



**Department of Energy**  
 Savannah River Operations Office  
 P.O. Box A  
 Aiken, South Carolina 29802

**MAY 29 2024**

Ms. Susan B. Fulmer, P. G., Manager  
 Federal Remediation Section  
 Division of Site Assessment, Remediation and Revitalization  
 Bureau of Land and Waste Management  
 South Carolina Department of Health and Environmental Control  
 2600 Bull Street  
 Columbia, South Carolina 29201

Mr. Jon Richards  
 Savannah River Site Remedial Project Manager  
 Superfund Division  
 U. S. Environmental Protection Agency, Region 4  
 61 Forsyth Street, SW  
 Atlanta, Georgia 30303

Dear Ms. Fulmer and Mr. Richards:

**SUBJECT:** Savannah River Site's Responses to the Regulatory Comments on the Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit (OU) Removal Action (U) - July 2022 through June 2023 (SRNS-RP-2023-00913, Revision 0, October 2023) SEMS Number: 82

The U.S. Department of Energy (DOE) is submitting the subject comment responses for your review. The South Carolina Department of Health and Environmental Control's (SCDHEC) and U.S. Environmental Protection Agency's (EPA) comments were received on February 21, 2024, and February 26, 2024, respectively. This report will not be revised; however, all comment responses will be included in the next EMR, as applicable. Please review these responses and provide your approval within thirty (30) days from receipt. The effort and time that the EPA and the SCDHEC have provided on this operable unit are greatly appreciated.

Questions from you or your staff may be directed to me at (803) 952-8365, or the DOE Operable Unit Manager, Ms. Karen Adams, at (803) 952-7871.

Sincerely,

**AVERY HAMMETT**

Digitally signed by AVERY  
 HAMMETT  
 Date: 2024.05.29 09:30:56 -04'00'

Avery G. Hammett  
 FFA Project Manager, DOE-Savannah River  
 Remediation and Deactivation & Decommissioning Division

RDDD-24-136

Ms. Susan Fulmer  
Mr. Jon Richards

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## Enclosures:

1. SRS Responses to the South Carolina Department of Health and Environmental Control's Comments on the Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit (OU) Removal Action (U) - July 2022 through June 2023 (SRNS-RP-2023-00913, Revision 0, October 2023) SEMS Number: 82
2. SRS Response to the U.S. Environmental Protection Agency's Comments on the Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit (OU) Removal Action (U) - July 2022 through June 2023 (SRNS-RP-2023-00913, Revision 0, October 2023) SEMS Number: 82

## cc w/o encl:

J. Blalock, SCDHEC-Columbia  
S. French, SCDHEC-Columbia  
M. Reece, SCDHEC-Columbia  
G. K. Taylor, SCDHEC-Columbia  
G. R. Stewart, SCDHEC-Columbia  
T. R. Fuss, SCDHEC-Aiken Environmental Affairs Office  
G. O'Quinn, SCDHEC-Aiken Environmental Affairs Office  
B. A. Cameron, SCDHEC-Aiken Environmental Affairs Office  
H. L. Herlong, SCDHEC-Aiken Environmental Affairs Office

## cc w/encl:

M. McRae, TechLaw, Inc.

**SRS Responses to SCDHEC Comments on the Effectiveness Monitoring Report (EMR) for the C-Area Groundwater (CAGW) Operable Unit (OU) Removal Action (U) – July 2022 through June 2023, SEMS Number: 82, SRNS-RP-2023-00913, Revision 0, October 2023**

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General Comments

1. CRW-1A and CRW-1D are identified in Table 4 as mid plume wells although they are located upgradient of Tritium and VOC source areas. CRW-1D is shown upgradient of the former source areas in Figure 2. The location of CRW-1A is not shown in any of the figures. Please consider revising how these wells are classified.

**Response: Agree**

**Wells CRW 1A and CRW 1D are background wells for the broader CAGW OU monitoring network, and Table 4 will be revised to correctly label these wells in the next EMR. Figures 2 and 7 will be revised in the next EMR to include well CRW 1A, and the text will differentiate between the CAGW OU background wells and the CAGW NTC RA background wells. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

2. Some of the figure names and numbers are misaligned. There are two Figure 30s and two Figure 31s. Starting with Figure 10b, the figure names are misaligned until Figure 31. For example, Figure 10c, described in Section 3.4 of the text and in the List of Figures, references Former ERH-SVE TCE source area trends. In the figure section of the report, the figure number for the Former ERH-SVE TCE source area trends is Figure 12c.

**Response: Agree with Clarification**

**There was a conversion error in the numbering of figures between the Word and PDF files. The correct figure numbers for Figure 11b and Figure 12c are Figure 10b and Figure 10c, respectively. Beginning with Figure 13 through Figure 30, the numbering is off by two. For example, Figure 13 should be Figure 11 and Figure 30 should be Figure 28. The text and figures in the next EMR will be verified to reference the correct numbering. Please see the attached corrected Figures 10a – 10c and Figure 11 (Figure 10a, Figure 11b, Figure 12c and Figure 13 in the Rev. 0 EMR). No changes to the current report are proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

Specific Comments

1. Section 3.1.2, CAGW OU Groundwater Monitoring Network, page 8. The first sentence of this section states that the CAGW OU monitoring network includes 62 monitoring stations, 48 of which are wells. Table 4 lists 63 monitoring stations in the CAGW OU

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network, including 49 wells. Additionally, the first sentence of the LAZ discussion in Section 3.4.2.1 states there are 11 CAGW OU wells screened in the LAZ; Table 4 lists 12. It appears that a monitoring well is not accounted for in the total mentioned in Section 3.1.2.

**Response: Agree with Clarification**

**Well CRW 1A was not in the original monitoring network for the CAGW OU, but it was added to the monitoring network to provide better Gordon Aquifer potentiometric coverage. Table 4 includes well CRW 1A and correctly shows 63 monitoring stations, 49 wells, and 12 CAGW OU LAZ wells. The text in the next EMR report will be updated to reflect the correct number of monitoring stations and wells (63 monitoring stations and 49 wells) presented in Table 4. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850**

2. Section 3.2, Groundwater Elevation Measurements and Groundwater Flow Direction, page 8. It would be useful to include a table that has the depth to groundwater measurements and calculated groundwater elevations above mean sea level in addition to the potentiometric figures presented in Appendix E. Please include a table with this information in future reports.

**Response: Agree.**

**A table that includes the depth to groundwater measurements and calculated groundwater elevations above mean sea level will be added to Appendix F in the next EMR. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850**

3. Section 3.4, Groundwater and Surface Water Compliance, page 12. The second paragraph of the page reads “In 2Q23, CSB 15D and CSB020C groundwater TCE concentrations (37.6 µg/L and 40.2 µg/L, respectively) exceeded the TCE MCL (5 µg/L) (Figure 10b).” There is no Figure 10b attached to the report. Regardless of its presence, the title of Figure 10b, in the List of Figures, implies surface water trends. It is unlikely that groundwater results from CSB 15D and CSB020C would be included in this figure.

**Response: Agree with Clarification**

**There was a conversion error in the numbering of figures between the Word and PDF files. The correct figure numbers for Figure 11b and Figure 12c are Figure 10b and Figure 10c, respectively. Beginning with Figure 13 through Figure 30, the numbering**

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is off by two. For example, Figure 13 should be Figure 11 and Figure 30 should be Figure 28. The text and figures in the next EMR will be verified to reference the correct numbering. Please see the attached corrected Figures 10a – 10c and Figure 11 (Figure 10a, Figure 11b, Figure 12c and Figure 13 in the Rev. 0 EMR). In the next EMR, Figure 11, or equivalent, will be referenced for wells CSB 15D and CSB020D, while surface water stations will reference Figure 10b, or equivalent. No changes to the current report are proposed.

**Responsible Party: Terry Killeen, (803) 952-6850**

4. Section 3.4.1.9, BioTrap QuantArray-Chlor® Data, page 22. The second paragraph states “New well CRW029C had elevated levels of phenol hydroxylase, toluene monooxygenase, toluene monooxygenase 2, and detectable toluene dioxygenase, while new well CRW030C had elevated levels of phenol hydroxylase, toluene monooxygenase, and toluene monooxygenase 2 (Table 4).” Please clarify why Table 4 is referenced in this sentence.

**Response: Agree with Clarification**

**The text should have referenced Table 5. The correct table will be referenced in the text in the next EMR. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850**

5. Section 3.4.2.1, Trichloroethylene in the Lower Aquifer Zone (LAZ), page 24. The text states that there are 11 LAZ wells monitoring the CAGW OU. CSB013B and CSB13D are in the same cluster of wells and are both screened in the LAZ and both sampled during the November 2022 sampling event. CRW15D and CRW015B are in the same cluster of wells and are both screened in the LAZ and both sampled during the November 2022 sampling event. To clarify the specific zones that are being monitored, please include a table that identifies the screen intervals below land surface and above mean sea level for all monitoring wells in the CAGW OU. This table could be combined with the groundwater levels and groundwater elevation table that was requested in Specific Comment 2.

