	10.54	10.74	9.71	10.41	10.45	10.47	10.93	10.4	10.65	10.4	10.39	10.46
Potassium	mg/L	22	---	---	---	---	22.3	---	---	15.9	14.6	13.6	15.0
Sodium	mg/L	523	---	---	---	---	603	---	---	376	348	324	329
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	2590	2520	---	---	---	2200	2090	2040
Specific Conductance (field)	µmhos/cm	2716	2530	2568	2658	2632	2442	2486	2350	1998	1986	1999	2041
Sulfate	mg/L	1070	1120	996	1030	1090	1110	933	1020	888	794	904	896
Sulfide	mg/L	---	---	---	---	---	---	---	---	<1.00	<1.00	<1.00	<1.00
Temperature (field)	ºC	22.11	21.12	24.1	22.37	23.6	14	17.89	24.8	22.45	23.5	17	20.7
Total Dissolved Solids	mg/L	1850	1740	1660	1730	1760	1630	1680	1550	1340	1270	1260	1320
Turbidity (field)	NTU	1.21	0.22	0.02	0.02	2.04	2.79	0.49	0.92	2.43	0.34	1	1.99
Filtered Turbidity (field)	NTU	---	---	---	---	---	1.47	---	---	---	0.34	0.62	1.89

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING											CMA SAMPLING		
Parameters	**Sample ID:**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**MW-19S**	**DUP 2**	**MW-19S**	**MW-19S**	**DUP 3**	**MW-19S**
	Sample Date:	**10-Aug-17**	**18-May-18**	**2-Aug-18**	**10-Aug-18**	**3-Oct-18**	**15-Jan-19**	**25-Apr-19**	**1-Oct-19**	**17-Jun-20**		**12-Oct-20**	**31-Mar-21**		**15-Oct-21**
Total Alkalinity as CaCO3	mg/L	132	---	---	---	---	141	---	---	128	130	132	135	133	150
Carbonate Alkalinity as CaCO3	mg/L	85.8	---	---	---	---	59.8	---	---	92.6	98.7	89.2	63.8	69	77.3
Bicarbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	---	<5	---	---	<5.00	<5.00	<5.00	<5	<5	<5.00
Hydroxide Alkalinity	mg/L	46.2	---	---	---	---	81.2	---	---	35.1	31.4	42.6	71.6	64.4	73.0
Boron	mg/L	7.64	8.43	8.64	3.78	10.2	9.79	8.57	6.64	6.8	7.18	6.88	6.86	8.41	5.88
Calcium	mg/L	41.3	45.7	35	24.8	35.3	50	52.4	40.4	43.6	42.1	40.7	42.3	35.3	41.6
Chloride	mg/L	15.7	14.5	15.1	14.9	14.8	14.2	13.7	14.4	13.8	14	14.1	13.7	14	13.6
Dissolved Oxygen (field)	mg/L	0.02	0.24	4.64	1.32	0.33	0.21	1.5	0.5	0.36	---	0.16	0.27	---	0.21
Fluoride	mg/L	1.32	1.3	1.34	1.3	1.24	1.27	1.13	1.37	1.15	1.04	1.38	1.46	1.54	1.57
Iron, Total	mg/L	---	---	---	---	---	---	---	---	0.0153 J	<0.0120	<0.0120	<0.0120	<0.0120	0.0509 J
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	---	<0.0120	<0.0120	<0.0120	<0.0120	<0.0120	0.0210 J
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	---	---	<0.02	<0.02	<0.0200
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	---	<0.02	<0.02	0.0210 J
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	---	0.0430 J	0.0330 J	0.0310 J	<0.02	<0.02	0.0450 J
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	---	---	<0.02	<0.02	<0.0200 H
Magnesium	mg/L	<0.220	---	---	---	---	0.121 J	---	---	0.0553 J	0.0510 J	0.0346 J	0.0773 J	0.0681 J	0.0415 J
Molybdenum, Total	mg/L	0.469	---	0.384	0.112	0.439	0.472	0.462	0.377	0.402	0.394	0.367	0.398	0.351	0.407
Molybdenum, Dissolved	mg/L	---	---	---	---	---	0.463	---	---	0.373	0.383	0.37	0.457	0.398	0.440
Nitrate as N	mg/L	---	---	---	---	<0.049	<0.03	<0.150	<0.03	<0.0600	<0.0600	<0.150	<0.0600	<0.0600	<0.0600
Oxidation-Reduction Potential (field)	mV	-215.4	-312.1	-227.4	-249	172.1	-162	-281.7	-252.4	-588.1	---	209.2	-191.7	---	-237.2
pH (laboratory)	S.U.	10.8	10.5	9.7	10.5	9.9	10.4	10.5	10.6	10.2	9.88	10.9	10.8	10.6	10.8
pH (field)	S.U.	10.72	11.09	10.55	10.56	10.63	11.01	11.26	10.65	10.97	---	10.92	11.09	---	10.84
Potassium	mg/L	35.9	---	---	---	---	38.2	---	---	35.2	34.1	33.7	33.9	29	34.6
Sodium	mg/L	697	---	---	---	---	801	---	---	644	598	610	639	545	462
Specific Conductance (laboratory)	umhos/cm	---	---	---	---	2470	3530	---	---	---	---	3860	3500	3540	3370
Specific Conductance (field)	µmhos/cm	3552	3530	3587	3563	3610	3438	3524	3552	3309	---	3433	3406	---	3342
Sulfate	mg/L	1650	1630	1520	1480	1950	1640	1520	1580	1490	1590	1640	1560	1560	1570
Sulfide	mg/L	---	---	---	---	---	---	---	---	1.52	<1.00	1.8	<1.00	<1.00	<1.00
Temperature (field)	ºC	24.37	20.38	26.67	24.71	25.4	13.4	17.92	25.86	22.99	---	23.8	18.3	---	21.8
Total Dissolved Solids	mg/L	2440	2560	2390	2440	2490	2500	2440	2460	2300	2290	2340	2360	2310	2290
Turbidity (field)	NTU	1.26	0.47	0.02	4.16	2.05	5.19	0.57	0.61	2.86	---	1.24	0.73	---	2.77
Filtered Turbidity (field)	NTU	---	---	---	---	---	2.24	---	---	---	---	1.24	0.59	---	1.88

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING									CMA SAMPLING	
Parameters	**Sample ID:**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**	**MW-22A**
	Sample Date:	**11-Aug-17**	**22-May-18**	**10-Aug-18**	**3-Oct-18**	**16-Jan-19**	**25-Apr-19**	**30-Sep-19**	**18-Jun-20**	**9-Oct-20**	**31-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	231	---	---	---	256	---	---	249	249	232	315
Carbonate Alkalinity as CaCO3	mg/L	<5	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	231	---	---	---	256	---	---	249	249	232	315
Hydroxide Alkalinity	mg/L	<5	---	---	---	<5	---	---	<5.00	<5.00	<5	<5.00
Boron	mg/L	1.77	1.74	2.18	1.45	1.78	1.88	1.49	2.82	1.84	1.6	1.76
Calcium	mg/L	559	636	697	702	643	507	481	754	507	529	515
Chloride	mg/L	2.28	2.6	2.41	2.4	2.24	2.56	2.39	2.34	2.05 J	2.17	2.06 J
Dissolved Oxygen (field)	mg/L	0.43	2.18	2.72	0.44	0.9	4.05	1.23	3.35	0.68	2	0.26
Fluoride	mg/L	0.341	2.24	0.315	0.329	0.299	0.374 J	0.364	0.237	0.279 J	0.249	0.608
Iron, Total	mg/L	---	---	---	---	---	---	---	0.0509 J	<0.0120	0.0536 J	0.660
Iron, Dissolved	mg/L	---	---	---	---	---	---	---	<0.0120	0.0121 J	0.0206 J	1.00
Iron, Ferric	mg/L	---	---	---	---	---	---	---	---	---	0.0536	<0.0200
Iron, Ferric, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	0.0206 J	<0.0200
Iron, Ferrous	mg/L	---	---	---	---	---	---	---	<0.0200	<0.0200	<0.02	0.904
Iron, Ferrous, Dissolved	mg/L	---	---	---	---	---	---	---	---	---	<0.02	<0.0200 H
Magnesium	mg/L	87.1	---	---	---	107	---	---	126	85	95	96.2
Molybdenum, Total	mg/L	<0.001	---	<0.001	<0.001	<0.0006	<0.0006	0.000787 J	<0.000600	<0.000600	<0.000600	<0.000600
Molybdenum, Dissolved	mg/L	---	---	---	---	0.000822 J	---	---	0.000773 J	<0.000600	<0.000600	0.0328
Nitrate as N	mg/L	---	---	---	0.458	<0.03	<0.150	0.198	<0.0600	<0.150	<0.0600	<0.150
Oxidation-Reduction Potential (field)	mV	64.2	-14.8	-30.2	275.1	275.6	43.2	-110.1	-36.5	146.4	207.4	-251.1
pH (laboratory)	S.U.	6.8	7	7.1	7.4	6.49	7.61	6.74	7.08	7.48	7.21	7.32
pH (field)	S.U.	6.76	7.01	7.02	6.75	6.75	7.19	7.02	6.97	6.97	7	7.00
Potassium	mg/L	14.4	---	---	---	17.8	---	---	21.7	13.7	15.2	16.7
Sodium	mg/L	140	---	---	---	169	---	---	202	135	147	158
Specific Conductance (laboratory)	umhos/cm	---	---	---	3180	3170	---	---	---	3450	3450	3250
Specific Conductance (field)	µmhos/cm	3218	3135	3244	3277	3181	3208	3236	3013	3165	3195	2975
Sulfate	mg/L	2030	1940	1860	1830	1990	1740	1880	2160	2010	2020	1970
Sulfide	mg/L	---	---	---	---	---	---	---	1.52	<1.00	<1.00	2.08
Temperature (field)	ºC	23.05	20.84	24.37	20.9	13.6	17.89	22.78	23.52	20.7	18.2	23.3
Total Dissolved Solids	mg/L	3030	3090	3050	1910	3000	3170	3030	3390	3160	3040	3010
Turbidity (field)	NTU	5.72	2.09	3.67	2.71	51.5	3.81	1.89	9.49	2.92	18.3	7.88
Filtered Turbidity (field)	NTU	---	---	---	---	4.9	---	---	---	0.51	---	1.18

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**MW-22B**	**MW-22B**	**MW-22B**	**MW-22B**
	Sample Date:	**24-Jul-20**	**13-Oct-20**	**31-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	333	364	364	435
Carbonate Alkalinity as CaCO3	mg/L	<5.00	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	328	364	364	435
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	2.97	3.4	3.14	3.17
Calcium	mg/L	90.1	69.8	75.8	82.7
Chloride	mg/L	55.5	56.1	57.8	55.0
Dissolved Oxygen (field)	mg/L	5.05	1.23	5.4	9.27
Fluoride	mg/L	1.14	1.05	1.46	1.21
Iron, Total	mg/L	11.7	0.282	4.19	6.04
Iron, Dissolved	mg/L	<0.0120	<0.0120	<0.0120	0.0138 J
Iron, Ferric	mg/L	---	---	3.23	4.22
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	3.06	0.58	0.957	1.82
Iron, Ferrous, Dissolved	mg/L	---	---	0.53	<0.0200 H
Magnesium	mg/L	24.1	21.7	23.4	26.0
Molybdenum, Total	mg/L	0.00878	0.00866	0.00753	0.00446 J
Molybdenum, Dissolved	mg/L	0.0111	0.00853	0.00841	0.00723
Nitrate as N	mg/L	---	<0.0600	1.03	0.958
Oxidation-Reduction Potential (field)	mV	180.5	235.6	37.4	259.2
pH (laboratory)	S.U.	7.57	7.77	7.75	7.59
pH (field)	S.U.	7.95	7.64	7.88	7.72
Potassium	mg/L	10.3	7.81	8.79	10.2
Sodium	mg/L	838	842	846	848
Specific Conductance (laboratory)	umhos/cm	---	5100	4460	4690
Specific Conductance (field)	µmhos/cm	4364	4400	6102	4547
Sulfate	mg/L	2180	2040	2080	2090
Sulfide	mg/L	4	<1.00	<1.00	<1.00
Temperature (field)	ºC	22.3	19.3	17.23	20.7
Total Dissolved Solids	mg/L	3000	3340	3280	3290
Turbidity (field)	NTU	926	8.67	>1,000	391
Filtered Turbidity (field)	NTU	1.21	0.21	1.41	2.05

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-1A**	**CM-1A**	**CM-1A**	**CM-1A**
	Sample Date:	**24-Jul-20**	**7-Oct-20**	**1-Apr-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	326	346	337	356
Carbonate Alkalinity as CaCO3	mg/L	<5.00	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	326	346	337	356
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	0.748	0.612	0.664	0.883
Calcium	mg/L	452	480	464	531
Chloride	mg/L	49.5	28.4	26.3	21.2
Dissolved Oxygen (field)	mg/L	6	0.59	1.8	0.37
Fluoride	mg/L	0.382	<0.500	0.483	0.399
Iron, Total	mg/L	5.34	0.0215 J	0.0232 J	0.115 J
Iron, Dissolved	mg/L	<0.0120	<0.0120	0.0713 J	0.0382 J
Iron, Ferric	mg/L	---	---	0.0232 J	0.0640
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	0.0382 J
Iron, Ferrous	mg/L	0.114	<0.0200	<0.0200	0.051
Iron, Ferrous, Dissolved	mg/L	---	---	<0.0200	<0.0200 H
Magnesium	mg/L	65.7	55.4	50.2	77.6
Molybdenum, Total	mg/L	0.0088	0.00198 J	0.00132 J	0.00127 J
Molybdenum, Dissolved	mg/L	0.00385 J	0.00169 J	0.00159 J	0.00121 J
Nitrate as N	mg/L	---	<0.300	<0.0600	<0.0300
Oxidation-Reduction Potential (field)	mV	301.9	170.1	175.7	-58.0
pH (laboratory)	S.U.	6.52	7.69	7.61	7.73
pH (field)	S.U.	6.93	6.84	6.95	6.77
Potassium	mg/L	12.4	8.79	7.52	11.9
Sodium	mg/L	178	181	170	198
Specific Conductance (laboratory)	umhos/cm	---	3620	3180	3300
Specific Conductance (field)	µmhos/cm	3105	3258	3225	3092
Sulfate	mg/L	1970	1810	1910	1940
Sulfide	mg/L	<1.00	<1.00	<1.00	<1.00
Temperature (field)	ºC	23.7	22.7	18.7	21.8
Total Dissolved Solids	mg/L	2980	3130	3090	3030
Turbidity (field)	NTU	31.4	2.91	2.39	15.6
Filtered Turbidity (field)	NTU	0.67	0.65	1.1	1.23

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-1B**	**CM-1B**	**CM-1B**	**CM-1B**
	Sample Date:	**24-Jul-20**	**12-Oct-20**	**1-Apr-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	432	439	---	424
Carbonate Alkalinity as CaCO3	mg/L	<5.00	<5.00	---	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	432	439	---	424
Hydroxide Alkalinity	mg/L	<5.00	<5.00	---	<5.00
Boron	mg/L	3.86	3.84	3.44	3.48
Calcium	mg/L	233	128	127	119
Chloride	mg/L	107	110	---	113
Dissolved Oxygen (field)	mg/L	4.33	---	0.81	0.39
Fluoride	mg/L	0.626	0.599	---	0.789
Iron, Total	mg/L	47.5	3.89	0.194 J	0.0865 J
Iron, Dissolved	mg/L	0.0150 J	0.0164 J	0.0136 J	<0.0120
Iron, Ferric	mg/L	---	---	0.112	0.0435 J
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	26	7.3	0.082	0.0430 J
Iron, Ferrous, Dissolved	mg/L	---	---	0.0450 J	<0.0200 H
Magnesium	mg/L	50.8	41.7	43.3	45.1
Molybdenum, Total	mg/L	0.0133	0.0144	0.0113	0.00976
Molybdenum, Dissolved	mg/L	0.019	0.0155	0.0126	0.0108
Nitrate as N	mg/L	---	9.85	---	<0.0600
Oxidation-Reduction Potential (field)	mV	184.2	-80.5	189.3	-70.5
pH (laboratory)	S.U.	7.67	8.12	---	8.03
pH (field)	S.U.	7.62	10.4	7.45	7.43
Potassium	mg/L	19.7	12.3	12.4	13.6
Sodium	mg/L	877	881	899	951
Specific Conductance (laboratory)	umhos/cm	---	5650	---	5110
Specific Conductance (field)	µmhos/cm	4900	1986	5107	4662
Sulfate	mg/L	2490	2290	---	2300
Sulfide	mg/L	5	<1.00	<1.00	<1.00
Temperature (field)	ºC	23.3	23.5	19.9	22.6
Total Dissolved Solids	mg/L	3490	3760	---	3670
Turbidity (field)	NTU	>1,000	0.34	14.8	18.2
Filtered Turbidity (field)	NTU	---	0.34	1.16	1.8

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING			CMA SAMPLING	
Parameters	**Sample ID:**	**CM-2**	**DUP 1**	**CM-2**	**CM-2**	**CM-2**
	Sample Date:	**24-Jul-20**		**7-Oct-20**	**1-Apr-21**	**15-Oct-21**
Total Alkalinity as CaCO3	mg/L	337	347	329	328	353
Carbonate Alkalinity as CaCO3	mg/L	<5.00	<5.00	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	337	347	329	328	353
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	0.93	0.941	0.845	0.679	0.744
Calcium	mg/L	492	533	491	466	487
Chloride	mg/L	3.79	3.12	2.84 J	3.49	3.15
Dissolved Oxygen (field)	mg/L	4.62	---	0.27	0.67	0.40
Fluoride	mg/L	0.558	0.565	<0.500	0.419	0.526
Iron, Total	mg/L	2.78	2.97	0.0482 J	0.132 J	0.232
Iron, Dissolved	mg/L	<0.0120	<0.0120	0.0139 J	0.0386 J	0.237
Iron, Ferric	mg/L	---	---	---	0.132	0.0970
Iron, Ferric, Dissolved	mg/L	---	---	---	<0.0200	0.237
Iron, Ferrous	mg/L	0.109	0.146	<0.0200	<0.0200	0.135
Iron, Ferrous, Dissolved	mg/L	---	---	---	<0.0200	<0.0200 H
Magnesium	mg/L	31.6	32.8	28.7	24.4	29.5
Molybdenum, Total	mg/L	0.00209 J	0.00218 J	0.00203 J	0.00161 J	0.00120 J
Molybdenum, Dissolved	mg/L	0.00158 J	0.00134 J	0.00177 J	0.00118 J	0.00136 J
Nitrate as N	mg/L	---	---	<0.300	0.529	0.0497 J
Oxidation-Reduction Potential (field)	mV	244.3	---	170.2	72.3	-27.8
pH (laboratory)	S.U.	6.66	6.6	7.91	7.82	7.37
pH (field)	S.U.	7.02	---	6.89	6.8	6.80
Potassium	mg/L	8.78	8.74	7.09	6.88	7.56
Sodium	mg/L	111	116	110	94	107
Specific Conductance (laboratory)	umhos/cm	---	---	3020	2190	2500
Specific Conductance (field)	µmhos/cm	2713	---	2872	2870	2182
Sulfate	mg/L	1680	1730	1590	1210	1370
Sulfide	mg/L	<1.00	<1.00	<1.00	<1.00	<1.00
Temperature (field)	ºC	21	---	20.1	17.7	21.4
Total Dissolved Solids	mg/L	2490	2660	2690	2060	2210
Turbidity (field)	NTU	16	---	18.8	2.32	14.6
Filtered Turbidity (field)	NTU	0.47	---	3.91	0.82	2.82

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-3A**	**CM-3A**	**CM-3A**	**CM-3A**
	Sample Date:	**21-Aug-20**	**13-Oct-20**	**30-Mar-21**	**14-Oct-21**
Total Alkalinity as CaCO3	mg/L	**	616	489	630
Carbonate Alkalinity as CaCO3	mg/L	**	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	**	616	489	630
Hydroxide Alkalinity	mg/L	**	<5.00	<5.00	<5.00
Boron	mg/L	4.84	3.8	2.82	2.72
Calcium	mg/L	50.9	70.3	64.3	67.6
Chloride	mg/L	52.9	36.1	54.8	42.5
Dissolved Oxygen (field)	mg/L	**	***	3.3	4.96
Fluoride	mg/L	0.425	0.699	0.858	0.801
Iron, Total	mg/L	2.78	8.53	0.0152 J	6.76
Iron, Dissolved	mg/L	<0.0120	<0.0120	0.794	0.0291 J
Iron, Ferric	mg/L	---	---	<0.0200	5.27
Iron, Ferric, Dissolved	mg/L	---	---	0.313	0.0291 J
Iron, Ferrous	mg/L	**	0.480 J	1.45	1.49
Iron, Ferrous, Dissolved	mg/L	---	---	0.481	<0.0200 H
Magnesium	mg/L	6.26	10.4	13.3	10.7
Molybdenum, Total	mg/L	0.0457	0.0222	0.0153	0.00297 J
Molybdenum, Dissolved	mg/L	0.0445	0.0299	0.0157	0.0120
Nitrate as N	mg/L	1.67	7.55	19.9	7.07
Oxidation-Reduction Potential (field)	mV	**	***	212.5	281.8
pH (laboratory)	S.U.	8.76	7.82	7.95	7.73
pH (field)	S.U.	**	***	7.6	7.37
Potassium	mg/L	6.13	7.41	6.68	6.38
Sodium	mg/L	429	499	559	447
Specific Conductance (laboratory)	umhos/cm	---	2940	2910	2410
Specific Conductance (field)	µmhos/cm	**	***	3015	2467
Sulfate	mg/L	554	749	971	635
Sulfide	mg/L	**	<1.00	<1.00	2.12
Temperature (field)	ºC	**	***	18.7	19.7
Total Dissolved Solids	mg/L	1700	1840	2330	1560
Turbidity (field)	NTU	**	***	>1,000	>1000
Filtered Turbidity (field)	NTU	**	***	0.44	1.84

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-3B**	**CM-3B**	**CM-3B**	**CM-3B**
	Sample Date:	**21-Aug-20**	**15-Oct-20**	**2-Apr-21**	**11-Oct-21**
Total Alkalinity as CaCO3	mg/L	**	413	519	**
Carbonate Alkalinity as CaCO3	mg/L	**	16.5	17.6	**
Bicarbonate Alkalinity as CaCO3	mg/L	**	396	502	**
Hydroxide Alkalinity	mg/L	**	<5.00	<5.00	**
Boron	mg/L	3.82	3.44	4.73	**
Calcium	mg/L	70	62.7	100	**
Chloride	mg/L	48.9	28.8	40.2	**
Dissolved Oxygen (field)	mg/L	**	***	***	***
Fluoride	mg/L	1.9	1.14	1.52	**
Iron, Total	mg/L	23.5	22.8	55.6	**
Iron, Dissolved	mg/L	0.0140 J	0.0399 J	0.0419 J	**
Iron, Ferric	mg/L	---	---	---	**
Iron, Ferric, Dissolved	mg/L	---	---	---	**
Iron, Ferrous	mg/L	**	**	---	**
Iron, Ferrous, Dissolved	mg/L	---	---	---	**
Magnesium	mg/L	13.6	11.2	23.2	**
Molybdenum, Total	mg/L	0.0327	0.0318	0.0353 J	**
Molybdenum, Dissolved	mg/L	0.0394	0.0355	0.0392	**
Nitrate as N	mg/L	<0.0300	4.64	31.3	**
Oxidation-Reduction Potential (field)	mV	**	***	***	***
pH (laboratory)	S.U.	8.11	8.65	8.24	**
pH (field)	S.U.	**	***	***	***
Potassium	mg/L	11.1	9.04	23.6	**
Sodium	mg/L	573	603	847	**
Specific Conductance (laboratory)	umhos/cm	---	2540	2930	**
Specific Conductance (field)	µmhos/cm	**	***	***	***
Sulfate	mg/L	1090	733	942	**
Sulfide	mg/L	**	**	---	**
Temperature (field)	ºC	**	***	***	***
Total Dissolved Solids	mg/L	2240	1310	2340	**
Turbidity (field)	NTU	**	***	***	***
Filtered Turbidity (field)	NTU	**	***	***	***

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-4A**	**CM-4A**	**CM-4A**	**CM-4A**
	Sample Date:	**24-Jul-20**	**8-Oct-20**	**30-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	470	557	510	605
Carbonate Alkalinity as CaCO3	mg/L	20	5.28	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	450	552	510	605
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	3.03	4.42	3.24	3.56
Calcium	mg/L	103	71.7	59.1	66.5
Chloride	mg/L	92.4	105	109	90.2
Dissolved Oxygen (field)	mg/L	2.68	***	3.93	5.31
Fluoride	mg/L	0.879	0.602	0.947	0.737
Iron, Total	mg/L	40	6.78	7.67	4.64
Iron, Dissolved	mg/L	0.0205 J	0.0162 J	0.0149 J	<0.0120
Iron, Ferric	mg/L	---	---	6.98	4.10
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	1.92	10.3	0.69	0.544
Iron, Ferrous, Dissolved	mg/L	---	---	0.278	<0.0200 H
Magnesium	mg/L	16.7	15.2	13.5	16.4
Molybdenum, Total	mg/L	0.0269	0.0271	0.0212	0.0105
Molybdenum, Dissolved	mg/L	0.0529	0.0391	0.0255	0.0194
Nitrate as N	mg/L	---	27	20	21.6
Oxidation-Reduction Potential (field)	mV	238.4	***	210.6	111.4
pH (laboratory)	S.U.	7.82	7.98	7.64	8.14
pH (field)	S.U.	7.6	***	7.74	7.64
Potassium	mg/L	14.3	8.13	8.26	7.82
Sodium	mg/L	443	654	580	709
Specific Conductance (laboratory)	umhos/cm	---	4150	3630	4030
Specific Conductance (field)	µmhos/cm	2939	***	3612	3240
Sulfate	mg/L	1050	1260	1300	1160
Sulfide	mg/L	4	<1.00	<1.00	<1.00
Temperature (field)	ºC	20.2	***	18.9	21.1
Total Dissolved Solids	mg/L	1900	2630	2660	2830
Turbidity (field)	NTU	692	***	>1,000	>1000
Filtered Turbidity (field)	NTU	0.4	***	0.54	2.13

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-4B**	**CM-4B**	**CM-4B**	**CM-4B**
	Sample Date:	**24-Jul-20**	**8-Oct-20**	**30-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	436	520	448	589
Carbonate Alkalinity as CaCO3	mg/L	15.7	24.5	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	420	495	448	589
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	3.14	4.31	3.63	3.79
Calcium	mg/L	56.5	47.1	42.1	79.1
Chloride	mg/L	69.9	95.3	119	113
Dissolved Oxygen (field)	mg/L	2.88	***	5.52	7.70
Fluoride	mg/L	1.01	1.07	1.4	1.05
Iron, Total	mg/L	4.25	1.27	2.19	13.0
Iron, Dissolved	mg/L	0.0123 J	1.56	0.0156 J	0.0134 J
Iron, Ferric	mg/L	---	---	1.03	11.4
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	19.2	5.17	1.16	1.64
Iron, Ferrous, Dissolved	mg/L	---	---	0.406	<0.0200 H
Magnesium	mg/L	14	12.1	13	17.8
Molybdenum, Total	mg/L	0.0307	0.0306	0.0303	0.0131
Molybdenum, Dissolved	mg/L	0.0354	0.0271	0.0344	0.0235
Nitrate as N	mg/L	---	7.22	17.8	22.2
Oxidation-Reduction Potential (field)	mV	292.1	***	214.4	63.6
pH (laboratory)	S.U.	7.78	8.32	7.84	8.04
pH (field)	S.U.	7.45	***	7.89	7.69
Potassium	mg/L	10.2	7.12	7.46	8.42
Sodium	mg/L	529	764	769	865
Specific Conductance (laboratory)	umhos/cm	---	4260	4160	4400
Specific Conductance (field)	µmhos/cm	3331	***	4107	3801
Sulfate	mg/L	1360	1460	1620	1590
Sulfide	mg/L	5	<1.00	<1.00	<1.00
Temperature (field)	ºC	20.7	***	19.2	21.2
Total Dissolved Solids	mg/L	2240	2750	3040	2980
Turbidity (field)	NTU	158	***	>1,000	>1000
Filtered Turbidity (field)	NTU	---	***	0.5	1.92

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-5A**	**CM-5A**	**CM-5A**	**CM-5A**
	Sample Date:	**24-Jul-20**	**8-Oct-20**	**30-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	451	541	445	538
Carbonate Alkalinity as CaCO3	mg/L	7.91	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	443	541	445	538
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	3.92	4.67	4.97	4.57
Calcium	mg/L	102	86.7	102	143
Chloride	mg/L	93.9	130	154	134
Dissolved Oxygen (field)	mg/L	3.81	***	3.36	6.35
Fluoride	mg/L	1.09	0.602	0.667	0.682
Iron, Total	mg/L	28.4	5.43	3.27	13.6
Iron, Dissolved	mg/L	<0.0120	<0.0120	0.0799 J	<0.0120
Iron, Ferric	mg/L	---	---	1.21	10.9
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	0.561	4.63	2.06	2.72
Iron, Ferrous, Dissolved	mg/L	---	---	0.673	<0.0200 H
Magnesium	mg/L	15.8	18.4	26	29.9
Molybdenum, Total	mg/L	0.0205	0.011	0.0182	0.00580
Molybdenum, Dissolved	mg/L	0.0352	0.0214	0.0192	0.0165
Nitrate as N	mg/L	---	27.4	27.2	24.4
Oxidation-Reduction Potential (field)	mV	270.1	***	217.6	126.0
pH (laboratory)	S.U.	7.7	7.96	7.46	7.75
pH (field)	S.U.	7.4	***	7.35	7.49
Potassium	mg/L	13.3	8.41	10.4	11.5
Sodium	mg/L	448	632	761	749
Specific Conductance (laboratory)	umhos/cm	---	4180	4180	4130
Specific Conductance (field)	µmhos/cm	2617	***	4132	3626
Sulfate	mg/L	808	1290	1540	1480
Sulfide	mg/L	<1.00	1.36	1.36	<1.00
Temperature (field)	ºC	22.5	***	19.2	21.0
Total Dissolved Solids	mg/L	1840	2680	3260	2900
Turbidity (field)	NTU	204	***	>1,000	>1000
Filtered Turbidity (field)	NTU	0.61	***	0.86	36.8

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate va
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

ATTACHMENT C
TABULATION OF DATA
SEMI-ANNUAL CMA SAMPLING
WESTERN FARMERS ELECTRIC COOPERATIVE - HUGO POWER STATION

		PREVIOUS SAMPLING		CMA SAMPLING	
Parameters	**Sample ID:**	**CM-5B**	**CM-5B**	**CM-5B**	**CM-5B**
	Sample Date:	**24-Jul-20**	**9-Oct-20**	**30-Mar-21**	**13-Oct-21**
Total Alkalinity as CaCO3	mg/L	421	525	486	613
Carbonate Alkalinity as CaCO3	mg/L	22.6	<5.00	<5.00	<5.00
Bicarbonate Alkalinity as CaCO3	mg/L	398	520	486	613
Hydroxide Alkalinity	mg/L	<5.00	<5.00	<5.00	<5.00
Boron	mg/L	3.8	4.42	3.86	4.37
Calcium	mg/L	115	56.4	46	56.8
Chloride	mg/L	107	113	145	141
Dissolved Oxygen (field)	mg/L	3.35	***	4.46	3.41
Fluoride	mg/L	0.636	0.786	1.15	0.925
Iron, Total	mg/L	32.3	1.26	1.73	3.61
Iron, Dissolved	mg/L	0.0246 J	1.87	0.214 J	<0.0120
Iron, Ferric	mg/L	---	---	0.47	2.97
Iron, Ferric, Dissolved	mg/L	---	---	<0.0200	<0.0200
Iron, Ferrous	mg/L	0.671	10.6	1.26	0.641
Iron, Ferrous, Dissolved	mg/L	---	---	0.206	<0.0200 H
Magnesium	mg/L	22	15.8	14	18.8
Molybdenum, Total	mg/L	0.04	0.0394	0.0536	0.0448
Molybdenum, Dissolved	mg/L	0.0515	0.0359	0.0594	0.0418
Nitrate as N	mg/L	---	25.8	58.0 H	59.8
Oxidation-Reduction Potential (field)	mV	229	***	224.2	50.8
pH (laboratory)	S.U.	7.94	7.84	7.67	7.92
pH (field)	S.U.	7.53	***	7.8	7.56
Potassium	mg/L	15.2	7.73	8	10.1
Sodium	mg/L	587	762	671	836
Specific Conductance (laboratory)	umhos/cm	---	4570	4130	4250
Specific Conductance (field)	µmhos/cm	3617	***	3914	3673
Sulfate	mg/L	1470	1430	1330	1310
Sulfide	mg/L	8	6.4	<1.00	1.28
Temperature (field)	ºC	21.7	***	18.8	21.0
Total Dissolved Solids	mg/L	2570	2910	3120	2910
Turbidity (field)	NTU	616	***	>1,000	>1000
Filtered Turbidity (field)	NTU	0.25	***	12.1	0.93

Notes:

1. mg/L : milligrams per liter.
2. S.U. : Standard Units.
3. ºC : degrees Celsius.
4. µmhos/cm : micromhos per centimeter.
5. mV : millivolts.
6. NTU : Nephelometric Turbidity Unit.
7. < : Analyte not detected at the laboratory method detection limit (MDL).
8. J : Result is less than the Reporting Limit (RL) but greater than or equal to the MDL and the concentration is an approximate value.
9. --- : no analysis performed.
10. H : Analyzed outside of holding time..
11. ** : Insufficient sample volume for analysis due to well depletion.
12. *** : Insufficient sample volume for field measurements.

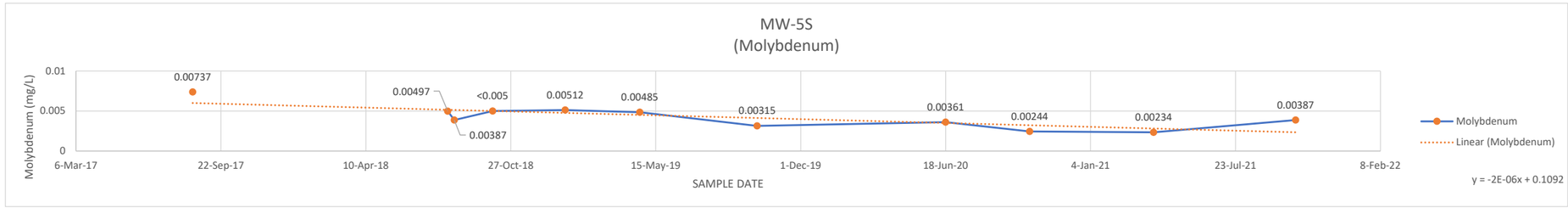
ATTACHMENT D

CHANGES IN MOLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

ATTACHMENT D
CHANGES IN MOLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

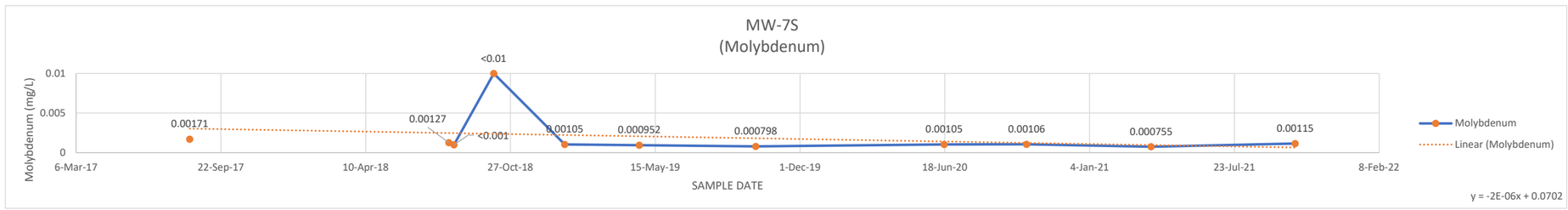
MW-5S

DATE	MOLYBDENUM
14-Aug-17	0.00737
22-May-18	
1-Aug-18	0.00497
10-Aug-18	0.00387
2-Oct-18	0.005
10-Jan-19	0.00512
23-Apr-19	0.00485
2-Oct-19	0.00315
18-Jun-20	0.00361
12-Oct-20	0.00244
1-Apr-21	0.00234
14-Oct-21	0.00387



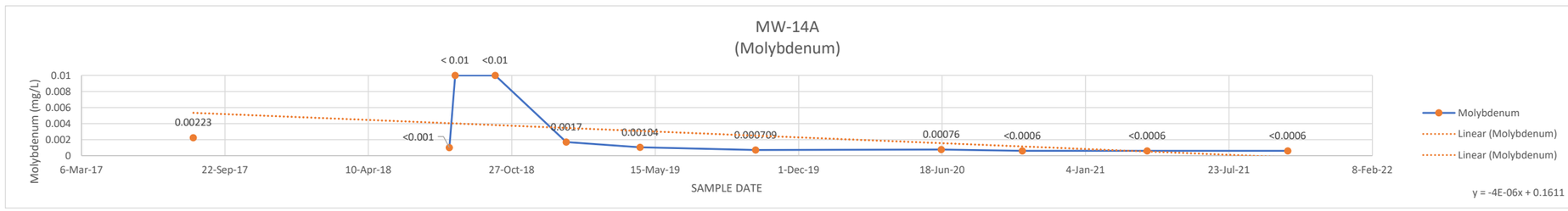
MW-7S

DATE	MOLYBDENUM
10-Aug-17	0.00171
17-May-18	
3-Aug-18	0.00127
10-Aug-18	0.001
4-Oct-18	0.01
10-Jan-19	0.00105
23-Apr-19	0.000952
1-Oct-19	0.000798
17-Jun-20	0.00105
9-Oct-20	0.00106
30-Mar-21	0.000755
15-Oct-21	0.00115



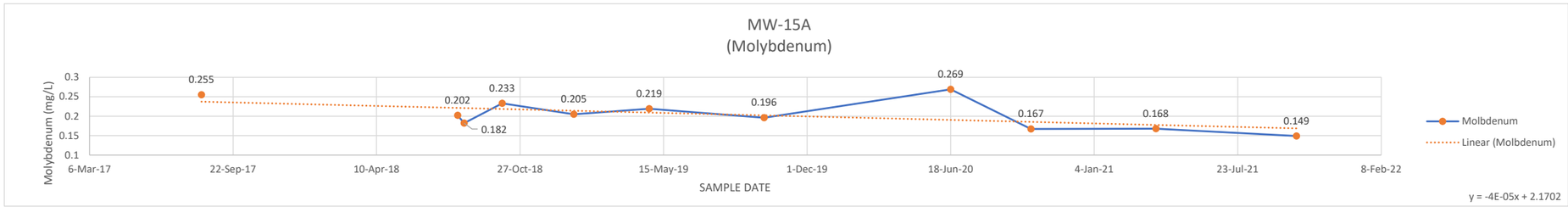
MW-14A

DATE	MOLYBDENUM
9-Aug-17	0.00223
17-May-18	
1-Aug-18	0.001
9-Aug-18	0.01
4-Oct-18	0.01
11-Jan-19	0.0017
24-Apr-19	0.00104
2-Oct-19	0.000709
17-Jun-20	0.00076
8-Oct-20	0.0006
31-Mar-21	0.0006
13-Oct-21	0.0006



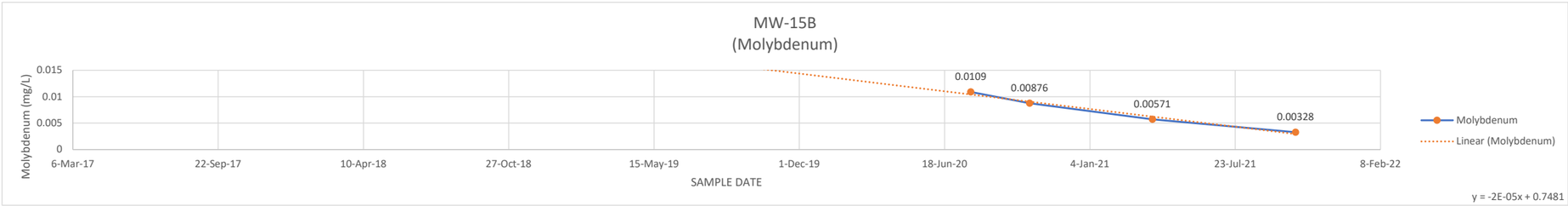
MW-15A

DATE	MOLYBDENUM
9-Aug-17	0.255
24-May-18	
1-Aug-18	0.202
10-Aug-18	0.182
2-Oct-18	0.233
10-Jan-19	0.205
25-Apr-19	0.219
2-Oct-19	0.196
18-Jun-20	0.269
8-Oct-20	0.167
31-Mar-21	0.168
13-Oct-21	0.149



MW-15B

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0109
13-Oct-20	0.00876
31-Mar-21	0.00571
14-Oct-21	0.00328

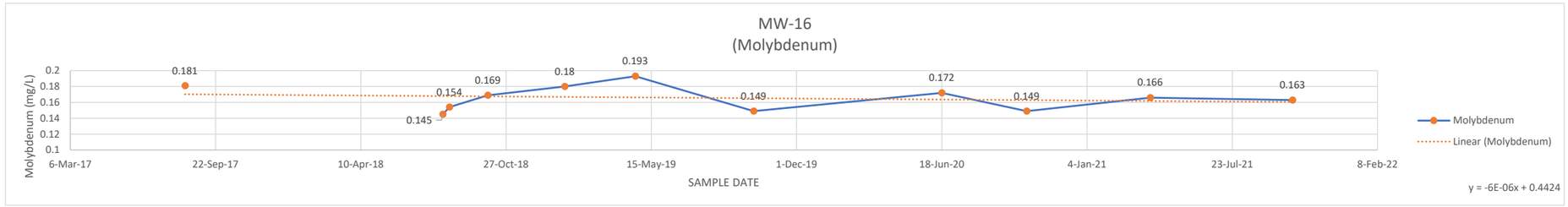


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT D
CHANGES IN MOLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

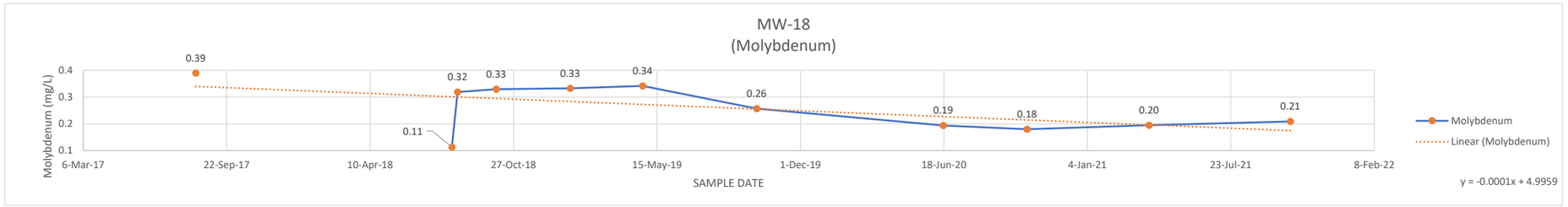
MW-16

DATE	MOLYBDENUM
11-Aug-17	0.181
22-May-18	
1-Aug-18	0.145
10-Aug-18	0.154
2-Oct-18	0.169
16-Jan-19	0.18
23-Apr-19	0.193
3-Oct-19	0.149
18-Jun-20	0.172
13-Oct-20	0.149
1-Apr-21	0.166
14-Oct-21	0.163



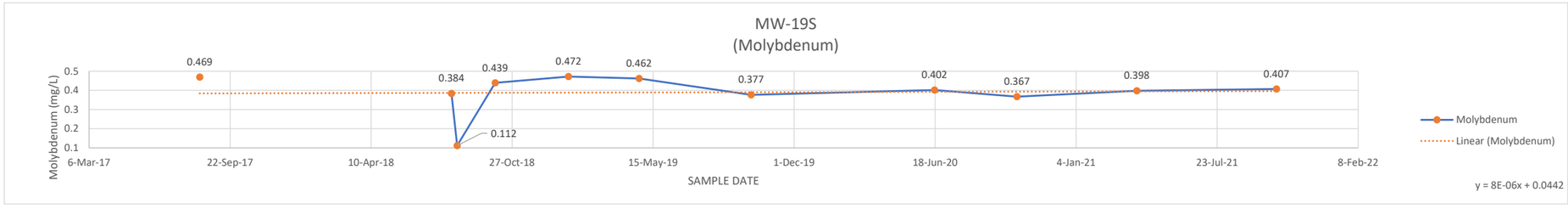
MW-18

DATE	MOLYBDENUM
10-Aug-17	0.39
18-May-18	
2-Aug-18	0.113
10-Aug-18	0.319
3-Oct-18	0.33
14-Jan-19	0.333
25-Apr-19	0.342
1-Oct-19	0.257
17-Jun-20	0.194
12-Oct-20	0.18
31-Mar-21	0.195
14-Oct-21	0.209



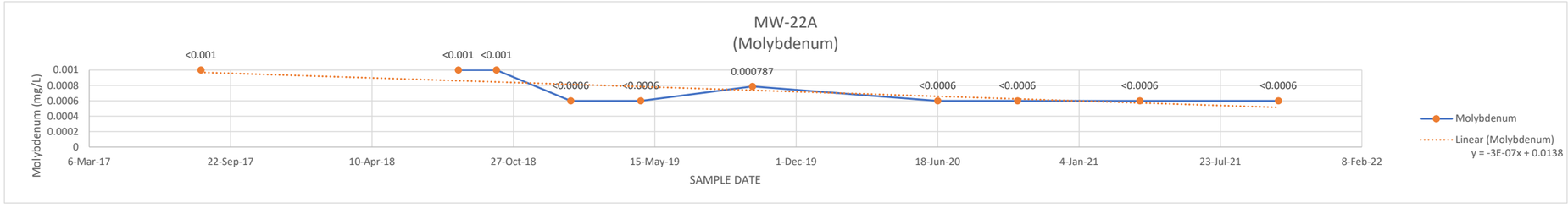
MW-19S

DATE	MOLYBDENUM
10-Aug-17	0.469
18-May-18	
2-Aug-18	0.384
10-Aug-18	0.112
3-Oct-18	0.439
15-Jan-19	0.472
25-Apr-19	0.462
1-Oct-19	0.377
17-Jun-20	0.402
12-Oct-20	0.367
31-Mar-21	0.398
15-Oct-21	0.407



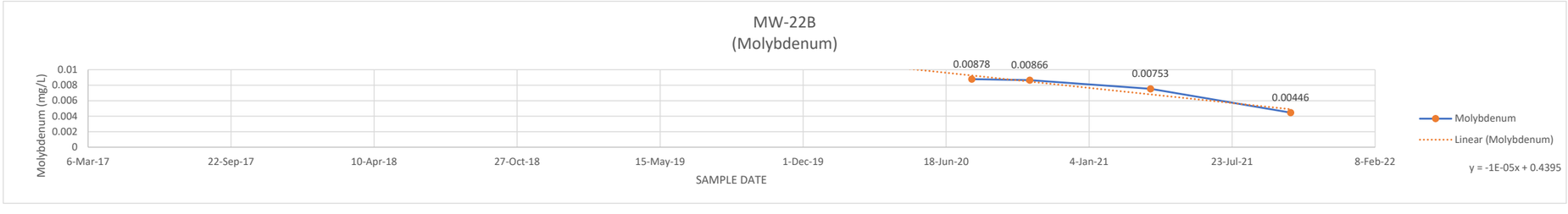
MW-22A

DATE	MOLYBDENUM
11-Aug-17	0.001
22-May-18	
10-Aug-18	0.001
3-Oct-18	0.001
16-Jan-19	0.0006
25-Apr-19	0.0006
30-Sep-19	0.000787
18-Jun-20	0.0006
9-Oct-20	0.0006
31-Mar-21	0.0006
13-Oct-21	0.0006



MW-22B

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.00878
13-Oct-20	0.00866
31-Mar-21	0.00753
13-Oct-21	0.00446

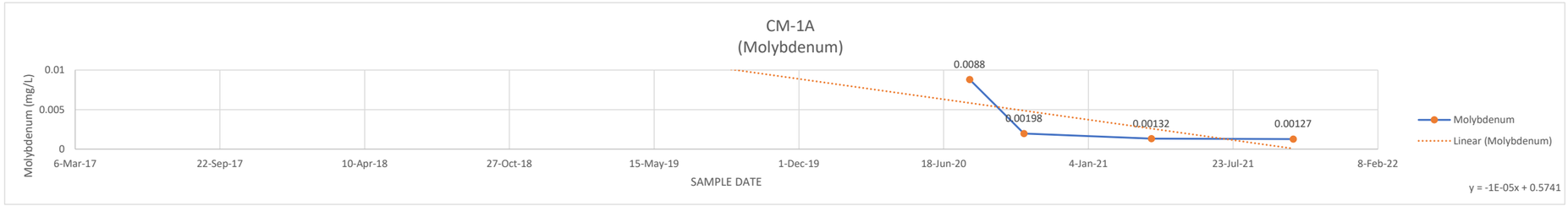


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT D
CHANGES IN MOLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

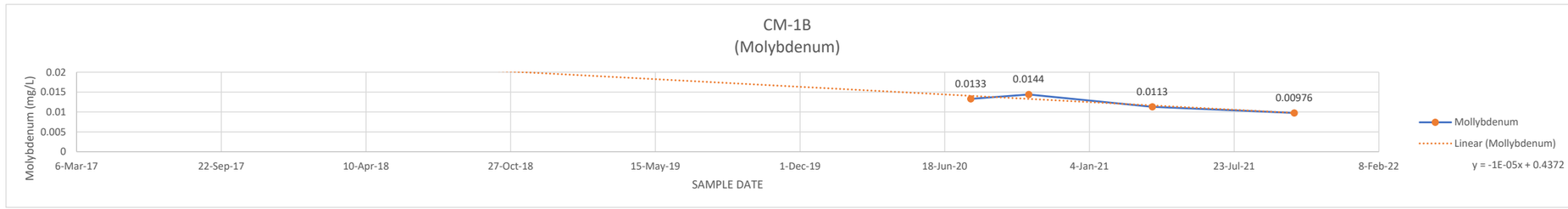
CM-1A

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0088
7-Oct-20	0.00198
1-Apr-21	0.00132
14-Oct-21	0.00127



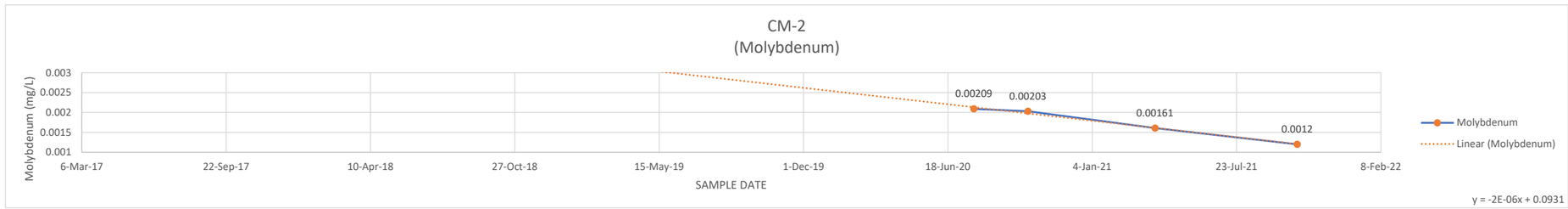
CM-1B

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0133
12-Oct-20	0.0144
1-Apr-21	0.0113
14-Oct-21	0.00976



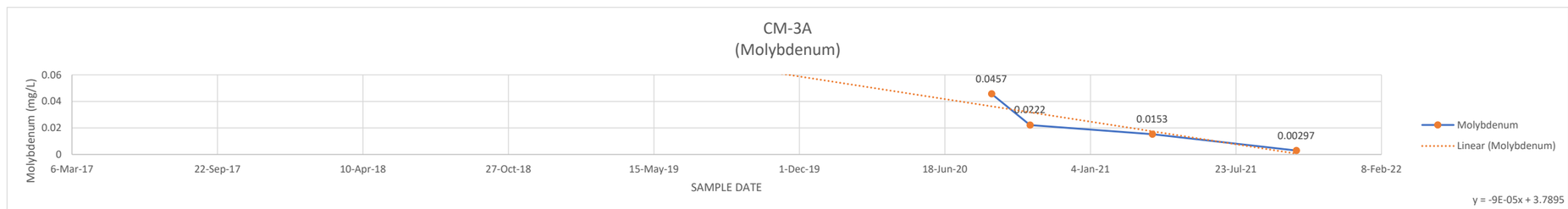
CM-2

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.00209
7-Oct-20	0.00203
1-Apr-21	0.00161
15-Oct-21	0.0012



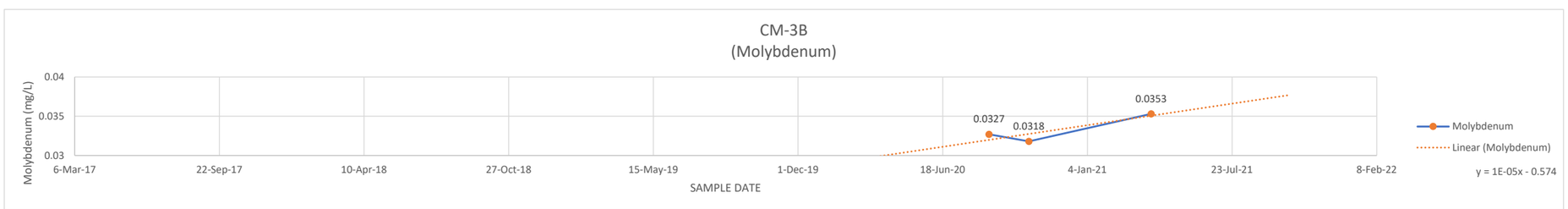
CM-3A

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
21-Aug-20	0.0457
13-Oct-20	0.0222
30-Mar-21	0.0153
14-Oct-21	0.00297



CM-3B

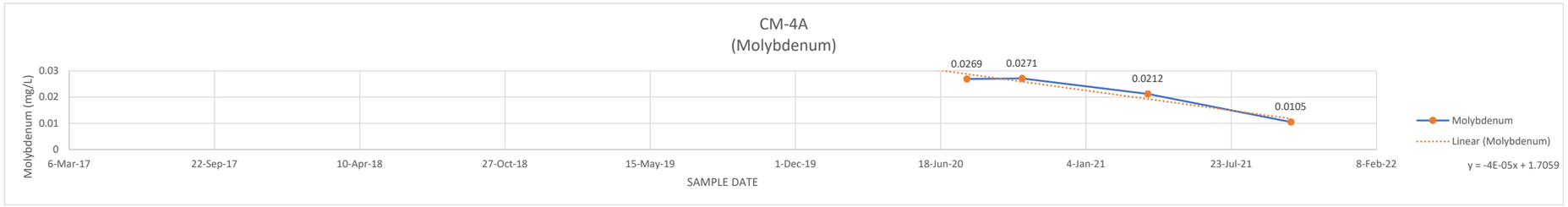
DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
21-Aug-20	0.0327
15-Oct-20	0.0318
2-Apr-21	0.0353
11-Oct-21	



ATTACHMENT D
CHANGES IN MOLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

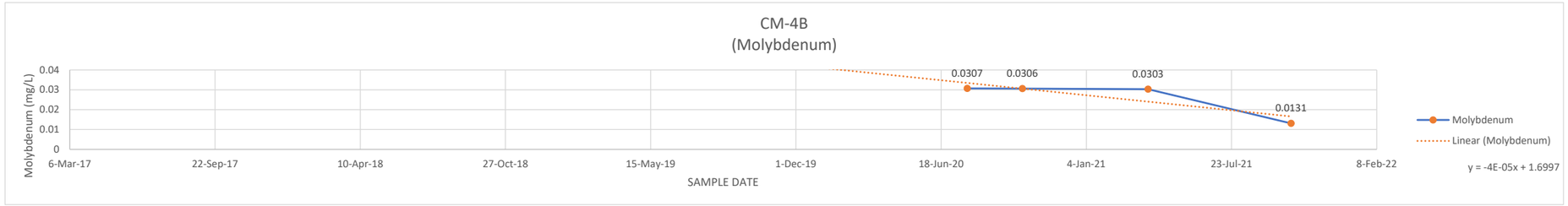
CM-4A

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0269
8-Oct-20	0.0271
30-Mar-21	0.0212
13-Oct-21	0.0105



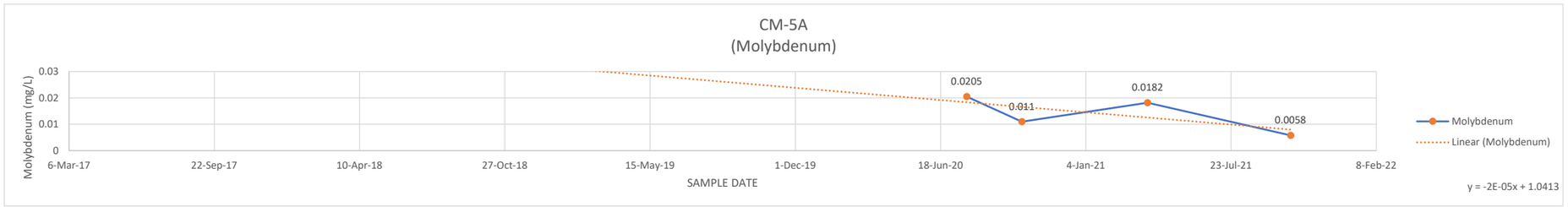
CM-4B

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0307
8-Oct-20	0.0306
30-Mar-21	0.0303
13-Oct-21	0.0131



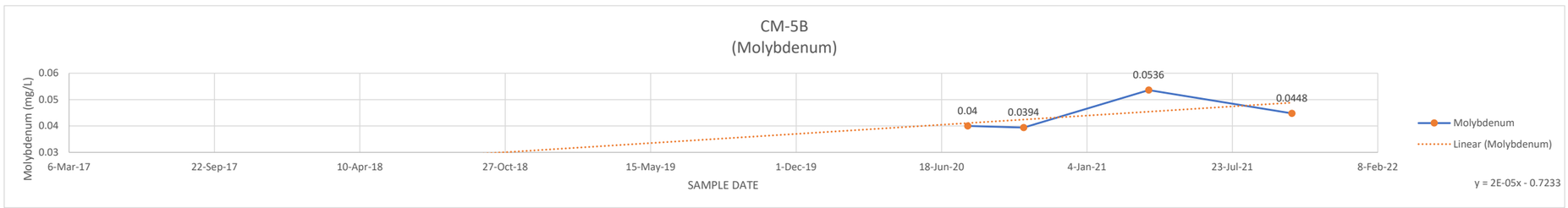
CM-5A

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.0205
8-Oct-20	0.011
30-Mar-21	0.0182
13-Oct-21	0.0058



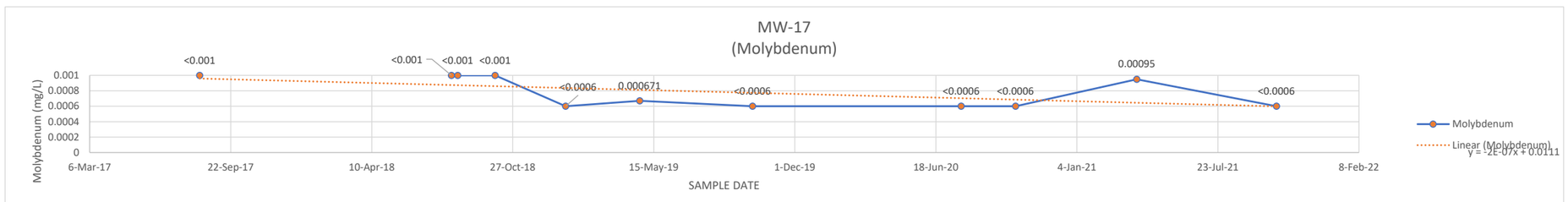
CM-5B

DATE	MOLYBDENUM
9-Aug-17	
24-May-18	
1-Aug-18	
10-Aug-18	
2-Oct-18	
10-Jan-19	
25-Apr-19	
2-Oct-19	
24-Jul-20	0.04
9-Oct-20	0.0394
30-Mar-21	0.0536
13-Oct-21	0.0448



MW-17

DATE	MOLYBDENUM
9-Aug-17	0.001
24-May-18	
1-Aug-18	0.001
10-Aug-18	0.001
2-Oct-18	0.001
10-Jan-19	0.0006
25-Apr-19	0.000671
2-Oct-19	0.0006
24-Jul-20	0.0006
9-Oct-20	0.0006
30-Mar-21	0.00095
14-Oct-21	0.0006



Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT E

COMPARISON OF CHANGES IN MEAN CONCENTRATION FOR MOLOYBDENUM

ATTACHMENT E
COMPARISON OF CHANGES IN MEAN CONCENTRATION FOR MOLYBDENUM
(MEAN OVER INITAL SAMPLING VRS MEAN OVER LAST FOUR SAMPLINGS)

	MEAN MOLYBDENUM CONCENTRATION (AUGUST 2017 THROUGH OCTOBER 2019) [1, 2]	MEAN MOLYBDENUM CONCENTRATION (JUNE 2020 THROUGH OCTOBER 2021)	PERCENT DIFFERENCE
MW-5S	0.004904286	0.003065	-38
MW-7S	0.002397143	0.00100375	-58
MW-14A	0.003811286	0.00064	-83
MW-15A	0.213142857	0.18825	-12
MW-15B	NOT APPLICABLE	0.0071625	Not Applicable
MW-16	0.167285714	0.1625	-3
MW-17	0.000838714	0.0006875	-18
MW-18	0.297714286	0.1945	-35
MW-19S	0.387857143	0.3935	1
MW-22A	0.000831167	0.0006	-28
MW-22B	NOT APPLICABLE	0.007358	Not Applicable
CM-1A	NOT APPLICABLE	0.0033425	Not Applicable
CM-1B	NOT APPLICABLE	0.01219	Not Applicable
CM-2	NOT APPLICABLE	0.0017325	Not Applicable
CM-3A	NOT APPLICABLE	0.0215425	Not Applicable
CM-3B	NOT APPLICABLE	0.033266667	Not Applicable
CM-4A	NOT APPLICABLE	0.021425	Not Applicable
CM-4B	NOT APPLICABLE	0.026175	Not Applicable
CM-5A	NOT APPLICABLE	0.013875	Not Applicable
CM-5B	NOT APPLICABLE	0.04445	Not Applicable

1) Mean Molybdenum Concentration (August 2017 through October 2019) is based on seven sampling events for MW-5S, MW-7S, MW-14A, MW-15A, MW-16, MW-17, MW-18, and MW-19S. It is based on six sampling events for MW-22A.

