

ADDENDUM OF  
FEBRUARY 2021 PHASE I ENVIRONMENTAL SITE ASSESSMENT  
DAIRYLAND POWER COOPERATIVE  
ROCKGEN ENERGY CENTER

Final  
March 26, 2021  
Project No. 13014.014



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## EXECUTIVE SUMMARY

Sargent & Lundy LLC (“S&L”) was retained by Dairyland Power Cooperative (“DPC”) in January 2021 to conduct a Phase I Environmental Site Assessment (Phase I ESA) of the parcels associated with the RockGen Energy Center located in Dane County, Wisconsin. Project boundaries included as part of the Phase I ESA consist of two parcels: 016/0612-232-8500-2 and 016/0612-232-9000-5. Project boundaries are shown in Appendix 1 and are referred to hereinafter as the “Site”. S&L completed a Phase I ESA of the Site and issued a Phase I ESA Report on February 1, 2021 (the “February 2021 Phase I ESA”).

The February 2021 Phase I ESA was prepared in conformance with ASTM Practice E1527-13-Standard Practice for Environmental Site Assessments. The primary objective of a Phase I ESA is to identify, to the extent feasible following the process described in ASTM E1527-13, Recognized Environmental Conditions (RECs) in connection with the Site. RECs are defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” (ASTM E1527-13 Section 1.1.1).

The Site (approximately 77.8 acres) consists of two parcels (016/0612-232-8500-2 and 016/0612-232-9000-5) associated with the RockGen Energy Center, which is located at 2346 Clear View Road, Village of Cambridge, Dane County, Wisconsin. Parcel 0612-232-8500-2 is also associated with the following historical address: 489 Koshkonong Road, Town of Christiana, Dane County, Wisconsin. In addition, the address for parcel 0612-232-9000-5 is 2305 Carpenter Swain Road, Town of Christiana, Dane County, Wisconsin. The Site is currently owned by RockGen Energy, LLC and is under option to purchase by DPC.

S&L representative, Amy Gozdowiak, conducted a site visit and visual inspection of the Site on January 13, 2021, during which the Site’s exterior was obstructed from view due to snow cover. The presence of snow during the January 2021 site visit was identified as a Site-Specific Limitation and attributed to Data Gaps in the February 2021 Phase I ESA. To address the Site-Specific Limitations and Data Gaps associated with the snow coverage identified in the February 2021 Phase I ESA, DPC retained S&L to perform a follow-up site visit. S&L representative, Samantha Thompson, conducted a site visit and visual inspection of the Site on March 18, 2021 during which minimal snow



obstructed view of the Site’s exterior. The March 2021 site visit was conducted in conformance with Section 9 of ASTM Practice E1527-13-Standard Practice for Environmental Site Assessments. In addition, following the February 2021 Phase I ESA, DPC requested water sampling at the Site’s three wells (one drinking water well and two process wells). DPC requested S&L to prepare an Addendum Report to the February 2021 Phase I ESA, limited to new information visually identified during the March 2021 site visit and results of the water sampling.

In general, ASTM E1527-13 describes the following four components of a Phase I ESA: (1) Records Review; (2) Site Reconnaissance; (3) Interviews; and (4) Report. The scope of this Phase I ESA Addendum is specifically limited to new information obtained during the March 2021 Site Reconnaissance and the water sampling results discussed above. S&L performed the work in conformance with the scope and limitations of ASTM E1527-13 – Site Reconnaissance and the S&L Task Order No. 13014-016 – Amendment 1, dated March 12, 2021.

This Phase I ESA Addendum was prepared for DPC as part of a potential real estate transaction; thus, DPC is defined as the “User” of the Phase I ESA.<sup>1</sup> Because this assessment was prepared for use by DPC, it was not prepared for, nor is it intended to be used by, any other potential purchaser, lender, tenant, or property manager to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability, nor can this report be used by any third party as part of an “all appropriate inquires” assessment of the Site as defined in 42 U.S.C. Section 1601(35)(B).

This Addendum, as a stand-alone report is not considered an ASTM E1527-13 compliant Phase I ESA and must be utilized in conjunction with the February 2021 Phase I ESA in order to be considered compliant with ASTM E1527-13.

Services provided as part of the Phase I ESA Addendum included:

- A visual site reconnaissance and inspection of the Site and, to the extent feasible, a visual inspection of adjacent properties, with the objective of identifying obvious indicators of RECs, controlled RECs (CRECs), or historical RECs (HRECs) in connection with the Site that could not be visually observed during the February 2021 Phase I ESA due to snow cover.

<sup>1</sup> The term “User” is defined in ASTM E1527-13 as “the party seeking to use Practice E1527 to complete an environmental site assessment of the property. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.”



- A review of water sampling results.
- Preparation of this addendum to the February 2021 Phase I ESA.

Scope limitations, data gaps, or other exceptions or deletions from the ASTM practice standard are described in Sections 1.4, 1.5, and 1.6 of this report and the February 2021 Phase I ESA. Per ASTM E1527-13, potential findings of the Phase I ESA can include RECs, CRECs, HRECs, and *de minimis* conditions. CRECs include RECs resulting from a past release of hazardous substances or petroleum products that have been addressed to the satisfaction of the applicable regulatory authority, with the hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. HRECs are defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority for meeting applicable unrestricted use criteria without subjecting the property to any required controls. *De minimis* conditions are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority.

Subject to the scope limitations, data gaps, and exceptions identified herein, S&L provides the following findings in addition to the findings presented in the February 2021 Phase I ESA:

**Recognized Environmental Conditions (RECs):**

No RECs were identified in connection with the Site; however, there are several data gaps identified that have potential to indicate impact to the Site (detailed in Section 1.6).

**Controlled RECs (CRECs):**

No CRECs were identified in connection with the Site.

**Historical RECs (HRECs):**

No additional HRECs were identified in connection with the Site beyond those identified in the February 2021 Phase I ESA.

**De Minimus Conditions:**

The following *de minimus* conditions were identified in connection with the Site during the March 2021 site reconnaissance:

- An oil spill was identified based on visual observation of a sheen on stormwater collected in the Combustion Turbine (CT) Unit 3 Accessory Module secondary containment. Mr. Robert Smith, who has been associated with the Site for five years as an Operator Technician III for RockGen Energy Center, indicated that the release would be collected via absorbent pads and/or sucked out by a vacuum truck for proper disposal off-site. S&L considers the identification of oil sheen within secondary containment as a *de minimus* condition due to the release collection plan described by Mr. Smith, lack of visual evidence of a release to the environment in the surrounding area, and the corrective action plans prescribed in the RockGen SPCC Plan regarding such a release.
- On the northwestern side of CT Unit 1, S&L visually observed a 55-gallon drum located on concrete and connected to CT Unit 1 equipment via plastic tubing and tape. Mr. Smith explained that the 55-gallon drum was collecting lube oil from a leak in the CT Unit equipment and that the use of the drum for this purpose was only temporary until the leak was addressed. S&L considers the use of the 55-gallon drum as a collection container for the lube oil leak without secondary containment a *de minimus* condition due to the lack of visual evidence of a release to the environment in the surrounding area. S&L recommends a secondary containment skid around the 55-gallon drum until a permanent solution to the leak can be developed and implemented. A permanent solution to the leak should be developed and implemented as soon as possible to prevent a potential release to the environment.
- S&L identified black- and copper-colored residue on the graveled area under the fuel gas intake and conditioning area equipment. Mr. Smith identified the residue as “carbon and rust residue,” which is not considered a release to the environment; however, the residue obstructs the view of the ground if a release were to occur and therefore is considered a *de minimus* condition.
- Several pieces of equipment throughout the RockGen Energy Center facility contained small oil spills within secondary containment and/or internally. Due to the lack of visual evidence of a release to the environment in the surrounding areas of these secondary containment structures and the corrective action plans prescribed in the RockGen SPCC Plan regarding such spills, S&L considers these spills to be *de minimus* conditions. Example photographs of these spills are provided in Appendix B.
- A red/orange stain on a concrete foundation located in the industrial air compressor room was observed; however, a photo of the stain was not obtained. Due to the lack of visual evidence of a release to the environment and the corrective action plans prescribed in the RockGen SPCC Plan regarding such spills, S&L considers this spill to be *de minimus* condition.

- S&L visually observed the storage of used parts on a plastic skid on gravel under the canopy area. Due to the lack of visual evidence of a release to the environment, S&L considers this activity to be a *de minimus* condition.
- S&L identified an office trailer with a walled generator with corrosion located on a plastic skid on gravel west of the canopy area. Due to the lack of visual evidence of a release to the environment, S&L considers this observation to be a *de minimus* condition.

In addition, debris that has accumulated in and around abandoned structures associated with the abandoned quarry and abandoned farmstead, as well as discolored vegetation near the abandoned quarry may constitute a *de minimus* environmental condition or a REC; however, given the lack of specific information regarding the nature of these materials, S&L identified the accumulation of debris in and around these structures as a data gap that could pose potential impact to the Site.

### **Other Findings:**

On February 25, 2021, TRC Environmental Corporation, Inc. (TRC) collected water samples from the two onsite production wells and one onsite well that services the potable water system. Water samples were tested for per- and polyfluoroalkyl substances (collectively referred to as “PFAS”). The potable well was also sampled for a limited number of drinking water quality parameters including copper, lead, chloride, and nitrate/nitrite. PFAS and related fluorinated compounds including perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid PFOA are have been used in firefighting fomes since the 1970s.<sup>2</sup> A memorandum prepared by TRC (dated March 15, 2021) summarizing the laboratory results (dated March 5, 2021) indicates that the potable well sample exceeds the Wisconsin Department of Natural Resources (DNR) proposed and promulgated groundwater enforcement standards (ESs) for perfluorooctanoic acid (PFOA) and the combined C8 standard, and exceeds the preventive action limits (PALs) for Nitrate + Nitrate, perflourononoic acid (PFNA), perfluorooctanesulfonic acid (PFOS), and perfluorooctanesulfonamide (FOSA).<sup>3</sup>

During the March 2021 site reconnaissance, the S&L representative was approached by an unknown RockGen Energy Center personnel, who indicated that the firefighting foam that has be used at the Site for the past 5 years (i.e., since approximately 2016) has been stored onsite since re-initiating the use of fuel oil in the CT Units. As part of annual testing procedures, the firefighting foam has been released to the area adjacent to the fire pump house near the aboveground fuel oil storage tank for approximately five to ten minutes during each annual occurrence.

<sup>2</sup> See, U.S. Fire Administration Data, Publications and Library ([usfa.fema.gov/data/](https://usfa.fema.gov/data/)).

<sup>3</sup> The combined C8 standard refers to a proposed standard reflecting the sum of eight PFOA, PFOS, and FOSA compounds.

The description of the firefighting foam annual testing does not align with the information provided as part of the February 2021 Phase I ESA interview task, which indicated that the firefighting foam had not been released to the environment.

A copy of the Safety Data Sheet (SDS) provided by the current Site operator for the Ansul firefighting foam (Product Name: ANSULITE 3% AFFF (AFC-3A)) was reviewed during the document review task of the February 2021 Phase I ESA. The SDS states that “this product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).” However, Section 5.3 of the SDS notes that “fluorinated oxides” are a potential hazardous combustion product, indicating the presence of fluorinated compounds in the product. Further research, including review of an Ansul Product Sheet for Ansulite 3% AFFF AFC-3A (dated 2014, attached), indicates that the concentrate is formulated from specialty fluorochemical and hydrocarbon type surfactants along with solvents. Given this information, it appears that the onsite firefighting foam at RockGen Energy Center likely contains some level of fluorochemicals; however, fluorochemical compounds in the foam are not currently classified as a CERCLA hazardous substance pursuant to 42 U.S.C. §9601(14). Because the firefighting foam is not currently designated as a CERCLA hazardous substance, an evaluation of the potential for a release of these compounds to the environment would be beyond the scope of a Phase I ESA.

Nevertheless, the release of the firefighting foam (potentially with fluorochemical surfactants) and the identification of PFAS in the March 2021 water sampling results can be characterized as a Business Environmental Risk (BER). Subsection 3.2.11 of ASTM E1527-13 defines BER as “a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, and is not an issue required to be investigated under this practice.” Evaluation of non-scope items, including BERs, is not required nor relevant for compliance with the AAI Rule or E1527-13. Inclusion of non-scope items in a Phase I ESA is entirely within the discretion of the User based on its own risk tolerance, noting that the consideration of non-scope items should be agreed upon as additional services prior to initiation of the environmental site assessment process (see, Section 1.3 of the ASTM standard). Given the time constraints under which S&L prepared the February 2021 Phase I ESA and this Addendum, S&L did not include a consideration of one or more potential BER. Nevertheless, this information is provided to assist DPC in determining whether the identification of PFAS in the Site’s water is considered a BER that requires further investigation.





## 1. INTRODUCTION

Sargent & Lundy LLC (“S&L”) was retained by Dairyland Power Cooperative (“DPC”) in January 2021 to conduct a Phase I Environmental Site Assessment (Phase I ESA) of the parcels associated with the RockGen Energy Center. Project boundaries included as part of the Phase I ESA consist of two parcels: 016/0612-232-8500-2 and 016/0612-232-9000-5. Project boundaries are shown in Appendix 1 and are referred to hereinafter as the “Site”. S&L completed a Phase I ESA of the Site and issued a Phase I ESA Report on February 1, 2021 (the “February 2021 Phase I ESA”).

The Site (approximately 77.8 acres) consists of two parcels (016/0612-232-8500-2 and 016/0612-232-9000-5) associated with the RockGen Energy Center, which is located at 2346 Clear View Road, Village of Cambridge, Dane County, Wisconsin. Parcel 0612-232-8500-2 is also associated with the following historical address: 489 Koshkonong Road, Town of Christiana, Dane County, Wisconsin. In addition, the address for parcel 0612-232-9000-5 is 2305 Carpenter Swain Road, Town of Christiana, Dane County, Wisconsin. The Site is currently owned by RockGen Energy, LLC and is under option to purchase by DPC.

S&L representative, Amy Gozdowiak, conducted a site visit and visual inspection of the Site on January 13, 2021, during which exterior areas of the Site were obstructed from view due to snow cover. The presence of snow during the January 2021 site visit was identified as a Site-Specific Limitation and attributed to Data Gaps in the February 2021 Phase I ESA. To address the Site-Specific Limitations and Data Gaps associated with the snow coverage identified in the February 2021 Phase I ESA, DPC retained S&L to perform a follow-up site visit and visual inspection of the Site. S&L representative, Samantha Thompson, conducted the follow-up site visit and visual inspection of the Site on March 18, 2021 during which minimal snow obstructed view of the Site’s exterior. The March 2021 site visit was conducted in conformance with Section 9 of ASTM Practice E1527-13-Standard Practice for Environmental Site Assessments.

In addition to the follow-up site visit, following the February 2021 Phase I ESA, DPC requested sampling of the Site’s three water wells (one drinking water well and two process wells). On February 25, 2021, TRC Environmental Corporation, Inc. (TRC) visited the site and obtained water samples from the two on-site production wells and one on-site well that provides potable water.



DPC requested S&L to prepare an Addendum Report to the February 2021 Phase I ESA addressing results from the follow-up site visit and well sample results. This report is being provided as an Addendum to the February 2021 Phase I ESA, and is limited to new information visually identified during the site visit and the results of the water sampling. This Addendum, as a stand-alone report, is not considered an ASTM E1527-13 compliant Phase I ESA and must be used in conjunction with the February 2021 Phase I ESA in order to be considered compliant with ASTM E1527-13.

## 1.1 PURPOSE

The purpose of this Phase I ESA Addendum is to identify, to the extent feasible following the process described in ASTM Standard Practice E1527-13 (Standard Practice for Environmental Site Assessments), Recognized Environmental Conditions (RECs) in connection with the Site in addition to those identified in the February 2021 Phase I ESA. RECs are defined as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” (ASTM E1527-13 Section 1.1.1).

