ENSOLUM

2024 GROUNDWATER MONITORING SUMMARY

Property:

Empire Abo Gas Plant
Unit I N/E4, S/E4 Township 18 South, Range 27 East
Eddy County, New Mexico
NMOCD Abatement Permit AP-112

April 11, 2025

Prepared for:

AKA Energy Group, LLC
125 Mercado Street Suite 201
Durango, CO 81301

Prepared by:

Stuart Hyde
Senior Managing Geologist

Daniel R. Moir
Senior Managing Geologist

TABLE OF CONTENTS

ATTACHMENTS

Figures

Tables

Appendices

1.0 INTRODUCTION

Ensolum, LLC (Ensolum), on behalf of AKA Energy Group, LLC (AKA), presents this *2024 Annual Groundwater Monitoring Summary* outlining results and findings of groundwater sampling conducted at the Empire Abo Site (Site). The Site is regulated under the New Mexico Oil Conservation Division (NMOCD), a division of the Energy, Minerals, and Natural Resources Department (EMNRD) as abatement permit AP-112. The Site is located on private surface in Unit I (northeast quarter of the southeast quarter), Section 3, Township 18 South, Range 27 East, in Eddy County, New Mexico. Coordinates of the Site are 32.777056° N, 104.259083° W (Figure 1). Since its construction in 1961, the Site has historically undergone multiple commercial acquisitions along with extensive groundwater testing, remediation, and proposed plans. Most recently, the Empire Abo Gas Plant was sold by Frontier Field Services, LLC (an entity of AKA) in March 2019, though AKA remained liable for multiple environmental conditions at the Site. As such, AKA retained Ensolum to provide continuing groundwater monitoring services, as further described below. The current configuration of the Site is shown on Figure 2.

2.0 SITE BACKGROUND

The Site was constructed in 1961 by Amoco Production Company and was operated as a natural gas processing plant. It was converted into a natural gas compressor and booster station in March 2019 upon being sold to Durango Midstream Services LLC, by Frontier Field Services, LLC (Frontier, an entity of AKA). AKA retained multiple environmental liabilities for the Site, including soil, groundwater, and phase separate hydrocarbons (PSH, also known as light non-aqueous phase liquids or LNAPL) monitoring and remediation, as well as for residual polychlorinated biphenyls (PCBs) found in soil and concrete at the facility.

Prior to this sale and conversion to a compression facility, Frontier submitted a *Groundwater Abatement Plan* (Larson & Associates, 2013) to the NMOCD to address impacted groundwater. According to the *2021 Annual Groundwater Monitoring and Remediation Report* (Larson & Associates, 2022), this abatement plan was subject to the New Mexico Office of the State Engineer's (NMOSE) approval of Frontier's request to "extract groundwater for remediation and disposal contingent upon permitting, installation, and start-up of a disposal (saltwater disposal (SWD) or acid gas injection (AGI)) well permitted through NMOCD". Approved on March 8, 2013, the NMOSE concluded groundwater remediation activities would not significantly impact the nearby Pecos River, and there are no existing water wells within 2 miles of the Site.

Per the *2021 Annual Groundwater Monitoring and Remediation Report*, PSH was identified at the Site in the form of natural gas condensate on groundwater along with dissolved benzene in groundwater. Both resulted from subsurface piping historically releasing natural gas condensate and were found to be present in five areas of the Site: southeast, southwest, east-central, west-central, and northeast. Per the same report, groundwater at the Site contained both elevated sulfate and total dissolved solids (TDS) concentrations exceeding the New Mexico Water Quality Control Commission (NMWQCC) domestic water quality standards, likely a result of naturally occurring gypsum dissolution in the Tansill Formation.

Per an email exchange with NMOCD in October 2017, Larson (representing AKA) proposed several amendments to the abatement plan including reducing the number of wells sampled during semi-annual groundwater monitoring events, the addition of several different wells to be sampled starting at the next semi-annual event (October 2017), conducting soil vapor extraction (SVE) and air sparge (AS) pilot tests, and installing an AS pilot well. In an effort to remediate PSH in soil and groundwater, Frontier selected SVE techniques, as opposed to pump and dispose (recovery wells), in August of 2018. This election of SVE was purportedly included in Frontier's *Groundwater Abatement Plan Amendment,* submitted to NMOCD on March 12, 2018. NMOCD approved these requests upon the condition and reinforcement that the reduction in semi-annual groundwater well sampling was only a reduction in wells to be monitored and not approval to abandon those wells. Additionally, the NMOCD approved AKA's request to analyze groundwater samples for benzene, toluene, ethylbenzene, and xylenes (BTEX) during each semi-annual monitoring event and once annually for cations (calcium, magnesium, potassium, and sodium), anions (alkalinity, chloride, and sulfate) and TDS.

2.1 SITE REMEDIATION ACTIVITIES

Between August 2018 and August 2019, AKA performed groundwater remediation activities to address the presence of PSH and dissolved-phase groundwater contaminants through SVE, AS, and thermal destruction (of impacted vapors) methods. Beginning in August 2019 and after noticeable reductions in contaminant removal, the system was replaced with a mobile, truck-mounted dual-phase SVE and enhanced fluid recovery system. The dual-phase system was operated between August 2019 and January 2022 during 14 individual events of various lengths.

Between 2018 and 2022, the combined vapor recovery of the two systems equaled 113.9 tons of hydrocarbon vapors, 78.1 barrels of hydrocarbon liquid, and 548.21 barrels of water from perched groundwater.

Additionally on November 6, 2020, AKA submitted the report *Empire Abo Gas Plant (AP-112), Soil Remediation Report* (Larson & Associates, 2020) to the NMOCD, which detailed soil remediation work performed between February and April 2020. The remediation was performed according to New Mexico Administrative Code (NMAC) 19.15.29 standards and resulted in removal of 8,108.65 cubic yards (ton equivalent) of soil and rock impacted by hydrocarbons from nine areas of the Site. The NMOCD responded on December 30, 2020, with closure approval of four areas, having met the NMOCD Table I Closure Criteria listed in 19.15.29 NMAC with no further remediation required.

In the *2021 Empire Abo Gas Plant (AP-112) Groundwater Monitoring and Remediation Report* (Larson & Associates, 2022), AKA proposed approval from the NMOCD for the following:

- Discontinue SVE remediation of PSH citing technical infeasibility to recover and remove remaining PSH;
- Allow natural attenuation of the dissolved benzene in groundwater based on previous reductions in concentration, as well as the argument that no existing water wells were located within 2 miles of the Site;
- Discontinue groundwater monitoring at the Site; and
- "Conditional closure and release from future liability since AKA no longer owns or operates the Facility".

2.2 TECHNICAL INFEASIBILITY APPROACH

Based on discussions with the NMOCD, AKA subsequently submitted the *Empire Abo Gas Plant (AP-112) Remediation and Technical Infeasibility Report* (Larson & Associates, 2022) to the NMOCD and stated the following conclusions and recommendations :

1. "AKA believes that the fate and transport model demonstrates that dissolved hydrocarbons (benzene) in groundwater will attenuate and reach [Water Quality Control Commission] WQCC human health standard (0.005 milligrams per liter, or mg/L) approximately 16,000 feet down gradient (southeast) from well MW-24 or about 1,345.45 feet up gradient (northwest) from the water well and is supported by removal of the hydrocarbon mass from soil excavation and SVE remediation.
2. AKA believes time (13.4152 to 58.29 years) and expense ($31,795,682.49) adequately demonstrates technical infeasibility to recover residual PSH primarily as vapors from the capillary fringe.
3. AKA requests approval to discontinue groundwater monitoring at the Facility.
4. AKA requests conditional closure and release from future liability since it no longer owns or operates the Facility."

In an electronic correspondence dated January 5, 2023, the NMOCD denied this closure request and technical infeasibility demonstration. The NMOCD suggested the "pursuit of closure via technical infeasibility per Paragraph 3 of Subsection E of 19.15.30.9 or by filing a petition seeking approval of alternative abatement standards under Subsection F of 19.15.30.9 NMAC. Under the latter, AKA Energy must state the alternative standards it seeks for wells containing PSH." The NMOCD also clarified while the technical infeasibility is still denied, AKA Energy "must specifically include a transport, fate and risk assessment" within their petition for alternative abatement and "must also identify the abatement standard from which petitioner wishes to vary, identify the water

contaminant for which the petitioner proposes the alternative standard, and state the alternative standard being proposed and all the standards listed in Subsection F of 19.15.30.9 NMAC."

2.3 PETITION FOR ALTERNATIVE ABATEMENT STANDARDS

In response to this denial, Larson submitted an *Alternate Abatement Standard Petition (AP-112)* (2023). Per the petition, it "seeks an alternate abatement standard (c) under Subsection F of 19.15.30.9 NMAC" summarizing AKA's risk assessment, Site-specific risk-based alternative concentrations (SSBRAC) of chemicals of concern (COC), and a fate and transport model, all of which were performed at the Site in February 2023. Groundwater samples were collected from wells known to contain PSH and were analyzed for the COCs benzene, ethylbenzene, and 1, 3, 5-trimethylbenzene. The fate and transport modeling was performed to demonstrate the nearest downgradient water well, located at Bogle Farms, would not be impacted by dissolved hydrocarbons. Per the report, AKA recommended the following SSBRAC resulting from both the risk-assessment and fate and transport modeling:

1. For on-Site shallow groundwater, the SSRBAC for benzene should be set at 0.693 mg/L and 1.53 mg/L for ethylbenzene.
2. For off-Site shallow groundwater, the SSRBAC for benzene should be set at 149 mg/L and 7.8 mg/L for ethylbenzene.
3. For evaluation of shallow groundwater associated with the PSH wells, the SSRBAC for the Facility should be set at 149 mg/L benzene, 7.8 mg/L ethylbenzene, and 796 mg/L 1,3,5-trimethylbenzene.
4. Since on-Site and off-Site groundwater are generally below these recommended SSRBAC and based on the conclusions and recommendations of the previously submitted *Remediation and Technical Infeasibility Report* (Larson & Associates, 2022), use of the SVE system for shallow groundwater remediation should be discontinued.
5. Since on-Site and off-Site groundwater concentrations are at or below the SSRBACs calculated for the most likely completed exposure scenarios, AKA requests approval of the recommended SSRBAC for on-Site and off-Site groundwater for use in evaluation of shallow groundwater remediation and groundwater monitoring and commence plugging monitoring wells on and off site.

On September 5, 2023, the NMOCD responded to the *Alternate Abatement Standard Petition* stating AKA Energy has "not provided tangible evidence toward an approval for an alternate abatement standard for the following reasons:

1. 19.15.30.9 (F) (a): either compliance with the abatement standards is not feasible, by the maximum use of technology within the responsible person's economic capacity; or there is no reasonable relationship between the economic and social costs and benefits, including attainment of the standards set forth in 19.15.30.9 NMAC to be obtained.

2. 19.15.30.9 (F) (b): the proposed alternative standards are technically achievable and cost-benefit justifiable.

3. 19.15.30.9 (F) (c): compliance with the proposed alternative abatement standard will not create a present or future hazard to public health or undue damage to property."

AKA submitted an *Addendum to Alternate Abatement Standard Petition (AP-112)* in response to and addressing these concerns on October 15, 2023. The following conclusions and recommendations made by Larson for each NMOCD comment are summarized below:

1. **19.15.30.9 (F) (a):** SVE technology had reduced PSH to the maximum extent possible, and decreased benzene below the human health standard in all but three monitoring wells. Shallow (perched) groundwater is not recoverable for domestic or agricultural use due to the thickness of saturation decreasing to the East, South, and West of the Site. To the north, where the greatest saturated thickness lies, TDS concentrations exceed 10,000 mg/L and is not "subject to regulation by the State of New Mexico under NMAC 20.6.2.3103." Also in the area North of the Site, shallow groundwater sulfate concentrations exceed 4,500 mg/L, therefore is not suitable for livestock use due to the risk of sulfur-associated polio. Sulfate concentrations in shallow groundwater elsewhere exceed 1,500 mg/L (except in MW-08), therefore is not suitable for livestock use due to risk of diarrhea as well as sulfur intake and reduction of copper availability in cattle. Finally, there is "no economic or social benefit to recover the residual PSH ($31,472,517.28) for shallow (perched) groundwater that covers an area of about 142.34 acres." In conclusion, "AKA Energy does not believe that the shallow (perched) groundwater requires any further protection, or additional abatement. AKA Energy requests NMOCD to approve closure under natural attenuation to leave approximately 146,896.23 gallons or about 3,486.52 bbl unrecovered in the capillary beneath the Facility, as with 2RP-022."

2. **19.15.30.9 (F) (b):** Various viable methods were used by previous owners and operators in an attempt to reduce PSH thickness and BTEX concentrations, however proved "ineffective and inefficient." Larson & Associates determined sulfate-reducing bacteria (SRB) are metabolizing dissolved PSH hydrocarbons. Shallow (perched) groundwater has been demonstrated to be "vertically discontinuous with no groundwater encountered below the perched groundwater for 200 feet and terminates or pinches out laterally between about 550 feet (south) and 1,500 feet (north)" from the Site. In conclusion, NMOCD is requested to approve SRB as a viable method of natural attenuation and microbial degradation to abate PSH thickness and BTEX concentrations at the Site.

3. **19.15.30.9 (F) (c):** To demonstrate that compliance with the proposed alternative abatement standard will not create a present or future hazard to public health or undue damage to property, Larson outlines the following: shallow (perched) groundwater "pinches out approximately 1,500 feet north of the Facility, about 660 feet west of the Facility, about 1,000 feet east of the Facility and about 550 feet south of the Facility. The saturated thickness diminishes to 0 feet (south) to 0.41 feet (north), 0.35 feet (west), and thins to less than 5 to 10 feet east of the Facility." This diminishing thickness is what prevents the shallow (perched) groundwater from being used as a domestic or livestock water resource. Since 2006 the shallow (perched) groundwater has been monitored for [Resource Conservation and Recovery Act] RCRA metals (arsenic, barium, cadmium, lead, mercury, selenium, silver), sulfate, chloride, and TDS. Chromium (0.05 mg/L) and arsenic (0.1 mg/L) are reported at concentrations above human health standards. Background chromium was reported at 0.076 mg/L. "The metal constituents (arsenic and chromium) are not pervasive throughout the shallow (perched) groundwater and do not pose a risk to the State of New Mexico water resources, or the environment. On May 3, 2019, NMOCD (Bradford Billings communication) approved AKA Energy's request to delete metals from groundwater monitoring at the Facility." According to NMAC 20.6.2.3101 groundwater TDS concentrations exceeding 10,000 mg/L are not subject to regulation by the State of New Mexico. TDS concentrations at Empire Abo exceed 10,000 mg/L over an area of about 25 acres. Sulfate concentrations in shallow (perched) groundwater also exceed domestic water quality standards of 600 mg/L. Chloride concentrations exceed domestic water standards of 250 mg/L in eight monitoring wells ranging from 279 mg/L to 9,950 mg/L. SRB are present in population levels ranging from 569,000 to 3,300,000, which are attenuating and naturally decomposing BTEX. Lastly, "Contradicting Paragraph 3 of Subsection A of 20.6.2.3103 NMAC, NMOCD granted

closure approval under natural attenuation for 2RP-022, with 0.27 feet (May 2016) and 0.69 feet (December 2016) of PSH (condensate) measured and reported on groundwater in shallow monitoring well MW-126." In conclusion, "AKA Energy requests NMOCD to approve discontinuing groundwater abatement and allow closure under natural attenuation for the Facility, as approved for 2RP-022."