**Response: Agree with Clarification**

**Table 4 correctly reflects the screen zone being monitored for each well. Note that CRW015B is screened in the LAZ, but CRW15D is screened in the MAZ. The text will be corrected to state 12 wells are screened in the LAZ in the next EMR consistent with the screen zones presented in Table 4. No change to the current report is proposed.**

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**Responsible Party: Terry Killeen, (803) 952-6850**

6. Section 3.4.2.1, Trichloroethylene in the Gordon Aquifer (GA) page 25. There are 10 Gordon aquifer wells, as stated in the text and included in Table 4. CRW 1A is identified as a Gordon Aquifer well that is to be sampled semi-annually. However, CRW 1A was not sampled during this reporting period, nor was a water level collected or a groundwater elevation reported on Figure E-4. In fact, Gordon Aquifer well CRW 1A is not depicted on any of the report map figures. There are no analytical results or groundwater elevation data associated with well CRW 1A in this report. Please discuss the absence of CRW-1A groundwater elevation data and analytical data.

**Response: Agree with Clarification**

**Please see the response to Specific Comment #1. CRW 1A is collocated with CRW 1D upgradient on the east side of the reactor area. Water elevation measurements were collected at well CRW 1A as shown below but were not included in the current report. Table 4 incorrectly lists tritium and VOC analyses for well CRW 1A. Well CRW 1A was not in the original monitoring network for the CAGW OU but was added for Gordon Aquifer water level measurements. Tritium and VOCs will be added for well CRW 1A in the 2Q24 sample event. The next EMR will include well CRW 1A depicted on the appropriate figures in addition to the analytical results and water elevation measurements. No change to the current report is proposed.**

| Well   | Sample_Date | Reference_Elev.<br>(ft-amsl) | Water_Elev.<br>(ft-amsl) | Water_Depth<br>(ft) |
|--------|-------------|------------------------------|--------------------------|---------------------|
| CRW 1A | 12/7/2021   | 293.89                       | 163.79                   | 130.10              |
| CRW 1A | 6/14/2022   | 293.89                       | 162.89                   | 131.00              |
| CRW 1A | 6/15/2023   | 293.89                       | 167.99                   | 125.90              |

**Responsible Party: Terry Killeen, (803) 952-6850**

7. Section 3.4.2.2 Tetrachloroethylene, page 25. The text states that the maximum 4Q22 PCE concentration was 1.92 ug/L from monitoring well CRW 10C. However, according to Table 3 and Table F-2, the maximum 4Q22 PCE concentration was 8.30 ug/L from monitoring well CRP 5C. While PCE remains a minor component of the CAQW OU VOC groundwater plume, it can no longer be said that PCE concentrations have not exceeded the MCL of 5 ug/L at any CAGW OU monitoring station since 2006.

**Response: Agree with Clarification**

**Under previous agreements, tritium within the CBRP OU boundary will be addressed as part of the CRGW OU, while VOCs will be addressed under the CBRP OU, including at well CRP 5C. Tritium at well CRP 5C is addressed under the CRGW**

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**OU, but the PCE at CRP 5C is addressed under the CBRP OU ROD. Both the VOC and tritium data for CRP 5C are reported in the CAGW OU tables for completeness. However, the VOC data from CRP 5C were not used to determine the maximum PCE concentration associated with the CAGW OU in the text, which was 1.92 ug/L at monitoring well CRW 10C. In the next EMR, only tritium data will be reported in tables for consistency with the text. No changes are proposed for the current report.**

**Responsible Party: Terry Killeen, (803) 952-6850**

8. Figure 4, CAGW OU NTC RA Area (4Q2022), page 37. Figure 4 depicts CAGW OU NTC RA monitoring station results from 4Q22. CSB020B, CSB020D, CRW 13A, CSB-15B, and CSL001 are not part of the NTC monitoring network, were not sampled in 4Q22, and should not be included in this figure. Furthermore, CSB020B and CSB020D were not sampled during the sampling period detailed in this report although they are identified in Table 4 as CAGW OU monitoring wells that are scheduled to be sampled annually. Please consider revising Figure 4 to only include CAGW OU NTC RA results and discuss why CSB020B and CSB020D were not sampled during this reporting period.

**Response: Clarification.**

**Figure 4 will be revised in the next EMR to only show stations sampled to support the CAGW NTC RA (Revised Figure 4 attached). Table 4 includes wells that are sampled to support the CAGW NTC RA and wells sampled for the CAGW OU network. In the next CAGW EMR, stations that support the NTC RA stations that support the overall CAGW OU will be depicted in separate tables. Wells CSB020B and CSB020D were sampled in 4Q22 as part of the broader CAGW OU monitoring network (see attached table). No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850**

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9. Figure E-1, November 2022 Potentiometric Contours for the Upper Aquifer Zone (UAZ), page E-3. Figure E-1 depicts November 2022 Potentiometric Contours for the Upper Aquifer Zone. The figure includes groundwater elevation contours but not the associated elevations that the contours represent. Please add numbers next to the contour lines indicating the groundwater elevations represented.

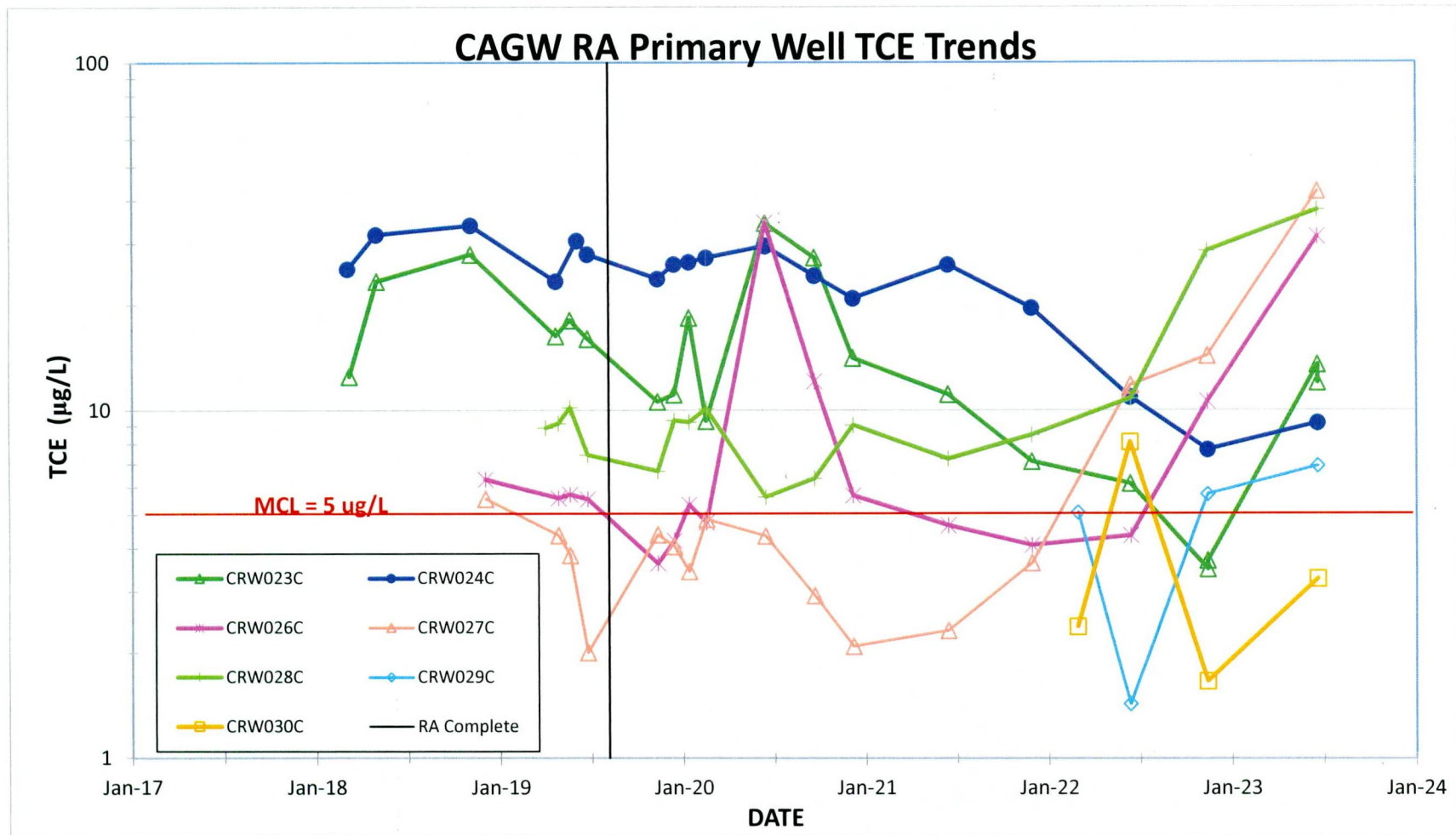
**Response: Agree.**

**The contour numbers will be added next to the contours in all the potentiometric figures in Appendix E in the next EMR, as represented by revised Figure E-1 (attached).**