Per ASTM E1527-13, potential findings of the Phase I ESA can include RECs, controlled RECs (CRECs), historical RECs (HRECs), and *de minimis* conditions, defined as:

- CRECs include RECs resulting from a past release of hazardous substances or petroleum products that have been addressed to the satisfaction of the applicable regulatory authority, with the hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.
- HRECs are defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority for meeting applicable unrestricted use criteria without subjecting the property to any required controls.
- *De minimis* conditions are those situations that do not present a material risk of harm to public health or the environment and generally would not be subject to enforcement action if brought to the attention of the regulating authority.

## 1.2 SCOPE OF SERVICES

In general, ASTM E1527-13 describes the following four components of a Phase I ESA: (1) Records Review; (2) Site Reconnaissance; (3) Interviews; and (4) Report. S&L performed this Phase I ESA Addendum in accordance with S&L Task Order No. 13014-016 – Amendment 1, dated March 12, 2021, and in conformance with the scope and limitations of ASTM E1527-13 – Site Reconnaissance only. Services provided as part of the Phase I ESA include:

- A visual site reconnaissance and inspection of the Site and, to the extent feasible, a visual inspection of adjacent properties, with the objective of identifying obvious indicators of RECs, CRECs, or HRECs in connection with the Site that are additional to the findings of the February 2021 Phase I ESA due to less snow cover during the March 2021 site reconnaissance.
- A review of water sampling results.
- Preparation of this report presenting any new, additional findings in relation to the February 2021 Phase I ESA.

S&L was authorized by DPC to perform this Phase I ESA Addendum as part of a potential real estate transaction; thus, DPC is defined as the “User” of the Phase I ESA as that term is defined in ASTM E1527-13. As the User of the February 2021 Phase I ESA, DPC was obligated to provide certain “User Provided Information” listed in Section 6 of the ASTM Standard.

Potential environmental liabilities that are not included within the scope of a Phase I ESA include, but are not limited to, asbestos, radon, lead-based paint, lead in drinking water, wetland impacts, regulatory compliance, industrial hygiene, health and safety, ecological resources, endangered species impacts, indoor air quality, and high voltage power lines. In addition, issues regarding ionizing radiation, oil/gas production, mineral rights and mining, and geotechnical suitability are also considered beyond the scope of a Phase I ESA. No sampling or testing of materials, soils, water, air or other environmental media was performed as part of this Phase I ESA Addendum.

## 1.3 SIGNIFICANT ASSUMPTIONS

Record information reviewed for this Phase I ESA Addendum is generally limited to information which is publicly available or information made available by the client, and to information that is obtainable within reasonable time and cost restraints. S&L relied upon the accuracy of information provided by others in the preparation of this Phase I ESA Addendum. Unless there is actual knowledge that information provided by others is incorrect, or it is obvious

that certain information is incorrect, independent verification of information provided is not considered to be within the scope of a Phase I ESA.

S&L also relied on DPC, as the User of this Phase I ESA, to provide the “User Provided Information” required by ASTM E1527-13, Section 6. User Provided Information includes, but is not limited to, a description of all Environmental Liens and Activity and Use Limitations (AULs) recorded against the Site. The ASTM Standard also requires the User to communicate any specialized knowledge, experience, or actual knowledge that is material to identifying potential RECs at the Site. S&L relied on DPC to provide the required User Provided Information (Section 3 of the February 2021 Phase I ESA), and S&L did not independently review or verify information provided by DPC. S&L also assumed that RockGen Energy Center personnel, as current operators of the Site, provided all available information and specialized knowledge regarding the presence or potential presence of RECs, CRECs, or HRECs at the Site.

#### **1.4 STUDY LIMITING CONDITIONS**

This report describes the process S&L followed to assess the Site and identify the presence, or likely presence, of RECs, CRECs, and HRECs in connection activities at or near the Site. In conducting the February 2021 Phase I ESA assessment, S&L relied on publicly available, practically reviewable, and reasonably ascertainable information, as defined by ASTM E1527-13. S&L relied on a standard environmental records search conducted by EDR, and User Provided Information provided by DPC. Within the scope limitations, assumptions, and limiting conditions described herein, S&L attempted to independently assess the presence, or potential presence, of RECs, CRECs, and HRECs in connection with the Site.

This report and all field data and notes were gathered and/or prepared by S&L in accordance with the agreed upon scope of work and generally accepted engineering and scientific practice in effect at the time of S&L's assessment of the Site. As with any Phase I ESA, there is a certain degree of dependence upon information provided by the facility and/or site representatives which is not readily verifiable through visual observations or supported by any available written documentation. S&L shall not be held responsible for conditions or consequences arising from relevant facts that were withheld or not fully disclosed by the facility and/or site representatives at the time this assessment was performed.

## 1.5 SITE-SPECIFIC LIMITATIONS

Subject to the scope and study limitations described herein, S&L did not encounter any material constraints in the performance of this Phase I ESA, with the following exceptions:

- Due to lack of access, it was not possible to visually inspect all operating areas at the Site, including the four equipment storage trailers, all CT Unit equipment and compartments, the substation or the substation metering building, or the two gated areas (one for the fuel gas metering house and one for the metered gas pipelines) near the secondary RockGen Energy Center entrance. In addition, S&L was not able to visually inspect interior areas within the abandoned farmstead structures located south of the RockGen Energy Center. Based on a review of available information and prior Phase I ESA Reports discussed in the February 2021 Phase I ESA, it is S&L's opinion that this Site-specific limitation does not represent a significant data gap in the Phase I ESA Addendum.
- Due to time and access limitations and snow coverage, it was not possible to visually observe all adjoining properties. S&L relied on environmental data available from the standard environmental records search (discussed in the February 2021 Phase I ESA) to identify potential RECs located on adjacent properties. Based on the results of the standard environmental records search and interviews with key site personnel (discussed in the February 2021 Phase I ESA), it is S&L's opinion that this Site-specific limitation does not represent a significant data gap.
- The site reconnaissance was subject to physical limitations imposed by weather, snow cover, ground cover, and physical obstructions around certain structures. The S&L representative who conducted the site reconnaissance was not able to visually observe all external portions of the Site due to dense vegetation and/or snow coverage. Based on a review of available information and prior Phase I ESA Reports (discussed in the February 2021 Phase I ESA), it is S&L's opinion that this Site-specific limitation represents a data gap, discussed below in Section 1.6.

## 1.6 DATA FAILURE/DATA GAPS

Per ASTM E1527-13 Section 12.7, the Phase I ESA shall identify and comment on significant data gaps that affect the ability of the environmental professional to identify RECs and to identify the sources of information that were consulted to address the data gaps. A data gap may be considered significant if other information and/or professional experience raises reasonable concerns involving the data gap. Specific data gaps encountered during this Phase I ESA are discussed, as appropriate, throughout this report. A list of data gaps, including the sources of information that were consulted to address the data gaps, and a statement as to the significance of each data gap is provided below.

Based upon the information available through the standard environmental records review, environmental records provided by DPC, observations made during the site reconnaissance, and interviews, it is S&L's opinion that the following data gaps, as that term is defined in ASTM E1527-13, exist per the February 2021 Phase I ESA and this Addendum:

- An abandoned structure, which appears to be associated with the historical quarry operations because of its proximity to the quarry and its identification in historical records at the same time as the quarry, was identified during the site reconnaissance. Debris, including an unmarked 55-gallon drum, was identified in the abandoned quarry structure during the site reconnaissance. The debris appears to be associated with unauthorized usage of the structure by unknown person(s) (e.g., as an unauthorized shelter and/or gathering place for unknown person(s)). No specific information regarding historical operations associated with the observed structure was identified as part of the records search or RockGen Energy Center personnel (“Facility Personnel”) interviews. As such, historical operations that occurred at this location, and the potential original contents of the unmarked 55-gallon drum, are not known and are considered a data gap that could pose potential impact to the Site.
- Within the farmstead structures and the area around the abandoned farmstead in the east-central portion of the Site contained scattered debris, including tires, metal parts, paint cans, a 55-gallon drum and handheld plastic substance containers. All debris materials were not completely discernable due to the minimal snow at the time of the March 2021 site reconnaissance. Facility Personnel were unaware of the debris but had no specific knowledge of the nature of the debris beyond that discernable by visual inspection. The visual identification of improper disposal of handheld plastic chemical containers, the lack of information regarding these materials, and their improper disposal is considered a data gap that could pose potential impact to the Site.
- S&L's representative visually inspected the area surrounding the former farmstead but did not enter the two structures in this area due to safety concerns; however, portions of the interior were able to be observed from the exterior. S&L's representative visually observed debris and other material stored within the structures, including metal equipment and parts, remnant pieces of furniture, and a handheld plastic container, but could not specifically determine the nature of the debris. Due to observation of debris stored within these structure, and the nature of debris identified in a previous Phase I ESA Report (i.e., paint cans and a 25-gallon drum), S&L considers the lack of information about the source and natures of all debris stored within these structures and their improper disposal to be a data gap that could pose potential impact the Site.
- A prior Phase I ESA Report (detailed in Section 4.4 of the February 2021 Phase I ESA) of the Site prepared by Clayton Group Services (Clayton) identified *de minimus* conditions during the site reconnaissance in

2001. One *de minimus* condition identified in the prior report was a small release (i.e., less than one gallon) of lube oil observed by Clayton at the base of the 5,000-gallon lube oil module skid within the concrete secondary containment vault on the southwest side of Turbine 3. No other details were provided, including how the spill was stopped or cleaned-up. Because information regarding clean-up activities and/or release to the environment was not provided, S&L cannot determine the potential for impact to the Site.

- Two prior Phase I ESA Reports (detailed in Section 4.4 of the February 2021 Phase I ESA) observed evidence of buried building materials (reportedly from the Koshkonong Creek Dam from Rockdale, Wisconsin) placed in the quarry under an agreement with Wisconsin DNR; however, no record of this agreement was provided with either report. Facility Personnel interviewed in preparation of the February 2021 Phase I ESA also asserted that Wisconsin DNR sanctioned the disposal of materials from the Wisconsin DNR Koshkonong Creek Dam project in the abandoned quarry. Facility Personnel stated that they would provide documentation regarding the agreement with Wisconsin DNR; however, this documentation has not yet been provided. A records request with Wisconsin DNR was also outstanding as of the time of finalization of the February 2021 Phase I ESA and has now been fulfilled without any documentation regarding sanctioned disposal of the building materials. The nature of materials observed in the vicinity of the abandoned quarry at the time of the March 2021 site reconnaissance appeared to be household items (e.g., bikes and building materials), while materials in the abandoned quarry appeared to be metal parts and rubble. A third prior Phase I ESA report (detailed in Section 4.4 in the February 2021 Phase I ESA) stated that 55-gallon drums and a fuel oil AST were associated with quarry operations. In addition, the original contents of an unmarked 55-gallon drum observed in the abandoned structure located adjacent (south) of the abandoned quarry are unknown (discussed above). During the March 2021 site visit, S&L identified an unidentifiable concrete block, remnant foundation, and discolored vegetation of unknown cause in this area. Overall, S&L considers the unconfirmed source and nature of the materials/debris stored/disposed-of in and around the quarry, the remanent foundation, and the cause of the discolored vegetation to represent a data gap with potential to impact the Site.

## 1.7 DEVIATIONS

S&L performed a site visit of the Site in general conformance with the processes and procedures described in ASTM E1527-13 Section 9 – Site Reconnaissance, subject to the assumptions, limitation, time constraints, and exceptions described herein.





## **1.8 USER RELIANCE**

This report is prepared pursuant to an agreement between S&L and DPC and is for the exclusive use of DPC (the User). This report was prepared for the exclusive use of DPC, and was not prepared for, nor is it intended to be used by, any other potential purchaser, lender, tenant, or property manager to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability, nor can this report be used by any third party as part of an “all appropriate inquires” assessment of the Site as defined in 42 U.S.C. Section 1601(35)(B). The conclusions and recommendations contained herein are based on S&L’s review of available data and visual observations of the environmental conditions at the subject Site. In providing this report S&L is not acting as a legal advisor or providing legal advice, and S&L makes findings with respect to any specific determinations made, or to be made, by DPC with respect to the subject Site. S&L has prepared this report using the degree of skill and care exercised in similar projects under similar conditions by other reputable and competent environmental consultants. The passage of time may result in operational and regulatory changes that would render this report inaccurate. No third party is entitled to rely on the observations, conclusions, or recommendations herein without S&L’s and DPC’s prior written approval.







## 2. SITE AND VICINITY DESCRIPTION

### 2.1 LOCATION

The Site (approximately 77.8 acres) consists of two parcels (016/0612-232-8500-2 and 016/0612-232-9000-5) associated with the RockGen Energy Center, which is located at 2346 Clear View Road, Village of Cambridge, Dane County, Wisconsin.

The geographic coordinates of the approximate center of the Site is:

42.974046° N latitude

-89.050054° W longitude

The legal description the Site is described as:

The west half of the northwest quarter (W<sup>1</sup>/<sub>2</sub> of NW <sup>1</sup>/<sub>4</sub>) of Section twenty-three (23), Township six (6) north, Range twelve (12) east, in the Town of Christiana, Dane County, Wisconsin.

### 2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The Site is located approximately 10 miles southeast of Madison, Wisconsin and approximately 1.5 miles west of the Village of Rockdale, Wisconsin. The Site is located in a relatively rural area of Dane County, Wisconsin, surrounded primarily by undeveloped agricultural parcels with scattered industrial and commercial facilities. Agricultural activities in the vicinity of the Site include farming, cash cropping, and dairying. The nearest industrial site, the T&T Stone Company Rock Quarry, is located approximately one-half mile northeast of the Site. The nearest residential property is located adjacent (east) to the Site at one of the farmsteads.

### 2.3 GENERAL SITE INFORMATION

The Site (approximately 77.8 acres) consists of two parcels (016/0612-232-8500-2 and 016/0612-232-9000-5) associated with the RockGen Energy Center, which is located at 2346 Clear View Road, Village of Cambridge, Dane County, Wisconsin. Parcel 0612-232-8500-2 is also associated with the following historical address: 489 Koshkonong Road, Town of Christiana, Dane County, Wisconsin. In addition, the address for parcel 0612-232-9000-





5 is 2305 Carpenter Swain Road, Town of Christiana, Dane County, Wisconsin. The Site is owned by RockGen Energy, LLC and is under option to purchase by DPC.

Approximately 13.8 acres in the northern portion of the Site is currently developed as an outdoor simple cycle, natural gas- and oil-fired electric power plant with a nominal capacity of 500 MW. The remaining areas on the Site include an abandoned quarry (approximately 19 acres) and an agricultural farmstead (approximately 45 acres). The general locations of these features are depicted in Appendix 2. Details regarding the Site infrastructure is discussed in the February 2021 Phase I ESA.

Photographs taken during the site reconnaissance are included in Appendix 2.

#### **2.4 SUMMARY OF SURROUNDING AREA**

Overall, the surrounding area predominately consists of undeveloped or agricultural land; however, the area does include the electrical substation located approximately 0.2 miles east of the Site since at least 1968, and the T&T Stone Company quarry located approximately 0.25 miles northeast of the Site.

Since the February 2021 Phase I ESA, no changes regarding the surrounding area and adjacent properties were identified during the March 2021 site visit.





### **3. USER PROVIDED INFORMATION**

DPC, as the User of this Phase I ESA, is responsible for providing, to the extent available, information listed in Section 6 of ASTM E1527-13 (User’s Responsibilities). Section 6 of ASTM E1527-13 describes tasks that are to be performed by the Phase I ESA User. User Provided Information is described in the All Appropriate Inquiries of 40 CFR Part 312, requires these tasks be performed by or on behalf of a party seeking to qualify for one or more landowner liability protection (LLP) available under CERCLA.

ASTM E1527-13 states that certain tasks, which will help to determine the possibility of RECs associated with the subject Site, are generally conducted by the ESA report User. User Provided Information includes: reviewing title records for environmental liens or activity and use limitations (AULs); awareness of any specialized knowledge or experience (e.g., information or knowledge of conditions indicative of releases or threatened releases, previous site ownership/operations, or environmental litigation); actual knowledge of any environmental lien or AULs encumbering the property; commonly known or reasonably ascertainable information within the local community about the property of which the User is aware.