2) MW-15B, MW-22B, CM-1A, CM-1B, CM-2, CM-3A, CM-3B, CM-4A, CM-4B, CM-5A, and CM-5B were not sampled for Molybdenum until June 2020

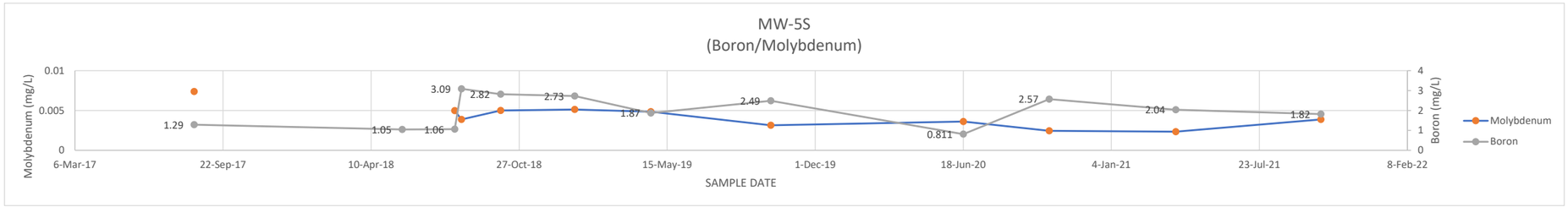
ATTACHMENT F

CHANGES IN CONCENTRATION OF CCR APPENDIX III PARAMETERS COMPARED TO CHANGES IN MONLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

ATTACHMENT F-1
CHANGES IN BORON AND MOLYBDENUM CONCENTRATIONS

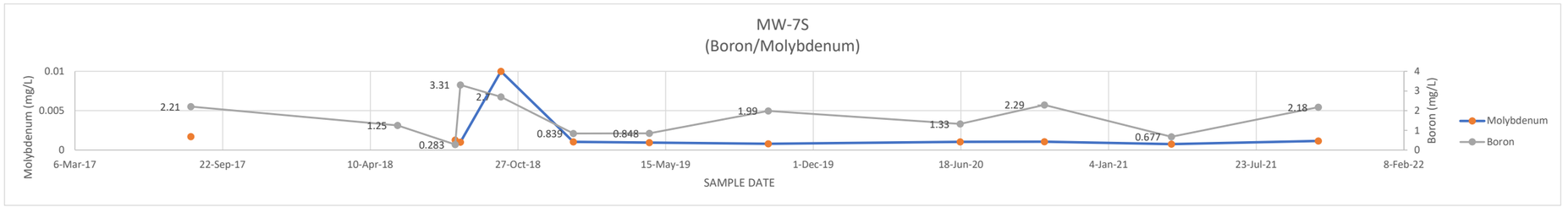
MW-5S

DATE	BORON	MOLYBDENUM
14-Aug-17	1.29	0.00737
22-May-18	1.05	
1-Aug-18	1.06	0.00497
10-Aug-18	3.09	0.00387
2-Oct-18	2.82	0.005
10-Jan-19	2.73	0.00512
23-Apr-19	1.87	0.00485
2-Oct-19	2.49	0.00315
18-Jun-20	0.811	0.00361
12-Oct-20	2.57	0.00244
1-Apr-21	2.04	0.00234
14-Oct-21	1.82	0.00387



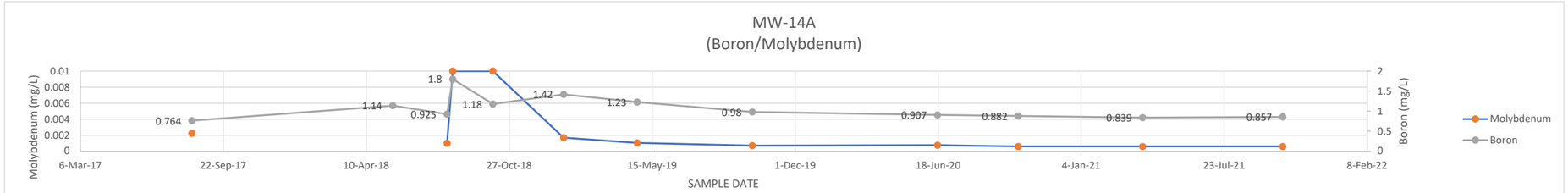
MW-7S

DATE	BORON	MOLYBDENUM
10-Aug-17	2.21	0.00171
17-May-18	1.25	
3-Aug-18	0.283	0.00127
10-Aug-18	3.31	0.001
4-Oct-18	2.7	0.01
10-Jan-19	0.839	0.00105
23-Apr-19	0.848	0.000952
1-Oct-19	1.99	0.000798
17-Jun-20	1.33	0.00105
9-Oct-20	2.29	0.00106
30-Mar-21	0.677	0.000755
15-Oct-21	2.18	0.00115



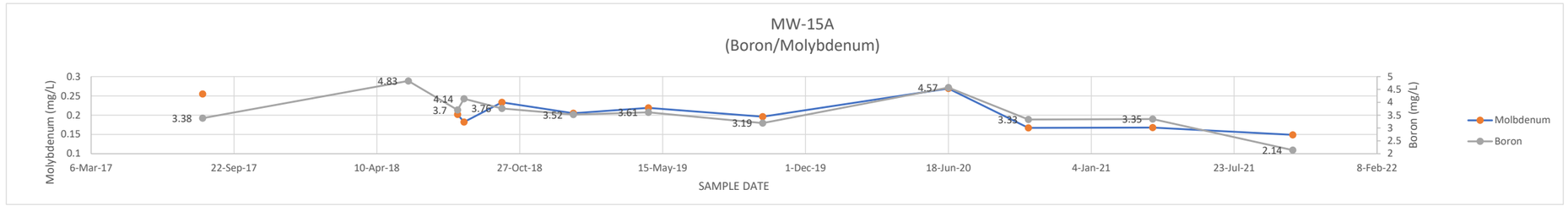
MW-14A

DATE	BORON	MOLYBDENUM
9-Aug-17	0.764	0.00223
17-May-18	1.14	
1-Aug-18	0.925	0.001
9-Aug-18	1.8	0.01
4-Oct-18	1.18	0.01
11-Jan-19	1.42	0.0017
24-Apr-19	1.23	0.00104
2-Oct-19	0.98	0.000709
17-Jun-20	0.907	0.00076
8-Oct-20	0.882	0.0006
31-Mar-21	0.839	0.0006
13-Oct-21	0.857	0.0006



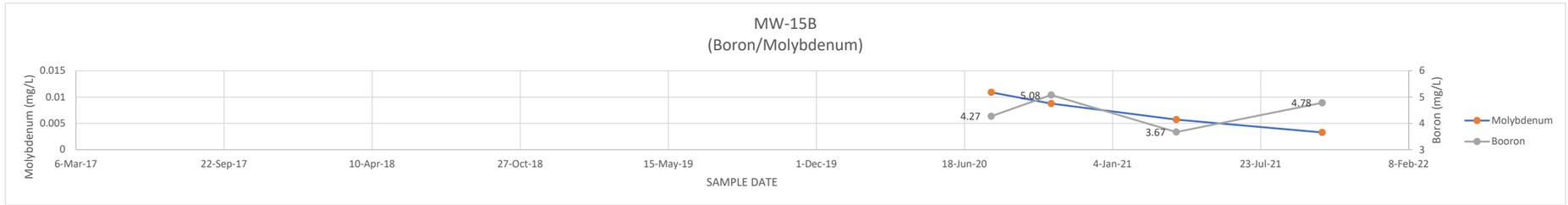
MW-15A

DATE	BORON	MOLYBDENUM
9-Aug-17	3.38	0.255
24-May-18	4.83	
1-Aug-18	3.7	0.202
10-Aug-18	4.14	0.182
2-Oct-18	3.76	0.233
10-Jan-19	3.52	0.205
25-Apr-19	3.61	0.219
2-Oct-19	3.19	0.196
18-Jun-20	4.57	0.269
8-Oct-20	3.33	0.167
31-Mar-21	3.35	0.168
13-Oct-21	2.14	0.149



MW-15B

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4.27	0.0109
13-Oct-20	5.08	0.00876
31-Mar-21	3.67	0.00571
14-Oct-21	4.78	0.00328

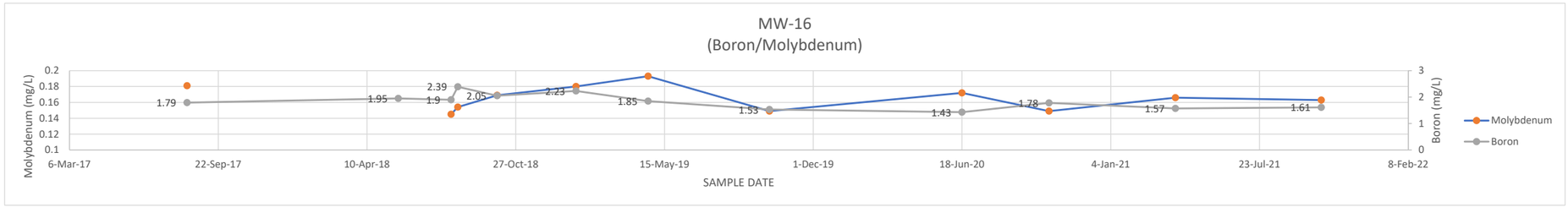


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-1
CHANGES IN BORON AND MOLYBDENUM CONCENTRATIONS

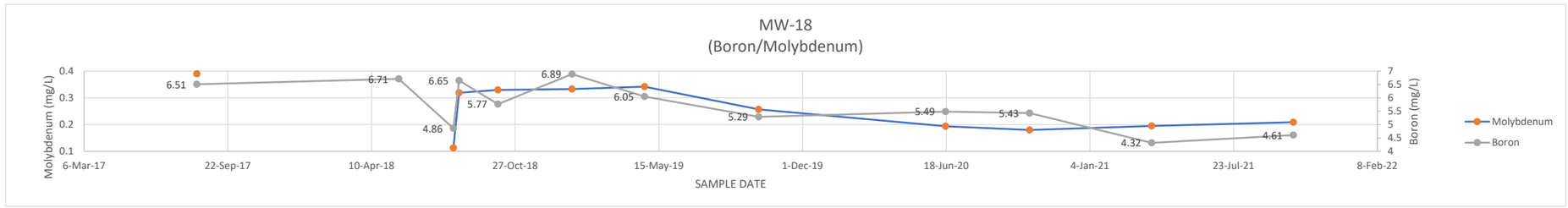
MW-16

DATE	BORON	MOLYBDENUM
11-Aug-17	1.79	0.181
22-May-18	1.95	
1-Aug-18	1.9	0.145
10-Aug-18	2.39	0.154
2-Oct-18	2.05	0.169
16-Jan-19	2.23	0.18
23-Apr-19	1.85	0.193
3-Oct-19	1.53	0.149
18-Jun-20	1.43	0.172
13-Oct-20	1.78	0.149
1-Apr-21	1.57	0.166
14-Oct-21	1.61	0.163



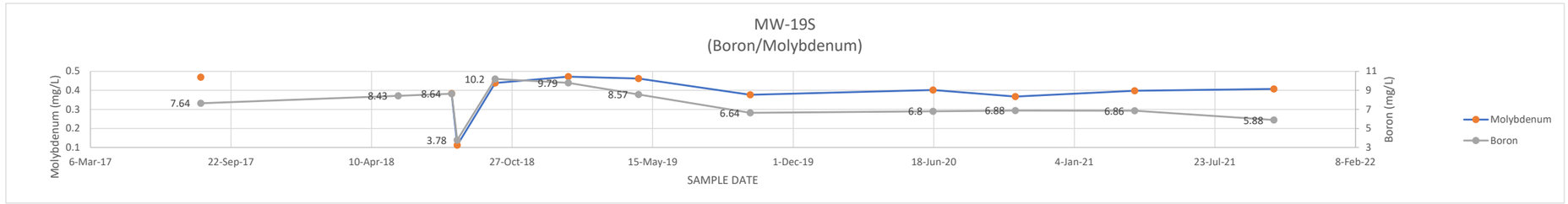
MW-18

DATE	BORON	MOLYBDENUM
10-Aug-17	6.51	0.39
18-May-18	6.71	
2-Aug-18	4.86	0.113
10-Aug-18	6.65	0.319
3-Oct-18	5.77	0.33
14-Jan-19	6.89	0.333
25-Apr-19	6.05	0.342
1-Oct-19	5.29	0.257
17-Jun-20	5.49	0.194
12-Oct-20	5.43	0.18
31-Mar-21	4.32	0.195
14-Oct-21	4.61	0.209



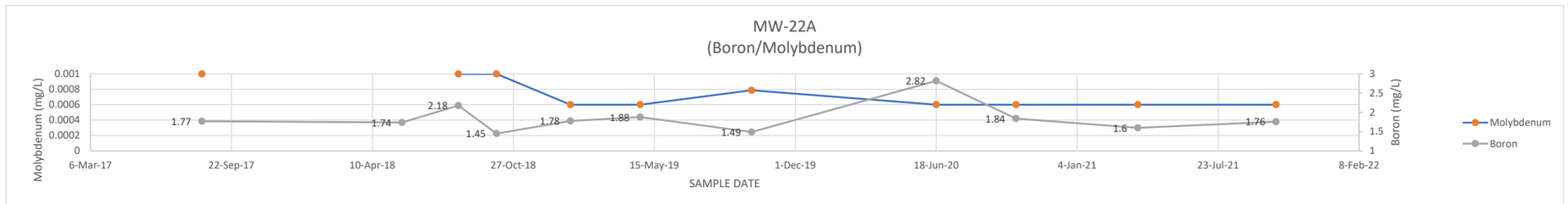
MW-19S

DATE	BORON	MOLYBDENUM
10-Aug-17	7.64	0.469
18-May-18	8.43	
2-Aug-18	8.64	0.384
10-Aug-18	3.78	0.112
3-Oct-18	10.2	0.439
15-Jan-19	9.79	0.472
25-Apr-19	8.57	0.462
1-Oct-19	6.64	0.377
17-Jun-20	6.8	0.402
12-Oct-20	6.88	0.367
31-Mar-21	6.86	0.398
15-Oct-21	5.88	0.407



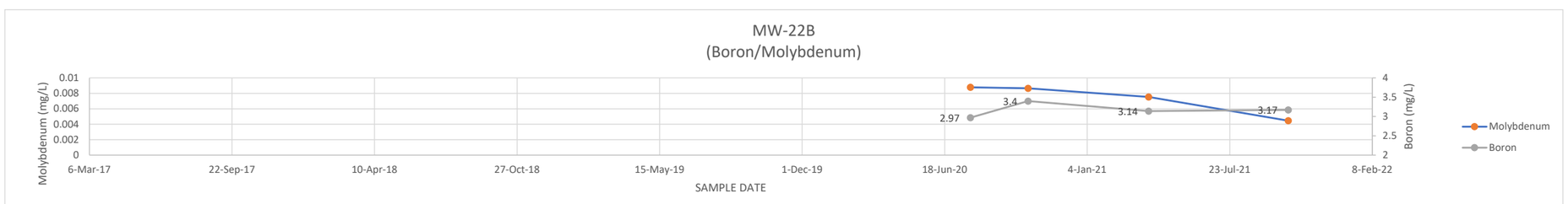
MW-22A

DATE	BORON	MOLYBDENUM
11-Aug-17	1.77	0.001
22-May-18	1.74	
10-Aug-18	2.18	0.001
3-Oct-18	1.45	0.001
16-Jan-19	1.78	0.0006
25-Apr-19	1.88	0.0006
30-Sep-19	1.49	0.000787
18-Jun-20	2.82	0.0006
9-Oct-20	1.84	0.0006
31-Mar-21	1.6	0.0006
13-Oct-21	1.76	0.0006



MW-22B

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2.97	0.00878
13-Oct-20	3.4	0.00866
31-Mar-21	3.14	0.00753
13-Oct-21	3.17	0.00446

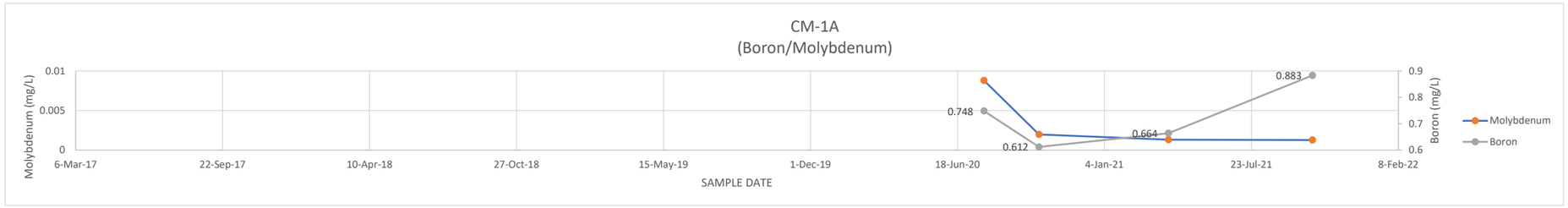


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-1
CHANGES IN BORON AND MOLYBDENUM CONCENTRATIONS

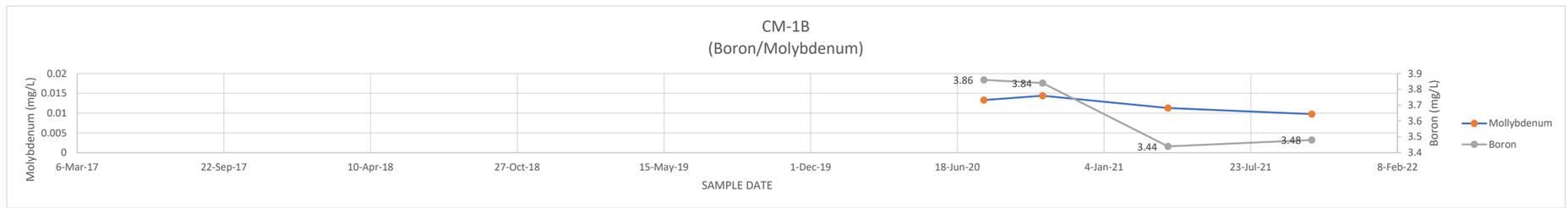
CM-1A

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.748	0.0088
7-Oct-20	0.612	0.00198
1-Apr-21	0.664	0.00132
14-Oct-21	0.883	0.00127



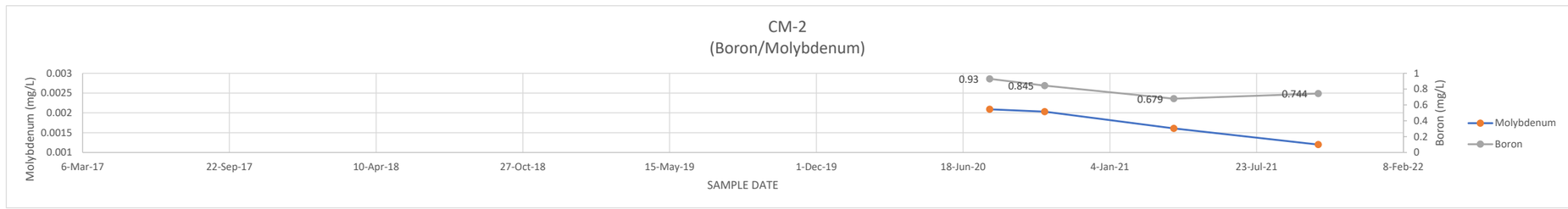
CM-1B

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.86	0.0133
12-Oct-20	3.84	0.0144
1-Apr-21	3.44	0.0113
14-Oct-21	3.48	0.00976



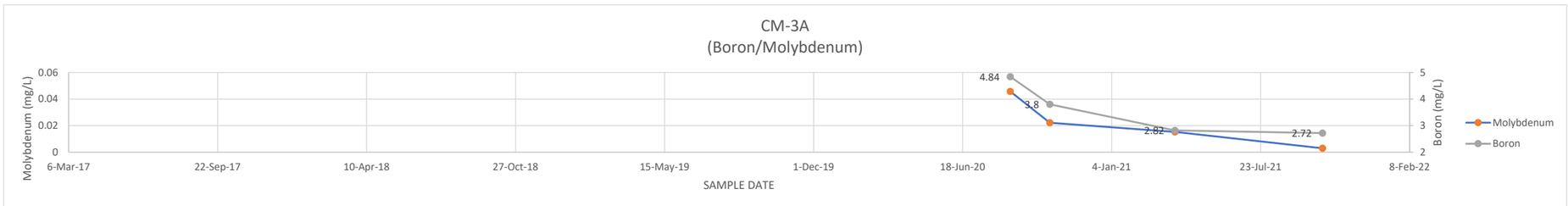
CM-2

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.93	0.00209
7-Oct-20	0.845	0.00203
1-Apr-21	0.679	0.00161
15-Oct-21	0.744	0.0012



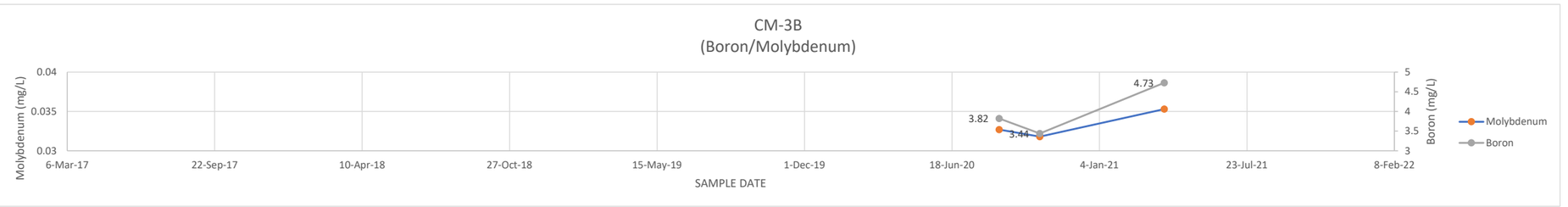
CM-3A

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	4.84	0.0457
13-Oct-20	3.8	0.0222
30-Mar-21	2.82	0.0153
14-Oct-21	2.72	0.00297



CM-3B

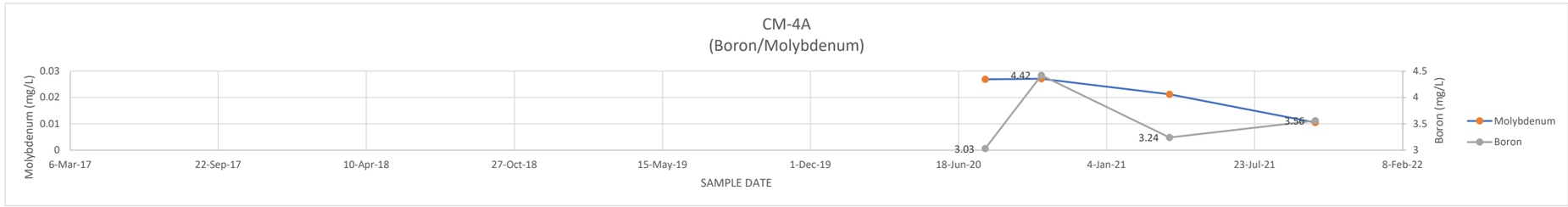
DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	3.82	0.0327
15-Oct-20	3.44	0.0318
2-Apr-21	4.73	0.0353
11-Oct-21		



ATTACHMENT F-1
CHANGES IN BORON AND MOLYBDENUM CONCENTRATIONS

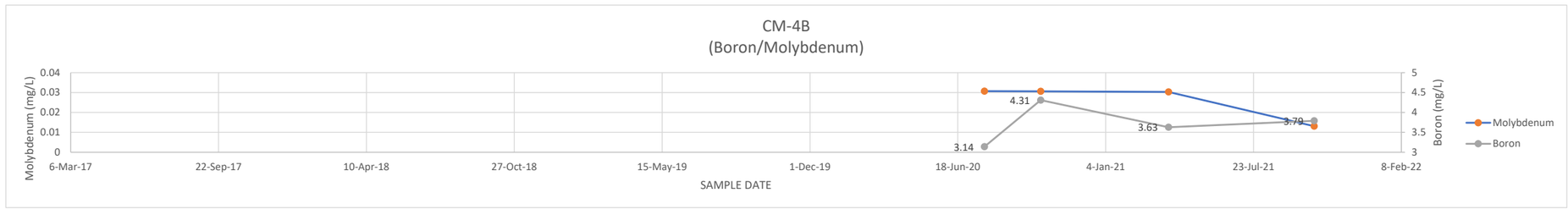
CM-4A

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.03	0.0269
8-Oct-20	4.42	0.0271
30-Mar-21	3.24	0.0212
13-Oct-21	3.56	0.0105



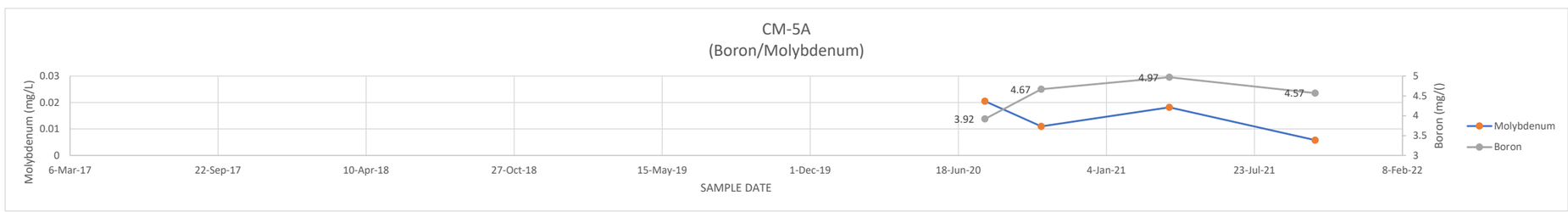
CM-4B

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.14	0.0307
8-Oct-20	4.31	0.0306
30-Mar-21	3.63	0.0303
13-Oct-21	3.79	0.0131



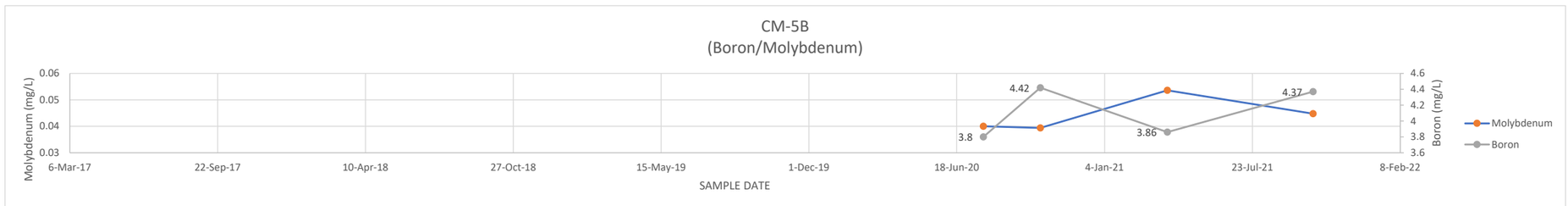
CM-5A

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.92	0.0205
8-Oct-20	4.67	0.011
30-Mar-21	4.97	0.0182
13-Oct-21	4.57	0.0058



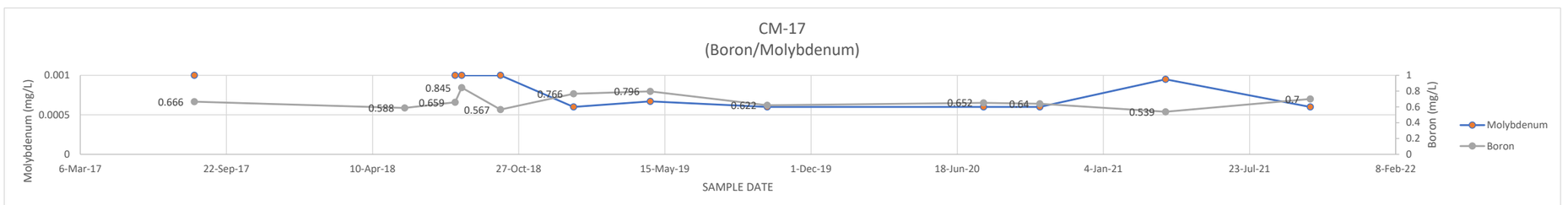
CM-5B

DATE	BORON	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.8	0.04
9-Oct-20	4.42	0.0394
30-Mar-21	3.86	0.0536
13-Oct-21	4.37	0.0448



MW-17

DATE	BORON	MOLYBDENUM
9-Aug-17	0.666	0.001
24-May-18	0.588	
1-Aug-18	0.659	0.001
10-Aug-18	0.845	0.001
2-Oct-18	0.567	0.001
10-Jan-19	0.766	0.0006
25-Apr-19	0.796	0.000671
2-Oct-19	0.622	0.0006
24-Jul-20	0.652	0.0006
9-Oct-20	0.64	0.0006
30-Mar-21	0.539	0.00095
14-Oct-21	0.7	0.0006

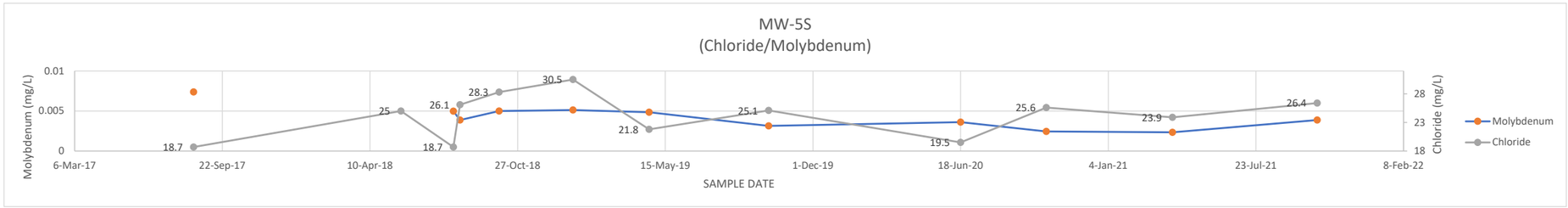


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-2
CHANGES IN CHLORIDE AND MOLYBDENUM CONCENTRATIONS

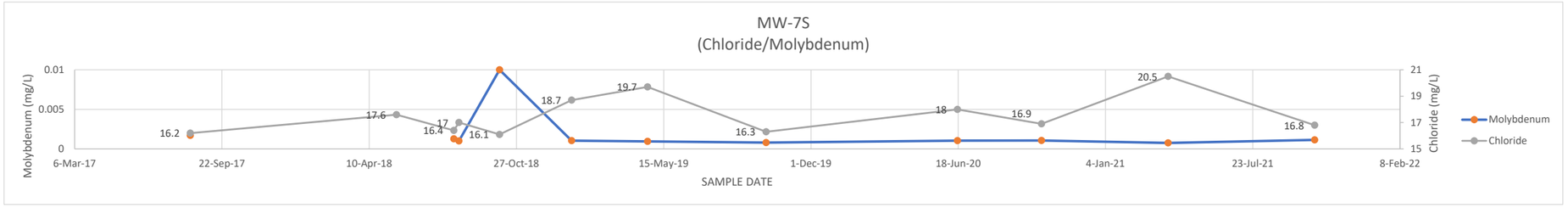
MW-5S

DATE	CHLORIDE	MOLYBDENUM
14-Aug-17	18.7	0.00737
22-May-18	25	
1-Aug-18	18.7	0.00497
10-Aug-18	26.1	0.00387
2-Oct-18	28.3	0.005
10-Jan-19	30.5	0.00512
23-Apr-19	21.8	0.00485
2-Oct-19	25.1	0.00315
18-Jun-20	19.5	0.00361
12-Oct-20	25.6	0.00244
1-Apr-21	23.9	0.00234
14-Oct-21	26.4	0.00387



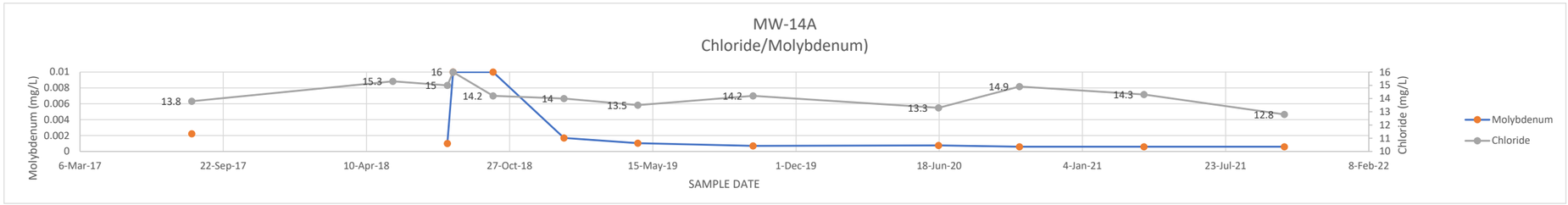
MW-7S

DATE	CHLORIDE	MOLYBDENUM
10-Aug-17	16.2	0.00171
17-May-18	17.6	
3-Aug-18	16.4	0.00127
10-Aug-18	17	0.001
4-Oct-18	16.1	0.01
10-Jan-19	18.7	0.00105
23-Apr-19	19.7	0.000952
1-Oct-19	16.3	0.000798
17-Jun-20	18	0.00105
9-Oct-20	16.9	0.00106
30-Mar-21	20.5	0.000755
15-Oct-21	16.8	0.00115



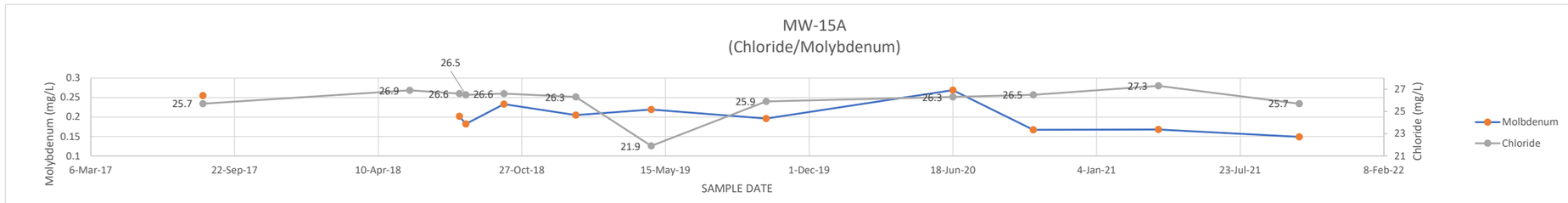
MW-14A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17	13.8	0.00223
17-May-18	15.3	
1-Aug-18	15	0.001
9-Aug-18	16	0.01
4-Oct-18	14.2	0.01
11-Jan-19	14	0.0017
24-Apr-19	13.5	0.00104
2-Oct-19	14.2	0.000709
17-Jun-20	13.3	0.00076
8-Oct-20	14.9	0.0006
31-Mar-21	14.3	0.0006
13-Oct-21	12.8	0.0006



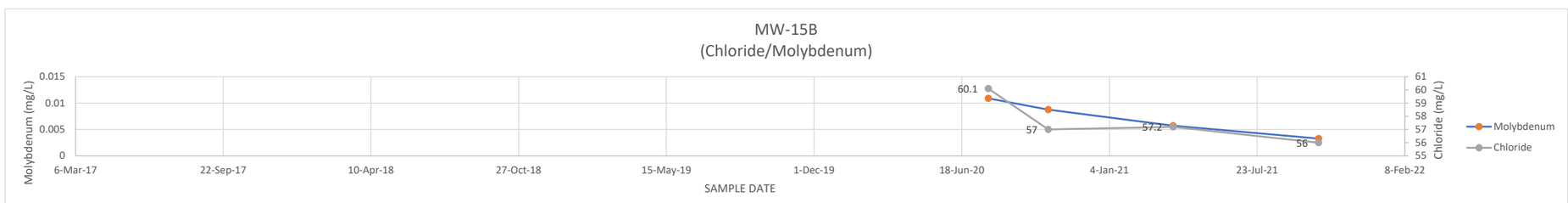
MW-15A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17	25.7	0.255
24-May-18	26.9	
1-Aug-18	26.6	0.202
10-Aug-18	26.5	0.182
2-Oct-18	26.6	0.233
10-Jan-19	26.3	0.205
25-Apr-19	21.9	0.219
2-Oct-19	25.9	0.196
18-Jun-20	26.3	0.269
8-Oct-20	26.5	0.167
31-Mar-21	27.3	0.168
13-Oct-21	25.7	0.149



MW-15B

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	60.1	0.0109
13-Oct-20	57	0.00876
31-Mar-21	57.2	0.00571
14-Oct-21	56	0.00328

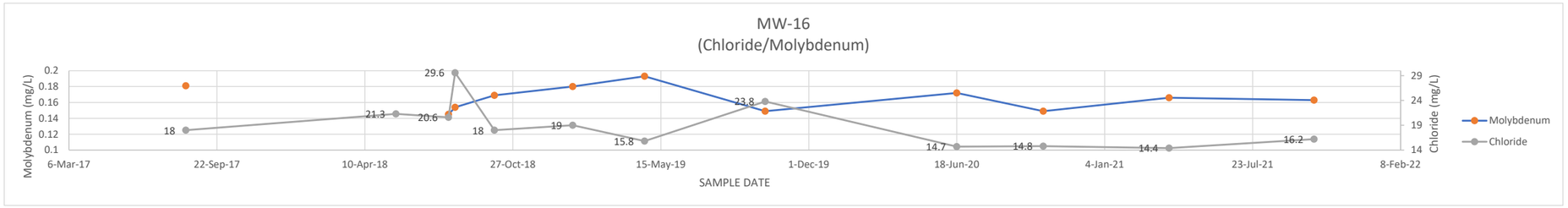


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-2
CHANGES IN CHLORIDE AND MOLYBDENUM CONCENTRATIONS

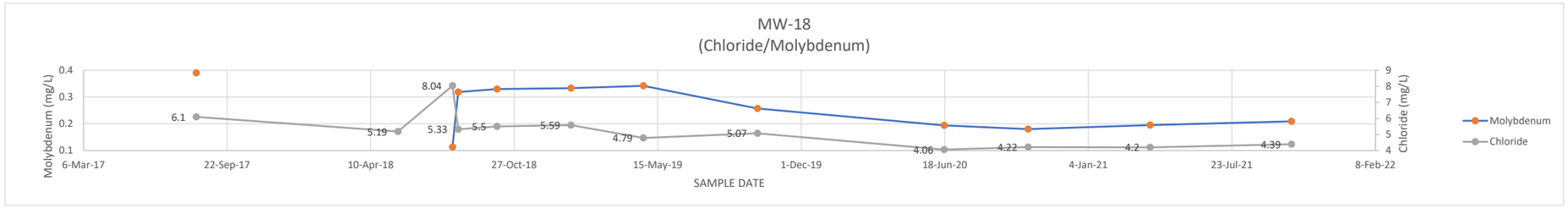
MW-16

DATE	CHLORIDE	MOLYBDENUM
11-Aug-17	18	0.181
22-May-18	21.3	
1-Aug-18	20.6	0.145
10-Aug-18	29.6	0.154
2-Oct-18	18	0.169
16-Jan-19	19	0.18
23-Apr-19	15.8	0.193
3-Oct-19	23.8	0.149
18-Jun-20	14.7	0.172
13-Oct-20	14.8	0.149
1-Apr-21	14.4	0.166
14-Oct-21	16.2	0.163



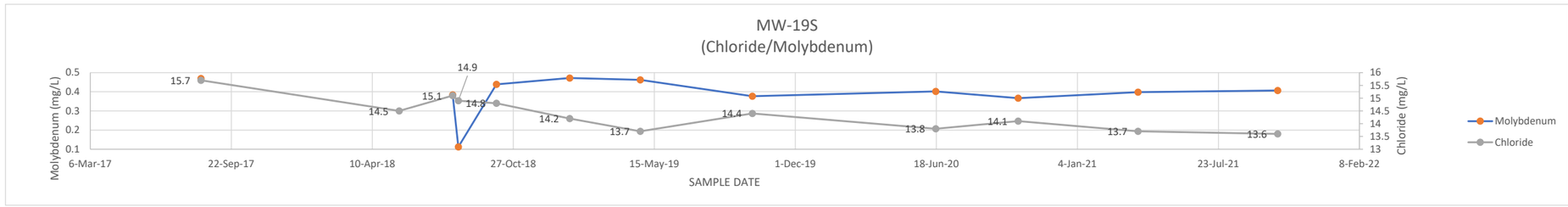
MW-18

DATE	CHLORIDE	MOLYBDENUM
10-Aug-17	6.1	0.39
18-May-18	5.19	
2-Aug-18	8.04	0.113
10-Aug-18	5.33	0.319
3-Oct-18	5.5	0.33
14-Jan-19	5.59	0.333
25-Apr-19	4.79	0.342
1-Oct-19	5.07	0.257
17-Jun-20	4.06	0.194
12-Oct-20	4.22	0.18
31-Mar-21	4.2	0.195
14-Oct-21	4.39	0.209



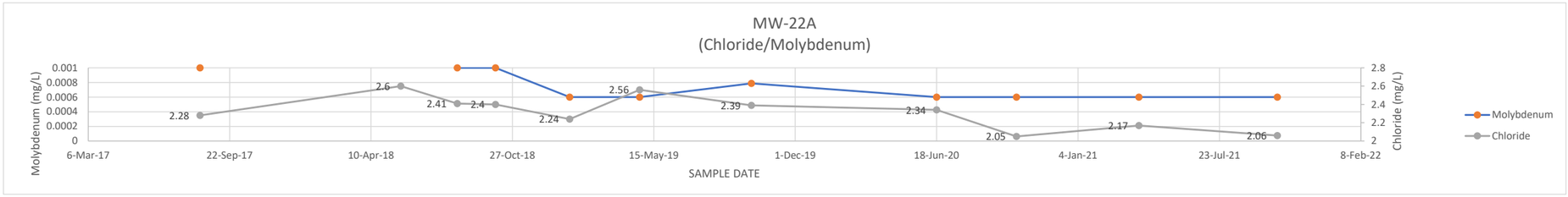
MW-19S

DATE	CHLORIDE	MOLYBDENUM
10-Aug-17	15.7	0.469
18-May-18	14.5	
2-Aug-18	15.1	0.384
10-Aug-18	14.9	0.112
3-Oct-18	14.8	0.439
15-Jan-19	14.2	0.472
25-Apr-19	13.7	0.462
1-Oct-19	14.4	0.377
17-Jun-20	13.8	0.402
12-Oct-20	14.1	0.367
31-Mar-21	13.7	0.398
15-Oct-21	13.6	0.407



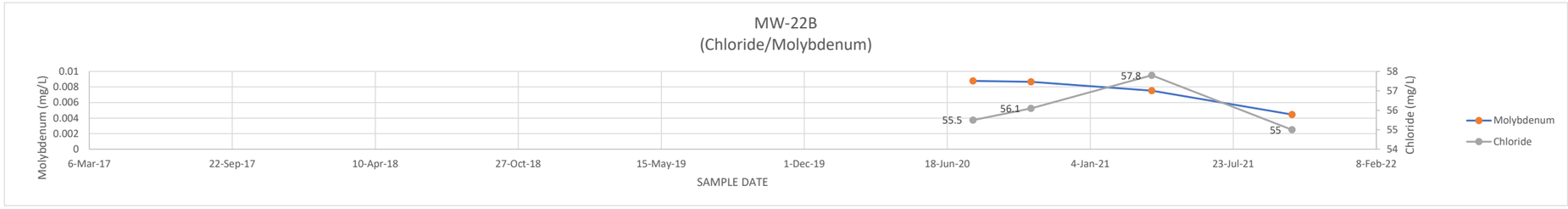
MW-22A

DATE	CHLORIDE	MOLYBDENUM
11-Aug-17	2.28	0.001
22-May-18	2.6	
10-Aug-18	2.41	0.001
3-Oct-18	2.4	0.001
16-Jan-19	2.24	0.0006
25-Apr-19	2.56	0.0006
30-Sep-19	2.39	0.000787
18-Jun-20	2.34	0.0006
9-Oct-20	2.05	0.0006
31-Mar-21	2.17	0.0006
13-Oct-21	2.06	0.0006



MW-22B

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	55.5	0.00878
13-Oct-20	56.1	0.00866
31-Mar-21	57.8	0.00753
13-Oct-21	55	0.00446

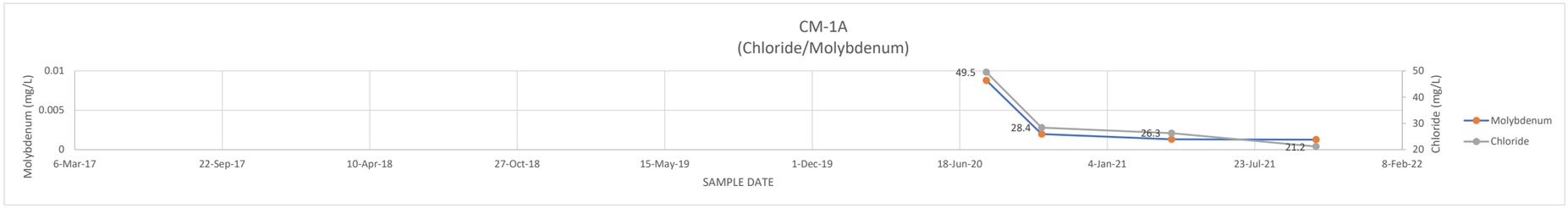


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-2
CHANGES IN CHLORIDE AND MOLYBDENUM CONCENTRATIONS

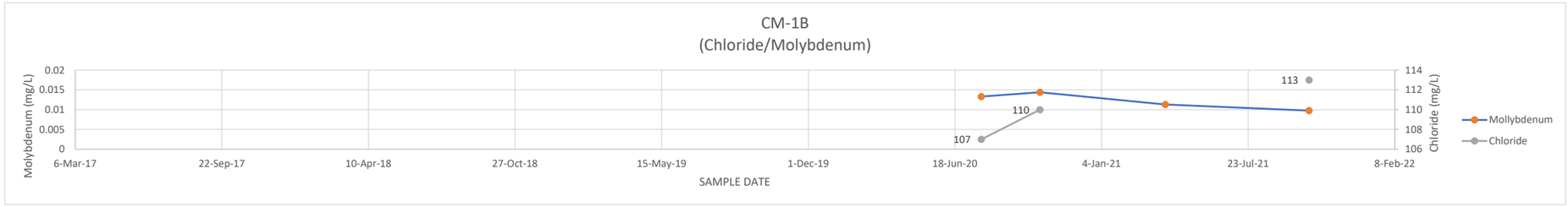
CM-1A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	49.5	0.0088
7-Oct-20	28.4	0.00198
1-Apr-21	26.3	0.00132
14-Oct-21	21.2	0.00127



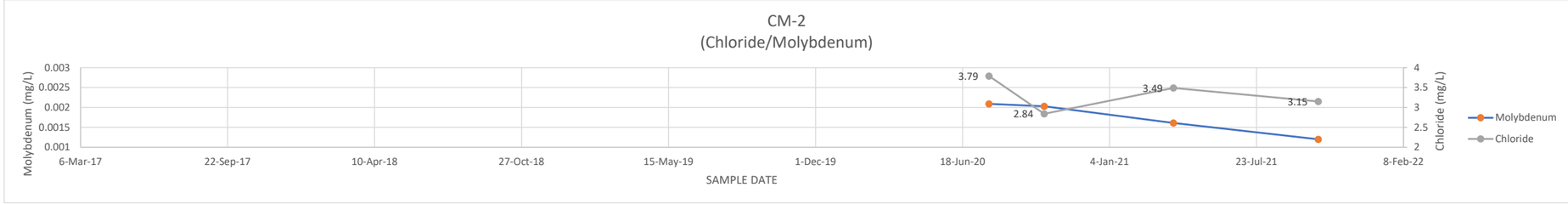
CM-1B

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	107	0.0133
12-Oct-20	110	0.0144
1-Apr-21		0.0113
14-Oct-21	113	0.00976



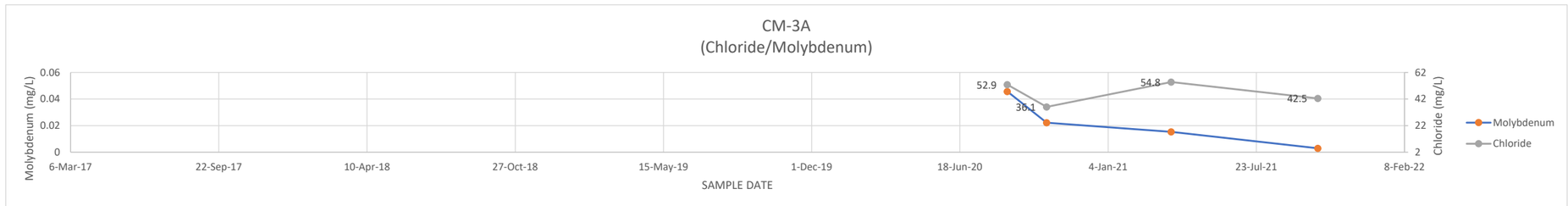
CM-2

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.79	0.00209
7-Oct-20	2.84	0.00203
1-Apr-21	3.49	0.00161
15-Oct-21	3.15	0.0012



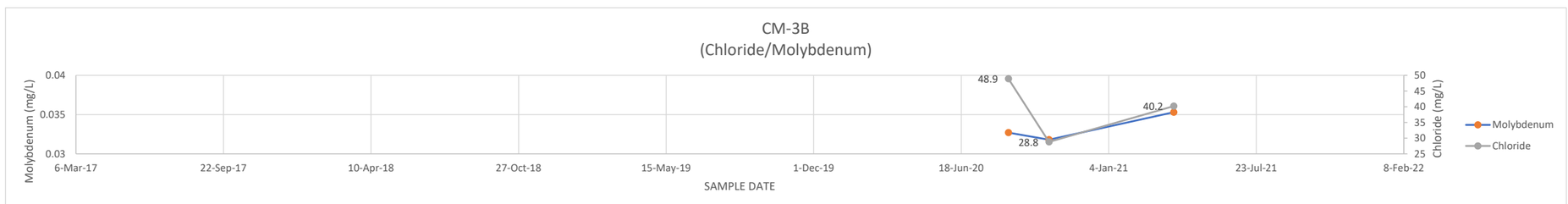
CM-3A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	52.9	0.0457
13-Oct-20	36.1	0.0222
30-Mar-21	54.8	0.0153
14-Oct-21	42.5	0.00297



CM-3B

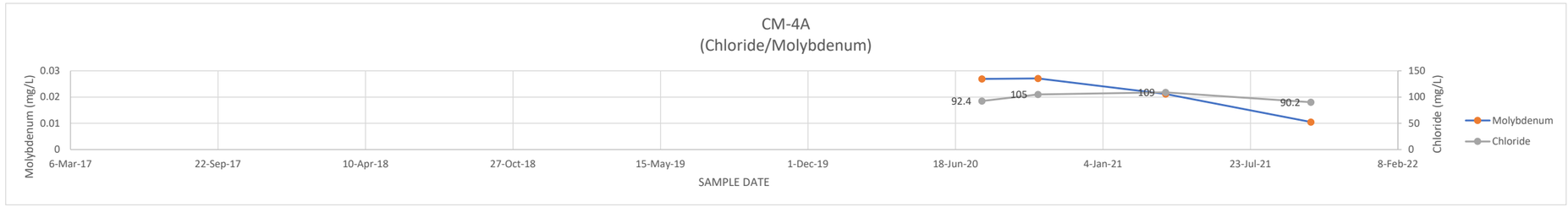
DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	48.9	0.0327
15-Oct-20	28.8	0.0318
2-Apr-21	40.2	0.0353
11-Oct-21		



ATTACHMENT F-2
CHANGES IN CHLORIDE AND MOLYBDENUM CONCENTRATIONS

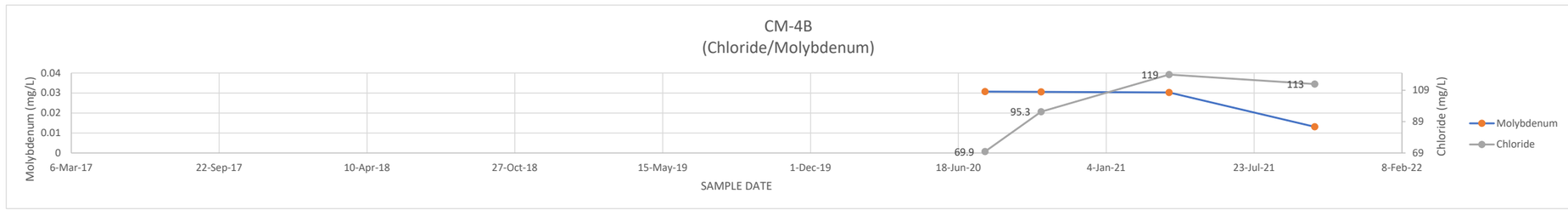
CM-4A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	92.4	0.0269
8-Oct-20	105	0.0271
30-Mar-21	109	0.0212
13-Oct-21	90.2	0.0105



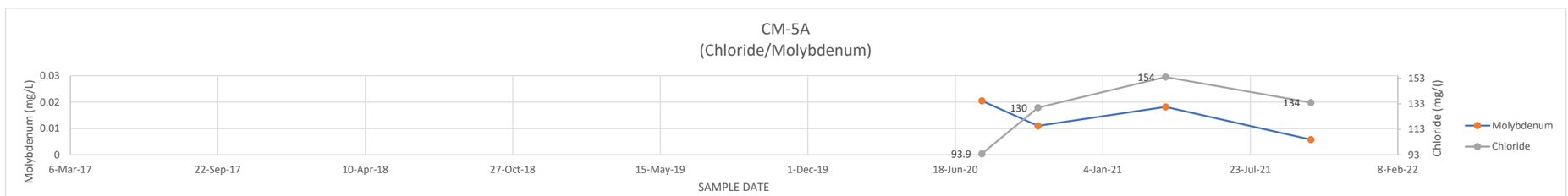
CM-4B

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	69.9	0.0307
8-Oct-20	95.3	0.0306
30-Mar-21	119	0.0303
13-Oct-21	113	0.0131



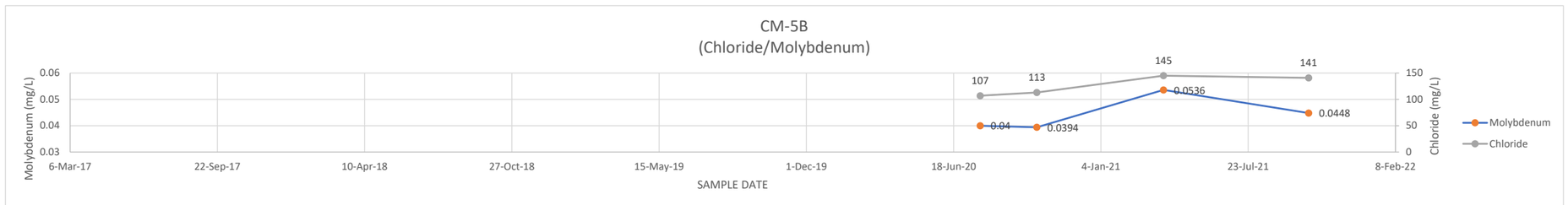
CM-5A

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	93.9	0.0205
8-Oct-20	130	0.011
30-Mar-21	154	0.0182
13-Oct-21	134	0.0058



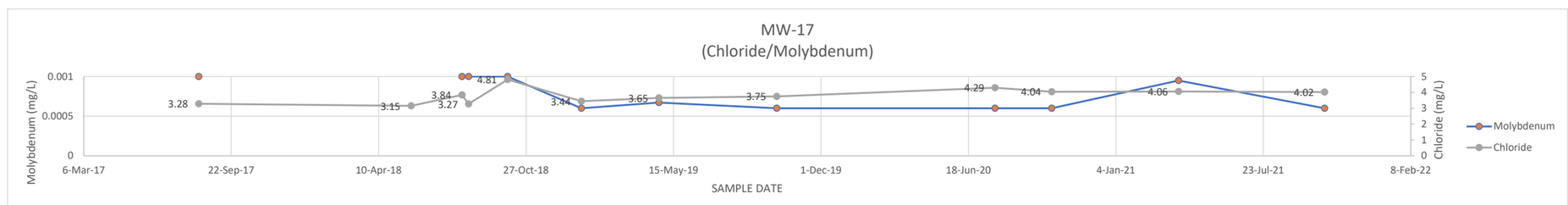
CM-5B

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	107	0.04
9-Oct-20	113	0.0394
30-Mar-21	145	0.0536
13-Oct-21	141	0.0448



MW-17

DATE	CHLORIDE	MOLYBDENUM
9-Aug-17	3.28	0.001
24-May-18	3.15	
1-Aug-18	3.84	0.001
10-Aug-18	3.27	0.001
2-Oct-18	4.81	0.001
10-Jan-19	3.44	0.0006
25-Apr-19	3.65	0.000671
2-Oct-19	3.75	0.0006
24-Jul-20	4.29	0.0006
9-Oct-20	4.04	0.0006
30-Mar-21	4.06	0.00095
14-Oct-21	4.02	0.0006

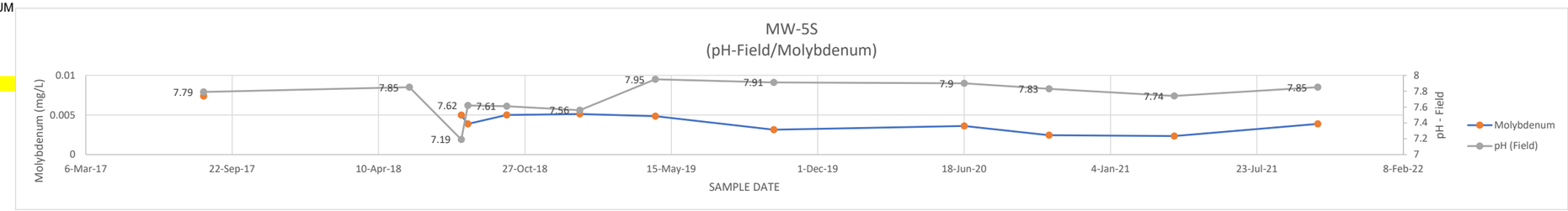


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3A
CHANGES IN PH (FIELD) AND MOLYBDENUM CONCENTRATIONS

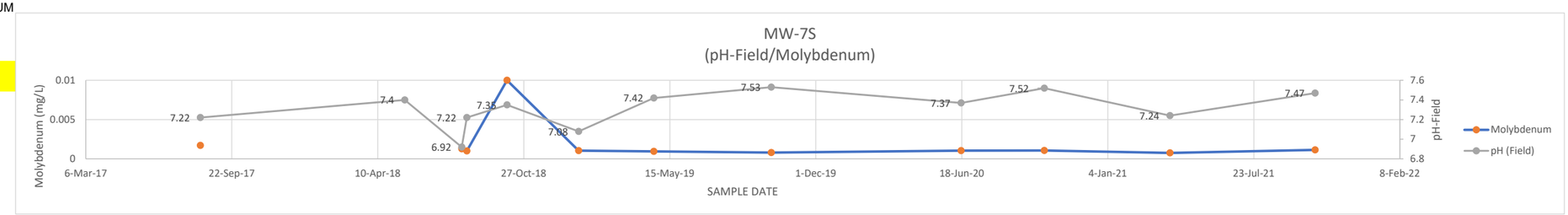
MW-5S

DATE	pH Field	MOLYBDENUM
14-Aug-17	7.79	0.00737
22-May-18	7.85	
1-Aug-18	7.19	0.00497
10-Aug-18	7.62	0.00387
2-Oct-18	7.61	0.005
10-Jan-19	7.56	0.00512
23-Apr-19	7.95	0.00485
2-Oct-19	7.91	0.00315
18-Jun-20	7.9	0.00361
12-Oct-20	7.83	0.00244
1-Apr-21	7.74	0.00234
14-Oct-21	7.85	0.00387



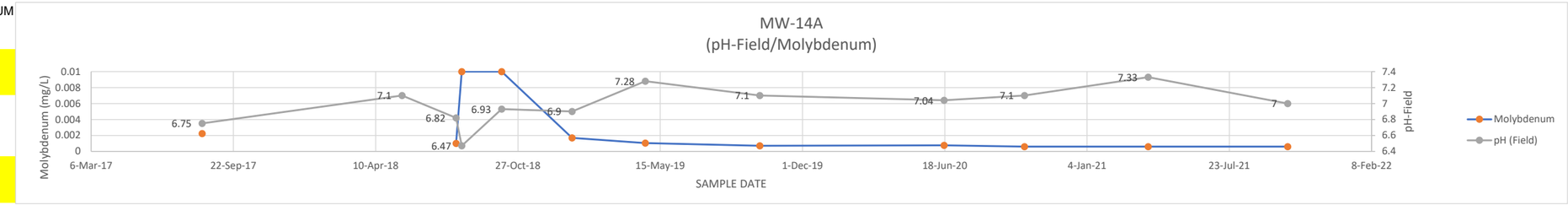
MW-7S

DATE	pH Field	MOLYBDENUM
10-Aug-17	7.22	0.00171
17-May-18	7.4	
3-Aug-18	6.92	0.00127
10-Aug-18	7.22	0.001
4-Oct-18	7.35	0.01
10-Jan-19	7.08	0.00105
23-Apr-19	7.42	0.000952
1-Oct-19	7.53	0.000798
17-Jun-20	7.37	0.00105
9-Oct-20	7.52	0.00106
30-Mar-21	7.24	0.000755
15-Oct-21	7.47	0.00115



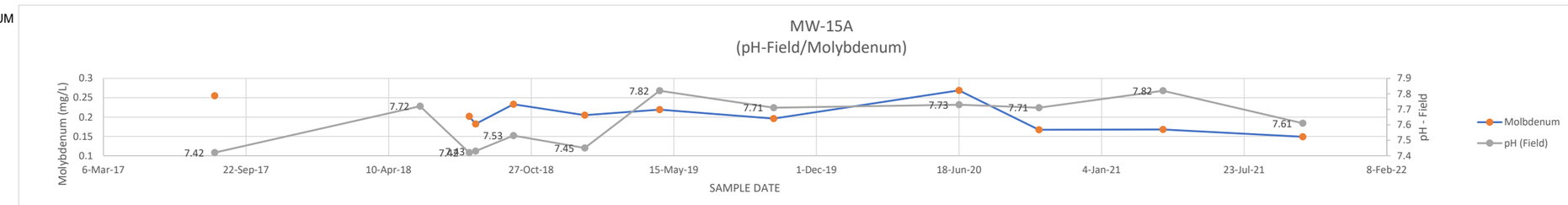
MW-14A

DATE	pH Field	MOLYBDENUM
9-Aug-17	6.75	0.00223
17-May-18	7.1	
1-Aug-18	6.82	0.001
4-Oct-18	6.93	0.01
11-Jan-19	6.9	0.0017
24-Apr-19	7.28	0.00104
2-Oct-19	7.1	0.000709
17-Jun-20	7.04	0.00076
8-Oct-20	7.1	0.0006
31-Mar-21	7.33	0.0006
13-Oct-21	7	0.0006



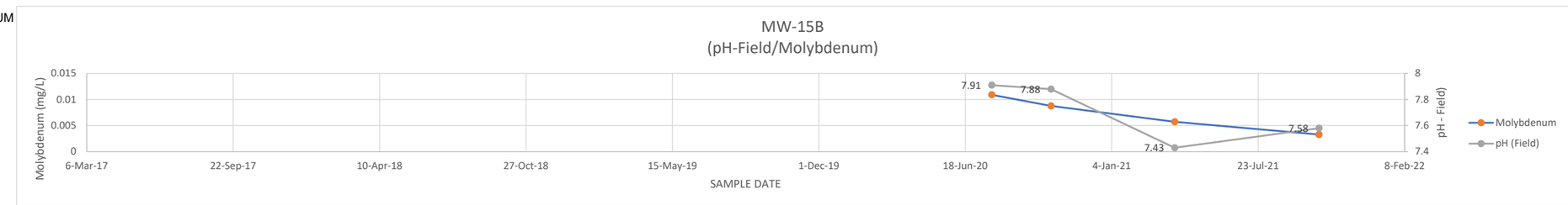
MW-15A

DATE	pH Field	MOLYBDENUM
9-Aug-17	7.42	0.255
24-May-18	7.72	
1-Aug-18	7.42	0.202
10-Aug-18	7.43	0.182
2-Oct-18	7.53	0.233
10-Jan-19	7.45	0.205
25-Apr-19	7.82	0.219
2-Oct-19	7.71	0.196
18-Jun-20	7.73	0.269
8-Oct-20	7.71	0.167
31-Mar-21	7.82	0.168
13-Oct-21	7.61	0.149



MW-15B

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.91	0.0109
13-Oct-20	7.88	0.00876
31-Mar-21	7.43	0.00571
14-Oct-21	7.58	0.00328

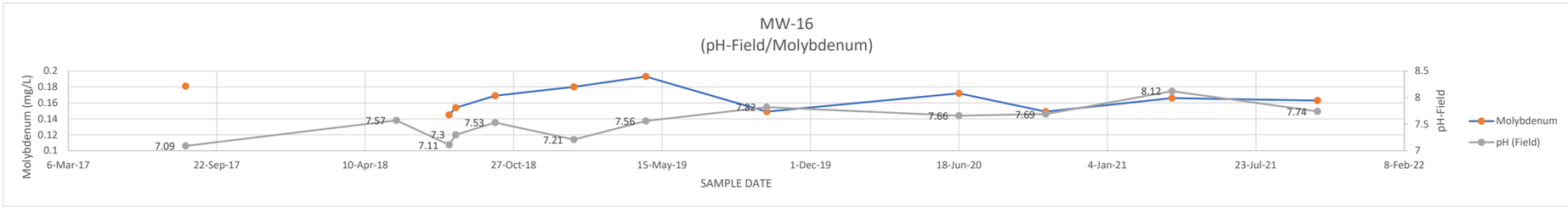


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3A
CHANGES IN PH (FIELD) AND MOLYBDENUM CONCENTRATIONS

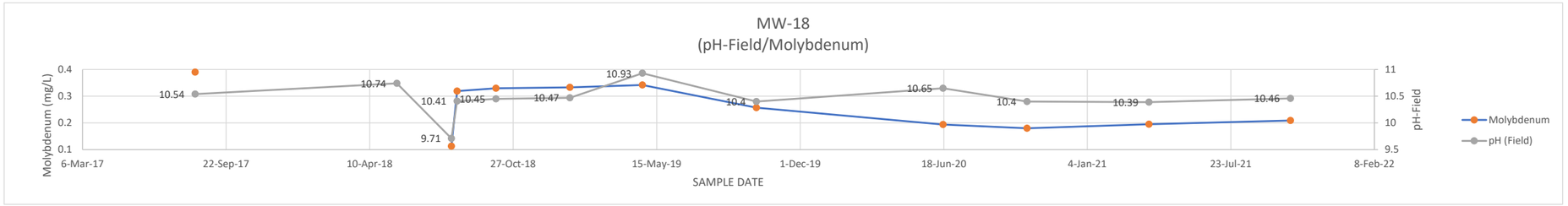
MW-16

DATE	pH Field	MOLYBDENUM
11-Aug-17	7.09	0.181
22-May-18	7.57	
1-Aug-18	7.11	0.145
10-Aug-18	7.3	0.154
2-Oct-18	7.53	0.169
16-Jan-19	7.21	0.18
23-Apr-19	7.56	0.193
3-Oct-19	7.82	0.149
18-Jun-20	7.66	0.172
13-Oct-20	7.69	0.149
1-Apr-21	8.12	0.166
14-Oct-21	7.74	0.163



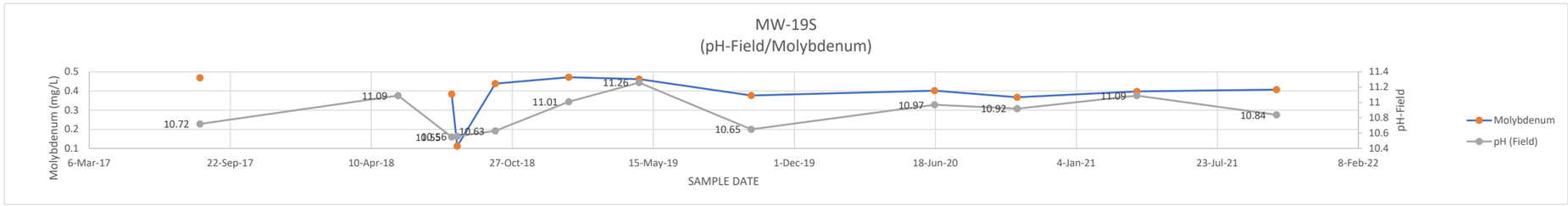
MW-18

DATE	pH Field	MOLYBDENUM
10-Aug-17	10.54	0.39
18-May-18	10.74	
2-Aug-18	9.71	0.113
10-Aug-18	10.41	0.319
3-Oct-18	10.45	0.33
14-Jan-19	10.47	0.333
25-Apr-19	10.93	0.342
1-Oct-19	10.4	0.257
17-Jun-20	10.65	0.194
12-Oct-20	10.4	0.18
31-Mar-21	10.39	0.195
14-Oct-21	10.46	0.209



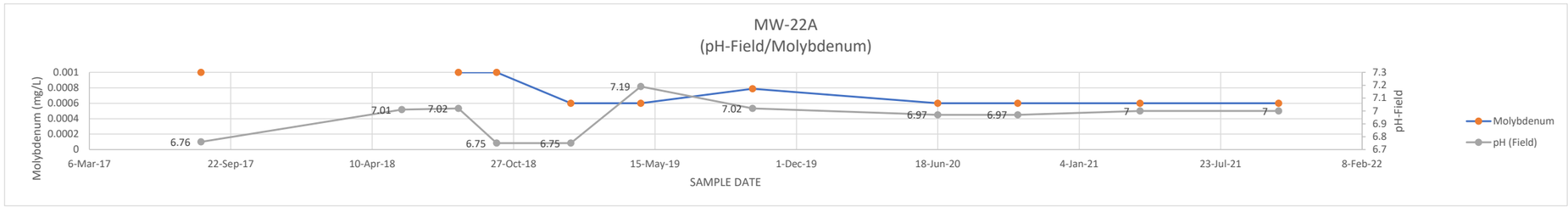
MW-19S

DATE	pH Field	MOLYBDENUM
10-Aug-17	10.72	0.469
18-May-18	11.09	
2-Aug-18	10.55	0.384
10-Aug-18	10.56	0.112
3-Oct-18	10.63	0.439
15-Jan-19	11.01	0.472
25-Apr-19	11.26	0.462
1-Oct-19	10.65	0.377
17-Jun-20	10.97	0.402
12-Oct-20	10.92	0.367
31-Mar-21	11.09	0.398
15-Oct-21	10.84	0.407



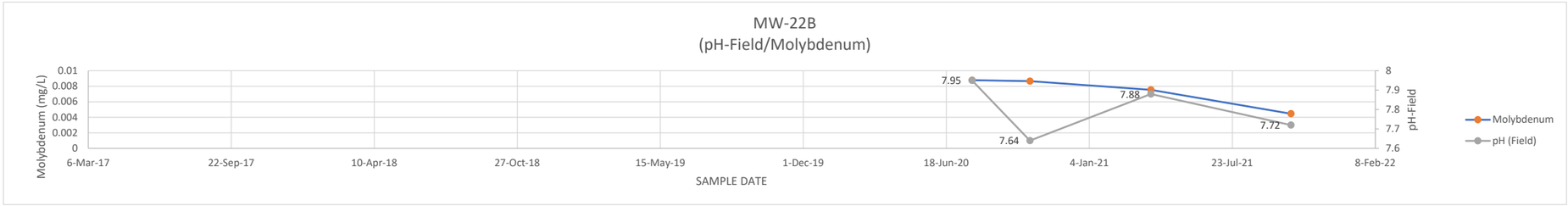
MW-22A

DATE	pH Field	MOLYBDENUM
11-Aug-17	6.76	0.001
22-May-18	7.01	
10-Aug-18	7.02	0.001
3-Oct-18	6.75	0.001
16-Jan-19	6.75	0.0006
25-Apr-19	7.19	0.0006
30-Sep-19	7.02	0.000787
18-Jun-20	6.97	0.0006
9-Oct-20	6.97	0.0006
31-Mar-21	7	0.0006
13-Oct-21	7	0.0006



MW-22B

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.95	0.00878
13-Oct-20	7.64	0.00866
31-Mar-21	7.88	0.00753
13-Oct-21	7.72	0.00446

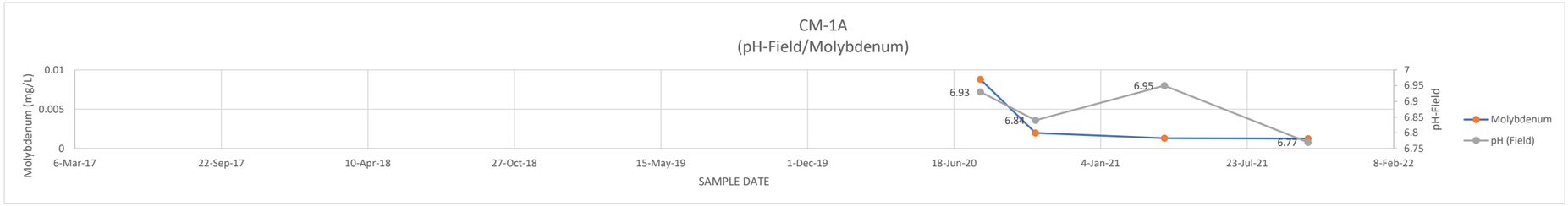


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3A
CHANGES IN PH (FIELD) AND MOLYBDENUM CONCENTRATIONS

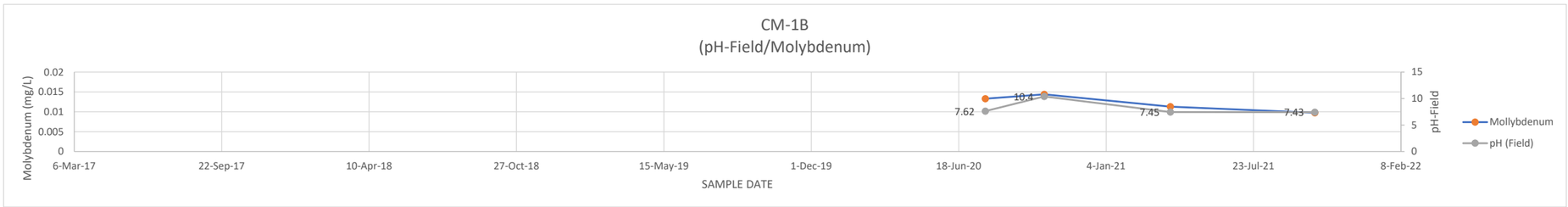
CM-1A

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	6.93	0.0088
7-Oct-20	6.84	0.00198
1-Apr-21	6.95	0.00132
14-Oct-21	6.77	0.00127