**Responsible Party: Terry Killeen, (803) 952-6850**

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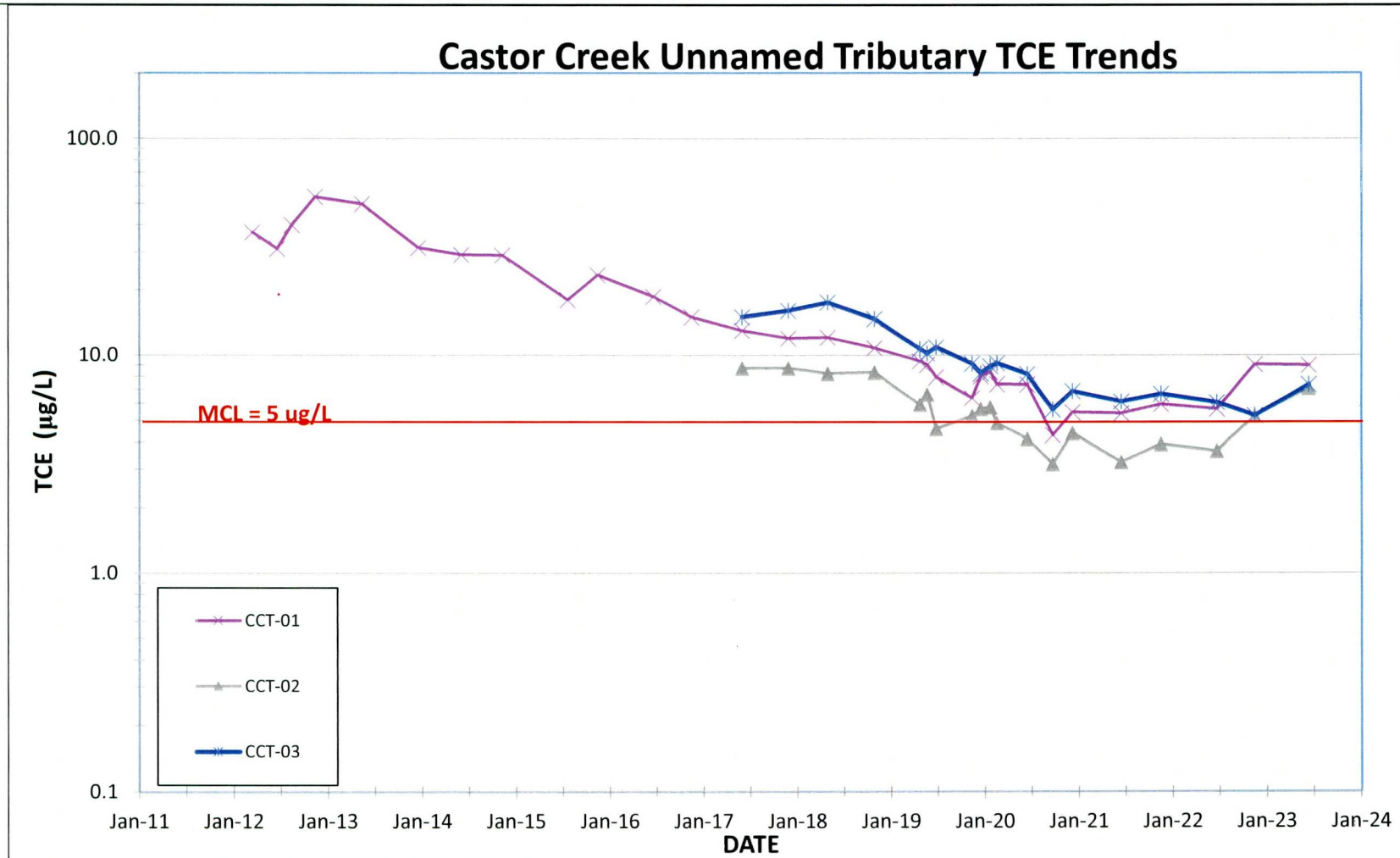
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**Figure 1a. Groundwater TCE Trends in Primary Wells**

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**Figure 2b (Figure 11b in Rev 0 EMR). Castor Creek Tributary Surface Water TCE Trends**

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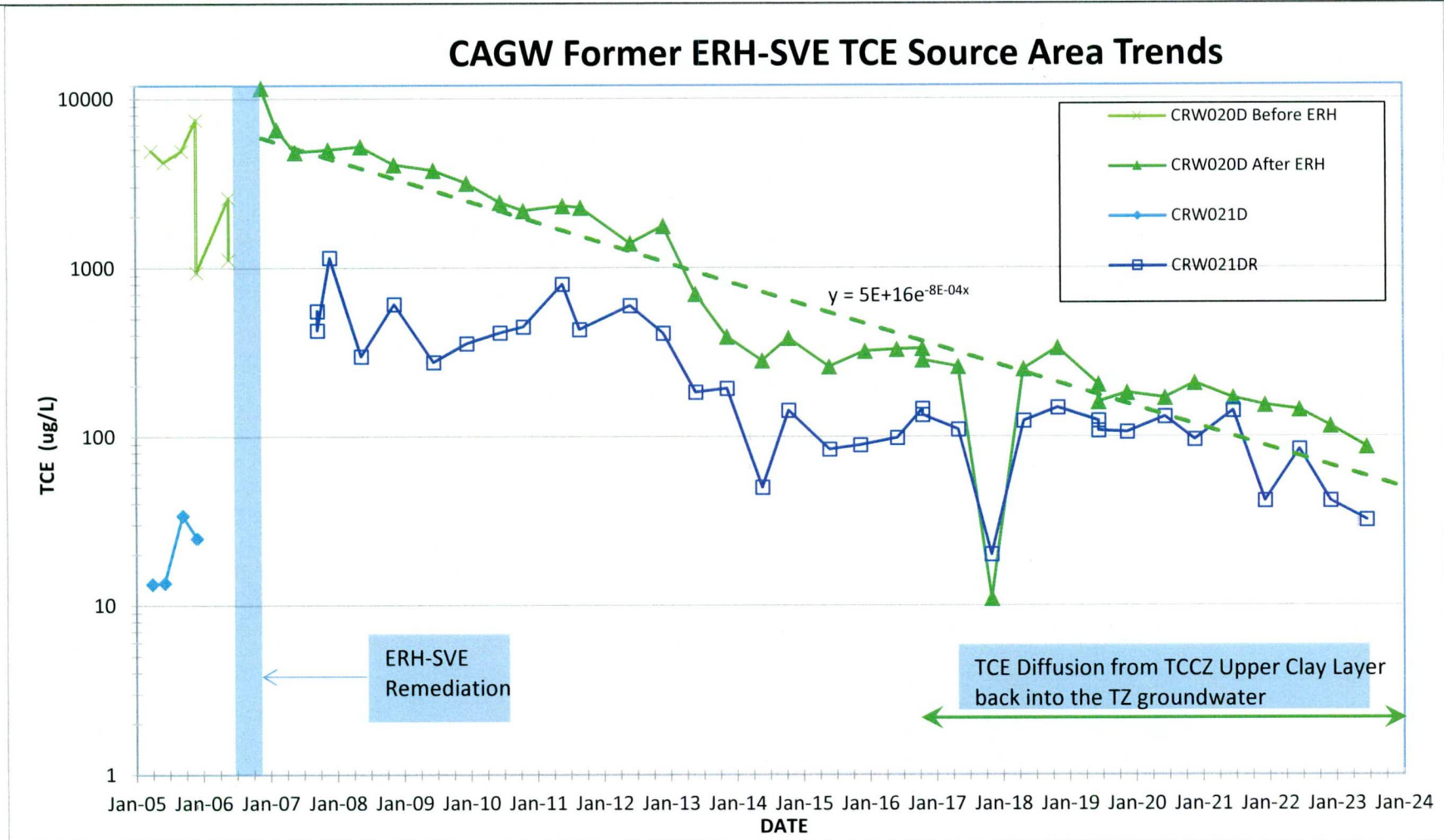
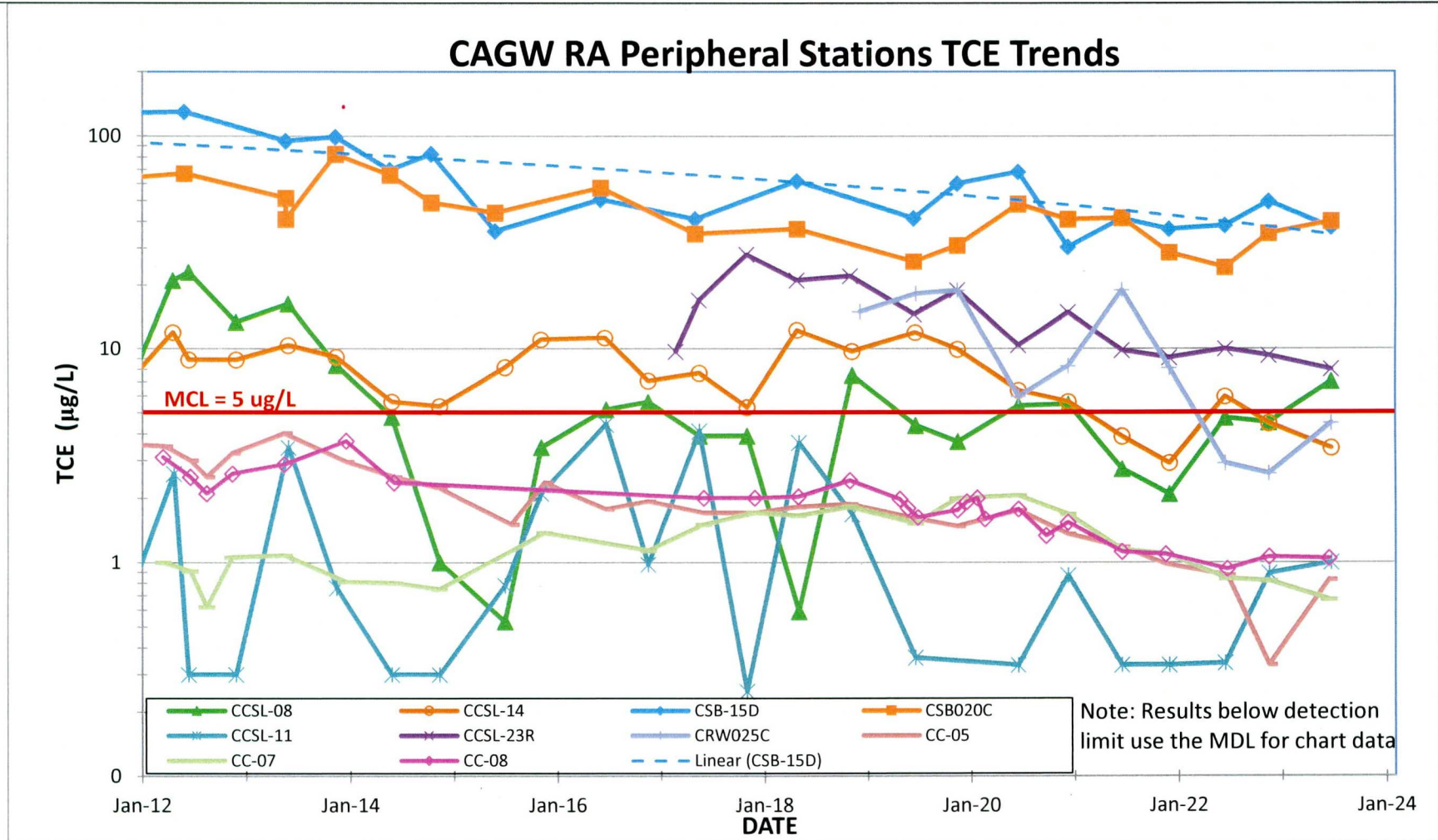