In accordance with the agreed upon scope-of-work, S&L provided to DPC a “User Questionnaire” requesting the information described in ASTM E1527-13 Section 6. S&L received a completed User Questionnaire from Mr. Robert Palmberg, on behalf of DPC, dated January 29, 2021. The completed User Questionnaire is discussed and provided in the February 2021 Phase I ESA.



## 4. RECORDS REVIEW

### 4.1 STANDARD ENVIRONMENTAL RECORDS

Discussion regarding standard environmental records review is provided in the February 2021 Phase I ESA, and S&L did not review any additional environmental records as part of this Addendum.

### 4.2 ADDITIONAL ENVIRONMENTAL RECORDS

Discussion regarding additional environmental records review is provided in the February 2021 Phase I ESA, and S&L did not review any additional environmental records as part of this Addendum.

### 4.3 PHYSICAL SETTING INFORMATION

A general description of the physical setting of the Site and surrounding area is provided in the February 2021 Phase I ESA.

### 4.4 PRIOR REPORTS

Three environmental assessment reports that were prepared for the Site were provided by Facility Personnel and reviewed by S&L. Findings from the three prior reports are summarized in the February 2021 Phase I ESA.

In addition, on February 25, 2021, TRC Environmental Corporation, Inc. (TRC) collected water samples from the two on-site production wells and one on-site well that services the potable water system. Water samples were tested for several chemical constituents, including per- and polyfluoroalkyl substances (collectively referred to as “PFAS”). The potable well was also sampled for a limited number of drinking water quality parameters including copper, lead, chloride, and nitrate/nitrite. PFAS and related fluorinated compounds including perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid PFOA are have been used in firefighting fomes since the 1970s.<sup>4</sup> A memorandum prepared by TRC (dated March 15, 2021) summarizing the laboratory results (dated March 5, 2021) indicates that the potable well sample exceeds the Wisconsin DNR proposed and promulgated groundwater enforcement standards (ESs) for perfluorooctanoic acid (PFOA) and the combined C8 standard, and exceeds the preventive action limits

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<sup>4</sup> See, U.S. Fire Administration Data, Publications and Library ([usfa.fema.gov/data/](https://usfa.fema.gov/data/)).



(PALs) for Nitrate + Nitrate, perflouoronanoic acid (PFNA), perfluorooctanesulfonic acid (PFOS), and perfluorooctanesulfonamide (FOSA). These exceedances are discussed further in Section 7.<sup>5</sup>

#### **4.5 HISTORICAL USE INFORMATION ON THE SITE AND ADJACENT SITES**

In addition to the records discussed in Section 0, information pertaining to historical uses of the Site and surrounding area was obtained from the following publicly available and readily reviewable sources obtained by EDR, which is discussed in the February 2021 Phase I ESA.

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<sup>5</sup> The combined C8 standard refers to a proposed standard reflecting the sum of eight PFOA, PFOS, and FOSA compounds.



## 5. SITE RECONNAISSANCE

The objective of the site reconnaissance is to visually observe structures and operations at the facility and to obtain information indicating the presence, or potential presence, of RECs in connection with the Site. S&L representative, Amy Gozdowiak, conducted a site visit and visual inspection of the Site on January 13, 2021, during which the Site's exterior was obstructed from view due to snow on the ground. Ms. Gozdowiak was accompanied by Mr. Leif Tolokken of DPC and the RockGen Energy Center Plant Manager, Mr. Dennis Oehring, during a portion of the site reconnaissance. The presence of snow during the January 2021 site visit was identified as a Site-Specific Limitation and attributed to Data Gaps in the February 2021 Phase I ESA.

To address the Site-Specific Limitations and Data Gaps associated with the snow coverage identified in the February 2021 Phase I ESA, DPC retained S&L to perform a follow-up site visit of the Site. S&L representative, Samantha Thompson, conducted a site visit and visual inspection of the Site on March 18, 2021 during which minimal snow obstructed view of the Site's exterior. During the March 2021 site visit, Ms. Thompson was accompanied by Mr. Tolokken and Mr. Robert Smith, who has been associated with the Site for five years is an Operator Technician III for RockGen Energy Center. S&L performed the March 2021 site visit in conformance with the scope and limitations of ASTM E1527-13 Section – Site Reconnaissance only and the S&L Task Order No. 13014-016 – Amendment 1, dated March 12, 2021. Representative photographs were taken during the site reconnaissance and are included in Appendix 2 of this report.

### 5.1 METHODOLOGY AND LIMITING CONDITIONS

S&L provided one professional to perform a visual inspection of developed areas on the Site and to perform a limited walk around of other portions of the Site, primarily agricultural and undeveloped areas. Site reconnaissance was conducted primarily on foot, with some observations made from vehicles while moving between developed areas. The S&L representative was not able to visually observe all interior areas within the abandoned farmstead, the four equipment storage trailers, all CT Unit equipment and compartments, substation and substation metering house, or the two gated areas (one for the fuel gas metering house and one for the metered gas pipelines) near the secondary plant entrance. The S&L representative was also not able to observe the ground at all external portions of the Site

due to minimal snow coverage; however, all efforts were made to visually observe all areas where hazardous material or petroleum products may have been handled, stored, or disposed.

The walk over of the non-RockGen Energy Center areas included visual observations of the abandoned farmstead and the abandoned quarry, as permitted by access other constraints (i.e., snow cover, vegetation density, ground slope, etc.). The perimeter of the property, agricultural areas, and stormwater detention pond were generally observed by car and from the adjacent public roads; however, closer visual observations were made of structures as conditions allowed. Observations made during the walk overs focused on indications of obvious surficial conditions that could constitute a REC. Limitations inherently associated with these walk overs included, but were not limited to, the topography, the accumulation of snow, and dense foliage growth that prevented clear observation of large areas.

## **5.2 PHYSICAL SETTING**

### **5.2.1 Site Topography**

The Site is located in a relatively rural area with farmsteads and agricultural land with sparse industrial or commercial facilities. The Site generally slopes gradually west-northwest toward an offsite, unnamed ditch to the west. Site elevations range between approximately 825 and 940 feet above sea level. The Site is relatively flat, gently sloping toward the west. Based on the topography of the Site and major surface water features, it is inferred that groundwater flow at the Site is generally to west-northwest.

Further information regarding site topography is discussed in the February 2021 Phase I ESA.

### **5.2.2 Stormwater**

Stormwater is discussed further in the February 2021 Phase I ESA.

## **5.3 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCT USE & STORAGE**

Since the February 2021 Phase I ESA, no changes in hazardous substance and petroleum product use and storage were identified during the March 2021 site visit; however, several pieces of equipment throughout the RockGen Energy Center facility contained small oil spills within secondary containment and/or on interior concrete. In addition, an oil spill was observed as a sheen on stormwater collected in the secondary containment of the Combustion Turbine (CT) Units 3 and 1 Accessory Modules. An oil spill was also observed as a sheen on

stormwater collected in the CT Unit 1 Accessory Module secondary containment. These spills are discussed further in Section 7.

### 5.3.1 Hazardous Waste and Solid Waste Management

Since the February 2021 Phase I ESA, no other changes in hazardous waste and solid waste management were identified during the March 2021 site visit except for those detailed below.

S&L identified three areas where waste appeared to be incorrectly stored and/or handled, which were more visible during the March 2021 site visit than the January 2021 site visit due to less snow cover:

1. The abandoned quarry located on the northwestern portion of the Site contained buried materials that were not completely discernable due to the snow at the time of the site reconnaissance. The materials that were discernable included metal parts and rubble. These buried materials are discussed further in Sections 1.6 and 7.
2. An area located southwest adjacent of the abandoned quarry contained miscellaneous debris, such as an unidentified concrete block, household items (lawn chairs and housing materials), concrete culverts, etc. Most of these items were visible, but the area still had some snow cover. This debris is discussed further in Sections 1.6 and 7.
3. The abandoned structure to the south of the abandoned quarry contained debris, including a 55-gallon drum, which appears to be associated with unauthorized usage of the structure by unknown person(s) (e.g., as an unauthorized shelter and/or gathering place for unknown person(s)).
4. Within the farmstead structures and the area around the abandoned farmstead in the east-central portion of the Site contained scattered debris, including tires, metal parts, paint cans, a 55-gallon drum and handheld plastic substance containers. All debris materials may not have been completely discernable due to the minimal snow at the time of the site reconnaissance.

The four areas where S&L identified where waste appeared to be improperly stored and/or handled are discussed further in Section 1.6.

### 5.3.2 Above Ground Storage Tanks

Since the February 2021 Phase I ESA, no changes regarding ASTs were identified during the March 2021 site visit.

### 5.3.3 Underground Storage Tanks

Since the February 2021 Phase I ESA, no changes regarding USTs were identified during the March 2021 site visit.



### 5.3.4 Drum and Container Storage

Since the February 2021 Phase I ESA, no changes in hazardous substance and petroleum product use and storage were identified during the March 2021 site visit with the exception of the following:

- Debris that has accumulated around the exterior of the abandoned farmstead was more visible during the March 2021 site visit due to minimal snow cover and/or dense vegetation. Debris observed around the abandoned farmstead consisted of various household items as well as handheld plastic substance containers which may contain, or may have contained, a hazardous substance or petroleum product. This debris is discussed further in Sections 1.6 and 7.
- After further visual observation of the interior of the abandoned farmstead barn structure, a 55-gallon drum, paint cans, and various handheld plastic substation containers were identified. This debris is discussed further in Sections 1.6 and 7.
- On the northwestern side of CT Unit 1, S&L identified a 55-gallon drum located on concrete and connected to CT Unit 1 equipment via plastic tubing and tape. Mr. Smith explained that the 55-gallon drum was collecting a lube oil from a leak in the CT Unit equipment and that the use of the drum for this purpose was only temporary until the leak was addressed. This 55-gallon drum is discussed further in Section 7.

### 5.3.5 Solid Waste Pits, Ponds, Lagoons, and Surface Waters

A stormwater detention pond was identified at the northwest corner of the Site. This area is below grade and appears to be surrounded by vegetation. Trees and larger plants have been cleared from the area. No pits, ponds, lagoons, or surface waters that manage solid wastes were identified at the Site.

### 5.3.6 Landfills

S&L did not identify information regarding operations at the Site to include landfill; however, S&L made visual observations of potentially improper storage/handling of waste at the Site, which discussed further in Section 7.

### 5.3.7 PCBs

Since the February 2021 Phase I ESA, no changes regarding PCBs were identified during the March 2021 site visit.

## 5.4 EXTERIOR OBSERVATIONS

In addition to the RockGen Energy Center, the Site includes an abandoned limestone quarry, a stormwater detention pond, an abandoned farmstead, the canopy area, a graveled area west of the main building, septic system berm area, and agricultural fields.

The abandoned farmstead is located toward the center of the Site. The farmstead structures were only observed from the exterior. Debris was observed in or around the farmstead structures and is discussed further below.

An abandoned structure was observed south of the abandoned quarry, just south of the RockGen Energy Center's main entrance. The structure contained various debris and a 55-gallon drum. The debris appears to be associated with unauthorized usage of the structure by unknown person(s) (e.g., as an unauthorized shelter and/or gathering place for unknown person(s)).

Visual observations of the abandoned limestone quarry and the stormwater detention pond located in the northwest corner of the Site were made in areas where walking was accessible during the site reconnaissance. Visibility of the abandoned quarry and surrounding area was minimally obstructed due to snow cover; observations are discussed further below. Visibility of the detention pond was not obstructed by snow. Visual observations of the agricultural fields were also made during the site reconnaissance with little to no obstruction by snow cover.

Visual observations of the canopy area were made via walking. The canopy area consists of enclosed structures as well as unenclosed areas. S&L identified storage of used parts on a plastic skid on gravel under the canopy area, which is discussed further in Section 7. Other observations are discussed below. West of the canopy area also includes an office trailer with a walled generator with corrosion located on a plastic skid on gravel; the generator is discussed further in Section 7.

In addition, visual observations were made of a graveled area west of the main building during the site reconnaissance. The area is used to store metal piping and other larger plant parts, which Mr. Smith indicated were cleaned.

Visual observations of exterior areas at the Site are described below:

#### **5.4.1 Stained Soil or Pavement**

No stained soils or pavement areas indicative of a release or spill were identified; however, S&L identified black- and copper-colored residue on the graveled area under the fuel gas intake and conditioning area equipment. Mr. Smith identified the residue as “carbon and rust residue”. This residue is discussed further in Section 7.

#### **5.4.2 Odors**

No odors indicative of a release or spill were identified.

#### **5.4.3 Stressed Vegetation**

During the March 2021 site visit, S&L identified discolored, red/orange vegetation of unknown cause near an area southwest adjacent of the abandoned quarry; this discolored vegetation is discussed further in Section 1.6.

### **5.5 INTERIOR OBSERVATIONS**

Interior observations were limited to one main structure (the main building) located at the north end the main parcel, just south of the combustion turbines.

#### **5.5.1 Stains and Corrosion**

A red/orange stain on concrete foundation was identified in the industrial air compressor room; however, a photo of the stain was not obtained. This spill is discussed further in Section 7.

No stains or evidence of corrosion indicative of a release to the environment were identified, and there was no evidence of material entering the interior trench or the exterior sumps or drains, discussed below.

#### **5.5.2 Sumps / Floor Drains**

No sumps or floor drains were identified in the Site’s enclosed structures; however, there are exteriorly located sumps and drains: several drain tanks associated with the turbine systems are located within concrete containment vaults, there is a sump located under the fuel oil canopy, and each GT Unit has a sump. In addition, the unloading bay also is equipped with floor drains that are capable of capturing spilled oil to facilitate collection for disposal. Due to time constraints and lack of access, S&L did not visually observe these subsurface or enclosed areas; however, no indications of a release to the sumps or drains were identified during the site reconnaissance.



A concrete trench was observed in the main building maintenance area, containing cables and circuitry to the control room. No indications of a release to the trench was identified during the site reconnaissance.

### **5.5.3 Oil/Water Separators**

No oil/water separators were identified in the Site's structures.

## 6. INTERVIEWS

### 6.1 INTERVIEW WITH CURRENT OWNER/OPERATOR

Interviews with Facility Personnel (i.e., employees of the RockGen Energy Center) are discussed in the February 2021 Phase I ESA, and an interview was not conducted as part of this Addendum.

During the March 2021 site visit, however, the S&L representative was approached by an unknown RockGen Energy Center personnel, who indicated that the firefighting foam used at the Site for the past 5 years (i.e., since approximately 2016) has been stored onsite since re-initiating the use of fuel oil in the CT Units at the Site. As part of annual testing procedures, the firefighting foam has been released to the area adjacent to the fire pump house near the fuel oil AST for approximately five to ten minutes at each annual occurrence. The description of the firefighting foam annual testing does not align with the information provided as part of the February 2021 Phase I ESA interview task, which indicated that the firefighting foam had not been released to the environment. This firefighting foam is discussed further in Section 7.

### 6.2 INTERVIEWS WITH PAST OWNERS/OPERATORS

Per ASTM, past owners, operators, and occupants of the subject Site, who are likely to have material information regarding the potential for contamination at the subject Site, shall be conducted to the extent that they can be identified and that the information likely to be obtained is not duplicative of information already obtained from other sources. S&L was not able to identify or interview past owners or operators of the Site.

### 6.3 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Local government agencies were contacted regarding records of the Site's historical and current operations in conjunction with the review of additional regulatory records. Information obtained through these requests is discussed in the February 2021 Phase I ESA.

## 7. FINDINGS AND OPINIONS

S&L's findings and opinions, based on visual observations made during the March 2021 site reconnaissance described above, relative to the potential for environmental impacts at the Site from RECs, CRECs, or HRECs, are provided below:

### 7.1 RECs

No RECs were identified in connection with the Site; however, as described in Section 1.6, several data gaps were identified that have potential to indicate impact to the Site. The identified data gaps are generally associated with the lack of specific information regarding historical operations associated with structures observed at the abandoned quarry and abandoned farmstead and the presence of unmarked 55-gallon drum and the accumulation of other debris at these locations. S&L considers the lack of information regarding these materials a data gap that could pose potential impact to the Site.

### 7.2 CRECs

No CRECs were identified in connection with the Site.