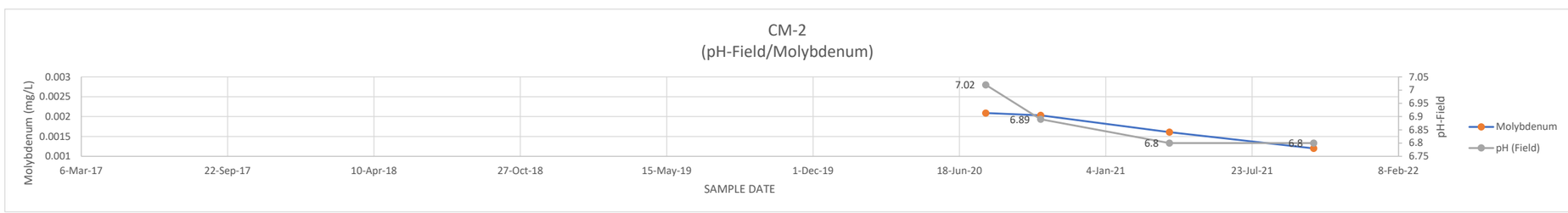
CM-1B

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.62	0.0133
12-Oct-20	10.4	0.0144
1-Apr-21	7.45	0.0113
14-Oct-21	7.43	0.00976



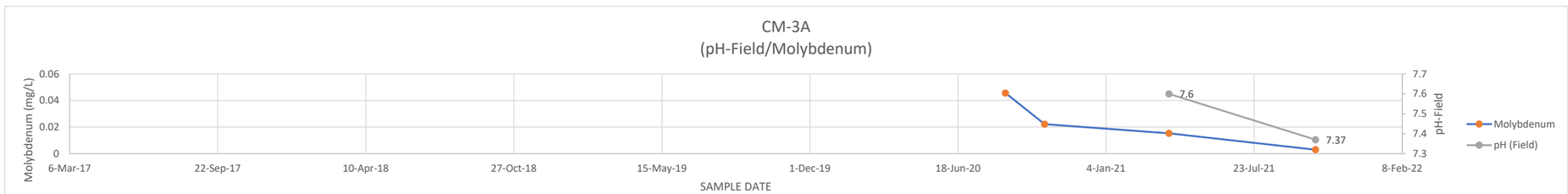
CM-2

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.02	0.00209
7-Oct-20	6.89	0.00203
1-Apr-21	6.8	0.00161
15-Oct-21	6.8	0.0012



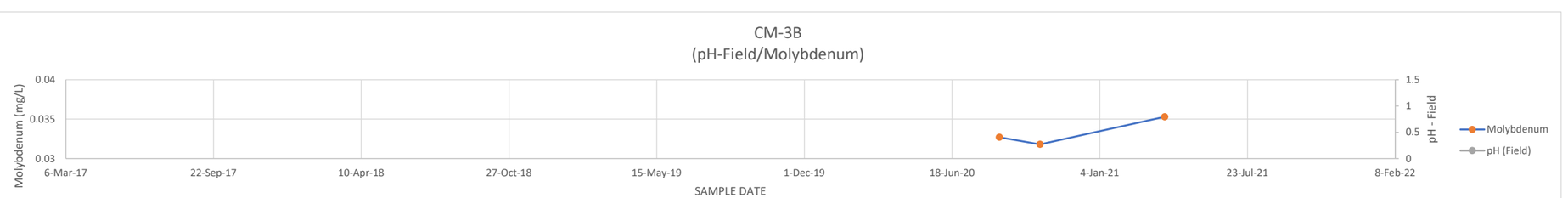
CM-3A

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	7.6	0.0153
14-Oct-21	7.37	0.00297



CM-3B

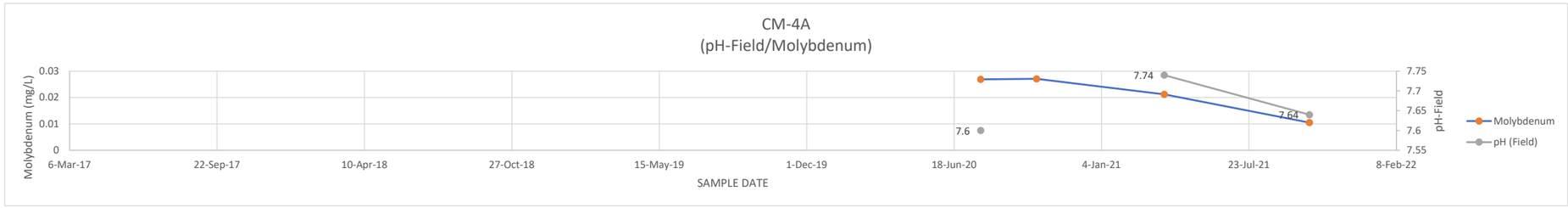
DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		



ATTACHMENT F-3A
CHANGES IN PH (FIELD) AND MOLYBDENUM CONCENTRATIONS

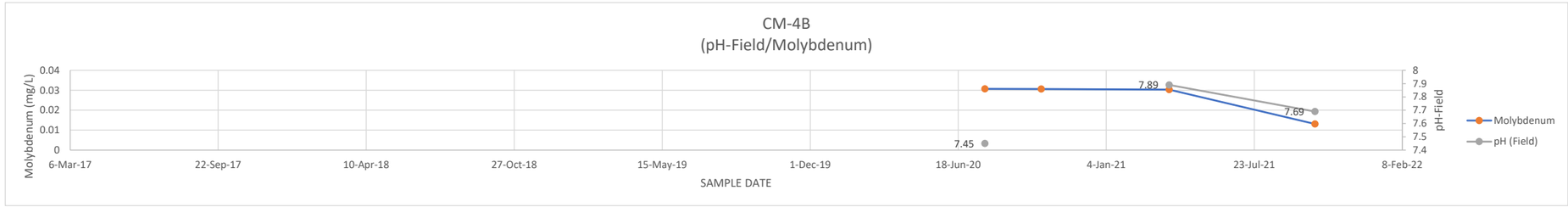
CM-4A

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.6	0.0269
8-Oct-20		0.0271
30-Mar-21	7.74	0.0212
13-Oct-21	7.64	0.0105



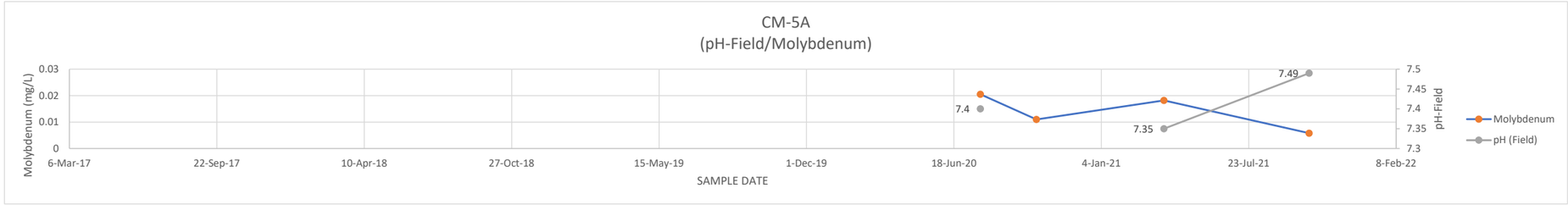
CM-4B

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.45	0.0307
8-Oct-20		0.0306
30-Mar-21	7.89	0.0303
13-Oct-21	7.69	0.0131



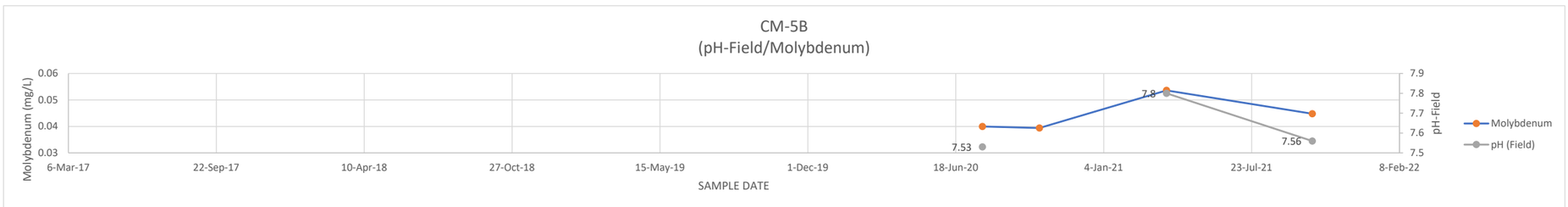
CM-5A

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.4	0.0205
8-Oct-20		0.011
30-Mar-21	7.35	0.0182
13-Oct-21	7.49	0.0058



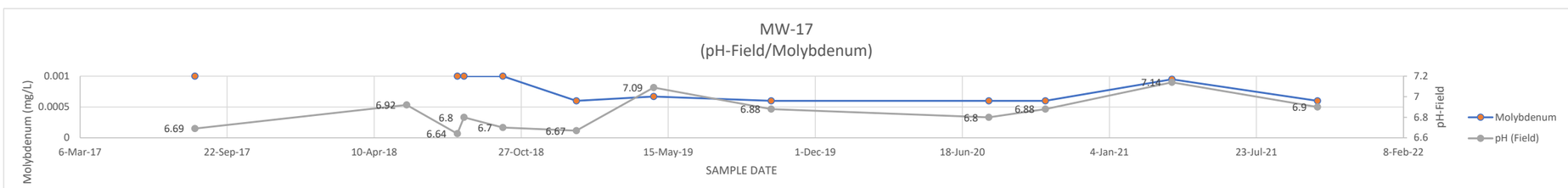
CM-5B

DATE	pH Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.53	0.04
9-Oct-20		0.0394
30-Mar-21	7.8	0.0536
13-Oct-21	7.56	0.0448



MW-17

DATE	pH Field	MOLYBDENUM
9-Aug-17	6.69	0.001
24-May-18	6.92	
1-Aug-18	6.64	0.001
10-Aug-18	6.8	0.001
2-Oct-18	6.7	0.001
10-Jan-19	6.67	0.0006
25-Apr-19	7.09	0.000671
2-Oct-19	6.88	0.0006
24-Jul-20	6.8	0.0006
9-Oct-20	6.88	0.0006
30-Mar-21	7.14	0.00095
14-Oct-21	6.9	0.0006

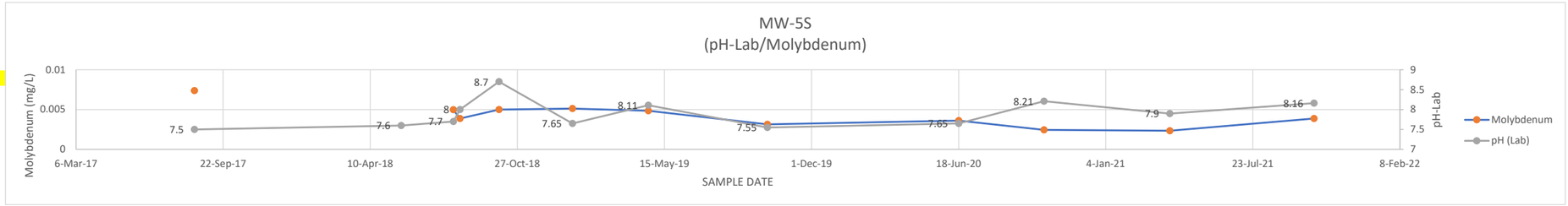


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3B
CHANGES IN PH (LAB) AND MOLYBDENUM CONCENTRATIONS

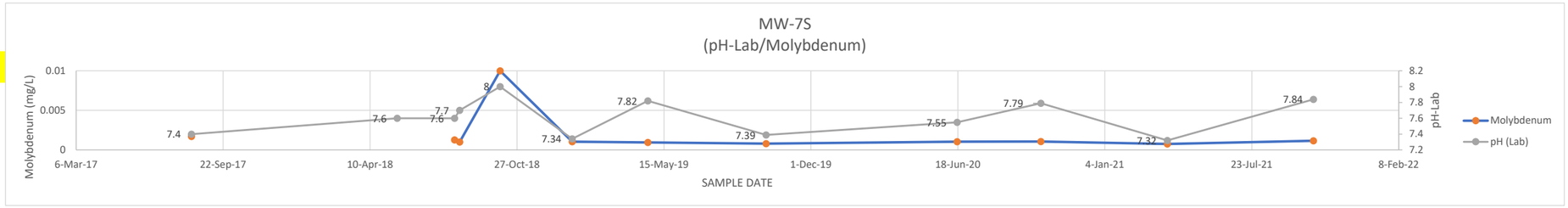
MW-5S

DATE	pH Lab	MOLYBDENUM
14-Aug-17	7.5	0.00737
22-May-18	7.6	
1-Aug-18	7.7	0.00497
10-Aug-18	8	0.00387
2-Oct-18	8.7	0.005
10-Jan-19	7.65	0.00512
23-Apr-19	8.11	0.00485
2-Oct-19	7.55	0.00315
18-Jun-20	7.65	0.00361
12-Oct-20	8.21	0.00244
1-Apr-21	7.9	0.00234
14-Oct-21	8.16	0.00387



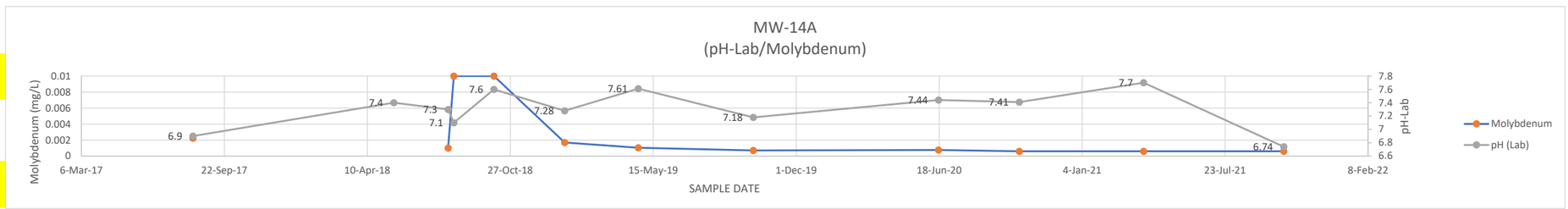
MW-7S

DATE	pH Lab	MOLYBDENUM
10-Aug-17	7.4	0.00171
17-May-18	7.6	
3-Aug-18	7.6	0.00127
10-Aug-18	7.7	0.001
4-Oct-18	8	0.01
10-Jan-19	7.34	0.00105
23-Apr-19	7.82	0.000952
1-Oct-19	7.39	0.000798
17-Jun-20	7.55	0.00105
9-Oct-20	7.79	0.00106
30-Mar-21	7.32	0.000755
15-Oct-21	7.84	0.00115



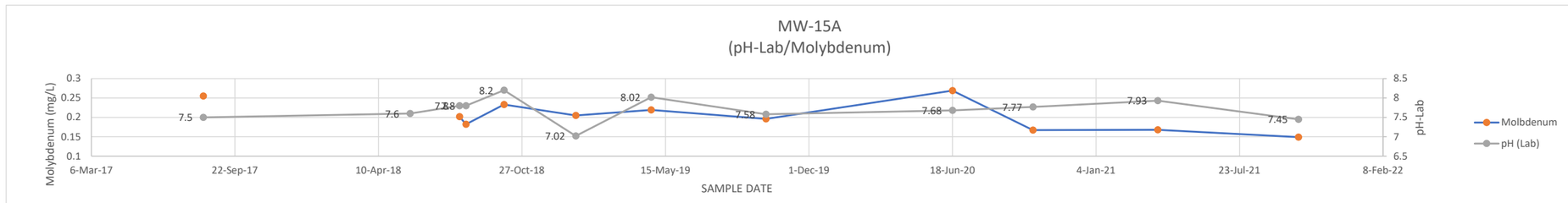
MW-14A

DATE	pH Lab	MOLYBDENUM
9-Aug-17	6.9	0.00223
17-May-18	7.4	
1-Aug-18	7.3	0.001
9-Aug-18	7.1	0.01
4-Oct-18	7.6	0.01
11-Jan-19	7.28	0.0017
24-Apr-19	7.61	0.00104
2-Oct-19	7.18	0.000709
17-Jun-20	7.44	0.00076
8-Oct-20	7.41	0.0006
31-Mar-21	7.7	0.0006
13-Oct-21	6.74	0.0006



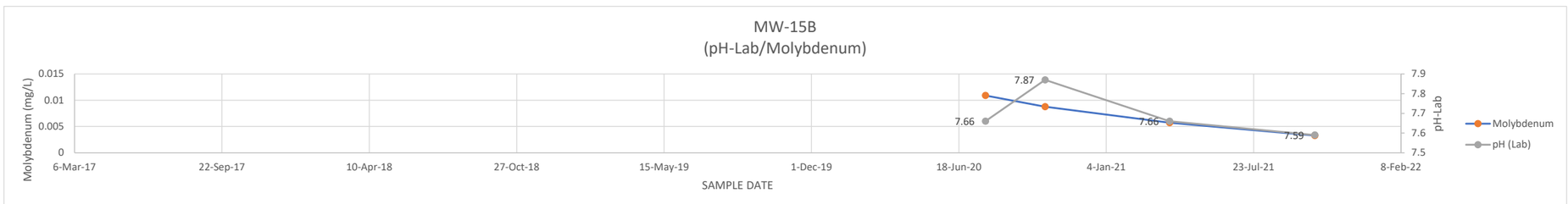
MW-15A

DATE	pH Lab	MOLYBDENUM
9-Aug-17	7.5	0.255
24-May-18	7.6	
1-Aug-18	7.8	0.202
10-Aug-18	7.8	0.182
2-Oct-18	8.2	0.233
10-Jan-19	7.02	0.205
25-Apr-19	8.02	0.219
2-Oct-19	7.58	0.196
18-Jun-20	7.68	0.269
8-Oct-20	7.77	0.167
31-Mar-21	7.93	0.168
13-Oct-21	7.45	0.149



MW-15B

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.66	0.0109
13-Oct-20	7.87	0.00876
31-Mar-21	7.66	0.00571
14-Oct-21	7.59	0.00328

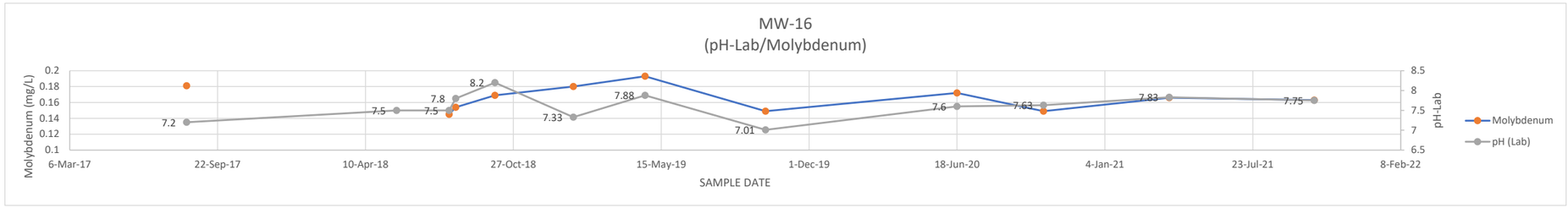


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3B
CHANGES IN PH (LAB) AND MOLYBDENUM CONCENTRATIONS

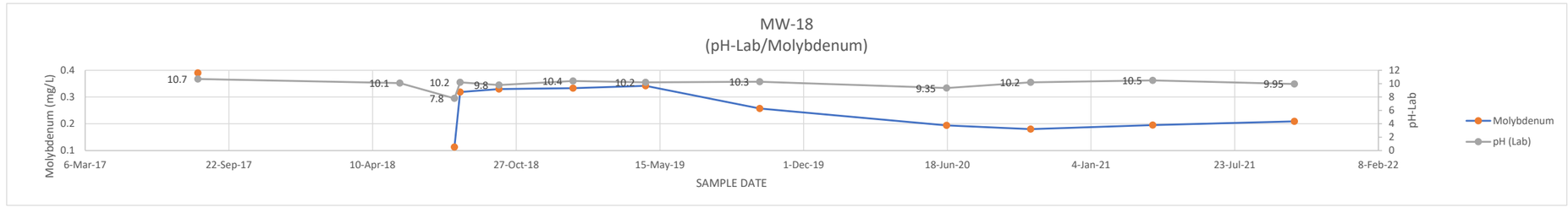
MW-16

DATE	pH Lab	MOLYBDENUM
11-Aug-17	7.2	0.181
22-May-18	7.5	
1-Aug-18	7.5	0.145
10-Aug-18	7.8	0.154
2-Oct-18	8.2	0.169
16-Jan-19	7.33	0.18
23-Apr-19	7.88	0.193
3-Oct-19	7.01	0.149
18-Jun-20	7.6	0.172
13-Oct-20	7.63	0.149
1-Apr-21	7.83	0.166
14-Oct-21	7.75	0.163



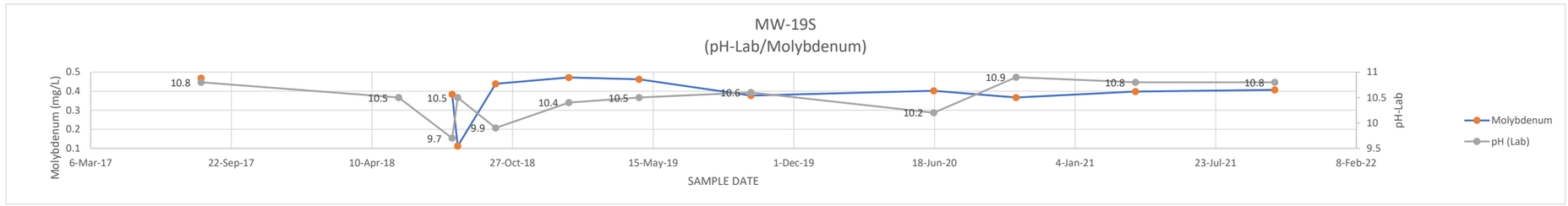
MW-18

DATE	pH Lab	MOLYBDENUM
10-Aug-17	10.7	0.39
18-May-18	10.1	
2-Aug-18	7.8	0.113
10-Aug-18	10.2	0.319
3-Oct-18	9.8	0.33
14-Jan-19	10.4	0.333
25-Apr-19	10.2	0.342
1-Oct-19	10.3	0.257
17-Jun-20	9.35	0.194
12-Oct-20	10.2	0.18
31-Mar-21	10.5	0.195
14-Oct-21	9.95	0.209



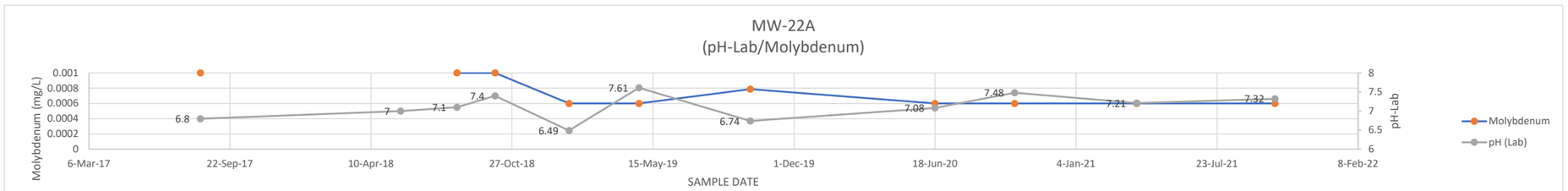
MW-19S

DATE	pH Lab	MOLYBDENUM
10-Aug-17	10.8	0.469
18-May-18	10.5	
2-Aug-18	9.7	0.384
10-Aug-18	10.5	0.112
3-Oct-18	9.9	0.439
15-Jan-19	10.4	0.472
25-Apr-19	10.5	0.462
1-Oct-19	10.6	0.377
17-Jun-20	10.2	0.402
12-Oct-20	10.9	0.367
31-Mar-21	10.8	0.398
15-Oct-21	10.8	0.407



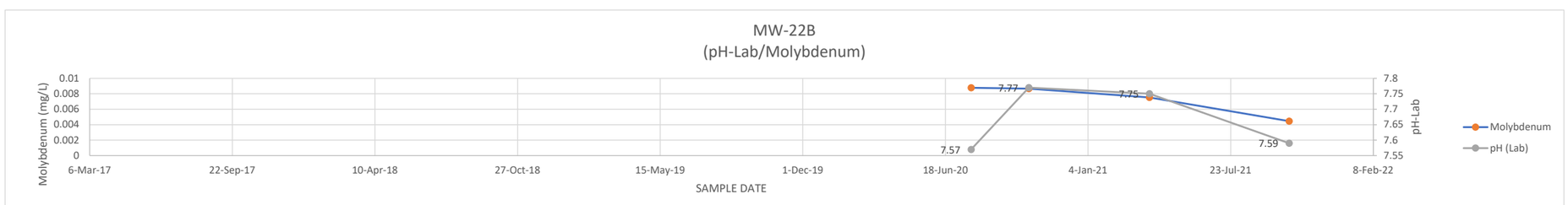
MW-22A

DATE	pH Lab	MOLYBDENUM
11-Aug-17	6.8	0.001
22-May-18	7	
10-Aug-18	7.1	0.001
3-Oct-18	7.4	0.001
16-Jan-19	6.49	0.0006
25-Apr-19	7.61	0.0006
30-Sep-19	6.74	0.000787
18-Jun-20	7.08	0.0006
9-Oct-20	7.48	0.0006
31-Mar-21	7.21	0.0006
13-Oct-21	7.32	0.0006



MW-22B

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.57	0.00878
13-Oct-20	7.77	0.00866
31-Mar-21	7.75	0.00753
13-Oct-21	7.59	0.00446

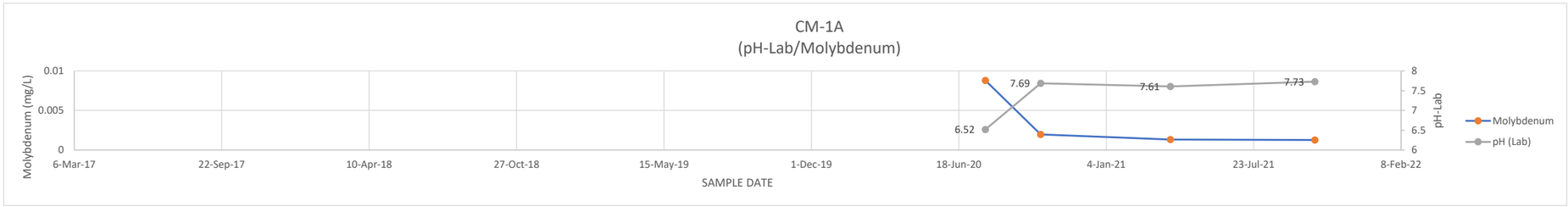


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-3B
CHANGES IN PH (LAB) AND MOLYBDENUM CONCENTRATIONS

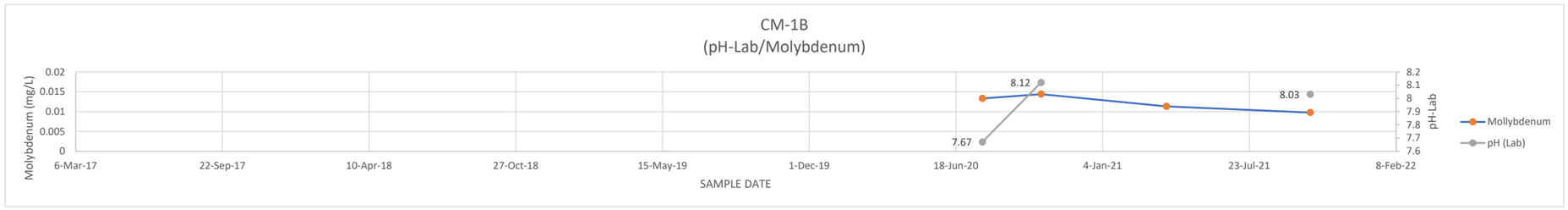
CM-1A

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	6.52	0.0088
7-Oct-20	7.69	0.00198
1-Apr-21	7.61	0.00132
14-Oct-21	7.73	0.00127



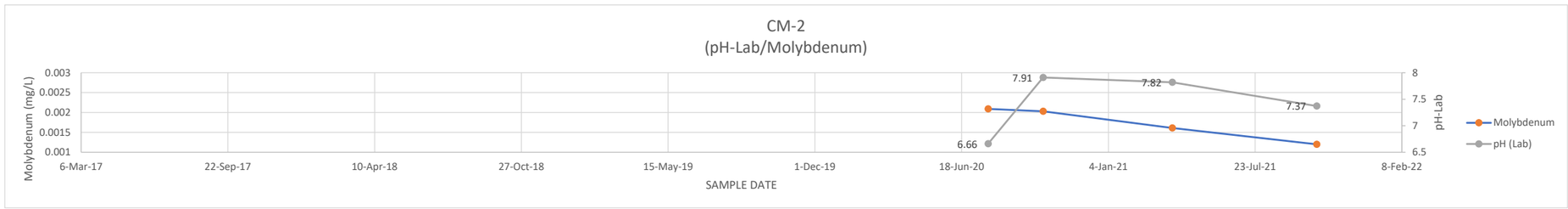
CM-1B

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.67	0.0133
12-Oct-20	8.12	0.0144
1-Apr-21		0.0113
14-Oct-21	8.03	0.00976



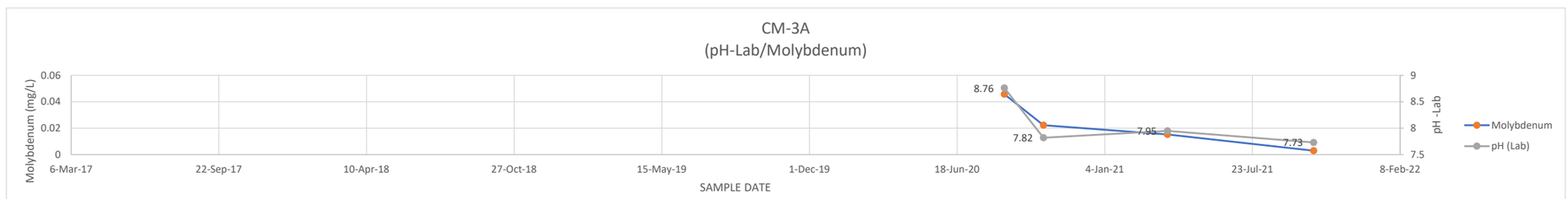
CM-2

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	6.66	0.00209
7-Oct-20	7.91	0.00203
1-Apr-21	7.82	0.00161
15-Oct-21	7.37	0.0012



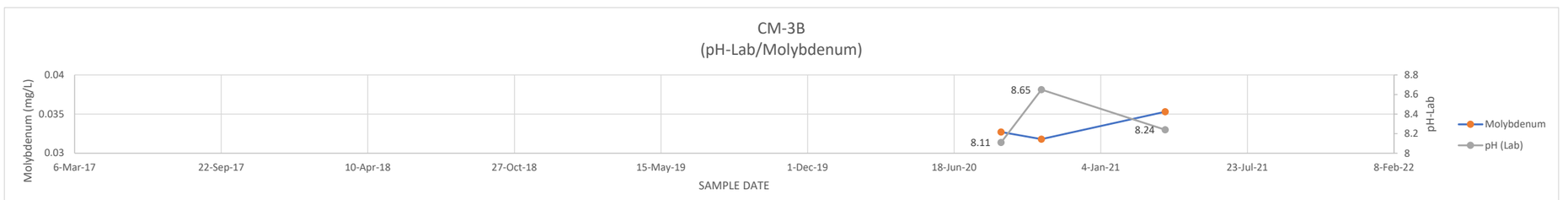
CM-3A

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	8.76	0.0457
13-Oct-20	7.82	0.0222
30-Mar-21	7.95	0.0153
14-Oct-21	7.73	0.00297



CM-3B

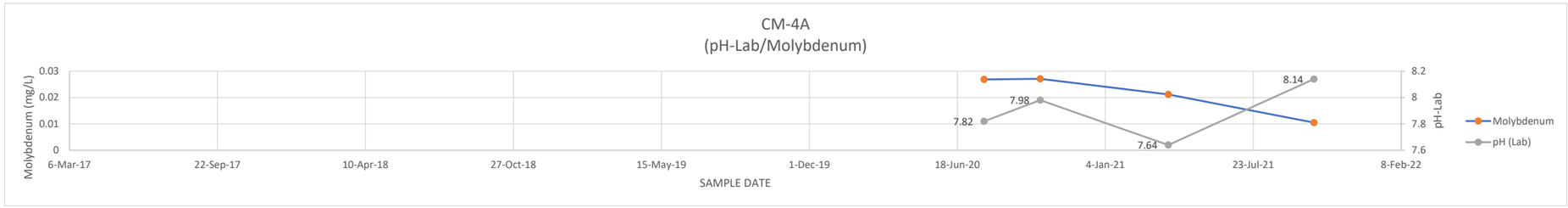
DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	8.11	0.0327
15-Oct-20	8.65	0.0318
2-Apr-21	8.24	0.0353
11-Oct-21		



ATTACHMENT F-3B
CHANGES IN PH (LAB) AND MOLYBDENUM CONCENTRATIONS

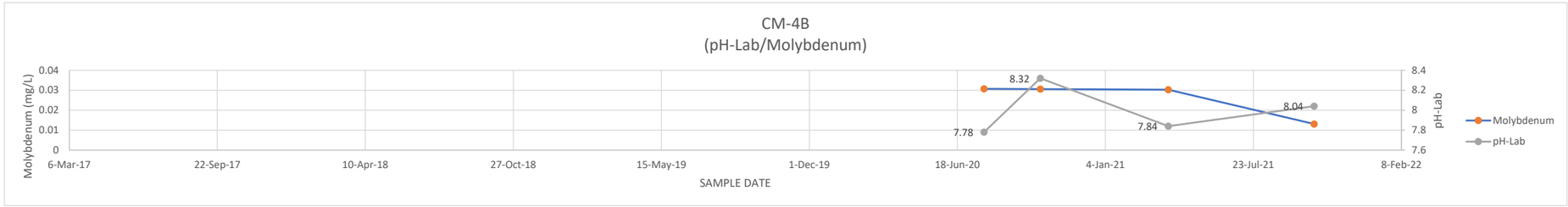
CM-4A

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.82	0.0269
8-Oct-20	7.98	0.0271
30-Mar-21	7.64	0.0212
13-Oct-21	8.14	0.0105



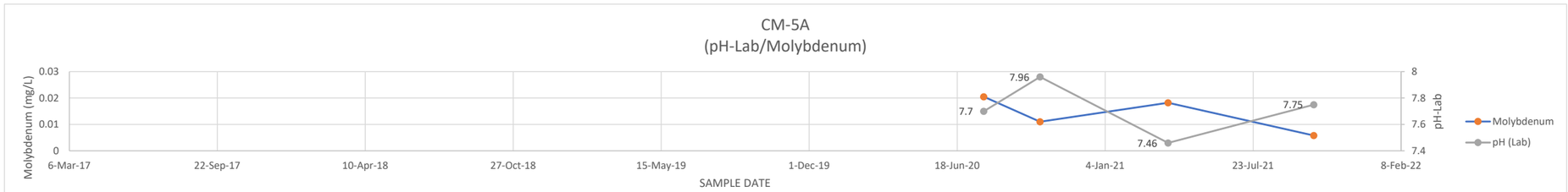
CM-4B

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.78	0.0307
8-Oct-20	8.32	0.0306
30-Mar-21	7.84	0.0303
13-Oct-21	8.04	0.0131



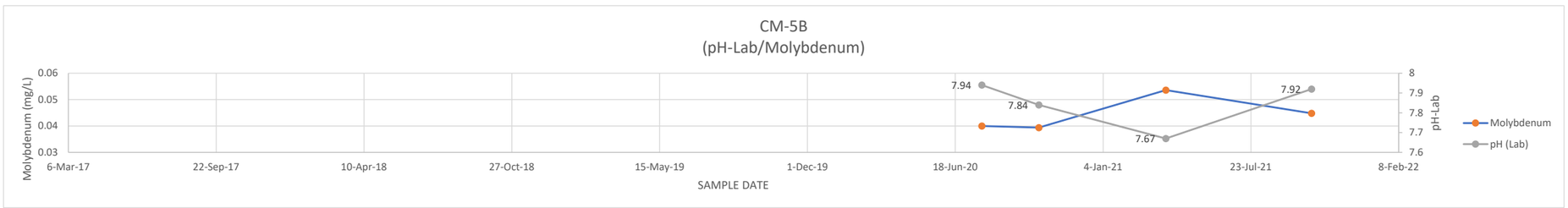
CM-5A

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.7	0.0205
8-Oct-20	7.96	0.011
30-Mar-21	7.46	0.0182
13-Oct-21	7.75	0.0058



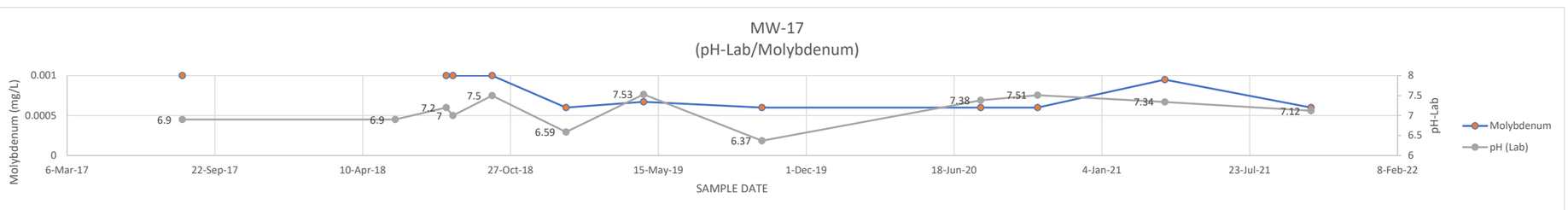
CM-5B

DATE	pH Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	7.94	0.04
9-Oct-20	7.84	0.0394
30-Mar-21	7.67	0.0536
13-Oct-21	7.92	0.0448



MW-17

DATE	pH Lab	MOLYBDENUM
9-Aug-17	6.9	0.001
24-May-18	6.9	
1-Aug-18	7.2	0.001
10-Aug-18	7	0.001
2-Oct-18	7.5	0.001
10-Jan-19	6.59	0.0006
25-Apr-19	7.53	0.000671
2-Oct-19	6.37	0.0006
24-Jul-20	7.38	0.0006
9-Oct-20	7.51	0.0006
30-Mar-21	7.34	0.00095
14-Oct-21	7.12	0.0006

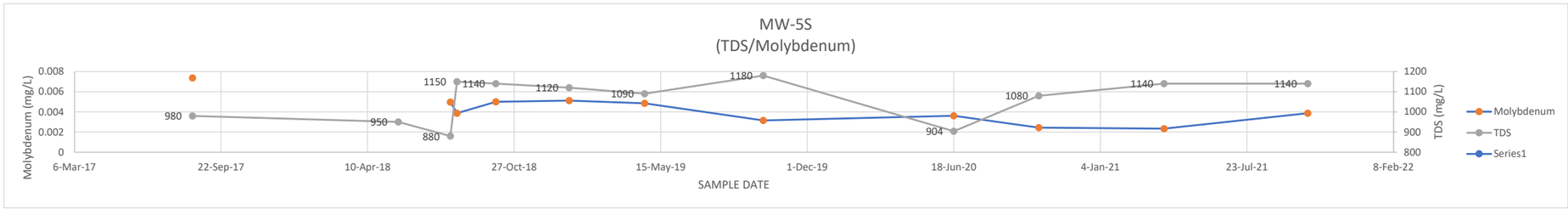


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-4
CHANGES IN TDS AND MOLYBDENUM CONCENTRATIONS

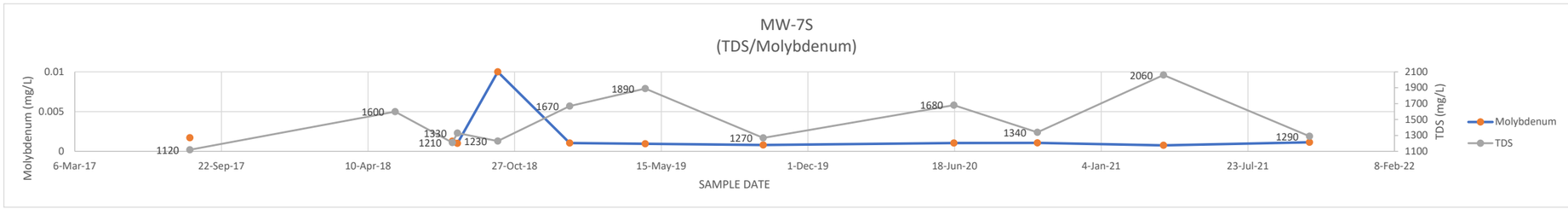
MW-5S

DATE	TDS	MOLYBDENUM
14-Aug-17	980	0.00737
22-May-18	950	
1-Aug-18	880	0.00497
10-Aug-18	1150	0.00387
2-Oct-18	1140	0.005
10-Jan-19	1120	0.00512
23-Apr-19	1090	0.00485
2-Oct-19	1180	0.00315
18-Jun-20	904	0.00361
12-Oct-20	1080	0.00244
1-Apr-21	1140	0.00234
14-Oct-21	1140	0.00387



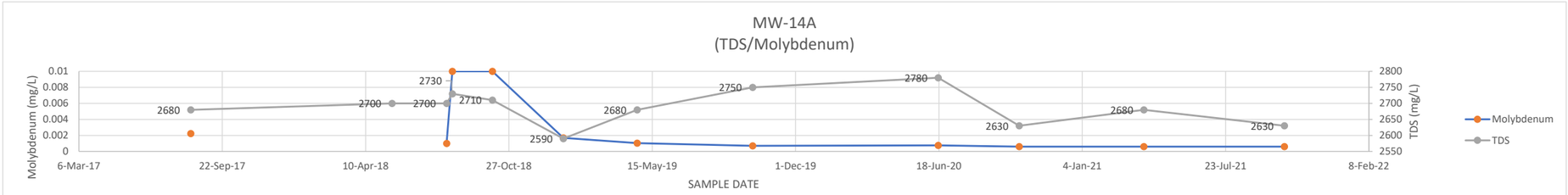
MW-7S

DATE	TDS	MOLYBDENUM
10-Aug-17	1120	0.00171
17-May-18	1600	
3-Aug-18	1210	0.00127
10-Aug-18	1330	0.001
4-Oct-18	1230	0.01
10-Jan-19	1670	0.00105
23-Apr-19	1890	0.000952
1-Oct-19	1270	0.000798
17-Jun-20	1680	0.00105
9-Oct-20	1340	0.00106
30-Mar-21	2060	0.000755
15-Oct-21	1290	0.00115



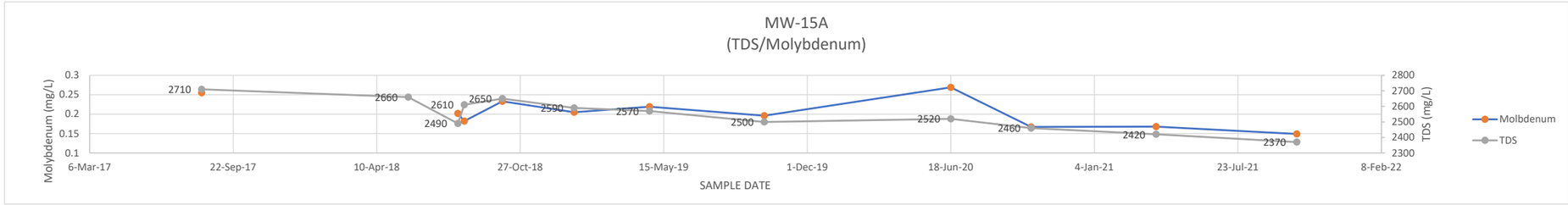
MW-14A

DATE	TDS	MOLYBDENUM
9-Aug-17	2680	0.00223
17-May-18	2700	
1-Aug-18	2700	0.001
9-Aug-18	2730	0.01
4-Oct-18	2710	0.01
11-Jan-19	2590	0.0017
24-Apr-19	2680	0.00104
2-Oct-19	2750	0.000709
17-Jun-20	2780	0.00076
8-Oct-20	2630	0.0006
31-Mar-21	2680	0.0006
13-Oct-21	2630	0.0006



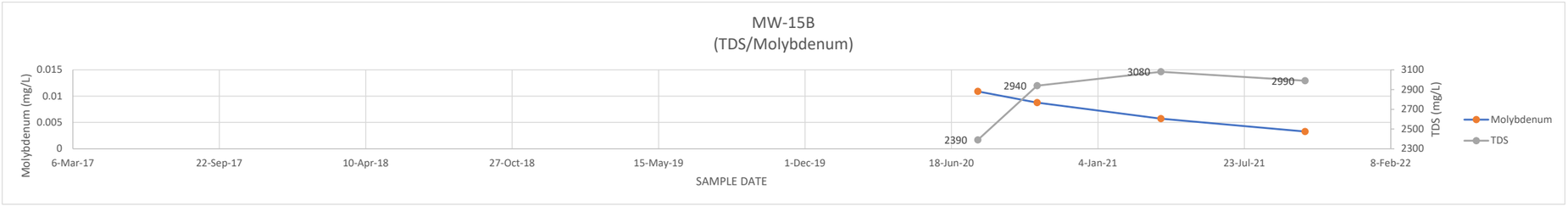
MW-15A

DATE	TDS	MOLYBDENUM
9-Aug-17	2710	0.255
24-May-18	2660	
1-Aug-18	2490	0.202
10-Aug-18	2610	0.182
2-Oct-18	2650	0.233
10-Jan-19	2590	0.205
25-Apr-19	2570	0.219
2-Oct-19	2500	0.196
18-Jun-20	2520	0.269
8-Oct-20	2460	0.167
31-Mar-21	2420	0.168
13-Oct-21	2370	0.149



MW-15B

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2390	0.0109
13-Oct-20	2940	0.00876
31-Mar-21	3080	0.00571
14-Oct-21	2990	0.00328

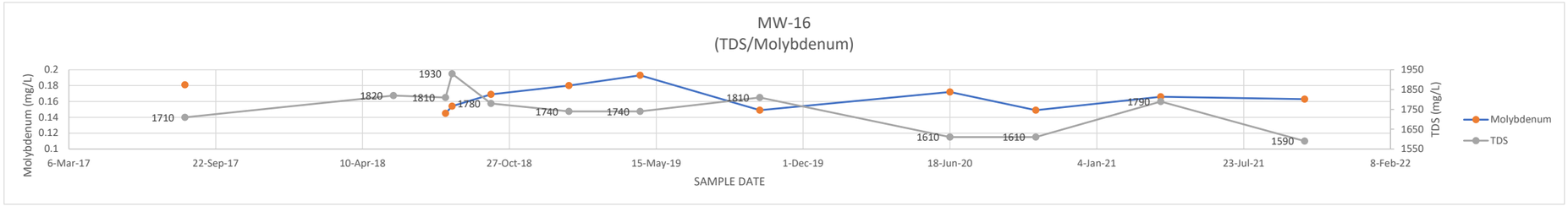


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-4
CHANGES IN TDS AND MOLYBDENUM CONCENTRATIONS

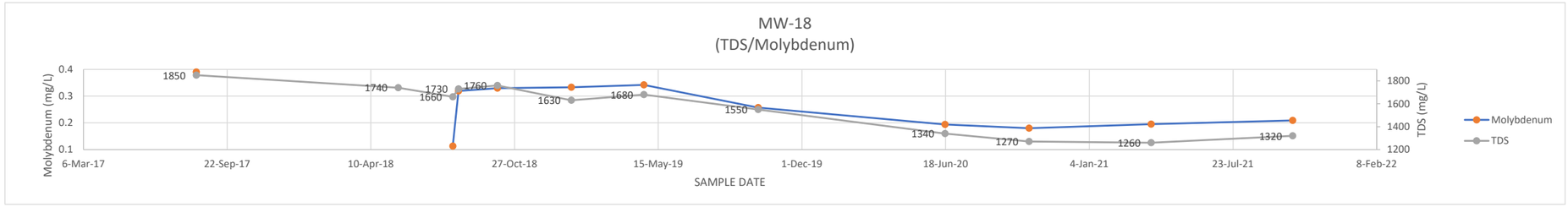
MW-16

DATE	TDS	MOLYBDENUM
11-Aug-17	1710	0.181
22-May-18	1820	
1-Aug-18	1810	0.145
10-Aug-18	1930	0.154
2-Oct-18	1780	0.169
16-Jan-19	1740	0.18
23-Apr-19	1740	0.193
3-Oct-19	1810	0.149
18-Jun-20	1610	0.172
13-Oct-20	1610	0.149
1-Apr-21	1790	0.166
14-Oct-21	1590	0.163



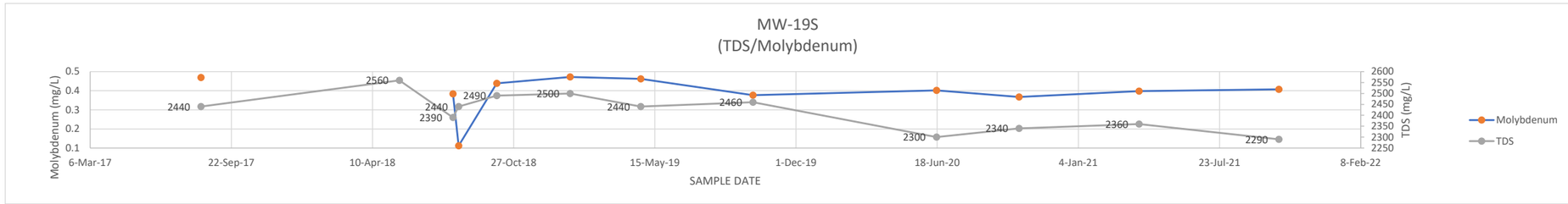
MW-18

DATE	TDS	MOLYBDENUM
10-Aug-17	1850	0.39
18-May-18	1740	
2-Aug-18	1660	0.113
10-Aug-18	1730	0.319
3-Oct-18	1760	0.33
14-Jan-19	1630	0.333
25-Apr-19	1680	0.342
1-Oct-19	1550	0.257
17-Jun-20	1340	0.194
12-Oct-20	1270	0.18
31-Mar-21	1260	0.195
14-Oct-21	1320	0.209



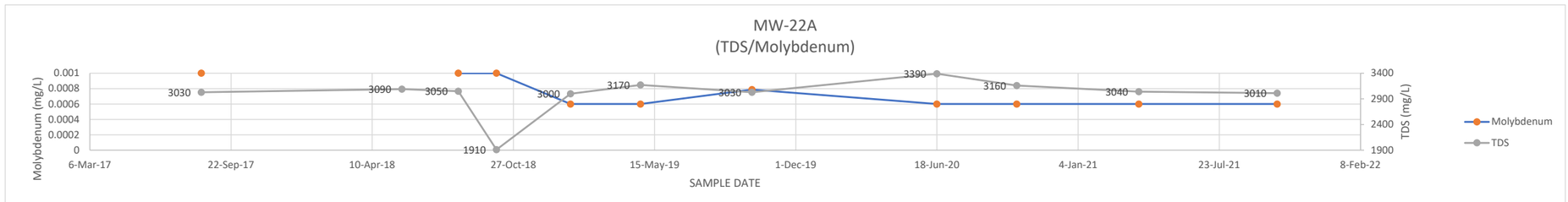
MW-19S

DATE	TDS	MOLYBDENUM
10-Aug-17	2440	0.469
18-May-18	2560	
2-Aug-18	2390	0.384
10-Aug-18	2440	0.112
3-Oct-18	2490	0.439
15-Jan-19	2500	0.472
25-Apr-19	2440	0.462
1-Oct-19	2460	0.377
17-Jun-20	2300	0.402
12-Oct-20	2340	0.367
31-Mar-21	2360	0.398
15-Oct-21	2290	0.407



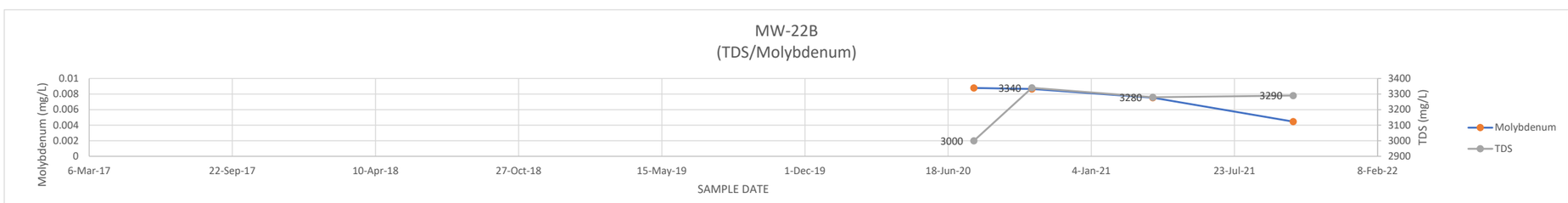
MW-22A

DATE	TDS	MOLYBDENUM
11-Aug-17	3030	0.001
22-May-18	3090	
10-Aug-18	3050	0.001
3-Oct-18	1910	0.001
16-Jan-19	3000	0.0006
25-Apr-19	3170	0.0006
30-Sep-19	3030	0.000787
18-Jun-20	3390	0.0006
9-Oct-20	3160	0.0006
31-Mar-21	3040	0.0006
13-Oct-21	3010	0.0006



MW-22B

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3000	0.00878
13-Oct-20	3340	0.00866
31-Mar-21	3280	0.00753
13-Oct-21	3290	0.00446

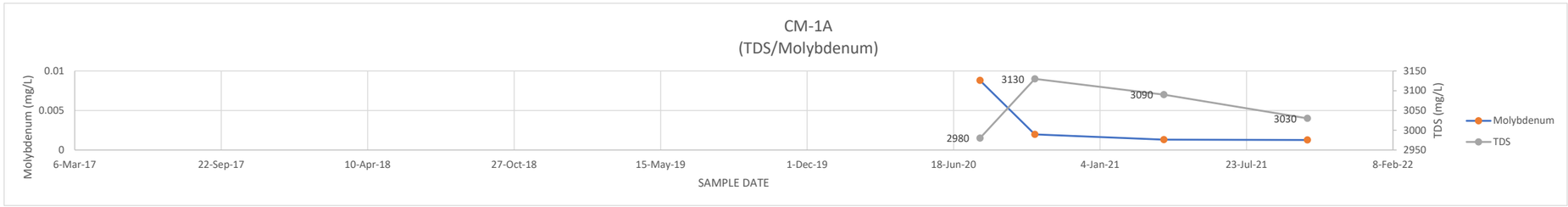


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-4
CHANGES IN TDS AND MOLYBDENUM CONCENTRATIONS

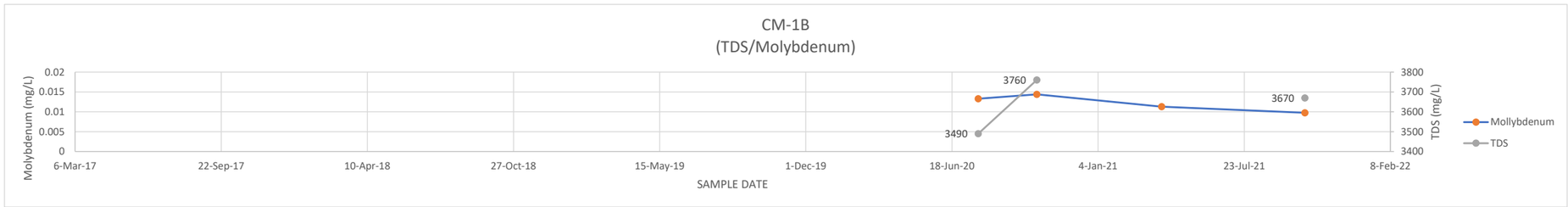
CM-1A

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2980	0.0088
7-Oct-20	3130	0.00198
1-Apr-21	3090	0.00132
14-Oct-21	3030	0.00127



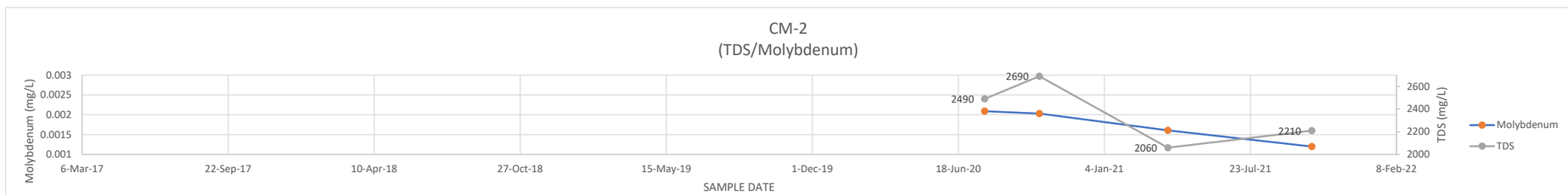
CM-1B

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3490	0.0133
12-Oct-20	3760	0.0144
1-Apr-21		0.0113
14-Oct-21	3670	0.00976



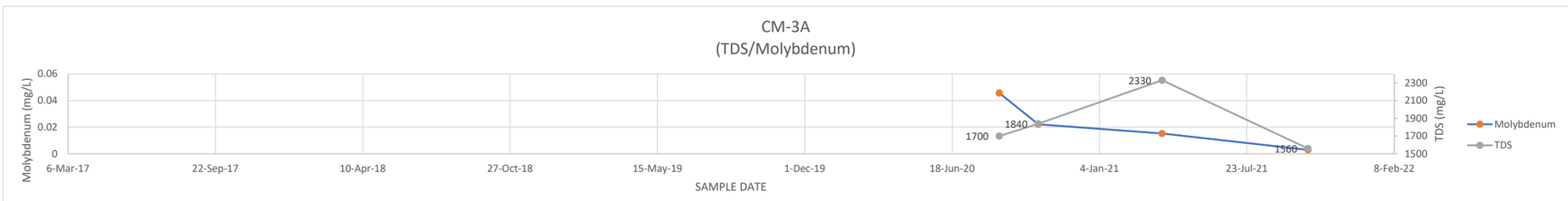
CM-2

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2490	0.00209
7-Oct-20	2690	0.00203
1-Apr-21	2060	0.00161
15-Oct-21	2210	0.0012



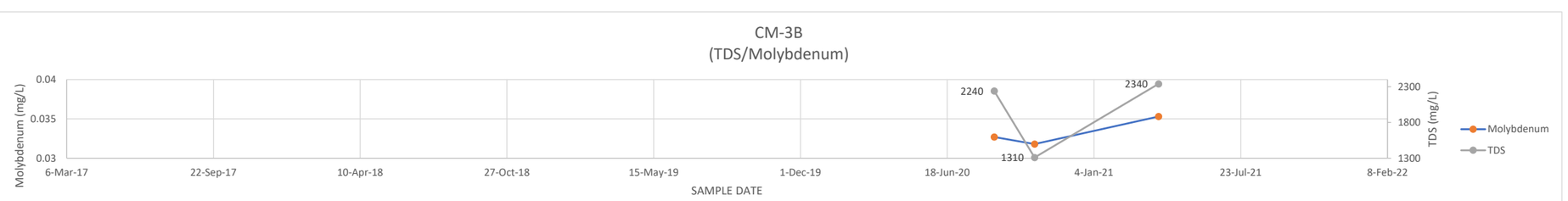
CM-3A

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	1700	0.0457
13-Oct-20	1840	0.0222
30-Mar-21	2330	0.0153
14-Oct-21	1560	0.00297



CM-3B

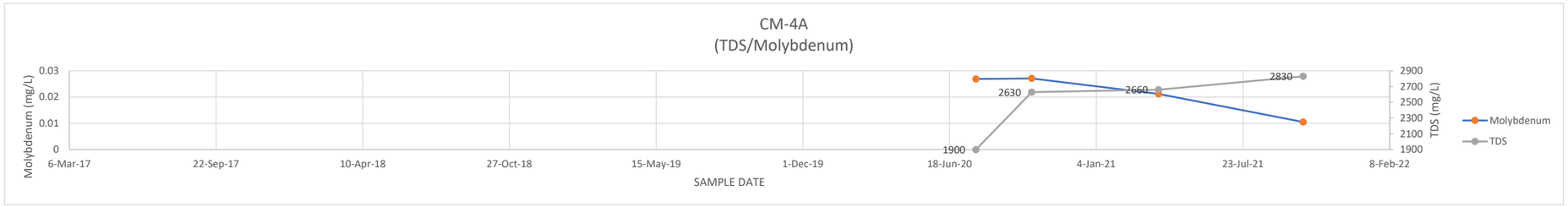
DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	2240	0.0327
15-Oct-20	1310	0.0318
2-Apr-21	2340	0.0353
11-Oct-21		



ATTACHMENT F-4
CHANGES IN TDS AND MOLYBDENUM CONCENTRATIONS

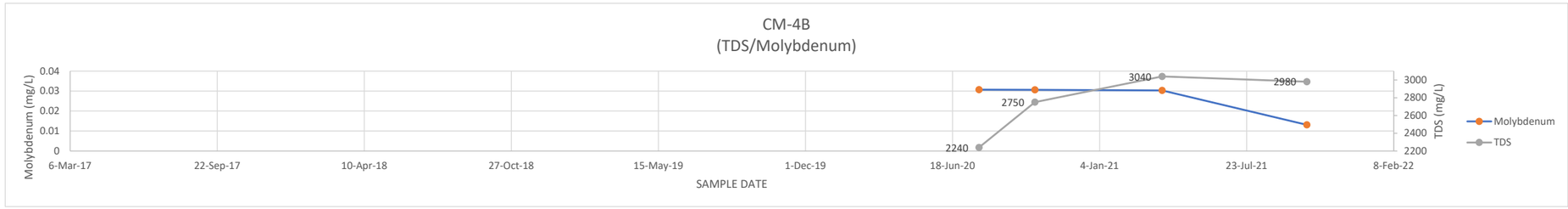
CM-4A

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1900	0.0269
8-Oct-20	2630	0.0271
30-Mar-21	2660	0.0212
13-Oct-21	2830	0.0105



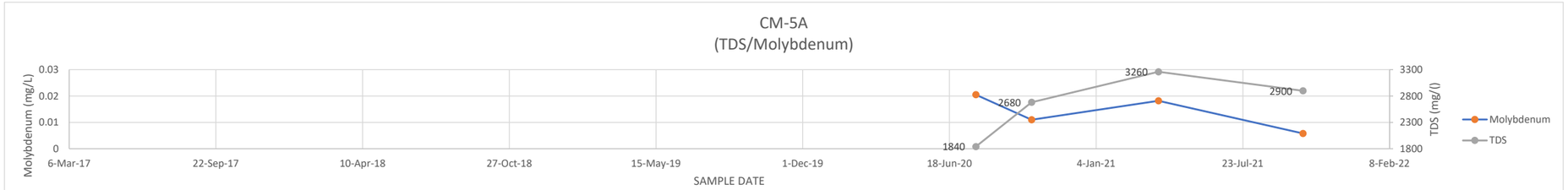
CM-4B

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2240	0.0307
8-Oct-20	2750	0.0306
30-Mar-21	3040	0.0303
13-Oct-21	2980	0.0131



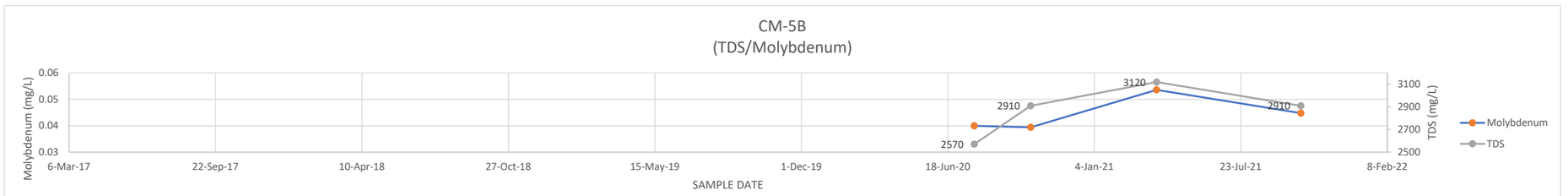
CM-5A

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1840	0.0205
8-Oct-20	2680	0.011
30-Mar-21	3260	0.0182
13-Oct-21	2900	0.0058



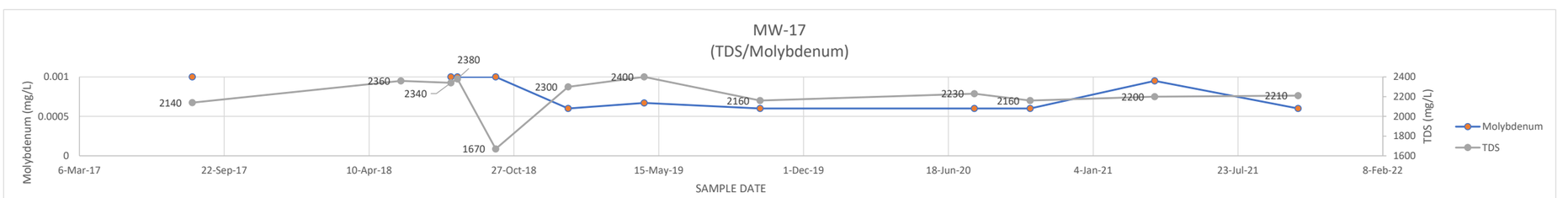
CM-5B

DATE	TDS	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2570	0.04
9-Oct-20	2910	0.0394
30-Mar-21	3120	0.0536
13-Oct-21	2910	0.0448



MW-17

DATE	TDS	MOLYBDENUM
9-Aug-17	2140	0.001
24-May-18	2360	
1-Aug-18	2340	0.001
10-Aug-18	2380	0.001
2-Oct-18	1670	0.001
10-Jan-19	2300	0.0006
25-Apr-19	2400	0.000671
2-Oct-19	2160	0.0006
24-Jul-20	2230	0.0006
9-Oct-20	2160	0.0006
30-Mar-21	2200	0.00095
14-Oct-21	2210	0.0006

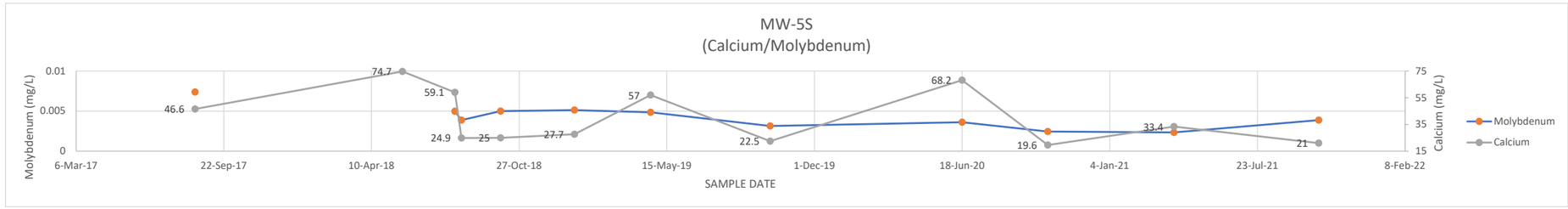


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-5
CHANGES IN CALCIUM AND MOLYBDENUM CONCENTRATIONS

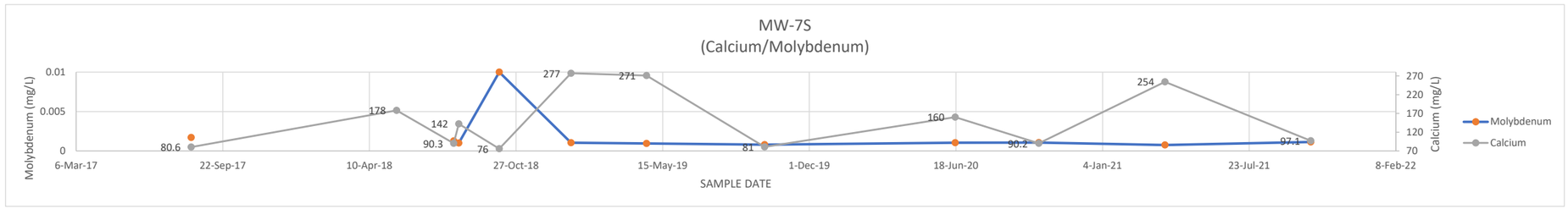
MW-5S

DATE	CALCIUM	MOLYBDENUM
14-Aug-17	46.6	0.00737
22-May-18	74.7	
1-Aug-18	59.1	0.00497
10-Aug-18	24.9	0.00387
2-Oct-18	25	0.005
10-Jan-19	27.7	0.00512
23-Apr-19	57	0.00485
2-Oct-19	22.5	0.00315
18-Jun-20	68.2	0.00361
12-Oct-20	19.6	0.00244
1-Apr-21	33.4	0.00234
14-Oct-21	21	0.00387