Figure 3c (Figure 12c in Rev. 0 EMR). CAGW OU Former ERH-SVE TCE Source Area Trends

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**Figure 11 (Figure 13 in Rev. 0 EMR). CAGW RA Peripheral Stations TCE Trends**

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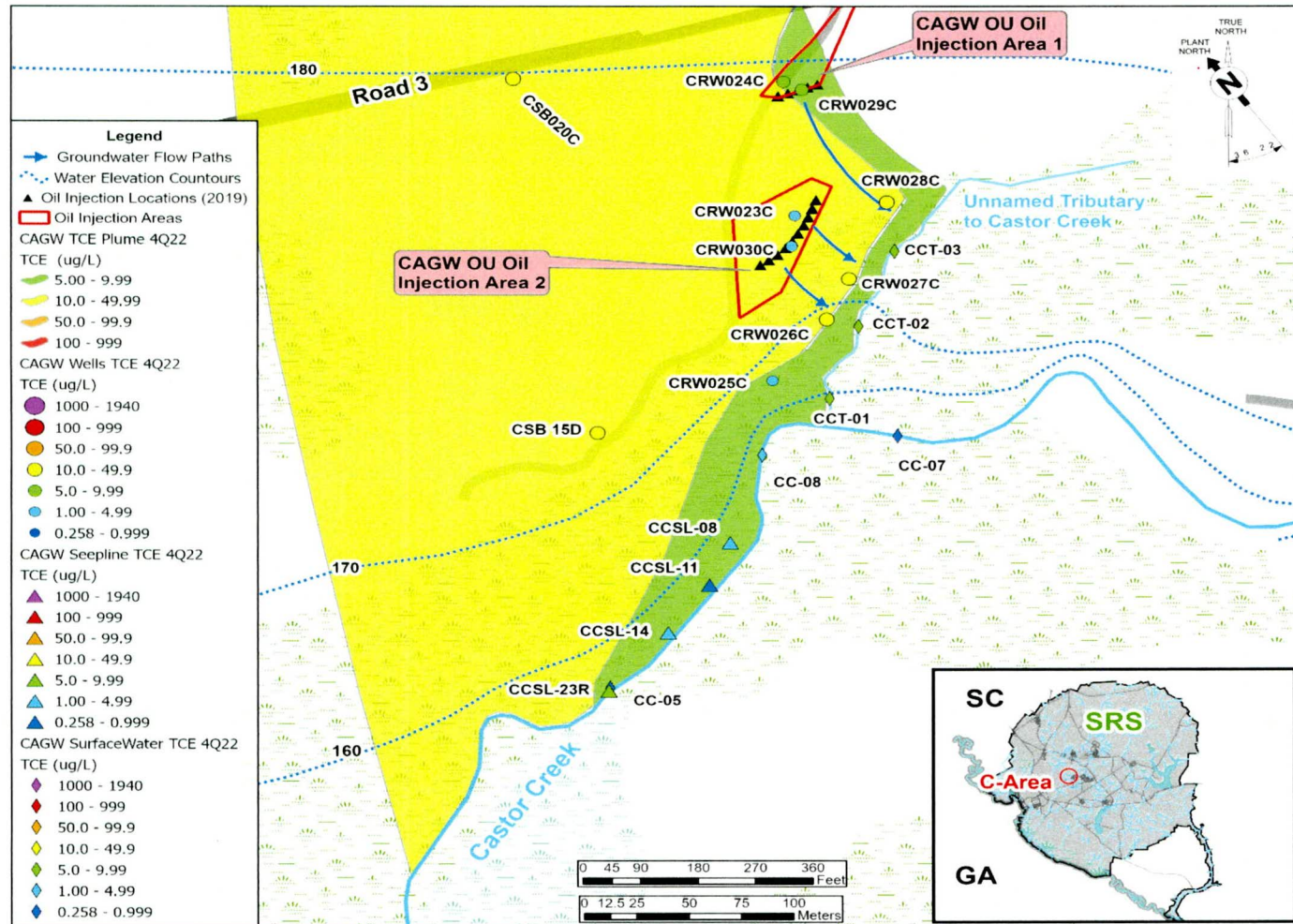
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**Wells CSB020B and CSB020D Sampled in 4Q22**

| SAMPLING EVENT | STATION | SAMPLE DATE | ANALYTE                       | MDL  | SQL  | QUALIFIER | RESULT | UNITS  |
|----------------|---------|-------------|-------------------------------|------|------|-----------|--------|--------|
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | BENZENE                       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | CHLOROETHENE (VINYL CHLORIDE) | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | CIS-1,2-DICHLOROETHYLENE      | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | ETHYLBENZENE                  | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | TETRACHLOROETHYLENE (PCE)     | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | TOLUENE                       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | TRANS-1,2-DICHLOROETHYLENE    | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | TRICHLOROETHYLENE (TCE)       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | TRITIUM                       | 0.74 | 1.77 |           | 1.83   | pCi/mL |
| 4Q22CAGW_GW    | CSB020B | 11/30/22    | XYLENES                       | 1.00 | 3.00 | U         | 3.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | BENZENE                       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | CHLOROETHENE (VINYL CHLORIDE) | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | CIS-1,2-DICHLOROETHYLENE      | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | ETHYLBENZENE                  | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | TETRACHLOROETHYLENE (PCE)     | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | TOLUENE                       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | TRANS-1,2-DICHLOROETHYLENE    | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | TRICHLOROETHYLENE (TCE)       | 0.33 | 1.00 | U         | 1.00   | ug/L   |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | TRITIUM                       | 0.76 | 1.81 |           | 1.91   | pCi/mL |
| 4Q22CAGW_GW    | CSB020D | 11/30/22    | XYLENES                       | 1.00 | 3.00 | U         | 3.00   | ug/L   |