### 7.3 HRECs

No additional HRECs were identified in connection with the Site beyond those identified in the February 2021 Phase I ESA.

### 7.4 *DE MINIMUS* CONDITIONS

The following *de minimus* conditions were identified in connection with the Site during the March 2021 site reconnaissance:

- An oil spill was observed as a sheen on stormwater collected in the CT Unit 3 Accessory Module secondary containment. Mr. Smith indicated that the release would be collected via absorbent pads and/or sucked out by a vacuum truck for proper disposal off-site. S&L considers the identification of oil sheen within secondary containment as a *de minimus* condition due to the release collection plan described by Mr. Smith, lack of visual evidence of a release to the environment in the surrounding area, and the corrective action plans prescribed in the RockGen SPCC Plan.

- On the northwestern side of CT Unit 1, S&L identified a 55-gallon drum located on concrete and connected to CT Unit 1 equipment via plastic tubing and tape. Mr. Smith explained that the 55-gallon drum was collecting a lube oil from a leak in the CT Unit equipment and that the use of the drum for this purpose was only temporary until the leak was addressed. S&L considers the use of the 55-gallon drum as a collection container for the lube oil leak without secondary containment a *de minimus* condition due to the lack of visual evidence of a release to the environment in the surrounding area. S&L recommends a secondary containment skid around the 55-gallon drum until a permanent solution to the leak can be developed and implemented. A permanent solution to the leak should be developed and implemented as soon as possible to prevent a potential release to the environment.
- S&L identified black- and copper-colored residue on the graveled area under the fuel gas intake and conditioning area equipment. Mr. Smith identified the residue as “carbon and rust residue,” which is not considered a release to the environment; however, the residue obstructs the view of the ground if a release were to occur and therefore is considered a *de minimus* condition.
- Several pieces of equipment throughout the RockGen Energy Center facility contained small oil spills within secondary containment and/or internally. Due to the lack of visual evidence of a release to the environment in the surrounding areas of these secondary containment structures and the corrective action plans prescribed in the RockGen SPCC Plan, S&L considers these spills to be *de minimus* conditions. Example photographs of these spills are provided in Appendix B.
- A red/orange stain on a concrete foundation was identified in the industrial air compressor room; however, a photo of the stain was not obtained. Due to the lack of visual evidence of a release to the environment and the corrective action plans prescribed in the RockGen SPCC Plan, S&L considers this spill to be *de minimus* condition.
- S&L visually observed the storage of used parts on a plastic skid on gravel under the canopy area. Due to the lack of visual evidence of a release to the environment, however, S&L considers this observation to be a *de minimus* condition.
- S&L visually observed an office trailer with a walled generator with corrosion located on a plastic skid on gravel west of the canopy area. Due to the lack of visual evidence of a release to the environment, however, S&L considers this observation to be a *de minimus* condition.

In addition, debris that has accumulated in and around abandoned structures associated with the abandoned quarry and abandoned farmstead, as well as the discolored vegetation near the abandoned quarry may constitute a *de minimus* environmental condition or a REC. However, given the lack of specific information regarding the nature of these materials, S&L identified the accumulation of debris in and around the structures as a data gap that could pose potential impact to the Site.

## 7.5 OTHER FINDINGS

On February 25, 2021, TRC Environmental Corporation, Inc. (TRC) collected water samples from the two onsite production wells and one onsite well that services the potable water system for per- and polyfluoroalkyl substances (collectively referred to as “PFAS”) at the RockGen Energy Center. The potable well was also sampled for a limited number of drinking water quality parameters including copper, lead, chloride, and nitrate/nitrite. PFAS and related fluorinated compounds including perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid PFOA are have been used in firefighting fomes since the 1970s. A memorandum prepared by TRC (dated March 15, 2021) summarizing the laboratory results (dated March 5, 2021) indicates that the potable well sample exceeds the Wisconsin Department of Natural Resources (DNR) proposed and promulgated groundwater enforcement standards (ESs) for perfluorooctanoic acid (PFOA) and the combined C8 standard, and exceeds the preventive action limits (PALs) for Nitrate + Nitrate, perflourononanoic acid (PFNA), perfluorooctanesulfonic acid (PFOS), and perfluorooctanesulfonamide (FOSA).

In addition, during the March 2021 site reconnaissance, the S&L representative was approached by an unknown RockGen Energy Center personnel, who indicated that the firefighting foam used at the Site for the past 5 years (i.e., since approximately 2016) has been stored onsite since re-initiating the use of fuel oil in the CT Units. As part of annual testing procedures, the firefighting foam has been released to the area adjacent to the fire pump house near the fuel oil (aboveground storage tank) AST for approximately five to ten minutes at each annual occurrence. The description of the firefighting foam annual testing does not align with the information provided as part of the February 2021 Phase I ESA interview task, which indicated that the firefighting foam had not been released to the environment.

A copy of the Safety Data Sheet (SDS) provided by the current Site operator for the Ansul firefighting foam (Product Name: ANSULITE 3% AFFF (AFC-3A)) was reviewed during the document review task of the February 2021 Phase I ESA. The SDS states that “this product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)”. However, Section 5.3 of the SDS notes that “fluorinated oxides” are a potential hazardous combustion product, indicating the presence of fluorinated compounds in the product. Further research, including review of an Ansul Product Sheet for Ansulite 3% AFFF AFC-3A (dated 2014, attached), indicates that the concentrate is formulated from specialty fluorochemical and hydrocarbon type surfactants along with solvents. Given this information, it appears likely that that the firefighting foam at the RockGen Energy Center contains some level of fluorochemicals; however, fluorochemical compounds in the foam are not currently classified as a CERCLA





hazardous substance pursuant to 42 U.S.C. §9601(14). Because the firefighting foam is not currently designated as a CERCLA hazardous substance, an evaluation of the potential for a release of these compounds to the environment would be beyond the scope of a Phase I ESA.

Nevertheless, the release of the firefighting foam (potentially with fluorochemical surfactants) and the identification of PFAS in the March 2021 water sampling results could qualify as a Business Environmental Risk (BER). Subsection 3.2.11 of ASTM E1527-13 defines BER as “a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, and is not an issue required to be investigated under this practice.” Evaluation of non-scope items, including BERs, is not required nor relevant for compliance with the AAI Rule or E1527-13. Inclusion of non-scope items in a Phase I ESA is entirely within the discretion of the User based on its own risk tolerance, noting that the consideration of non-scope items should be agreed upon as additional services prior to initiation of the environmental site assessment process (see, Section 1.3 of the ASTM standard). Given the time constraints under which S&L prepared the February 2021 Phase I ESA and this Addendum, S&L did not include a consideration of one or more potential BER. Nevertheless, this information is provided to assist DPC in determining whether the identification of PFAS in the Site’s water is considered a BER that requires further investigation.

## **7.6 LIMITATIONS, DATA GAPS, AND DEVIATIONS**

Study limitations, site-specific limitations, data gaps, and deviations are described in Sections 1.4, 1.5, 1.6, and 1.7, respectively.





## 8. ENVIRONMENTAL PROFESSIONAL STATEMENT

S&L performed a Phase I ESA of the Site in general conformance with the scope and limitations of ASTM E1527-13. The Phase I ESA included a review of available historical data, environmental data, site reconnaissance and visual observation of Site operations, and interviews with key Site personnel. Scope limitation, deviations from ASTM E1527-13, and data gaps are identified in the report. No physical environmental sampling was performed.

Per ASTM E1527-13 Section 12.12 and 12.13, the following Environmental Professional statements are provided:

I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site.

Name: Kenneth Snell Title: Senior Environmental Manager

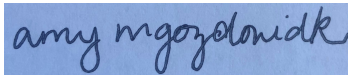
Signature:  Date: 5/3/2021

Sargent & Lundy: Report Contributors:

**PREPARED BY:**



**Samantha Thompson**  
Environmental Associate



**Amy Gozdowiak**  
Environmental Associate

**REVIEWED BY:**



**Ken Snell**  
Senior Environmental Manager

5/3/2021

**Date**

**APPROVED BY:**



**Adam Redd**  
Senior Manager

5/3/2021

**Date**





## APPENDICES

Appendix 1: Site Layout

Appendix 2: Site Photographs

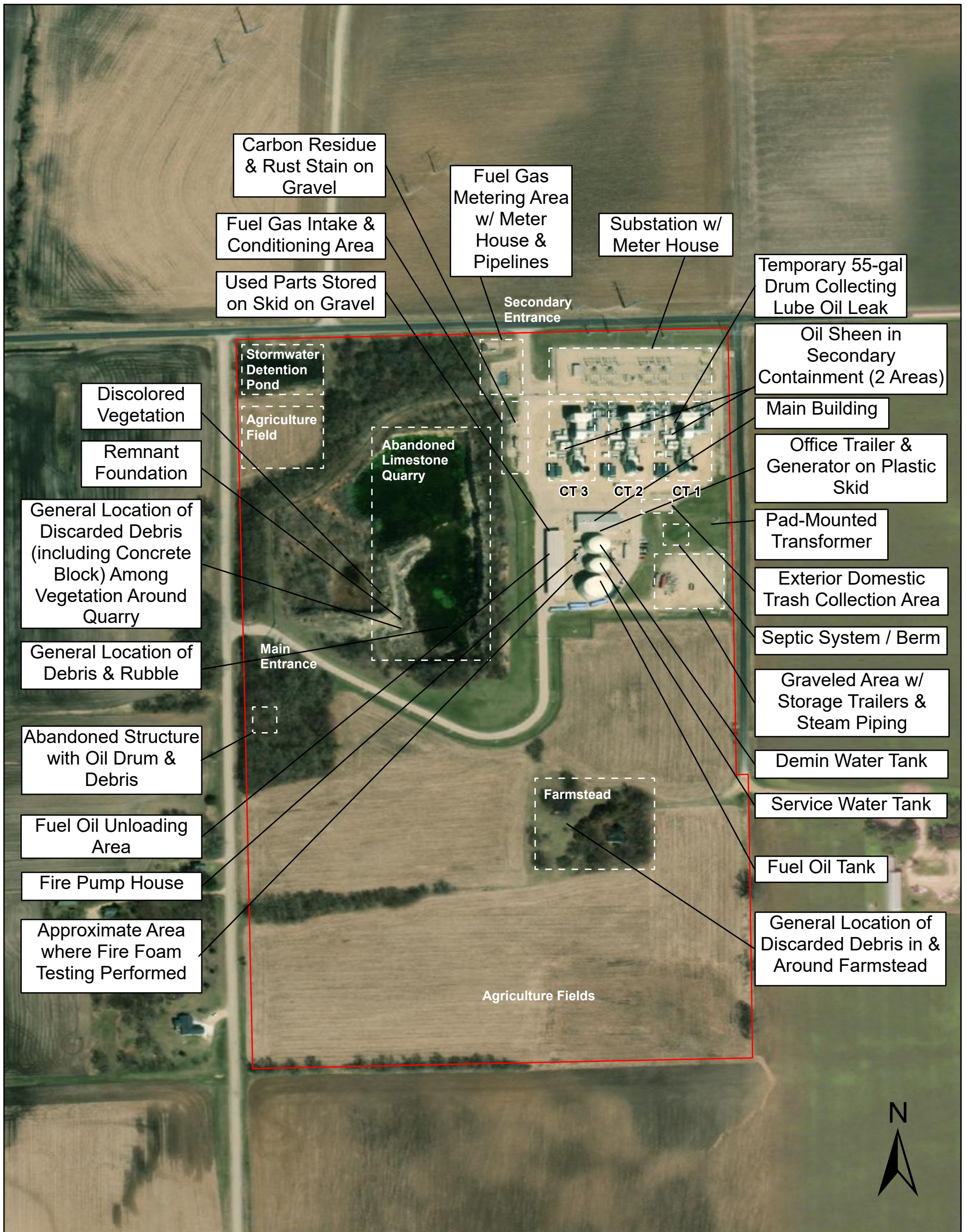
Appendix 3: Water Sampling Report and Memo





## APPENDIX 1. SITE LAYOUT





0 250 500 Feet

Date: 3/25/2021  
Prepared by: S&L

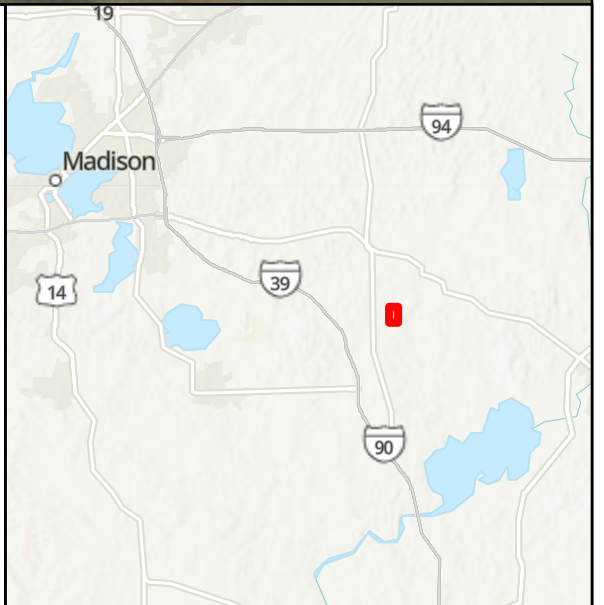


## RockGen Energy Center Dane County, WI

### Site Layout

**Legend**

RockGen Energy Center Boundary





## APPENDIX 2. SITE PHOTOGRAPHS





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 1

Photo facing east of machinery with oil spill within secondary containment on concrete pad and concrete foundation under canopy area.



## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 2

Photo facing east of machinery with oil spill within enclosed in a structure on concrete foundation under canopy area.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 3

Photo facing east of machinery with oil and other substance spill within secondary containment on concrete pad and concrete foundation under canopy area.



## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 4

Photo facing east of machinery with oil spill in secondary containment on concrete foundation in the main fire pump house located west of the ASTs





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 5

Photo facing east of oil sheen on stormwater collected in secondary containment of in the CT Unit 3 Accessory Module.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 6

Photo facing west of the "carbon and rust residue" on gravel under the fuel gas intake and conditioning equipment.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 7

Photo facing east of oil sheen on stormwater collected in secondary containment of in the CT Unit 1 Accessory Module.



## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 8

Photo facing east of a 55-gal drum located on concrete and connected to CT Unit 1 equipment via plastic tubing and tape.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 9

Example photo facing south of minimal snow cover and rubble in abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 10  
Example photo of debris in abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 11

Photo facing south of the miscellaneous debris, including the unidentified concrete block in the background, near the abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 12

Photo facing southwest of the unidentified concrete block and miscellaneous debris near the abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 13

Photo facing east of cleared, remnant foundation in foreground near abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 14

Photo facing north of potentially discolored vegetation near abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 15

Debris inside 55-gal drum in abandoned structure south of abandoned quarry.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 16

Example photo facing west of debris, including handheld plastic containers, around abandoned farmstead barn structure.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 17

Example photo of paint cans and plastic containers (left and center background), red 55-gal drum (right foreground), a miscellaneous debris in abandoned farmstead barn structure.



## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 18

Photo of spill on concrete foundation in air compressor room.





## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 19

Spare metal parts stored on a plastic skid on gravel under the canopy area on the right.



## Photographic Record

<b>Client Name:</b>	DPC	<b>Site Name:</b>	RockGen Energy Center
<b>Project Number:</b>	13014.014	<b>Site Location:</b>	2346 Clear View Road, Cambridge, WI
<b>Photographer:</b>	Samantha Thompson	<b>Date Photos Taken:</b>	03/18/2021



Photo 20

Walled generator with corrosion on plastic skid located generally west of the demineralized water tank.



## APPENDIX 3. WATER SAMPLING REPORT AND MEMO







## Technical Memorandum

---

**Date:** March 15, 2021

**To:** Adam Redd, Sargent & Lundy

**From:** Jeff Ramey, TRC  
Lydia Auner, TRC

**Project No.:** 432124.0000

**Subject:** Groundwater and Potable Well Sampling at Cambridge, WI Facility

---

### ***Background***

TRC Environmental Corporation, Inc. (TRC) was hired by Sargent & Lundy (client) to collect water samples from two production wells and a well that services the potable water system for per- and polyfluoroalkyl substances (PFAS) and a limited number of drinking water quality parameters at the RockGen Energy Center (Site) located at 2346 Clear View Road, Cambridge, WI 53523.