The NMOCD responded to the *Addendum to Alternate Abatement Standard Petition (AP-112)* in a letter dated January 11, 2024, and stated that AKA again had not provided additional tangible evidence toward an approval for an alternative abatement standard. The NMOCD stated the agency defines groundwater as "interstitial water that occurs in saturated earth material and can enter a well in sufficient amounts to be used as a water supply" and therefore retains its jurisdiction over protection of groundwater at the Site. Additionally, they stated AKA did not provide background sampling data to support their arguments and conclusions regarding groundwater quality located north of the Site.

The NMOCD also responded that "AKA Energy states that "past remediation techniques, by current and past owners, have been utilized without success due to scaling: pump skimmers, groundwater depression, air stripper, hydrophobic absorbent socks. The SVE System has been the most successful of all, except in 3 wells." However, no data has been provided to OCD to evaluate these technologies nor has a cost comparison been evaluated in the amended report".

Lastly, the NMOCD disagreed with AKA's assertion that other abatement sites had achieved closure with the presence of PSH remaining. The NMOCD stated that a letter of conditional approval AKA was referring to allowed the operator to discontinue active remediation, but the operator had to continue groundwater monitoring. Furthermore, the NMOCD stated that "no closure had been approved…and the site remains in active abatement status utilizing a Monitored Natural Attenuation (MNA) remediation method".

In conclusion, the NMOCD stated that "after review of the Addendum, the OCD has determined AKA Energy's response to be insufficient in providing enough additional evidence to determination that monitored natural attenuation by sulfur reducing bacteria (SRB) will sufficiently and effectively reduce PSH to below measurable amounts and BTEX below NMWQCC standards in perched groundwater beneath and surrounding the facility. In addition, AKA Energy's request to discontinue groundwater abatement and allow for unmonitored natural attenuation is denied".

3.0 SITE GEOLOGICAL AND HYDROGEOLOGICAL SETTING

The geologic setting, known aquifers, and regional groundwater use were introduced in the *Empire Abo Gas Plant, Eddy County, New Mexico, Groundwater Study, Volume 1* (Amoco Production Company, 1992). They were further documented in the *2013 Annual Groundwater Monitoring Report* (Larson & Associates, 2014) and are described below.

The Site surface elevation is approximately 3,550 feet above mean sea level (AMSL) and generally slopes to the southeast. The Pecos River is the nearest surface-water body and is 3.4 miles east-northeast of the Site. An unnamed dry intermittent wash is located 1,300 feet south of the Site and flows to Scoggins Draw. The nearby dry washes are losing streams and based on surface elevation and depth to groundwater, there is no groundwater-to-surface water interactions anticipated from the Site.

Based on reports by Larson & Associates (2014),

> *"The lowest encountered formation at the Facility is the Permian-age Yates formation of the Artesia Group. The Yates formation is named for the Yates oilfield in Pecos County, Texas, and has wide aerial extent in both surface exposures and subsurface wells samples. The Yates formation is approximately 250 to 350 feet thick and is documented as siltstone north of Roswell, New Mexico, carbonate and evaporites west and northwest of Carlsbad, and as gypsum north of Lake McMillan to near Roswell (the vicinity of the Facility). At the Facility it appears as red mudstone/shale/clay reported at the base of monitor well borings is the top of the Yates formation.*
>
> *Above the Yates formation is the Tansill formation of the Artesia Group. The type section of the Tansill formation is found along US Highway 285 about 2 miles north of Carlsbad and is reported to be predominantly dolomite. The reef shelf margin is about 300 – 325 feet thick (Kelley, 1971), however, this facies gives way to evaporite facies about 10 miles north of the type section. In the vicinity of the Facility the Tansill Formation is part of an irregularly shaped north-trending belt that is generally less than a mile wide and comprised of anhydrite and salt about 100 feet thick. At the Facility the anhydrite, gypsum and salts of the Tansill formation appear to be the bulk of the strata encountered in monitor wells and borings, and is the aquifer of concern."*

Additionally, based on the results presented in *Empire Abo Gas Plant, Eddy County, New Mexico, Groundwater Study, Volume 2* (Amoco Production Company, 1993), the "subsurface consists of highly weather, multi-colored clay, sand and rock combinations…There is little stratigraphic continuity between wells throughout the entire plant area and therefore no definite correlations can be made". Additionally, the report states that "several shallow perched aquicludes are found throughout the plant at various depths. No continuous units were found. Monitor wells were drilled to depths up to 200 feet and no major or minor aquifers were encountered…Of the 26 wells drilled, 23 encountered groundwater at various depths, all of which are perched aquicludes."

4.0 2024 ANNUAL GROUNDWATER SAMPLING

Site groundwater monitoring wells were gauged and sampled by Ensolum personnel in the fall of 2024. Monitoring well locations are shown on Figure 3. Depth-to-groundwater and depth-to-PSH were measured in all viable on-Site monitoring wells using an oil/water interface probe on September 30, 2024. The interface probe is decontaminated with Alconox® soap and rinsed with distilled water prior to each measurement. Of note, 13 monitoring wells, MW-13, MW-14, MW-16, EB-01, EB-03, EB-04, EB-05, EB07, EB-08, P-01, P-03, P-04, and P-05, could not be located during the 2024 effort, as noted in Table 1. All other wells were located and gauged. Measurements and calculated groundwater elevations (AMSL) for the 2024 and historical sampling events are presented in Table 1. Depth to PSH was also recorded when present and a correction factor of 0.7 was applied to the calculated groundwater elevation to account for the depression of the water column caused by the presence of overlying PSH.

Inferred groundwater flow direction has historically been interpreted based on the assumption that groundwater at the Site is interconnected, resulting in a radial pattern of flow from the center of the Site and moving in all directions, caused by mounding of groundwater. To be consistent with previously submitted reports, a groundwater potentiometric surface map, including the inferred groundwater flow directions for the 2024 event, is depicted on Figure 4 using similar assumptions as previous reports; however, the *2021 Empire Abo Gas Plant (AP-112) Groundwater Monitoring and Remediation Report* (Larson & Associates, 2022) states that the "groundwater mounding is due in part to water perched on shallow discontinuous clay and silty-clay units beneath the central and eastern areas of the Facility". As such, there may be several hydrogeologically disconnected groundwater bearings zones beneath the Site, leading to complex groundwater flow and movement in the subsurface.

4.1 GROUNDWATER SAMPLING

Based on prior NMOCD approvals, wells MW-02, MW-03, MW-08, MW-12, MW-15, MW-17, MW-22, MW-23, MW-24, EB-02, P-02, and P-05 were purged and sampled for laboratory analysis on October 1, 2024. Wells MW-20 and MW-24 did not contain sufficient volumes of groundwater and were not sampled during this event. Additionally, wells EB-07 and P-05 could not be located and were also not sampled. Purging and sampling was conducted in wells that did not contain measurable volumes of PSH using low-flow methods and a bladder pump set within the middle of the well screen. Ensolum monitored groundwater quality parameters during purging and allowed for groundwater equilibration prior to sample collection. Water quality parameters included temperature, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and electrical conductivity (EC). Groundwater sampling forms are attached as Appendix A. Purge water was collected off-Site disposal.

The October 2024 samples were submitted to Eurofins Environment Testing (Eurofins) located in Midland, Texas for the following analyses:

- BTEX by United States Environmental Protection Agency (EPA) Method 8260D;
- Anion chloride, fluoride, and sulfate by EPA Method 300.0;
- Inorganics and General Chemistry Parameters:
  - Dissolved metals sodium, potassium, silicon oxide, calcium, and magnesium by EPA Method 200.7;
  - Alkalinity by Standard Method (SM) 2320B;
  - Specific conductance by SM 2510B;
  - TDS by SM 2540C; and
  - pH and temperature by SM 4500 H+ B.

4.2 PHASE SEPARATED HYDROCARBONS RESULTS AND FINDINGS

Thirteen Site wells continued to contain measurable volumes of PSH during the 2024 sampling event and included MW-02-09, MW-02-12, MW-02-13, MW-02-14, MW-02-15, MW-02-16, MW-03-02, MW-03-03, MW-06, MW-09, MW-10, MW-21, and AS-1. During the 2024 sampling, PSH ranged in thickness from 0.01 feet in well MW-02-13 to 5.26 feet in well MW-02-12. Based on the remediation efforts conducted at the Site, noticeable reductions of PSH were noted between 2018 and 2024.

Based on the 2024 sampling and gauging, as well as historical gauging results, PSH has been reduced to below detection in the following 18 wells:

- MW-02-06, MW-02-10, MW-02-11, MW-03, MW-03-01, MW-03-04, MW-04, MW-11, MW-13, MW-19, MW-20, MW-23, EB-02, EB-03, EB-04, EB-05, EB-06, and P-01.

Additionally, PSH thickness has decreased over time in the following five wells:

- MW-02-09, MW-02-13, MW-06, MW-10, and AS-1.

However, since remediation efforts ceased in 2022, PSH has rebounded and increased in thickness in the following eight wells:

- MW-02-12, MW-02-14, MW-02-15, MW-02-16, MW-03-02, MW-03-03, MW-09, and MW-21.

Additionally, although they could not be located during the 2024 sampling event, wells MW-14 and EB-08 contained measurable volumes of PSH during the January 2022 sampling event. A summary of PSH thickness in select wells is summarized in Table 2 and on Figure 5. Additionally, graphs included in Appendix B depict PSH thickness over time.

4.3 BTEX RESULTS AND FINDINGS

Based on the 2024 sampling results, wells MW-03 and MW-22 contained benzene concentrations of 0.511 mg/L and 0.826 mg/L, respectively, exceeding the applicable NMWQCC standard of 0.010 mg/L (the standard in place at the time of work plan approval by the NMOCD). Benzene was either not detected above the laboratory reporting limits or the NMWQCC standard in the other sampled wells. Additionally, toluene, ethylbenzene, and xylenes were either not detected above the laboratory reporting limits or the applicable NMWQCC standards in any of the sampled wells during the 2024 sampling event.

BTEX analytical results are summarized in Table 3 and on Figure 6. Complete laboratory analytical reports are attached in Appendix C.

4.4 INORGANICS AND GENERAL CHEMISTRY PARAMETERS RESULTS AND FINDINGS

Of the inorganics and general chemistry parameters sampled in 2024, concentrations of chloride, sulfate, and TDS were the only constituents with exceedances of the NMWQCC standards at the Site. Chloride concentrations exceeding the NMWQCC standard have been consistently present in wells MW-08, MW-15, and MW-18 based on historical results. Sulfate and TDS concentrations have also been consistently present above the NMWQCC standards in all wells at the Site. With the exception of well MW-02, inorganics and general chemistry parameters have been stable over time and the 2024 sampling results are consistent with past results. Well MW-02 had a significant increase of magnesium, sulfate, and TDS between sampling events conducted in April and December of 2019 and have stayed elevated above historical results through 2024.

Metals and general chemistry analytical results are summarized in Table 4, with chloride, sulfate and TDS concentrations presented on Figure 7. Complete laboratory analytical reports are attached in Appendix C.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the information presented in this report, the following conclusions and recommendations are presented for the Site:

- Inferred groundwater flow direction has historically been interpreted based on the assumption that groundwater at the Site is interconnected, resulting in a radial pattern of flow from the center of the Site and moving in all directions caused by mounding of groundwater; however, based on previous interpretations of the Site's subsurface lithology and hydrogeology, groundwater at the Site is likely present in several hydrogeologically disconnected groundwater bearings zones. To better assess groundwater flow direction and potential contaminant migration, AKA plans to reassess the subsurface lithology to better evaluate potential remedial options.
- The consistent concentrations of sulfate and TDS across all wells at the Site (including unimpacted and upgradient/background wells) indicate the presence of these constituents are likely due to naturally occurring concentrations from the dissolution of the gypsum bedrock formation at the Site. Although there has been an increase of sulfate and TDS in MW-02, this could be due to additional groundwater infiltration through the formation in this area. Well MW-02 has not contained exceedances of BTEX constituents, and no other constituents have increased within this well, indicating this is unlikely to be related to a new or different release at the Site. As such, we are requesting these constituents are no longer sampled for laboratory analysis during future monitoring events.
- Calcium, magnesium, potassium, sodium, and alkalinity concentrations have been consistent over time. Additionally, the NMWQCC does not have cleanup standards for these constituents. AKA and Ensolum do not believe the continuation of sampling for these parameters will offer significant benefits to the project or Site and we are requesting these constituents are no longer sampled for laboratory analysis during future monitoring events.
- Toluene, ethylbenzene, and xylenes have not been detected over the NMWQCC standards in any wells since at least 2013. As such, we are requesting these constituents are no longer sampled for laboratory analysis during future monitoring events.
- Based on present and historical concentrations of benzene and chloride, AKA will continue to monitor the 15 wells at the Site for these two constituents for 2025. All viable Site wells will also continue to be gauged for the presence of PSH in 2025. Gauging and sampling will be performed on a semi-annual basis.
- Alternative remediation techniques will be evaluated in 2025 to address residual concentrations of benzene and the presence of PSH.

6.0 REFERENCES

Amoco Production Company. (1992). *Empire Abo Gas Plant, Eddy County, New Mexico, Groundwater Study, Volume 1.* Houston.

Amoco Production Company. (1993). *Empire Abo Gas Plant, Eddy County, New Mexico, Groundwater Study, Volume 2.* Houston.