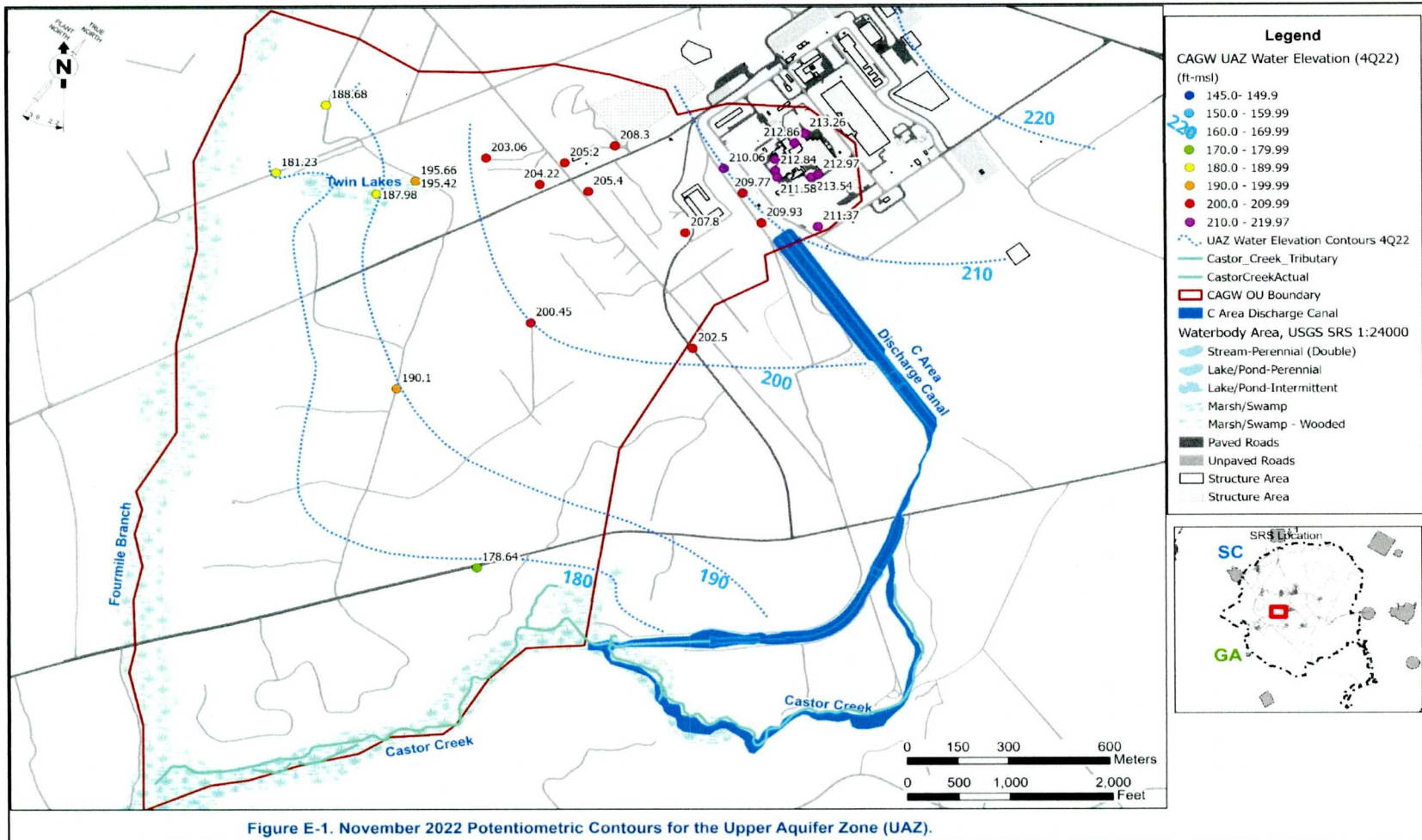
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**Revised Figure 4. CAGW OU NTC RA Areas (4Q2022)**

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**GENERAL COMMENTS**

1. It is unclear if the locations where the surface water samples are collected are being impacted by the site conditions (e.g., flow volumes, levels) and therefore may vary at the time of sample collection. For example, surface water stations at the unnamed tributary (i.e., CCT-01, CCT-02, and CCT-03) and Castor Creek (i.e., CC-06, CC-07, CC-08) are shown in different locations. Figure 3 (CAGW OU NTC RA Areas [2019 Baseline Conditions]; Page 36 of 117) shows the locations of CCT-02 and CCT-03 as across the unnamed tributary from monitoring wells CRW026C and CRW028C, respectively; however, Figure 4 (CAGW OU NTC RA Areas [4Q2022]) shows CCT-02 and CCT-03 as located on the same side of the tributary and closer to monitoring wells CRW026C and CRW027C, respectively. Surface water stations CCT-01 and CC-05 exhibit similar inconsistencies in location between Figures 3 and 4. As such, it is unclear if these samples were collected from different locations in the 2019 baseline and current sampling period due to site conditions at the time of surface water sampling. *Please revise the EMR to clarify if these surface water samples were collected at the same locations and if so, ensure the figures are consistent.*

**Response: Agree with Clarification**

**Samples are collected at the same location where the signs are located (see attached photos of water station sign locations) for each sampling event. There is a defined channel for the unnamed tributary with surface water present, and sampling events are not impacted by site conditions. Figures 3 and 4 (attached) have been revised to correctly show surface water stations CCT-01, CCT-02, and CCT-03 in the unnamed tributary and stations CC-05, CC-07 and CC-08 in Castor Creek. Only stations in the CAGW RA monitoring network are depicted in revised Figures 3 and 4, based on other comments. The surface water stations will be verified to be in the correct locations on all figures in the next EMR report.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

2. The numbering of the figures referenced in the text is inconsistent with the figures provided in the EMR. For example, in Section 3.4.1 (CAGW OU NTC RA), the discussion of the results for background wells CSB 15D and CSB020C references Figure 11, but the data for these background wells are provided in Figure 13 (CAGW RA Peripheral Stations TCE Trends). As another example, Section 3.4.1.6 (Methane) references Figures 15 and 16 for the methane results, but methane results are shown in Figures 17 and 18. *Please revise the EMR to resolve the discrepancies in the figure numbers referenced in the text and provided in the EMR.*

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**Response: Clarification.**

There was a conversion error in the numbering of figures between the Word and PDF files. The correct figure numbers for Figure 11b and Figure 12c are Figure 10b and Figure 10c, respectively. Beginning with Figure 13 through Figure 30, the numbering is off by two. For example, Figure 13 should be Figure 11 and Figure 30 should be Figure 28. The text and figures in the next EMR will be verified to reference the correct numbering.

Section 3.4.1 (CAGW OU NTC RA) in the discussion of the results for background wells CSB 15D and CSB020C, currently references Figure 11 but only for TCE results. Figure 13 contains the co-metabolic enzyme data for well CRW026C. Figures 15 and 16 depict methane results, but only for wells CRW023C and CRW026C, respectively. Please see the attached corrected Figures 15 and 16 (i.e., Figures 17 and 18 in the Rev. 0 EMR). No change to the current report is proposed.

Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)

## SPECIFIC COMMENTS

- 1. Section 3.4.1.6, Methane, Page 18 of 117:** The text states that seepline location CCSL-23R had a large variation in methane concentrations during the fourth quarter 2022 (4Q22) to second quarter 2023 (2Q23) sampling period; however, Appendix A (CAGW OU NTC RA Analytical Data 2022-2023) reports both results as not detected for CCSL-23R. It is unclear if this variation is in reference to the previous methane concentrations at this location, which are noted to increase from 2018 to 2021 and then decrease to below detection limits in 2022. *Please revise the EMR to clarify the discussion of the current and previous methane results at seepline location CCSL-23R.*

**Response: Agree.**

The text in Section 3.4.1.6 should have stated that a large variation in methane concentrations has been observed at seepline station CCSL-23R from the 4Q21 to the 2Q23 sampling period. Methane concentrations at CCSL-23R increased from 6.20 µg/L in October 2018 to 133 µg/L in June 2021, but methane concentrations have declined to 10.2 µg/L in November 2021 (4Q21) and below detection limits from June 2022 to June 2023 (2Q23). CCSL-23R is the farthest seepline station in the CAGW NTC RA monitoring network from the injection areas, so it is likely these variations in methane are from natural origins. No change to the current report is proposed.

Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)

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- 2. Section 3.4.2, CAGW OU, Page 24 of 117:** The discussion of the Middle Aquifer Zone states that mid-plume wells exhibit slowly decreasing concentrations of TCE; however, a graph showing the trends in TCE concentrations for these wells is not provided as a supporting line of evidence. *Please revise the EMR to include a graph of the TCE concentration trends for the mid-plume wells discussed in this section.*

**Response: Agree.**

**Future CAGW OU EMRs will include a graph of the mid-plume MAZ well TCE trends similar to new Figure 10d attached to these responses. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

- 3. Figure 16, Ethylene Groundwater Concentrations, Page 50 of 117:** The note on this figure states that elevated method detection limits (MDLs) rendered the analysis of ethylene useless after February 2020, but Section 3.4.1.5 (Ethylene) notes that lower MDLs were achieved in 4Q22 and 2Q23. In addition, it is recommended that the figure show the results that were not detected (ND) differently than the detected data points (e.g., using solid vs. open circles as symbols for each data point) to show the elevated MDLs. For example, ethylene was not detected in 4Q22 but was detected in 2Q23 at several wells. *Please revise Figure 16 to note that the timeframe for the elevated MDLs as discussed in Section 3.4.1.5 and use different symbols for the data points to differentiate between detected and ND results.*

**Response: Agree.**

**The revised Figure 14, Ethylene Groundwater Concentrations (shown as Figure 16 in the Rev. 0 EMR), is attached, and a similar chart will appear in the next EMR. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

- 4. Figure 17, CRW023C Post-RA Groundwater Trends, Page 51 of 117:** The 2Q23 data for chloride, nitrate, and sulfate are not presented on Figure 17. For example, the text in Section 3.4.1.7 (Chloride, Nitrate and Sulfate) notes that nitrate concentrations have been increasing since 2022, but Figure 17 does not include the concentrations reported for nitrate (i.e., 1.4 ug/L and 1.43 ug/L for CRW023C in 2Q23) in Appendix A (CAGW OU NTC RA Analytical Data 2022-2023). *Please revise Figure 17 to include the 2Q23 data for chloride, nitrate, and sulfate.*

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**Response: Agree.**

**The chloride, nitrate and sulfate trends for CRW023C are shown on the attached revised Figure 15 (shown as Figure 17 in the Rev. 0 EMR), and includes the 4Q22 and 2Q23 data. The next EMR will reference the correct figure for this section. No change to the current report is proposed.**

**Responsible Party: Terry Killeen, (803) 952-6850, [terry.killeen@srs.gov](mailto:terry.killeen@srs.gov)**

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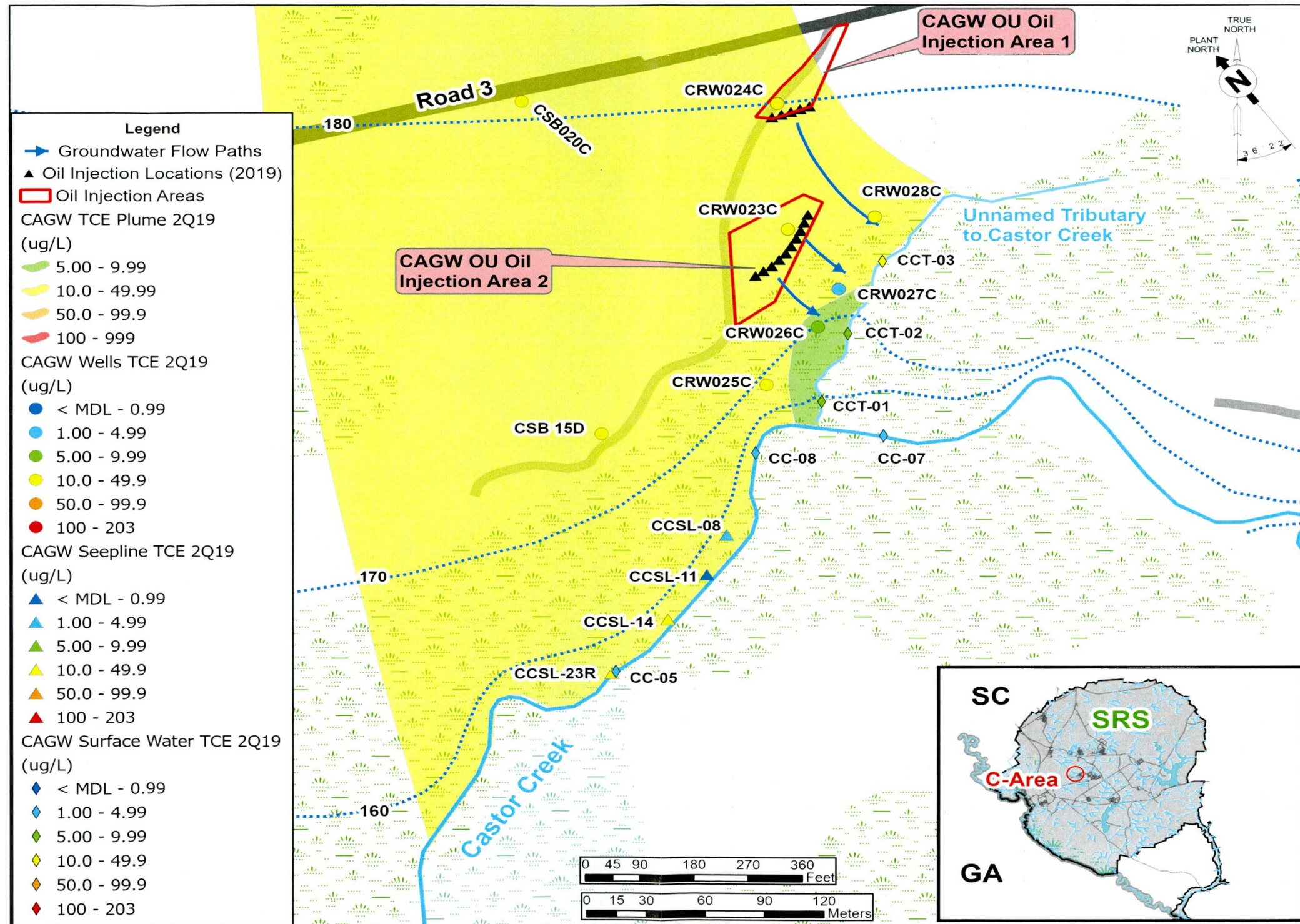
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Photos of Castor Creek unnamed tributary surface water sample locations CCT 02 and CCT 03.

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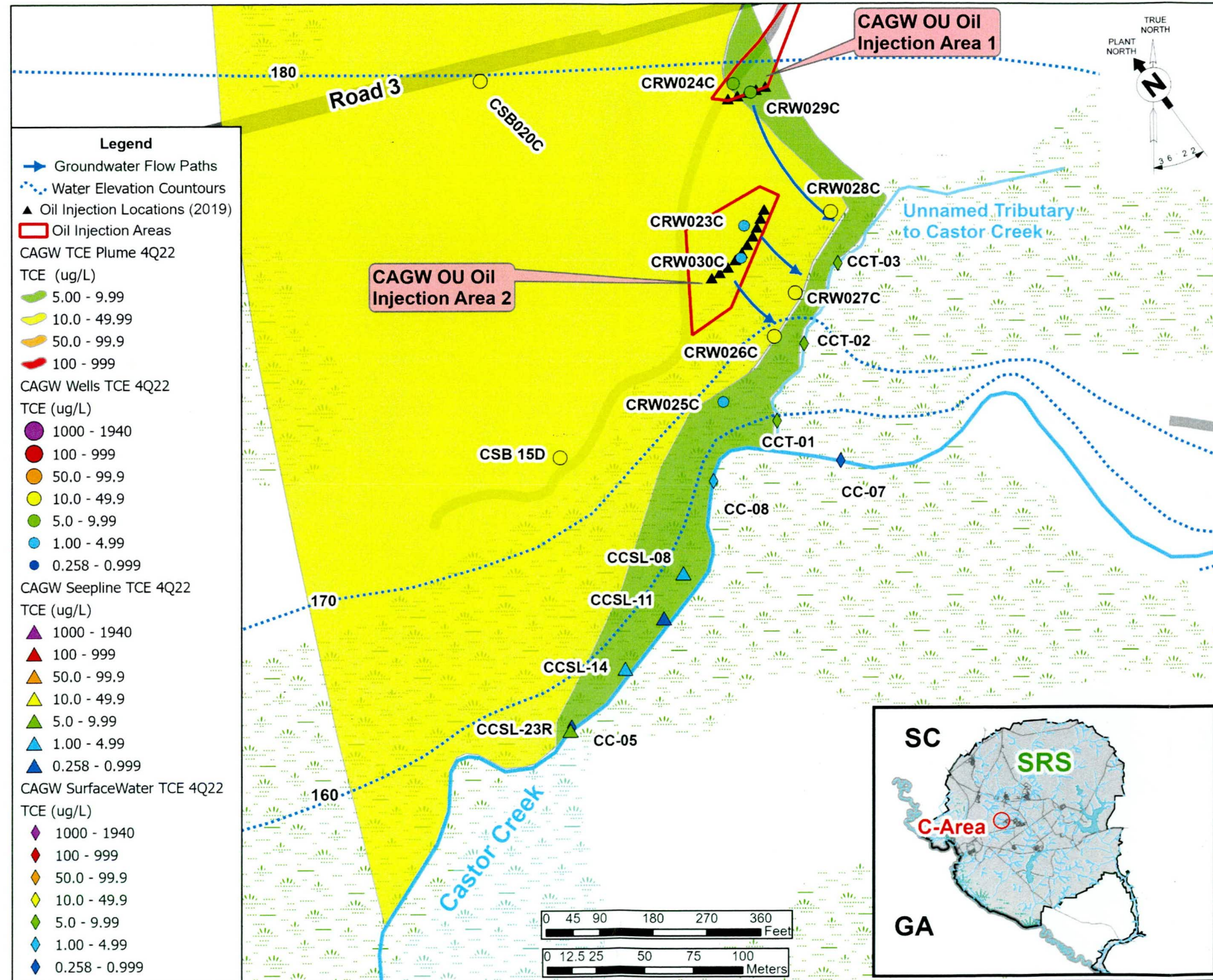
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Revised Figure 3. CAGW OU NTC RA Areas (2019 Baseline Conditions)