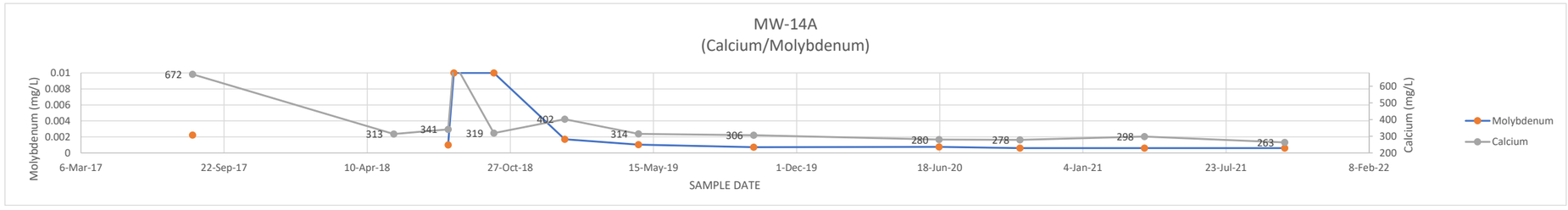
MW-7S

DATE	CALCIUM	MOLYBDENUM
10-Aug-17	80.6	0.00171
17-May-18	178	
3-Aug-18	90.3	0.00127
10-Aug-18	142	0.001
4-Oct-18	76	0.01
10-Jan-19	277	0.00105
23-Apr-19	271	0.000952
1-Oct-19	81	0.000798
17-Jun-20	160	0.00105
9-Oct-20	90.2	0.00106
30-Mar-21	254	0.000755
15-Oct-21	97.1	0.00115



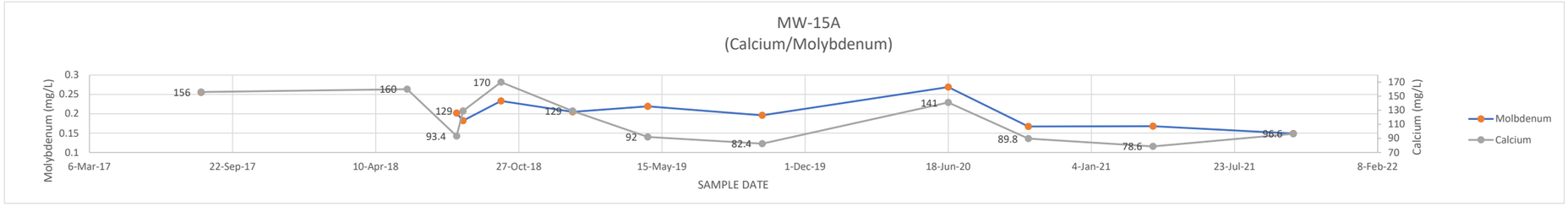
MW-14A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17	672	0.00223
17-May-18	313	
1-Aug-18	341	0.001
9-Aug-18	746	0.01
4-Oct-18	319	0.01
11-Jan-19	402	0.0017
24-Apr-19	314	0.00104
2-Oct-19	306	0.000709
17-Jun-20	280	0.00076
8-Oct-20	278	0.0006
31-Mar-21	298	0.0006
13-Oct-21	263	0.0006



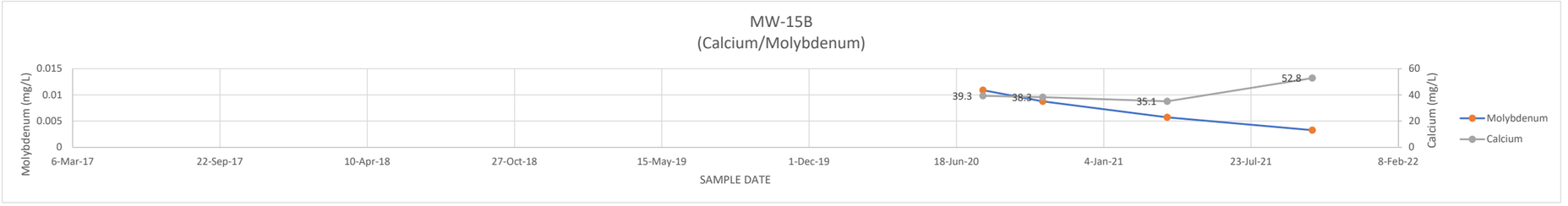
MW-15A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17	156	0.255
24-May-18	160	
1-Aug-18	93.4	0.202
10-Aug-18	129	0.182
2-Oct-18	170	0.233
10-Jan-19	129	0.205
25-Apr-19	92	0.219
2-Oct-19	82.4	0.196
18-Jun-20	141	0.269
8-Oct-20	89.8	0.167
31-Mar-21	78.6	0.168
13-Oct-21	96.6	0.149



MW-15B

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	39.3	0.0109
13-Oct-20	38.3	0.00876
31-Mar-21	35.1	0.00571
14-Oct-21	52.8	0.00328

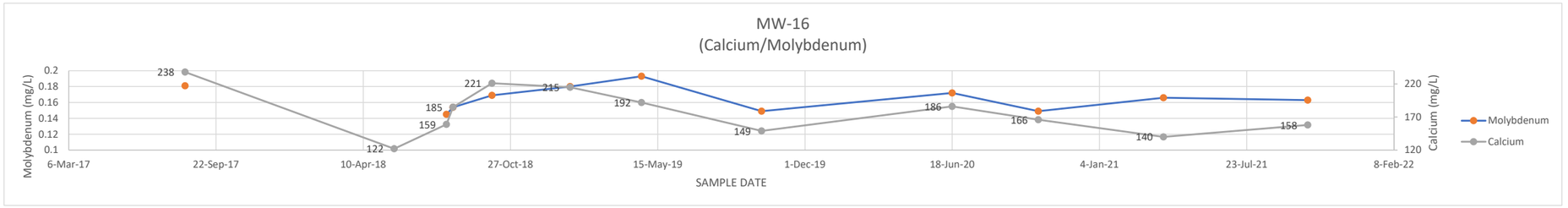


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-5
CHANGES IN CALCIUM AND MOLYBDENUM CONCENTRATIONS

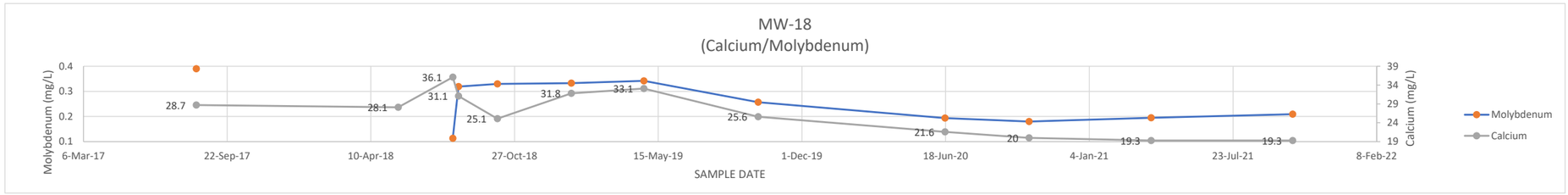
MW-16

DATE	CALCIUM	MOLYBDENUM
11-Aug-17	238	0.181
22-May-18	122	
1-Aug-18	159	0.145
10-Aug-18	185	0.154
2-Oct-18	221	0.169
16-Jan-19	215	0.18
23-Apr-19	192	0.193
3-Oct-19	149	0.149
18-Jun-20	186	0.172
13-Oct-20	166	0.149
1-Apr-21	140	0.166
14-Oct-21	158	0.163



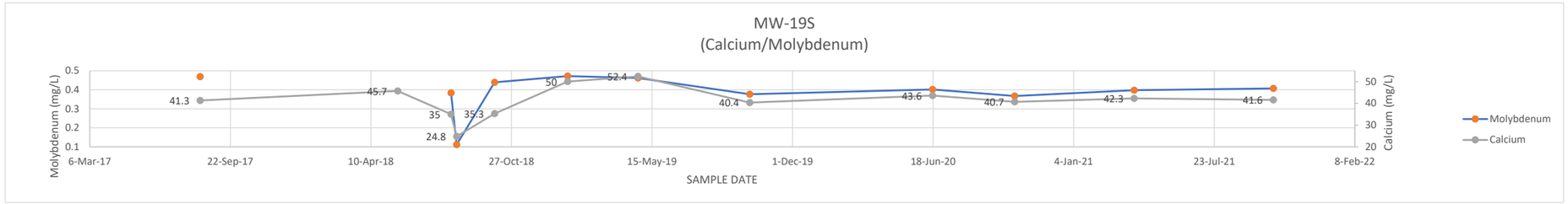
MW-18

DATE	CALCIUM	MOLYBDENUM
10-Aug-17	28.7	0.39
18-May-18	28.1	
2-Aug-18	36.1	0.113
10-Aug-18	31.1	0.319
3-Oct-18	25.1	0.33
14-Jan-19	31.8	0.333
25-Apr-19	33.1	0.342
1-Oct-19	25.6	0.257
17-Jun-20	21.6	0.194
12-Oct-20	20	0.18
31-Mar-21	19.3	0.195
14-Oct-21	19.3	0.209



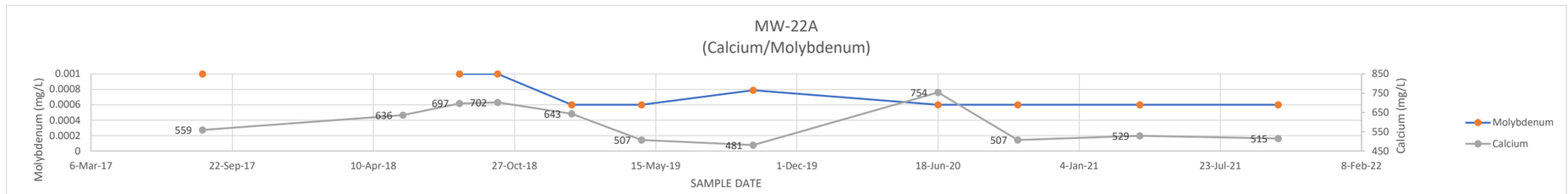
MW-19S

DATE	CALCIUM	MOLYBDENUM
10-Aug-17	41.3	0.469
18-May-18	45.7	
2-Aug-18	35	0.384
10-Aug-18	24.8	0.112
3-Oct-18	35.3	0.439
15-Jan-19	50	0.472
25-Apr-19	52.4	0.462
1-Oct-19	40.4	0.377
17-Jun-20	43.6	0.402
12-Oct-20	40.7	0.367
31-Mar-21	42.3	0.398
15-Oct-21	41.6	0.407



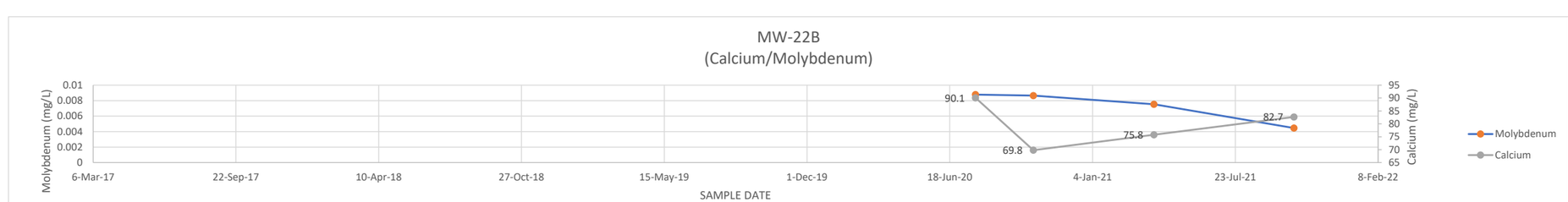
MW-22A

DATE	CALCIUM	MOLYBDENUM
11-Aug-17	559	0.001
22-May-18	636	
10-Aug-18	697	0.001
3-Oct-18	702	0.001
16-Jan-19	643	0.0006
25-Apr-19	507	0.0006
30-Sep-19	481	0.000787
18-Jun-20	754	0.0006
9-Oct-20	507	0.0006
31-Mar-21	529	0.0006
13-Oct-21	515	0.0006



MW-22B

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	90.1	0.00878
13-Oct-20	69.8	0.00866
31-Mar-21	75.8	0.00753
13-Oct-21	82.7	0.00446

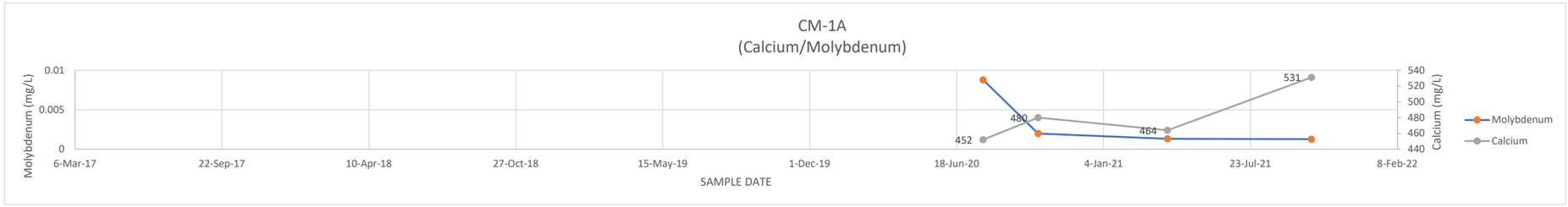


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-5
CHANGES IN CALCIUM AND MOLYBDENUM CONCENTRATIONS

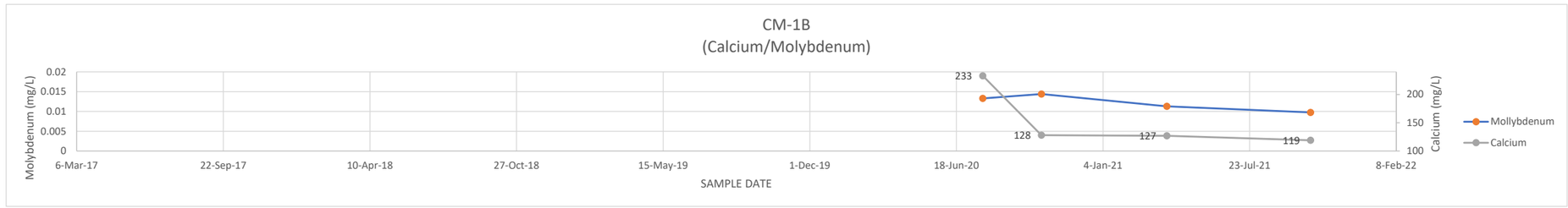
CM-1A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	452	0.0088
7-Oct-20	480	0.00198
1-Apr-21	464	0.00132
14-Oct-21	531	0.00127



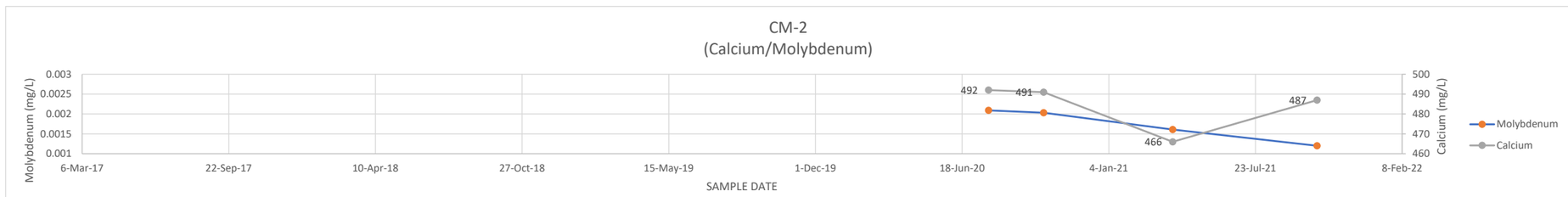
CM-1B

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	233	0.0133
12-Oct-20	128	0.0144
1-Apr-21	127	0.0113
14-Oct-21	119	0.00976



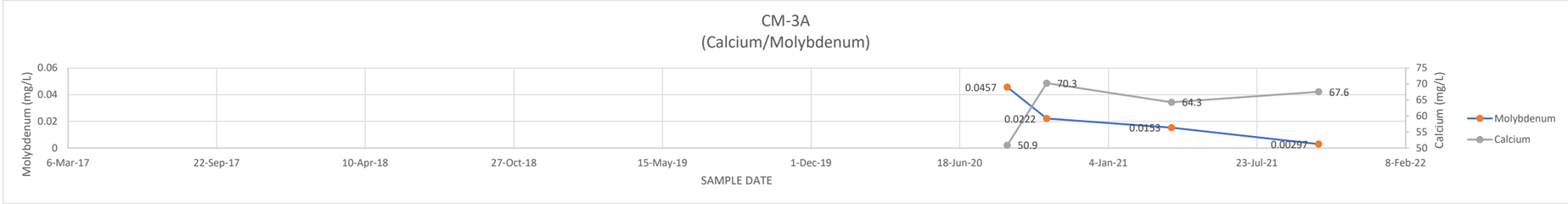
CM-2

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	492	0.00209
7-Oct-20	491	0.00203
1-Apr-21	466	0.00161
15-Oct-21	487	0.0012



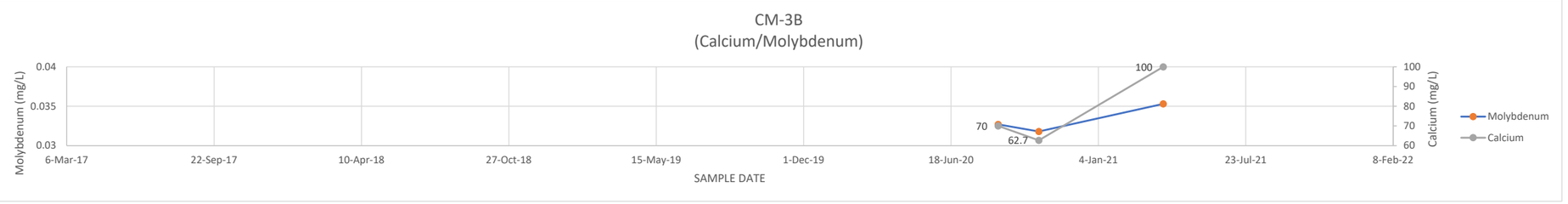
CM-3A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	50.9	0.0457
13-Oct-20	70.3	0.0222
30-Mar-21	64.3	0.0153
14-Oct-21	67.6	0.00297



CM-3B

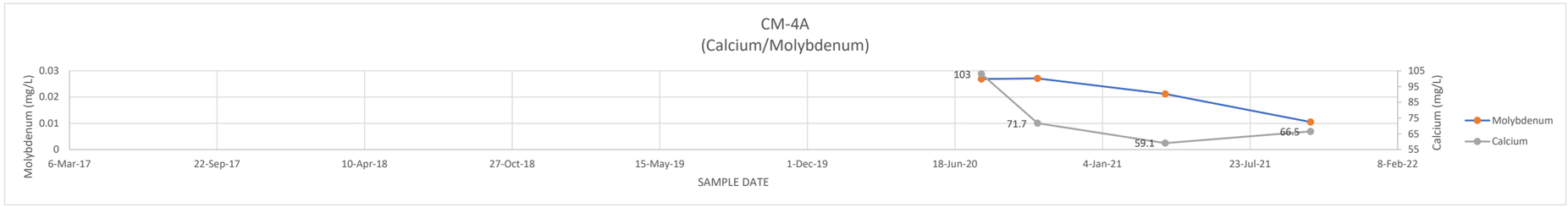
DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	70	0.0327
15-Oct-20	62.7	0.0318
2-Apr-21	100	0.0353
11-Oct-21		



ATTACHMENT F-5
CHANGES IN CALCIUM AND MOLYBDENUM CONCENTRATIONS

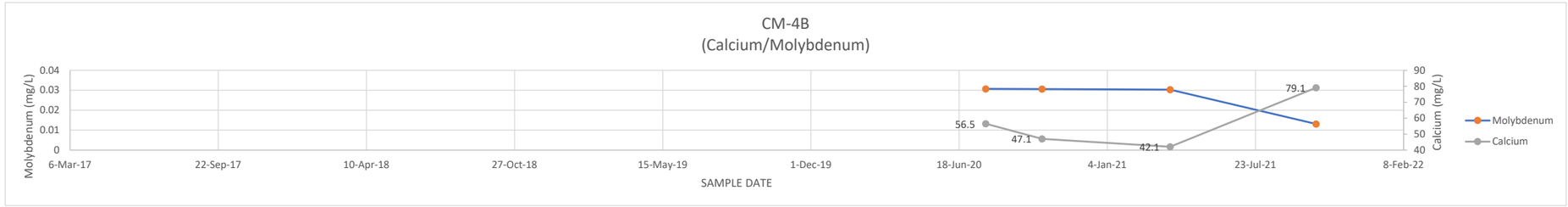
CM-4A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	103	0.0269
8-Oct-20	71.7	0.0271
30-Mar-21	59.1	0.0212
13-Oct-21	66.5	0.0105



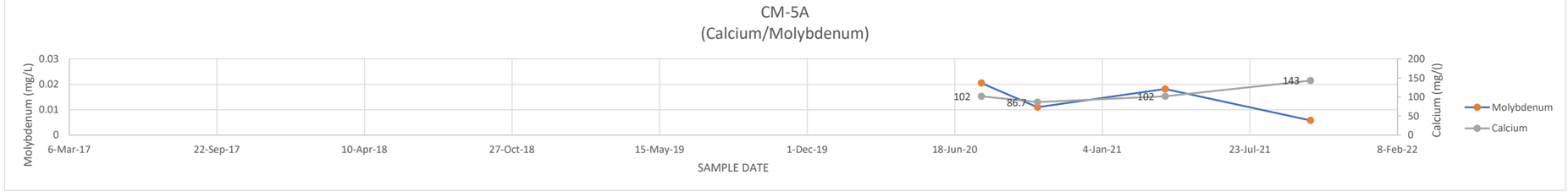
CM-4B

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	56.5	0.0307
8-Oct-20	47.1	0.0306
30-Mar-21	42.1	0.0303
13-Oct-21	79.1	0.0131



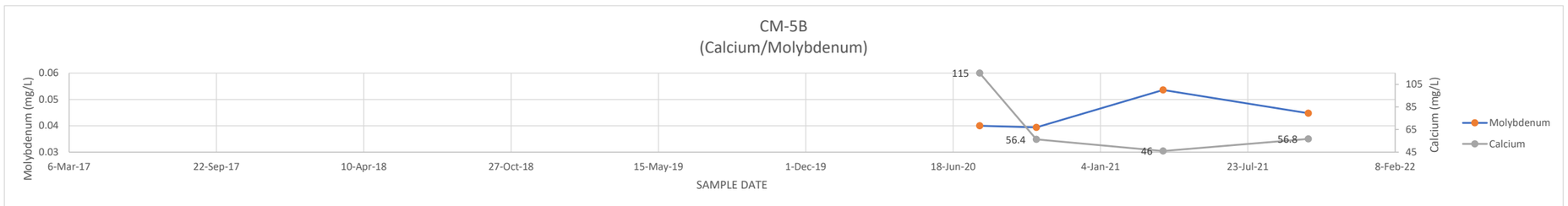
CM-5A

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	102	0.0205
8-Oct-20	86.7	0.011
30-Mar-21	102	0.0182
13-Oct-21	143	0.0058



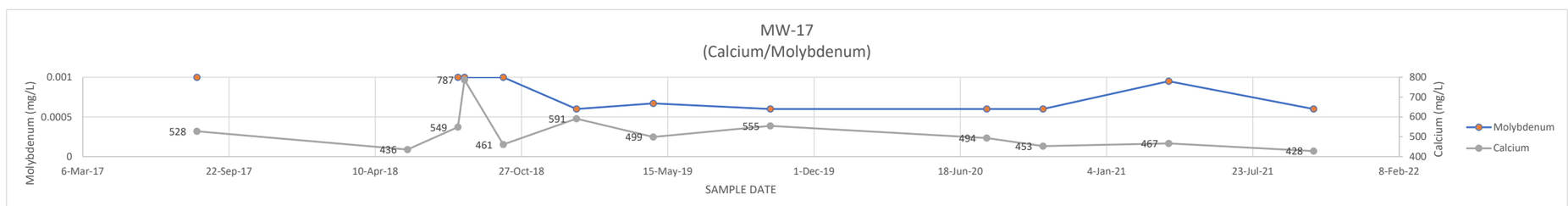
CM-5B

DATE	CALCIUM	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	115	0.04
9-Oct-20	56.4	0.0394
30-Mar-21	46	0.0536
13-Oct-21	56.8	0.0448



MW-17

DATE	CALCIUM	MOLYBDENUM
9-Aug-17	528	0.001
24-May-18	436	
1-Aug-18	549	0.001
10-Aug-18	787	0.001
2-Oct-18	461	0.001
10-Jan-19	591	0.0006
25-Apr-19	499	0.000671
2-Oct-19	555	0.0006
24-Jul-20	494	0.0006
9-Oct-20	453	0.0006
30-Mar-21	467	0.00095
14-Oct-21	428	0.0006

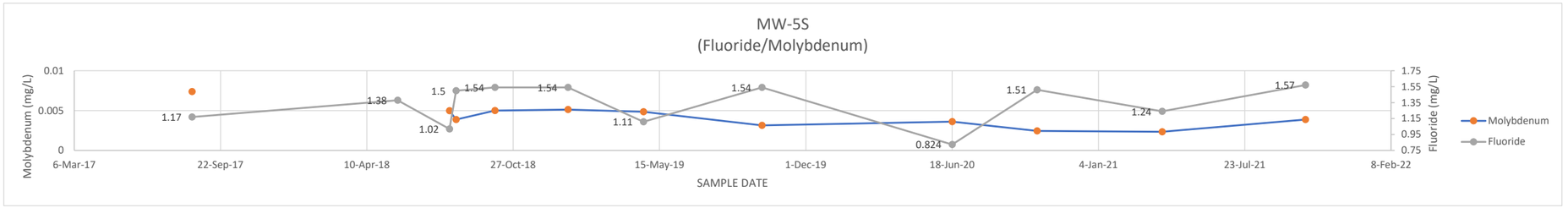


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-6
CHANGES IN FLUORIDE AND MOLYBDENUM CONCENTRATIONS

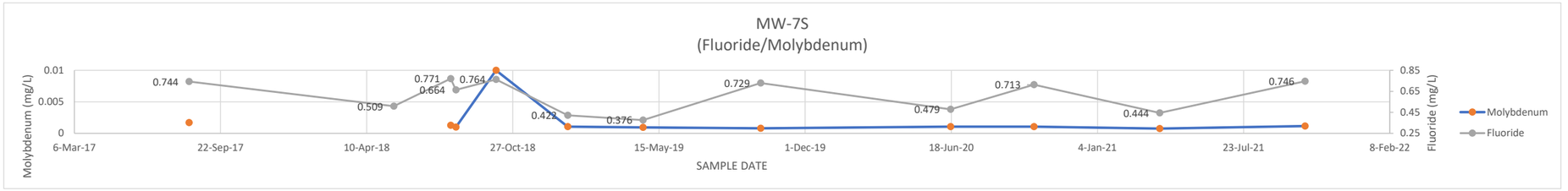
MW-5S

DATE	FLUORIDE	MOLYBDENUM
14-Aug-17	1.17	0.00737
22-May-18	1.38	
1-Aug-18	1.02	0.00497
10-Aug-18	1.5	0.00387
2-Oct-18	1.54	0.005
10-Jan-19	1.54	0.00512
23-Apr-19	1.11	0.00485
2-Oct-19	1.54	0.00315
18-Jun-20	0.824	0.00361
12-Oct-20	1.51	0.00244
1-Apr-21	1.24	0.00234
14-Oct-21	1.57	0.00387



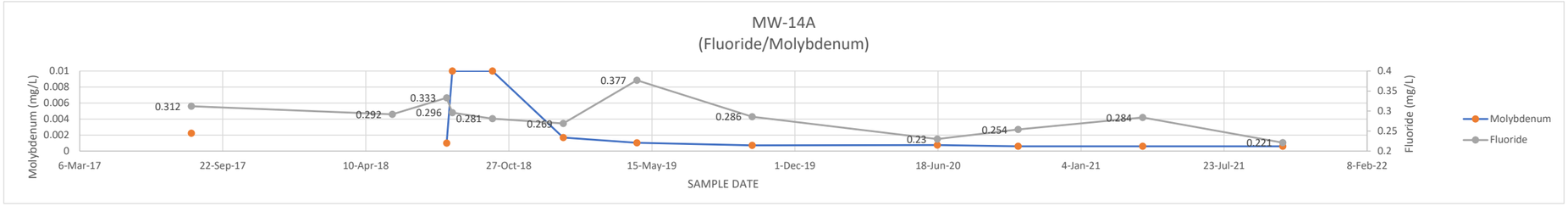
MW-7S

DATE	FLUORIDE	MOLYBDENUM
10-Aug-17	0.744	0.00171
17-May-18	0.509	
3-Aug-18	0.771	0.00127
10-Aug-18	0.664	0.001
4-Oct-18	0.764	0.01
10-Jan-19	0.422	0.00105
23-Apr-19	0.376	0.000952
1-Oct-19	0.729	0.000798
17-Jun-20	0.479	0.00105
9-Oct-20	0.713	0.00106
30-Mar-21	0.444	0.000755
15-Oct-21	0.746	0.00115



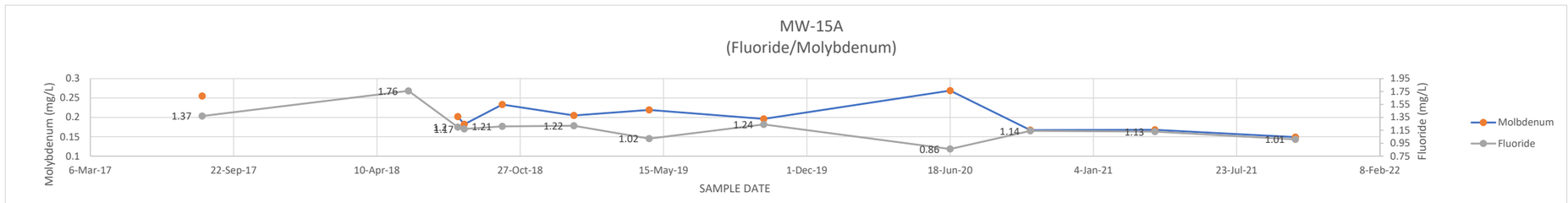
MW-14A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17	0.312	0.00223
17-May-18	0.292	
1-Aug-18	0.333	0.001
9-Aug-18	0.296	0.01
4-Oct-18	0.281	0.01
11-Jan-19	0.269	0.0017
24-Apr-19	0.377	0.00104
2-Oct-19	0.286	0.000709
17-Jun-20	0.23	0.00076
8-Oct-20	0.254	0.0006
31-Mar-21	0.284	0.0006
13-Oct-21	0.221	0.0006



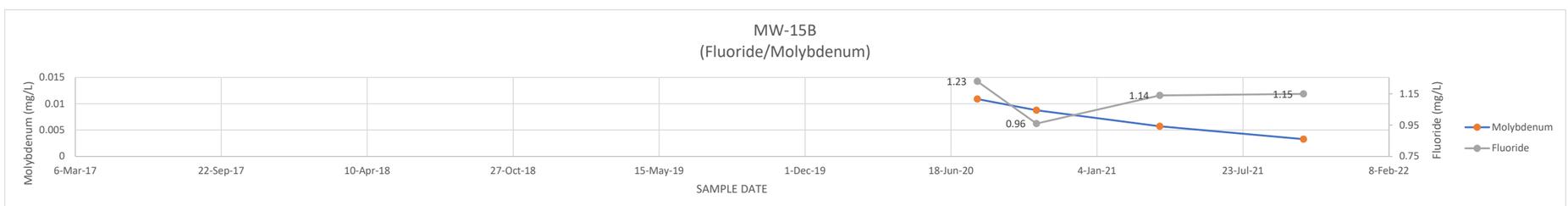
MW-15A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17	1.37	0.255
24-May-18	1.76	
1-Aug-18	1.2	0.202
10-Aug-18	1.17	0.182
2-Oct-18	1.21	0.233
10-Jan-19	1.22	0.205
25-Apr-19	1.02	0.219
2-Oct-19	1.24	0.196
18-Jun-20	0.86	0.269
8-Oct-20	1.14	0.167
31-Mar-21	1.13	0.168
13-Oct-21	1.01	0.149



MW-15B

DATE	FLUORID	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1.23	0.0109
13-Oct-20	0.96	0.00876
31-Mar-21	1.14	0.00571
14-Oct-21	1.15	0.00328

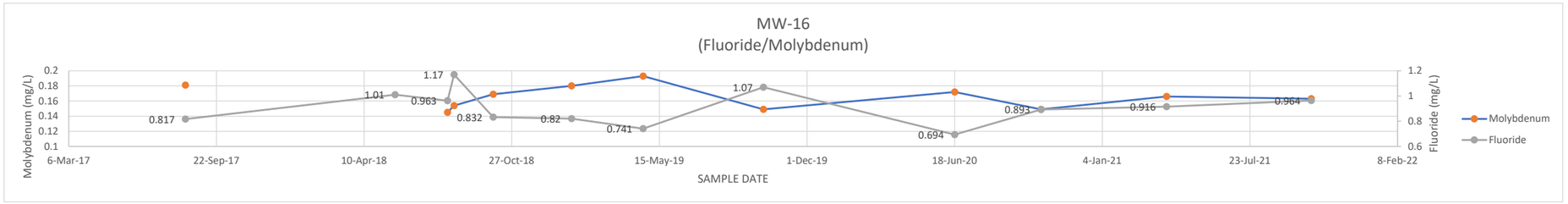


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-6
CHANGES IN FLUORIDE AND MOLYBDENUM CONCENTRATIONS

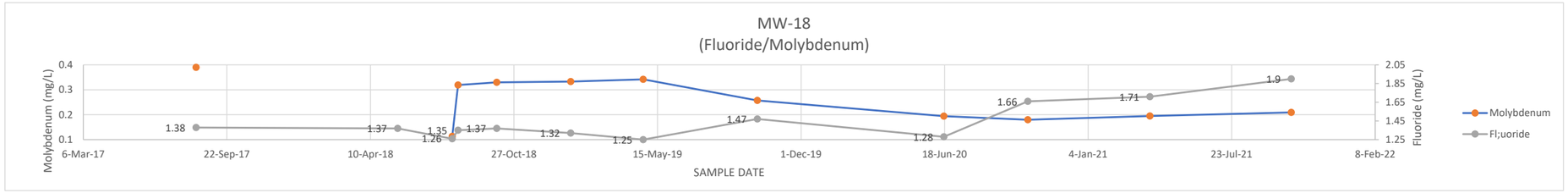
MW-16

DATE	FLUORIDE	MOLYBDENUM
11-Aug-17	0.817	0.181
22-May-18	1.01	
1-Aug-18	0.963	0.145
10-Aug-18	1.17	0.154
2-Oct-18	0.832	0.169
16-Jan-19	0.82	0.18
23-Apr-19	0.741	0.193
3-Oct-19	1.07	0.149
18-Jun-20	0.694	0.172
13-Oct-20	0.893	0.149
1-Apr-21	0.916	0.166
14-Oct-21	0.964	0.163



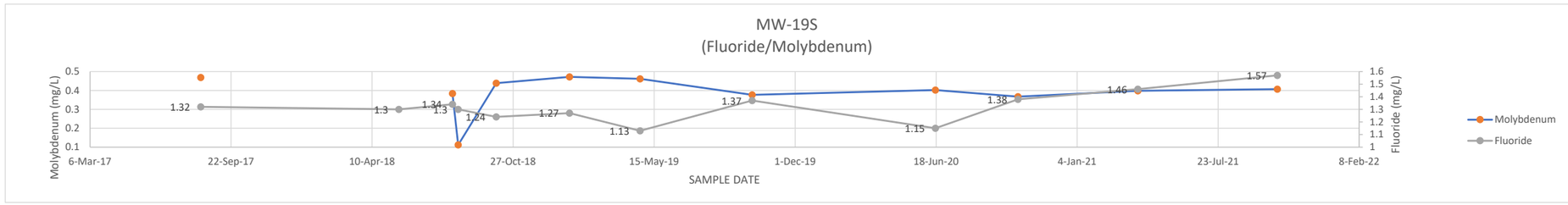
MW-18

DATE	FLUORIDE	MOLYBDENUM
10-Aug-17	1.38	0.39
18-May-18	1.37	
2-Aug-18	1.26	0.113
10-Aug-18	1.35	0.319
3-Oct-18	1.37	0.33
14-Jan-19	1.32	0.333
25-Apr-19	1.25	0.342
1-Oct-19	1.47	0.257
17-Jun-20	1.28	0.194
12-Oct-20	1.66	0.18
31-Mar-21	1.71	0.195
14-Oct-21	1.9	0.209



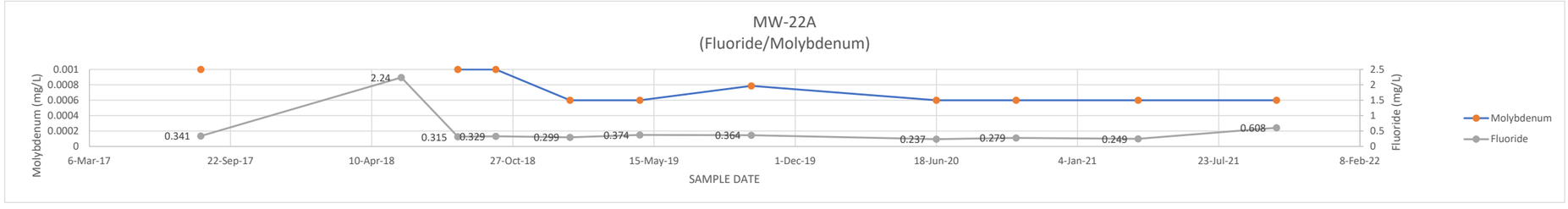
MW-19S

DATE	FLUORIDE	MOLYBDENUM
10-Aug-17	1.32	0.469
18-May-18	1.3	
2-Aug-18	1.34	0.384
10-Aug-18	1.24	0.112
3-Oct-18	1.24	0.439
15-Jan-19	1.27	0.472
25-Apr-19	1.13	0.462
1-Oct-19	1.37	0.377
17-Jun-20	1.15	0.402
12-Oct-20	1.38	0.367
31-Mar-21	1.46	0.398
15-Oct-21	1.57	0.407



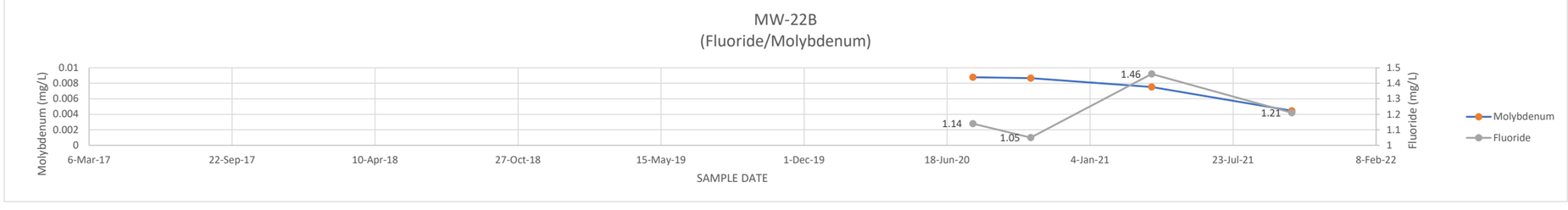
MW-22A

DATE	FLUROIDE	MOLYBDENUM
11-Aug-17	0.341	0.001
22-May-18	2.24	
10-Aug-18	0.315	0.001
3-Oct-18	0.329	0.001
16-Jan-19	0.299	0.0006
25-Apr-19	0.374	0.0006
30-Sep-19	0.364	0.000787
18-Jun-20	0.237	0.0006
9-Oct-20	0.279	0.0006
31-Mar-21	0.249	0.0006
13-Oct-21	0.608	0.0006



MW-22B

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1.14	0.00878
13-Oct-20	1.05	0.00866
31-Mar-21	1.46	0.00753
13-Oct-21	1.21	0.00446

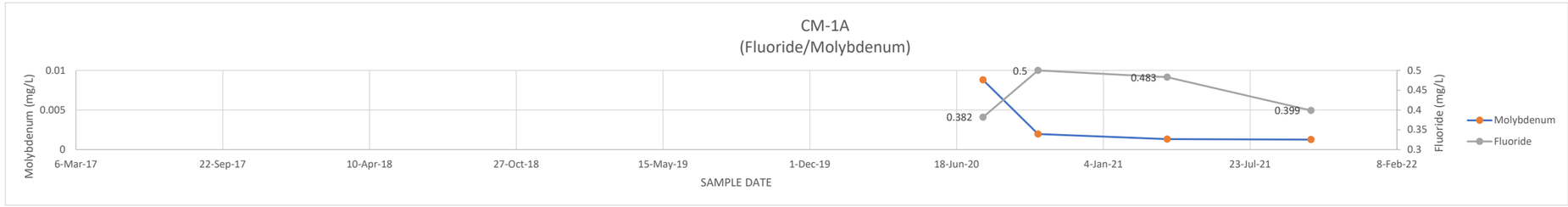


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-6
CHANGES IN FLUORIDE AND MOLYBDENUM CONCENTRATIONS

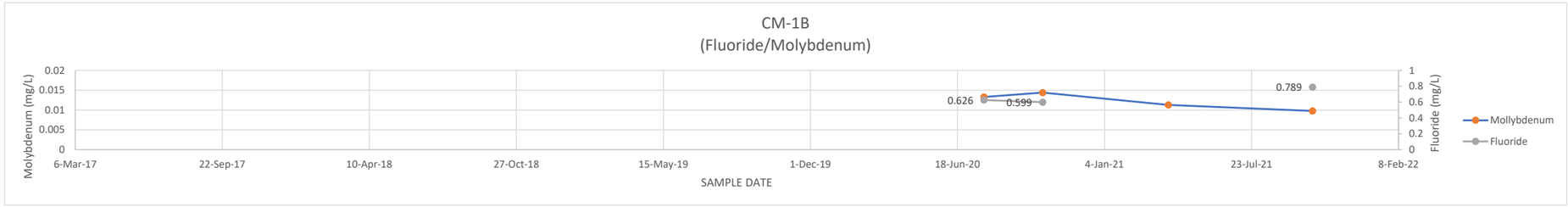
CM-1A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.382	0.0088
7-Oct-20	0.5	0.00198
1-Apr-21	0.483	0.00132
14-Oct-21	0.399	0.00127



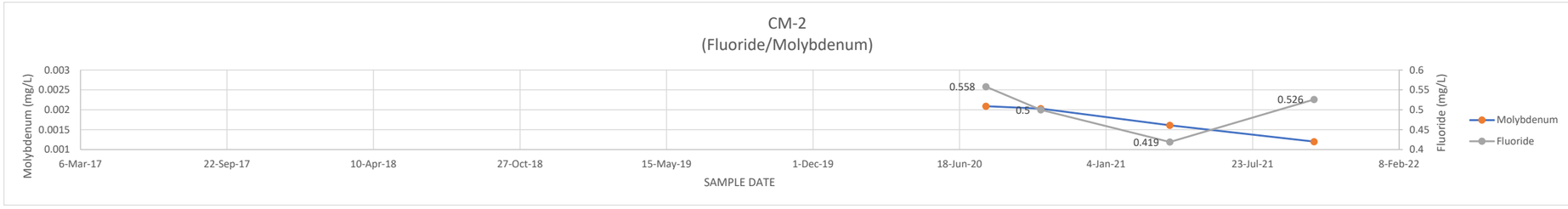
CM-1B

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.626	0.0133
12-Oct-20	0.599	0.0144
1-Apr-21		0.0113
14-Oct-21	0.789	0.00976



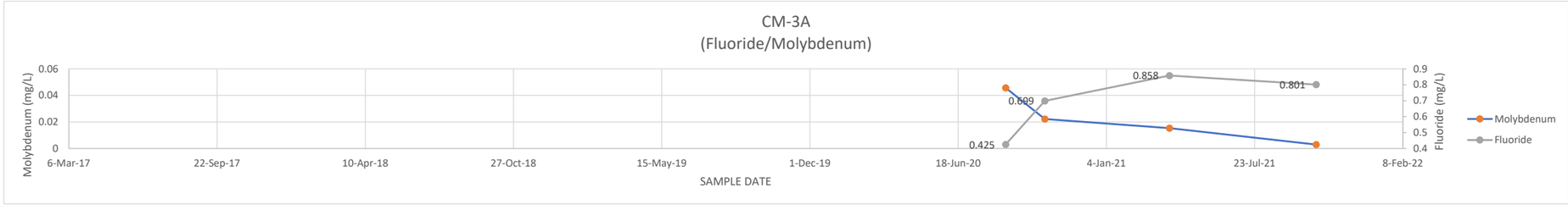
CM-2

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.558	0.00209
7-Oct-20	0.5	0.00203
1-Apr-21	0.419	0.00161
15-Oct-21	0.526	0.0012



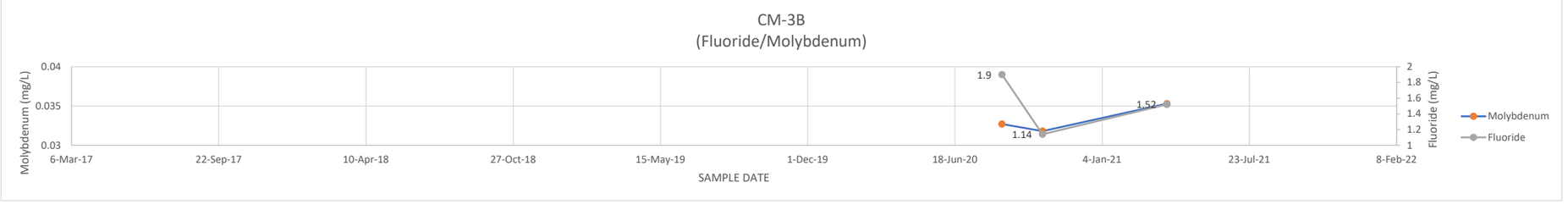
CM-3A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	0.425	0.0457
13-Oct-20	0.699	0.0222
30-Mar-21	0.858	0.0153
14-Oct-21	0.801	0.00297



CM-3B

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	1.9	0.0327
15-Oct-20	1.14	0.0318
2-Apr-21	1.52	0.0353
11-Oct-21		

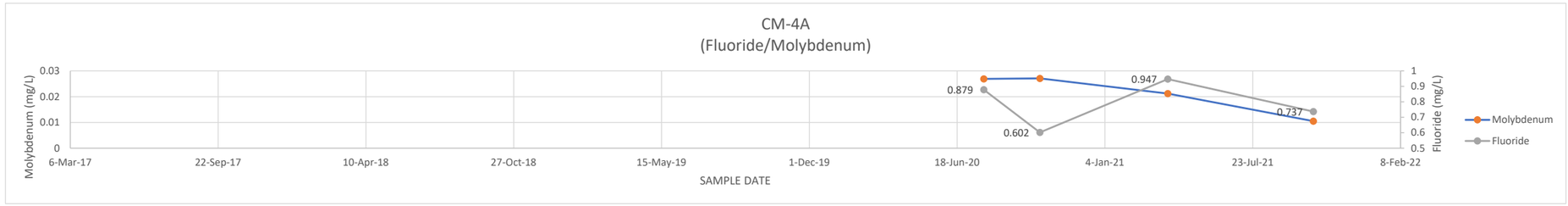


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-6
CHANGES IN FLUORIDE AND MOLYBDENUM CONCENTRATIONS

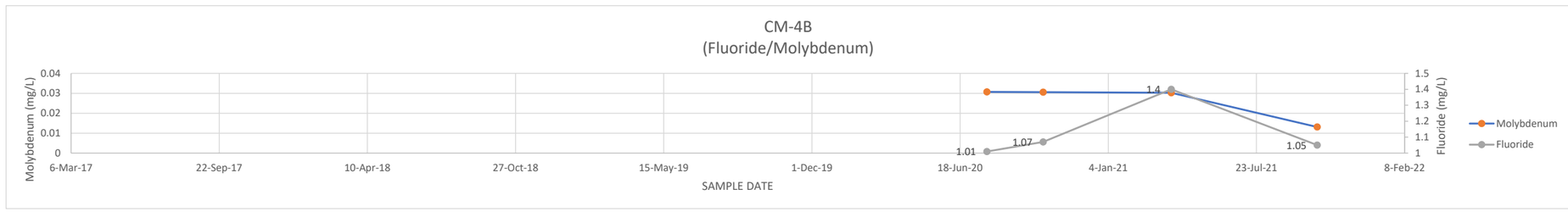
CM-4A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.879	0.0269
8-Oct-20	0.602	0.0271
30-Mar-21	0.947	0.0212
13-Oct-21	0.737	0.0105



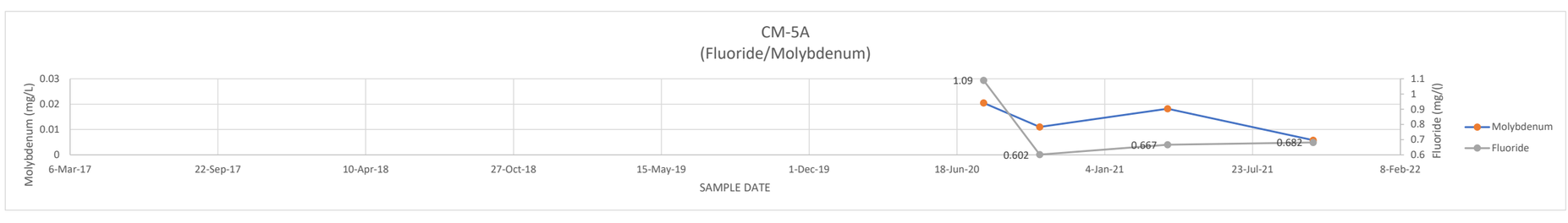
CM-4B

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1.01	0.0307
8-Oct-20	1.07	0.0306
30-Mar-21	1.4	0.0303
13-Oct-21	1.05	0.0131



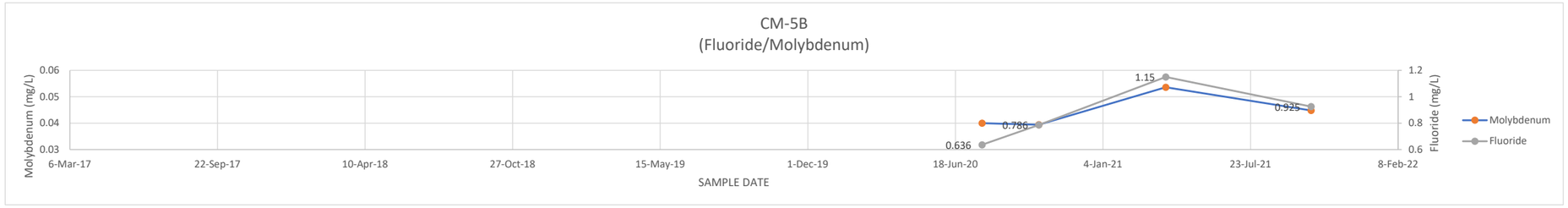
CM-5A

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1.09	0.0205
8-Oct-20	0.602	0.011
30-Mar-21	0.667	0.0182
13-Oct-21	0.682	0.0058



CM-5B

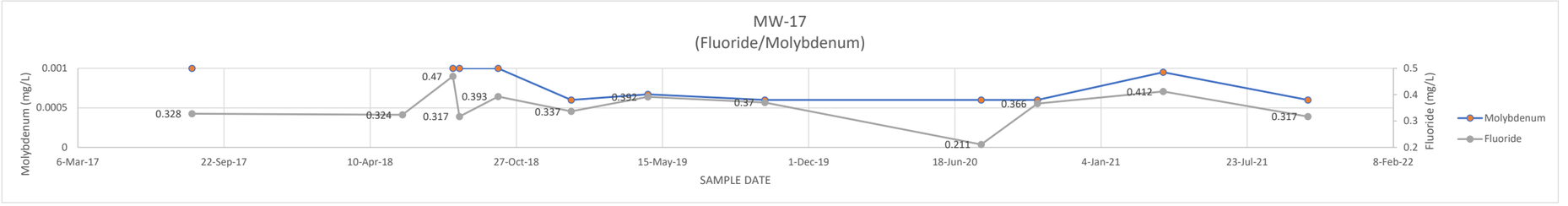
DATE	FLUORIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.636	0.04
9-Oct-20	0.786	0.0394
30-Mar-21	1.15	0.0536
13-Oct-21	0.925	0.0448



MW-17

DATE	FLUORIDE	MOLYBDENUM
9-Aug-17	0.328	0.001
24-May-18	0.324	
1-Aug-18	0.47	0.001
10-Aug-18	0.317	0.001
2-Oct-18	0.393	0.001
10-Jan-19	0.337	0.0006
25-Apr-19	0.392	0.000671
2-Oct-19	0.37	0.0006
24-Jul-20	0.211	0.0006
9-Oct-20	0.366	0.0006
30-Mar-21	0.412	0.00095
14-Oct-21	0.317	0.0006

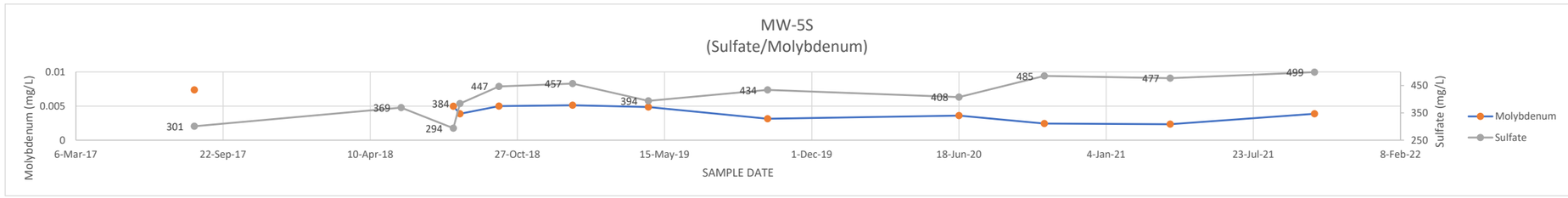
Yellow Indicates Reported Below shown value (MDL)



ATTACHMENT F-7
CHANGES IN SULFATE AND MOLYBDENUM CONCENTRATIONS

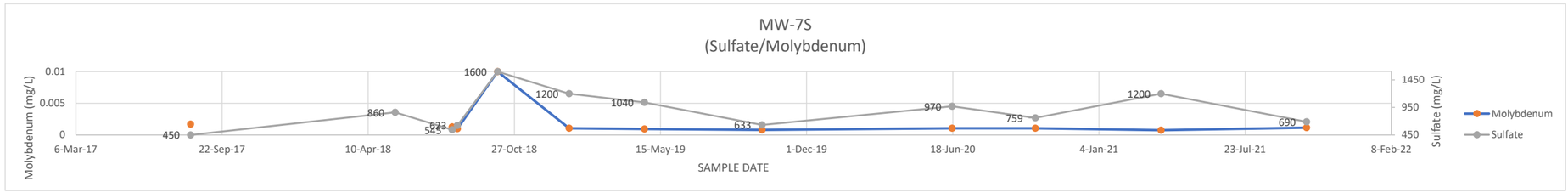
MW-5S

DATE	SULFATE	MOLYBDENUM
14-Aug-17	301	0.00737
22-May-18	369	
1-Aug-18	294	0.00497
10-Aug-18	384	0.00387
2-Oct-18	447	0.005
10-Jan-19	457	0.00512
23-Apr-19	394	0.00485
2-Oct-19	434	0.00315
18-Jun-20	408	0.00361
12-Oct-20	485	0.00244
1-Apr-21	477	0.00234
14-Oct-21	499	0.00387



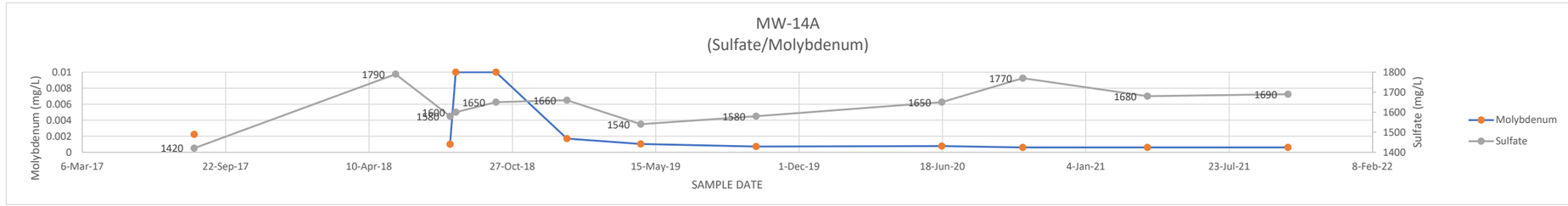
MW-7S

DATE	SULFATE	MOLYBDENUM
10-Aug-17	450	0.00171
17-May-18	860	
3-Aug-18	545	0.00127
10-Aug-18	623	0.001
4-Oct-18	1600	0.01
10-Jan-19	1200	0.00105
23-Apr-19	1040	0.000952
1-Oct-19	633	0.000798
17-Jun-20	970	0.00105
9-Oct-20	759	0.00106
30-Mar-21	1200	0.000755
15-Oct-21	690	0.00115



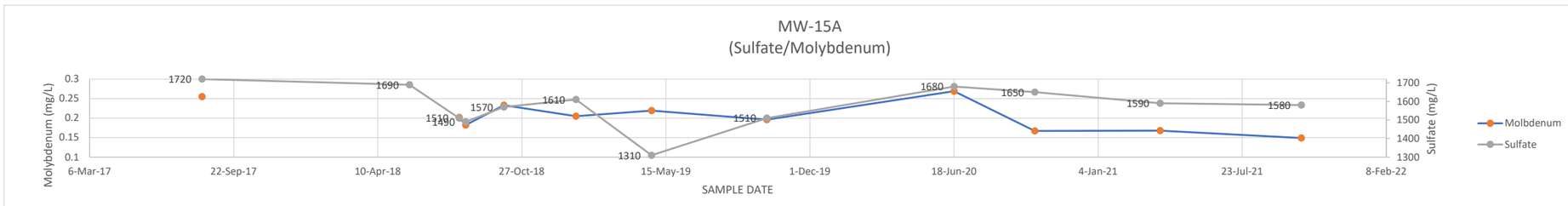
MW-14A

DATE	SULFATE	MOLYBDENUM
9-Aug-17	1420	0.00223
17-May-18	1790	
1-Aug-18	1580	0.001
9-Aug-18	1600	0.01
4-Oct-18	1650	0.01
11-Jan-19	1660	0.0017
24-Apr-19	1540	0.00104
2-Oct-19	1580	0.000709
17-Jun-20	1650	0.00076
8-Oct-20	1770	0.0006
31-Mar-21	1680	0.0006
13-Oct-21	1690	0.0006



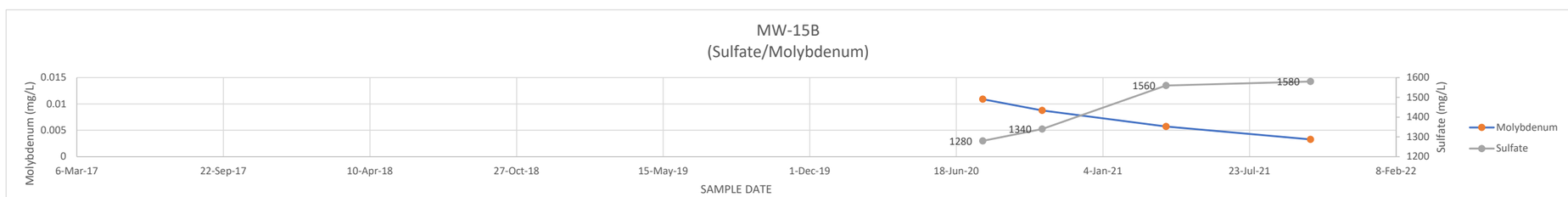
MW-15A

DATE	SULFATE	MOLYBDENUM
9-Aug-17	1720	0.255
24-May-18	1690	
1-Aug-18	1510	0.202
10-Aug-18	1490	0.182
2-Oct-18	1570	0.233
10-Jan-19	1610	0.205
25-Apr-19	1310	0.219
2-Oct-19	1510	0.196
18-Jun-20	1680	0.269
8-Oct-20	1650	0.167
31-Mar-21	1590	0.168
13-Oct-21	1580	0.149



MW-15B

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1280	0.0109
13-Oct-20	1340	0.00876
31-Mar-21	1560	0.00571
14-Oct-21	1580	0.00328

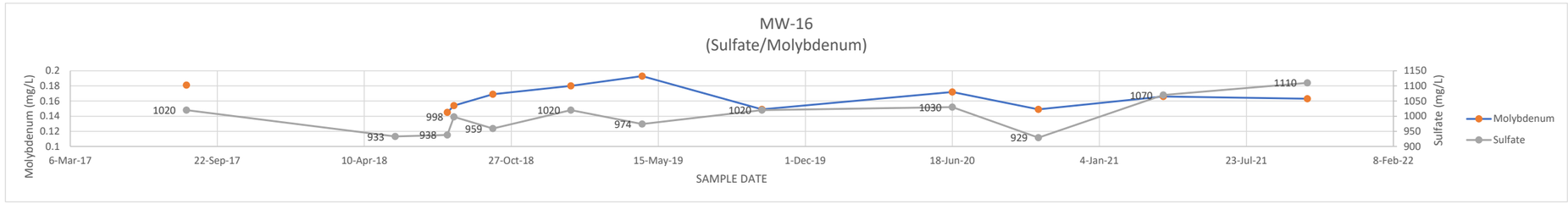


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-7
CHANGES IN SULFATE AND MOLYBDENUM CONCENTRATIONS

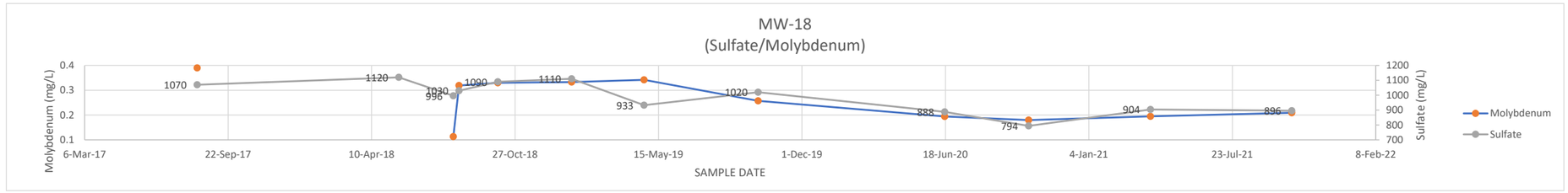
MW-16

DATE	SULFATE	MOLYBDENUM
11-Aug-17	1020	0.181
22-May-18	933	
1-Aug-18	938	0.145
10-Aug-18	998	0.154
2-Oct-18	959	0.169
16-Jan-19	1020	0.18
23-Apr-19	974	0.193
3-Oct-19	1020	0.149
18-Jun-20	1030	0.172
13-Oct-20	929	0.149
1-Apr-21	1070	0.166
14-Oct-21	1110	0.163



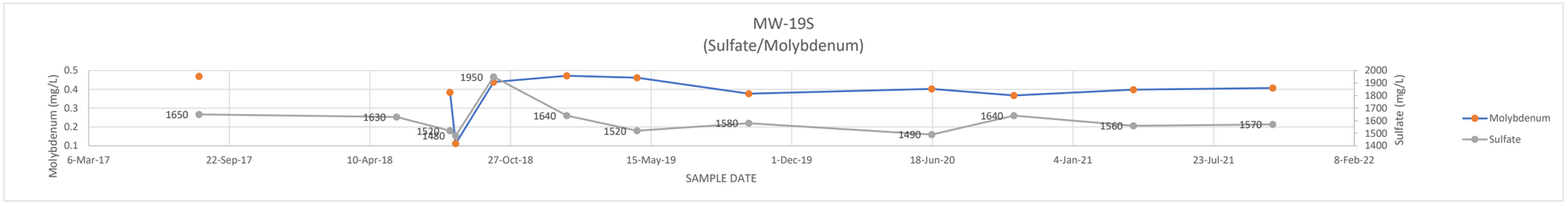
MW-18

DATE	SULFATE	MOLYBDENUM
10-Aug-17	1070	0.39
18-May-18	1120	
2-Aug-18	996	0.113
10-Aug-18	1030	0.319
3-Oct-18	1090	0.33
14-Jan-19	1110	0.333
25-Apr-19	933	0.342
1-Oct-19	1020	0.257
17-Jun-20	888	0.194
12-Oct-20	794	0.18
31-Mar-21	904	0.195
14-Oct-21	896	0.209



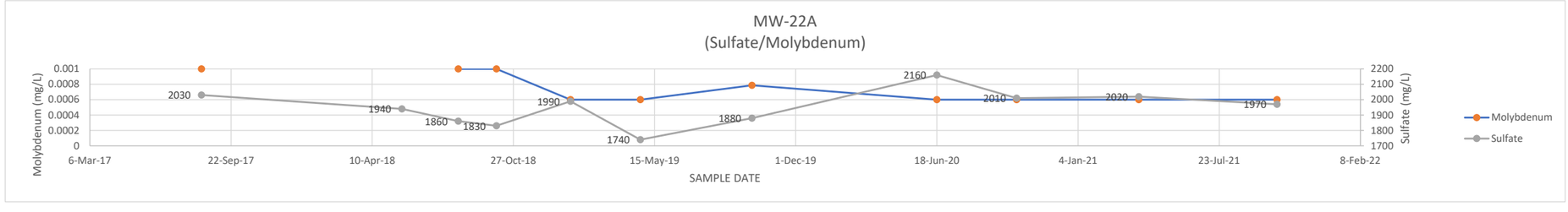
MW-19S

DATE	SULFATE	MOLYBDENUM
10-Aug-17	1650	0.469
18-May-18	1630	
2-Aug-18	1520	0.384
10-Aug-18	1480	0.112
3-Oct-18	1950	0.439
15-Jan-19	1640	0.472
25-Apr-19	1520	0.462
1-Oct-19	1580	0.377
17-Jun-20	1490	0.402
12-Oct-20	1640	0.367
31-Mar-21	1560	0.398
15-Oct-21	1570	0.407



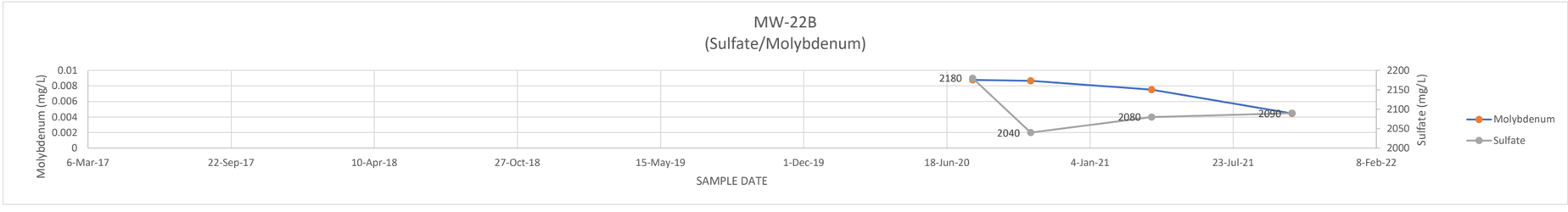
MW-22A

DATE	SULFATE	MOLYBDENUM
11-Aug-17	2030	0.001
22-May-18	1940	
10-Aug-18	1860	0.001
3-Oct-18	1830	0.001
16-Jan-19	1990	0.0006
25-Apr-19	1740	0.0006
30-Sep-19	1880	0.000787
18-Jun-20	2160	0.0006
9-Oct-20	2010	0.0006
31-Mar-21	2020	0.0006
13-Oct-21	1970	0.0006



MW-22B

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2180	0.00878
13-Oct-20	2040	0.00866
31-Mar-21	2080	0.00753
13-Oct-21	2090	0.00446