### ***Approach***

TRC field personnel traveled to the Site on the afternoon of February 25, 2021 and met a Site personnel who accompanied TRC during this sampling event. Using TRC's established groundwater sampling standard operating procedure (SOP) with PFAS provisions and restricted sampling materials, a potable water sample was taken from the kitchen faucet inside the facility at the location depicted in the photolog in this memorandum. The faucet in the kitchen was opened and flushed for five minutes prior to collecting a water sample. The laboratory sample containers were filled directly from the faucet. Next, the two wells providing process water at the Site were sampled, with the well associated with pump #1 on the south portion of the Site being sampled first and the well associated with pump #2 on the west portion of the Site being sampled second. Each production well was sampled by opening a vent on the water supply pipe and collecting a water sample directly from the stream of water into the sample container as depicted in the photolog. No sampling equipment was used to collect the production well samples. A field blank consisting of laboratory supplied PFAS-free water was also collected during this event and submitted for laboratory analysis for PFAS.

All samples were immediately placed in the sample cooler on ice and shipped to Eurofins-TestAmerica's Chicago, Illinois laboratory for next day delivery. The PFAS samples were internally subcontracted to Eurofins-TestAmerica's West Sacramento, California laboratory and the limited drinking water quality parameters were analyzed in the Chicago laboratory. During the internal subcontracting process, the ice in the cooler melted and the PFAS samples arrived at the West Sacramento laboratory at 12.3 degrees Celsius, which is above the required temperature criteria.

The three water samples and the field blank were analyzed for PFAS by Eurofins-TestAmerica's West Sacramento, California laboratory's by modified EPA method 537.1 and their standard operating procedure (SOP) utilizing the WI PFAS Method Suitability document and reporting the list of 36 PFAS analytes within.

## Technical Memorandum

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Additionally, the potable well sample was analyzed for lead and copper by EPA Method 200.8, nitrate/ nitrite by EPA Method 353.2, and chloride by EPA Method 300.0. by Eurofins-TestAmerica's, University Park, Illinois laboratory. An expedited turn-around-time of five business days was requested for all analyses. The results for all samples were reported in the analytical report: 500-195330-1.

### **Results**

The sample results are summarized in Table 1 and compared to the Wisconsin Department of Natural Resources (WDNR) proposed and promulgated groundwater enforcement standards (ES) and preventive action limits (PALs) in ch. NR 140. The proposed PFAS groundwater standards are the Wisconsin Department of Health Services (DHS) recommendations for standards associated with the Cycle 10 and Cycle 11 rule-making processes. All sample results are also compared to the proposed and promulgated WDNR ch. NR 809 drinking water maximum contaminant levels (MCLs), where applicable at the time of producing this memorandum. The comparison table in this memorandum shows that the potable well sample exceeds the proposed ES for perfluorooctanoic acid (PFOA) and the combined C8 standard and the PAL for Nitrate + Nitrate, perflourononanoic acid (PFNA), perfluorooctanesulfonic acid (PFOS), and perfluorooctanesulfonamide (FOSA).

# Table

## Technical Memorandum

**Table 1**

Constituent	NR 140 <sup>(1)</sup>		NR 809	POTABLE WELL KITCHEN SINK	WELL WATER PUMP #1 SOUTH	WELL WATER PUMP #2 WEST	FB-01
	Enforcement Standard (ES)	Preventive Action Limit (PAL)	Maximum Contaminant Level (MCL)	02/25/2021	02/25/2021	02/25/2021	02/25/2021
<b>Metals (ug/L)</b>							
Copper	1300	130	1300	<b>39</b>	--	--	--
Lead	15	1.5	15 <sup>(2)</sup>	<b>0.19 J</b>	--	--	--
<b>Inorganics (mg/L)</b>							
Chloride	250 <sup>(4)</sup>	125 <sup>(4)</sup>	-	<b>55</b>	--	--	--
Nitrate + Nitrite	10	2	10	<b>2.9</b>	--	--	--
<b>PFAS (ng/L)</b>							
Perfluorobutanoic acid (PFBA)	10000	2000	-	<b>130</b>	< 2.3	< 2.3	< 2.2
Perfluoropentanoic acid (PFPeA)	-	-	-	<b>570</b>	< 0.47	< 0.47	< 0.45
Perfluorohexanoic acid (PFHxA)	150000	30000	-	<b>330</b>	< 0.55	< 0.56	< 0.54
Perfluoroheptanoic acid (PFHpA)	-	-	-	<b>210</b>	< 0.24	< 0.24	< 0.23
Perfluorooctanoic acid (PFOA)	20	2	-	<b>220</b>	< 0.81	< 0.82	< 0.79
Perfluorononanoic acid (PFNA)	30	3	-	<b>27</b>	< 0.26	< 0.26	< 0.25
Perfluorodecanoic acid (PFDA)	300	60	-	<b>7.5</b>	< 0.30	< 0.30	< 0.29
Perfluoroundecanoic acid (PFUnA)	3000	600	-	< 1.0	< 1.0	< 1.1	< 1.0
Perfluorododecanoic acid (PFDoA)	500	100	-	< 0.50	< 0.52	< 0.53	< 0.51
Perfluorotridecanoic acid (PFTriA)	-	-	-	< 1.2	< 1.2	< 1.3	< 1.2
Perfluorotetradecanoic acid (PFTeA)	10000	2000	-	< 0.66	< 0.70	< 0.70	< 0.68
Perfluoro-n-hexadecanoic acid (PFHxDA)	-	-	-	< 0.81	< 0.85	< 0.86	< 0.82
Perfluoro-n-octadecanoic acid (PFODA)	400000	80000	-	< 0.86	< 0.90	< 0.91	< 0.87
Perfluorobutanesulfonic acid (PFBS)	450000	90000	-	<b>0.74 J</b>	< 0.19	< 0.19	< 0.19
Perfluoropentanesulfonic acid (PFPeS)	-	-	-	< 0.27	< 0.29	< 0.29	< 0.28
Perfluorohexanesulfonic acid (PFHxS)	40	4	-	<b>1.6 J</b>	< 0.54	< 0.55	< 0.53
Perfluoroheptanesulfonic Acid (PFHpS)	-	-	-	< 0.17	< 0.18	< 0.18	< 0.18
Perfluorooctanesulfonic acid (PFOS)	20	2	-	<b>8.5</b>	< 0.51	< 0.52	< 0.50
Perfluoronanesulfonic acid (PFNS)	-	-	-	< 0.34	< 0.35	< 0.36	< 0.34
Perfluorodecanesulfonic acid (PFDS)	-	-	-	< 0.29	< 0.30	< 0.31	< 0.30
Perfluorododecanesulfonic acid (PFDoS)	-	-	-	< 0.88	< 0.92	< 0.93	< 0.90
Perfluorooctanesulfonamide (FOSA)	20	2	-	<b>9.5</b>	<b>1.3 J</b>	<b>1.8 J</b>	< 0.91
NEtFOSA	20	2	-	< 0.79	< 0.83	< 0.84	< 0.81
NMeFOSA	-	-	-	< 0.39	< 0.41	< 0.41	< 0.40
NMeFOSAA	-	-	-	< 1.1	< 1.1	< 1.2	< 1.1
NEtFOSAA	20	2	-	< 1.2	< 1.2	< 1.3	< 1.2
NMeFOSE	-	-	-	< 1.3	< 1.3	< 1.3	< 1.3
NEtFOSE	20	2	-	< 0.77	< 0.81	< 0.82	< 0.79
4:2 FTS	-	-	-	<b>8.1</b>	< 0.23	< 0.23	< 0.22
6:2 FTS	-	-	-	<b>2300</b>	< 2.4	< 2.4	< 2.3
8:2 FTS	-	-	-	<b>760</b>	< 0.44	< 0.44	< 0.43
10:2 FTS	-	-	-	< 0.61	< 0.64	< 0.65	< 0.62
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	3000	600	-	< 0.36	< 0.38	< 0.39	< 0.37
HFPO-DA (GenX)	300	30	-	< 1.4	< 1.4	< 1.4	< 1.4
F-53B Major	-	-	-	< 0.22	< 0.23	< 0.23	< 0.22
F-53B Minor	-	-	-	< 0.29	< 0.30	< 0.31	< 0.30
<b>Combined C8 Standard</b>	20 <sup>(3)</sup>	2 <sup>(3)</sup>	-	<b>238</b>	<b>1.3 J</b>	<b>1.8 J</b>	< 1.2

**Notes:**

- = Standard not established  
 -- = Not analyzed  
 < = Less than the detection limit  
**Bold** = analyte detected  
 J = Estimated value

Result exceeds NR 140 ES (proposed or established)

Result exceeds NR 140 PAL (proposed or established)

Prepared by: L. Auner, 3/8/2021

Checked by: J. Ramey 3/8/2021

**Footnotes:**

(1) Cycle 10 and Cycle 11 PFAS standards are proposed.

(2) Per NR 809.54(3)(a), the lead action level is exceeded if the concentration of lead in more than 10% of tap water samples collected during any monitoring period conducted in accordance with s. NR 809.547 is greater than 0.015 mg/L.

(3) Proposed standard is for the sum of PFOA, PFOS, FOSA, NEtFOSA, NEtFOSAA, and NEtFOSE.

(4) Public welfare standard

# Photolog



## Technical Memorandum

Potable well kitchen sink sample location



## Technical Memorandum

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Production well water pump #1 (south) sample location





## Technical Memorandum

Production well water pump #2 (west) sample location



## Technical Memorandum

---

Production well water pump #2 (west) sample location close-up





## ANALYTICAL REPORT

Eurofins TestAmerica, Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-195330-1  
Client Project/Site: WI Project 432124

For:  
TRC Environmental Corporation.  
150 N. Patrick Blvd.  
Suite 180  
Brookfield, Wisconsin 53045

Attn: Jeff Ramey



Authorized for release by:  
3/5/2021 4:55:10 PM

Sandie Fredrick, Project Manager II  
(920)261-1660  
[sandra.fredrick@eurofinset.com](mailto:sandra.fredrick@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Case Narrative

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

---

## Job ID: 500-195330-1

---

Laboratory: Eurofins TestAmerica, Chicago

### Narrative

---

#### Job Narrative 500-195330-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 2/26/2021 11:05 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### LCMS

Method 537 (modified): Results for samples POTABLE WELL KITCHEN SINK (500-195330-1) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-467046. Method Code:3535 PFC\_WI Matrix:Water

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Client Sample ID: POTABLE WELL KITCHEN SINK

Lab Sample ID: 500-195330-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	130		4.5	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	330		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid (PFHpA)	210		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	220		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	27		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	7.5		1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.74	J	1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	1.6	J	1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.5		1.8	0.49	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	9.5		1.8	0.89	ng/L	1		537 (modified)	Total/NA
4:2 FTS	8.1		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA) - DL	570		18	4.5	ng/L	10		537 (modified)	Total/NA
6:2 FTS - DL	2300		45	23	ng/L	10		537 (modified)	Total/NA
8:2 FTS - DL	760		18	4.2	ng/L	10		537 (modified)	Total/NA
Copper	39		2.0	0.50	ug/L	1		6020A	Total Recoverable
Lead	0.19	J	0.50	0.19	ug/L	1		6020A	Total Recoverable
Nitrogen, Nitrate Nitrite Chloride	2.9		0.50	0.21	mg/L	5		353.2	Total/NA
	55		10	5.0	mg/L	5		SM 4500 Cl- E	Total/NA

## Client Sample ID: WELL WATER PUMP #1 SOUTH

Lab Sample ID: 500-195330-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonamide (FOSA)	1.3	J	1.9	0.93	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: WELL WATER PUMP #2 WEST

Lab Sample ID: 500-195330-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonamide (FOSA)	1.8	J	1.9	0.94	ng/L	1		537 (modified)	Total/NA

## Client Sample ID: FB-01

Lab Sample ID: 500-195330-4

No Detections.

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
6020A	Metals (ICP/MS)	SW846	TAL CHI
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL CHI
SM 4500 Cl- E	Chloride, Total	SM	TAL CHI
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CHI
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

## Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Sample Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-195330-1	POTABLE WELL KITCHEN SINK	Water	02/25/21 13:08	02/26/21 11:05	
500-195330-2	WELL WATER PUMP #1 SOUTH	Water	02/25/21 13:25	02/26/21 11:05	
500-195330-3	WELL WATER PUMP #2 WEST	Water	02/25/21 13:36	02/26/21 11:05	
500-195330-4	FB-01	Water	02/25/21 13:42	02/26/21 11:05	

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# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: POTABLE WELL KITCHEN SINK**

**Lab Sample ID: 500-195330-1**

Date Collected: 02/25/21 13:08

Matrix: Water

Date Received: 02/26/21 11:05

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	130		4.5	2.2	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorohexanoic acid (PFHxA)	330		1.8	0.53	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoroheptanoic acid (PFHpA)	210		1.8	0.23	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorooctanoic acid (PFOA)	220		1.8	0.77	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorononanoic acid (PFNA)	27		1.8	0.25	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorodecanoic acid (PFDA)	7.5		1.8	0.28	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.8	1.0	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorododecanoic acid (PFDoA)	<0.50		1.8	0.50	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.8	1.2	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorotetradecanoic acid (PFTeA)	<0.66		1.8	0.66	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.81		1.8	0.81	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.86		1.8	0.86	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorobutanesulfonic acid (PFBS)	0.74	J	1.8	0.18	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoropentanesulfonic acid (PFPeS)	<0.27		1.8	0.27	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorohexanesulfonic acid (PFHxS)	1.6	J	1.8	0.52	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.17		1.8	0.17	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorooctanesulfonic acid (PFOS)	8.5		1.8	0.49	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.8	0.34	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorodecanesulfonic acid (PFDS)	<0.29		1.8	0.29	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorododecanesulfonic acid (PFDoS)	<0.88		1.8	0.88	ng/L		03/03/21 13:19	03/04/21 11:56	1
Perfluorooctanesulfonamide (FOSA)	9.5		1.8	0.89	ng/L		03/03/21 13:19	03/04/21 11:56	1
NEtFOSA	<0.79		1.8	0.79	ng/L		03/03/21 13:19	03/04/21 11:56	1
NMeFOSA	<0.39		1.8	0.39	ng/L		03/03/21 13:19	03/04/21 11:56	1
NMeFOSAA	<1.1		4.5	1.1	ng/L		03/03/21 13:19	03/04/21 11:56	1
NEtFOSAA	<1.2		4.5	1.2	ng/L		03/03/21 13:19	03/04/21 11:56	1
NMeFOSE	<1.3		3.6	1.3	ng/L		03/03/21 13:19	03/04/21 11:56	1
NEtFOSE	<0.77		1.8	0.77	ng/L		03/03/21 13:19	03/04/21 11:56	1
4:2 FTS	8.1		1.8	0.22	ng/L		03/03/21 13:19	03/04/21 11:56	1
10:2 FTS	<0.61		1.8	0.61	ng/L		03/03/21 13:19	03/04/21 11:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.36		1.8	0.36	ng/L		03/03/21 13:19	03/04/21 11:56	1
HFPO-DA (GenX)	<1.4		3.6	1.4	ng/L		03/03/21 13:19	03/04/21 11:56	1
F-53B Major	<0.22		1.8	0.22	ng/L		03/03/21 13:19	03/04/21 11:56	1
F-53B Minor	<0.29		1.8	0.29	ng/L		03/03/21 13:19	03/04/21 11:56	1
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
13C4 PFBA	106		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C2 PFHxA	106		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C4 PFHpA	116		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C4 PFOA	96		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C5 PFNA	108		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C2 PFDA	98		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C2 PFUnA	108		25 - 150				03/03/21 13:19	03/04/21 11:56	1
13C2 PFDoA	121		25 - 150				03/03/21 13:19	03/04/21 11:56	1

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: POTABLE WELL KITCHEN SINK**