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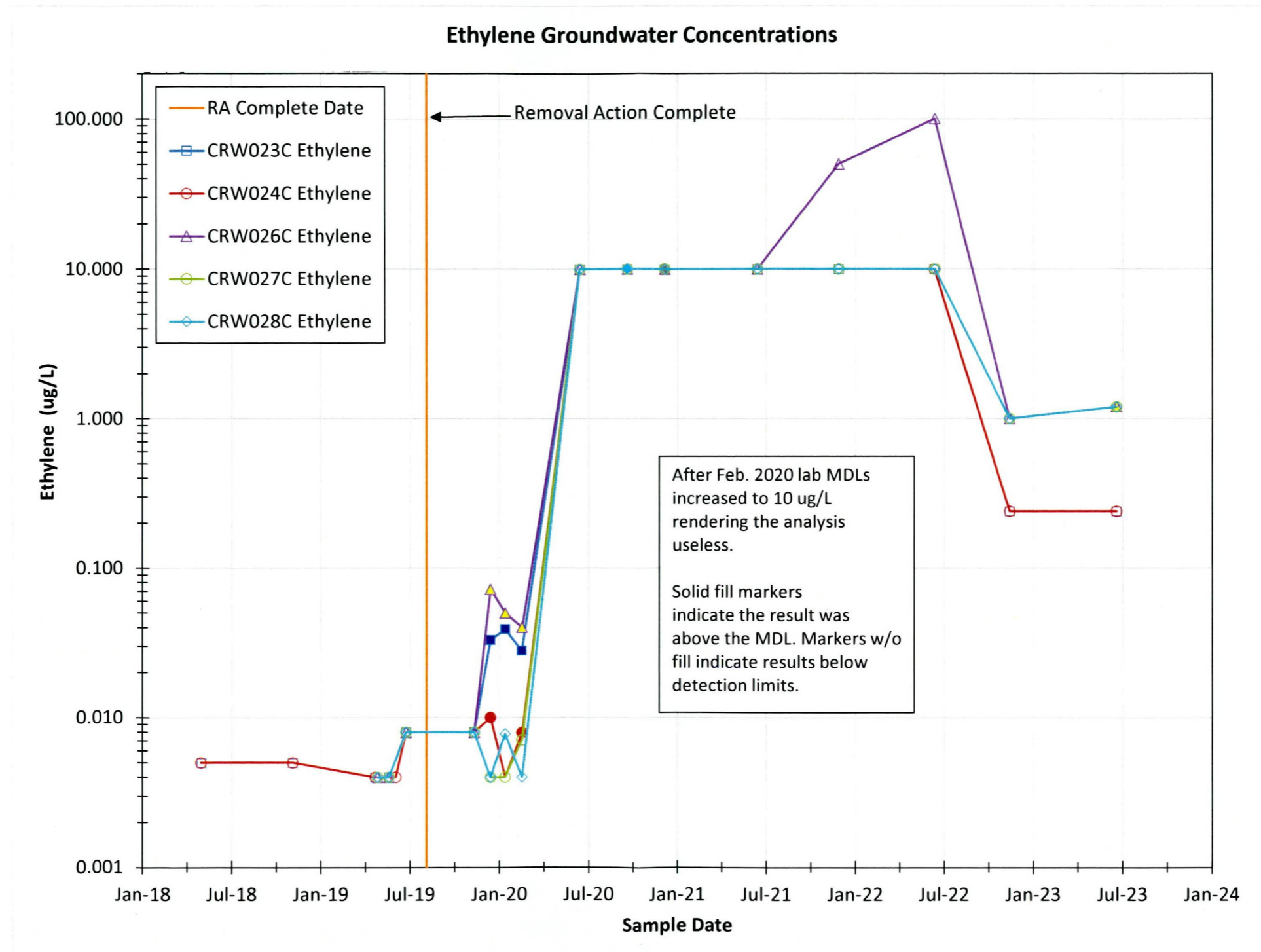
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Revised Figure 4. CAGW OU NTC RA Areas (4Q2022)

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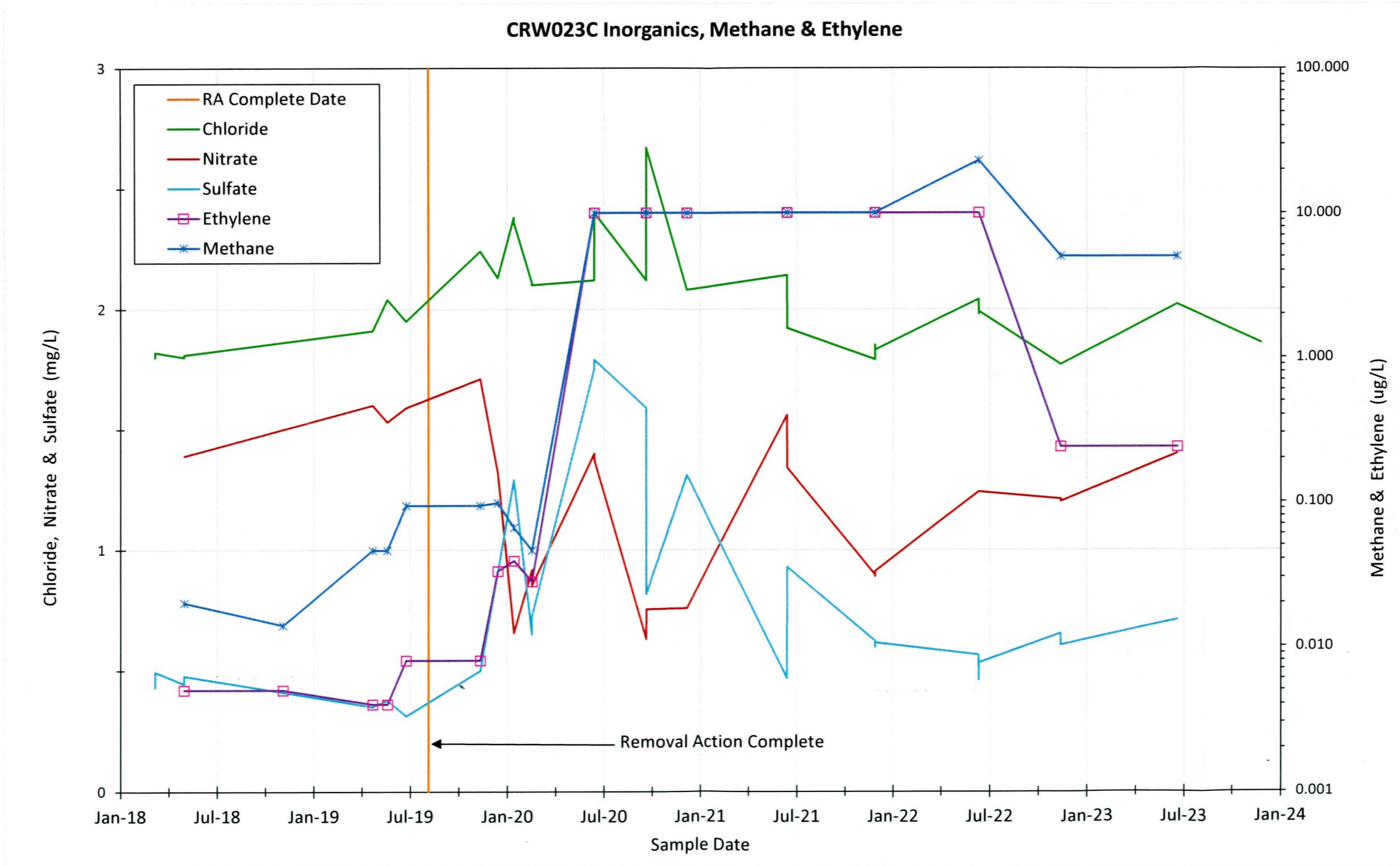
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Revised Figure 14 (shown as Figure 16 in the Rev 0 EMR). Ethylene Groundwater Trends