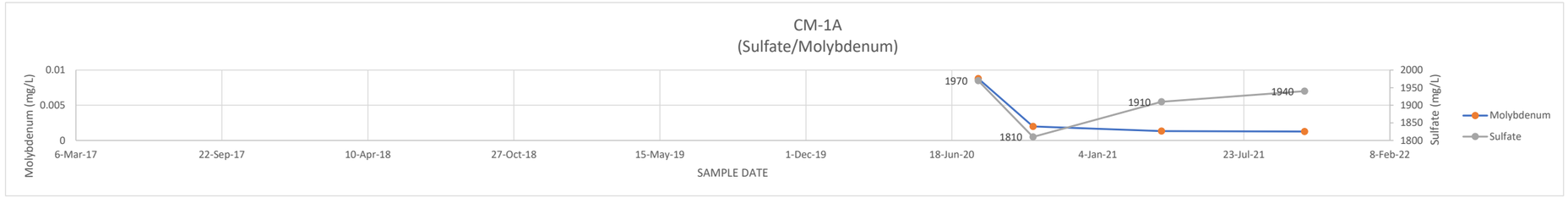


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT F-7
CHANGES IN SULFATE AND MOLYBDENUM CONCENTRATIONS

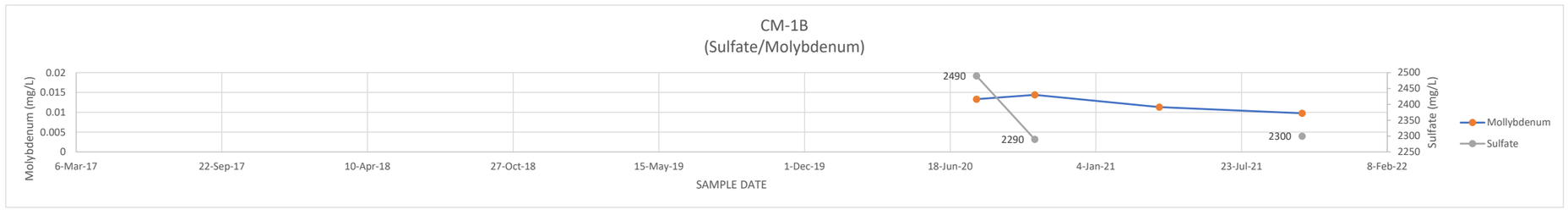
CM-1A

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1970	0.0088
7-Oct-20	1810	0.00198
1-Apr-21	1910	0.00132
14-Oct-21	1940	0.00127



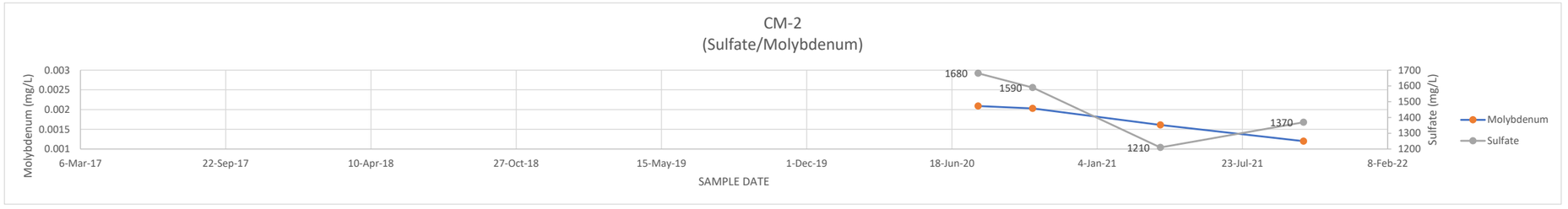
CM-1B

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2490	0.0133
12-Oct-20	2290	0.0144
1-Apr-21		0.0113
14-Oct-21	2300	0.00976



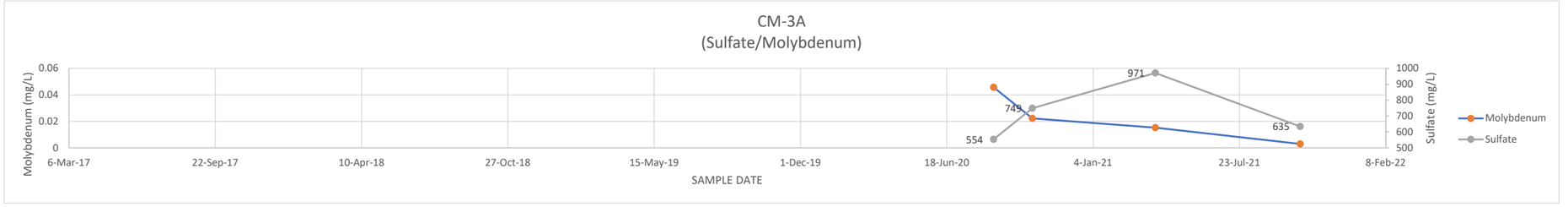
CM-2

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1680	0.00209
7-Oct-20	1590	0.00203
1-Apr-21	1210	0.00161
15-Oct-21	1370	0.0012



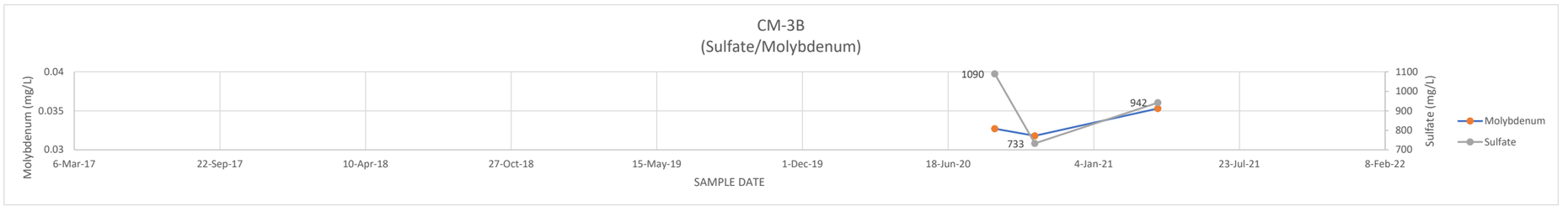
CM-3A

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	554	0.0457
13-Oct-20	749	0.0222
30-Mar-21	971	0.0153
14-Oct-21	635	0.00297



CM-3B

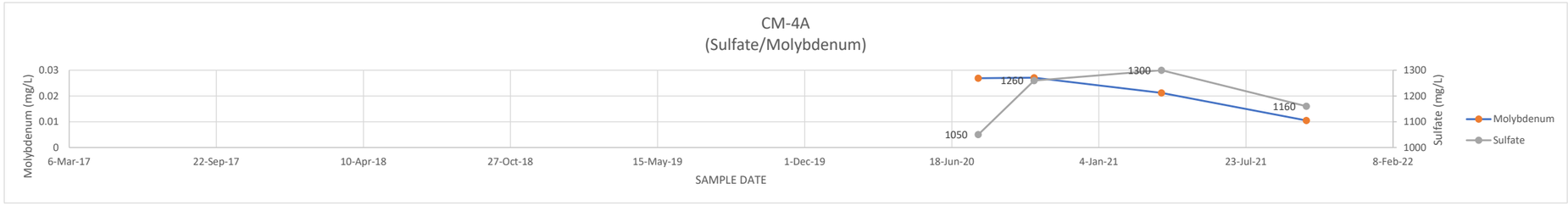
DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	1090	0.0327
15-Oct-20	733	0.0318
2-Apr-21	942	0.0353
11-Oct-21		



ATTACHMENT F-7
CHANGES IN SULFATE AND MOLYBDENUM CONCENTRATIONS

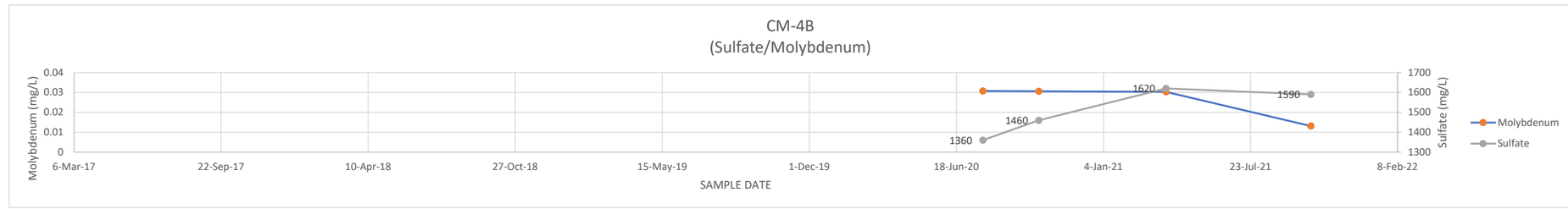
CM-4A

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1050	0.0269
8-Oct-20	1260	0.0271
30-Mar-21	1300	0.0212
13-Oct-21	1160	0.0105



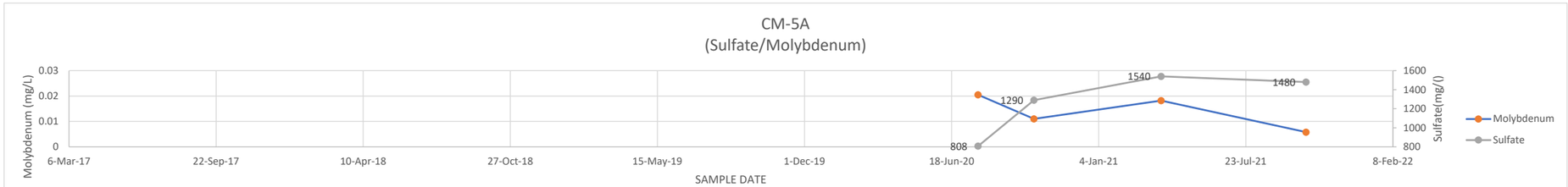
CM-4B

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1360	0.0307
8-Oct-20	1460	0.0306
30-Mar-21	1620	0.0303
13-Oct-21	1590	0.0131



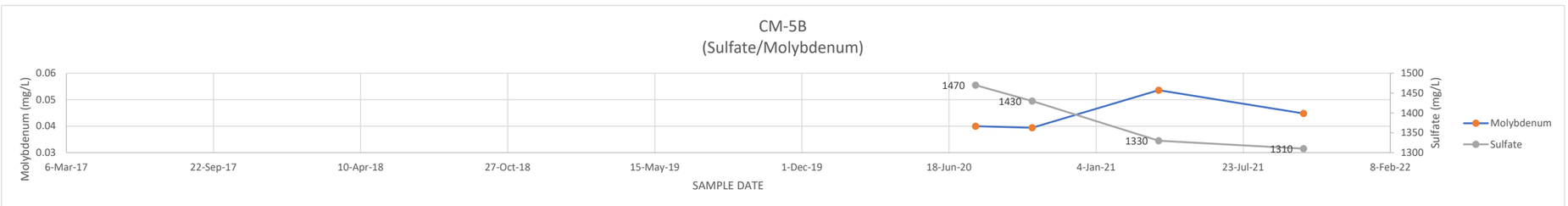
CM-5A

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	808	0.0205
8-Oct-20	1290	0.011
30-Mar-21	1540	0.0182
13-Oct-21	1480	0.0058



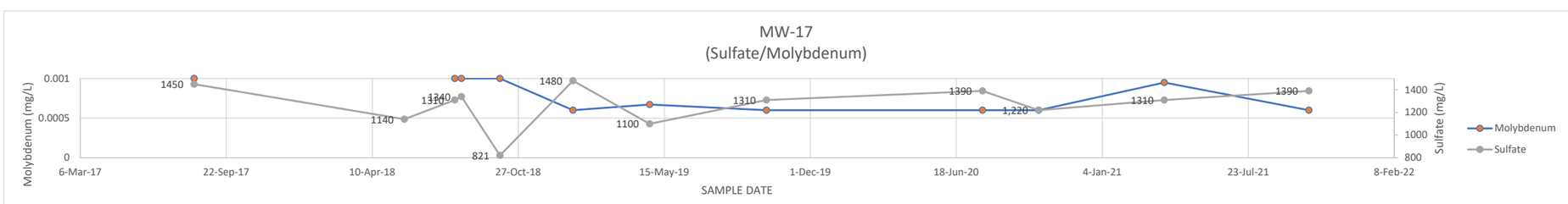
CM-5B

DATE	SULFATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1470	0.04
9-Oct-20	1430	0.0394
30-Mar-21	1330	0.0536
13-Oct-21	1310	0.0448



MW-17

DATE	SULFATE	MOLYBDENUM
9-Aug-17	1450	0.001
24-May-18	1140	
1-Aug-18	1310	0.001
10-Aug-18	1340	0.001
2-Oct-18	821	0.001
10-Jan-19	1480	0.0006
25-Apr-19	1100	0.000671
2-Oct-19	1310	0.0006
24-Jul-20	1390	0.0006
9-Oct-20	1,220	0.0006
30-Mar-21	1310	0.00095
14-Oct-21	1390	0.0006



Yellow Indicates Reported Below shown value (MDL)

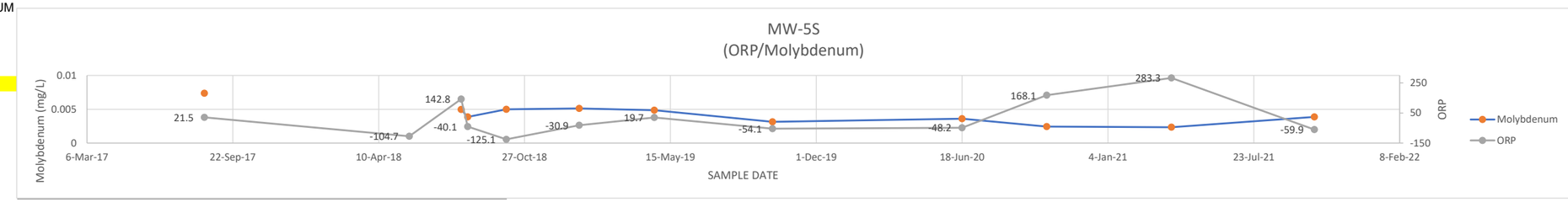
ATTACHMENT G

CHANGES IN CONCENTRATION OF INDICATOR PARAMETERS FOR MNA COMPARED TO CHANGES IN MONLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

ATTACHMENT G-1
CHANGES IN ORP AND MOLYBDENUM CONCENTRATIONS

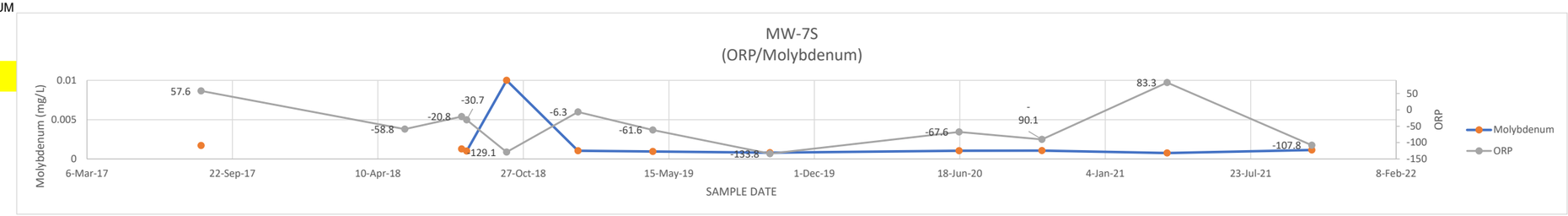
MW-5S

DATE	ORP	MOLYBDENUM
14-Aug-17	21.5	0.00737
22-May-18	-104.7	
1-Aug-18	142.8	0.00497
10-Aug-18	-40.1	0.00387
2-Oct-18	-125.1	0.005
10-Jan-19	-30.9	0.00512
23-Apr-19	19.7	0.00485
2-Oct-19	-54.1	0.00315
18-Jun-20	-48.2	0.00361
12-Oct-20	168.1	0.00244
1-Apr-21	283.3	0.00234
14-Oct-21	-59.9	0.00387



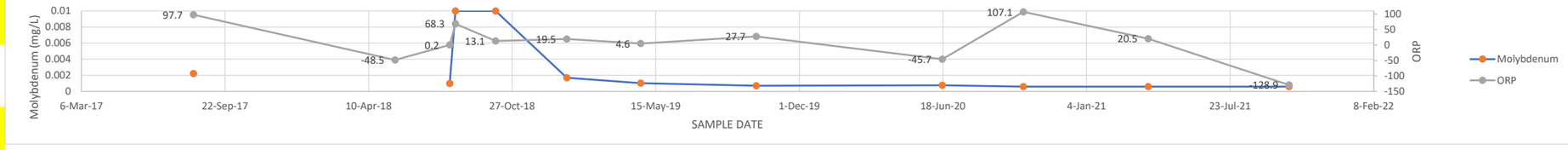
MW-7S

DATE	ORP	MOLYBDENUM
10-Aug-17	57.6	0.00171
17-May-18	-58.8	
3-Aug-18	-20.8	0.00127
10-Aug-18	-30.7	0.001
4-Oct-18	-129.1	0.01
10-Jan-19	-6.3	0.00105
23-Apr-19	-61.6	0.000952
1-Oct-19	-133.8	0.000798
17-Jun-20	-67.6	0.00105
9-Oct-20	-90.1	0.00106
30-Mar-21	83.3	0.000755
15-Oct-21	-107.8	0.00115



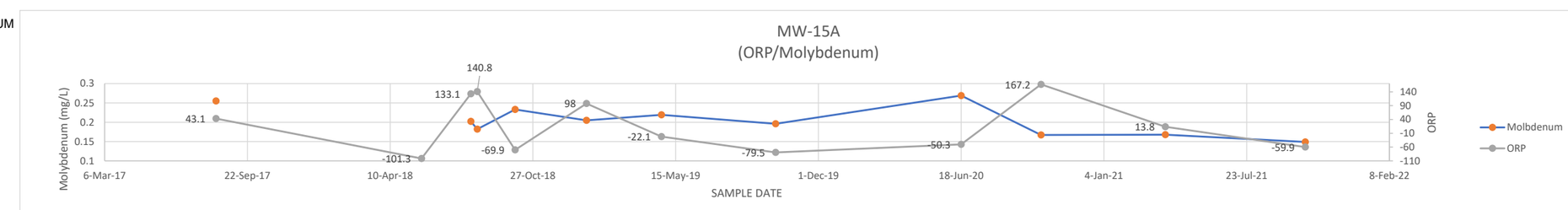
MW-14A

DATE	ORP	MOLYBDENUM
9-Aug-17	97.7	0.00223
17-May-18	-48.5	
1-Aug-18	68.3	0.001
9-Aug-18	0.2	0.01
4-Oct-18	13.1	0.01
11-Jan-19	19.5	0.0017
24-Apr-19	4.6	0.00104
2-Oct-19	27.7	0.000709
17-Jun-20	-45.7	0.00076
8-Oct-20	107.1	0.0006
31-Mar-21	20.5	0.0006
13-Oct-21	-128.9	0.0006



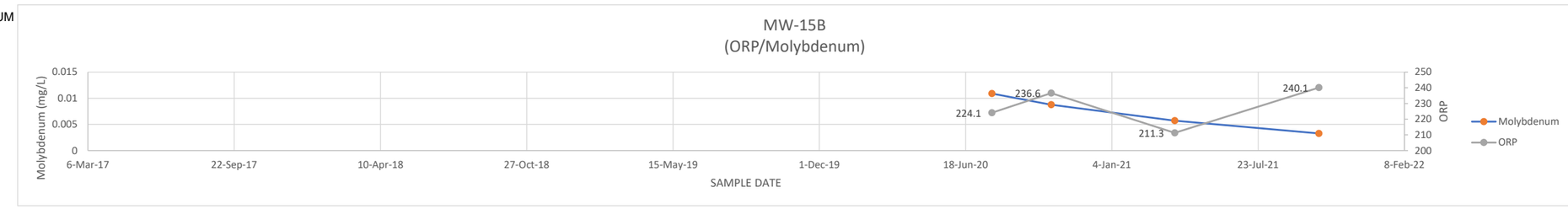
MW-15A

DATE	ORP	MOLYBDENUM
9-Aug-17	43.1	0.255
24-May-18	-101.3	
1-Aug-18	133.1	0.202
10-Aug-18	140.8	0.182
2-Oct-18	-69.9	0.233
10-Jan-19	98	0.205
25-Apr-19	-22.1	0.219
2-Oct-19	-79.5	0.196
18-Jun-20	-50.3	0.269
8-Oct-20	167.2	0.167
31-Mar-21	13.8	0.168
13-Oct-21	-59.9	0.149



MW-15B

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	224.1	0.0109
13-Oct-20	236.6	0.00876
31-Mar-21	211.3	0.00571
14-Oct-21	240.1	0.00328

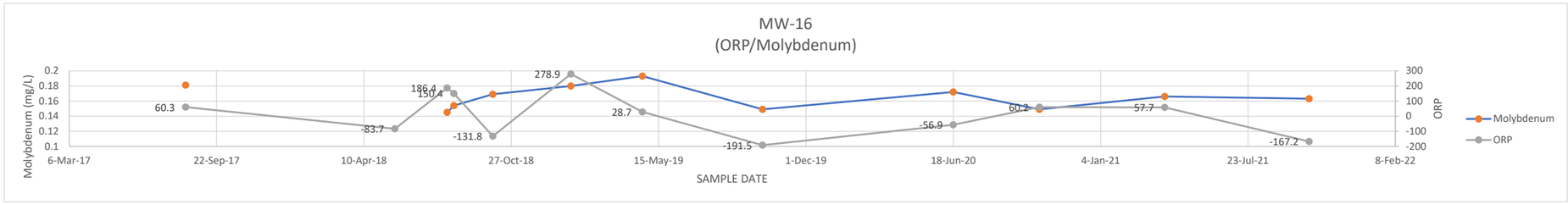


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-1
CHANGES IN ORP AND MOLYBDENUM CONCENTRATIONS

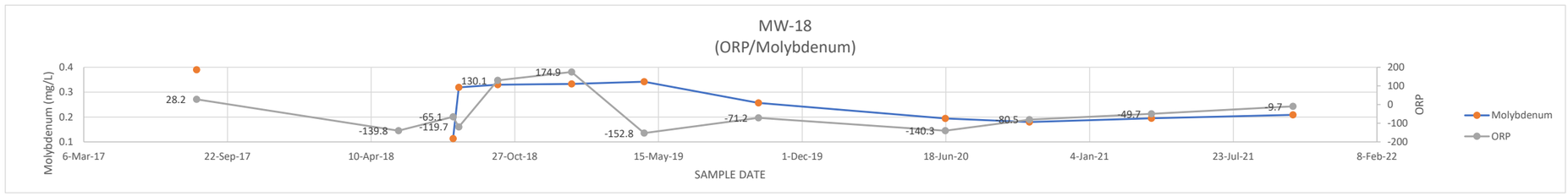
MW-16

DATE	ORP	MOLYBDENUM
11-Aug-17	60.3	0.181
22-May-18	-83.7	
1-Aug-18	186.4	0.145
10-Aug-18	150.4	0.154
2-Oct-18	-131.8	0.169
16-Jan-19	278.9	0.18
23-Apr-19	28.7	0.193
3-Oct-19	-191.5	0.149
18-Jun-20	-56.9	0.172
13-Oct-20	60.2	0.149
1-Apr-21	57.7	0.166
14-Oct-21	-167.2	0.163



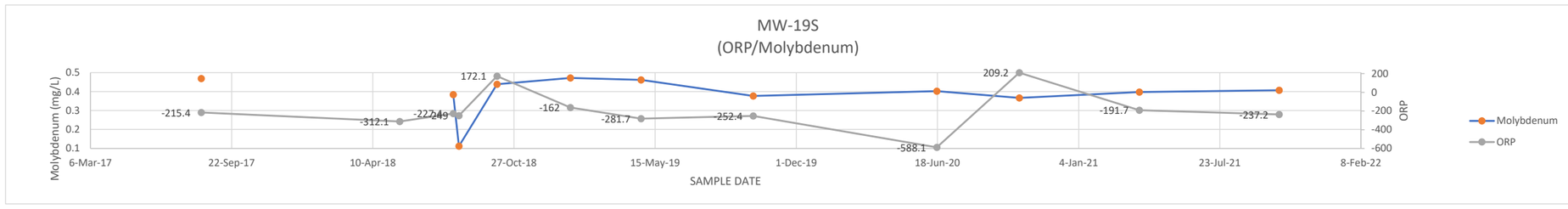
MW-18

DATE	ORP	MOLYBDENUM
10-Aug-17	28.2	0.39
18-May-18	-139.8	
2-Aug-18	-65.1	0.113
10-Aug-18	-119.7	0.319
3-Oct-18	130.1	0.33
14-Jan-19	174.9	0.333
25-Apr-19	-152.8	0.342
1-Oct-19	-71.2	0.257
17-Jun-20	-140.3	0.194
12-Oct-20	-80.5	0.18
31-Mar-21	-49.7	0.195
14-Oct-21	-9.7	0.209



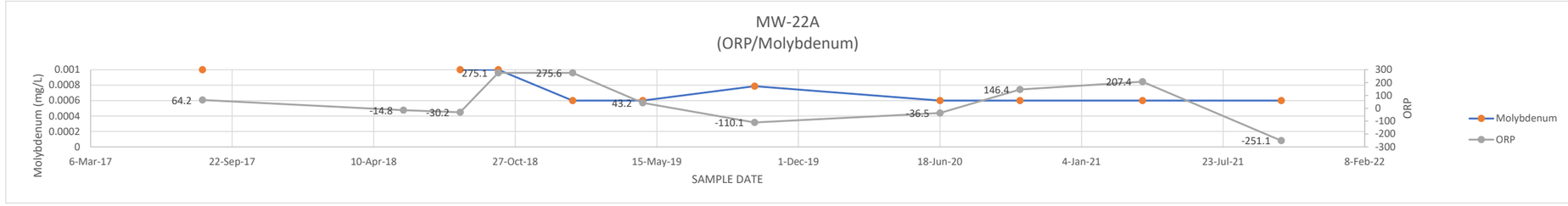
MW-19S

DATE	ORP	MOLYBDENUM
10-Aug-17	-215.4	0.469
18-May-18	-312.1	
2-Aug-18	-227.4	0.384
10-Aug-18	-249	0.112
3-Oct-18	172.1	0.439
15-Jan-19	-162	0.472
25-Apr-19	-281.7	0.462
1-Oct-19	-252.4	0.377
17-Jun-20	-588.1	0.402
12-Oct-20	209.2	0.367
31-Mar-21	-191.7	0.398
15-Oct-21	-237.2	0.407



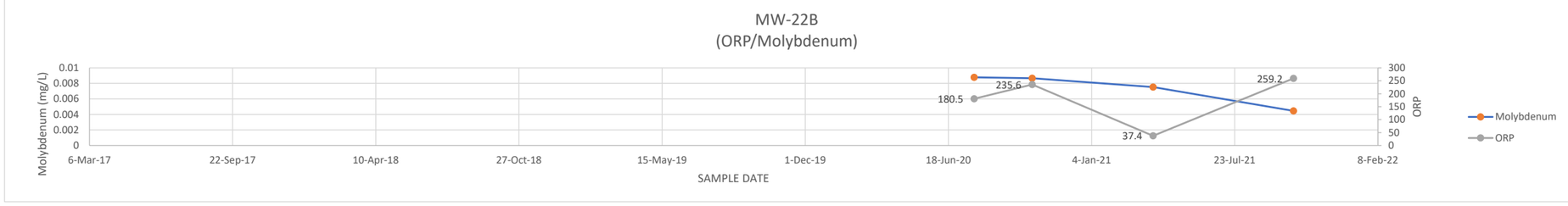
MW-22A

DATE	ORP	MOLYBDENUM
11-Aug-17	64.2	0.001
22-May-18	-14.8	
10-Aug-18	-30.2	0.001
3-Oct-18	275.1	0.001
16-Jan-19	275.6	0.0006
25-Apr-19	43.2	0.0006
30-Sep-19	-110.1	0.000787
18-Jun-20	-36.5	0.0006
9-Oct-20	146.4	0.0006
31-Mar-21	207.4	0.0006
13-Oct-21	-251.1	0.0006



MW-22B

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	180.5	0.00878
13-Oct-20	235.6	0.00866
31-Mar-21	37.4	0.00753
13-Oct-21	259.2	0.00446

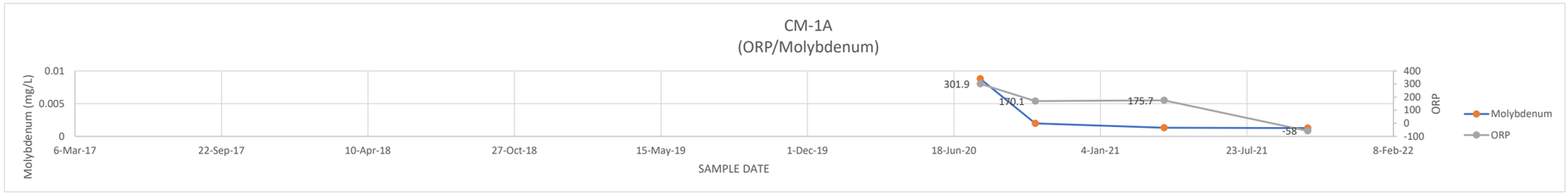


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-1
CHANGES IN ORP AND MOLYBDENUM CONCENTRATIONS

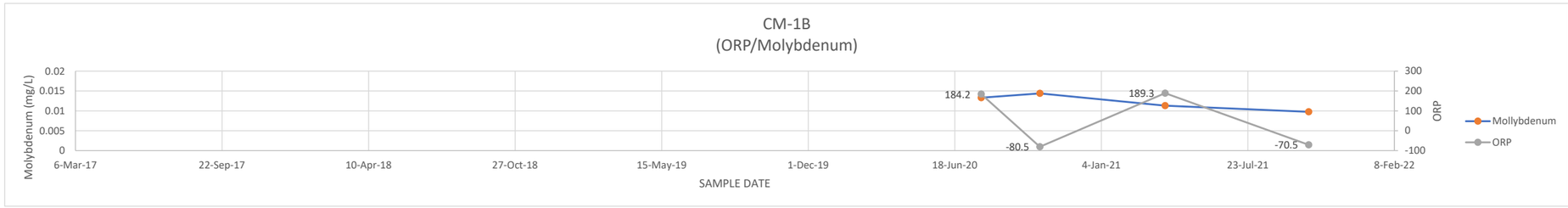
CM-1A

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	301.9	0.0088
7-Oct-20	170.1	0.00198
1-Apr-21	175.7	0.00132
14-Oct-21	-58	0.00127



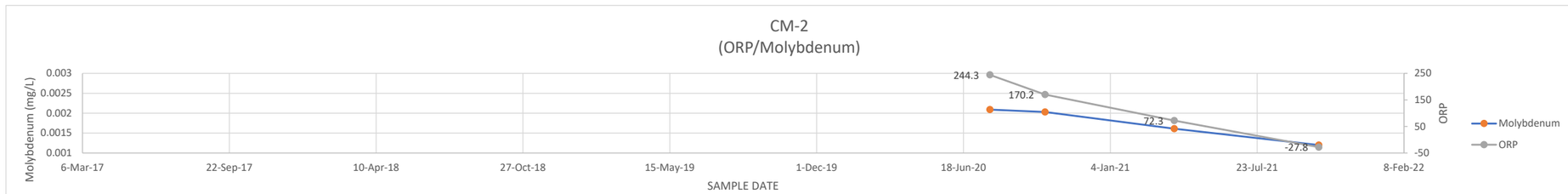
CM-1B

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	184.2	0.0133
12-Oct-20	-80.5	0.0144
1-Apr-21	189.3	0.0113
14-Oct-21	-70.5	0.00976



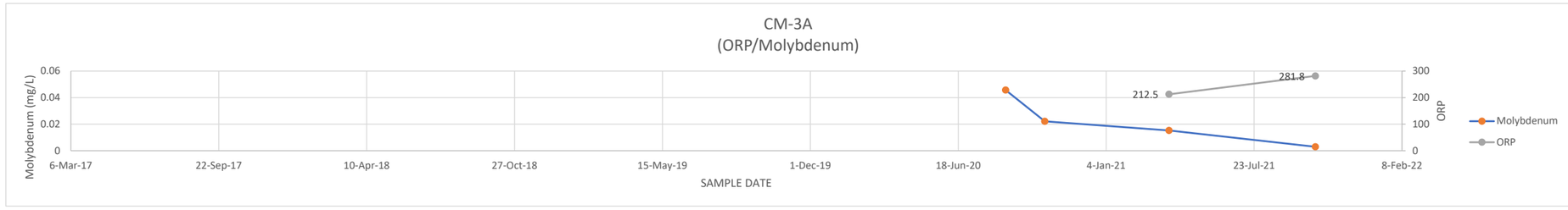
CM-2

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	244.3	0.00209
7-Oct-20	170.2	0.00203
1-Apr-21	72.3	0.00161
15-Oct-21	-27.8	0.0012



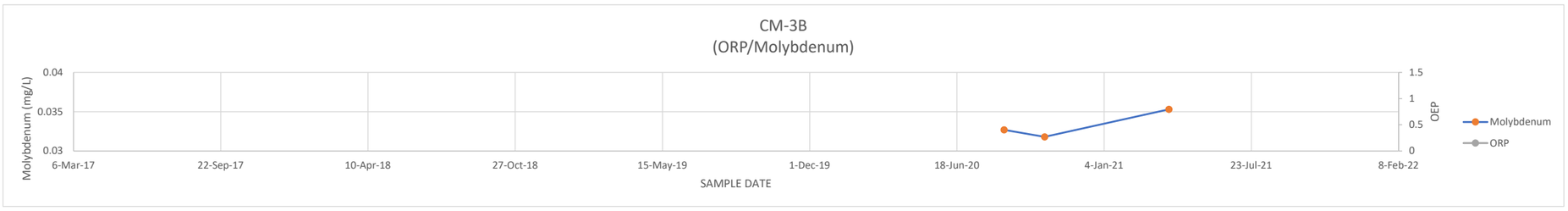
CM-3A

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	212.5	0.0153
14-Oct-21	281.8	0.00297



CM-3B

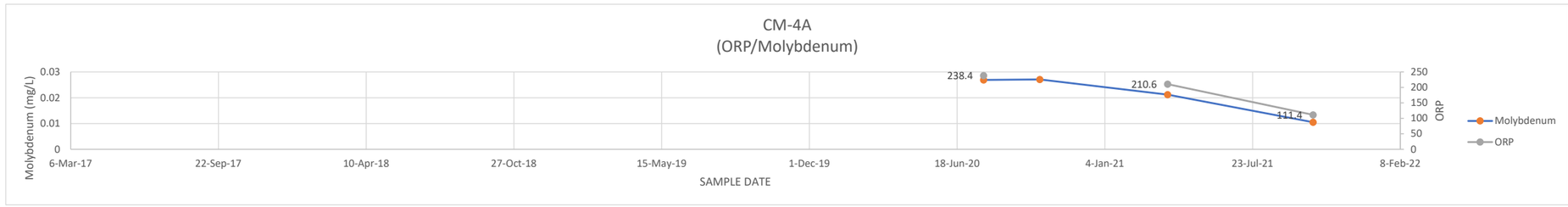
DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		



ATTACHMENT G-1
CHANGES IN ORP AND MOLYBDENUM CONCENTRATIONS

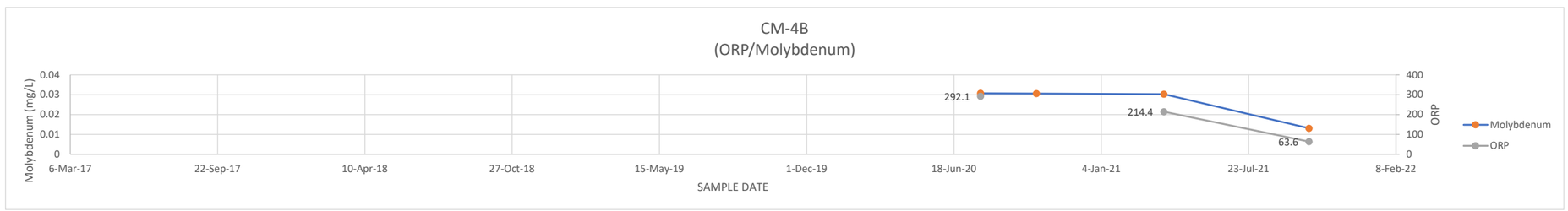
CM-4A

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	238.4	0.0269
8-Oct-20		0.0271
30-Mar-21	210.6	0.0212
13-Oct-21	111.4	0.0105



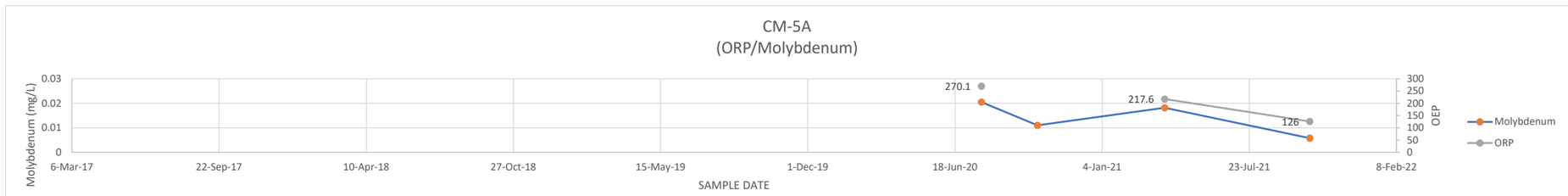
CM-4B

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	292.1	0.0307
8-Oct-20		0.0306
30-Mar-21	214.4	0.0303
13-Oct-21	63.6	0.0131



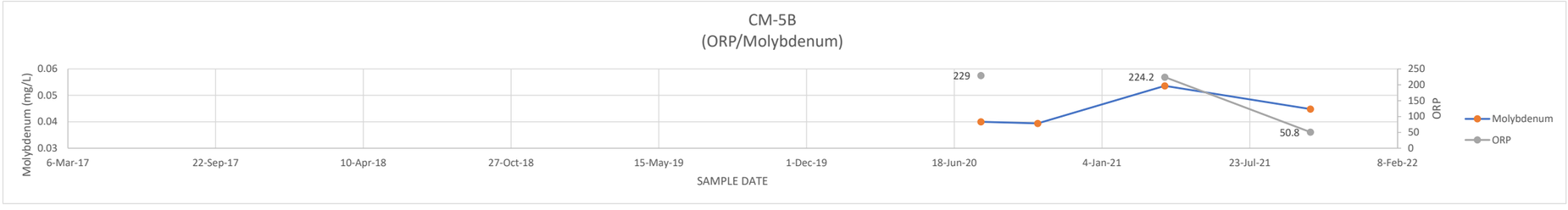
CM-5A

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	270.1	0.0205
8-Oct-20		0.011
30-Mar-21	217.6	0.0182
13-Oct-21	126	0.0058



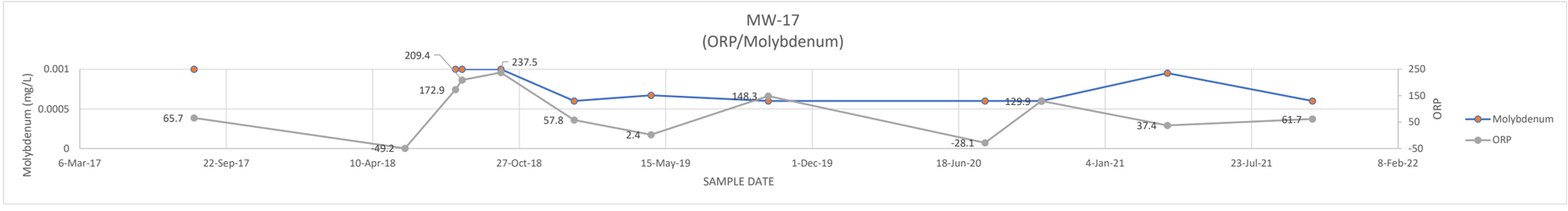
CM-5B

DATE	ORP	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	229	0.04
9-Oct-20		0.0394
30-Mar-21	224.2	0.0536
13-Oct-21	50.8	0.0448



MW-17

DATE	ORP	MOLYBDENUM
9-Aug-17	65.7	0.001
24-May-18	-49.2	
1-Aug-18	172.9	0.001
10-Aug-18	209.4	0.001
2-Oct-18	237.5	0.001
10-Jan-19	57.8	0.0006
25-Apr-19	2.4	0.000671
2-Oct-19	148.3	0.0006
24-Jul-20	-28.1	0.0006
9-Oct-20	129.9	0.0006
30-Mar-21	37.4	0.00095
14-Oct-21	61.7	0.0006

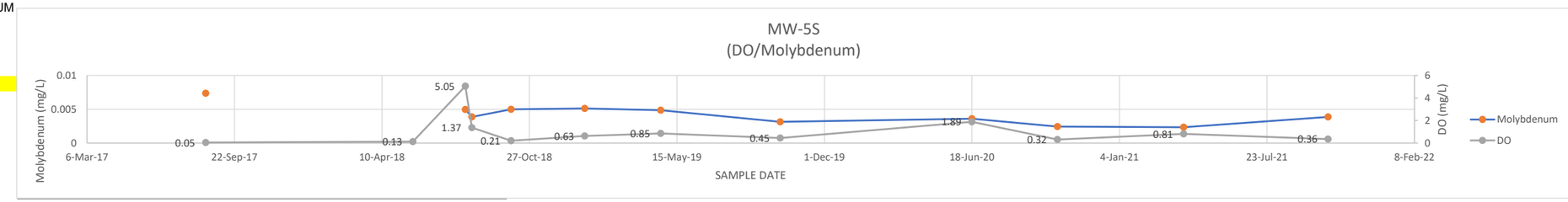


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-2
CHANGES IN DO AND MOLYBDENUM CONCENTRATIONS

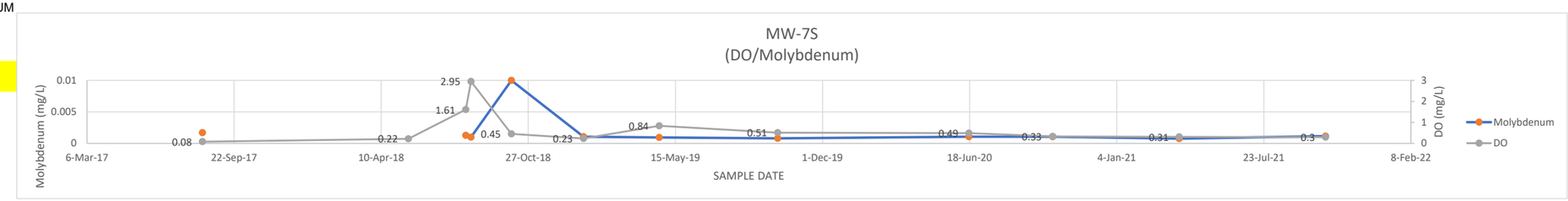
MW-5S

DATE	DO	MOLYBDENUM
14-Aug-17	0.05	0.00737
22-May-18	0.13	
1-Aug-18	5.05	0.00497
10-Aug-18	1.37	0.00387
2-Oct-18	0.21	0.005
10-Jan-19	0.63	0.00512
23-Apr-19	0.85	0.00485
2-Oct-19	0.45	0.00315
18-Jun-20	1.89	0.00361
12-Oct-20	0.32	0.00244
1-Apr-21	0.81	0.00234
14-Oct-21	0.36	0.00387



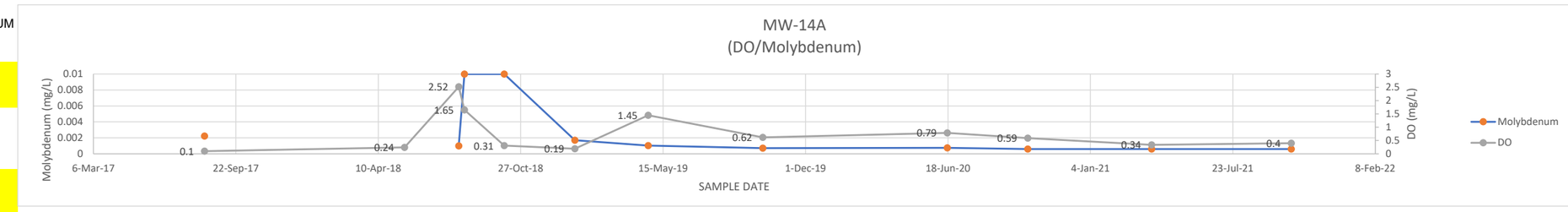
MW-7S

DATE	DO	MOLYBDENUM
10-Aug-17	0.08	0.00171
17-May-18	0.22	
3-Aug-18	1.61	0.00127
10-Aug-18	2.95	0.001
4-Oct-18	0.45	0.01
10-Jan-19	0.23	0.00105
23-Apr-19	0.84	0.000952
1-Oct-19	0.51	0.000798
17-Jun-20	0.49	0.00105
9-Oct-20	0.33	0.00106
30-Mar-21	0.31	0.000755
15-Oct-21	0.3	0.00115



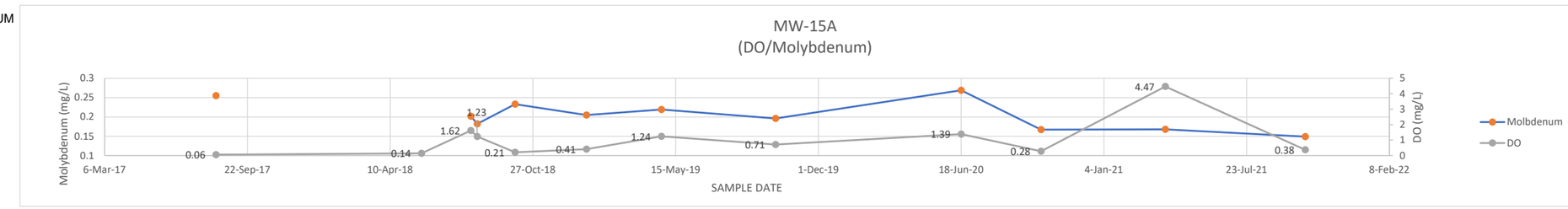
MW-14A

DATE	DO	MOLYBDENUM
9-Aug-17	0.1	0.00223
17-May-18	0.24	
1-Aug-18	2.52	0.001
9-Aug-18	1.65	0.01
4-Oct-18	0.31	0.01
11-Jan-19	0.19	0.0017
24-Apr-19	1.45	0.00104
2-Oct-19	0.62	0.000709
17-Jun-20	0.79	0.00076
8-Oct-20	0.59	0.0006
31-Mar-21	0.34	0.0006
13-Oct-21	0.4	0.0006



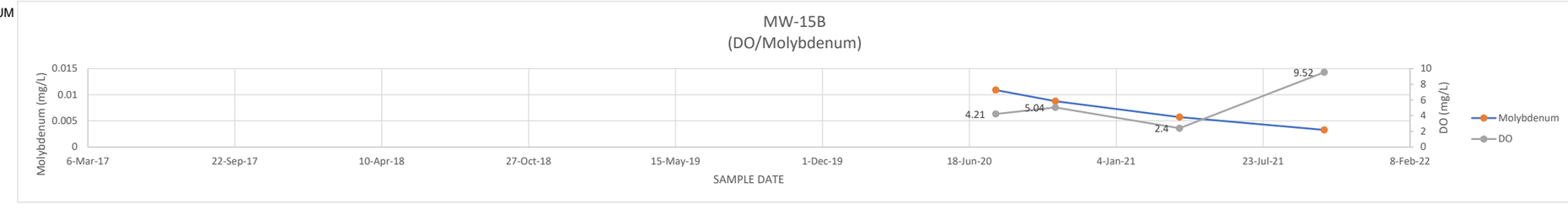
MW-15A

DATE	DO	MOLYBDENUM
9-Aug-17	0.06	0.255
24-May-18	0.14	
1-Aug-18	1.62	0.202
10-Aug-18	1.23	0.182
2-Oct-18	0.21	0.233
10-Jan-19	0.41	0.205
25-Apr-19	1.24	0.219
2-Oct-19	0.71	0.196
18-Jun-20	1.39	0.269
8-Oct-20	0.28	0.167
31-Mar-21	4.47	0.168
13-Oct-21	0.38	0.149



MW-15B

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4.21	0.0109
13-Oct-20	5.04	0.00876
31-Mar-21	2.4	0.00571
14-Oct-21	9.52	0.00328

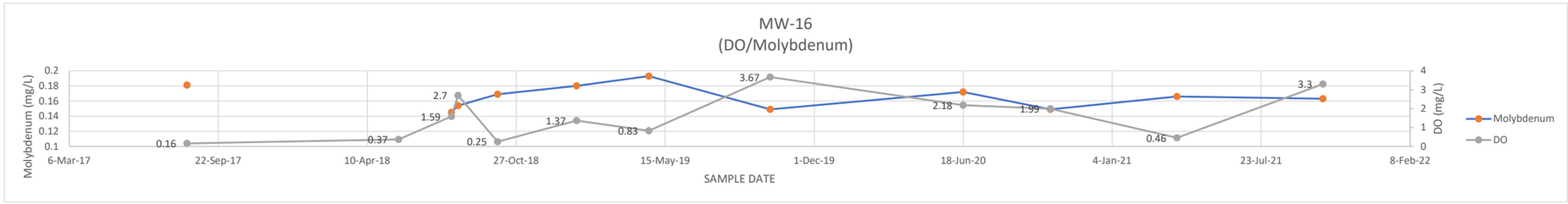


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-2
CHANGES IN DO AND MOLYBDENUM CONCENTRATIONS

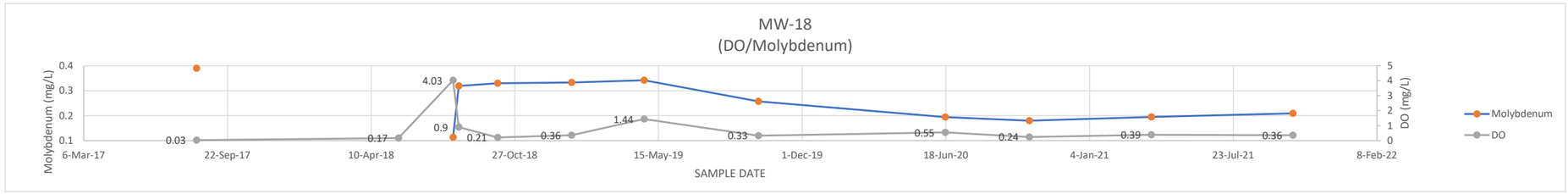
MW-16

DATE	DO	MOLYBDENUM
11-Aug-17	0.16	0.181
22-May-18	0.37	
1-Aug-18	1.59	0.145
10-Aug-18	2.7	0.154
2-Oct-18	0.25	0.169
16-Jan-19	1.37	0.18
23-Apr-19	0.83	0.193
3-Oct-19	3.67	0.149
18-Jun-20	2.18	0.172
13-Oct-20	1.99	0.149
1-Apr-21	0.46	0.166
14-Oct-21	3.3	0.163



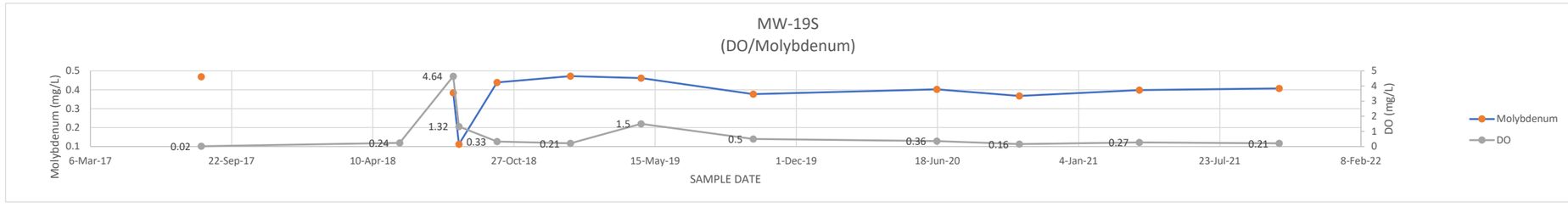
MW-18

DATE	ORP	MOLYBDENUM
10-Aug-17	0.03	0.39
18-May-18	0.17	
2-Aug-18	4.03	0.113
10-Aug-18	0.9	0.319
3-Oct-18	0.21	0.33
14-Jan-19	0.36	0.333
25-Apr-19	1.44	0.342
1-Oct-19	0.33	0.257
17-Jun-20	0.55	0.194
12-Oct-20	0.24	0.18
31-Mar-21	0.39	0.195
14-Oct-21	0.36	0.209



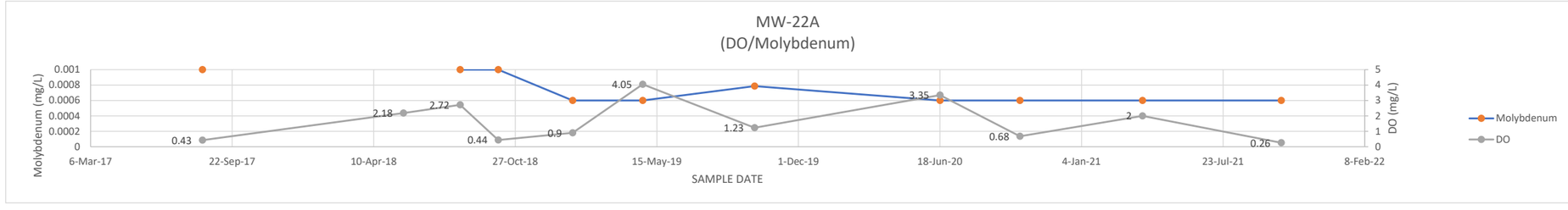
MW-19S

DATE	DO	MOLYBDENUM
10-Aug-17	0.02	0.469
18-May-18	0.24	
2-Aug-18	4.64	0.384
10-Aug-18	1.32	0.112
3-Oct-18	0.33	0.439
15-Jan-19	0.21	0.472
25-Apr-19	1.5	0.462
1-Oct-19	0.5	0.377
17-Jun-20	0.36	0.402
12-Oct-20	0.16	0.367
31-Mar-21	0.27	0.398
15-Oct-21	0.21	0.407



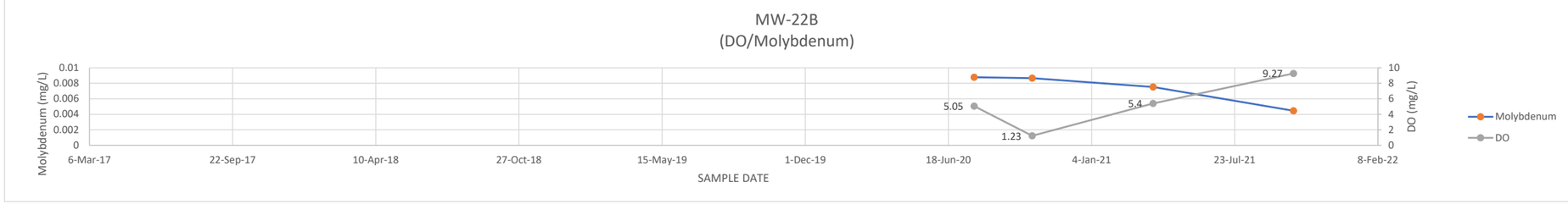
MW-22A

DATE	DO	MOLYBDENUM
11-Aug-17	0.43	0.001
22-May-18	2.18	
10-Aug-18	2.72	0.001
3-Oct-18	0.44	0.001
16-Jan-19	0.9	0.0006
25-Apr-19	4.05	0.0006
30-Sep-19	1.23	0.000787
18-Jun-20	3.35	0.0006
9-Oct-20	0.68	0.0006
31-Mar-21	2	0.0006
13-Oct-21	0.26	0.0006



MW-22B

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	5.05	0.00878
13-Oct-20	1.23	0.00866
31-Mar-21	5.4	0.00753
13-Oct-21	9.27	0.00446

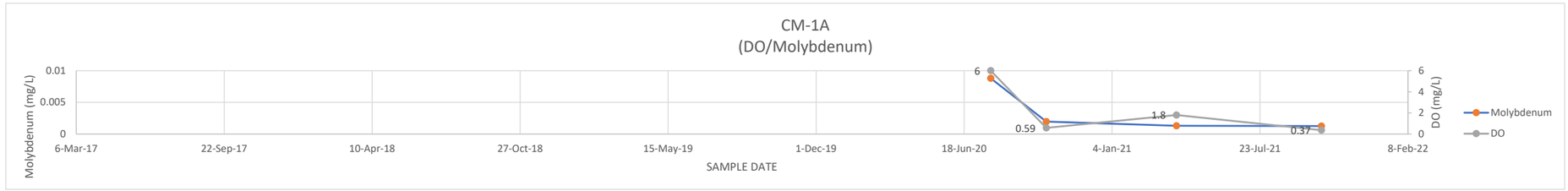


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-2
CHANGES IN DO AND MOLYBDENUM CONCENTRATIONS

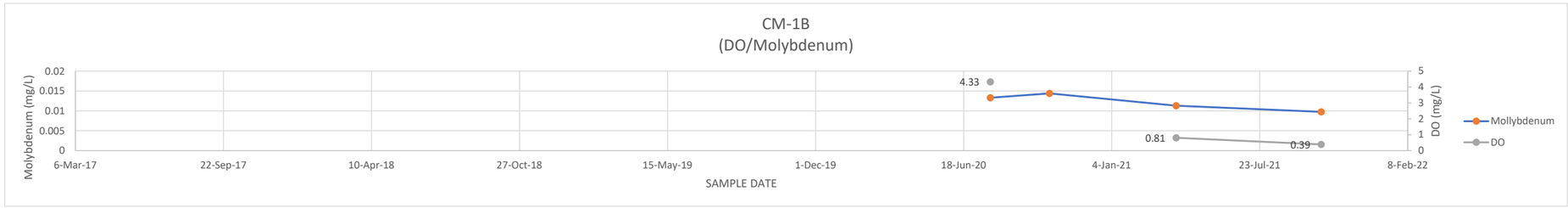
CM-1A

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	6	0.0088
7-Oct-20	0.59	0.00198
1-Apr-21	1.8	0.00132
14-Oct-21	0.37	0.00127



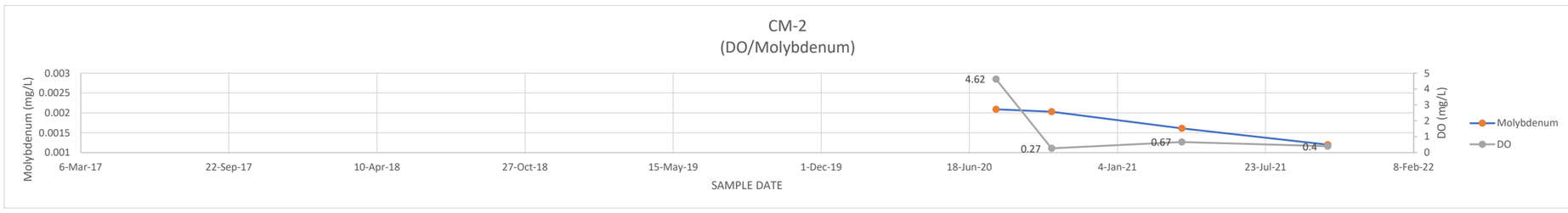
CM-1B

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4.33	0.0133
12-Oct-20		0.0144
1-Apr-21	0.81	0.0113
14-Oct-21	0.39	0.00976



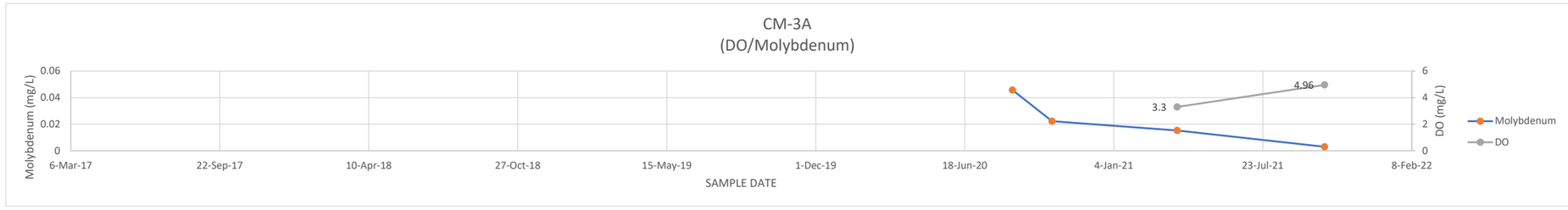
CM-2

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4.62	0.00209
7-Oct-20	0.27	0.00203
1-Apr-21	0.67	0.00161
15-Oct-21	0.4	0.0012



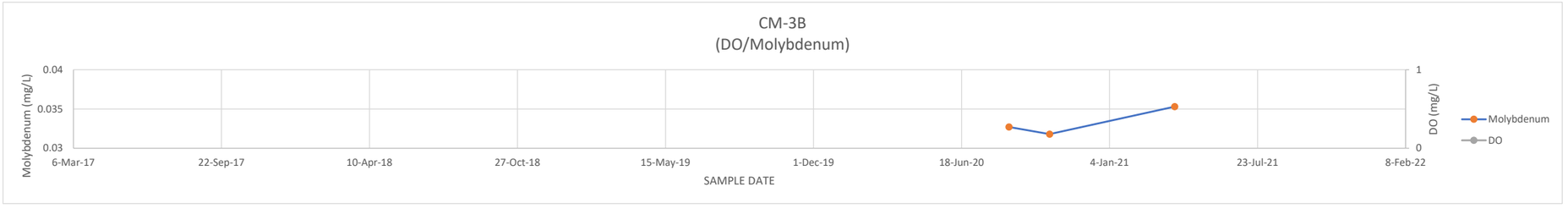
CM-3A

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	3.3	0.0153
14-Oct-21	4.96	0.00297



CM-3B

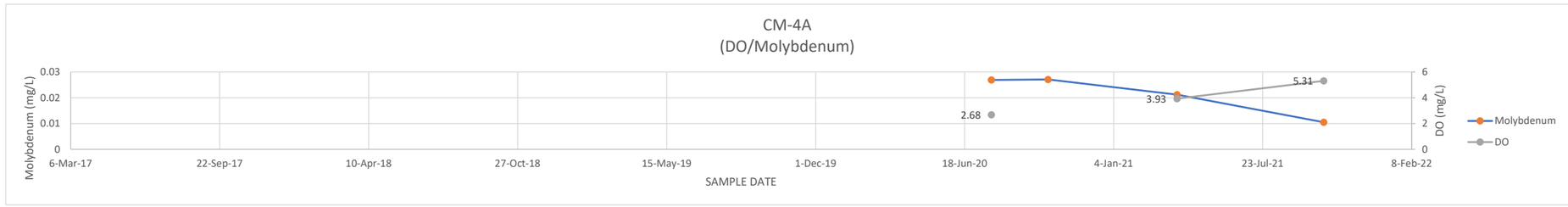
DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		



ATTACHMENT G-2
CHANGES IN DO AND MOLYBDENUM CONCENTRATIONS

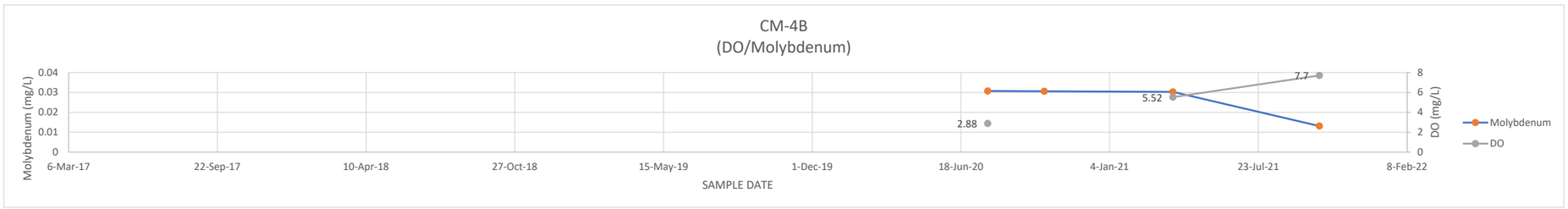
CM-4A

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2.68	0.0269
8-Oct-20		0.0271
30-Mar-21	3.93	0.0212
13-Oct-21	5.31	0.0105



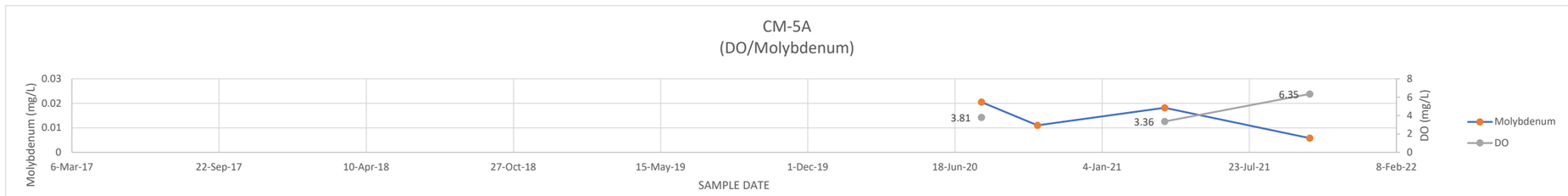
CM-4B

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2.88	0.0307
8-Oct-20		0.0306
30-Mar-21	5.52	0.0303
13-Oct-21	7.7	0.0131



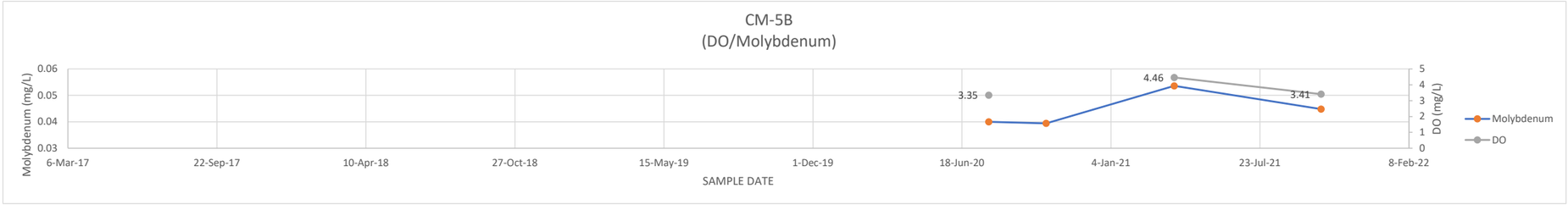
CM-5A

DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.81	0.0205
8-Oct-20		0.011
30-Mar-21	3.36	0.0182
13-Oct-21	6.35	0.0058



CM-5B

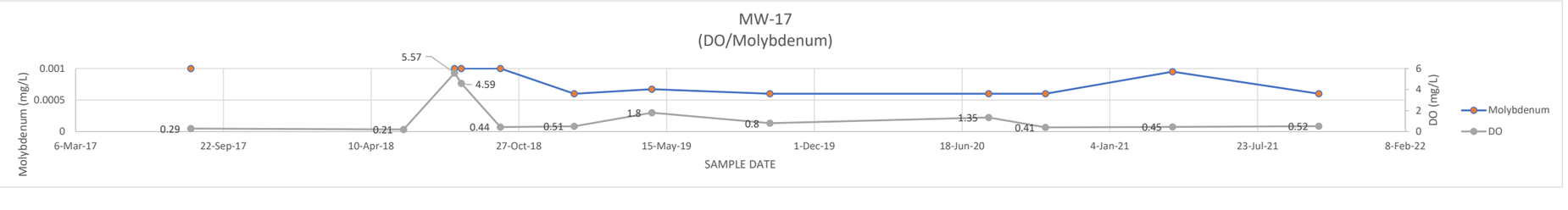
DATE	DO	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3.35	0.04
9-Oct-20		0.0394
30-Mar-21	4.46	0.0536
13-Oct-21	3.41	0.0448



MW-17

DATE	DO	MOLYBDENUM
9-Aug-17	0.29	0.001
24-May-18	0.21	
1-Aug-18	5.57	0.001
10-Aug-18	4.59	0.001
2-Oct-18	0.44	0.001
10-Jan-19	0.51	0.0006
25-Apr-19	1.8	0.000671
2-Oct-19	0.8	0.0006
24-Jul-20	1.35	0.0006
9-Oct-20	0.41	0.0006
30-Mar-21	0.45	0.00095
14-Oct-21	0.52	0.0006

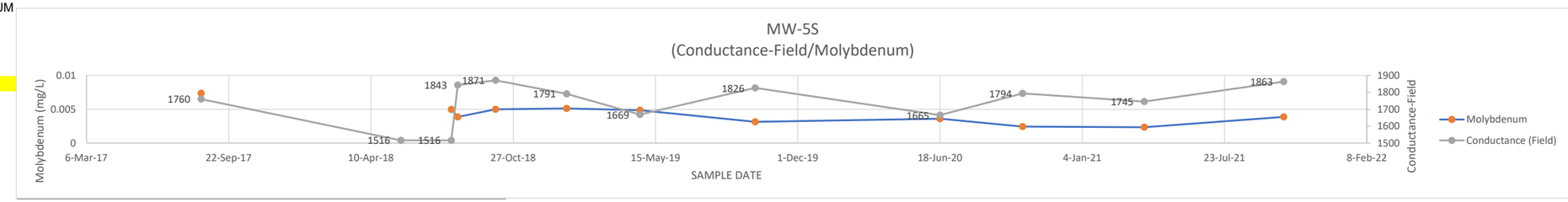
Yellow Indicates Reported Below shown value (MDL)