**Lab Sample ID: 500-195330-1**

**Date Collected: 02/25/21 13:08**

**Matrix: Water**

**Date Received: 02/26/21 11:05**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFTeDA	121		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C2 PFHxDA	115		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C3 PFBS	102		25 - 150	03/03/21 13:19	03/04/21 11:56	1
18O2 PFHxS	101		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C4 PFOS	102		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C8 FOSA	97		10 - 150	03/03/21 13:19	03/04/21 11:56	1
d3-NMeFOSAA	107		25 - 150	03/03/21 13:19	03/04/21 11:56	1
d5-NEtFOSAA	108		25 - 150	03/03/21 13:19	03/04/21 11:56	1
d-N-MeFOSA-M	80		10 - 150	03/03/21 13:19	03/04/21 11:56	1
d-N-EtFOSA-M	71		10 - 150	03/03/21 13:19	03/04/21 11:56	1
d7-N-MeFOSE-M	102		10 - 150	03/03/21 13:19	03/04/21 11:56	1
d9-N-EtFOSE-M	97		10 - 150	03/03/21 13:19	03/04/21 11:56	1
M2-4:2 FTS	104		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C3 HFPO-DA	113		25 - 150	03/03/21 13:19	03/04/21 11:56	1
13C2 10:2 FTS	134		25 - 150	03/03/21 13:19	03/04/21 11:56	1

**Method: 537 (modified) - Fluorinated Alkyl Substances - DL**

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Perfluoropentanoic acid (PFPeA)	570		18	4.5	ng/L		03/03/21 13:19	03/05/21 08:22	10
6:2 FTS	2300		45	23	ng/L		03/03/21 13:19	03/05/21 08:22	10
8:2 FTS	760		18	4.2	ng/L		03/03/21 13:19	03/05/21 08:22	10

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C5 PFPeA	96		25 - 150	03/03/21 13:19	03/05/21 08:22	10
M2-6:2 FTS	105		25 - 150	03/03/21 13:19	03/05/21 08:22	10
M2-8:2 FTS	102		25 - 150	03/03/21 13:19	03/05/21 08:22	10

**Method: 6020A - Metals (ICP/MS) - Total Recoverable**

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Copper	39		2.0	0.50	ug/L		02/26/21 17:04	03/01/21 13:33	1
Lead	0.19	J	0.50	0.19	ug/L		02/26/21 17:04	03/01/21 13:33	1

**General Chemistry**

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Nitrogen, Nitrate Nitrite	2.9		0.50	0.21	mg/L			03/03/21 14:27	5
Chloride	55		10	5.0	mg/L			03/05/21 15:50	5



# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: WELL WATER PUMP #1 SOUTH**

**Lab Sample ID: 500-195330-2**

**Date Collected: 02/25/21 13:25**

**Matrix: Water**

**Date Received: 02/26/21 11:05**

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.3		4.8	2.3	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorohexanoic acid (PFHxA)	<0.55		1.9	0.55	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorooctanoic acid (PFOA)	<0.81		1.9	0.81	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorododecanoic acid (PFDoA)	<0.52		1.9	0.52	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorotetradecanoic acid (PFTeA)	<0.70		1.9	0.70	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.85		1.9	0.85	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.90		1.9	0.90	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorohexanesulfonic acid (PFHxS)	<0.54		1.9	0.54	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorooctanesulfonic acid (PFOS)	<0.51		1.9	0.51	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorononanesulfonic acid (PFNS)	<0.35		1.9	0.35	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:06	1
Perfluorododecanesulfonic acid (PFDoS)	<0.92		1.9	0.92	ng/L		03/03/21 13:19	03/04/21 12:06	1
<b>Perfluorooctanesulfonamide (FOSA)</b>	<b>1.3 J</b>		1.9	0.93	ng/L		03/03/21 13:19	03/04/21 12:06	1
NEtFOSA	<0.83		1.9	0.83	ng/L		03/03/21 13:19	03/04/21 12:06	1
NMeFOSA	<0.41		1.9	0.41	ng/L		03/03/21 13:19	03/04/21 12:06	1
NMeFOSAA	<1.1		4.8	1.1	ng/L		03/03/21 13:19	03/04/21 12:06	1
NEtFOSAA	<1.2		4.8	1.2	ng/L		03/03/21 13:19	03/04/21 12:06	1
NMeFOSE	<1.3		3.8	1.3	ng/L		03/03/21 13:19	03/04/21 12:06	1
NEtFOSE	<0.81		1.9	0.81	ng/L		03/03/21 13:19	03/04/21 12:06	1
4:2 FTS	<0.23		1.9	0.23	ng/L		03/03/21 13:19	03/04/21 12:06	1
6:2 FTS	<2.4		4.8	2.4	ng/L		03/03/21 13:19	03/04/21 12:06	1
8:2 FTS	<0.44		1.9	0.44	ng/L		03/03/21 13:19	03/04/21 12:06	1
10:2 FTS	<0.64		1.9	0.64	ng/L		03/03/21 13:19	03/04/21 12:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.38		1.9	0.38	ng/L		03/03/21 13:19	03/04/21 12:06	1
HFPO-DA (GenX)	<1.4		3.8	1.4	ng/L		03/03/21 13:19	03/04/21 12:06	1
F-53B Major	<0.23		1.9	0.23	ng/L		03/03/21 13:19	03/04/21 12:06	1
F-53B Minor	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:06	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C4 PFBA	89		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C5 PFPeA	96		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C2 PFHxA	89		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C4 PFHpA	98		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C4 PFOA	93		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C5 PFNA	94		25 - 150				03/03/21 13:19	03/04/21 12:06	1
13C2 PFDA	97		25 - 150				03/03/21 13:19	03/04/21 12:06	1

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: WELL WATER PUMP #1 SOUTH**

**Lab Sample ID: 500-195330-2**

**Date Collected: 02/25/21 13:25**

**Matrix: Water**

**Date Received: 02/26/21 11:05**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFluA	90		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C2 PFlDoA	93		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C2 PFlTeDA	102		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C2 PFlHxDA	98		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C3 PFlBS	89		25 - 150	03/03/21 13:19	03/04/21 12:06	1
18O2 PFlHS	86		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C4 PFlOS	89		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C8 FOSA	85		10 - 150	03/03/21 13:19	03/04/21 12:06	1
d3-NMeFOSA	91		25 - 150	03/03/21 13:19	03/04/21 12:06	1
d5-NEtFOSA	83		25 - 150	03/03/21 13:19	03/04/21 12:06	1
d-N-MeFOSA-M	61		10 - 150	03/03/21 13:19	03/04/21 12:06	1
d-N-EtFOSA-M	63		10 - 150	03/03/21 13:19	03/04/21 12:06	1
d7-N-MeFOSE-M	89		10 - 150	03/03/21 13:19	03/04/21 12:06	1
d9-N-EtFOSE-M	88		10 - 150	03/03/21 13:19	03/04/21 12:06	1
M2-4:2 FTS	90		25 - 150	03/03/21 13:19	03/04/21 12:06	1
M2-6:2 FTS	87		25 - 150	03/03/21 13:19	03/04/21 12:06	1
M2-8:2 FTS	92		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C3 HFPO-DA	93		25 - 150	03/03/21 13:19	03/04/21 12:06	1
13C2 10:2 FTS	121		25 - 150	03/03/21 13:19	03/04/21 12:06	1

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: WELL WATER PUMP #2 WEST**

**Lab Sample ID: 500-195330-3**

Date Collected: 02/25/21 13:36

Matrix: Water

Date Received: 02/26/21 11:05

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.3		4.8	2.3	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoropentanoic acid (PFPeA)	<0.47		1.9	0.47	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorohexanoic acid (PFHxA)	<0.56		1.9	0.56	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoroheptanoic acid (PFHpA)	<0.24		1.9	0.24	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorooctanoic acid (PFOA)	<0.82		1.9	0.82	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorononanoic acid (PFNA)	<0.26		1.9	0.26	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorodecanoic acid (PFDA)	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoroundecanoic acid (PFUnA)	<1.1		1.9	1.1	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorododecanoic acid (PFDoA)	<0.53		1.9	0.53	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorotridecanoic acid (PFTriA)	<1.3		1.9	1.3	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorotetradecanoic acid (PFTeA)	<0.70		1.9	0.70	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.86		1.9	0.86	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.91		1.9	0.91	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoropentanesulfonic acid (PFPeS)	<0.29		1.9	0.29	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorohexanesulfonic acid (PFHxS)	<0.55		1.9	0.55	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorooctanesulfonic acid (PFOS)	<0.52		1.9	0.52	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorononanesulfonic acid (PFNS)	<0.36		1.9	0.36	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorodecanesulfonic acid (PFDS)	<0.31		1.9	0.31	ng/L		03/03/21 13:19	03/04/21 12:15	1
Perfluorododecanesulfonic acid (PFDoS)	<0.93		1.9	0.93	ng/L		03/03/21 13:19	03/04/21 12:15	1
<b>Perfluorooctanesulfonamide (FOSA)</b>	<b>1.8 J</b>		1.9	0.94	ng/L		03/03/21 13:19	03/04/21 12:15	1
NEtFOSA	<0.84		1.9	0.84	ng/L		03/03/21 13:19	03/04/21 12:15	1
NMeFOSA	<0.41		1.9	0.41	ng/L		03/03/21 13:19	03/04/21 12:15	1
NMeFOSAA	<1.2		4.8	1.2	ng/L		03/03/21 13:19	03/04/21 12:15	1
NEtFOSAA	<1.3		4.8	1.3	ng/L		03/03/21 13:19	03/04/21 12:15	1
NMeFOSE	<1.3		3.9	1.3	ng/L		03/03/21 13:19	03/04/21 12:15	1
NEtFOSE	<0.82		1.9	0.82	ng/L		03/03/21 13:19	03/04/21 12:15	1
4:2 FTS	<0.23		1.9	0.23	ng/L		03/03/21 13:19	03/04/21 12:15	1
6:2 FTS	<2.4		4.8	2.4	ng/L		03/03/21 13:19	03/04/21 12:15	1
8:2 FTS	<0.44		1.9	0.44	ng/L		03/03/21 13:19	03/04/21 12:15	1
10:2 FTS	<0.65		1.9	0.65	ng/L		03/03/21 13:19	03/04/21 12:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.39		1.9	0.39	ng/L		03/03/21 13:19	03/04/21 12:15	1
HFPO-DA (GenX)	<1.4		3.9	1.4	ng/L		03/03/21 13:19	03/04/21 12:15	1
F-53B Major	<0.23		1.9	0.23	ng/L		03/03/21 13:19	03/04/21 12:15	1
F-53B Minor	<0.31		1.9	0.31	ng/L		03/03/21 13:19	03/04/21 12:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	92		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C5 PFPeA	95		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 PFHxA	98		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C4 PFHpA	100		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C4 PFOA	95		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C5 PFNA	100		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 PFDA	94		25 - 150	03/03/21 13:19	03/04/21 12:15	1

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# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: WELL WATER PUMP #2 WEST**

**Lab Sample ID: 500-195330-3**

**Date Collected: 02/25/21 13:36**

**Matrix: Water**

**Date Received: 02/26/21 11:05**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFluA	98		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 PFlDoA	104		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 PFlTeDA	109		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 PFlHxDA	98		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C3 PFlBS	94		25 - 150	03/03/21 13:19	03/04/21 12:15	1
18O2 PFlHS	94		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C4 PFlOS	95		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C8 FOSA	90		10 - 150	03/03/21 13:19	03/04/21 12:15	1
d3-NMeFOSA	91		25 - 150	03/03/21 13:19	03/04/21 12:15	1
d5-NEtFOSA	92		25 - 150	03/03/21 13:19	03/04/21 12:15	1
d-N-MeFOSA-M	68		10 - 150	03/03/21 13:19	03/04/21 12:15	1
d-N-EtFOSA-M	62		10 - 150	03/03/21 13:19	03/04/21 12:15	1
d7-N-MeFOSE-M	79		10 - 150	03/03/21 13:19	03/04/21 12:15	1
d9-N-EtFOSE-M	86		10 - 150	03/03/21 13:19	03/04/21 12:15	1
M2-4:2 FTS	110		25 - 150	03/03/21 13:19	03/04/21 12:15	1
M2-6:2 FTS	96		25 - 150	03/03/21 13:19	03/04/21 12:15	1
M2-8:2 FTS	113		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C3 HFPO-DA	105		25 - 150	03/03/21 13:19	03/04/21 12:15	1
13C2 10:2 FTS	119		25 - 150	03/03/21 13:19	03/04/21 12:15	1



# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: FB-01**  
**Date Collected: 02/25/21 13:42**  
**Date Received: 02/26/21 11:05**

**Lab Sample ID: 500-195330-4**  
**Matrix: Water**

**Method: 537 (modified) - Fluorinated Alkyl Substances**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.2		4.6	2.2	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoropentanoic acid (PFPeA)	<0.45		1.9	0.45	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorohexanoic acid (PFHxA)	<0.54		1.9	0.54	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoroheptanoic acid (PFHpA)	<0.23		1.9	0.23	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorooctanoic acid (PFOA)	<0.79		1.9	0.79	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorononanoic acid (PFNA)	<0.25		1.9	0.25	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorodecanoic acid (PFDA)	<0.29		1.9	0.29	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoroundecanoic acid (PFUnA)	<1.0		1.9	1.0	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorododecanoic acid (PFDoA)	<0.51		1.9	0.51	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorotridecanoic acid (PFTriA)	<1.2		1.9	1.2	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorotetradecanoic acid (PFTeA)	<0.68		1.9	0.68	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.82		1.9	0.82	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.87		1.9	0.87	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorobutanesulfonic acid (PFBS)	<0.19		1.9	0.19	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoropentanesulfonic acid (PFPeS)	<0.28		1.9	0.28	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorohexanesulfonic acid (PFHxS)	<0.53		1.9	0.53	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.18		1.9	0.18	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorooctanesulfonic acid (PFOS)	<0.50		1.9	0.50	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorononanesulfonic acid (PFNS)	<0.34		1.9	0.34	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorodecanesulfonic acid (PFDS)	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorododecanesulfonic acid (PFDoS)	<0.90		1.9	0.90	ng/L		03/03/21 13:19	03/04/21 12:24	1
Perfluorooctanesulfonamide (FOSA)	<0.91		1.9	0.91	ng/L		03/03/21 13:19	03/04/21 12:24	1
NEtFOSA	<0.81		1.9	0.81	ng/L		03/03/21 13:19	03/04/21 12:24	1
NMeFOSA	<0.40		1.9	0.40	ng/L		03/03/21 13:19	03/04/21 12:24	1
NMeFOSAA	<1.1		4.6	1.1	ng/L		03/03/21 13:19	03/04/21 12:24	1
NEtFOSAA	<1.2		4.6	1.2	ng/L		03/03/21 13:19	03/04/21 12:24	1
NMeFOSE	<1.3		3.7	1.3	ng/L		03/03/21 13:19	03/04/21 12:24	1
NEtFOSE	<0.79		1.9	0.79	ng/L		03/03/21 13:19	03/04/21 12:24	1
4:2 FTS	<0.22		1.9	0.22	ng/L		03/03/21 13:19	03/04/21 12:24	1
6:2 FTS	<2.3		4.6	2.3	ng/L		03/03/21 13:19	03/04/21 12:24	1
8:2 FTS	<0.43		1.9	0.43	ng/L		03/03/21 13:19	03/04/21 12:24	1
10:2 FTS	<0.62		1.9	0.62	ng/L		03/03/21 13:19	03/04/21 12:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.37		1.9	0.37	ng/L		03/03/21 13:19	03/04/21 12:24	1
HFPO-DA (GenX)	<1.4		3.7	1.4	ng/L		03/03/21 13:19	03/04/21 12:24	1
F-53B Major	<0.22		1.9	0.22	ng/L		03/03/21 13:19	03/04/21 12:24	1
F-53B Minor	<0.30		1.9	0.30	ng/L		03/03/21 13:19	03/04/21 12:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	89		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C5 PFPeA	99		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 PFHxA	91		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C4 PFHpA	102		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C4 PFOA	96		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C5 PFNA	102		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 PFDA	90		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 PFUnA	92		25 - 150	03/03/21 13:19	03/04/21 12:24	1