Larson & Associates. (2013). *Groundwater Abatement Plan.*

Larson & Associates. (2014). *2013 Annual Groundwater Monitoring Report.*

Larson & Associates. (2020). *Empire Abo Gas Plant (AP-112), Soil Remediation Report.*

Larson & Associates. (2022). *2021 Annual Groundwater Monitoring Report.*

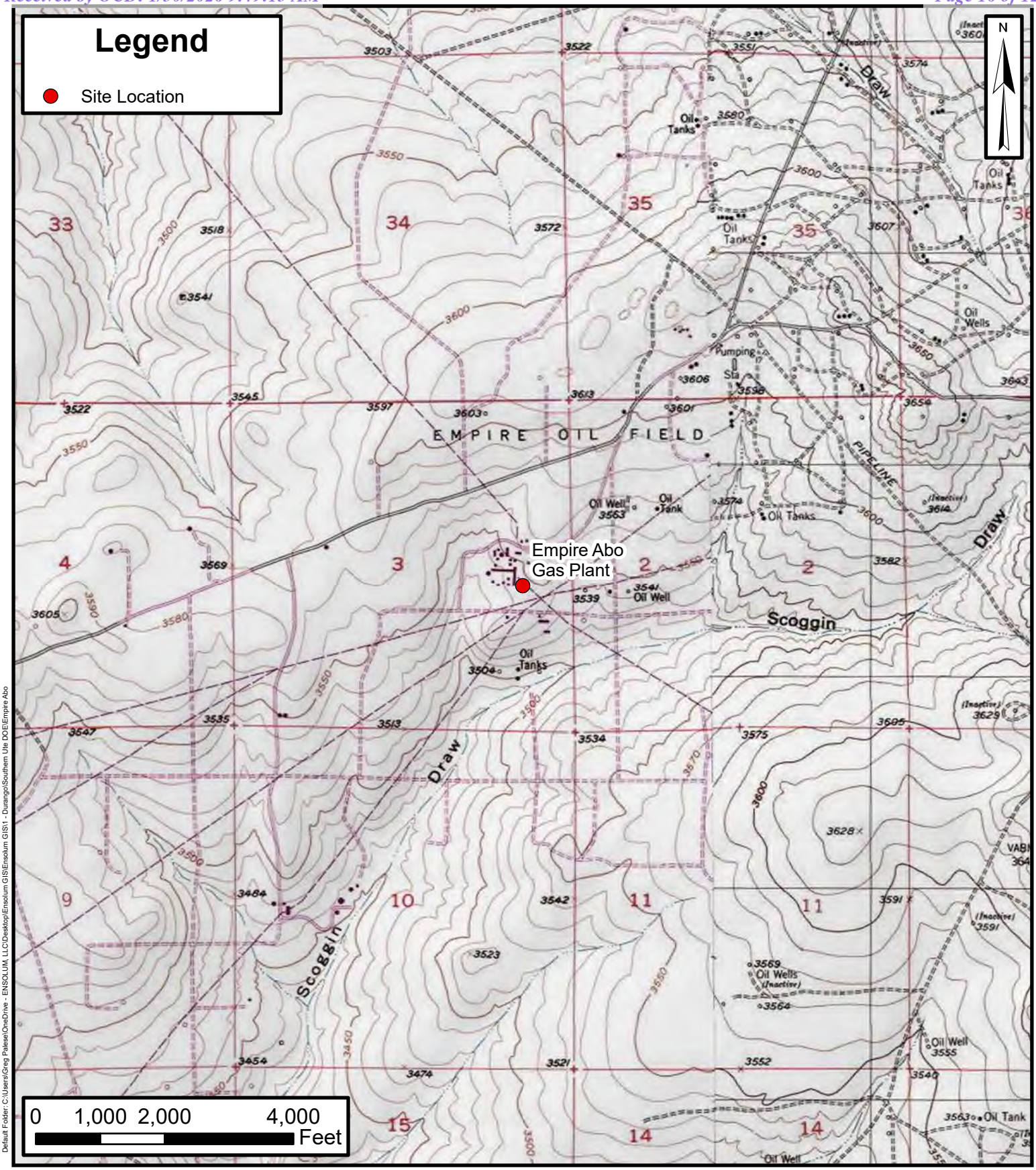
Larson & Associates. (2022). *2021 Empire Abo Gas Plant (AP-112) Groundwater Monitoring and Remediation Report.*

Larson & Associates. (2022). *Empire Abo Gas Plant (AP-112), Remediation and Technical Infeasibility Report.*

Larson & Associates. (2023). *Alternate Abatement Standard Petition (AP-112).*

ENSOLUM

FIGURES



Default Folder: C:\Users\Greg Pates\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS\1 - Durango\Southern Ute DOE\Empire Abo

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

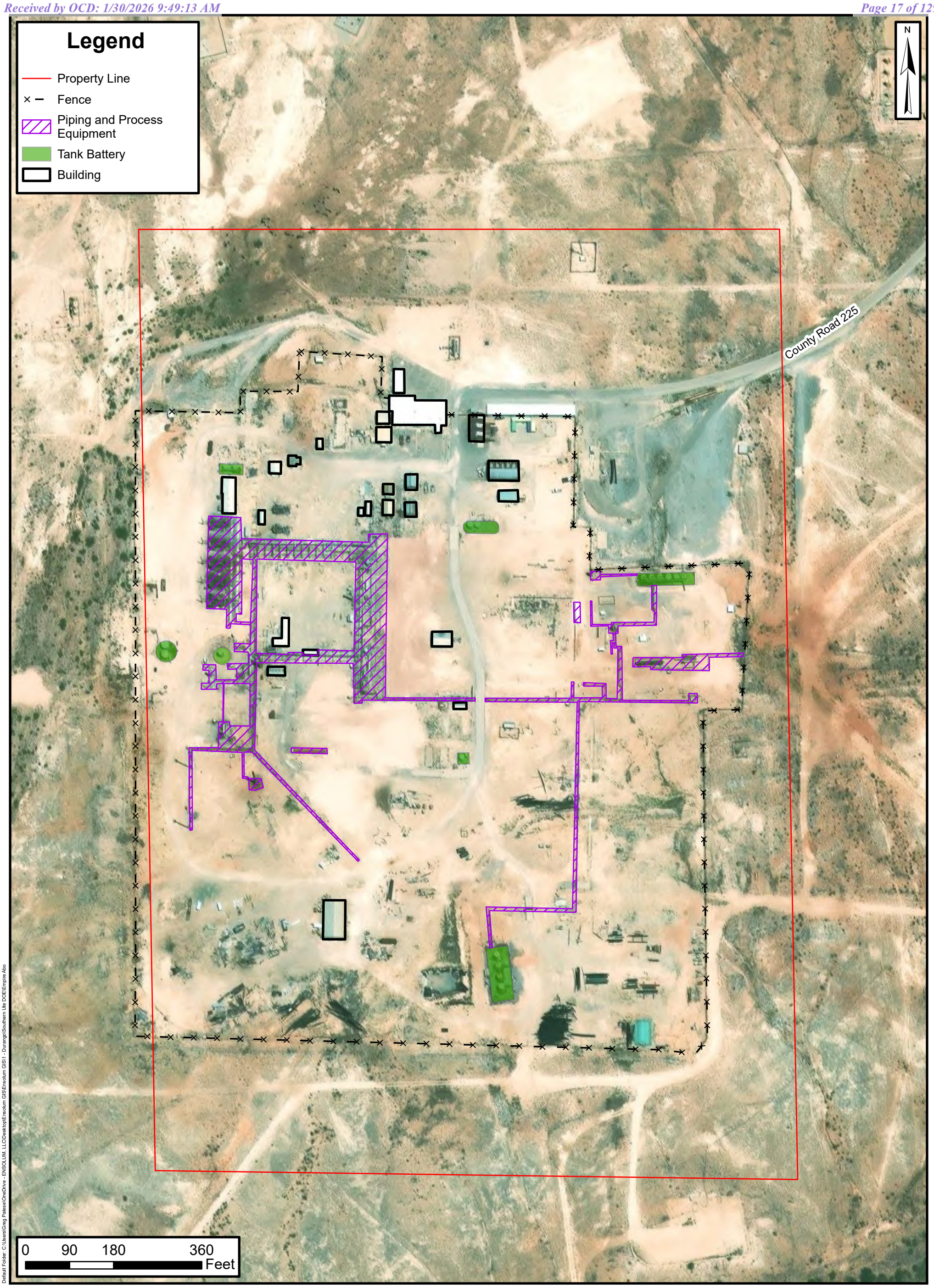
Site Location Map

Empire Abo Gas Plant
AKA Energy Group, LLC

32.77595, -104.26035
Eddy County, New Mexico

FIGURE
1

Sources: Environmental Systems Research Institute (ESRI), National Geographic Society, i-Cubed



Default Folder: C:\Users\Greg Pateset\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS\1 - Durango\Southern Ute DOE\Empire Abo

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Map

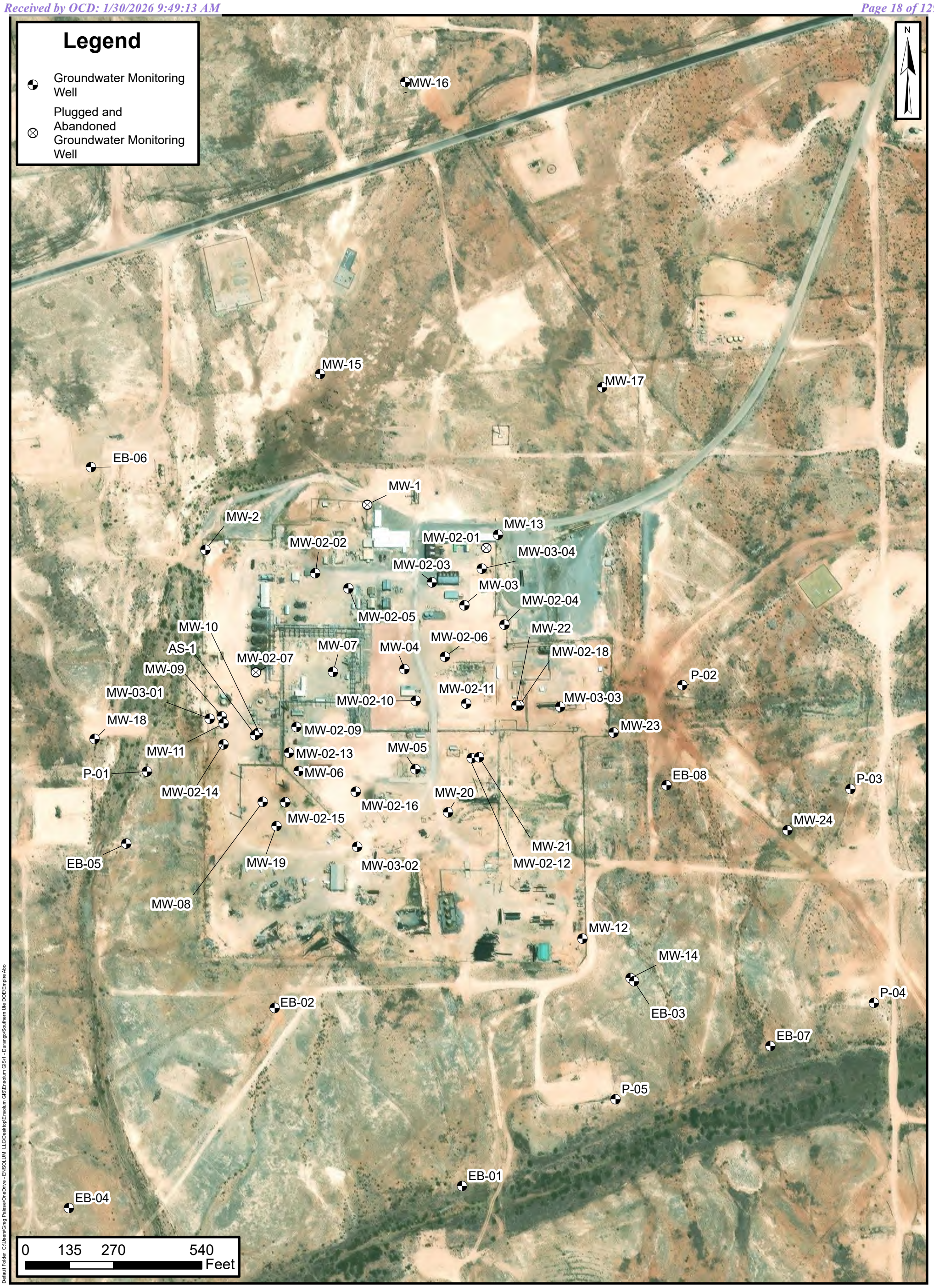
Empire Abo Gas Plant
AKA Energy Group, LLC

32.77595, -104.26035
Eddy County, New Mexico

FIGURE

2

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



Default Folder: C:\Users\Greg Pates\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS\1 - Durango\Southern Ute DOE\Empire Abo

Well Location Map

Empire Abo Gas Plant
AKA Energy Group, LLC

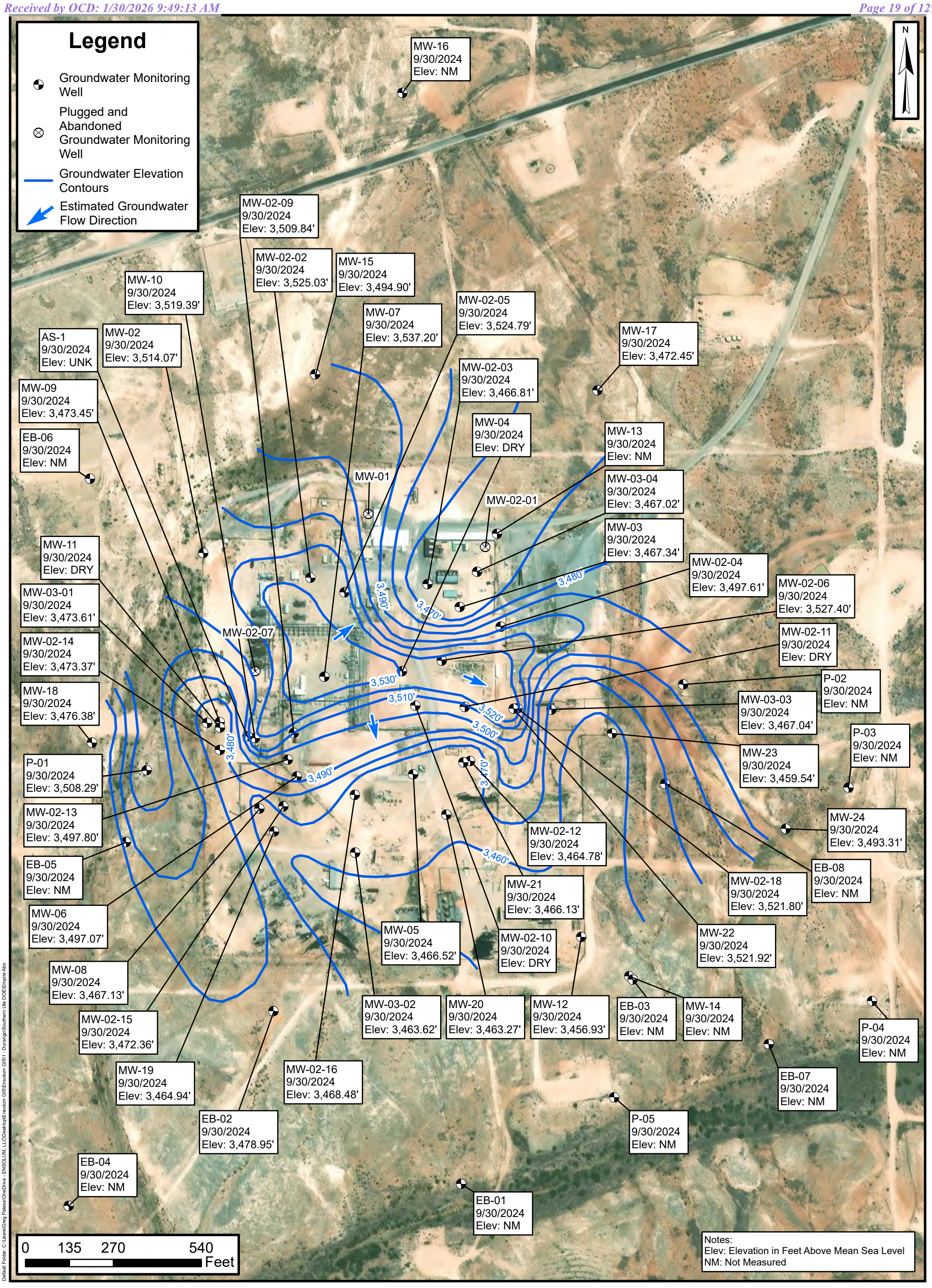
32.77595, -104.26035
Eddy County, New Mexico