ATTACHMENT G-3
CHANGES IN CONDUCTANCE (FIELD) AND MOLYBDENUM CONCENTRATIONS

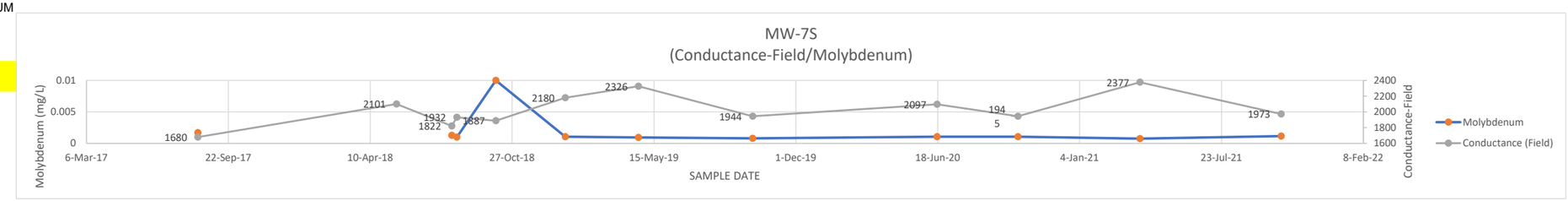
MW-5S

DATE	COND-Field	MOLYBDENUM
14-Aug-17	1760	0.00737
22-May-18	1516	
1-Aug-18	1516	0.00497
10-Aug-18	1843	0.00387
2-Oct-18	1871	0.005
10-Jan-19	1791	0.00512
23-Apr-19	1669	0.00485
2-Oct-19	1826	0.00315
18-Jun-20	1665	0.00361
12-Oct-20	1794	0.00244
1-Apr-21	1745	0.00234
14-Oct-21	1863	0.00387



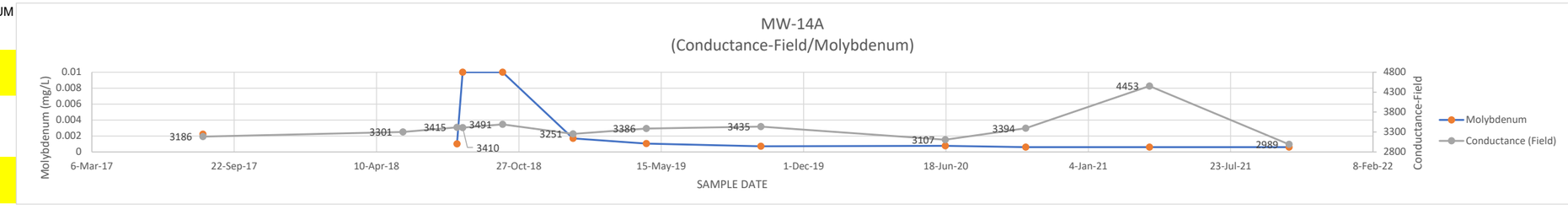
MW-7S

DATE	COND-Field	MOLYBDENUM
10-Aug-17	1680	0.00171
17-May-18	2101	
3-Aug-18	1822	0.00127
10-Aug-18	1932	0.001
4-Oct-18	1887	0.01
10-Jan-19	2180	0.00105
23-Apr-19	2326	0.000952
1-Oct-19	1944	0.000798
17-Jun-20	2097	0.00105
9-Oct-20	1945	0.00106
30-Mar-21	2377	0.000755
15-Oct-21	1973	0.00115



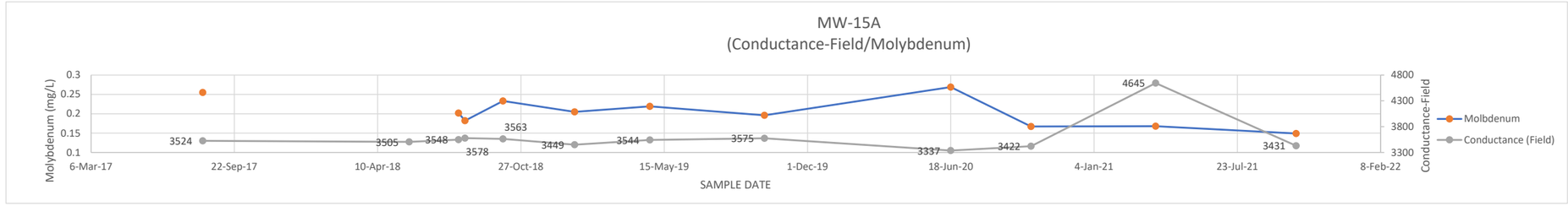
MW-14A

DATE	COND-Field	MOLYBDENUM
9-Aug-17	3186	0.00223
17-May-18	3301	
1-Aug-18	3415	0.001
9-Aug-18	3410	0.01
4-Oct-18	3491	0.01
11-Jan-19	3251	0.0017
24-Apr-19	3386	0.00104
2-Oct-19	3435	0.000709
17-Jun-20	3107	0.00076
8-Oct-20	3394	0.0006
31-Mar-21	4453	0.0006
13-Oct-21	2989	0.0006



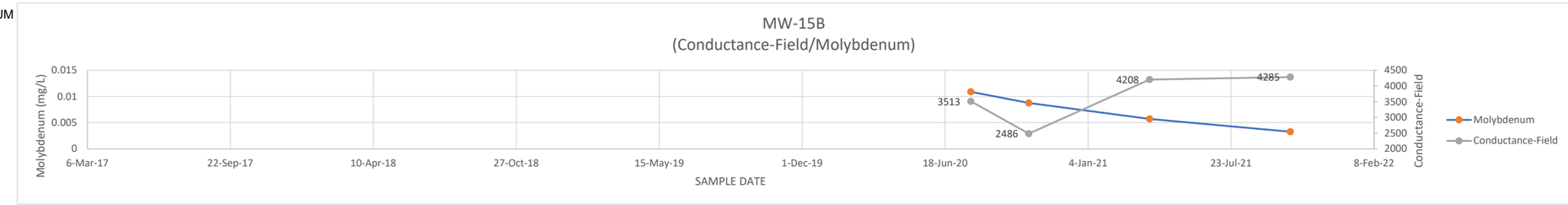
MW-15A

DATE	COND-Field	MOLYBDENUM
9-Aug-17	3524	0.255
24-May-18	3505	
1-Aug-18	3548	0.202
10-Aug-18	3578	0.182
2-Oct-18	3563	0.233
10-Jan-19	3449	0.205
25-Apr-19	3544	0.219
2-Oct-19	3575	0.196
18-Jun-20	3337	0.269
8-Oct-20	3422	0.167
31-Mar-21	4645	0.168
13-Oct-21	3431	0.149



MW-15B

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3513	0.0109
13-Oct-20	2486	0.00876
31-Mar-21	4208	0.00571
14-Oct-21	4285	0.00328

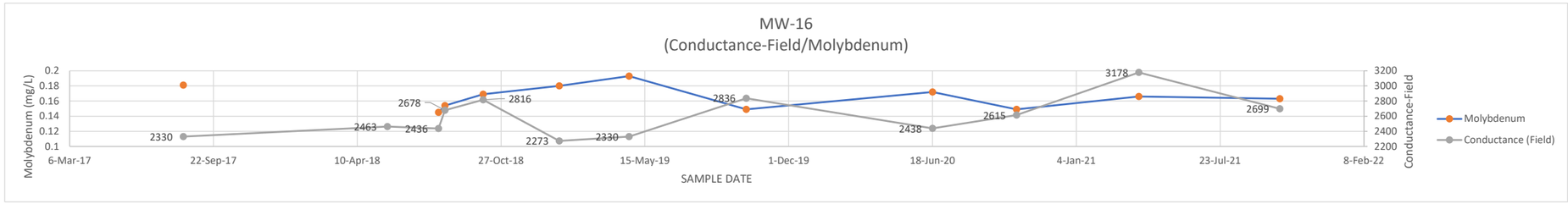


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-3
CHANGES IN CONDUCTANCE (FIELD) AND MOLYBDENUM CONCENTRATIONS

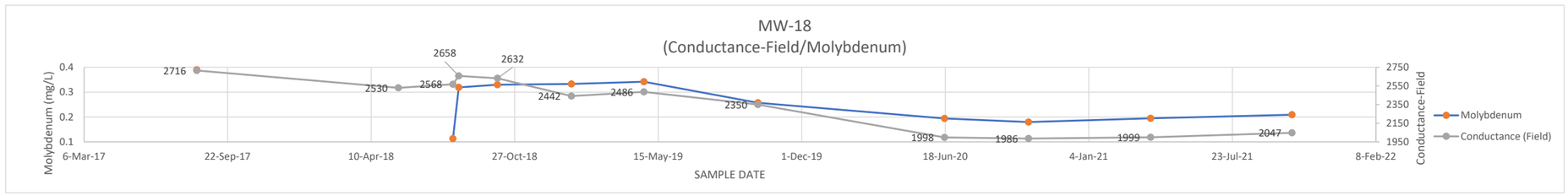
MW-16

DATE	COND-Field	MOLYBDENUM
11-Aug-17	2330	0.181
22-May-18	2463	
1-Aug-18	2436	0.145
10-Aug-18	2678	0.154
2-Oct-18	2816	0.169
16-Jan-19	2273	0.18
23-Apr-19	2330	0.193
3-Oct-19	2836	0.149
18-Jun-20	2438	0.172
13-Oct-20	2615	0.149
1-Apr-21	3178	0.166
14-Oct-21	2699	0.163



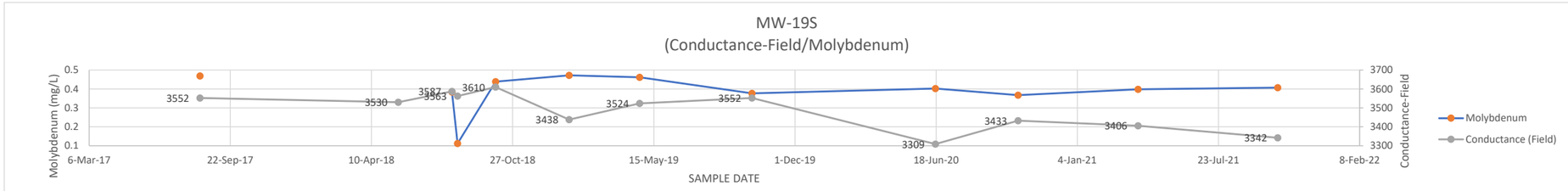
MW-18

DATE	COND-Field	MOLYBDENUM
10-Aug-17	2716	0.39
18-May-18	2530	
2-Aug-18	2568	0.113
10-Aug-18	2658	0.319
3-Oct-18	2632	0.33
14-Jan-19	2442	0.333
25-Apr-19	2486	0.342
1-Oct-19	2350	0.257
17-Jun-20	1998	0.194
12-Oct-20	1986	0.18
31-Mar-21	1999	0.195
14-Oct-21	2047	0.209



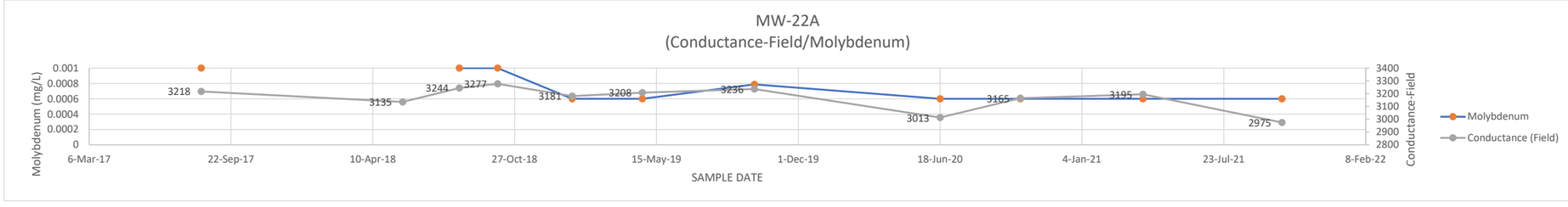
MW-19S

DATE	COND-Field	MOLYBDENUM
10-Aug-17	3552	0.469
18-May-18	3530	
2-Aug-18	3587	0.384
10-Aug-18	3563	0.112
3-Oct-18	3610	0.439
15-Jan-19	3438	0.472
25-Apr-19	3524	0.462
1-Oct-19	3552	0.377
17-Jun-20	3309	0.402
12-Oct-20	3433	0.367
31-Mar-21	3406	0.398
15-Oct-21	3342	0.407



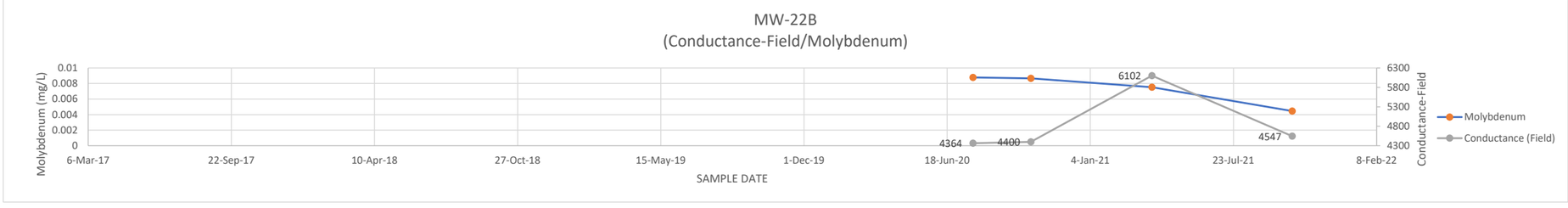
MW-22A

DATE	COND-Field	MOLYBDENUM
11-Aug-17	3218	0.001
22-May-18	3135	
10-Aug-18	3244	0.001
3-Oct-18	3277	0.001
16-Jan-19	3181	0.0006
25-Apr-19	3208	0.0006
30-Sep-19	3236	0.000787
18-Jun-20	3013	0.0006
9-Oct-20	3165	0.0006
31-Mar-21	3195	0.0006
13-Oct-21	2975	0.0006



MW-22B

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4364	0.00878
13-Oct-20	4400	0.00866
31-Mar-21	6102	0.00753
13-Oct-21	4547	0.00446

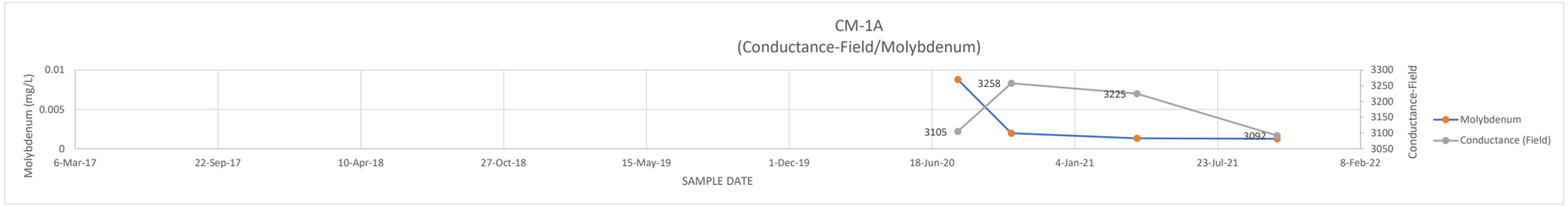


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-3
CHANGES IN CONDUCTANCE (FIELD) AND MOLYBDENUM CONCENTRATIONS

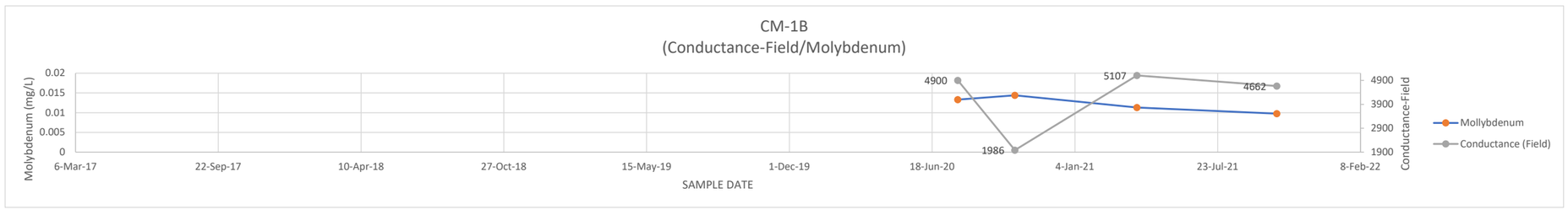
CM-1A

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3105	0.0088
7-Oct-20	3258	0.00198
1-Apr-21	3225	0.00132
14-Oct-21	3092	0.00127



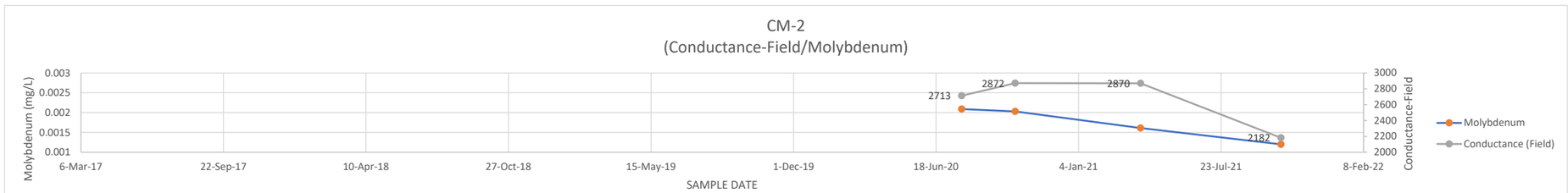
CM-1B

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4900	0.0133
12-Oct-20	1986	0.0144
1-Apr-21	5107	0.0113
14-Oct-21	4662	0.00976



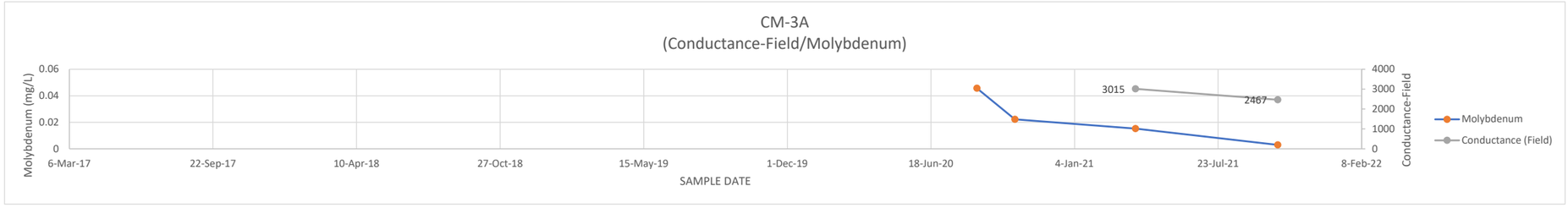
CM-2

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2713	0.00209
7-Oct-20	2872	0.00203
1-Apr-21	2870	0.00161
15-Oct-21	2182	0.0012



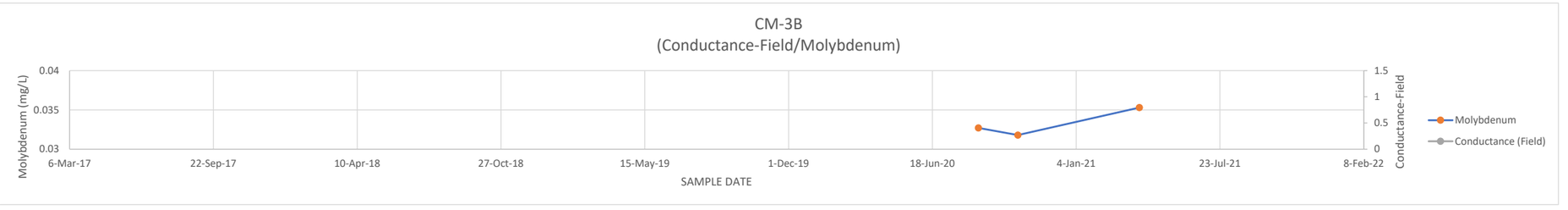
CM-3A

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	3015	0.0153
14-Oct-21	2467	0.00297



CM-3B

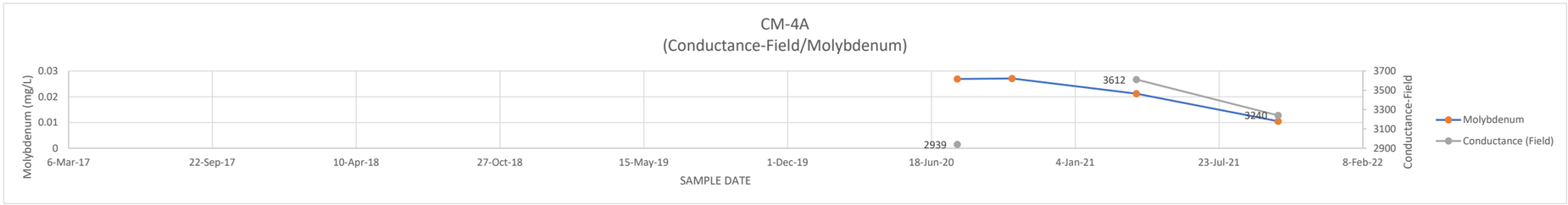
DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		



ATTACHMENT G-3
CHANGES IN CONDUCTANCE (FIELD) AND MOLYBDENUM CONCENTRATIONS

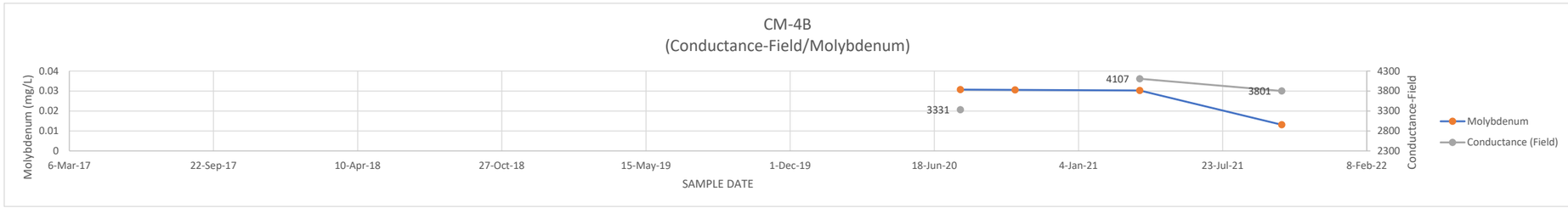
CM-4A

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2939	0.0269
8-Oct-20		0.0271
30-Mar-21	3612	0.0212
13-Oct-21	3240	0.0105



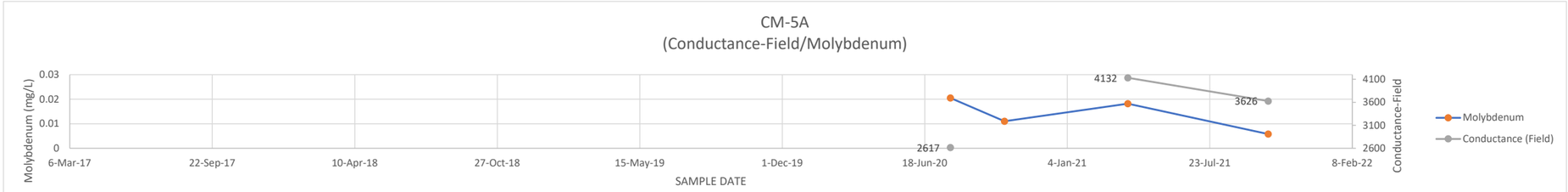
CM-4B

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3331	0.0307
8-Oct-20		0.0306
30-Mar-21	4107	0.0303
13-Oct-21	3801	0.0131



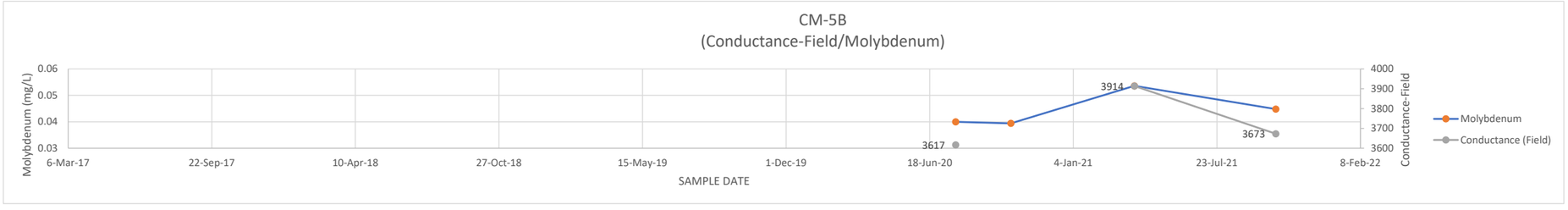
CM-5A

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2617	0.0205
8-Oct-20		0.011
30-Mar-21	4132	0.0182
13-Oct-21	3626	0.0058



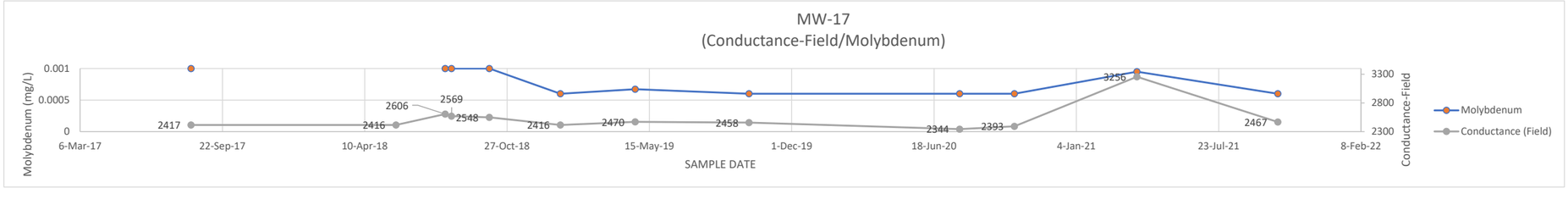
CM-5B

DATE	COND-Field	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3617	0.04
9-Oct-20		0.0394
30-Mar-21	3914	0.0536
13-Oct-21	3673	0.0448



MW-17

DATE	COND-Field	MOLYBDENUM
9-Aug-17	2417	0.001
24-May-18	2416	
1-Aug-18	2606	0.001
10-Aug-18	2569	0.001
2-Oct-18	2548	0.001
10-Jan-19	2416	0.0006
25-Apr-19	2470	0.000671
2-Oct-19	2458	0.0006
24-Jul-20	2344	0.0006
9-Oct-20	2393	0.0006
30-Mar-21	3256	0.00095
14-Oct-21	2467	0.0006

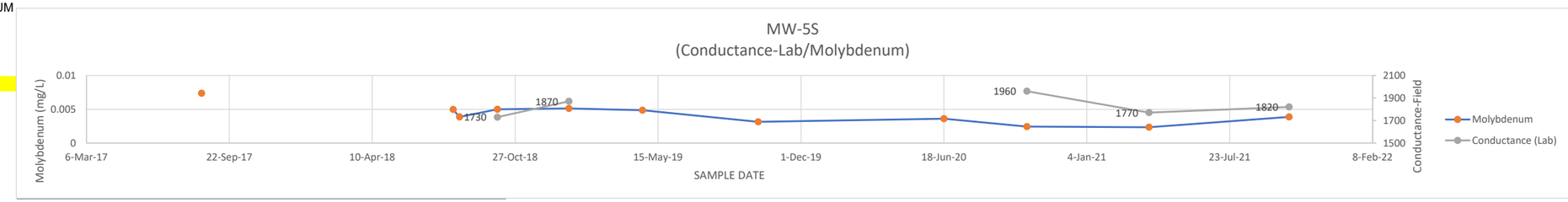


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-3
CHANGES IN CONDUCTANCE (LAB) AND MOLYBDENUM CONCENTRATIONS

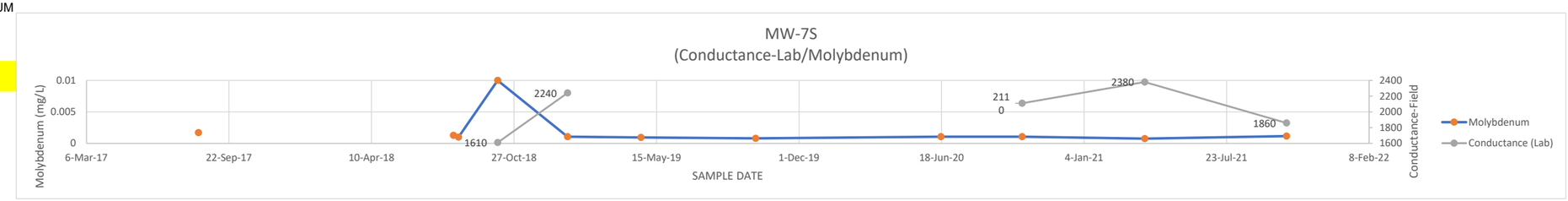
MW-5S

DATE	COND-Lab	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18	1730	0.005
10-Jan-19	1870	0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20		0.00361
12-Oct-20	1960	0.00244
1-Apr-21	1770	0.00234
14-Oct-21	1820	0.00387



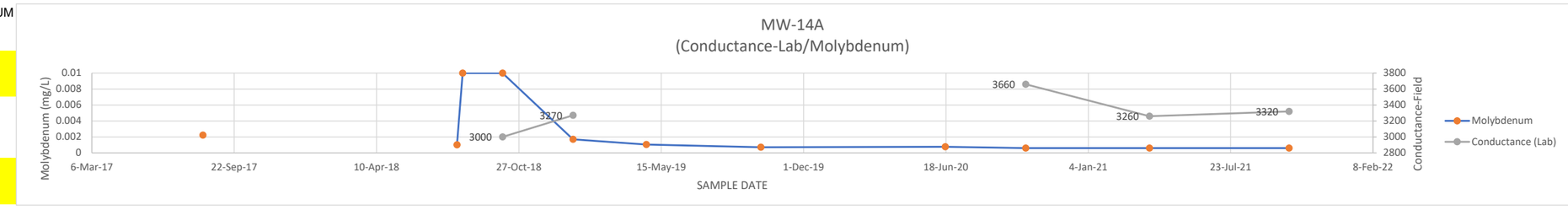
MW-7S

DATE	COND-Lab	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18	1610	0.01
10-Jan-19	2240	0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20		0.00105
9-Oct-20	2110	0.00106
30-Mar-21	2380	0.000755
15-Oct-21	1860	0.00115



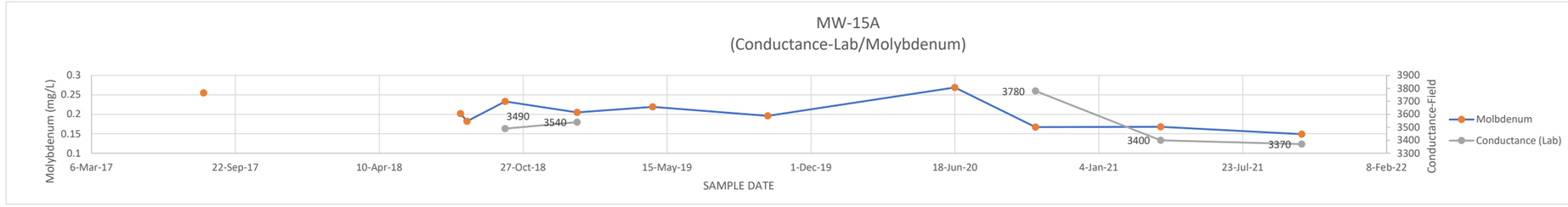
MW-14A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18	3000	0.01
11-Jan-19	3270	0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20		0.00076
8-Oct-20	3660	0.0006
31-Mar-21	3260	0.0006
13-Oct-21	3320	0.0006



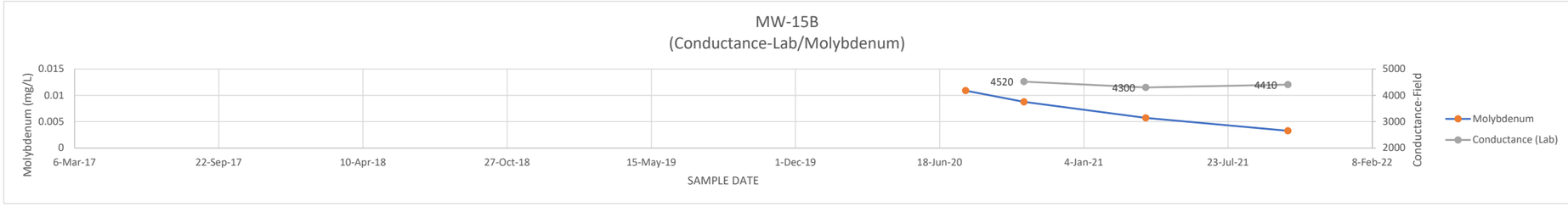
MW-15A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18	3490	0.233
10-Jan-19	3540	0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20		0.269
8-Oct-20	3780	0.167
31-Mar-21	3400	0.168
13-Oct-21	3370	0.149



MW-15B

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0109
13-Oct-20	4520	0.00876
31-Mar-21	4300	0.00571
14-Oct-21	4410	0.00328

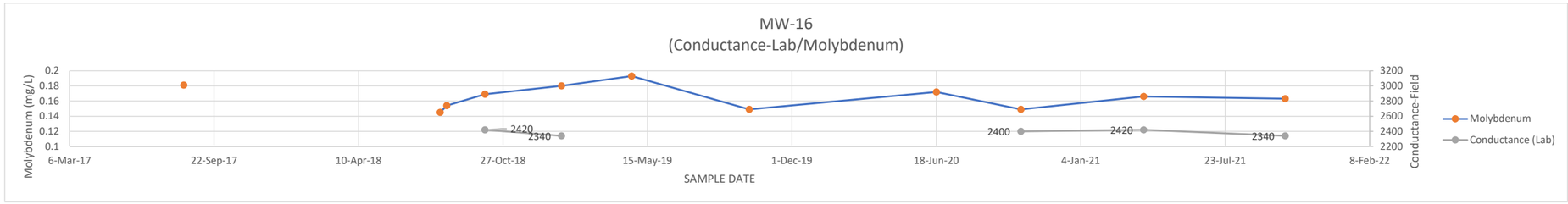


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-3
CHANGES IN CONDUCTANCE (LAB) AND MOLYBDENUM CONCENTRATIONS

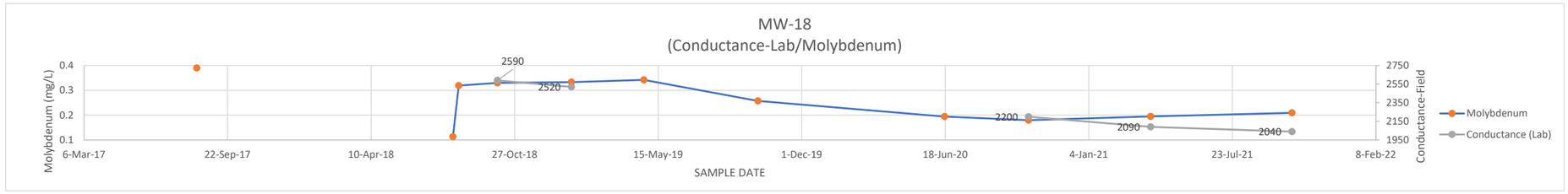
MW-16

DATE	COND-Lab	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18	2420	0.169
16-Jan-19	2340	0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20		0.172
13-Oct-20	2400	0.149
1-Apr-21	2420	0.166
14-Oct-21	2340	0.163



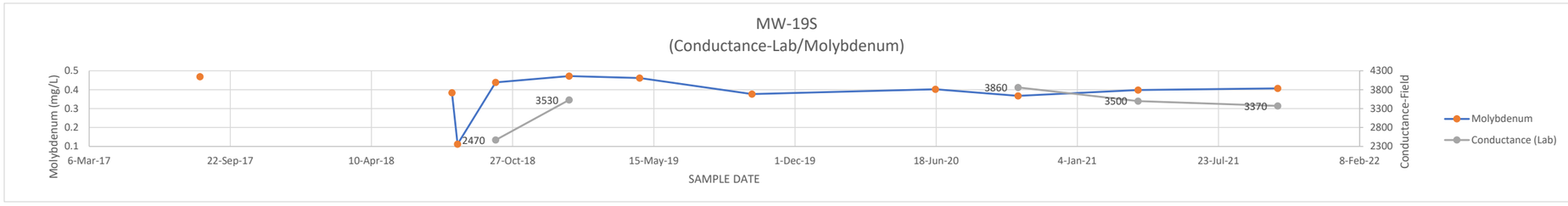
MW-18

DATE	COND-Lab	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18	2590	0.33
14-Jan-19	2520	0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20		0.194
12-Oct-20	2200	0.18
31-Mar-21	2090	0.195
14-Oct-21	2040	0.209



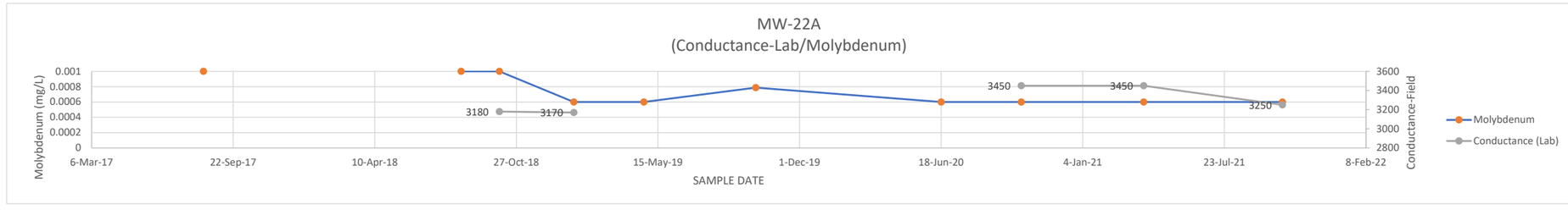
MW-19S

DATE	COND-Lab	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18	2470	0.439
15-Jan-19	3530	0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20		0.402
12-Oct-20	3860	0.367
31-Mar-21	3500	0.398
15-Oct-21	3370	0.407



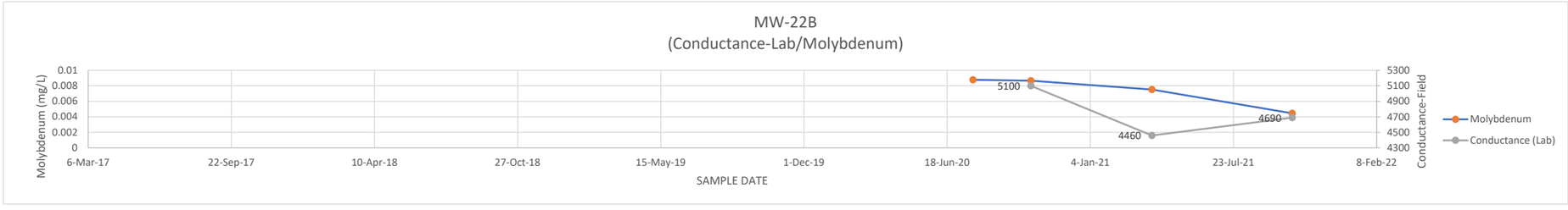
MW-22A

DATE	COND-Lab	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18	3180	0.001
16-Jan-19	3170	0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20		0.0006
9-Oct-20	3450	0.0006
31-Mar-21	3450	0.0006
13-Oct-21	3250	0.0006



MW-22B

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00878
13-Oct-20	5100	0.00866
31-Mar-21	4460	0.00753
13-Oct-21	4690	0.00446

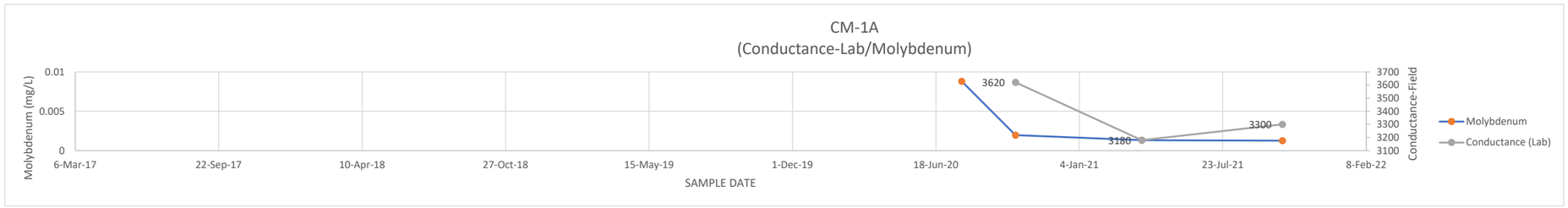


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-3
CHANGES IN CONDUCTANCE (LAB) AND MOLYBDENUM CONCENTRATIONS

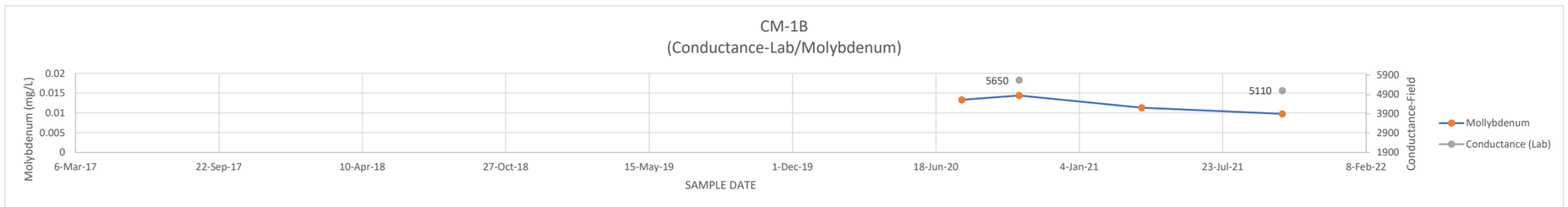
CM-1A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0088
7-Oct-20	3620	0.00198
1-Apr-21	3180	0.00132
14-Oct-21	3300	0.00127



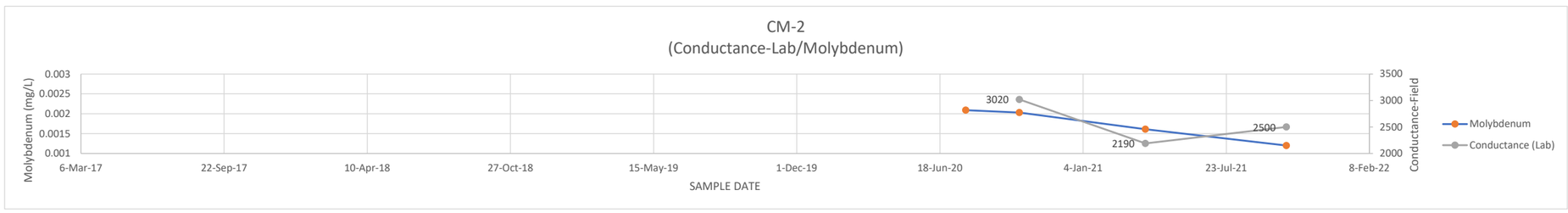
CM-1B

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0133
12-Oct-20	5650	0.0144
1-Apr-21		0.0113
14-Oct-21	5110	0.00976



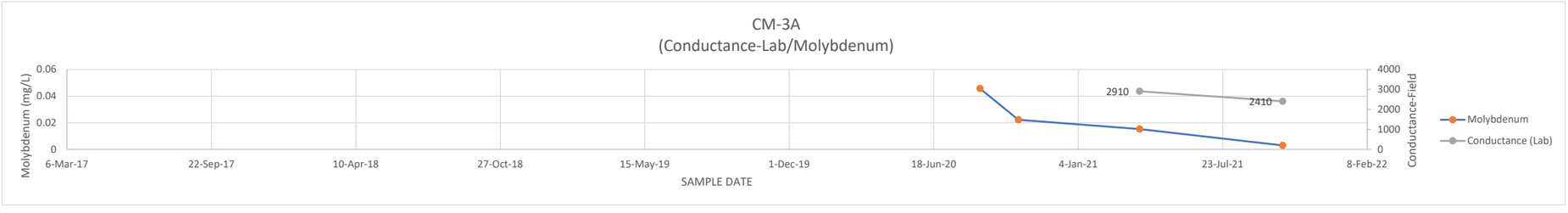
CM-2

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00209
7-Oct-20	3020	0.00203
1-Apr-21	2190	0.00161
15-Oct-21	2500	0.0012



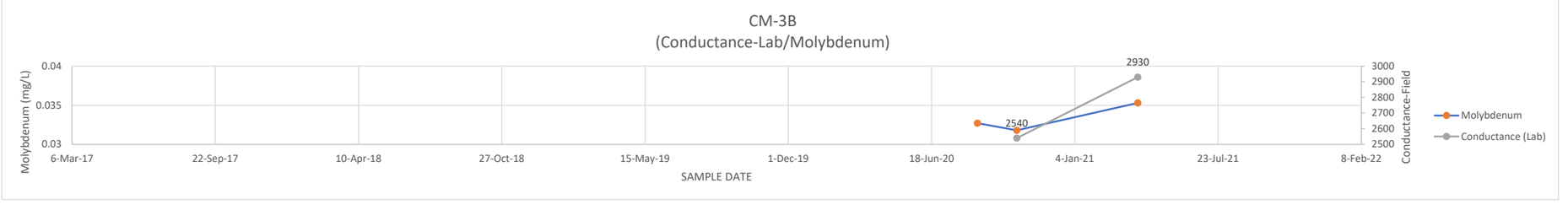
CM-3A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	2910	0.0153
14-Oct-21	2410	0.00297



CM-3B

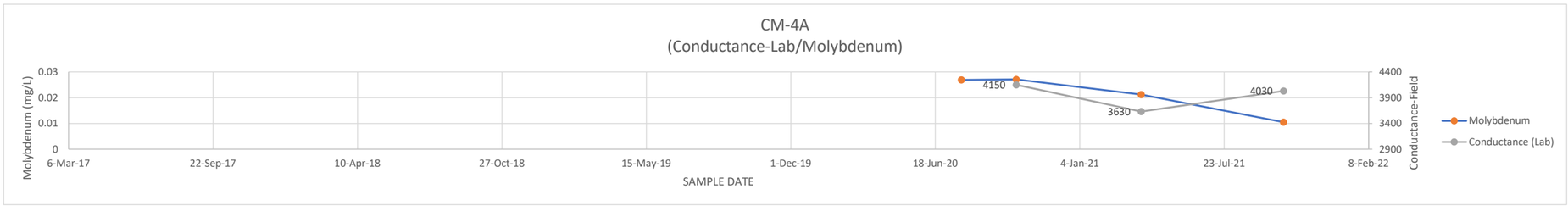
DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20	2540	0.0318
2-Apr-21	2930	0.0353
11-Oct-21		



ATTACHMENT G-3
CHANGES IN CONDUCTANCE (LAB) AND MOLYBDENUM CONCENTRATIONS

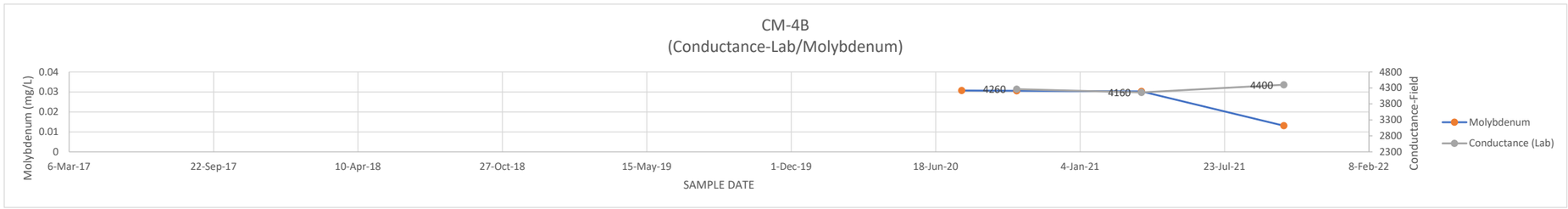
CM-4A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0269
8-Oct-20	4150	0.0271
30-Mar-21	3630	0.0212
13-Oct-21	4030	0.0105



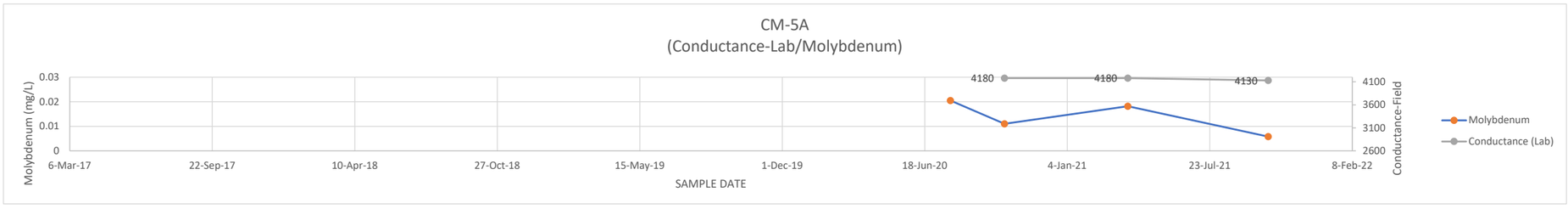
CM-4B

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0307
8-Oct-20	4260	0.0306
30-Mar-21	4160	0.0303
13-Oct-21	4400	0.0131



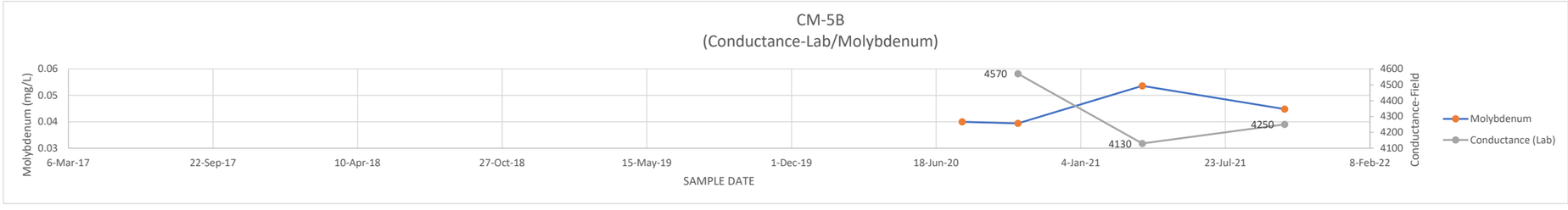
CM-5A

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0205
8-Oct-20	4180	0.011
30-Mar-21	4180	0.0182
13-Oct-21	4130	0.0058



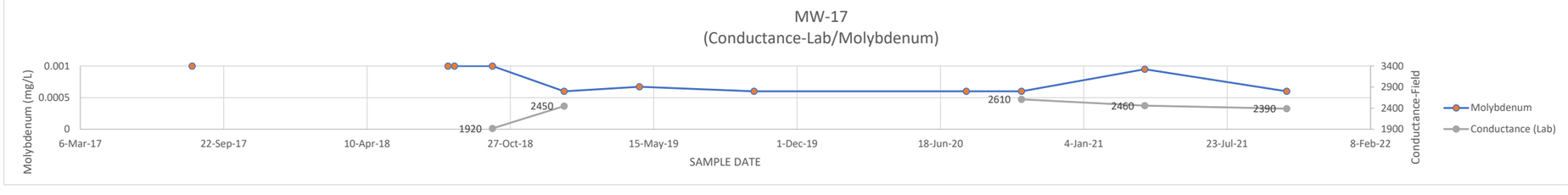
CM-5B

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.04
9-Oct-20	4570	0.0394
30-Mar-21	4130	0.0536
13-Oct-21	4250	0.0448



MW-17

DATE	COND-Lab	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18	1920	0.001
10-Jan-19	2450	0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20		0.0006
9-Oct-20	2610	0.0006
30-Mar-21	2460	0.00095
14-Oct-21	2390	0.0006

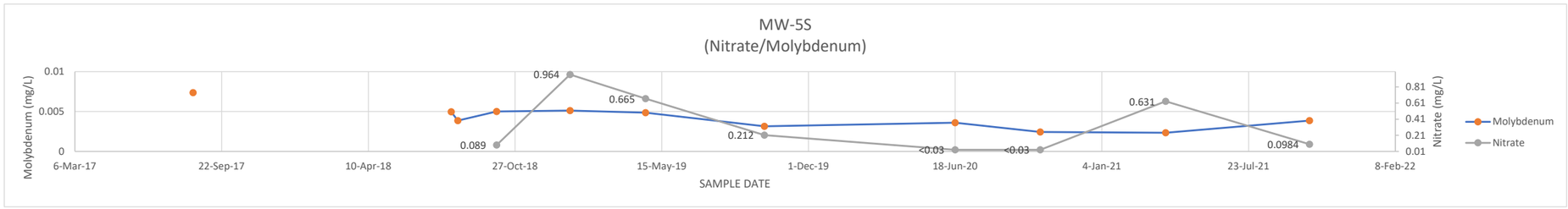


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-4
CHANGES IN NITRATE AND MOLYBDENUM CONCENTRATIONS

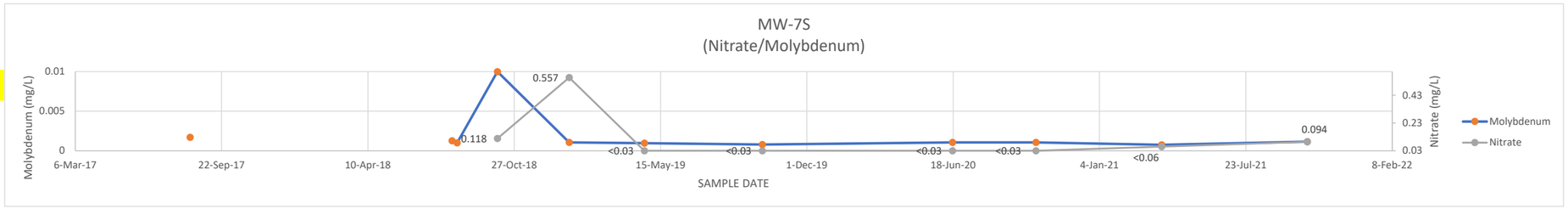
MW-5S

DATE	NITRATE	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18	0.089	0.005
10-Jan-19	0.964	0.00512
23-Apr-19	0.665	0.00485
2-Oct-19	0.212	0.00315
18-Jun-20	0.03	0.00361
12-Oct-20	0.03	0.00244
1-Apr-21	0.631	0.00234
14-Oct-21	0.0984	0.00387



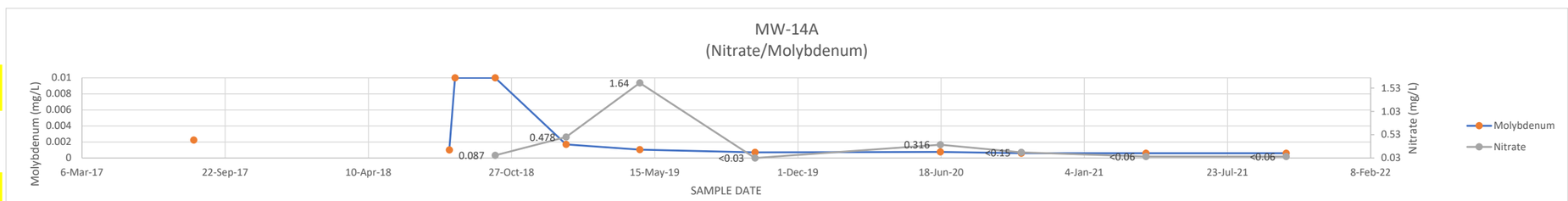
MW-7S

DATE	NITRATE	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18	0.118	0.01
10-Jan-19	0.557	0.00105
23-Apr-19	0.03	0.000952
1-Oct-19	0.03	0.000798
17-Jun-20	0.03	0.00105
9-Oct-20	0.03	0.00106
30-Mar-21	0.06	0.000755
15-Oct-21	0.094	0.00115



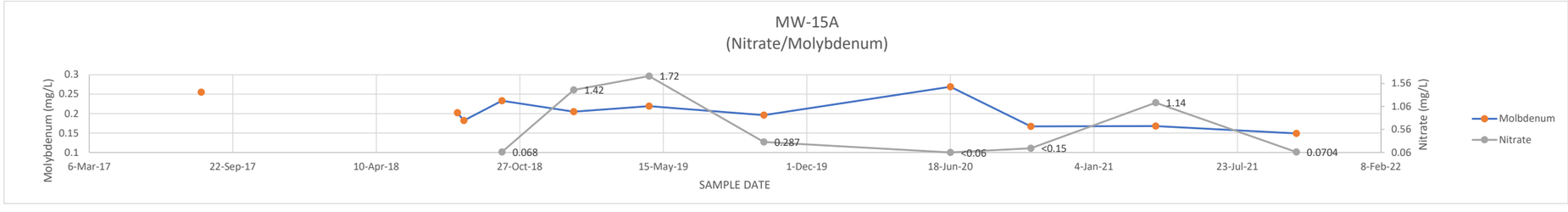
MW-14A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18	0.087	0.01
11-Jan-19	0.478	0.0017
24-Apr-19	1.64	0.00104
2-Oct-19	0.03	0.000709
17-Jun-20	0.316	0.00076
8-Oct-20	0.15	0.0006
31-Mar-21	0.06	0.0006
13-Oct-21	0.06	0.0006



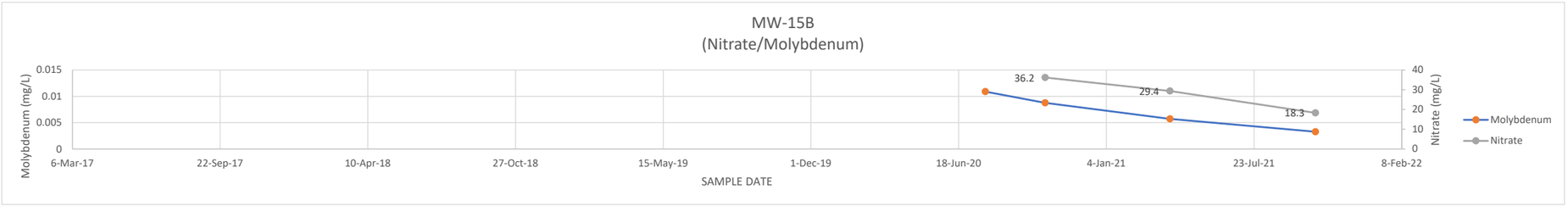
MW-15A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18	0.068	0.233
10-Jan-19	1.42	0.205
25-Apr-19	1.72	0.219
2-Oct-19	0.287	0.196
18-Jun-20	0.06	0.269
8-Oct-20	0.15	0.167
31-Mar-21	1.14	0.168
13-Oct-21	0.0704	0.149



MW-15B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0109
13-Oct-20	36.2	0.00876
31-Mar-21	29.4	0.00571
14-Oct-21	18.3	0.00328

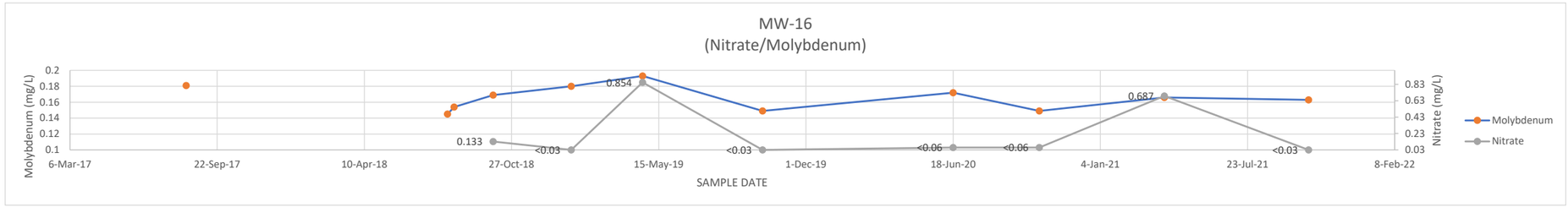


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-4
CHANGES IN NITRATE AND MOLYBDENUM CONCENTRATIONS

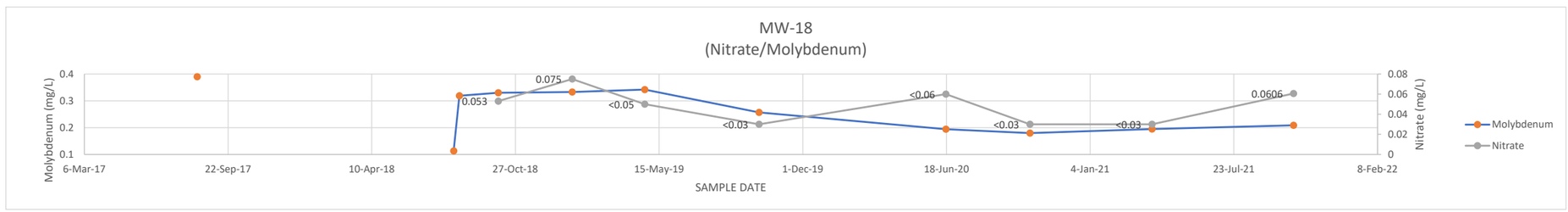
MW-16

DATE	NITRATE	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18	0.133	0.169
16-Jan-19	0.03	0.18
23-Apr-19	0.854	0.193
3-Oct-19	0.03	0.149
18-Jun-20	0.06	0.172
13-Oct-20	0.06	0.149
1-Apr-21	0.687	0.166
14-Oct-21	0.03	0.163



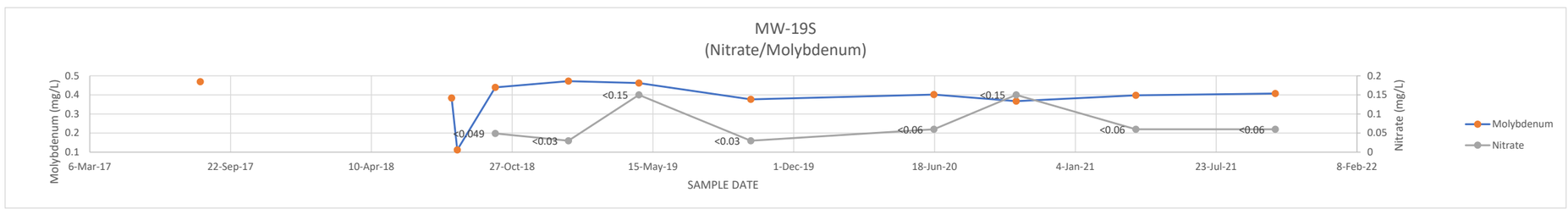
MW-18

DATE	NITRATE	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18	0.053	0.33
14-Jan-19	0.075	0.333
25-Apr-19	0.05	0.342
1-Oct-19	0.03	0.257
17-Jun-20	0.06	0.194
12-Oct-20	0.03	0.18
31-Mar-21	0.03	0.195
14-Oct-21	0.0606	0.209



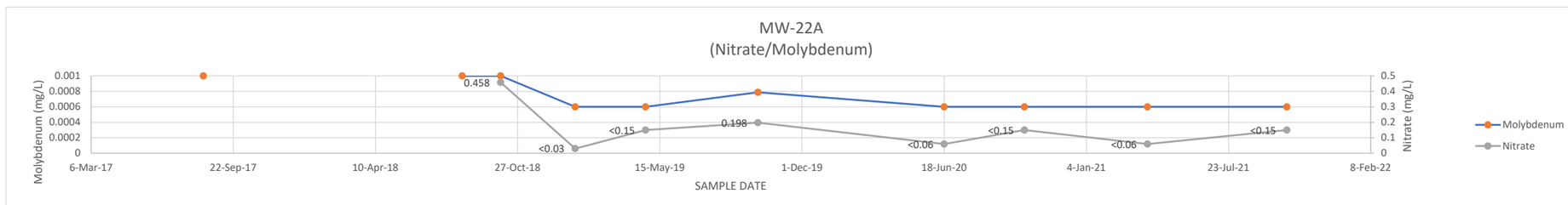
MW-19S

DATE	NITRATE	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18	0.049	0.439
15-Jan-19	0.03	0.472
25-Apr-19	0.15	0.462
1-Oct-19	0.03	0.377
17-Jun-20	0.06	0.402
12-Oct-20	0.15	0.367
31-Mar-21	0.06	0.398
15-Oct-21	0.06	0.407



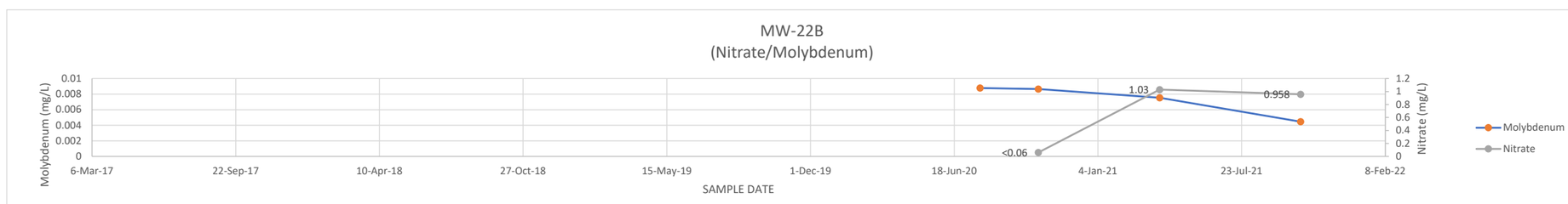
MW-22A

DATE	NITRATE	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18	0.458	0.001
16-Jan-19	0.03	0.0006
25-Apr-19	0.15	0.0006
30-Sep-19	0.198	0.000787
18-Jun-20	0.06	0.0006
9-Oct-20	0.15	0.0006
31-Mar-21	0.06	0.0006
13-Oct-21	0.15	0.0006



MW-22B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00878
13-Oct-20	0.06	0.00866
31-Mar-21	1.03	0.00753
13-Oct-21	0.958	0.00446

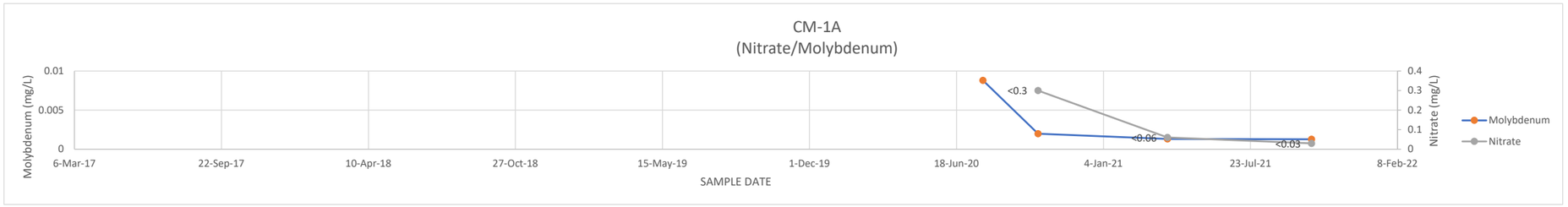


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-4
CHANGES IN NITRATE AND MOLYBDENUM CONCENTRATIONS

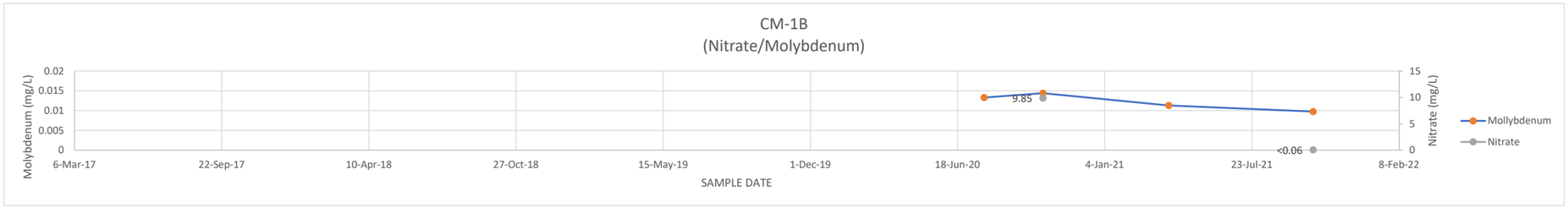
CM-1A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0088
7-Oct-20	0.3	0.00198
1-Apr-21	0.06	0.00132
14-Oct-21	0.03	0.00127



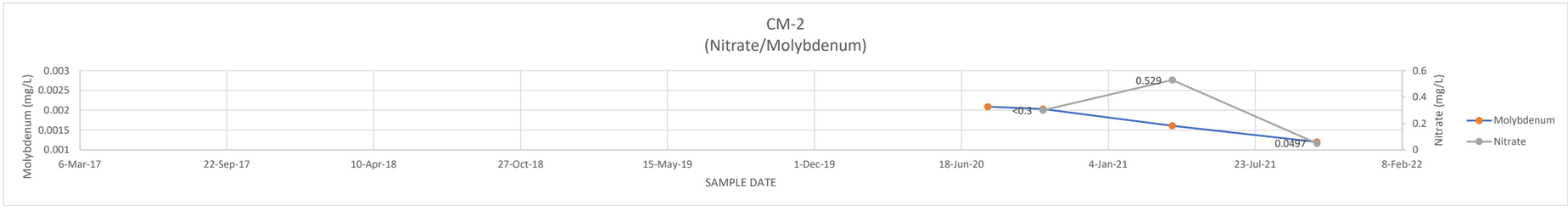
CM-1B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0133
12-Oct-20	9.85	0.0144
1-Apr-21		0.0113
14-Oct-21	0.06	0.00976