Eurofins TestAmerica, Chicago

# Client Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

**Client Sample ID: FB-01**

**Lab Sample ID: 500-195330-4**

**Date Collected: 02/25/21 13:42**

**Matrix: Water**

**Date Received: 02/26/21 11:05**

**Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)**

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C2 PFDoA	101		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 PFTeDA	109		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 PFHxDA	98		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C3 PFBS	93		25 - 150	03/03/21 13:19	03/04/21 12:24	1
18O2 PFHxS	93		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C4 PFOS	90		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C8 FOSA	81		10 - 150	03/03/21 13:19	03/04/21 12:24	1
d3-NMeFOSAA	87		25 - 150	03/03/21 13:19	03/04/21 12:24	1
d5-NEtFOSAA	94		25 - 150	03/03/21 13:19	03/04/21 12:24	1
d-N-MeFOSA-M	73		10 - 150	03/03/21 13:19	03/04/21 12:24	1
d-N-EtFOSA-M	73		10 - 150	03/03/21 13:19	03/04/21 12:24	1
d7-N-MeFOSE-M	92		10 - 150	03/03/21 13:19	03/04/21 12:24	1
d9-N-EtFOSE-M	91		10 - 150	03/03/21 13:19	03/04/21 12:24	1
M2-4:2 FTS	103		25 - 150	03/03/21 13:19	03/04/21 12:24	1
M2-6:2 FTS	91		25 - 150	03/03/21 13:19	03/04/21 12:24	1
M2-8:2 FTS	102		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C3 HFPO-DA	102		25 - 150	03/03/21 13:19	03/04/21 12:24	1
13C2 10:2 FTS	120		25 - 150	03/03/21 13:19	03/04/21 12:24	1

# Definitions/Glossary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Qualifiers

### LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## LCMS

### Prep Batch: 467046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1 - DL	POTABLE WELL KITCHEN SINK	Total/NA	Water	3535	
500-195330-1	POTABLE WELL KITCHEN SINK	Total/NA	Water	3535	
500-195330-2	WELL WATER PUMP #1 SOUTH	Total/NA	Water	3535	
500-195330-3	WELL WATER PUMP #2 WEST	Total/NA	Water	3535	
500-195330-4	FB-01	Total/NA	Water	3535	
MB 320-467046/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-467046/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-467046/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

### Analysis Batch: 467353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1	POTABLE WELL KITCHEN SINK	Total/NA	Water	537 (modified)	467046
500-195330-2	WELL WATER PUMP #1 SOUTH	Total/NA	Water	537 (modified)	467046
500-195330-3	WELL WATER PUMP #2 WEST	Total/NA	Water	537 (modified)	467046
500-195330-4	FB-01	Total/NA	Water	537 (modified)	467046
MB 320-467046/1-A	Method Blank	Total/NA	Water	537 (modified)	467046
LCS 320-467046/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	467046
LCSD 320-467046/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	467046

### Analysis Batch: 467752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1 - DL	POTABLE WELL KITCHEN SINK	Total/NA	Water	537 (modified)	467046

## Metals

### Prep Batch: 586606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	3005A	
MB 500-586606/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-586606/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-195330-1 MS	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	3005A	
500-195330-1 MSD	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	3005A	
500-195330-1 DU	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	3005A	

### Analysis Batch: 586865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	6020A	586606
MB 500-586606/1-A	Method Blank	Total Recoverable	Water	6020A	586606
LCS 500-586606/2-A	Lab Control Sample	Total Recoverable	Water	6020A	586606
500-195330-1 MS	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	6020A	586606
500-195330-1 MSD	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	6020A	586606
500-195330-1 DU	POTABLE WELL KITCHEN SINK	Total Recoverable	Water	6020A	586606

## General Chemistry

### Analysis Batch: 587117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1	POTABLE WELL KITCHEN SINK	Total/NA	Water	353.2	
MB 500-587117/38	Method Blank	Total/NA	Water	353.2	
LCS 500-587117/39	Lab Control Sample	Total/NA	Water	353.2	

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# QC Association Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## General Chemistry

Analysis Batch: 587472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-195330-1	POTABLE WELL KITCHEN SINK	Total/NA	Water	SM 4500 Cl- E	

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# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

**Lab Sample ID: MB 320-467046/1-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid (PFBA)	<2.4		5.0	2.4	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoropentanoic acid (PFPeA)	<0.49		2.0	0.49	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorohexanoic acid (PFHxA)	<0.58		2.0	0.58	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoroheptanoic acid (PFHpA)	<0.25		2.0	0.25	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorooctanoic acid (PFOA)	<0.85		2.0	0.85	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorononanoic acid (PFNA)	<0.27		2.0	0.27	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	0.31	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoroundecanoic acid (PFUnA)	<1.1		2.0	1.1	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorododecanoic acid (PFDoA)	<0.55		2.0	0.55	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorotridecanoic acid (PFTriA)	<1.3		2.0	1.3	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorotetradecanoic acid (PFTeA)	<0.73		2.0	0.73	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoro-n-hexadecanoic acid (PFHxDA)	<0.89		2.0	0.89	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoro-n-octadecanoic acid (PFODA)	<0.94		2.0	0.94	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorobutanesulfonic acid (PFBS)	<0.20		2.0	0.20	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoropentanesulfonic acid (PFPeS)	<0.30		2.0	0.30	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorohexanesulfonic acid (PFHxS)	<0.57		2.0	0.57	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	<0.19		2.0	0.19	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorooctanesulfonic acid (PFOS)	<0.54		2.0	0.54	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorononanesulfonic acid (PFNS)	<0.37		2.0	0.37	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorodecanesulfonic acid (PFDS)	<0.32		2.0	0.32	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorododecanesulfonic acid (PFDoS)	<0.97		2.0	0.97	ng/L		03/03/21 12:24	03/04/21 09:45	1
Perfluorooctanesulfonamide (FOSA)	<0.98		2.0	0.98	ng/L		03/03/21 12:24	03/04/21 09:45	1
NEtFOSA	<0.87		2.0	0.87	ng/L		03/03/21 12:24	03/04/21 09:45	1
NMeFOSA	<0.43		2.0	0.43	ng/L		03/03/21 12:24	03/04/21 09:45	1
NMeFOSAA	<1.2		5.0	1.2	ng/L		03/03/21 12:24	03/04/21 09:45	1
NEtFOSAA	<1.3		5.0	1.3	ng/L		03/03/21 12:24	03/04/21 09:45	1
NMeFOSE	<1.4		4.0	1.4	ng/L		03/03/21 12:24	03/04/21 09:45	1
NEtFOSE	<0.85		2.0	0.85	ng/L		03/03/21 12:24	03/04/21 09:45	1
4:2 FTS	<0.24		2.0	0.24	ng/L		03/03/21 12:24	03/04/21 09:45	1
6:2 FTS	<2.5		5.0	2.5	ng/L		03/03/21 12:24	03/04/21 09:45	1
8:2 FTS	<0.46		2.0	0.46	ng/L		03/03/21 12:24	03/04/21 09:45	1
10:2 FTS	<0.67		2.0	0.67	ng/L		03/03/21 12:24	03/04/21 09:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.40		2.0	0.40	ng/L		03/03/21 12:24	03/04/21 09:45	1
HFPO-DA (GenX)	<1.5		4.0	1.5	ng/L		03/03/21 12:24	03/04/21 09:45	1
F-53B Major	<0.24		2.0	0.24	ng/L		03/03/21 12:24	03/04/21 09:45	1
F-53B Minor	<0.32		2.0	0.32	ng/L		03/03/21 12:24	03/04/21 09:45	1
Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
13C4 PFBA	95		25 - 150	03/03/21 12:24	03/04/21 09:45	1			
13C5 PFPeA	94		25 - 150	03/03/21 12:24	03/04/21 09:45	1			
13C2 PFHxA	94		25 - 150	03/03/21 12:24	03/04/21 09:45	1			
13C4 PFHpA	106		25 - 150	03/03/21 12:24	03/04/21 09:45	1			
13C4 PFOA	96		25 - 150	03/03/21 12:24	03/04/21 09:45	1			
13C5 PFNA	101		25 - 150	03/03/21 12:24	03/04/21 09:45	1			

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# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: MB 320-467046/1-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

Isotope Dilution	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C2 PFDA	102		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C2 PFUnA	100		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C2 PFDoA	91		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C2 PFTeDA	99		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C2 PFHxDA	108		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C3 PFBS	96		25 - 150	03/03/21 12:24	03/04/21 09:45	1
18O2 PFHxS	95		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C4 PFOS	96		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C8 FOSA	86		10 - 150	03/03/21 12:24	03/04/21 09:45	1
d3-NMeFOSAA	93		25 - 150	03/03/21 12:24	03/04/21 09:45	1
d5-NEtFOSAA	93		25 - 150	03/03/21 12:24	03/04/21 09:45	1
d-N-MeFOSA-M	71		10 - 150	03/03/21 12:24	03/04/21 09:45	1
d-N-EtFOSA-M	76		10 - 150	03/03/21 12:24	03/04/21 09:45	1
d7-N-MeFOSE-M	91		10 - 150	03/03/21 12:24	03/04/21 09:45	1
d9-N-EtFOSE-M	88		10 - 150	03/03/21 12:24	03/04/21 09:45	1
M2-4:2 FTS	95		25 - 150	03/03/21 12:24	03/04/21 09:45	1
M2-6:2 FTS	96		25 - 150	03/03/21 12:24	03/04/21 09:45	1
M2-8:2 FTS	102		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C3 HFPO-DA	101		25 - 150	03/03/21 12:24	03/04/21 09:45	1
13C2 10:2 FTS	109		25 - 150	03/03/21 12:24	03/04/21 09:45	1

**Lab Sample ID: LCS 320-467046/2-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid (PFBA)	40.0	43.2		ng/L		108	60 - 135
Perfluoropentanoic acid (PFPeA)	40.0	43.4		ng/L		109	60 - 135
Perfluorohexanoic acid (PFHxA)	40.0	40.0		ng/L		100	60 - 135
Perfluoroheptanoic acid (PFHpA)	40.0	41.1		ng/L		103	60 - 135
Perfluorooctanoic acid (PFOA)	40.0	43.5		ng/L		109	60 - 135
Perfluorononanoic acid (PFNA)	40.0	41.3		ng/L		103	60 - 135
Perfluorodecanoic acid (PFDA)	40.0	43.0		ng/L		108	60 - 135
Perfluoroundecanoic acid (PFUnA)	40.0	39.9		ng/L		100	60 - 135
Perfluorododecanoic acid (PFDoA)	40.0	39.4		ng/L		99	60 - 135
Perfluorotridecanoic acid (PFTriA)	40.0	40.1		ng/L		100	60 - 135
Perfluorotetradecanoic acid (PFTeA)	40.0	38.3		ng/L		96	60 - 135
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	43.2		ng/L		108	60 - 135
Perfluoro-n-octadecanoic acid (PFODA)	40.0	25.5		ng/L		64	60 - 135
Perfluorobutanesulfonic acid (PFBS)	35.4	40.1		ng/L		114	60 - 135
Perfluoropentanesulfonic acid (PFPeS)	37.5	39.0		ng/L		104	60 - 135
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.5		ng/L		106	60 - 135

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# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-467046/2-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	41.7		ng/L		109	60 - 135
Perfluorooctanesulfonic acid (PFOS)	37.1	39.0		ng/L		105	60 - 135
Perfluorononanesulfonic acid (PFNS)	38.4	40.6		ng/L		106	60 - 135
Perfluorodecanesulfonic acid (PFDS)	38.6	42.8		ng/L		111	60 - 135
Perfluorododecanesulfonic acid (PFDoS)	38.7	41.3		ng/L		107	60 - 135
Perfluorooctanesulfonamide (FOSA)	40.0	48.1		ng/L		120	60 - 135
NEtFOSA	40.0	32.1		ng/L		80	60 - 135
NMeFOSA	40.0	41.7		ng/L		104	60 - 135
NMeFOSAA	40.0	34.4		ng/L		86	60 - 135
NEtFOSAA	40.0	41.6		ng/L		104	60 - 135
NMeFOSE	40.0	41.5		ng/L		104	60 - 135
NEtFOSE	40.0	36.3		ng/L		91	60 - 135
4:2 FTS	37.4	38.6		ng/L		103	60 - 135
6:2 FTS	37.9	42.8		ng/L		113	60 - 135
8:2 FTS	38.3	36.7		ng/L		96	60 - 135
10:2 FTS	38.6	38.5		ng/L		100	60 - 135
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	45.4		ng/L		120	60 - 135
HFPO-DA (GenX)	40.0	40.5		ng/L		101	60 - 135
F-53B Major	37.3	43.1		ng/L		116	60 - 135
F-53B Minor	37.7	44.3		ng/L		118	60 - 135

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C4 PFBA	89		25 - 150
13C5 PFPeA	93		25 - 150
13C2 PFHxA	96		25 - 150
13C4 PFHpA	103		25 - 150
13C4 PFOA	96		25 - 150
13C5 PFNA	95		25 - 150
13C2 PFDA	94		25 - 150
13C2 PFUnA	94		25 - 150
13C2 PFDoA	100		25 - 150
13C2 PFTeDA	96		25 - 150
13C2 PFHxDA	104		25 - 150
13C3 PFBS	89		25 - 150
18O2 PFHxS	93		25 - 150
13C4 PFOS	89		25 - 150
13C8 FOSA	85		10 - 150
d3-NMeFOSAA	99		25 - 150
d5-NEtFOSAA	92		25 - 150
d-N-MeFOSA-M	66		10 - 150
d-N-EtFOSA-M	65		10 - 150
d7-N-MeFOSE-M	86		10 - 150
d9-N-EtFOSE-M	89		10 - 150



# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCS 320-467046/2-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
M2-4:2 FTS	100		25 - 150
M2-6:2 FTS	85		25 - 150
M2-8:2 FTS	96		25 - 150
13C3 HFPO-DA	97		25 - 150
13C2 10:2 FTS	105		25 - 150

**Lab Sample ID: LCSD 320-467046/3-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

<b>Analyte</b>	<b>Spike Added</b>	<b>LCSD Result</b>	<b>LCSD Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>%Rec. Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
Perfluorobutanoic acid (PFBA)	40.0	41.8		ng/L		104	60 - 135	3	30
Perfluoropentanoic acid (PFPeA)	40.0	40.3		ng/L		101	60 - 135	8	30
Perfluorohexanoic acid (PFHxA)	40.0	41.2		ng/L		103	60 - 135	3	30
Perfluoroheptanoic acid (PFHpA)	40.0	40.4		ng/L		101	60 - 135	2	30
Perfluorooctanoic acid (PFOA)	40.0	41.8		ng/L		105	60 - 135	4	30
Perfluorononanoic acid (PFNA)	40.0	39.0		ng/L		97	60 - 135	6	30
Perfluorodecanoic acid (PFDA)	40.0	43.2		ng/L		108	60 - 135	0	30
Perfluoroundecanoic acid (PFUnA)	40.0	39.5		ng/L		99	60 - 135	1	30
Perfluorododecanoic acid (PFDoA)	40.0	40.5		ng/L		101	60 - 135	3	30
Perfluorotridecanoic acid (PFTriA)	40.0	38.6		ng/L		97	60 - 135	4	30
Perfluorotetradecanoic acid (PFTeA)	40.0	35.6		ng/L		89	60 - 135	7	30
Perfluoro-n-hexadecanoic acid (PFHxDA)	40.0	41.3		ng/L		103	60 - 135	4	30
Perfluoro-n-octadecanoic acid (PFODA)	40.0	28.6		ng/L		72	60 - 135	12	30
Perfluorobutanesulfonic acid (PFBS)	35.4	33.6		ng/L		95	60 - 135	18	30
Perfluoropentanesulfonic acid (PFPeS)	37.5	36.5		ng/L		97	60 - 135	7	30
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.7		ng/L		106	60 - 135	1	30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	39.6		ng/L		104	60 - 135	5	30
Perfluorooctanesulfonic acid (PFOS)	37.1	38.4		ng/L		104	60 - 135	2	30
Perfluorononanesulfonic acid (PFNS)	38.4	40.8		ng/L		106	60 - 135	1	30
Perfluorodecanesulfonic acid (PFDS)	38.6	42.1		ng/L		109	60 - 135	2	30
Perfluorododecanesulfonic acid (PFDoS)	38.7	39.2		ng/L		101	60 - 135	5	30
Perfluorooctanesulfonamide (FOSA)	40.0	46.3		ng/L		116	60 - 135	4	30
NEtFOSA	40.0	31.5		ng/L		79	60 - 135	2	30
NMeFOSA	40.0	39.7		ng/L		99	60 - 135	5	30
NMeFOSAA	40.0	34.0		ng/L		85	60 - 135	1	30
NEtFOSAA	40.0	40.1		ng/L		100	60 - 135	4	30
NMeFOSE	40.0	40.3		ng/L		101	60 - 135	3	30