FIGURE

3

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Groundwater Potentiometric Surface Map September 2024

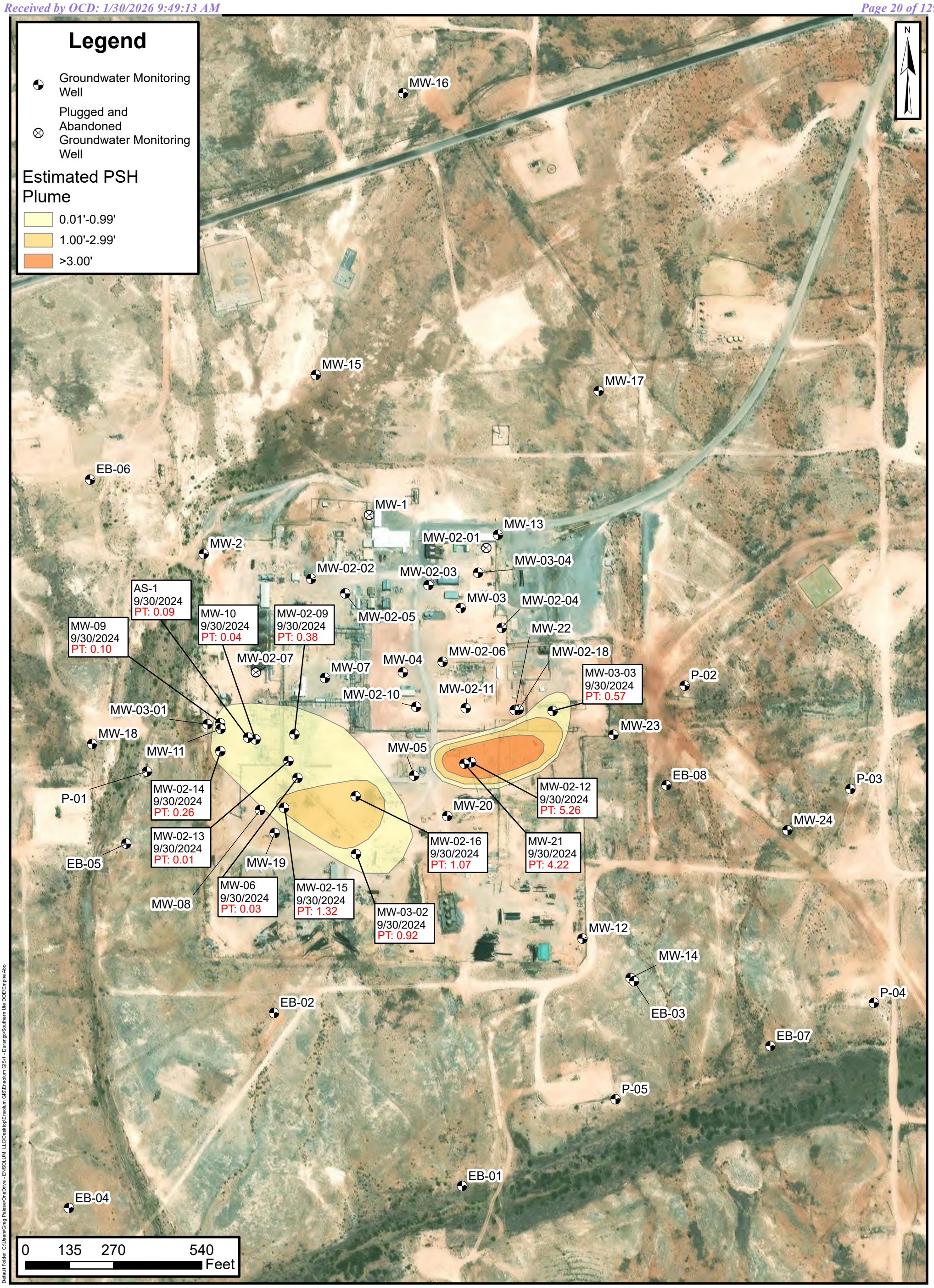
Empire Abo Gas Plant
AKA Energy Group, LLC

32.77595, -104.26035
Eddy County, New Mexico

FIGURE

4

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



Default Folder: C:\Users\Greg Pates\OneDrive - ENSOLUM, LLC\Desktop\Ensolum GIS\Ensolum GIS\1 - Durango\Southern Ute DOE\Empire Abo

Phase Separated Hydrocarbon Thickness Map September 2024

Empire Abo Gas Plant
AKA Energy Group, LLC

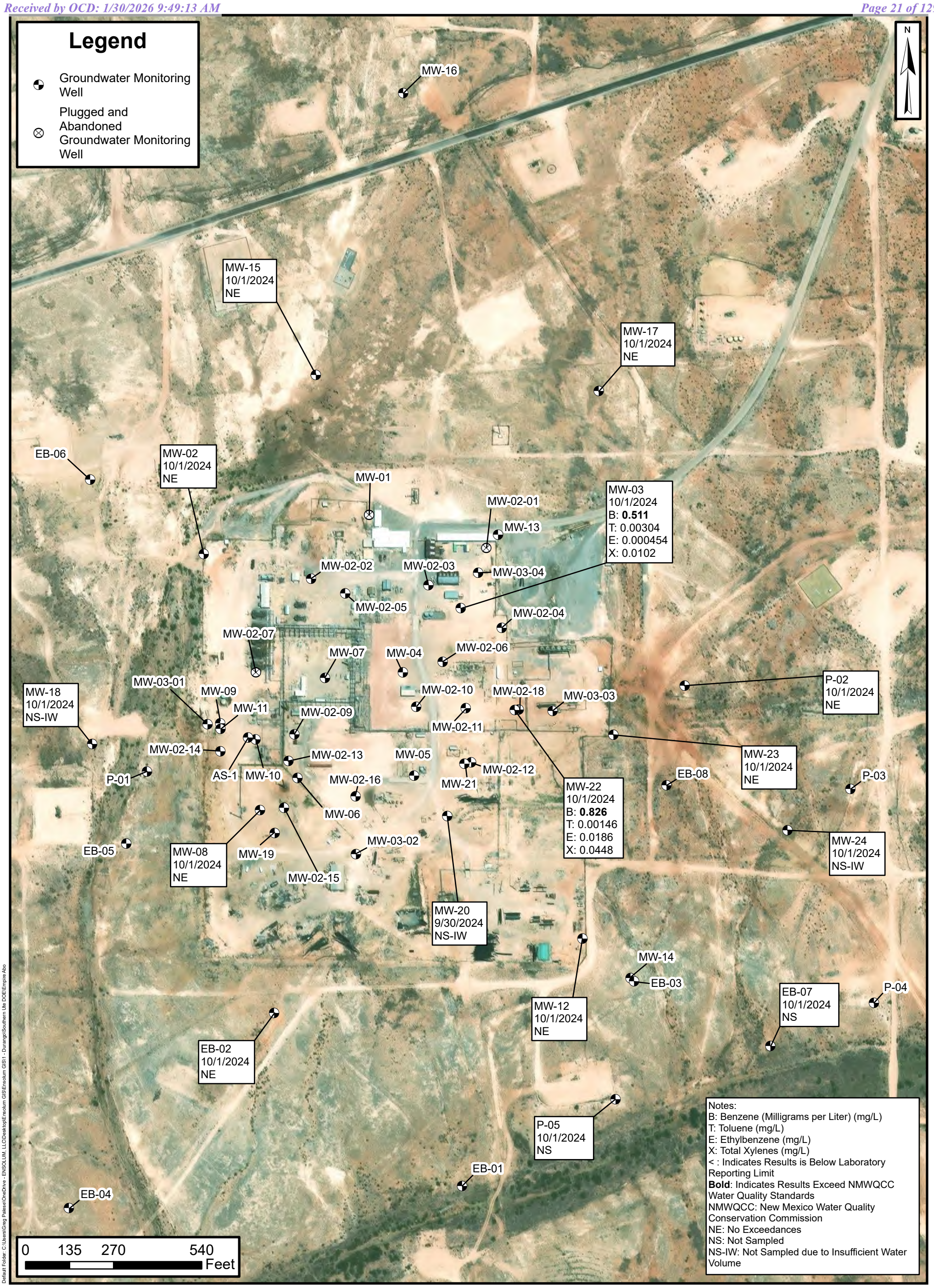
32.77595, -104.26035
Eddy County, New Mexico

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

FIGURE

5

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

BTEX Concentrations in Groundwater October 2024

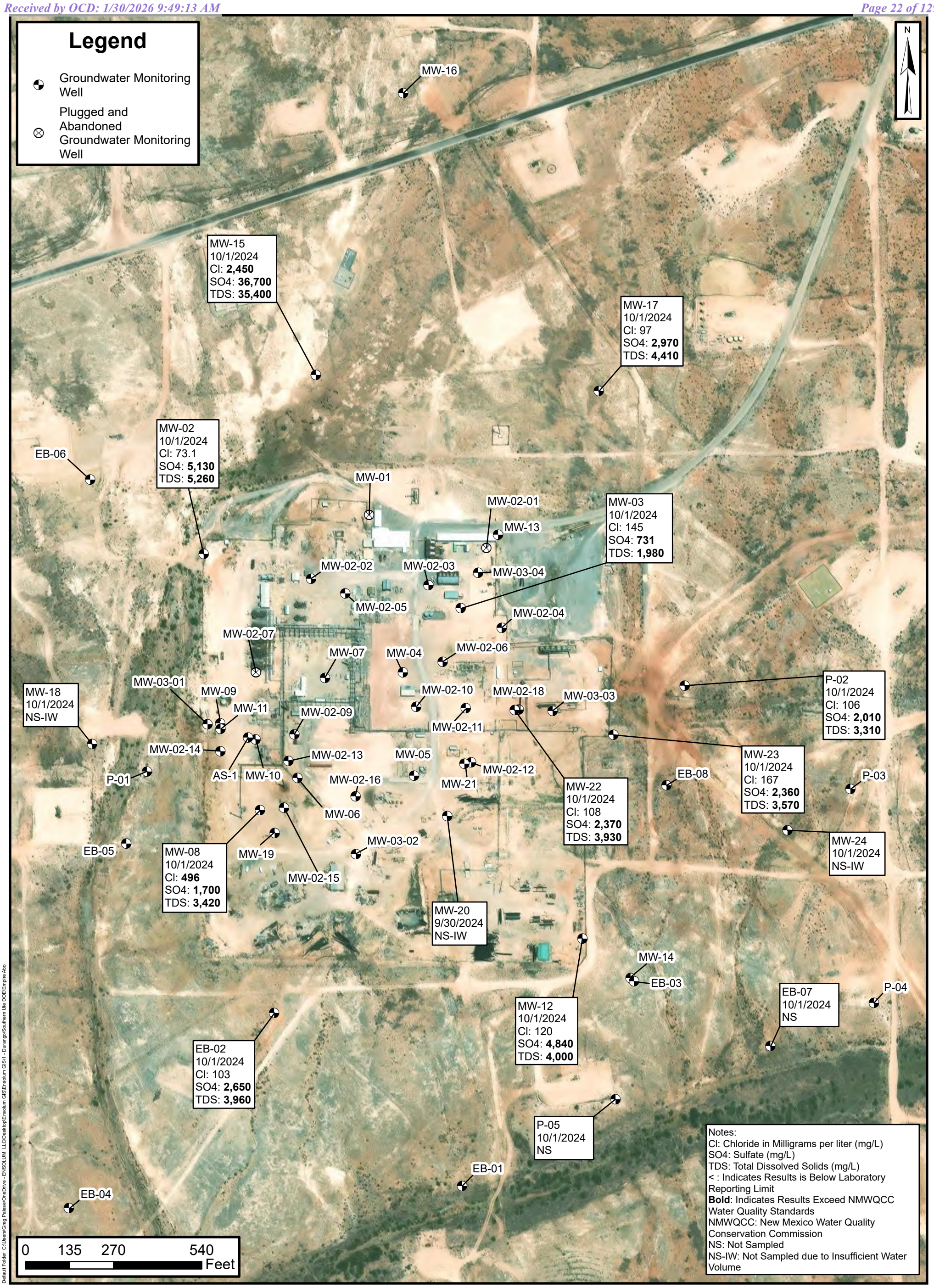
Empire Abo Gas Plant
AKA Energy Group, LLC

32.77595, -104.26035
Eddy County, New Mexico

FIGURE

6

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Inorganic Concentrations in Groundwater October 2024