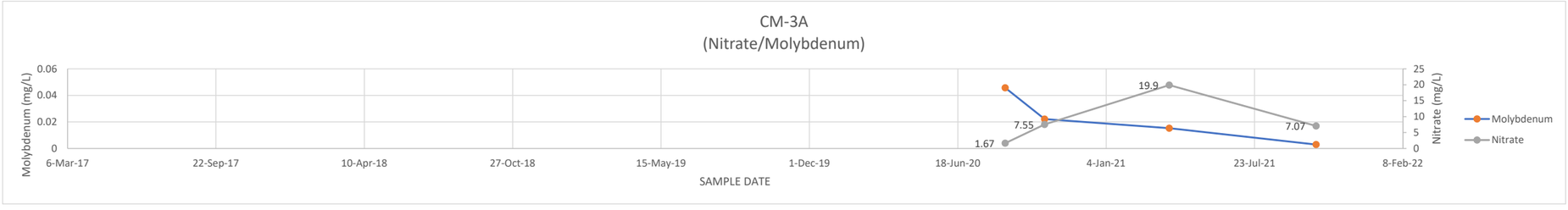
CM-2

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00209
7-Oct-20	0.3	0.00203
1-Apr-21	0.529	0.00161
15-Oct-21	0.0497	0.0012



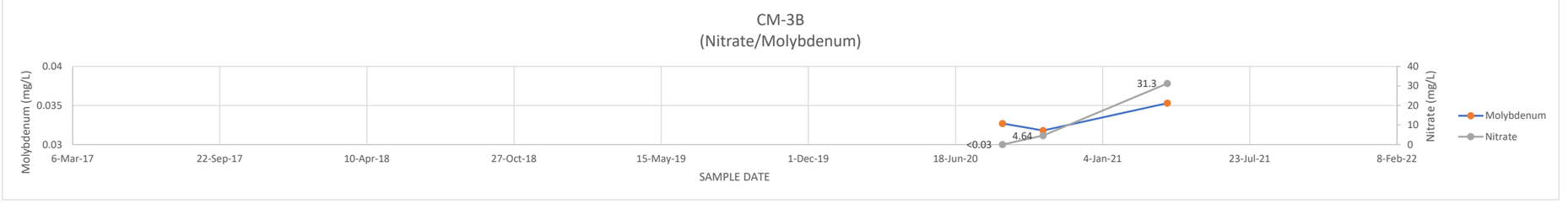
CM-3A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	1.67	0.0457
13-Oct-20	7.55	0.0222
30-Mar-21	19.9	0.0153
14-Oct-21	7.07	0.00297



CM-3B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	0.03	0.0327
15-Oct-20	4.64	0.0318
2-Apr-21	31.3	0.0353
11-Oct-21		

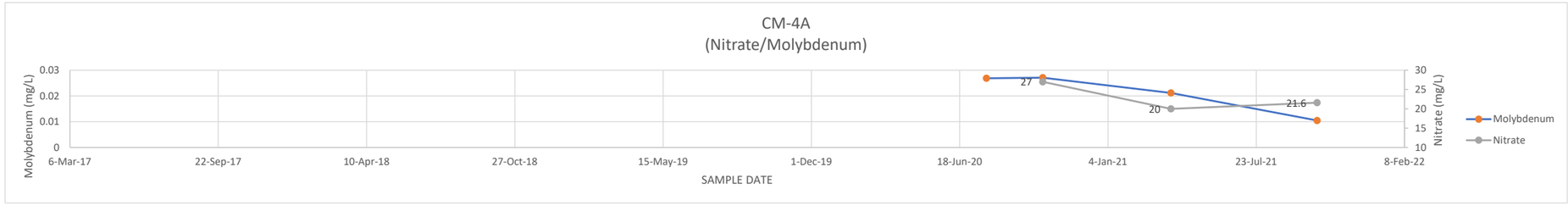


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-4
CHANGES IN NITRATE AND MOLYBDENUM CONCENTRATIONS

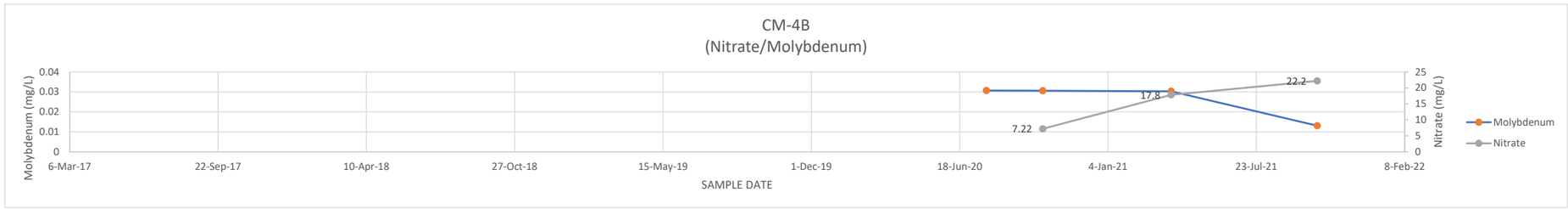
CM-4A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0269
8-Oct-20	27	0.0271
30-Mar-21	20	0.0212
13-Oct-21	21.6	0.0105



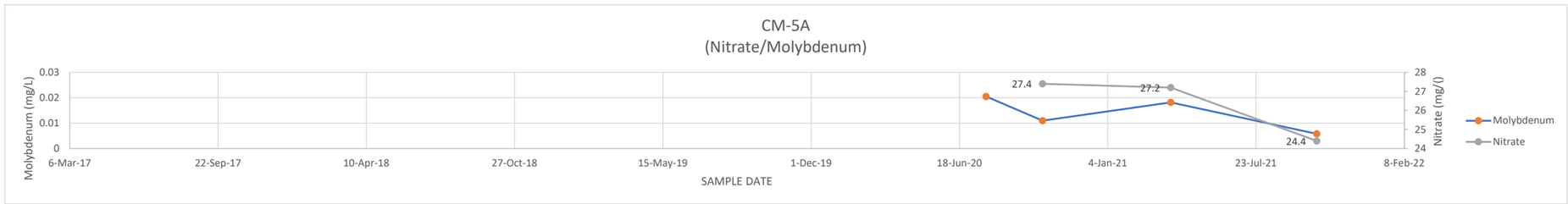
CM-4B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0307
8-Oct-20	7.22	0.0306
30-Mar-21	17.8	0.0303
13-Oct-21	22.2	0.0131



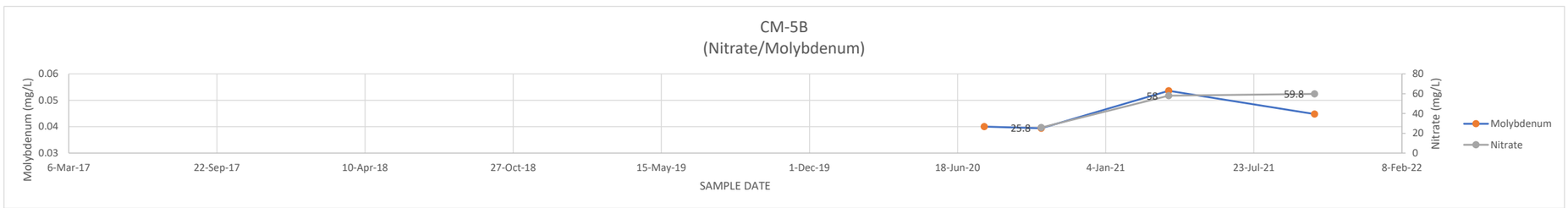
CM-5A

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0205
8-Oct-20	27.4	0.011
30-Mar-21	27.2	0.0182
13-Oct-21	24.4	0.0058



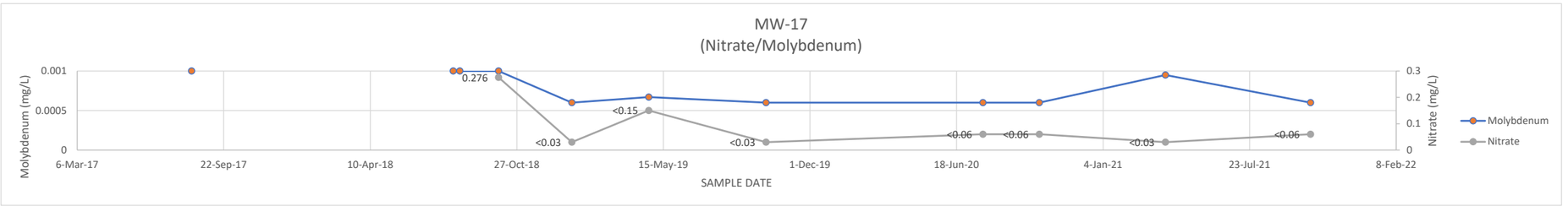
CM-5B

DATE	NITRATE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.04
9-Oct-20	25.8	0.0394
30-Mar-21	58	0.0536
13-Oct-21	59.8	0.0448



MW-17

DATE	NITRATE	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18	0.276	0.001
10-Jan-19	0.03	0.0006
25-Apr-19	0.15	0.000671
2-Oct-19	0.03	0.0006
24-Jul-20	0.06	0.0006
9-Oct-20	0.06	0.0006
30-Mar-21	0.03	0.00095
14-Oct-21	0.06	0.0006

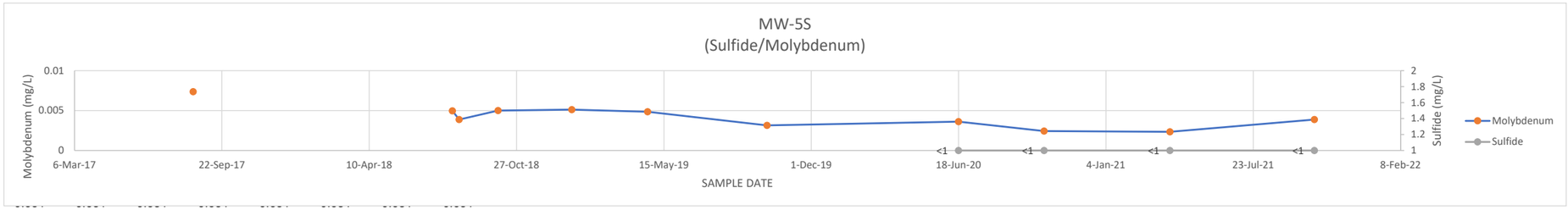


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-5
CHANGES IN SULFIDE AND MOLYBDENUM CONCENTRATIONS

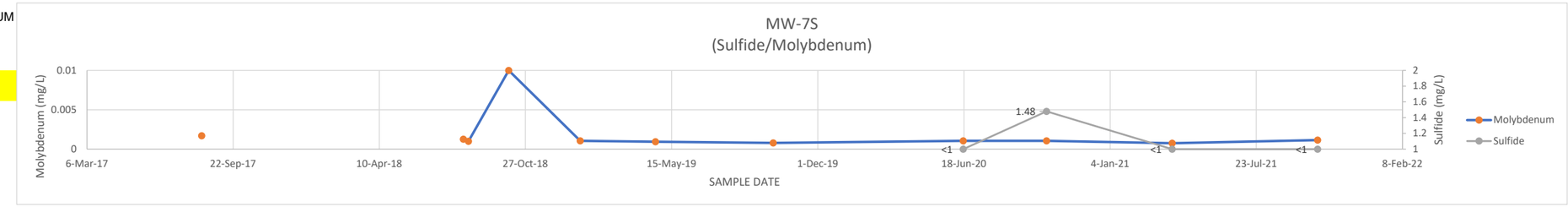
MW-5S

DATE	SULFIDE	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18		0.005
10-Jan-19		0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20	1	0.00361
12-Oct-20	1	0.00244
1-Apr-21	1	0.00234
14-Oct-21	1	0.00387



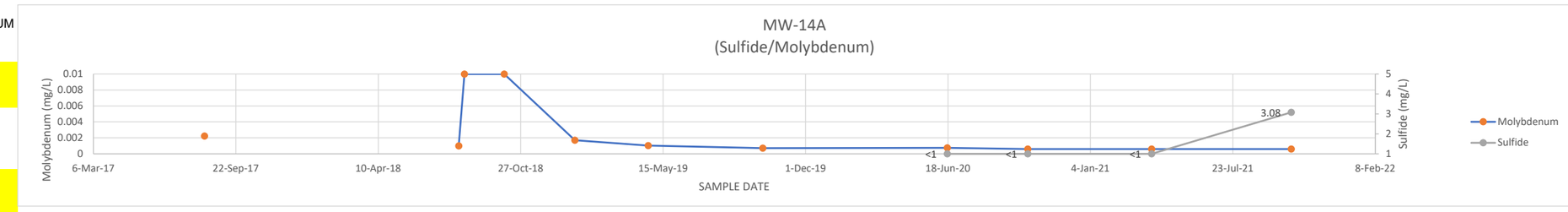
MW-7S

DATE	SULFIDE	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18		0.01
10-Jan-19		0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20	1	0.00105
9-Oct-20	1.48	0.00106
30-Mar-21	1	0.000755
15-Oct-21	1	0.00115



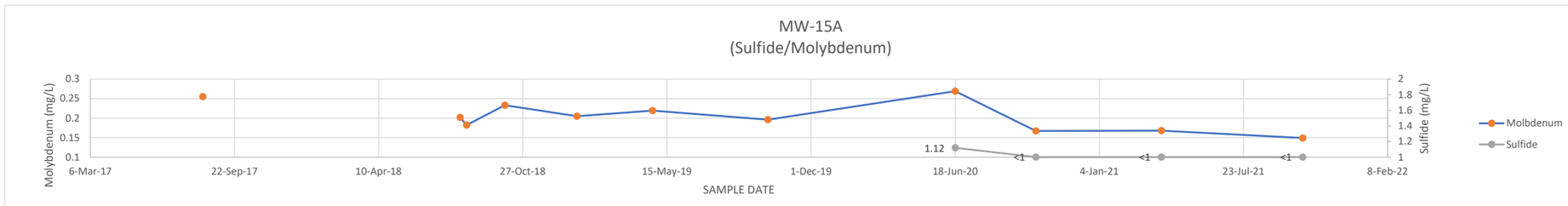
MW-14A

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18		0.01
11-Jan-19		0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20	1	0.00076
8-Oct-20	1	0.0006
31-Mar-21	1	0.0006
13-Oct-21	3.08	0.0006



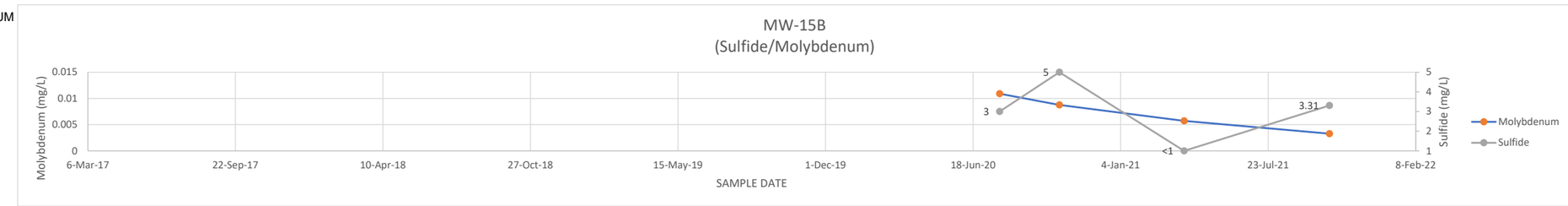
MW-15A

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18		0.233
10-Jan-19		0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20	1.12	0.269
8-Oct-20	1	0.167
31-Mar-21	1	0.168
13-Oct-21	1	0.149



MW-15B

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	3	0.0109
13-Oct-20	5	0.00876
31-Mar-21	1	0.00571
14-Oct-21	3.31	0.00328

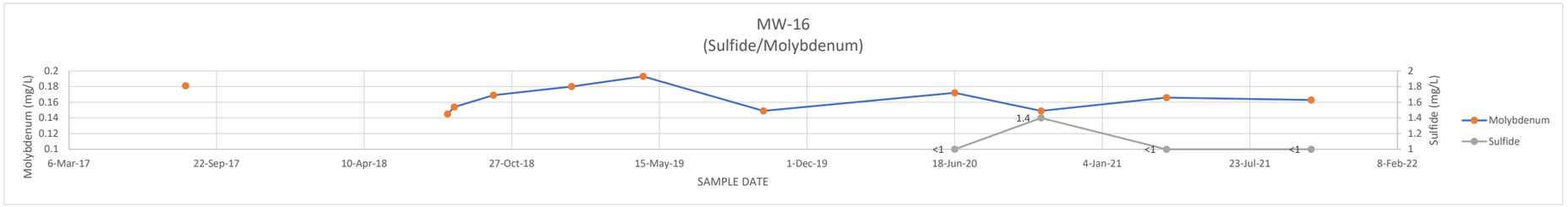


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-5
CHANGES IN SULFIDE AND MOLYBDENUM CONCENTRATIONS

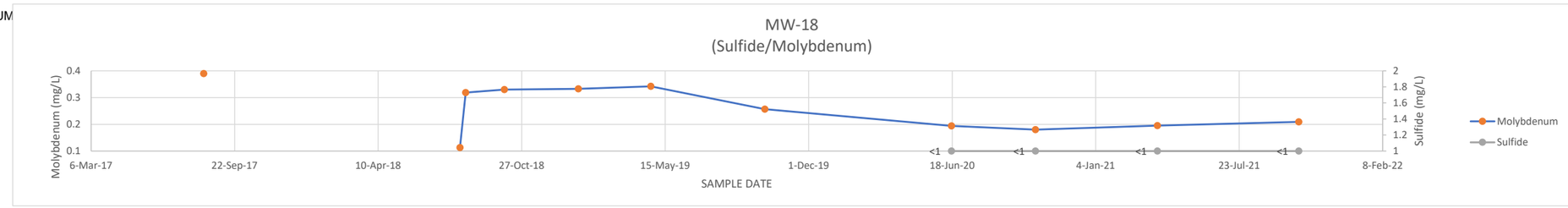
MW-16

DATE	SULFIDE	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18		0.169
16-Jan-19		0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20	1	0.172
13-Oct-20	1.4	0.149
1-Apr-21	1	0.166
14-Oct-21	1	0.163



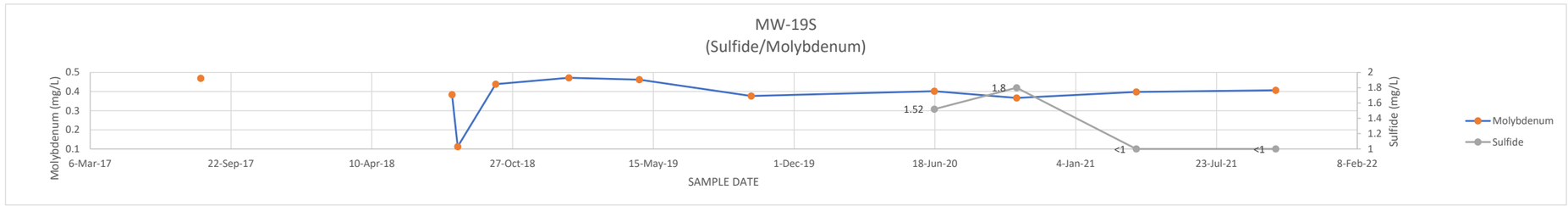
MW-18

DATE	SULFIDE	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18		0.33
14-Jan-19		0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20	1	0.194
12-Oct-20	1	0.18
31-Mar-21	1	0.195
14-Oct-21	1	0.209



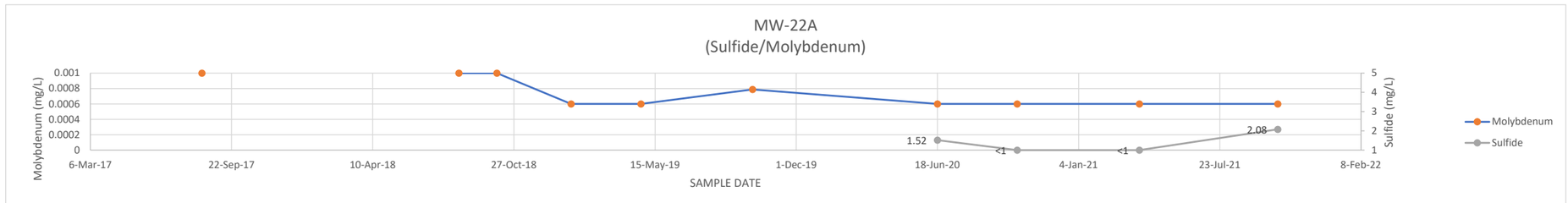
MW-19S

DATE	SULFIDE	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18		0.439
15-Jan-19		0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20	1.52	0.402
12-Oct-20	1.8	0.367
31-Mar-21	1	0.398
15-Oct-21	1	0.407



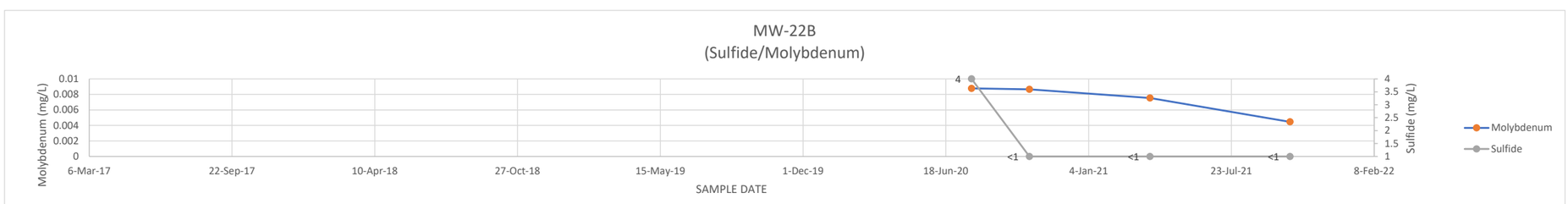
MW-22A

DATE	SULFIDE	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18		0.001
16-Jan-19		0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20	1.52	0.0006
9-Oct-20	1	0.0006
31-Mar-21	1	0.0006
13-Oct-21	2.08	0.0006



MW-22B

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4	0.00878
13-Oct-20	1	0.00866
31-Mar-21	1	0.00753
13-Oct-21	1	0.00446

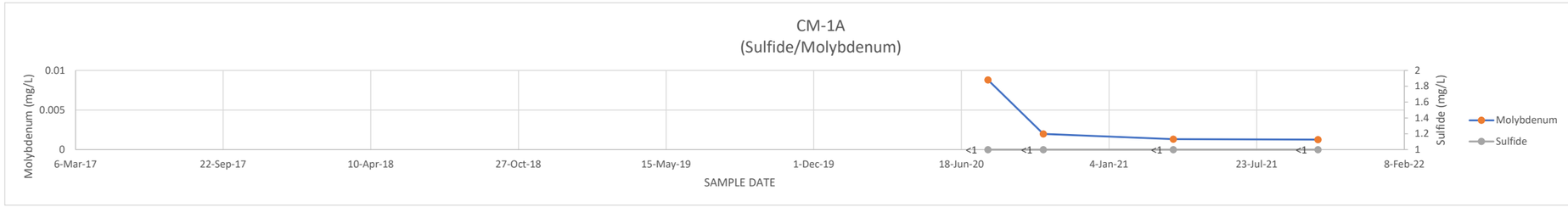


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-5
CHANGES IN SULFIDE AND MOLYBDENUM CONCENTRATIONS

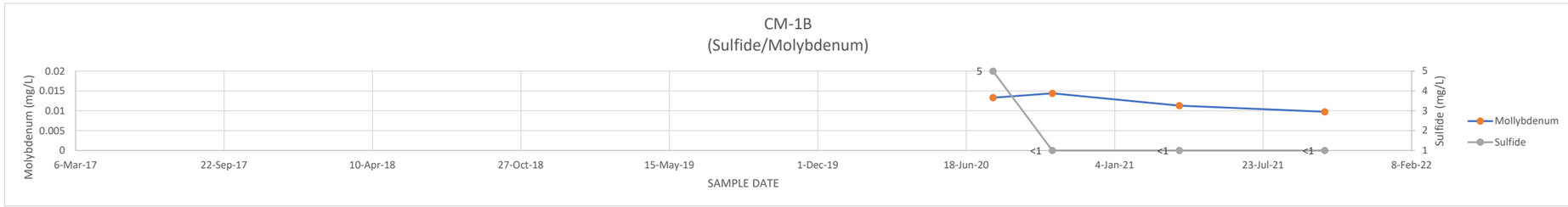
CM-1A

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1	0.0088
7-Oct-20	1	0.00198
1-Apr-21	1	0.00132
14-Oct-21	1	0.00127



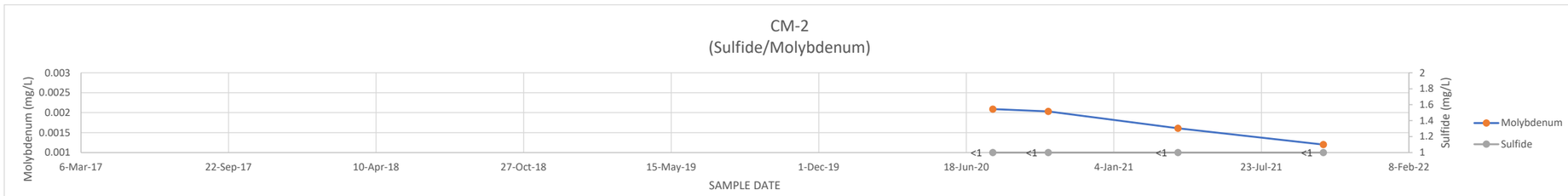
CM-1B

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	5	0.0133
12-Oct-20	1	0.0144
1-Apr-21	1	0.0113
14-Oct-21	1	0.00976



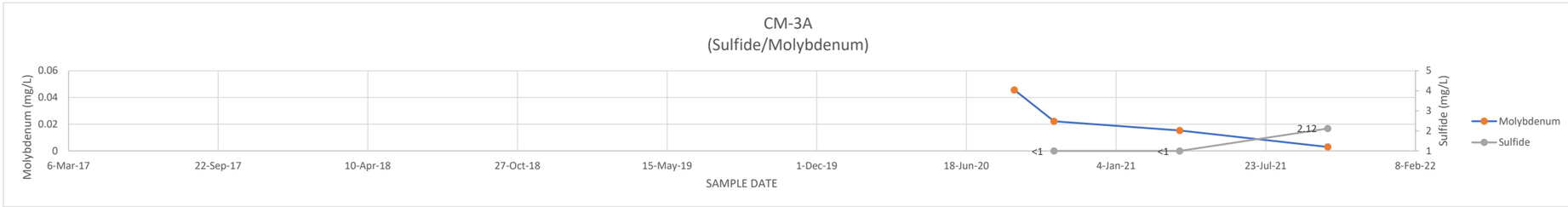
CM-2

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1	0.00209
7-Oct-20	1	0.00203
1-Apr-21	1	0.00161
15-Oct-21	1	0.0012



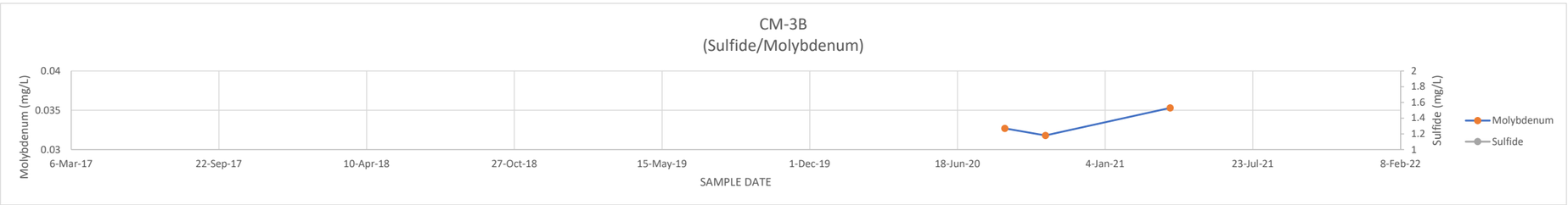
CM-3A

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20	1	0.0222
30-Mar-21	1	0.0153
14-Oct-21	2.12	0.00297



CM-3B

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		

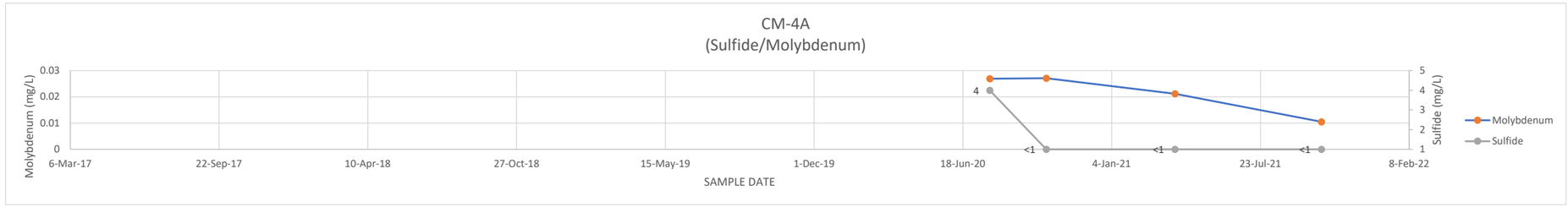


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-5
CHANGES IN SULFIDE AND MOLYBDENUM CONCENTRATIONS

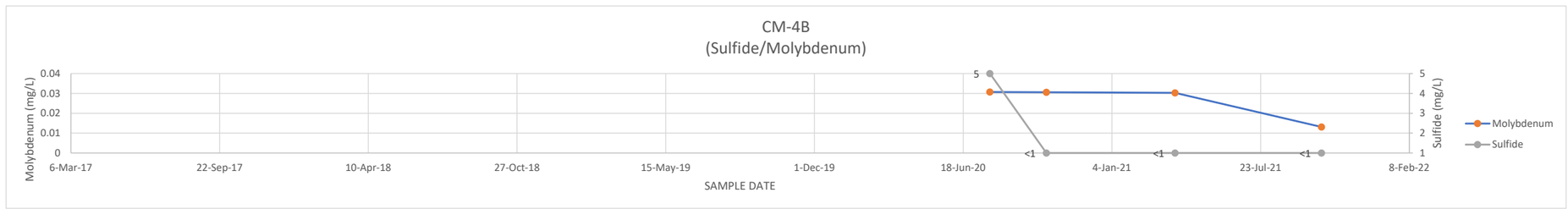
CM-4A

DATE	SULFLIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	4	0.0269
8-Oct-20	1	0.0271
30-Mar-21	1	0.0212
13-Oct-21	1	0.0105



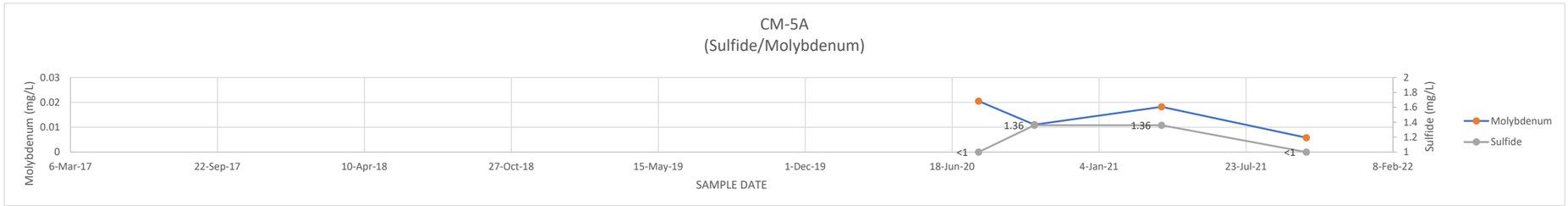
CM-4B

DATE	SULFLIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	5	0.0307
8-Oct-20	1	0.0306
30-Mar-21	1	0.0303
13-Oct-21	1	0.0131



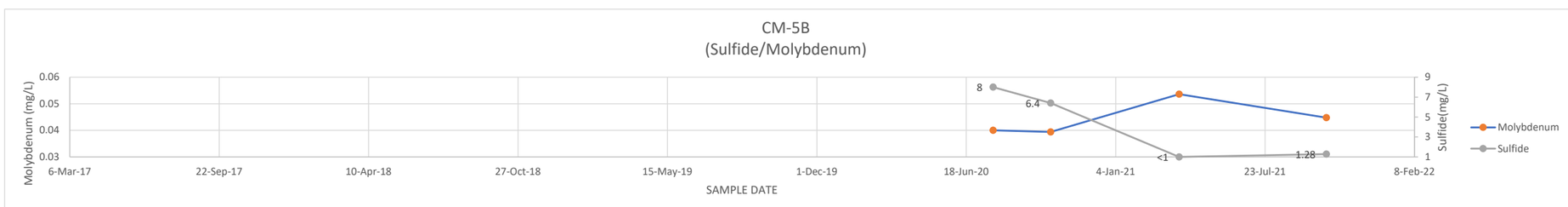
CM-5A

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	1	0.0205
8-Oct-20	1.36	0.011
30-Mar-21	1.36	0.0182
13-Oct-21	1	0.0058



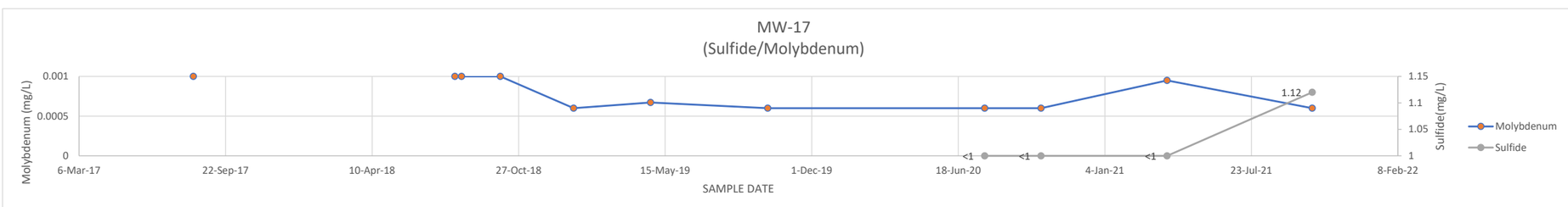
CM-5B

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	8	0.04
9-Oct-20	6.4	0.0394
30-Mar-21	1	0.0536
13-Oct-21	1.28	0.0448



MW-17

DATE	SULFIDE	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18		0.001
10-Jan-19		0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20	1	0.0006
9-Oct-20	1	0.0006
30-Mar-21	1	0.00095
14-Oct-21	1.12	0.0006

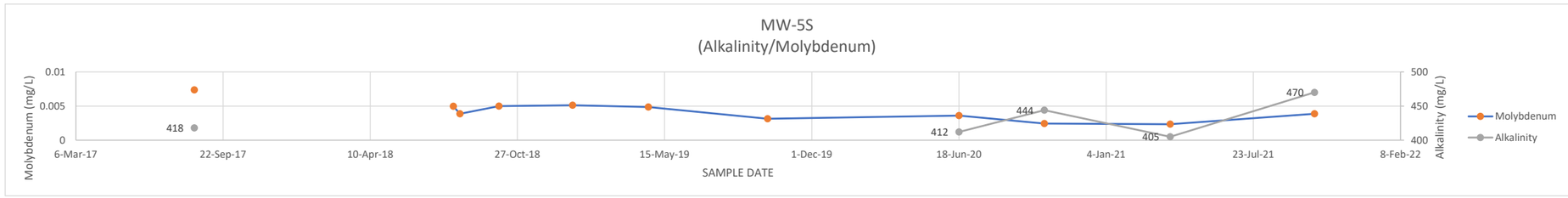


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-6
CHANGES IN ALKALLINITY AND MOLYBDENUM CONCENTRATIONS

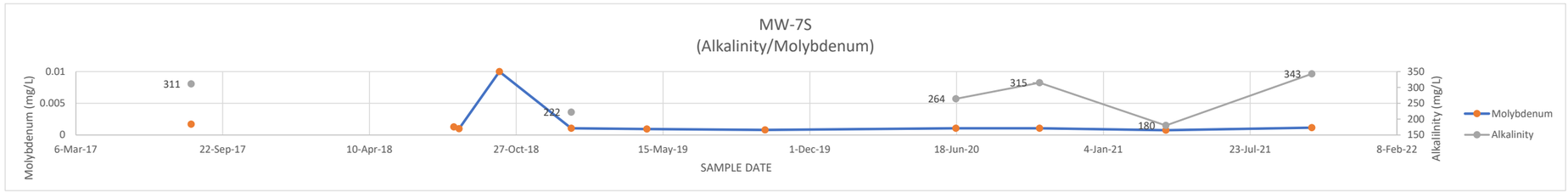
MW-5S

DATE	ALKALINITY	MOLYBDENUM
14-Aug-17	418	0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18		0.005
10-Jan-19		0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20	412	0.00361
12-Oct-20	444	0.00244
1-Apr-21	405	0.00234
14-Oct-21	470	0.00387



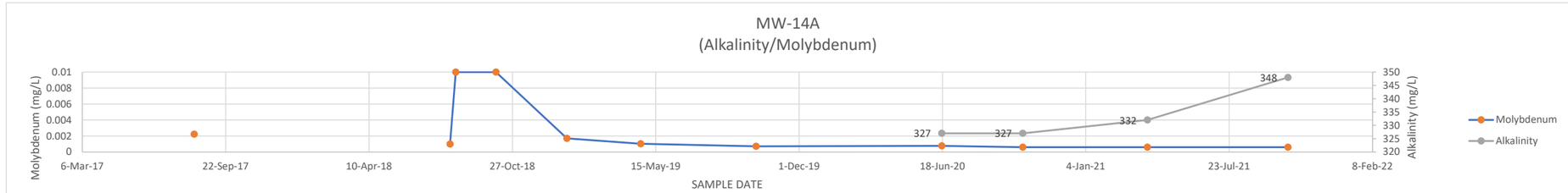
MW-7S

DATE	ALKALINITY	MOLYBDENUM
10-Aug-17	311	0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18		0.01
10-Jan-19	222	0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20	264	0.00105
9-Oct-20	315	0.00106
30-Mar-21	180	0.000755
15-Oct-21	343	0.00115



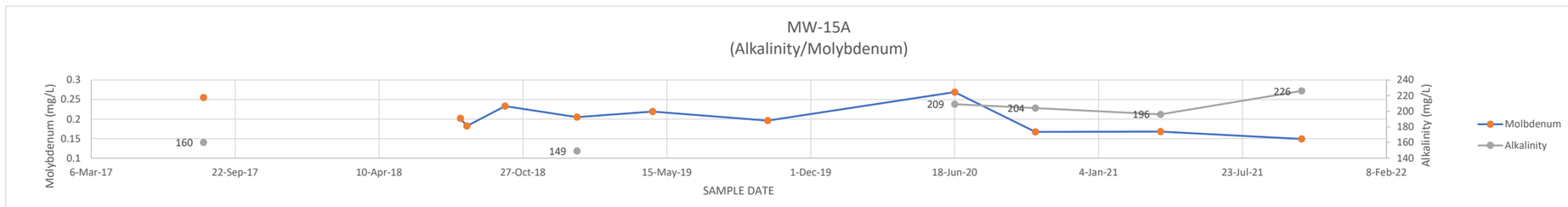
MW-14A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17	280	0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18		0.01
11-Jan-19		0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20	327	0.00076
8-Oct-20	327	0.0006
31-Mar-21	332	0.0006
13-Oct-21	348	0.0006



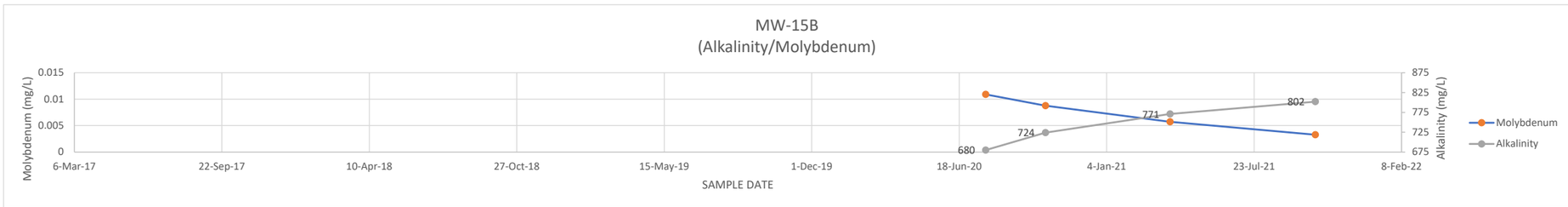
MW-15A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17	160	0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18		0.233
10-Jan-19	149	0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20	209	0.269
8-Oct-20	204	0.167
31-Mar-21	196	0.168
13-Oct-21	226	0.149



MW-15B

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	680	0.0109
13-Oct-20	724	0.00876
31-Mar-21	771	0.00571
14-Oct-21	802	0.00328

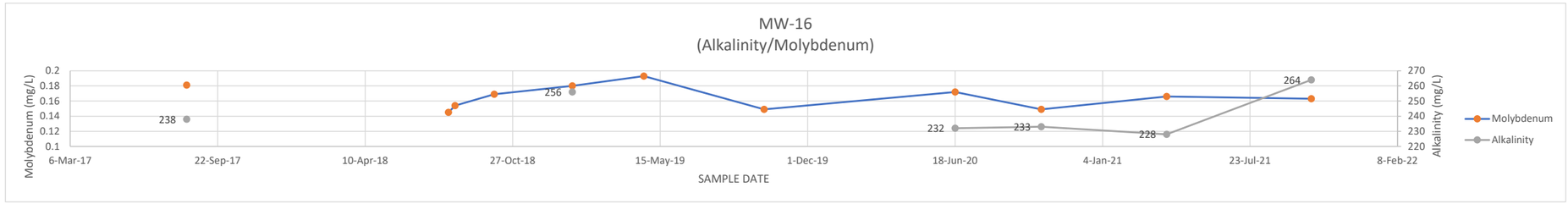


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-6
CHANGES IN ALKALLINITY AND MOLYBDENUM CONCENTRATIONS

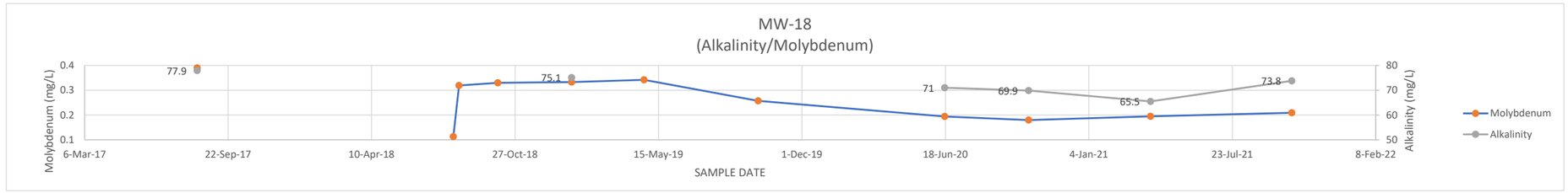
MW-16

DATE	ALKALINITY	MOLYBDENUM
11-Aug-17	238	0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18		0.169
16-Jan-19	256	0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20	232	0.172
13-Oct-20	233	0.149
1-Apr-21	228	0.166
14-Oct-21	264	0.163



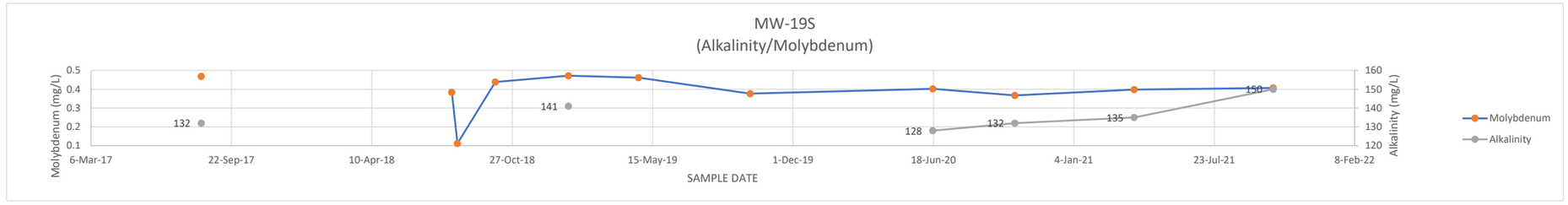
MW-18

DATE	ALKALINITY	MOLYBDENUM
10-Aug-17	77.9	0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18		0.33
14-Jan-19	75.1	0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20	71	0.194
12-Oct-20	69.9	0.18
31-Mar-21	65.5	0.195
14-Oct-21	73.8	0.209



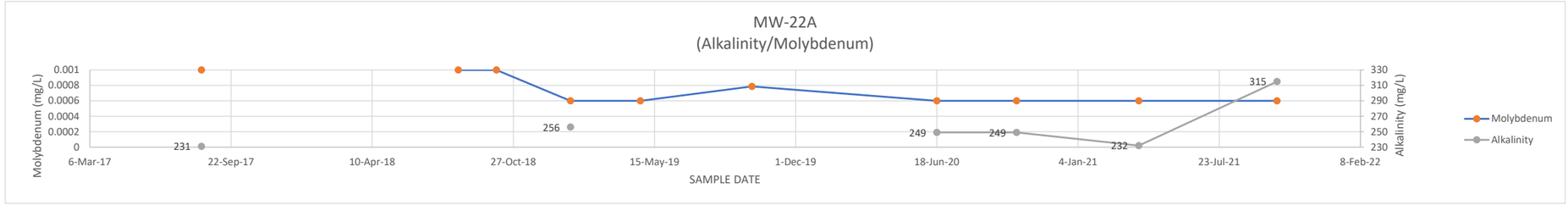
MW-19S

DATE	ALKALINITY	MOLYBDENUM
10-Aug-17	132	0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18		0.439
15-Jan-19	141	0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20	128	0.402
12-Oct-20	132	0.367
31-Mar-21	135	0.398
15-Oct-21	150	0.407



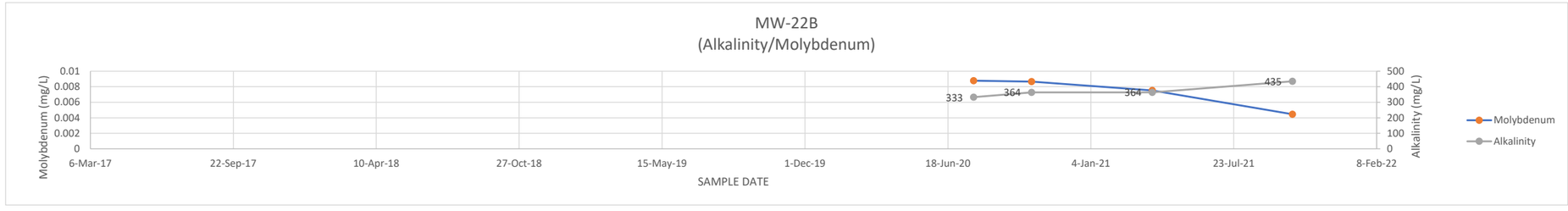
MW-22A

DATE	ALKALINITY	MOLYBDENUM
11-Aug-17	231	0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18		0.001
16-Jan-19	256	0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20	249	0.0006
9-Oct-20	249	0.0006
31-Mar-21	232	0.0006
13-Oct-21	315	0.0006



MW-22B

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	333	0.00878
13-Oct-20	364	0.00866
31-Mar-21	364	0.00753
13-Oct-21	435	0.00446

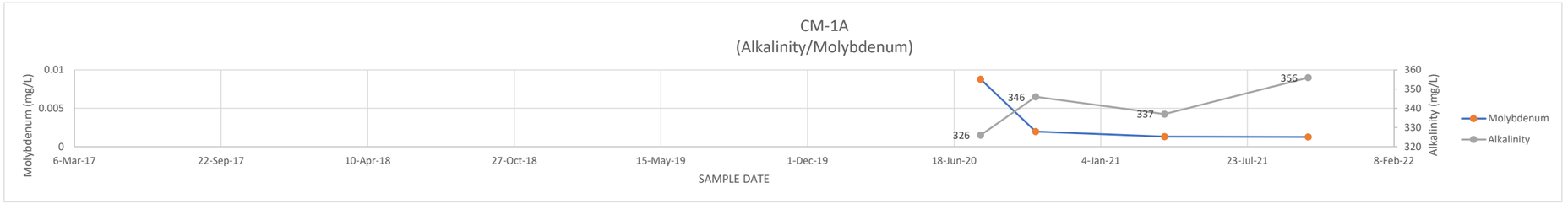


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT G-6
CHANGES IN ALKALLINITY AND MOLYBDENUM CONCENTRATIONS

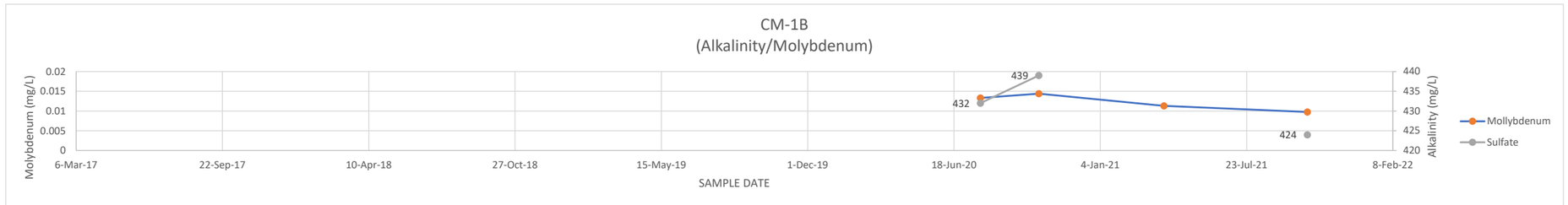
CM-1A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	326	0.0088
7-Oct-20	346	0.00198
1-Apr-21	337	0.00132
14-Oct-21	356	0.00127



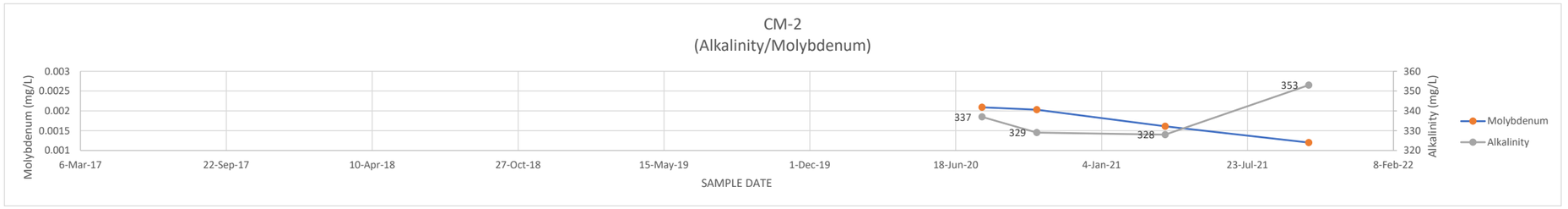
CM-1B

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	432	0.0133
12-Oct-20	439	0.0144
1-Apr-21		0.0113
14-Oct-21	424	0.00976



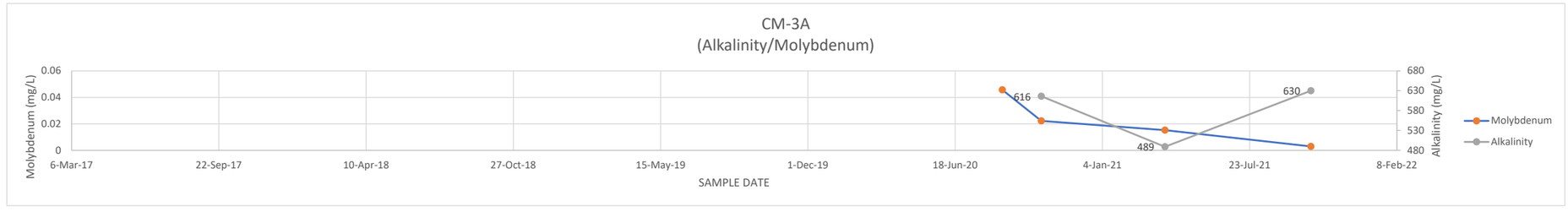
CM-2

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	337	0.00209
7-Oct-20	329	0.00203
1-Apr-21	328	0.00161
15-Oct-21	353	0.0012



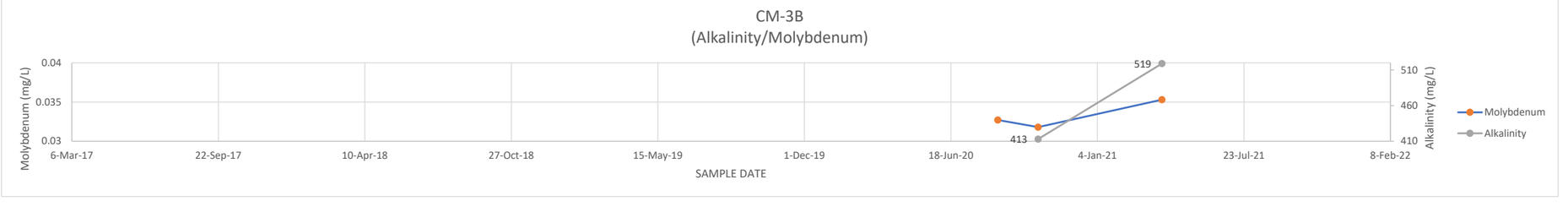
CM-3A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20	616	0.0222
30-Mar-21	489	0.0153
14-Oct-21	630	0.00297



CM-3B

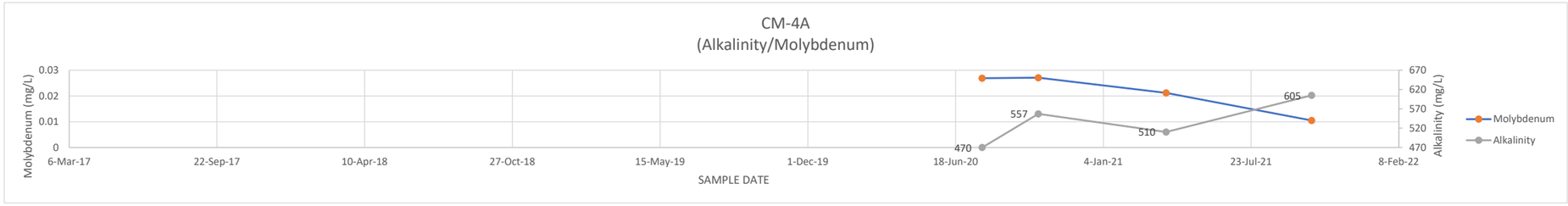
DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20	413	0.0318
2-Apr-21	519	0.0353
11-Oct-21		



ATTACHMENT G-6
CHANGES IN ALKALLINITY AND MOLYBDENUM CONCENTRATIONS

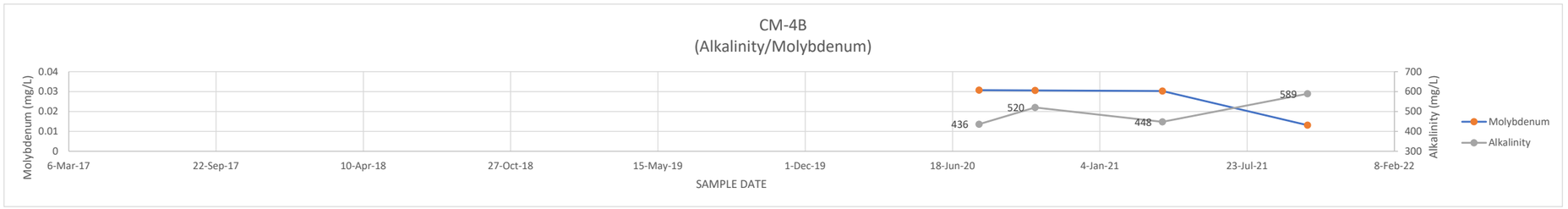
CM-4A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	470	0.0269
8-Oct-20	557	0.0271
30-Mar-21	510	0.0212
13-Oct-21	605	0.0105



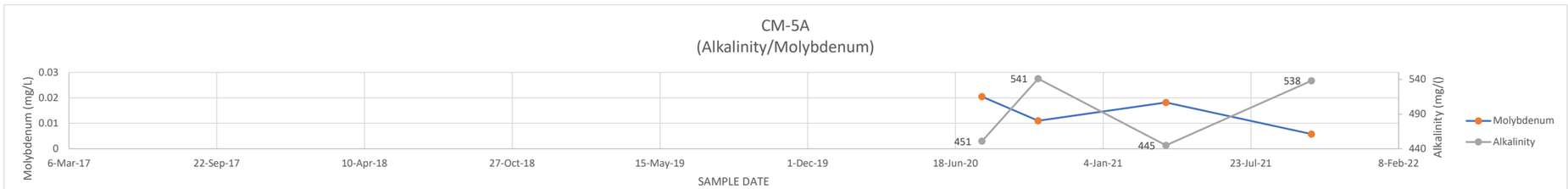
CM-4B

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	436	0.0307
8-Oct-20	520	0.0306
30-Mar-21	448	0.0303
13-Oct-21	589	0.0131



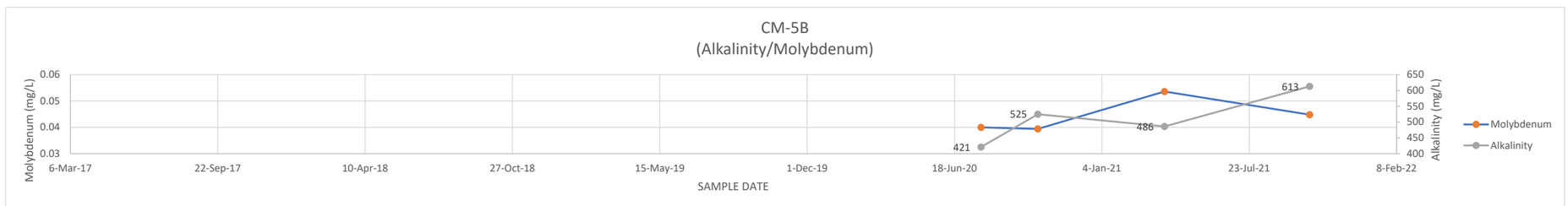
CM-5A

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	451	0.0205
8-Oct-20	541	0.011
30-Mar-21	445	0.0182
13-Oct-21	538	0.0058



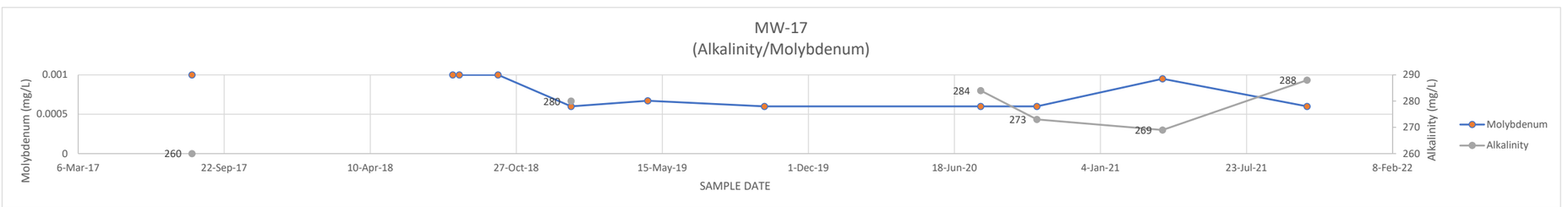
CM-5B

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	421	0.04
9-Oct-20	525	0.0394
30-Mar-21	486	0.0536
13-Oct-21	613	0.0448



MW-17

DATE	ALKALINITY	MOLYBDENUM
9-Aug-17	260	0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18		0.001
10-Jan-19	280	0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20	284	0.0006
9-Oct-20	273	0.0006
30-Mar-21	269	0.00095
14-Oct-21	288	0.0006



Yellow Indicates Reported Below shown value (MDL)

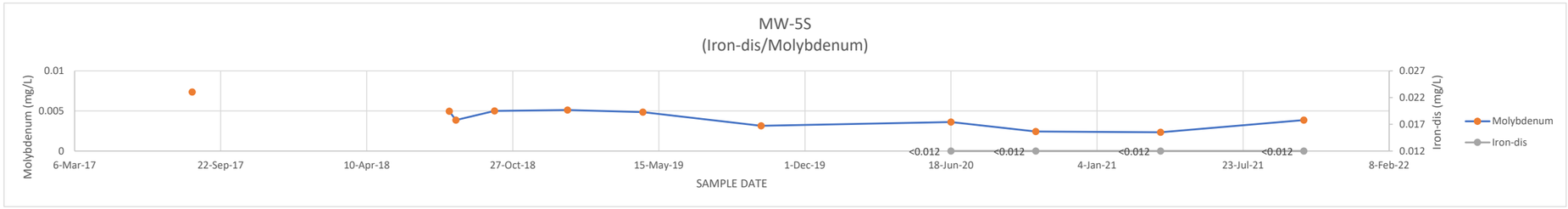
ATTACHMENT H

CHANGES IN IRON CONCENTRATION COMPARED TO CHANGES IN MONLYBDENUM CONCENTRATION OVER SAMPLING HISTORY

ATTACHMENT H-1
CHANGES IN IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

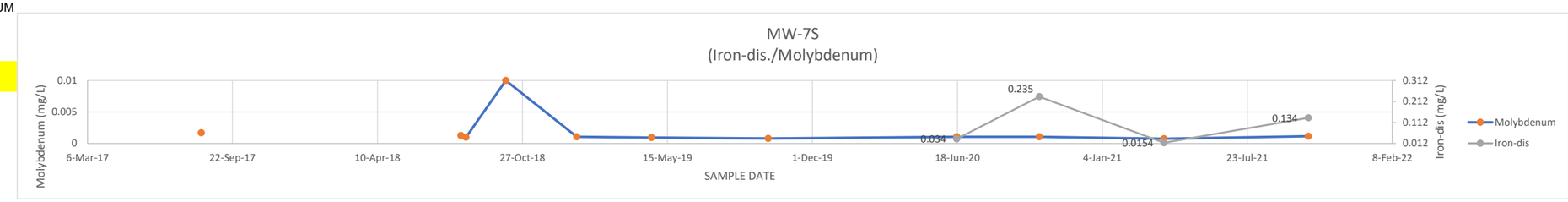
MW-5S

DATE	DIS FE	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18		0.005
10-Jan-19		0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20	0.012	0.00361
12-Oct-20	0.012	0.00244
1-Apr-21	0.012	0.00234
14-Oct-21	0.012	0.00387



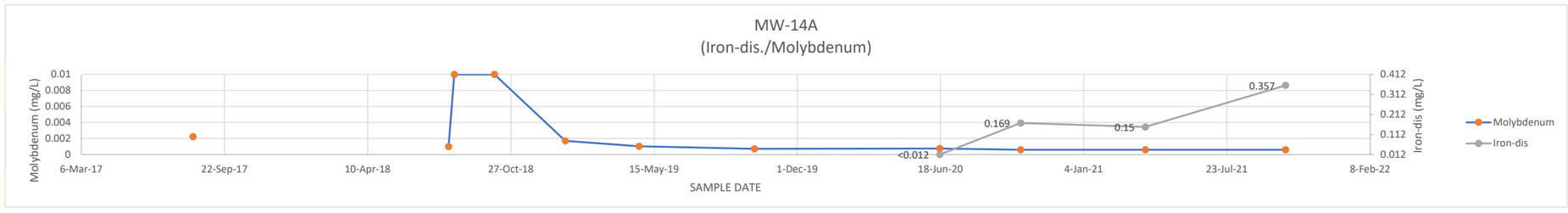
MW-7S

DATE	DIS FE	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18		0.01
10-Jan-19		0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20	0.034	0.00105
9-Oct-20	0.235	0.00106
30-Mar-21	0.0154	0.000755
15-Oct-21	0.134	0.00115



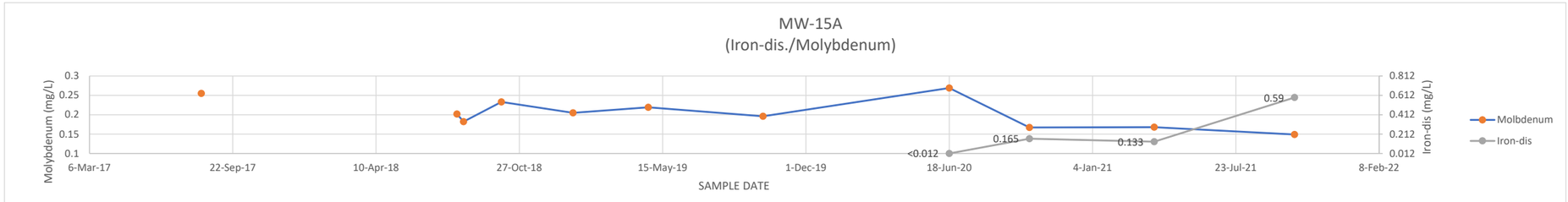
MW-14A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18		0.01
11-Jan-19		0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20	0.012	0.00076
8-Oct-20	0.169	0.0006
31-Mar-21	0.15	0.0006
13-Oct-21	0.357	0.0006



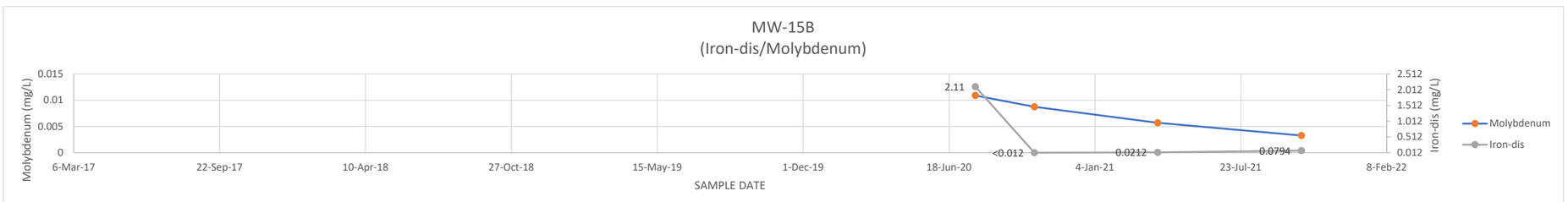
MW-15A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18		0.233
10-Jan-19		0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20	0.012	0.269
8-Oct-20	0.165	0.167
31-Mar-21	0.133	0.168
13-Oct-21	0.59	0.149



MW-15B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	2.11	0.0109
13-Oct-20	0.012	0.00876
31-Mar-21	0.0212	0.00571
14-Oct-21	0.0794	0.00328

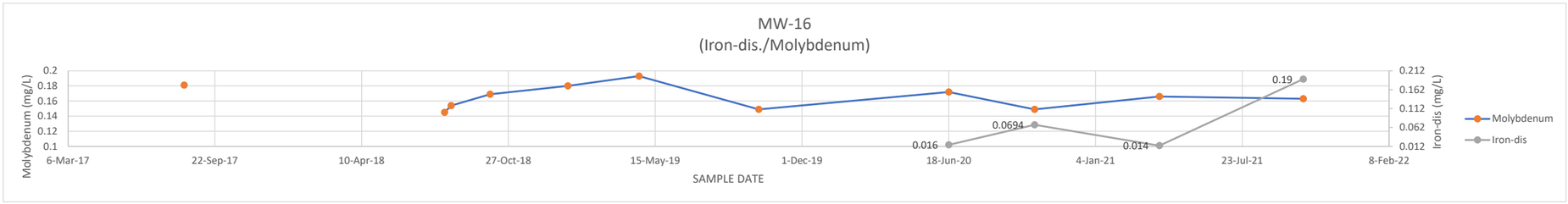


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-1
CHANGES IN IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