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# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

**Lab Sample ID: LCSD 320-467046/3-A**  
**Matrix: Water**  
**Analysis Batch: 467353**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 467046**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
NETFOSE	40.0	37.5		ng/L		94	60 - 135	3	30
4:2 FTS	37.4	38.6		ng/L		103	60 - 135	0	30
6:2 FTS	37.9	43.2		ng/L		114	60 - 135	1	30
8:2 FTS	38.3	36.3		ng/L		95	60 - 135	1	30
10:2 FTS	38.6	38.2		ng/L		99	60 - 135	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	37.7	40.8		ng/L		108	60 - 135	11	30
HFPO-DA (GenX)	40.0	38.8		ng/L		97	60 - 135	4	30
F-53B Major	37.3	42.8		ng/L		115	60 - 135	1	30
F-53B Minor	37.7	43.0		ng/L		114	60 - 135	3	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C4 PFBA	94		25 - 150
13C5 PFPeA	95		25 - 150
13C2 PFHxA	92		25 - 150
13C4 PFHpA	102		25 - 150
13C4 PFOA	95		25 - 150
13C5 PFNA	104		25 - 150
13C2 PFDA	98		25 - 150
13C2 PFUnA	98		25 - 150
13C2 PFDoA	101		25 - 150
13C2 PFTeDA	103		25 - 150
13C2 PFHxDA	106		25 - 150
13C3 PFBS	97		25 - 150
18O2 PFHxS	96		25 - 150
13C4 PFOS	89		25 - 150
13C8 FOSA	91		10 - 150
d3-NMeFOSAA	100		25 - 150
d5-NEtFOSAA	94		25 - 150
d-N-MeFOSA-M	77		10 - 150
d-N-EtFOSA-M	71		10 - 150
d7-N-MeFOSE-M	90		10 - 150
d9-N-EtFOSE-M	89		10 - 150
M2-4:2 FTS	96		25 - 150
M2-6:2 FTS	90		25 - 150
M2-8:2 FTS	103		25 - 150
13C3 HFPO-DA	97		25 - 150
13C2 10:2 FTS	112		25 - 150

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: MB 500-586606/1-A**  
**Matrix: Water**  
**Analysis Batch: 586865**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 586606**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	<0.50		2.0	0.50	ug/L		02/26/21 17:04	03/01/21 13:26	1
Lead	<0.19		0.50	0.19	ug/L		02/26/21 17:04	03/01/21 13:26	1

Eurofins TestAmerica, Chicago

# QC Sample Results

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: LCS 500-586606/2-A**  
**Matrix: Water**  
**Analysis Batch: 586865**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 586606**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	250	248		ug/L		99	80 - 120
Lead	100	100		ug/L		100	80 - 120

**Lab Sample ID: 500-195330-1 MS**  
**Matrix: Water**  
**Analysis Batch: 586865**

**Client Sample ID: POTABLE WELL KITCHEN SINK**  
**Prep Type: Total Recoverable**  
**Prep Batch: 586606**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	39		250	293		ug/L		102	75 - 125
Lead	0.19	J	100	101		ug/L		101	75 - 125

**Lab Sample ID: 500-195330-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 586865**

**Client Sample ID: POTABLE WELL KITCHEN SINK**  
**Prep Type: Total Recoverable**  
**Prep Batch: 586606**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	39		250	295		ug/L		102	75 - 125	1	20
Lead	0.19	J	100	103		ug/L		103	75 - 125	3	20

**Lab Sample ID: 500-195330-1 DU**  
**Matrix: Water**  
**Analysis Batch: 586865**

**Client Sample ID: POTABLE WELL KITCHEN SINK**  
**Prep Type: Total Recoverable**  
**Prep Batch: 586606**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Copper	39		39.1		ug/L		0.7	20
Lead	0.19	J	<0.19		ug/L		NC	20

## Method: 353.2 - Nitrogen, Nitrate-Nitrite

**Lab Sample ID: MB 500-587117/38**  
**Matrix: Water**  
**Analysis Batch: 587117**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.041		0.10	0.041	mg/L			03/03/21 13:53	1

**Lab Sample ID: LCS 500-587117/39**  
**Matrix: Water**  
**Analysis Batch: 587117**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrate Nitrite	1.00	1.04		mg/L		104	90 - 110

# Lab Chronicle

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Client Sample ID: POTABLE WELL KITCHEN SINK

Lab Sample ID: 500-195330-1

Date Collected: 02/25/21 13:08

Matrix: Water

Date Received: 02/26/21 11:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467046	03/03/21 13:19	LA	TAL SAC
Total/NA	Analysis	537 (modified)		1	467353	03/04/21 11:56	S1M	TAL SAC
Total/NA	Prep	3535	DL		467046	03/03/21 13:19	LA	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	467752	03/05/21 08:22	JY1	TAL SAC
Total Recoverable	Prep	3005A			586606	02/26/21 17:04	BDE	TAL CHI
Total Recoverable	Analysis	6020A		1	586865	03/01/21 13:33	FXG	TAL CHI
Total/NA	Analysis	353.2		5	587117	03/03/21 14:27	PFK	TAL CHI
Total/NA	Analysis	SM 4500 Cl- E		5	587472	03/05/21 15:50	MS	TAL CHI

## Client Sample ID: WELL WATER PUMP #1 SOUTH

Lab Sample ID: 500-195330-2

Date Collected: 02/25/21 13:25

Matrix: Water

Date Received: 02/26/21 11:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467046	03/03/21 13:19	LA	TAL SAC
Total/NA	Analysis	537 (modified)		1	467353	03/04/21 12:06	S1M	TAL SAC

## Client Sample ID: WELL WATER PUMP #2 WEST

Lab Sample ID: 500-195330-3

Date Collected: 02/25/21 13:36

Matrix: Water

Date Received: 02/26/21 11:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467046	03/03/21 13:19	LA	TAL SAC
Total/NA	Analysis	537 (modified)		1	467353	03/04/21 12:15	S1M	TAL SAC

## Client Sample ID: FB-01

Lab Sample ID: 500-195330-4

Date Collected: 02/25/21 13:42

Matrix: Water

Date Received: 02/26/21 11:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			467046	03/03/21 13:19	LA	TAL SAC
Total/NA	Analysis	537 (modified)		1	467353	03/04/21 12:24	S1M	TAL SAC

### Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



# Accreditation/Certification Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-21

## Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-21 *
ANAB	ISO/IEC 17025	L2468	01-20-21 *
Arizona	State	AZ0708	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	02-01-23
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-17-21
Kansas	NELAP	E-10375	02-01-21 *
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-21
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Pennsylvania	NELAP	68-01272	03-31-21
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442019-01	02-28-21 *
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-21
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *


\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

**Eurofins TestAmerica, Chicago**

2417 Bond Street  
 University Park IL 60484  
 Phone 708-534-5200 Fax 708-534-5211

**Chain of Custody Record**

eurofins Environmental

<b>Client Information</b>		Sampler <i>Lydia Auner</i>	Lab PM Fredrick Sandie	Carrier Tracking No(s)	COC No 500-89539-40046 1	
Client Contact <i>Lydia Auner Jeff Ramey</i>		Phone <i>(608) 977-1089</i>	E-Mail <i>sandra.fredrick@eurofinset.com</i>	State of Origin	Page Page 1 of 1	
Company TRC Environmental Corporation			PWS ID	<b>Analysis Requested</b>		
Address <i>708 Heartland Trail 150 N Patrick Blvd, Suite 180</i>			Due Date Requested		 500-195330 COC	
City <i>Madison Brookfield</i>			TAT Requested (days) <i>5 days</i>			
State Zip <i>WI 53747 WI, 53045</i>			Compliance Project <input type="checkbox"/> Yes <input type="checkbox"/> No			
Phone <i>(414) 294-9247</i>			PO # <i>163705</i>			
Email <i>launer@trccompanies.com jramey@trccompanies.com</i>			Purchase Order Requested			
Project Name <i>WI Project 432124</i>			Project # <i>50017486</i>		Job # <i>500-195330</i>	
Site <i>Cambridge, WI</i>			SSOW#			
<b>Sample Identification</b>		Sample Date	Sample Time	Sample Type (C=comp G=grab)	Matrix (W=water S=solid O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No) Performing MS/MSD (Yes or No) PFC_IDA PFAS (8 Analytes) 6020A Copper/Lead 363.2 N+N SM4500_C_E Chloride Total Number of Containers
Preservation Code:						
1	POTABLE WELL KITCHEN SINK	2/25/21	13 08	6	Water	X X X X
2	WELL WATER PUMP #1 SOUTH	2/25/21	13 25	6	Water	X
3	WELL WATER PUMP #2 WEST	2/25/21	13 36	6	Water	X
4	FB-01	2/25/21	13 42	6	Water	X
					Water	
					Water	
					Water	
					Water	
					Water	
<b>Possible Hazard Identification</b>			<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I II III IV Other (specify)			Special Instructions/QC Requirements			
Empty Kit Relinquished by		Date	Time	Method of Shipment		
Relinquished by <i>Lydia Auner</i>		Date/Time <i>2/25/21 14 40</i>	Company TRC	Received by <i>Paula Buckley</i>		
Relinquished by		Date/Time	Company	Received by		
Relinquished by		Date/Time	Company	Received by		
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks <i>0.3</i>		

ORIGIN ID:RRLA (608) 826-3663  
LYDIA AUNER  
TRC  
708 HEARTLAND TRAIL, SUITE 3000

SHIP DATE: 23FEB21  
ACTWGT: 25.00 LB MAN  
CAD: 525155/CAFE3406

MADISON, WI 53717  
UNITED STATES US

TO

**TESTAMERICA CHICAGO**  
**2417 BOND STREET**

**UNIVERSITY PARK IL 604843101**

(708) 534-6200

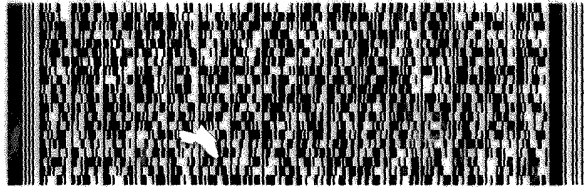
REF:

YHU1

PO:

DEPT:

RMA: 



**FedEx**  
Express



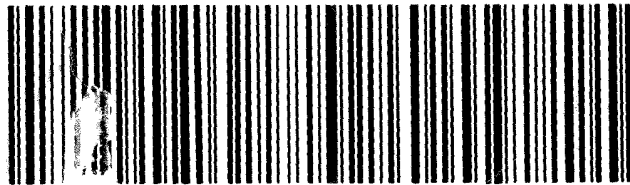
**FedEx**

TRK# 7125 4944 0403  
0221

**FRI - 26 FEB 10:30A**  
**PRIORITY OVERNIGHT**

**79 JOTA**

**60484**  
IL-US **ORD**



\*2641531 02/25 56DJ3/CB7A/FE4R



500-195330 Wayb

# Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-195330-1

**Login Number: 195330**

**List Source: Eurofins TestAmerica, Chicago**

**List Number: 1**

**Creator: Buckley, Paula M**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Login Sample Receipt Checklist

Client: TRC Environmental Corporation.

Job Number: 500-195330-1

**Login Number: 195330**

**List Number: 2**

**Creator: Cahill, Nicholas P**

**List Source: Eurofins TestAmerica, Sacramento**

**List Creation: 03/02/21 03:13 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1447732
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	12.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Isotope Dilution Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

## Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
500-195330-1	POTABLE WELL KITCHEN SINI	106		106	116	96	108	98	108
500-195330-1 - DL	POTABLE WELL KITCHEN SINI		96						
500-195330-2	WELL WATER PUMP #1 SOUTI	89	96	89	98	93	94	97	90
500-195330-3	WELL WATER PUMP #2 WEST	92	95	98	100	95	100	94	98
500-195330-4	FB-01	89	99	91	102	96	102	90	92
LCS 320-467046/2-A	Lab Control Sample	89	93	96	103	96	95	94	94
LCSD 320-467046/3-A	Lab Control Sample Dup	94	95	92	102	95	104	98	98
MB 320-467046/1-A	Method Blank	95	94	94	106	96	101	102	100

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	PFHxDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (10-150)	d3NMFOS (25-150)
500-195330-1	POTABLE WELL KITCHEN SINI	121	121	115	102	101	102	97	107
500-195330-1 - DL	POTABLE WELL KITCHEN SINI								
500-195330-2	WELL WATER PUMP #1 SOUTI	93	102	98	89	86	89	85	91
500-195330-3	WELL WATER PUMP #2 WEST	104	109	98	94	94	95	90	91
500-195330-4	FB-01	101	109	98	93	93	90	81	87
LCS 320-467046/2-A	Lab Control Sample	100	96	104	89	93	89	85	99
LCSD 320-467046/3-A	Lab Control Sample Dup	101	103	106	97	96	89	91	100
MB 320-467046/1-A	Method Blank	91	99	108	96	95	96	86	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	d5NEFOS (25-150)	dMeFOSA (10-150)	dEtFOSA (10-150)	NMFM (10-150)	NEFM (10-150)	M242FTS (25-150)	M262FTS (25-150)	M282FTS (25-150)
500-195330-1	POTABLE WELL KITCHEN SINI	108	80	71	102	97	104		
500-195330-1 - DL	POTABLE WELL KITCHEN SINI							105	102
500-195330-2	WELL WATER PUMP #1 SOUTI	83	61	63	89	88	90	87	92
500-195330-3	WELL WATER PUMP #2 WEST	92	68	62	79	86	110	96	113
500-195330-4	FB-01	94	73	73	92	91	103	91	102
LCS 320-467046/2-A	Lab Control Sample	92	66	65	86	89	100	85	96
LCSD 320-467046/3-A	Lab Control Sample Dup	94	77	71	90	89	96	90	103
MB 320-467046/1-A	Method Blank	93	71	76	91	88	95	96	102

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	HFPODA (25-150)	M102FTS (25-150)
500-195330-1	POTABLE WELL KITCHEN SINI	113	134
500-195330-1 - DL	POTABLE WELL KITCHEN SINI		
500-195330-2	WELL WATER PUMP #1 SOUTI	93	121
500-195330-3	WELL WATER PUMP #2 WEST	105	119
500-195330-4	FB-01	102	120
LCS 320-467046/2-A	Lab Control Sample	97	105
LCSD 320-467046/3-A	Lab Control Sample Dup	97	112
MB 320-467046/1-A	Method Blank	101	109

### Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA

# Isotope Dilution Summary

Client: TRC Environmental Corporation.  
Project/Site: WI Project 432124

Job ID: 500-195330-1

PFDA = 13C2 PFDA  
PFUnA = 13C2 PFUnA  
PFDoA = 13C2 PFDoA  
PFTDA = 13C2 PFTeDA  
PFHxDA = 13C2 PFHxDA  
C3PFBS = 13C3 PFBS  
PFHxS = 18O2 PFHxS  
PFOS = 13C4 PFOS  
PFOSA = 13C8 FOSA  
d3NMFOS = d3-NMeFOSAA  
d5NEFOS = d5-NEtFOSAA  
dMeFOSA = d-N-MeFOSA-M  
dEtFOSA = d-N-EtFOSA-M  
NMFm = d7-N-MeFOSE-M  
NEFM = d9-N-EtFOSE-M  
M242FTS = M2-4:2 FTS  
M262FTS = M2-6:2 FTS  
M282FTS = M2-8:2 FTS  
HFPODA = 13C3 HFPO-DA  
M102FTS = 13C2 10:2 FTS

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