Empire Abo Gas Plant
AKA Energy Group, LLC

32.77595, -104.26035
Eddy County, New Mexico

FIGURE

7

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft

ENSOLUM

TABLES

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-1	--	--	--	WELL PLUGGED			
MW-2	3,548.19	37.88	5/20/2013	34.00	--	--	3,514.19
			10/15/2013	34.05	--	--	3,514.14
			5/14/2014	34.00	--	--	3,514.19
			10/14/2014	34.05	--	--	3,514.14
			4/21/2015	34.05	--	--	3,514.14
			12/8/2015	34.10	--	--	3,514.09
			4/11/2016	34.06	--	--	3,514.13
			12/12/2016	34.06	--	--	3,514.13
			4/17/2017	34.06	--	--	3,514.13
			10/25/2017	34.03	--	--	3,514.16
			12/8/2017	34.13	--	--	3,514.06
			3/19/2018	34.13	--	--	3,514.06
			4/29/2019	34.08	--	--	3,514.11
			12/9/2019	34.08	--	--	3,514.11
			4/7/2020	DRY			
			9/22/2020	34.11	--	--	3,514.08
			4/27/2021	34.10	--	--	3,514.09
			1/4/2022	34.05	--	--	3,514.14
			9/30/2024	34.12	--	--	3,514.07
MW-02-01	--	--	--	WELL PLUGGED			
MW-02-02	3,552.26	48.65	5/20/2013	26.91	--	--	3,525.35
			10/15/2013	27.00	--	--	3,525.26
			5/14/2014	27.22	--	--	3,525.04
			10/14/2014	27.20	--	--	3,525.06
			4/21/2015	26.96	--	--	3,525.30
			12/8/2015	27.20	--	--	3,525.06
			4/11/2016	27.18	--	--	3,525.08
			12/12/2016	27.06	--	--	3,525.20
			4/17/2017	26.99	--	--	3,525.27
			10/25/2017	27.49	--	--	3,524.77
			12/8/2017	27.40	--	--	3,524.86
			3/19/2018	27.21	--	--	3,525.05
			12/9/2019	27.13	--	--	3,525.13
			4/7/2020	27.25	--	--	3,525.01
			9/22/2020	27.36	--	--	3,524.90
			4/27/2021	27.03	--	--	3,525.23
			1/4/2022	27.18	--	--	3,525.08
			9/30/2024	27.23	--	--	3,525.03
MW-02-03	3,556.03	108.50	5/20/2013	77.55	--	--	3,478.48
			10/15/2013	79.00	--	--	3,477.03
			5/14/2014	81.11	--	--	3,474.92
			10/14/2014	79.12	--	--	3,476.91
			4/21/2015	79.65	--	--	3,476.38
			12/8/2015	79.95	--	--	3,476.08
			4/11/2016	80.03	--	--	3,476.00
			12/12/2016	89.50	--	--	3,466.53
			4/17/2017	82.44	--	--	3,473.59
			10/25/2017	83.15	--	--	3,472.88
			12/8/2017	83.46	--	--	3,472.57
			3/13/2018	84.51	--	--	3,471.52
			3/19/2018	84.23	--	--	3,471.80
			12/4/2018	85.02	--	--	3,471.01
			4/24/2019	86.02	--	--	3,470.01
			12/9/2019	83.42	--	--	3,472.61
			4/6/2020	84.12	--	--	3,471.91
			9/22/2020	85.56	--	--	3,470.47
			4/27/2021	86.47	--	--	3,469.56
			1/4/2022	85.05	--	--	3,470.98
			9/30/2024	89.22	--	--	3,466.81

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-02-04	3,553.79	61.60	5/20/2013	51.45	--	--	3,502.34
			10/15/2013	51.00	--	--	3,502.79
			5/14/2014	52.80	--	--	3,500.99
			10/14/2014	48.58	--	--	3,505.21
			4/21/2015	50.70	--	--	3,503.09
			12/8/2015	52.30	--	--	3,501.49
			4/11/2016	52.58	--	--	3,501.21
			12/12/2016	53.00	--	--	3,500.79
			4/17/2017	54.30	--	--	3,499.49
			10/25/2017	53.18	--	--	3,500.61
			12/8/2017	53.80	--	--	3,499.99
			3/13/2018	54.82	--	--	3,498.97
			3/19/2018	54.90	--	--	3,498.89
			12/4/2018	53.36	--	--	3,500.43
			4/24/2019	54.52	--	--	3,499.27
			12/9/2019	53.20	--	--	3,500.59
			4/6/2020	52.93	--	--	3,500.86
			9/22/2020	54.41	--	--	3,499.38
			4/27/2021	54.96	--	--	3,498.83
			1/4/2022	54.07	--	--	3,499.72
			9/30/2024	56.18	--	--	3,497.61
MW-02-05	3,552.69	52.31	5/20/2013	27.45	--	--	3,525.24
			10/15/2013	27.60	--	--	3,525.09
			5/14/2014	27.90	--	--	3,524.79
			10/14/2014	27.90	--	--	3,524.79
			4/21/2015	27.62	--	--	3,525.07
			12/8/2015	27.80	--	--	3,524.89
			4/11/2016	27.82	--	--	3,524.87
			12/12/2016	28.71	--	--	3,523.98
			4/17/2017	27.00	--	--	3,525.69
			10/25/2017	28.11	--	--	3,524.58
			12/8/2017	28.09	--	--	3,524.60
			3/19/2018	27.80	--	--	3,524.89
			12/5/2018	28.03	--	--	3,524.66
			4/24/2019	27.84	--	--	3,524.85
			12/9/2019	27.80	--	--	3,524.89
			4/7/2020	27.92	--	--	3,524.77
			9/22/2020	28.03	--	--	3,524.66
			4/27/2021	27.63	--	--	3,525.06
			1/4/2022	27.84	--	--	3,524.85
			9/30/2024	27.90	--	--	3,524.79
MW-02-06	3,550.82	23.90	5/20/2013	19.30	19.25	0.05	3,531.56
			10/15/2013	11.00	10.55	0.45	3,540.14
			5/14/2014	20.85	20.50	0.35	3,530.22
			10/14/2014	12.20	11.75	0.45	3,538.94
			4/21/2015	18.60	18.30	0.30	3,532.43
			12/8/2015	16.11	Trace	Trace	3,534.71
			4/11/2016	15.79	Trace	Trace	3,535.03
			12/12/2016	17.66	17.65	0.01	3,533.17
			4/17/2017	21.63	21.62	0.01	3,529.20
			10/25/2017	20.16	19.68	0.48	3,531.00
			12/8/2017	20.15	--	--	3,530.67
			3/13/2018	21.35	20.94	0.41	3,529.76
			3/19/2018	20.91	--	--	3,529.91
			12/4/2018	20.62	20.37	0.25	3,530.38
			4/24/2019	21.94	21.33	0.61	3,529.31
			8/30/2019	22.18	21.10	1.08	3,529.40
			12/9/2020	19.97	--	--	3,530.85
			4/6/2020	21.43	--	--	3,529.39
			9/22/2020	22.05	--	--	3,528.77
			4/27/2021	22.49	--	--	3,528.33
			1/4/2022	22.66	--	--	3,528.16
			9/30/2024	23.42	--	--	3,527.40

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-02-07	3,547.00	63.80	5/20/2013	58.00	--	--	3,489.00
			10/15/2013	60.40	--	--	3,486.60
			5/14/2014	61.70	--	--	3,485.30
			10/14/2014	59.05	--	--	3,487.95
			4/21/2015	62.00	--	--	3,485.00
			12/8/2015	DRY			
			4/11/2016	DRY			
			12/12/2016	61.95	--	--	3,485.05
			4/17/2017	DRY			
			10/25/2017	DRY			
			12/8/2017	DRY			
			3/19/2018	DRY			
			12/4/2019	DRY			
			4/24/2019	DRY			
			12/7/2019	**WELL PLUGGED**			
MW-02-09	3,546.52	43.97	5/20/2013	38.45	34.00	4.45	3,511.19
			10/15/2013	37.70	34.55	3.15	3,511.03
			5/14/2014	39.15	34.60	4.55	3,510.56
			10/14/2014	38.90	34.82	4.08	3,510.48
			4/21/2015	38.80	34.92	3.88	3,510.44
			12/8/2015	37.90	35.70	2.20	3,510.16
			4/11/2016	36.81	35.35	1.46	3,510.73
			12/13/2016	38.65	35.70	2.95	3,509.94
			4/17/2017	38.60	35.80	2.80	3,509.88
			10/25/2017	38.79	35.81	2.98	3,509.82
			12/8/2017	36.59	36.30	0.29	3,510.13
			3/13/2018	39.09	36.32	2.77	3,509.37
			3/19/2018	37.15	36.29	0.86	3,509.97
			12/4/2018	37.91	37.61	0.30	3,508.82
			4/24/2019	36.53	36.30	0.23	3,510.15
			8/30/2019	36.58	36.33	0.25	3,510.12
			12/9/2019	36.60	36.35	0.25	3,510.10
			4/6/2020	36.45	36.34	0.11	3,510.15
			9/22/2020	36.60	36.35	0.25	3,510.10
			1/4/2022	36.28	--	--	3,510.24
			9/30/2024	36.68	36.30	0.38	3,509.84
MW-02-10	3,548.40	72.90	5/20/2013	**	63.96	>10	--
			10/15/2013	72.40	66.10	6.30	3,480.41
			5/14/2014	>72.9	68.35	>4.55	--
			10/14/2014	>72.9	64.72	>8.15	--
			4/21/2015	>72.9	67.25	>5.65	--
			12/8/2015	>72.9	67.05	>5.85	--
			4/11/2016	>72.9	67.47	>5.43	--
			12/12/2016	>72.9	68.90	>4.00	--
			4/17/2017	>72.9	69.98	>2.92	--
			10/25/2017	>72.9	71.35	>1.55	--
			12/8/2017	>72.9	70.95	>1.95	--
			3/13/2018	72.55	72.49	0.06	3,475.89
			3/19/2018	72.59	72.52	0.07	3,475.86
			12/4/2018	74.15	72.85	1.30	3,475.16
			4/24/2019	DRY			
			12/9/2019	DRY			
			4/6/2020	72.77	72.31	0.46	3,475.95
			9/22/2020	74.31	74.29	0.02	3,474.10
			1/4/2022	74.57	--	--	3,473.83
			9/30/2024	DRY			

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-02-11	3,546.79	23.42	5/20/2013	21.90	21.78	0.12	3,524.97
			10/15/2013	18.30	18.25	0.05	3,528.53
			5/14/2014	22.50	22.45	0.05	3,524.33
			10/14/2014	17.35	17.29	0.06	3,529.48
			4/21/2015	19.54	--	--	3,527.25
			12/8/2015	18.80	--	--	3,527.99
			4/11/2016	20.59	--	--	3,526.20
			12/12/2016	21.00	--	--	3,525.79
			4/17/2017	21.45	--	--	3,525.34
			10/25/2017	21.38	--	--	3,525.41
			12/8/2017	22.10	--	--	3,524.69
			3/13/2018	23.23	22.93	0.30	3,523.77
			3/19/2018	**	22.90	**	--
			12/4/2018	22.40	21.77	0.63	3,524.83
			4/24/2019	**	23.17	**	--
			12/9/2019	**	21.96	**	--
			4/6/2020	DRY			
			9/22/2020	DRY			
			4/27/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	DRY			
MW-02-12	3,543.32	85.85	5/20/2013	66.84	--	--	3,476.48
			10/15/2013	67.80	--	--	3,475.52
			5/14/2014	70.00	--	--	3,473.32
			10/14/2014	67.25	--	--	3,476.07
			4/21/2015	68.10	--	--	3,475.22
			12/8/2015	68.25	--	--	3,475.07
			4/11/2016	68.42	--	--	3,474.90
			12/12/2016	69.10	--	--	3,474.22
			4/17/2017	70.66	--	--	3,472.66
			10/25/2017	71.35	--	--	3,471.97
			12/8/2017	71.68	--	--	3,471.64
			3/13/2018	72.45	--	--	3,470.87
			3/19/2018	72.54	--	--	3,470.78
			12/4/2018	81.01	72.94	8.07	3,467.96
			4/24/2019	74.43	74.36	0.07	3,468.94
			12/9/2019	71.38	71.35	0.03	3,471.96
			4/7/2020	72.07	72.00	0.07	3,471.30
			9/22/2020	73.81	73.59	0.22	3,469.66
			4/27/2021	74.64	74.58	0.06	3,468.72
			1/4/2022	79.25	72.93	6.32	3,468.49
			9/30/2024	82.22	76.96	5.26	3,464.78
MW-02-13	3,545.59	50.05	5/20/2013	47.42	43.80	3.62	3,500.70
			10/15/2013	47.40	43.82	3.58	3,500.70
			5/14/2014	47.38	45.91	1.47	3,499.24
			10/14/2014	47.25	41.40	5.85	3,502.44
			4/21/2015	46.80	45.00	1.80	3,500.05
			12/8/2015	46.90	44.75	2.15	3,500.20
			4/11/2016	47.07	44.72	2.35	3,500.17
			12/13/2016	47.02	45.30	1.72	3,499.77
			4/17/2017	47.05	45.20	1.85	3,499.84
			10/25/2017	47.13	46.37	0.76	3,498.99
			12/8/2017	47.07	47.00	0.07	3,498.57
			3/13/2018	48.11	46.91	1.20	3,498.32
			3/19/2018	47.35	46.83	0.52	3,498.60
			12/4/2018	46.87	46.68	0.19	3,498.85
			4/24/2019	47.84	47.28	0.56	3,498.14
			8/30/2019	47.85	47.64	0.21	3,497.89
			12/9/2019	47.68	47.67	0.01	3,497.92
			4/7/2020	47.58	47.50	0.08	3,498.07
			9/22/2020	47.53	47.45	0.08	3,498.12
			4/27/2021	47.70	47.69	0.01	3,497.90
			1/4/2022	47.52	47.45	0.07	3,498.12
			9/30/2024	47.80	47.79	0.01	3,497.80