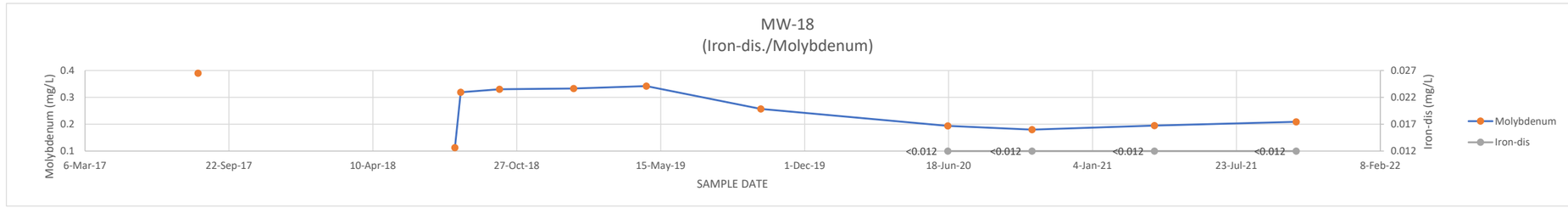
MW-16

DATE	DIS FE	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18		0.169
16-Jan-19		0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20	0.016	0.172
13-Oct-20	0.0694	0.149
1-Apr-21	0.014	0.166
14-Oct-21	0.19	0.163



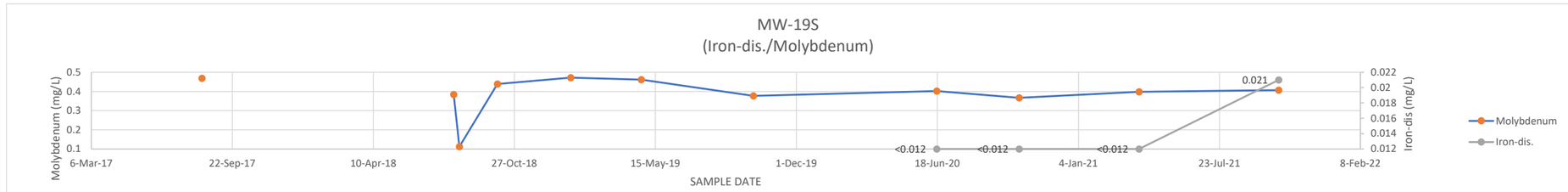
MW-18

DATE	DIS FE	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18		0.33
14-Jan-19		0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20	0.012	0.194
12-Oct-20	0.012	0.18
31-Mar-21	0.012	0.195
14-Oct-21	0.012	0.209



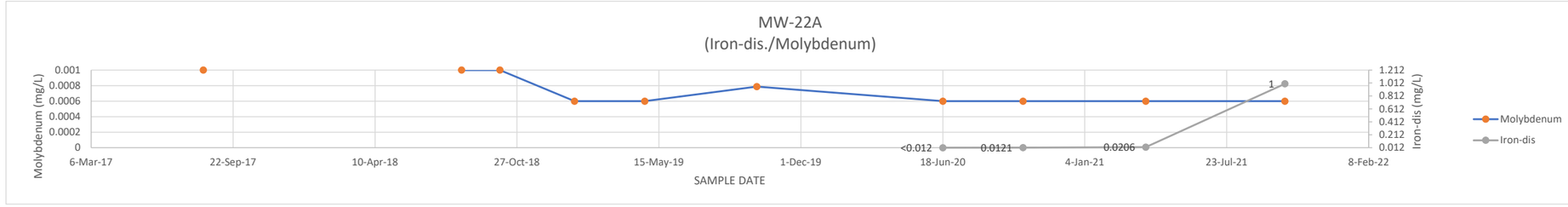
MW-19S

DATE	DIS FE	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18		0.439
15-Jan-19		0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20	0.012	0.402
12-Oct-20	0.012	0.367
31-Mar-21	0.012	0.398
15-Oct-21	0.021	0.407



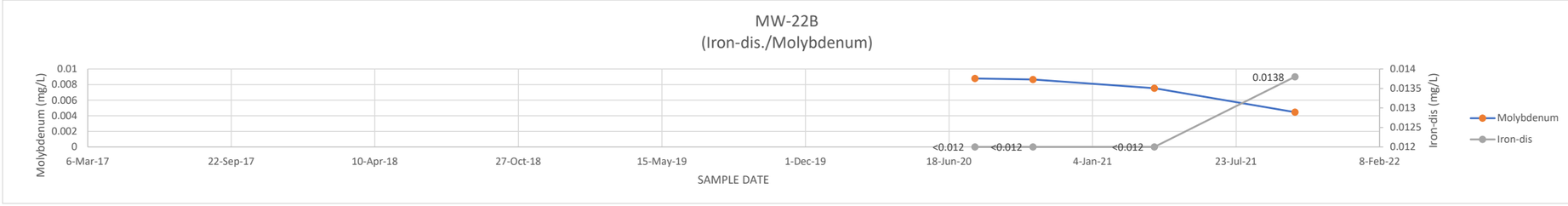
MW-22A

DATE	DIS FE	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18		0.001
16-Jan-19		0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20	0.012	0.0006
9-Oct-20	0.0121	0.0006
31-Mar-21	0.0206	0.0006
13-Oct-21	1	0.0006



MW-22B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.012	0.00878
13-Oct-20	0.012	0.00866
31-Mar-21	0.012	0.00753
13-Oct-21	0.0138	0.00446

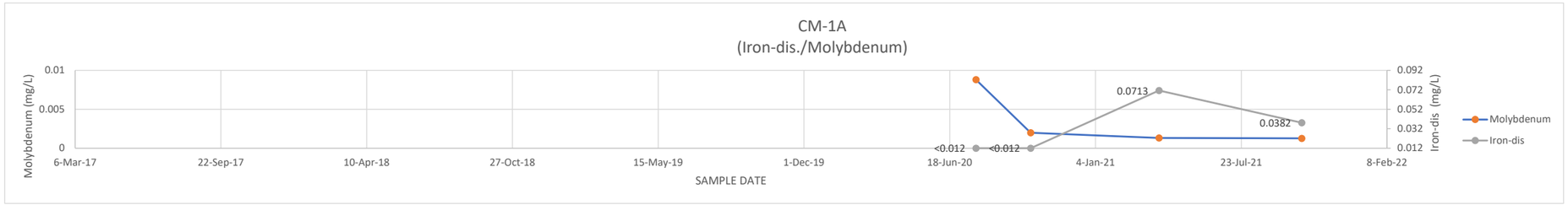


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-1
CHANGES IN IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

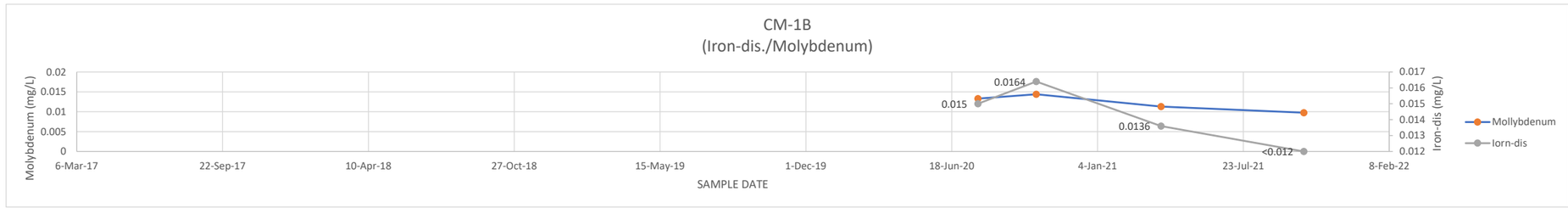
CM-1A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.012	0.0088
7-Oct-20	0.012	0.00198
1-Apr-21	0.0713	0.00132
14-Oct-21	0.0382	0.00127



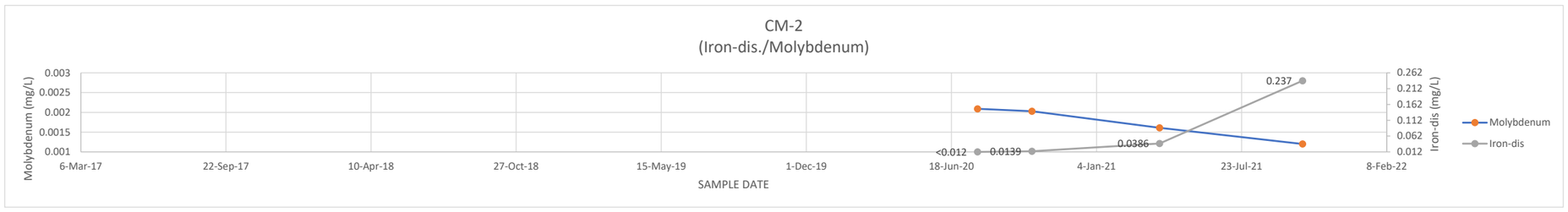
CM-1B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.015	0.0133
12-Oct-20	0.0164	0.0144
1-Apr-21	0.0136	0.0113
14-Oct-21	0.012	0.00976



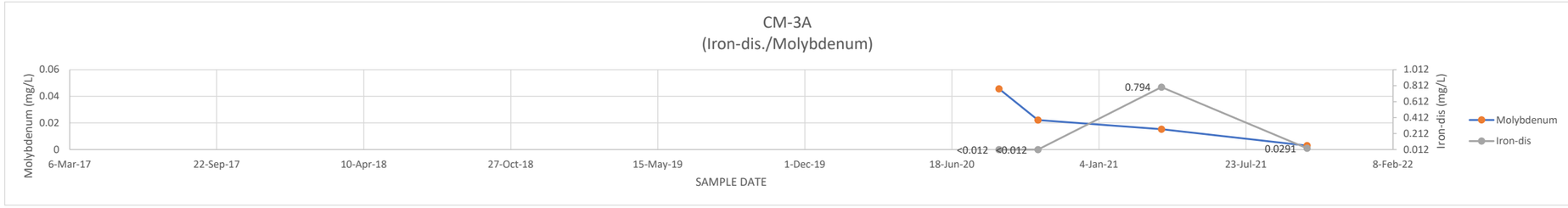
CM-2

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.012	0.00209
7-Oct-20	0.0139	0.00203
1-Apr-21	0.0386	0.00161
15-Oct-21	0.237	0.0012



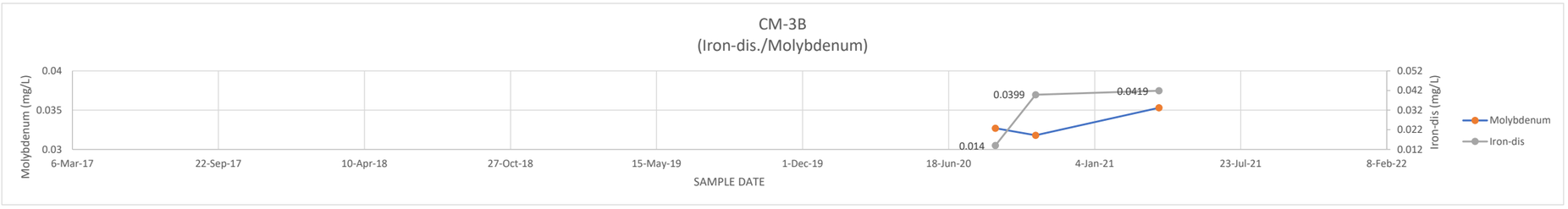
CM-3A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	0.012	0.0457
13-Oct-20	0.012	0.0222
30-Mar-21	0.794	0.0153
14-Oct-21	0.0291	0.00297



CM-3B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20	0.014	0.0327
15-Oct-20	0.0399	0.0318
2-Apr-21	0.0419	0.0353
11-Oct-21		

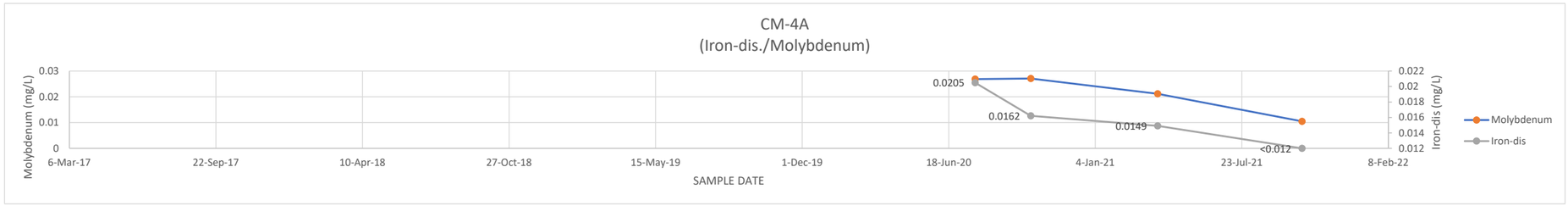


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-1
CHANGES IN IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

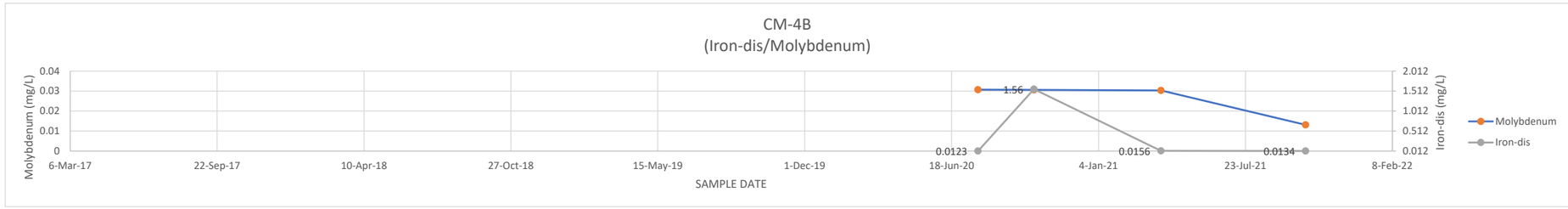
CM-4A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.0205	0.0269
8-Oct-20	0.0162	0.0271
30-Mar-21	0.0149	0.0212
13-Oct-21	0.012	0.0105



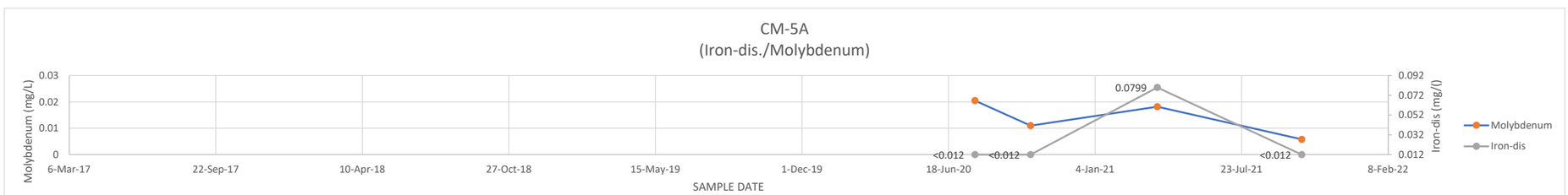
CM-4B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.0123	0.0307
8-Oct-20	1.56	0.0306
30-Mar-21	0.0156	0.0303
13-Oct-21	0.0134	0.0131



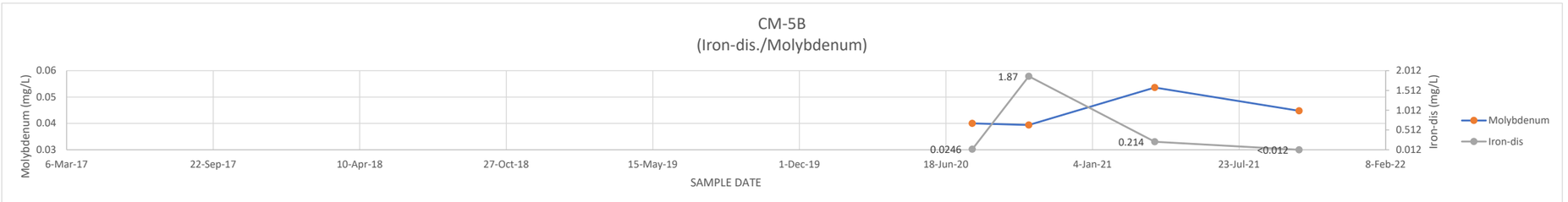
CM-5A

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.012	0.0205
8-Oct-20	0.012	0.011
30-Mar-21	0.0799	0.0182
13-Oct-21	0.012	0.0058



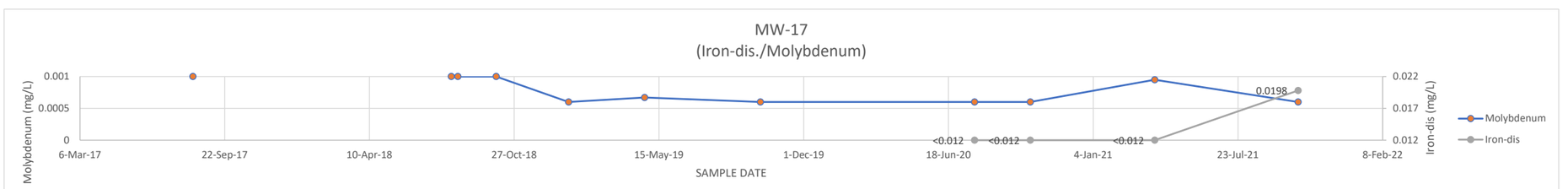
CM-5B

DATE	DIS FE	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20	0.0246	0.04
9-Oct-20	1.87	0.0394
30-Mar-21	0.214	0.0536
13-Oct-21	0.012	0.0448



MW-17

DATE	DIS FE	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18		0.001
10-Jan-19		0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20	0.012	0.0006
9-Oct-20	0.012	0.0006
30-Mar-21	0.012	0.00095
14-Oct-21	0.0198	0.0006

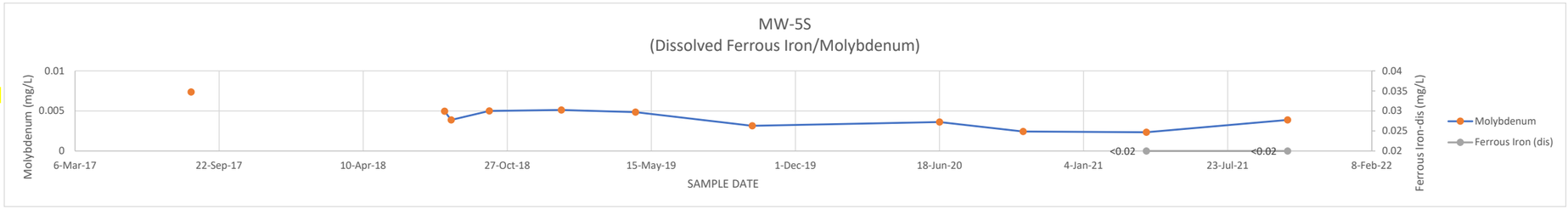


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-2
CHANGES IN FERROUS IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

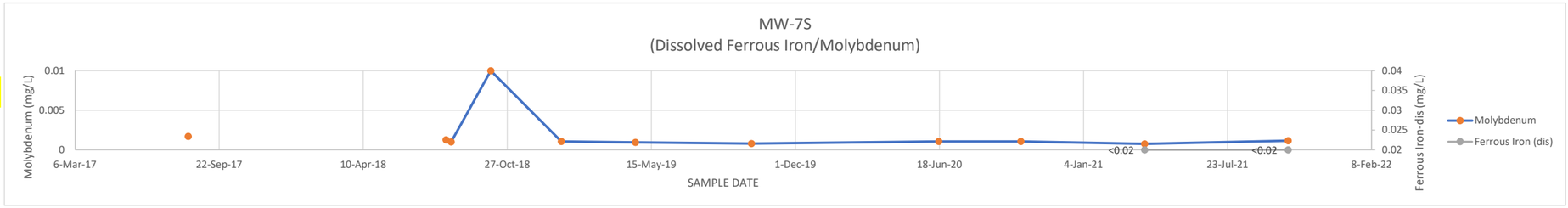
MW-5S

DATE	DIS FE(II)	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18		0.005
10-Jan-19		0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20		0.00361
12-Oct-20		0.00244
1-Apr-21	0.02	0.00234
14-Oct-21	0.02	0.00387



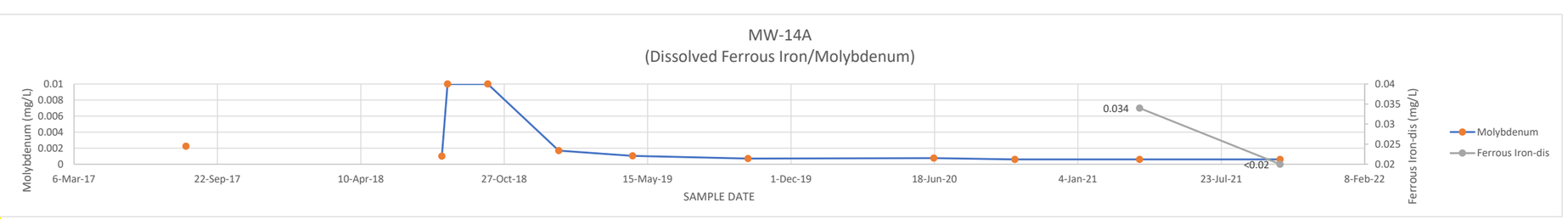
MW-7S

DATE	DIS FE(II)	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18		0.01
10-Jan-19		0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20		0.00105
9-Oct-20		0.00106
30-Mar-21	0.02	0.000755
15-Oct-21	0.02	0.00115



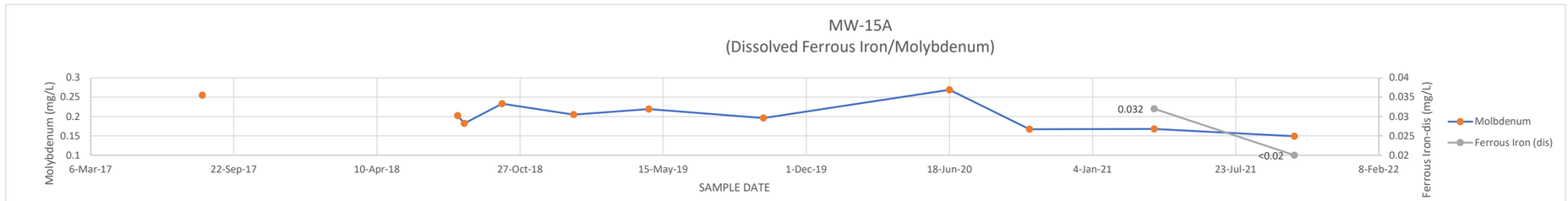
MW-14A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18		0.01
11-Jan-19		0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20		0.00076
8-Oct-20		0.0006
31-Mar-21	0.034	0.0006
13-Oct-21	0.02	0.0006



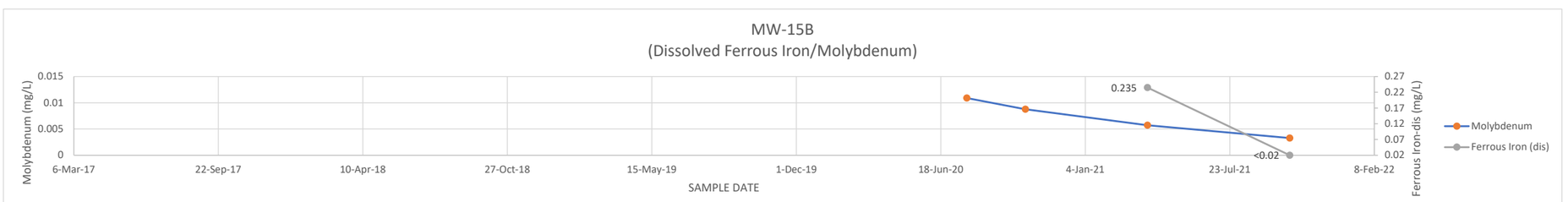
MW-15A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18		0.233
10-Jan-19		0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20		0.269
8-Oct-20		0.167
31-Mar-21	0.032	0.168
13-Oct-21	0.02	0.149



MW-15B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0109
13-Oct-20		0.00876
31-Mar-21	0.235	0.00571
14-Oct-21	0.02	0.00328

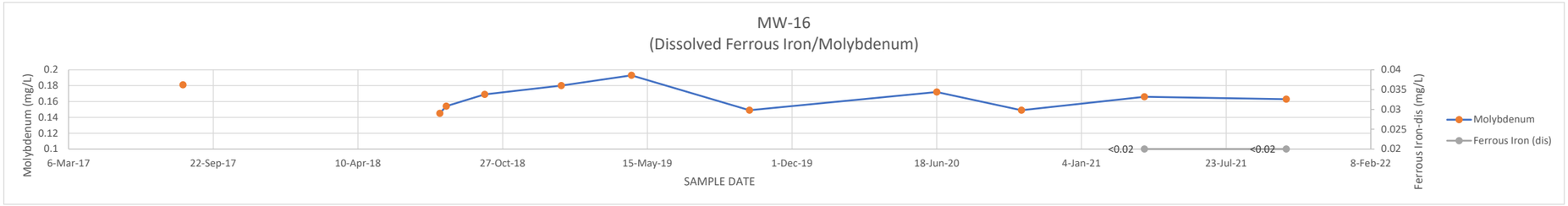


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-2
CHANGES IN FERROUS IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

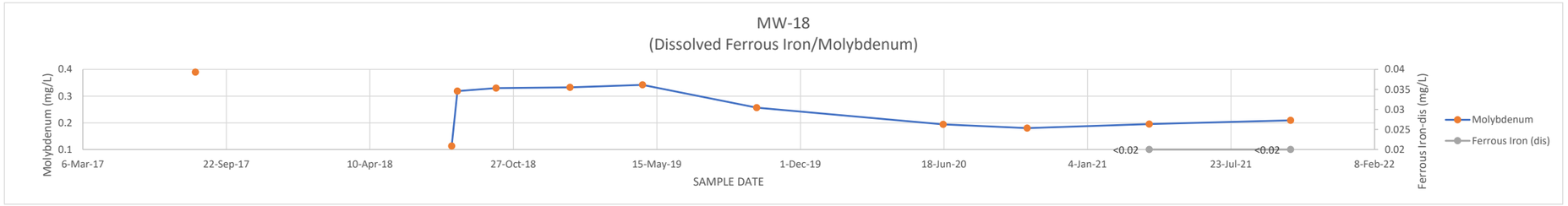
MW-16

DATE	DIS FE(II)	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18		0.169
16-Jan-19		0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20		0.172
13-Oct-20		0.149
1-Apr-21	0.02	0.166
14-Oct-21	0.02	0.163



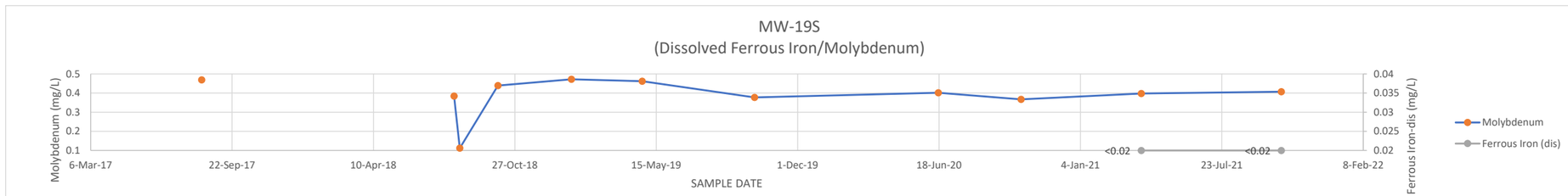
MW-18

DATE	DIS FE(II)	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18		0.33
14-Jan-19		0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20		0.194
12-Oct-20		0.18
31-Mar-21	0.02	0.195
14-Oct-21	0.02	0.209



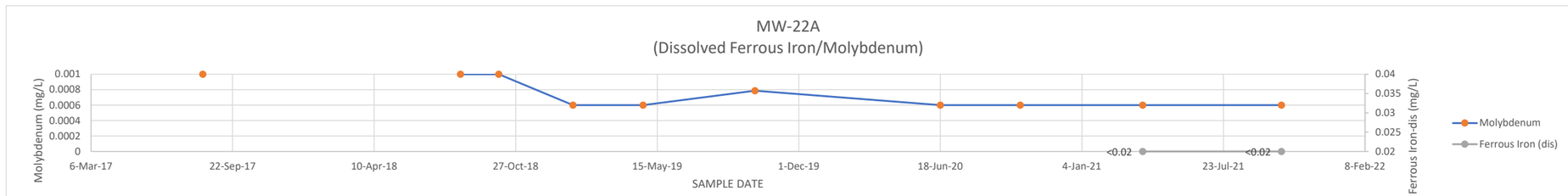
MW-19S

DATE	DIS FE(II)	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18		0.439
15-Jan-19		0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20		0.402
12-Oct-20		0.367
31-Mar-21	0.02	0.398
15-Oct-21	0.02	0.407



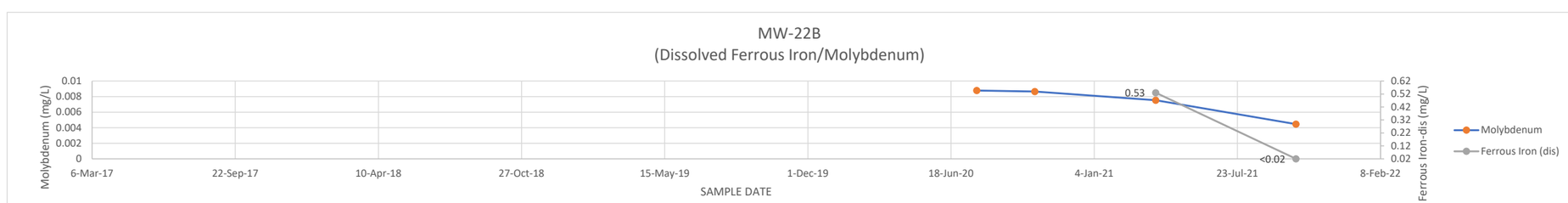
MW-22A

DATE	DIS FE(II)	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18		0.001
16-Jan-19		0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20		0.0006
9-Oct-20		0.0006
31-Mar-21	0.02	0.0006
13-Oct-21	0.02	0.0006



MW-22B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00878
13-Oct-20		0.00866
31-Mar-21	0.53	0.00753
13-Oct-21	0.02	0.00446

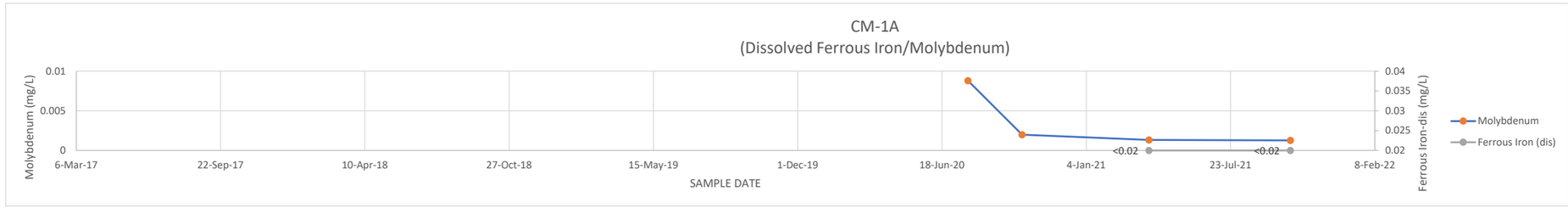


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-2
CHANGES IN FERROUS IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

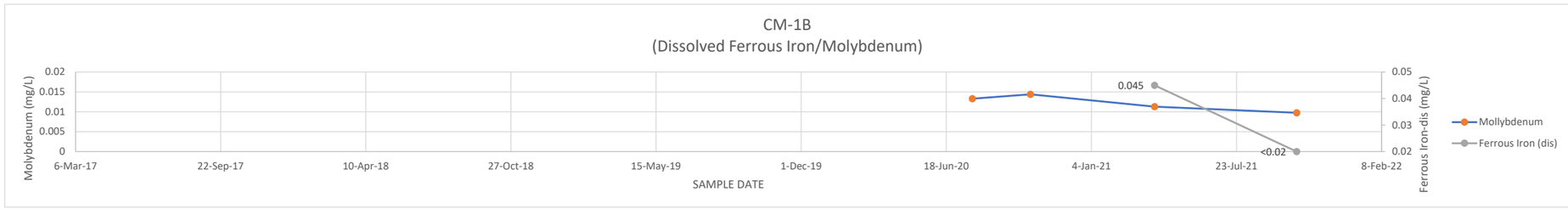
CM-1A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0088
7-Oct-20		0.00198
1-Apr-21	0.02	0.00132
14-Oct-21	0.02	0.00127



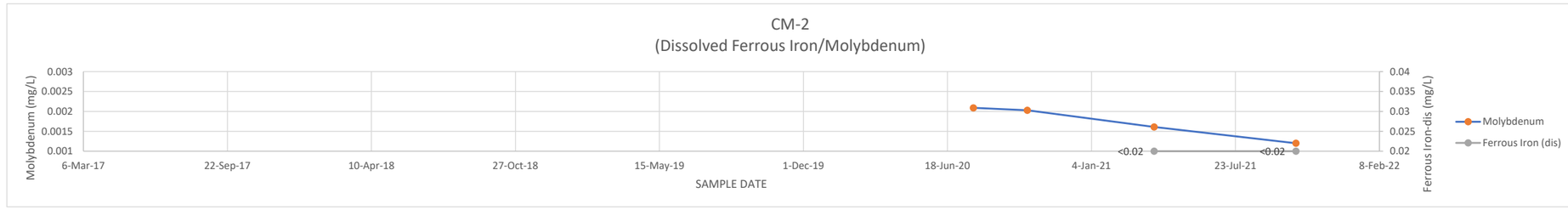
CM-1B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0133
12-Oct-20		0.0144
1-Apr-21	0.045	0.0113
14-Oct-21	0.02	0.00976



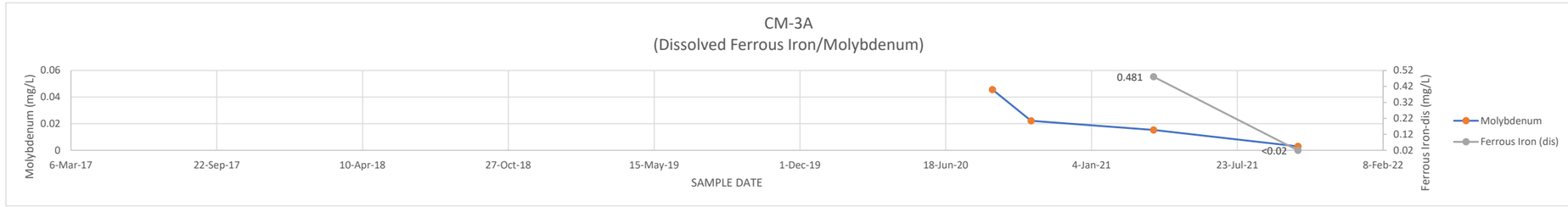
CM-2

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00209
7-Oct-20		0.00203
1-Apr-21	0.02	0.00161
15-Oct-21	0.02	0.0012



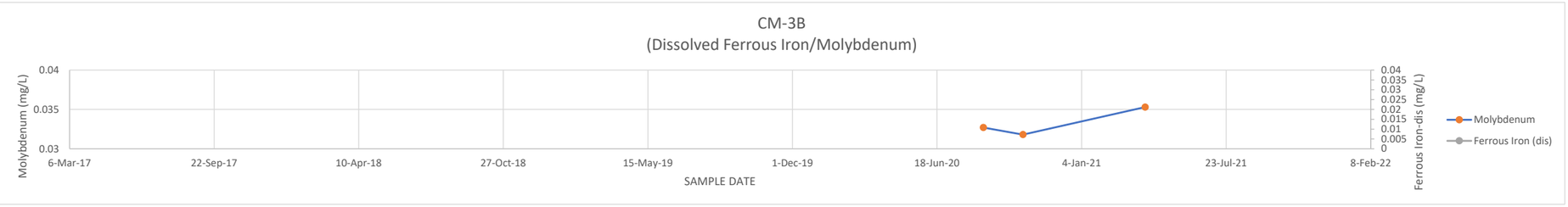
CM-3A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	0.481	0.0153
14-Oct-21	0.02	0.00297



CM-3B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		

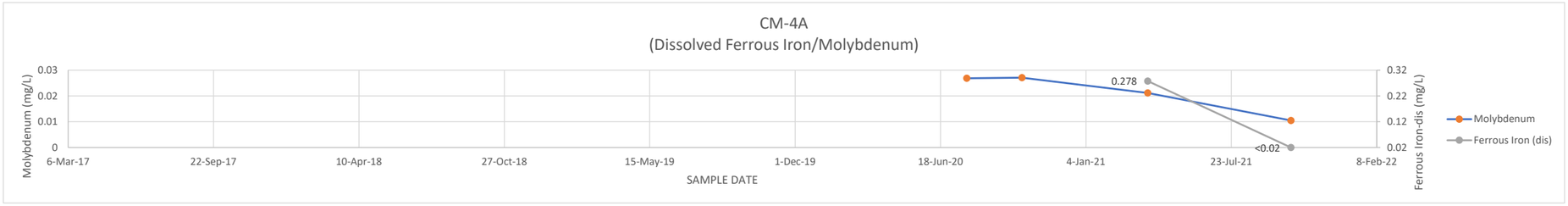


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-2
CHANGES IN FERROUS IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

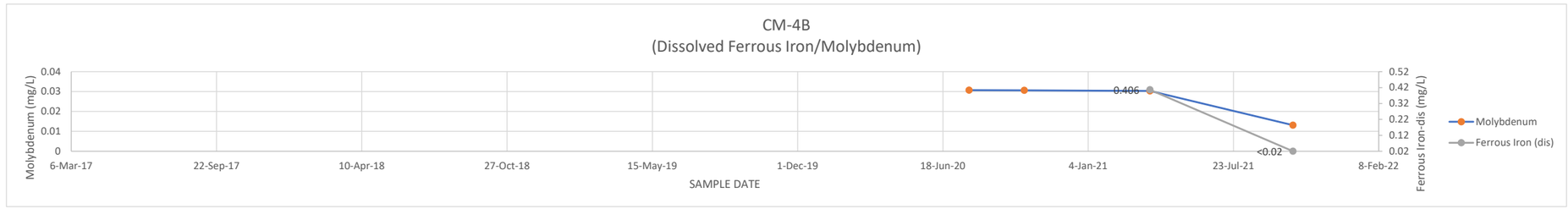
CM-4A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0269
8-Oct-20		0.0271
30-Mar-21	0.278	0.0212
13-Oct-21	0.02	0.0105



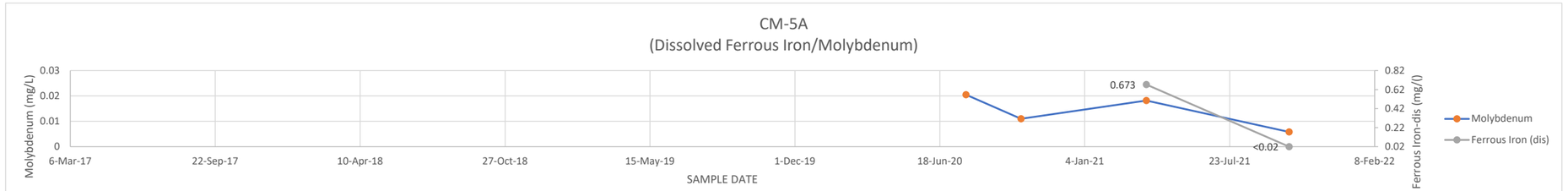
CM-4B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0307
8-Oct-20		0.0306
30-Mar-21	0.406	0.0303
13-Oct-21	0.02	0.0131



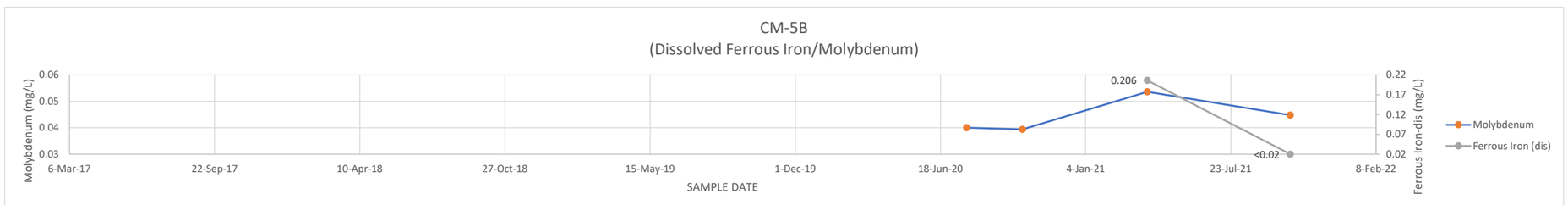
CM-5A

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0205
8-Oct-20		0.011
30-Mar-21	0.673	0.0182
13-Oct-21	0.02	0.0058



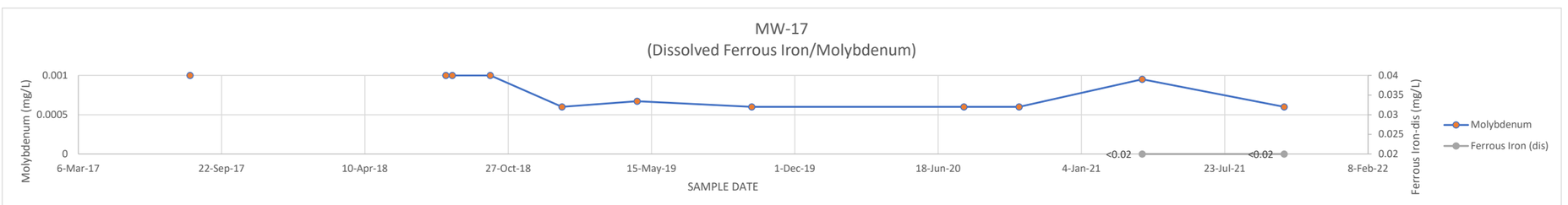
CM-5B

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.04
9-Oct-20		0.0394
30-Mar-21	0.206	0.0536
13-Oct-21	0.02	0.0448



MW-17

DATE	DIS FE(II)	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18		0.001
10-Jan-19		0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20		0.0006
9-Oct-20		0.0006
30-Mar-21	0.02	0.00095
14-Oct-21	0.02	0.0006

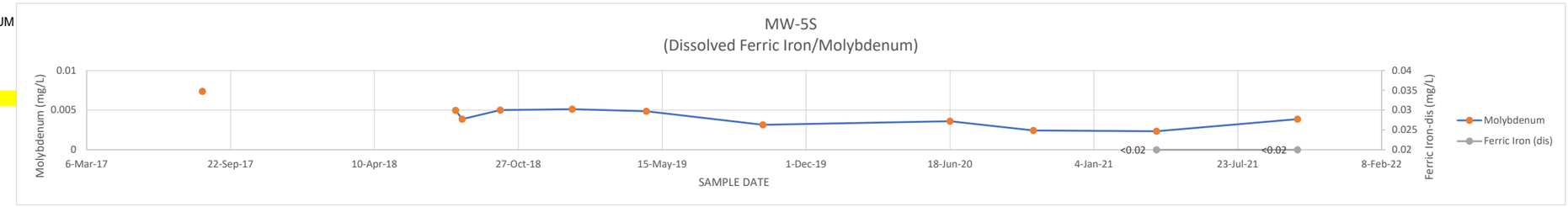


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-3
CHANGES IN FERRIC IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

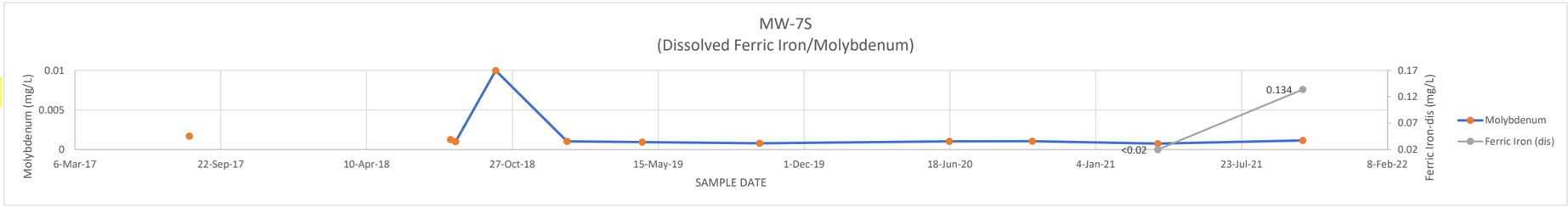
MW-5S

DATE	DIS (III)	MOLYBDENUM
14-Aug-17		0.00737
22-May-18		
1-Aug-18		0.00497
10-Aug-18		0.00387
2-Oct-18		0.005
10-Jan-19		0.00512
23-Apr-19		0.00485
2-Oct-19		0.00315
18-Jun-20		0.00361
12-Oct-20		0.00244
1-Apr-21	0.02	0.00234
14-Oct-21	0.02	0.00387



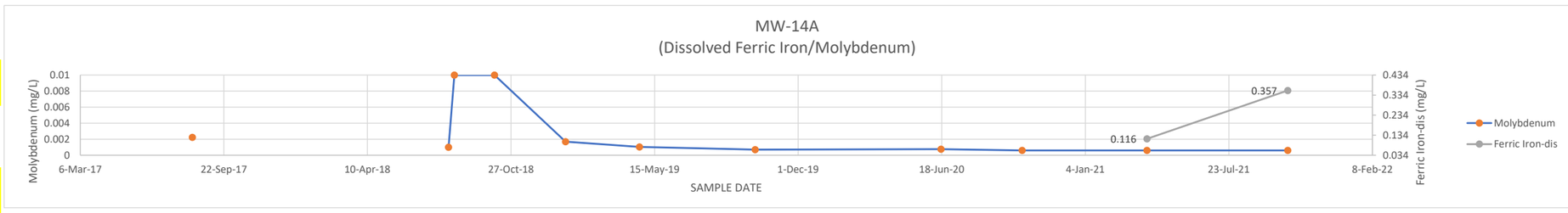
MW-7S

DATE	DIS (III)	MOLYBDENUM
10-Aug-17		0.00171
17-May-18		
3-Aug-18		0.00127
10-Aug-18		0.001
4-Oct-18		0.01
10-Jan-19		0.00105
23-Apr-19		0.000952
1-Oct-19		0.000798
17-Jun-20		0.00105
9-Oct-20		0.00106
30-Mar-21	0.02	0.000755
15-Oct-21	0.134	0.00115



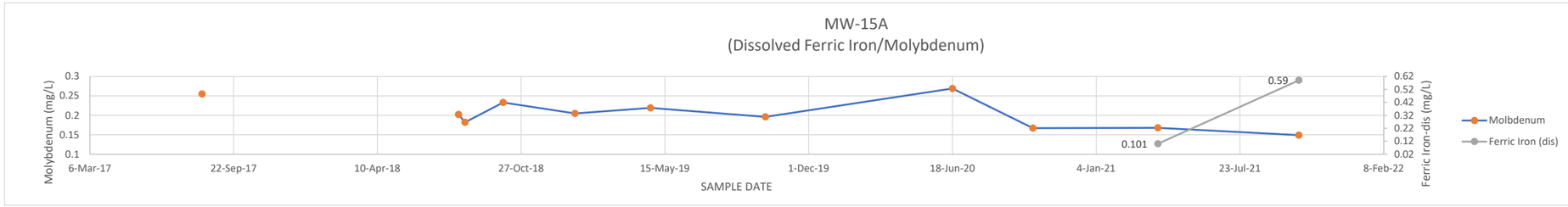
MW-14A

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		0.00223
17-May-18		
1-Aug-18		0.001
9-Aug-18		0.01
4-Oct-18		0.01
11-Jan-19		0.0017
24-Apr-19		0.00104
2-Oct-19		0.000709
17-Jun-20		0.00076
8-Oct-20		0.0006
31-Mar-21	0.116	0.0006
13-Oct-21	0.357	0.0006



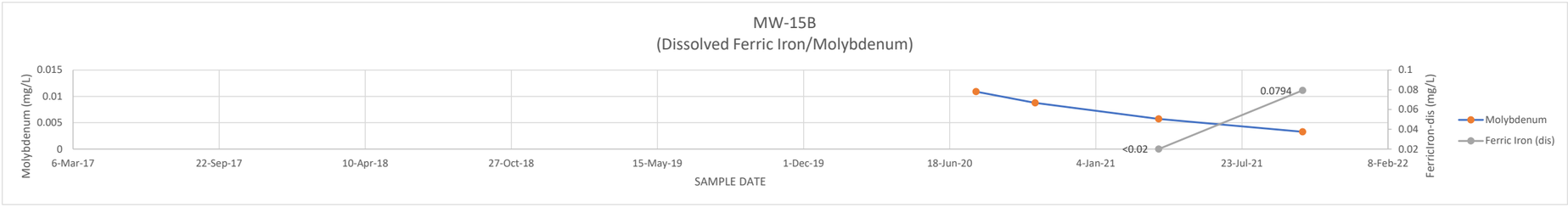
MW-15A

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		0.255
24-May-18		
1-Aug-18		0.202
10-Aug-18		0.182
2-Oct-18		0.233
10-Jan-19		0.205
25-Apr-19		0.219
2-Oct-19		0.196
18-Jun-20		0.269
8-Oct-20		0.167
31-Mar-21	0.101	0.168
13-Oct-21	0.59	0.149



MW-15B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0109
13-Oct-20		0.00876
31-Mar-21	0.02	0.00571
14-Oct-21	0.0794	0.00328

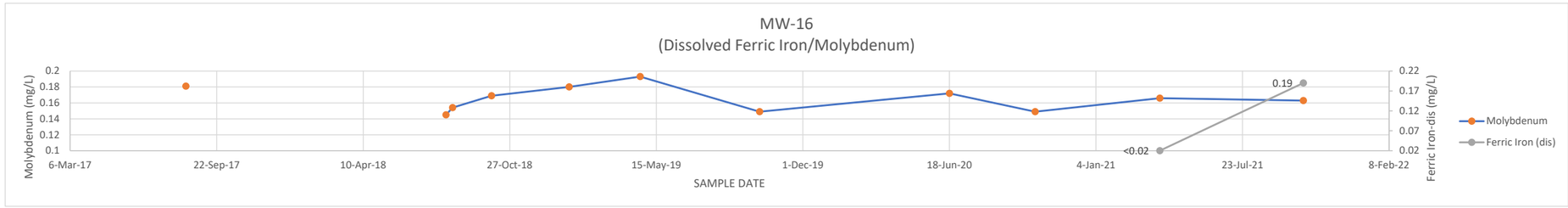


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-3
CHANGES IN FERRIC IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

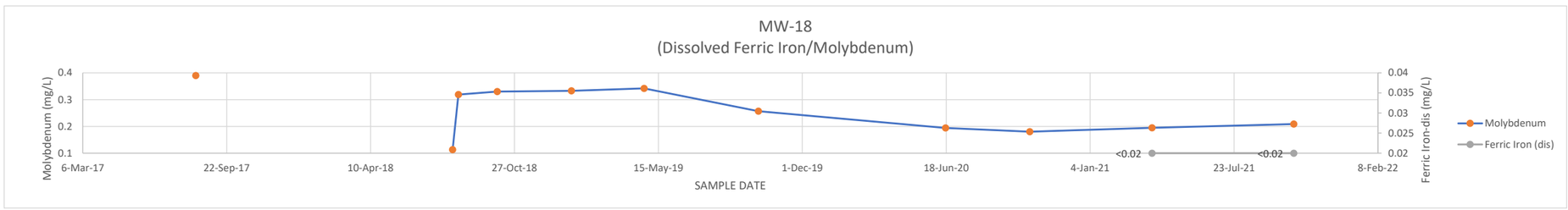
MW-16

DATE	DIS (III)	MOLYBDENUM
11-Aug-17		0.181
22-May-18		
1-Aug-18		0.145
10-Aug-18		0.154
2-Oct-18		0.169
16-Jan-19		0.18
23-Apr-19		0.193
3-Oct-19		0.149
18-Jun-20		0.172
13-Oct-20		0.149
1-Apr-21	0.02	0.166
14-Oct-21	0.19	0.163



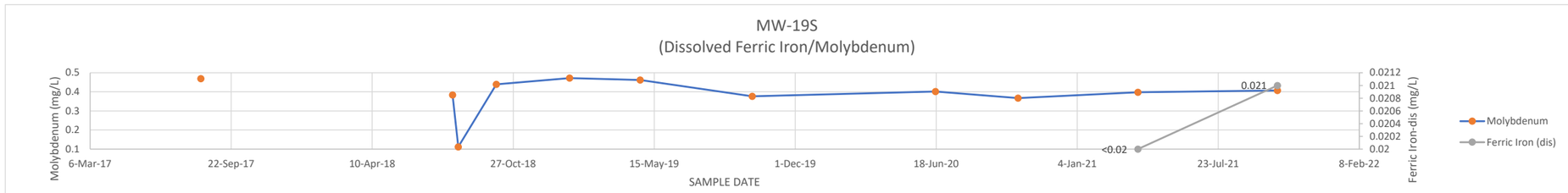
MW-18

DATE	DIS (III)	MOLYBDENUM
10-Aug-17		0.39
18-May-18		
2-Aug-18		0.113
10-Aug-18		0.319
3-Oct-18		0.33
14-Jan-19		0.333
25-Apr-19		0.342
1-Oct-19		0.257
17-Jun-20		0.194
12-Oct-20		0.18
31-Mar-21	0.02	0.195
14-Oct-21	0.02	0.209



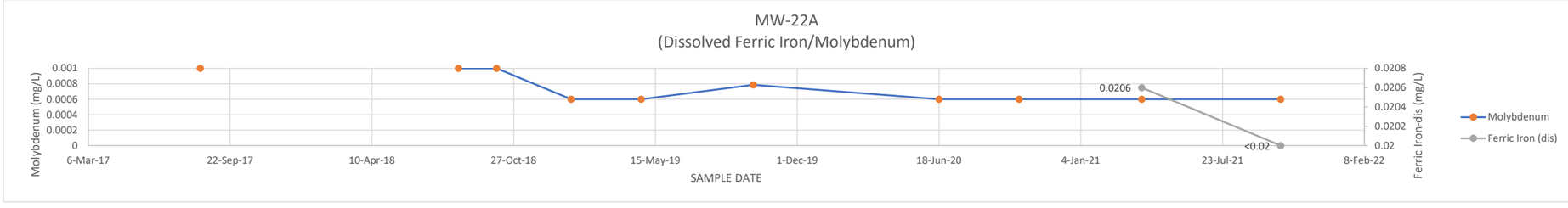
MW-19S

DATE	DIS (III)	MOLYBDENUM
10-Aug-17		0.469
18-May-18		
2-Aug-18		0.384
10-Aug-18		0.112
3-Oct-18		0.439
15-Jan-19		0.472
25-Apr-19		0.462
1-Oct-19		0.377
17-Jun-20		0.402
12-Oct-20		0.367
31-Mar-21	0.02	0.398
15-Oct-21	0.021	0.407



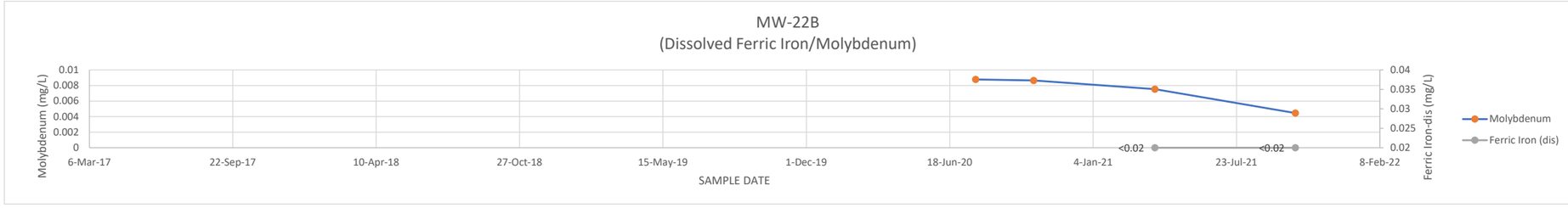
MW-22A

DATE	DIS (III)	MOLYBDENUM
11-Aug-17		0.001
22-May-18		
10-Aug-18		0.001
3-Oct-18		0.001
16-Jan-19		0.0006
25-Apr-19		0.0006
30-Sep-19		0.000787
18-Jun-20		0.0006
9-Oct-20		0.0006
31-Mar-21	0.0206	0.0006
13-Oct-21	0.02	0.0006



MW-22B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00878
13-Oct-20		0.00866
31-Mar-21	0.02	0.00753
13-Oct-21	0.02	0.00446

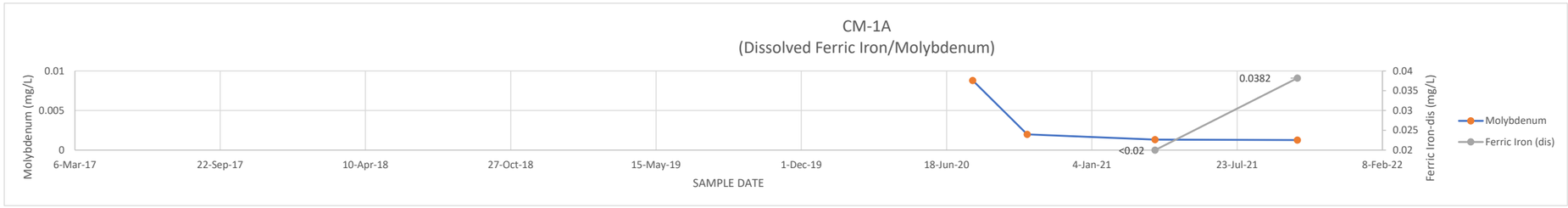


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-3
CHANGES IN FERRIC IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

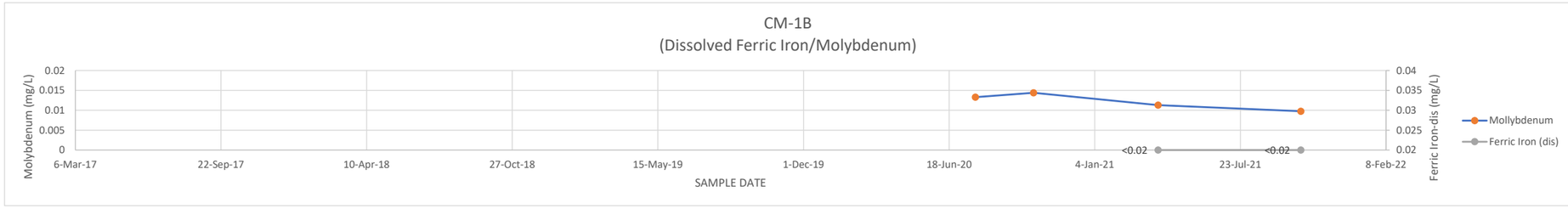
CM-1A

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0088
7-Oct-20		0.00198
1-Apr-21	0.02	0.00132
14-Oct-21	0.0382	0.00127



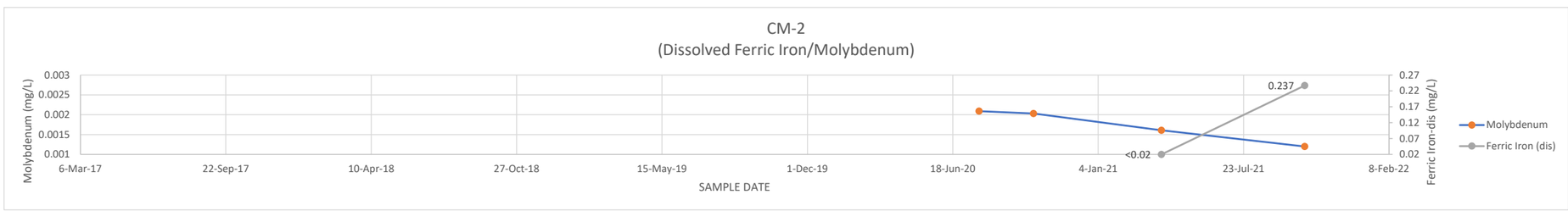
CM-1B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0133
12-Oct-20		0.0144
1-Apr-21	0.02	0.0113
14-Oct-21	0.02	0.00976



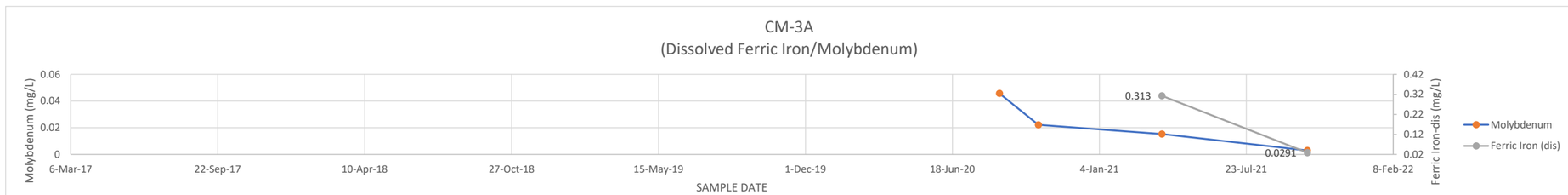
CM-2

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.00209
7-Oct-20		0.00203
1-Apr-21	0.02	0.00161
15-Oct-21	0.237	0.0012



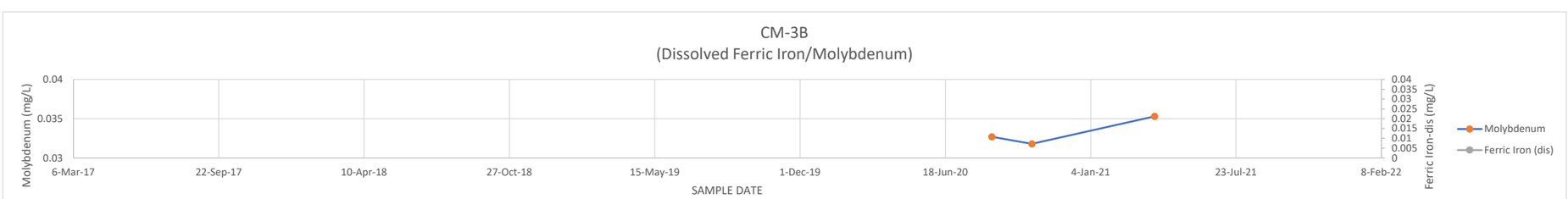
CM-3A

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0457
13-Oct-20		0.0222
30-Mar-21	0.313	0.0153
14-Oct-21	0.0291	0.00297



CM-3B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
21-Aug-20		0.0327
15-Oct-20		0.0318
2-Apr-21		0.0353
11-Oct-21		

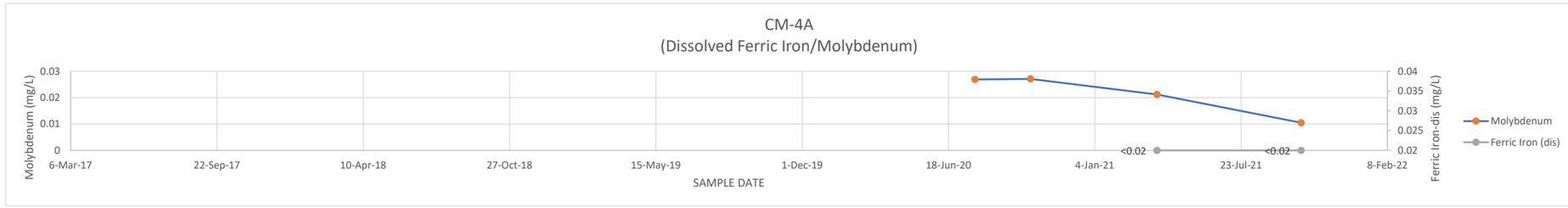


Yellow Indicates Reported Below shown value (MDL)

ATTACHMENT H-3
CHANGES IN FERRIC IRON (DISSOLVED) AND MOLYBDENUM CONCENTRATIONS

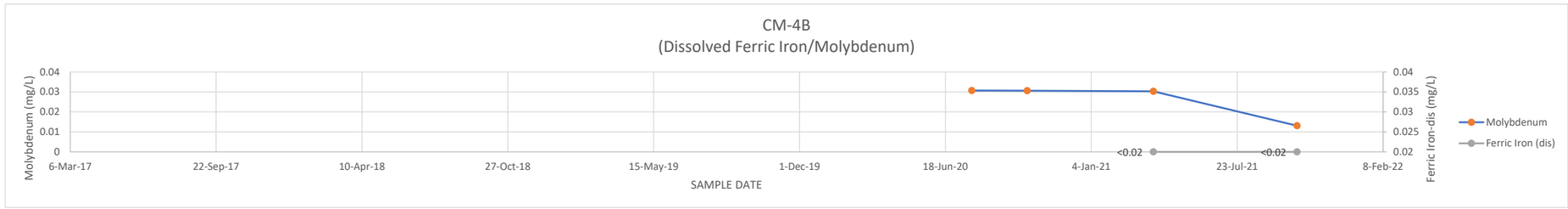
CM-4A

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0269
8-Oct-20		0.0271
30-Mar-21	0.02	0.0212
13-Oct-21	0.02	0.0105



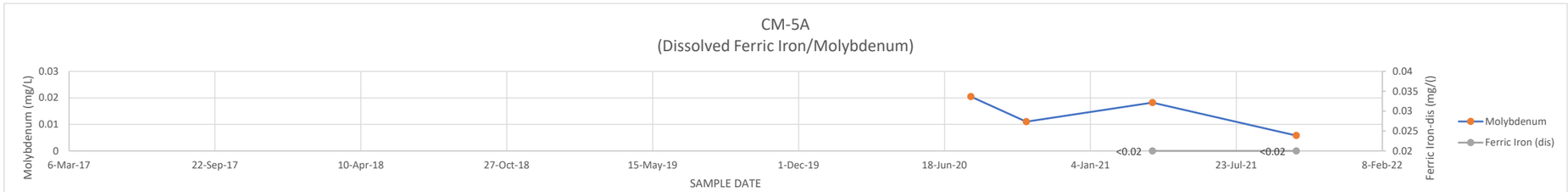
CM-4B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0307
8-Oct-20		0.0306
30-Mar-21	0.02	0.0303
13-Oct-21	0.02	0.0131



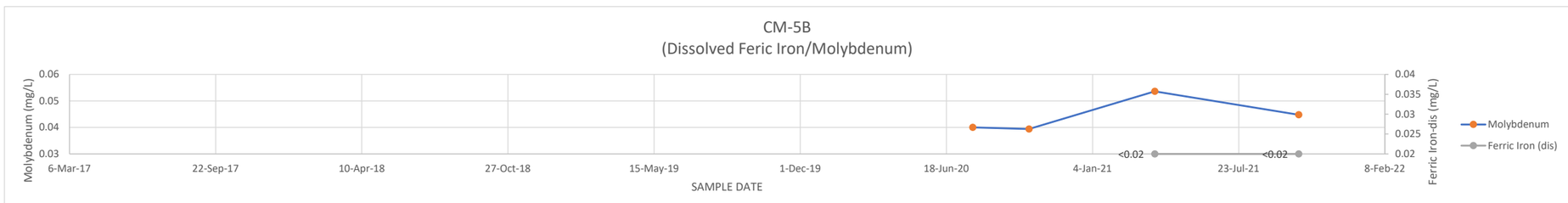
CM-5A

DATE	DIS(III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.0205
8-Oct-20		0.011
30-Mar-21	0.02	0.0182
13-Oct-21	0.02	0.0058



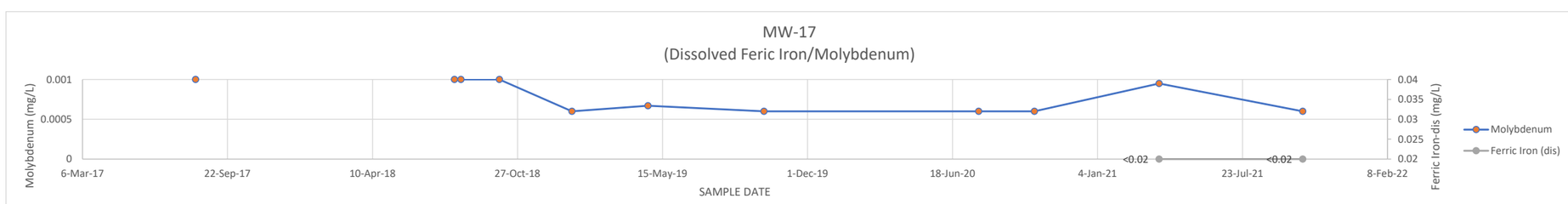
CM-5B

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		
24-May-18		
1-Aug-18		
10-Aug-18		
2-Oct-18		
10-Jan-19		
25-Apr-19		
2-Oct-19		
24-Jul-20		0.04
9-Oct-20		0.0394
30-Mar-21	0.02	0.0536
13-Oct-21	0.02	0.0448



MW-17

DATE	DIS (III)	MOLYBDENUM
9-Aug-17		0.001
24-May-18		
1-Aug-18		0.001
10-Aug-18		0.001
2-Oct-18		0.001
10-Jan-19		0.0006
25-Apr-19		0.000671
2-Oct-19		0.0006
24-Jul-20		0.0006
9-Oct-20		0.0006
30-Mar-21	0.02	0.00095
14-Oct-21	0.02	0.0006



Yellow Indicates Reported Below shown value (MDL)