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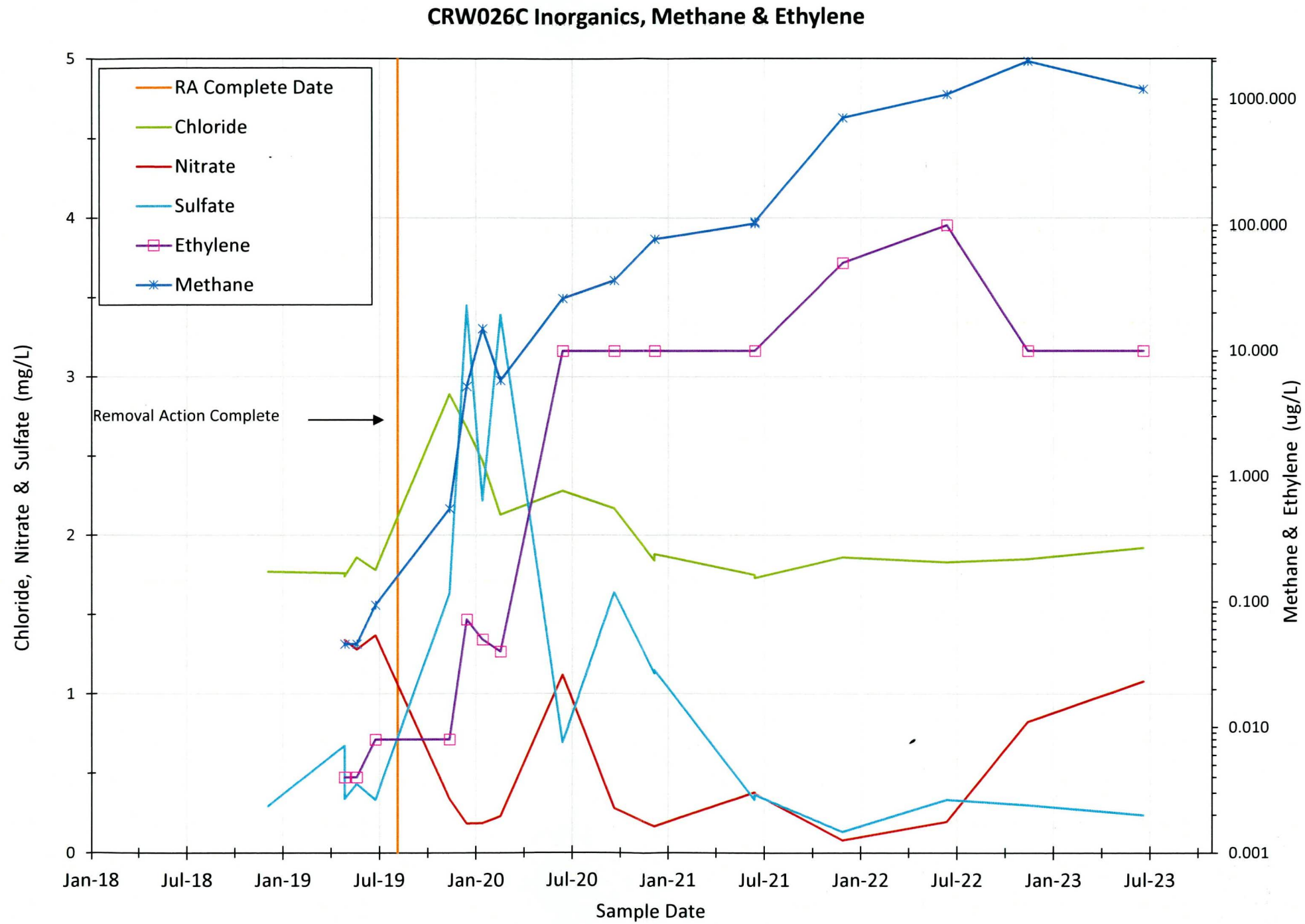
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Revised Figure 15 (shown as Figure 17 in the Rev. 0 EMR). CRW023C Post-RA Groundwater Trends

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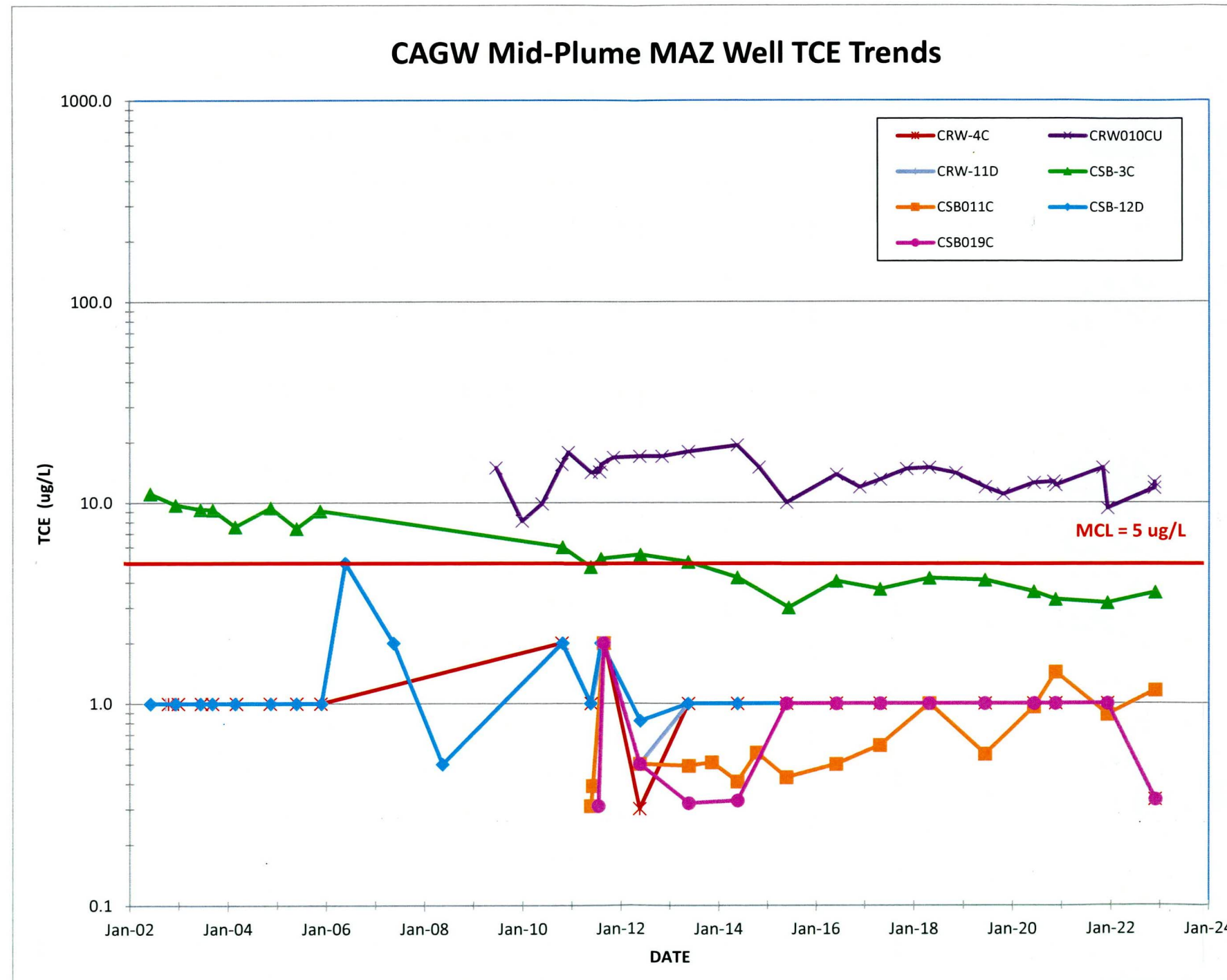
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Revised Figure 16 (shown as Figure 18 in the Rev. 0 EMR). CRW026C Post-RA Groundwater Trends

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New Figure 10d. MAZ Well Mid-Plume TCE Trends

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