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-02-14	3,544.53	78.80	5/20/2013	60.35	59.47	0.88	3,484.80
			10/15/2013	60.85	60.15	0.70	3,484.17
			5/14/2014	62.20	61.60	0.60	3,482.75
			10/14/2014	61.20	59.30	1.90	3,484.66
			4/21/2015	62.00	61.25	0.75	3,483.06
			12/8/2015	61.70	61.35	0.35	3,483.08
			4/11/2016	61.80	61.38	0.42	3,483.02
			12/13/2016	61.90	61.31	0.59	3,483.04
			4/17/2017	61.80	61.30	0.50	3,483.08
			10/25/2017	64.95	64.47	0.48	3,479.92
			12/8/2017	64.82	64.79	0.03	3,479.73
			3/13/2018	65.69	65.55	0.14	3,478.94
			3/19/2018	65.90	65.82	0.08	3,478.69
			12/4/2018	66.92	66.67	0.25	3,477.79
			4/24/2019	67.94	--	--	3,476.59
			8/30/2019	68.00	67.45	0.55	3,476.92
			12/9/2019	64.58	64.57	0.01	3,479.96
			4/7/2020	65.34	65.30	0.04	3,479.22
			9/22/2020	65.23	65.19	0.04	3,479.33
			4/27/2021	68.53	68.48	0.05	3,476.04
			1/4/2022	67.53	--	--	3,477.00
			9/30/2024	71.34	71.08	0.26	3,473.37
MW-02-15	3,543.29	75.95	5/20/2013	61.04	--	--	3,482.25
			10/15/2013	61.50	--	--	3,481.79
			5/14/2014	62.75	--	--	3,480.54
			10/14/2014	60.71	--	--	3,482.58
			4/21/2015	62.25	--	--	3,481.04
			12/8/2015	62.21	--	--	3,481.08
			4/11/2016	62.31	--	--	3,480.98
			12/13/2016	67.41	67.31	0.10	3,475.95
			4/17/2017	64.60	64.32	0.28	3,478.89
			10/25/2017	65.08	64.88	0.20	3,478.35
			12/8/2017	65.00	64.69	0.31	3,478.51
			3/13/2018	68.76	65.69	3.07	3,476.68
			3/19/2018	68.31	65.71	2.60	3,476.80
			12/4/2018	70.24	66.03	4.21	3,476.00
			4/24/2019	68.37	68.00	0.37	3,475.18
			8/30/2019	69.51	69.13	0.38	3,474.05
			12/9/2019	65.51	64.59	0.92	3,478.42
			4/6/2020	65.89	65.66	0.23	3,477.56
			9/22/2020	67.50	67.30	0.20	3,475.93
			4/27/2021	70.18	69.85	0.33	3,473.34
			1/4/2022	69.66	68.57	1.09	3,474.39
			9/30/2024	71.85	70.53	1.32	3,472.36
MW-02-16	3,544.24	86.10	5/20/2013	67.25	--	--	3,476.99
			10/15/2013	67.90	--	--	3,476.34
			5/14/2014	70.00	--	--	3,474.24
			10/14/2014	67.58	--	--	3,476.66
			4/21/2015	68.56	--	--	3,475.68
			12/8/2015	68.50	--	--	3,475.74
			4/11/2016	68.66	--	--	3,475.58
			12/12/2016	72.89	72.15	0.74	3,471.87
			4/17/2017	72.13	70.50	1.63	3,473.25
			10/25/2017	72.65	70.91	1.74	3,472.81
			12/8/2017	71.75	71.74	0.01	3,472.50
			3/13/2018	72.34	72.10	0.24	3,472.07
			3/19/2018	72.50	72.30	0.20	3,471.88
			12/4/2018	72.42	72.30	0.12	3,471.90
			4/24/2019	73.48	73.24	0.24	3,470.93
			8/30/2019	74.00	73.22	0.78	3,470.79
			12/9/2019	71.02	--	--	3,473.22
			4/6/2020	71.65	--	--	3,472.59
			9/22/2020	72.89	Trace	Trace	3,471.35
			4/27/2021	74.09	Trace	Trace	3,470.15
			1/4/2022	73.12	Trace	Trace	3,471.12
			9/30/2024	76.51	75.44	1.07	3,468.48

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-02-18	3,545.70	39.80	5/20/2013	20.65	--	--	3,525.05
			10/15/2013	17.15	--	--	3,528.55
			5/14/2014	21.25	--	--	3,524.45
			10/14/2014	15.35	--	--	3,530.35
			4/21/2015	18.35	--	--	3,527.35
			12/8/2015	17.75	--	--	3,527.95
			4/11/2016	19.63	--	--	3,526.07
			12/12/2016	19.95	--	--	3,525.75
			4/17/2017	20.32	--	--	3,525.38
			10/25/2017	20.49	--	--	3,525.21
			12/8/2017	21.24	--	--	3,524.46
			3/13/2018	21.90	--	--	3,523.80
			3/19/2018	21.95	--	--	3,523.75
			12/4/2018	20.82	--	--	3,524.88
			4/24/2019	22.34	--	--	3,523.36
			12/10/2019	21.50	--	--	3,524.20
			4/6/2020	22.48	--	--	3,523.22
			9/22/2020	23.08	--	--	3,522.62
			4/27/2021	23.80	--	--	3,521.90
			1/4/2022	23.12	--	--	3,522.58
			9/30/2024	23.90	--	--	3,521.80
MW-03	3,555.30	--	5/20/2013	72.62	--	--	3,482.68
			10/15/2013	75.90	--	--	3,479.40
			5/14/2014	77.32	77.30	0.02	3,477.99
			10/14/2014	75.12	--	--	3,480.18
			4/21/2015	76.35	--	--	3,478.95
			12/8/2015	76.28	--	--	3,479.02
			4/11/2016	76.60	--	--	3,478.70
			12/12/2016	77.40	--	--	3,477.90
			4/17/2017	79.63	--	--	3,475.67
			10/25/2017	79.45	--	--	3,475.85
			12/8/2017	80.54	--	--	3,474.76
			3/13/2018	83.06	82.65	0.41	3,472.53
			3/19/2018	82.90	--	--	3,472.40
			12/4/2018	82.75	--	--	3,472.55
			4/25/2019	84.13	84.11	0.02	3,471.18
			12/9/2019	79.14	--	--	3,476.16
			4/6/2020	81.52	--	--	3,473.78
			9/22/2020	83.64	83.60	0.04	3,471.69
			4/28/2021	85.03	84.87	0.16	3,470.38
			1/4/2022	83.89	83.82	0.07	3,471.46
			9/30/2024	87.96	--	--	3,467.34
MW-03-01	3,542.56	73.40	5/20/2013	57.50	--	--	3,485.06
			10/15/2013	58.70	58.10	0.60	3,484.28
			5/14/2014	60.70	59.20	1.50	3,482.91
			10/14/2014	57.15	57.07	0.08	3,485.47
			4/21/2015	60.20	59.65	0.55	3,482.75
			12/8/2015	61.00	59.66	1.34	3,482.50
			4/11/2016	58.75	58.53	0.22	3,483.96
			12/13/2016	58.36	58.26	0.10	3,484.27
			4/17/2017	58.30	58.20	0.10	3,484.33
			10/25/2017	61.76	61.51	0.25	3,480.98
			12/8/2017	61.77	61.70	0.07	3,480.84
			3/13/2018	64.40	62.87	1.53	3,479.23
			3/19/2018	63.17	62.90	0.27	3,479.58
			12/4/2018	64.12	--	--	3,478.44
			4/24/2019	65.15	--	--	3,477.41
			12/9/2019	61.38	--	--	3,481.18
			4/6/2020	65.34	65.30	0.04	3,477.25
			9/22/2020	64.49	--	--	3,478.07
			4/27/2021	66.19	--	--	3,476.37
			1/4/2022	65.10	--	--	3,477.46
			9/30/2024	68.95	--	--	3,473.61

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-03-02	3,541.08	105.75	5/20/2013	69.10	68.75	0.35	3,472.23
			10/15/2013	69.00	65.80	3.20	3,474.32
			5/14/2014	70.40	69.80	0.60	3,471.10
			10/14/2014	68.20	67.40	0.80	3,473.44
			4/21/2015	68.95	68.75	0.20	3,472.27
			12/8/2015	69.20	68.75	0.45	3,472.20
			4/11/2016	69.32	68.97	0.35	3,472.01
			12/12/2016	69.33	68.65	0.68	3,472.23
			4/17/2017	71.14	70.16	0.98	3,470.63
			10/25/2017	70.89	70.65	0.24	3,470.36
			12/8/2017	71.03	--	--	3,470.05
			3/13/2018	71.40	--	--	3,469.68
			3/19/2018	71.32	--	--	3,469.76
			12/4/2018	71.00	--	--	3,470.08
			4/24/2019	73.31	--	--	3,467.77
			12/9/2019	71.33	--	--	3,469.75
			4/6/2020	71.04	--	--	3,470.04
			9/22/2020	72.29	--	--	3,468.79
			4/27/2021	74.00	73.99	0.01	3,467.09
			1/4/2022	73.50	72.87	0.63	3,468.02
			9/30/2024	78.10	77.18	0.92	3,463.62
MW-03-03	3,544.72	85.40	5/20/2013	71.30	--	--	3,473.42
			10/15/2013	71.65	--	--	3,473.07
			5/14/2014	72.90	--	--	3,471.82
			10/14/2014	71.30	--	--	3,473.42
			4/21/2015	71.40	--	--	3,473.32
			12/8/2015	71.70	--	--	3,473.02
			4/11/2016	71.81	--	--	3,472.91
			12/12/2016	72.20	--	--	3,472.52
			4/17/2017	73.29	--	--	3,471.43
			10/25/2017	74.84	--	--	3,469.88
			12/8/2017	73.90	--	--	3,470.82
			3/13/2018	74.39	--	--	3,470.33
			3/19/2018	74.47	--	--	3,470.25
			12/4/2018	75.03	74.63	0.40	3,469.97
			4/24/2019	75.67	75.21	0.46	3,469.37
			12/9/2019	74.43	74.03	0.40	3,470.57
			4/6/2020	74.10	Trace	Trace	3,470.62
			9/22/2020	75.12	74.95	0.17	3,469.72
			4/27/2021	76.08	75.72	0.36	3,468.89
			1/4/2022	75.15	--	--	3,469.57
			9/30/2024	78.08	77.51	0.57	3,467.04
MW-03-04	3,558.45	117.50	5/20/2013	78.42	78.12	0.30	3,480.24
			10/15/2013	81.95	81.55	0.40	3,476.78
			5/14/2014	84.25	83.35	0.90	3,474.83
			10/14/2014	82.25	81.80	0.45	3,476.52
			4/21/2015	82.55	82.35	0.20	3,476.04
			12/8/2015	82.95	82.70	0.25	3,475.68
			4/11/2016	83.43	83.08	0.35	3,475.27
			12/12/2016	84.20	83.55	0.65	3,474.71
			4/17/2017	86.92	84.90	2.02	3,472.94
			10/25/2017	87.57	85.89	1.68	3,472.06
			12/8/2017	85.96	--	--	3,472.49
			3/13/2018	86.79	--	--	3,471.66
			3/19/2018	86.59	--	--	3,471.86
			12/4/2018	87.69	--	--	3,470.76
			4/24/2019	88.15	--	--	3,470.30
			8/30/2019	88.45	88.23	0.22	3,470.00
			12/9/2019	70.90	--	--	3,487.55
			4/6/2020	86.85	Trace	Trace	3,471.60
			9/22/2020	87.97	--	--	3,470.48
			4/27/2021	88.62	--	--	3,469.83
			1/4/2022	88.38	--	--	3,470.07
			9/30/2024	91.43	--	--	3,467.02

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-04	3,550.99	62.59	5/20/2013	52.10	52.03	0.07	3,498.94
			10/15/2013	53.45	53.25	0.20	3,497.68
			5/14/2014	58.30	57.80	0.50	3,493.04
			10/14/2014	53.25	53.00	0.25	3,497.92
			4/21/2015	57.55	56.90	0.65	3,493.90
			12/8/2015	54.20	53.55	0.65	3,497.25
			4/11/2016	53.75	52.97	0.78	3,497.79
			12/12/2016	53.65	52.86	0.79	3,497.89
			4/17/2017	58.33	57.45	0.88	3,493.28
			10/25/2017	54.60	53.83	0.77	3,496.93
			12/8/2017	DRY			
			3/13/2018	DRY			
			3/19/2018	DRY			
			12/4/2018	52.95	--	--	3,498.04
			4/24/2019	59.85	58.00	1.85	3,491.14
			12/10/2019	55.03	54.77	0.26	3,495.96
			4/6/2020	DRY			
			9/22/2020	DRY			
			4/27/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	DRY			
MW-05	3,543.77	95.30	5/20/2013	66.73	--	--	3,477.04
			10/15/2013	67.60	--	--	3,476.17
			5/14/2014	69.70	--	--	3,474.07
			10/14/2014	67.00	--	--	3,476.77
			4/21/2015	68.02	--	--	3,475.75
			12/8/2015	68.20	--	--	3,475.57
			4/11/2016	68.22	--	--	3,475.55
			12/12/2016	68.92	--	--	3,474.85
			4/17/2017	70.49	--	--	3,473.28
			10/25/2017	70.92	--	--	3,472.85
			12/8/2017	76.68	--	--	3,467.09
			3/13/2018	72.90	--	--	3,470.87
			3/19/2018	72.24	--	--	3,471.53
			12/4/2018	72.29	--	--	3,471.48
			4/24/2019	73.42	--	--	3,470.35
			12/9/2019	71.02	--	--	3,472.75
			4/7/2020	71.86	--	--	3,471.91
			9/22/2020	73.15	--	--	3,470.62
			4/28/2021	74.44	--	--	3,469.33
			1/4/2022	73.37	--	--	3,470.40
			9/30/2024	77.25	--	--	3,466.52
MW-06	3,544.50	76.90	5/20/2013	46.30	42.48	3.82	3,500.87
			10/15/2013	46.80	41.68	5.12	3,501.28
			5/14/2014	47.00	44.70	2.30	3,499.11
			10/14/2014	43.70	39.60	4.10	3,503.67
			4/21/2015	44.90	42.80	2.10	3,501.07
			12/8/2015	46.45	43.05	3.40	3,500.43
			4/11/2016	46.52	43.59	2.93	3,500.03
			12/13/2016	46.31	43.78	2.53	3,499.96
			4/17/2017	46.30	43.85	2.45	3,499.92
			10/25/2017	46.00	44.76	1.24	3,499.37
			12/8/2017	45.91	45.90	0.01	3,498.60
			3/13/2018	47.45	46.12	1.33	3,497.98
			3/19/2018	47.45	46.06	1.39	3,498.02
			12/4/2018	46.15	44.86	1.29	3,499.25
			4/24/2019	46.69	46.08	0.61	3,498.24
			8/30/2019	47.46	47.35	0.11	3,497.12
			12/9/2019	46.53	46.52	0.01	3,497.98
			4/7/2020	46.15	46.02	0.13	3,498.44
			9/22/2020	46.76	46.62	0.14	3,497.84
			4/28/2021	47.42	47.40	0.02	3,497.09
			1/4/2022	47.02	46.38	0.64	3,497.93
			9/30/2024	47.45	47.42	0.03	3,497.07

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-07	3,546.49	26.35	5/20/2013	4.30	--	--	3,542.19
			10/15/2013	8.05	--	--	3,538.44
			5/14/2014	8.10	--	--	3,538.39
			10/14/2014	7.30	--	--	3,539.19
			4/21/2015	7.90	--	--	3,538.59
			12/8/2015	6.00	--	--	3,540.49
			4/11/2016	5.61	--	--	3,540.88
			12/12/2016	8.88	--	--	3,537.61
			4/17/2017	7.98	--	--	3,538.51
			10/25/2017	8.63	--	--	3,537.86
			12/8/2017	8.95	--	--	3,537.54
			3/19/2018	9.68	--	--	3,536.81
			12/4/2018	8.72	--	--	3,537.77
			4/24/2019	8.88	--	--	3,537.61
			12/9/2019	8.88	--	--	3,537.61
			4/7/2020	8.80	--	--	3,537.69
			9/21/2020	9.52	--	--	3,536.97
			4/28/2021	10.23	--	--	3,536.26
			1/4/2022	9.43	--	--	3,537.06
			9/30/2024	9.29	--	--	3,537.20
MW-08	3,543.73	88.95	5/20/2013	66.07	--	--	3,477.66
			10/15/2013	66.45	--	--	3,477.28
			5/14/2014	68.15	--	--	3,475.58
			10/14/2014	65.95	--	--	3,477.78
			4/21/2015	67.10	--	--	3,476.63
			12/8/2015	67.25	--	--	3,476.48
			4/11/2016	67.36	--	--	3,476.37
			12/12/2016	67.23	--	--	3,476.50
			4/17/2017	67.20	--	--	3,476.53
			10/25/2017	70.02	--	--	3,473.71
			12/8/2017	70.43	--	--	3,473.30
			3/13/2018	71.22	--	--	3,472.51
			3/19/2018	71.11	--	--	3,472.62
			12/4/2018	72.03	--	--	3,471.70
			4/24/2019	74.09	--	--	3,469.64
			12/9/2019	70.91	--	--	3,472.82
			4/6/2020	71.02	--	--	3,472.71
			9/22/2020	72.59	--	--	3,471.14
			4/28/2021	74.10	--	--	3,469.63
			1/4/2022	73.33	--	--	3,470.40
			9/30/2024	76.60	--	--	3,467.13
MW-09	3,542.82	75.80	5/20/2013	56.50	--	--	3,486.32
			10/15/2013	57.55	57.25	0.30	3,485.48
			5/14/2014	59.32	58.50	0.82	3,484.07
			10/14/2014	57.95	55.90	2.05	3,486.31
			4/21/2015	60.80	58.70	2.10	3,483.49
			12/8/2015	59.60	58.85	0.75	3,483.75
			4/11/2016	59.66	58.47	1.19	3,483.99
			12/13/2016	59.74	58.28	1.46	3,484.10
			4/17/2017	59.70	58.28	1.42	3,484.11
			10/25/2017	63.44	61.65	1.79	3,480.63
			12/8/2017	63.35	61.81	1.54	3,480.55
			3/13/2018	64.56	62.96	1.60	3,479.38
			3/19/2018	64.69	63.01	1.68	3,479.31
			12/4/2018	64.18	64.14	0.04	3,478.67
			4/24/2019	65.70	--	--	3,477.12
			12/9/2019	61.88	--	--	3,480.94
			4/6/2020	62.50	--	--	3,480.32
			9/22/2020	64.79	--	--	3,478.03
			4/27/2021	66.58	--	--	3,476.24
			1/4/2022	65.45	--	--	3,474.37
			9/30/2024	69.44	69.34	0.10	3,473.45

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-10	3,544.44	53.24	5/20/2013	51.60	45.55	6.05	3,497.08
			10/15/2013	52.00	47.55	4.45	3,495.56
			5/14/2014	52.30	50.70	1.60	3,493.26
			10/14/2014	51.10	47.40	3.70	3,495.93
			4/21/2015	50.95	48.05	2.90	3,495.52
			12/8/2015	53.00	48.70	4.30	3,494.45
			4/11/2016	52.62	44.81	7.81	3,497.29
			12/13/2016	52.61	50.40	2.21	3,493.38
			4/17/2017	52.60	50.51	2.09	3,493.30
			10/25/2017	52.69	50.76	1.93	3,493.10
			12/8/2017	52.83	--	--	3,491.61
			3/13/2018	53.31	52.63	0.68	3,491.61
			3/19/2018	52.88	52.64	0.24	3,491.73
			12/4/2018	52.66	52.64	0.02	3,491.79
			4/24/2019	--	52.91	--	--
			12/9/2019	**	52.73	--	--
			4/6/2020	H_2S PRESENT IN WELL			
			9/22/2020	52.44	52.26	0.18	3,492.13
			4/27/2021	52.71	--	--	3,491.73
			1/4/2022	52.64	52.45	0.19	3,491.93
			9/30/2024	25.08	25.04	0.04	--
MW-11	3,542.73	58.98	5/20/2013	56.10	--	--	3,486.63
			10/15/2013	57.00	--	--	3,485.73
			5/14/2014	58.98	58.30	0.68	3,484.23
			10/14/2014	56.20	56.00	0.20	3,486.67
			4/21/2015	58.98	58.60	0.38	3,484.02
			12/8/2015	58.98	58.40	0.58	3,484.16
			4/11/2016	58.41	58.38	0.03	3,484.34
			12/13/2016	58.33	Trace	Trace	3,484.40
			4/17/2017	58.55	58.40	0.15	3,484.29
			10/25/2017	58.47	--	--	3,484.26
			12/8/2017	58.51	--	--	3,484.22
			3/13/2018	58.74	--	--	3,483.99
			3/19/2018	58.55	--	--	3,484.18
			12/4/2018	58.60	--	--	3,484.13
			4/24/2019	58.86	--	--	3,483.87
			12/9/2019	58.93	--	--	3,483.80
			4/6/2020	DRY			
			9/22/2020	DRY			
			4/28/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	DRY			
MW-12	3,525.25	74.11	5/20/2013	62.00	--	--	3,463.25
			10/15/2013	61.20	--	--	3,464.05
			5/14/2014	62.78	--	--	3,462.47
			10/14/2014	60.95	--	--	3,464.30
			4/21/2015	59.80	--	--	3,465.45
			12/8/2015	60.45	--	--	3,464.80
			4/11/2016	59.99	--	--	3,465.26
			12/12/2016	60.40	--	--	3,464.85
			4/17/2017	61.00	--	--	3,464.25
			10/25/2017	62.31	--	--	3,462.94
			12/8/2017	62.79	--	--	3,462.46
			3/13/2018	63.50	--	--	3,461.75
			3/19/2018	63.27	--	--	3,461.98
			12/4/2018	64.20	--	--	3,461.05
			4/24/2019	64.61	--	--	3,460.64
			4/7/2020	64.20	--	--	3,461.05
			9/22/2020	64.80	--	--	3,460.45
			4/28/2021	65.61	--	--	3,459.64
			1/4/2022	65.16	--	--	3,460.09
			9/30/2024	68.32	--	--	3,456.93

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-13	3,561.40	88.64	5/20/2013	71.88	--	--	3,489.52
			10/14/2013	83.00	--	--	3,478.40
			5/14/2014	>88.64	81.10	--	--
			10/13/2014	84.65	--	--	3,476.75
			4/20/2015	86.03	--	--	3,475.37
			12/7/2015	>88.64	83.00	--	--
			4/11/2016	86.03	*		3,475.37
			12/12/2016	86.80	--	--	3,474.60
			4/17/2017	DRY			
			10/24/2017	DRY			
			12/8/2017	DRY			
			3/19/2018	DRY			
			12/3/2018	DRY			
			4/23/2019	DRY			
			12/10/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/26/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	Could Not Locate			
MW-14	3,520.32	72.50	5/20/2013	61.54	61.52	0.02	3,458.79
			10/14/2013	60.61	--	--	3,459.71
			5/14/2014	62.28	62.23	0.05	3,458.08
			10/13/2014	60.80	57.80	3.00	3,461.62
			4/20/2015	59.55	--	--	3,460.77
			12/7/2015	59.50	Trace	Trace	3,525.06
			4/11/2016	60.08	--	--	3,460.24
			12/12/2016	59.38	--	--	3,460.94
			4/17/2017	59.68	59.52	0.16	3,460.75
			10/24/2017	61.53	61.42	0.11	3,458.87
			12/8/2017	62.12	62.00	0.12	3,458.28
			3/13/2018	64.02	63.80	0.22	3,456.45
			3/19/2018	64.30	--	--	3,456.02
			12/3/2018	65.37	63.15	2.22	3,456.50
			4/24/2019	67.64	66.29	1.35	3,453.63
			8/30/2019	66.54	66.28	0.26	3,453.96
			12/10/2019	63.51	63.24	0.27	3,457.00
			4/6/2020	64.87	64.13	0.74	3,455.97
			9/21/2020	65.70	65.55	0.15	3,454.73
			4/27/2021	66.96	66.90	0.06	3,453.40
			1/5/2022	67.33	59.39	7.94	3,458.55
			9/30/2024	Could Not Locate			
MW-15	3,562.45	80.20	5/20/2013	67.30	--	--	3,495.15
			10/14/2013	66.52	--	--	3,495.93
			5/14/2014	67.75	--	--	3,494.70
			10/13/2014	65.65	--	--	3,496.80
			4/20/2015	67.30	--	--	3,495.15
			12/7/2015	64.70	--	--	3,497.75
			4/11/2016	67.26	--	--	3,495.19
			12/12/2016	67.16	--	--	3,495.29
			4/17/2017	67.58	--	--	3,494.87
			10/24/2017	67.24	--	--	3,495.21
			12/8/2017	67.34	--	--	3,495.11
			3/19/2018	67.55	--	--	3,494.90
			12/3/2018	67.73	--	--	3,494.72
			4/23/2019	66.18	--	--	3,496.27
			12/9/2019	65.03	--	--	3,497.42
			4/6/2020	67.43	--	--	3,495.02
			9/21/2020	65.64	--	--	3,496.81
			4/26/2021	67.61	--	--	3,494.84
			1/4/2022	67.80	--	--	3,494.65
			9/30/2024	67.55	--	--	3,494.90

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-16	3,585.46	117.39	5/20/2013	111.70	--	--	3,473.76
			10/14/2013	112.30	--	--	3,473.16
			5/14/2014	114.10	--	--	3,471.36
			10/13/2014	113.85	--	--	3,471.61
			4/20/2015	112.45	--	--	3,473.01
			12/7/2015	114.25	--	--	3,471.21
			4/11/2016	114.72	--	--	3,470.74
			12/12/2016	115.30	--	--	3,470.16
			4/17/2017	115.72	--	--	3,469.74
			10/24/2017	116.79	--	--	3,468.67
			12/8/2017	116.85	--	--	3,468.61
			3/19/2018	116.83	--	--	3,468.63
			12/4/2018	116.90	--	--	3,468.56
			4/24/2019	116.86	--	--	3,468.60
			12/9/2019	116.86	--	--	3,468.60
			4/6/2020	116.89	--	--	3,468.57
			9/21/2020	116.85	--	--	3,468.61
			4/26/2021	116.87	--	--	3,468.59
			1/4/2022	116.88	--	--	3,468.58
			9/30/2024	Could Not Locate			
MW-17	3,570.84	101.60	5/20/2013	93.36	--	--	3,477.48
			10/15/2013	93.00	--	--	3,477.84
			5/14/2014	95.61	--	--	3,475.23
			10/14/2014	95.15	--	--	3,475.69
			4/20/2015	95.80	--	--	3,475.04
			12/7/2015	96.45	--	--	3,474.39
			4/11/2016	95.34	--	--	3,475.50
			12/12/2016	96.60	--	--	3,474.24
			4/17/2017	97.72	--	--	3,473.12
			10/24/2017	97.75	--	--	3,473.09
			12/8/2017	95.92	--	--	3,474.92
			3/19/2018	98.21	--	--	3,472.63
			12/4/2018	97.05	--	--	3,473.79
			4/23/2019	98.58	--	--	3,472.26
			12/9/2019	98.23	--	--	3,472.61
			4/6/2020	98.10	--	--	3,472.74
			9/21/2020	98.28	--	--	3,472.56
			4/26/2021	98.16	--	--	3,472.68
			1/4/2022	98.28	--	--	3,472.56
			9/30/2024	98.39	--	--	3,472.45
MW-18	3,532.63	56.53	5/20/2013	50.95	--	--	3,481.68
			10/14/2013	50.50	Trace	Trace	3,482.13
			5/14/2014	51.31	--	--	3,481.32
			10/13/2014	51.79	--	--	3,480.84
			4/20/2015	51.02	--	--	3,481.61
			12/7/2015	52.21	--	--	3,480.42
			4/11/2016	51.57			3,481.06
			12/12/2016	50.90	--	--	3,481.73
			4/17/2017	52.12	--	--	3,480.51
			10/24/2017	53.91	--	--	3,478.72
			12/8/2017	53.89	--	--	3,478.74
			3/19/2018	53.61	--	--	3,479.02
			12/5/2018	57.61	--	--	3,475.02
			4/23/2019	55.69	--	--	3,476.94
			12/9/2019	55.07	--	--	3,477.56
			4/6/2020	54.26	--	--	3,478.37
			9/21/2020	55.49	--	--	3,477.14
			4/26/2021	56.04	--	--	3,476.59
			1/4/2022	56.04	--	--	3,476.59
			9/30/2024	56.25	--	--	3,476.38

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-19	3,543.34	79.42	5/20/2013	71.15	67.10	4.05	3,475.03
			10/15/2013	71.10	67.00	4.10	3,475.11
			5/14/2014	73.30	62.75	10.55	3,477.43
			10/14/2014	70.10	66.50	3.60	3,475.76
			4/21/2015	72.45	66.00	6.45	3,475.41
			12/7/2015	68.60	65.50	3.10	3,476.91
			4/11/2016	69.66	67.24	2.42	3,475.37
			12/13/2016	68.00	65.78	2.22	3,476.89
			4/17/2017	70.41	68.00	2.41	3,474.62
			10/25/2017	71.30	69.85	1.45	3,473.06
			12/8/2017	72.10	71.97	0.13	3,471.33
			3/13/2018	72.85	72.56	0.29	3,470.69
			3/19/2018	72.75	72.54	0.21	3,470.74
			12/4/2018	74.05	73.89	0.16	3,469.40
			4/24/2019	75.03	74.87	0.16	3,468.42
			8/30/2019	75.63	75.37	0.26	3,467.89
			12/9/2019	73.70	--	--	3,469.64
			4/6/2020	73.19	--	--	3,470.15
			9/22/2020	74.42	74.41	0.01	3,468.93
			4/26/2021	75.86	75.84	0.02	3,467.49
			1/4/2022	75.45	Trace	Trace	3,467.89
			9/30/2024	78.40	--	--	3,464.94
MW-20	3,541.47	79.39	5/20/2013	71.05	71.02	0.03	3,470.44
			10/15/2013	70.45	70.40	0.05	3,471.06
			5/14/2014	72.00	71.50	0.50	3,469.82
			10/14/2014	69.90	--	--	3,471.57
			4/21/2015	70.90	--	--	3,470.57
			12/7/2015	70.71	Trace	Trace	3,470.76
			4/11/2016	70.93	--	--	3,470.54
			12/12/2016	71.00	--	--	3,470.47
			4/17/2017	71.91	--	--	3,469.56
			10/25/2017	72.13	--	--	3,469.34
			12/8/2017	72.59	--	--	3,468.88
			3/13/2018	73.20	--	--	3,468.27
			3/19/2018	72.96	--	--	3,468.51
			12/4/2018	73.73	--	--	3,467.74
			4/24/2019	74.50	--	--	3,466.97
			12/9/2019	72.57	--	--	3,468.90
			4/7/2020	73.00	--	--	3,468.47
			9/22/2020	74.21	--	--	3,467.26
			4/27/2021	75.14	--	--	3,466.33
			1/4/2022	74.66	--	--	3,466.81
			9/30/2024	78.20	--	--	3,463.27
MW-21	3,543.15	81.48	5/20/2013	67.65	66.65	1.00	3,476.20
			10/15/2013	68.60	67.40	1.20	3,475.39
			5/14/2014	70.50	69.23	1.27	3,473.54
			10/14/2014	67.92	66.80	1.12	3,476.01
			4/21/2015	68.60	67.55	1.05	3,475.29
			12/7/2015	68.80	67.80	1.00	3,475.05
			4/11/2016	68.83	67.71	1.12	3,475.10
			12/12/2016	69.41	67.80	1.61	3,474.87
			4/17/2017	71.78	70.60	1.18	3,472.20
			10/25/2017	71.10	69.50	1.60	3,473.17
			12/8/2017	70.98	70.97	0.01	3,472.18
			3/13/2018	74.90	72.10	2.80	3,470.21
			3/19/2018	72.45	72.10	0.35	3,470.95
			12/4/2018	77.83	68.26	9.57	3,472.02
			8/30/2019	74.30	74.00	0.30	3,469.06
			12/9/2019	66.73	66.68	0.05	3,476.46
			4/7/2020	69.53	69.27	0.26	3,473.80
			9/22/2020	73.45	72.63	0.82	3,470.27
			4/27/2021	74.65	74.31	0.34	3,468.74
			1/4/2022	76.41	71.73	4.68	3,470.02
			9/30/2024	79.97	75.75	4.22	3,466.13

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
MW-22	3,545.87	41.07	5/20/2013	20.90	--	--	3,524.97
			10/15/2013	17.40	--	--	3,528.47
			5/14/2014	21.51	--	--	3,524.36
			10/14/2014	15.55	--	--	3,530.32
			4/21/2015	18.60	Trace	Trace	3,527.27
			12/7/2015	17.95	--	--	3,527.92
			4/11/2016	19.77	--	--	3,526.10
			12/12/2016	20.18	--	--	3,525.69
			4/17/2017	20.36	--	--	3,525.51
			10/25/2017	20.51	--	--	3,525.36
			12/8/2017	21.23	--	--	3,524.64
			3/13/2018	22.15	--	--	3,523.72
			3/19/2018	22.22	--	--	3,523.65
			12/4/2018	21.60	--	--	3,524.27
			4/25/2019	22.61	--	--	3,523.26
			12/9/2019	21.36	--	--	3,524.51
			4/6/2020	22.60	--	--	3,523.27
			9/22/2020	23.15	--	--	3,522.72
			4/27/2021	23.89	--	--	3,521.98
			1/4/2022	23.22	--	--	3,522.65
			9/30/2024	23.95	--	--	3,521.92
MW-23	3,542.21	85.74	5/20/2013	72.71	--	--	3,469.50
			10/14/2013	72.72	--	--	3,469.49
			5/14/2014	74.70	--	--	3,467.51
			10/13/2014	72.37	--	--	3,469.84
			4/20/2015	71.98	--	--	3,470.23
			12/7/2015	72.65	--	--	3,469.56
			4/11/2016	72.94	--	--	3,469.27
			12/12/2016	72.95	--	--	3,469.26
			4/17/2017	74.02	--	--	3,468.19
			10/24/2017	75.11	--	--	3,467.10
			12/8/2017	76.81	--	--	3,465.40
			3/13/2018	77.51	--	--	3,464.70
			3/19/2018	77.67	--	--	3,464.54
			12/4/2018	78.33	--	--	3,463.88
			4/23/2019	78.92	78.83	0.09	3,463.35
			8/30/2019	79.40	79.38	0.02	3,462.82
			12/9/2019	78.00	77.90	0.10	3,464.28
			4/6/2020	78.04	Trace	Trace	3,464.17
			9/21/2020	78.81	78.71	0.10	3,463.47
			4/27/2021	79.80	79.72	0.08	3,462.47
			1/4/2022	79.28	79.26	0.02	3,462.94
			9/30/2024	82.67	--	--	3,459.54
MW-24	3,529.10	36.00	5/30/2012	29.69	--	--	3,499.41
			9/24/2012	33.00	--	--	3,496.10
			5/14/2014	29.50	--	--	3,499.60
			10/13/2014	21.69	--	--	3,507.41
			4/20/2015	24.92	--	--	3,504.18
			12/7/2015	24.50	--	--	3,504.60
			4/11/2016	24.89	--	--	3,504.21
			12/12/2016	22.10	--	--	3,507.00
			4/17/2017	23.65	--	--	3,505.45
			10/24/2017	27.38	--	--	3,501.72
			12/8/2017	29.50	--	--	3,499.60
			12/4/2018	32.53	--	--	3,496.57
			4/24/2019	34.90	--	--	3,494.20
			12/9/2019	28.06	--	--	3,501.04
			4/6/2020	31.90	--	--	3,497.20
			9/21/2020	34.69	--	--	3,494.41
			4/27/2021	35.59	--	--	3,493.51
			1/4/2022	26.66	--	--	3,502.44
			9/30/2024	35.79	--	--	3,493.31

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
EB-01	3,492.15	37.05	5/20/2013	DRY			
			10/14/2013	DRY			
			5/14/2014	DRY			
			10/13/2014	DRY			
			4/20/2015	DRY			
			12/7/2015	DRY			
			4/11/2016	DRY			
			12/12/2016	DRY			
			4/17/2017	DRY			
			10/24/2017	DRY			
			12/8/2017	DRY			
			12/4/2018	DRY			
			4/23/2019	DRY			
			12/9/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/27/2021	DRY			
			1/5/2022	DRY			
			9/30/2024	Could Not Locate			
EB-02	3,525.34	57.47	5/20/2013	42.05	Trace	Trace	3,483.29
			10/14/2013	42.45	--	--	3,482.89
			5/14/2014	42.72	--	--	3,482.62
			10/13/2014	43.40	--	--	3,481.94
			4/20/2015	43.70	--	--	3,481.64
			12/7/2015	44.16	--	--	3,481.18
			4/11/2016	44.02	--	--	3,481.32
			12/12/2016	44.00	--	--	3,481.34
			4/17/2017	44.13	--	--	3,481.21
			10/24/2017	44.85	--	--	3,480.49
			12/8/2017	44.90	--	--	3,480.44
			12/5/2018	45.07	--	--	3,480.27
			4/23/2019	45.02	--	--	3,480.32
			12/9/2019	45.17	--	--	3,480.17
			4/6/2020	45.25	--	--	3,480.09
			9/21/2020	46.03	--	--	3,479.31
			4/26/2021	45.45	--	--	3,479.89
			1/4/2022	45.82	--	--	3,479.52
			9/30/2024	46.39	--	--	3,478.95
EB-03	3,521.05	69.84	5/20/2013	61.36	61.32	0.04	3,459.72
			10/14/2013	60.78	Trace	Trace	3,460.27
			5/14/2014	61.69	61.65	0.04	3,459.39
			10/13/2014	58.95	--	--	3,462.10
			4/20/2015	60.75	Trace	Trace	3,460.30
			12/7/2015	61.60	60.80	0.80	3,460.01
			4/11/2016	61.95	60.85	1.10	3,459.87
			12/12/2016	61.20	60.80	0.40	3,460.13
			4/17/2017	61.35	60.85	0.50	3,460.05
			10/24/2017	61.09	60.91	0.18	3,460.09
			12/8/2017	61.10	61.05	0.05	3,459.99
			3/13/2018	64.07	63.69	0.38	3,457.25
			12/3/2018	60.88	60.87	0.01	3,460.18
			4/24/2019	65.74	65.30	0.44	3,455.62
			8/30/2019	67.43	66.94	0.49	3,453.96
			12/10/2019	60.91	60.83	0.08	3,460.20
			4/6/2020	62.28	Trace	Trace	3,458.77
			9/21/2020	64.89	64.87	0.02	3,456.17
			4/27/2021	67.33	67.08	0.25	3,453.90
			1/5/2022	64.60	--	--	3,456.45
			9/30/2024	Could Not Locate			

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
EB-04	3,508.38	53.91	5/20/2013	52.63	Trace	Trace	3,455.75
			10/14/2013	52.70	--	--	3,455.68
			5/14/2014	DRY			
			10/13/2014	DRY			
			4/20/2015	50.81	--	--	3,457.57
			12/7/2015	DRY			
			4/11/2016	DRY			
			12/12/2016	DRY			
			4/17/2017	DRY			
			10/24/2017	DRY			
			12/8/2017	DRY			
			12/5/2018	DRY			
			4/23/2019	DRY			
			12/10/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/27/2021	DRY			
			1/5/2022	DRY			
			9/30/2024	Could Not Locate			
EB-05	3,526.61	57.93	5/20/2013	50.15	Trace	Trace	3,476.46
			10/14/2013	49.92	--	--	3,476.69
			5/14/2014	50.65	--	--	3,475.96
			10/13/2014	51.00	--	--	3,475.61
			4/20/2015	50.41	--	--	3,476.20
			12/7/2015	51.10	--	--	3,475.51
			4/11/2016	50.66	--	--	3,475.95
			12/12/2016	50.50	--	--	3,476.11
			4/17/2017	51.06	--	--	3,475.55
			10/24/2017	52.13	--	--	3,474.48
			12/8/2017	53.05	--	--	3,473.56
			12/5/2018	53.25	--	--	3,473.36
			4/23/2019	53.42	--	--	3,473.19
			12/10/2019	53.57	--	--	3,473.04
			4/6/2020	52.75	--	--	3,473.86
			9/21/2020	53.38	--	--	3,473.23
			4/26/2021	53.85	--	--	3,472.76
			1/5/2022	53.93	--	--	3,472.68
			9/30/2024	Could Not Locate			
EB-06	3,556.63	75.00	5/20/2013	73.45	--	--	3,483.18
			10/14/2013	73.04	Trace	Trace	3,483.59
			5/14/2014	73.98	--	--	3,482.65
			10/13/2014	74.70	--	--	3,481.93
			4/20/2015	73.80	--	--	3,482.83
			12/7/2015	75.28	--	--	3,481.35
			4/11/2016	74.76	--	--	3,481.87
			12/12/2016	73.76	--	--	3,482.87
			4/17/2017	75.07	--	--	3,481.56
			10/24/2017	76.00	--	--	3,480.63
			12/8/2017	DRY			
			12/3/2018	**WELL OBSTRUCTED**			
EB-07	3,503.97	56.08	5/20/2013	53.92	--	--	3,450.05
			10/15/2013	54.58	--	--	3,449.39
			5/14/2014	DRY	--	--	DRY
			10/13/2014	47.90	--	--	3,456.07
			4/20/2015	49.19	--	--	3,454.78
			12/7/2015	50.00	--	--	3,453.97
			4/11/2016	50.00	--	--	3,453.97
			12/12/2016	49.85	--	--	3,454.12
			4/17/2017	50.02	--	--	3,453.95
			10/24/2017	50.41	--	--	3,453.56
			12/8/2017	50.83	--	--	3,453.14
			12/5/2018	51.11	--	--	3,452.86
			4/23/2019	51.48	--	--	3,452.49
			12/9/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/26/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	Could Not Locate			

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
EB-08	3,537.07	86.22	5/20/2013	73.60	71.20	2.40	3,465.15
			10/14/2013	73.20	70.90	2.30	3,465.48
			5/14/2014	74.90	72.55	2.35	3,463.82
			10/13/2014	72.00	69.50	2.50	3,466.82
			4/20/2015	71.70	70.00	1.70	3,466.56
			12/7/2015	72.10	71.00	1.10	3,465.74
			4/11/2016	72.70	71.61	1.09	3,465.13
			12/12/2016	71.75	70.55	1.20	3,466.16
			4/17/2017	72.60	71.48	1.12	3,465.25
			10/24/2017	74.87	73.77	1.10	3,462.97
			12/8/2017	73.40	73.39	0.01	3,463.68
			3/13/2018	74.91	74.44	0.47	3,462.49
			12/4/2018	74.35	73.50	0.85	3,463.32
			4/24/2019	76.36	75.52	0.84	3,461.30
			8/30/2019	78.00	76.86	1.14	3,459.87
			12/10/2019	75.35	75.17	0.18	3,461.85
			4/6/2020	74.73	74.59	0.14	3,462.44
			9/21/2020	78.69	78.46	0.23	3,458.54
			4/27/2021	79.97	78.85	1.12	3,457.88
			1/5/2022	78.54	78.43	0.11	3,458.61
			9/30/2024	Could Not Locate			
P-01	3,530.21	54.06	5/20/2013	50.87	Trace	Trace	3,479.34
			10/14/2013	50.85	--	--	3,479.36
			5/14/2014	50.95	--	--	3,479.26
			10/13/2014	50.82	--	--	3,479.39
			4/20/2015	50.93	--	--	3,479.28
			12/7/2015	50.95	Trace	Trace	3,479.26
			4/11/2016	50.89	--	--	3,479.32
			12/12/2016	50.85	--	--	3,479.36
			4/17/2017	51.02	--	--	3,479.19
			10/24/2017	53.40	--	--	3,476.81
			12/8/2017	50.94	--	--	3,479.27
			12/5/2018	50.86	--	--	3,479.35
			4/23/2019	50.85	--	--	3,479.36
			12/10/2019	50.89	--	--	3,479.32
			4/6/2020	50.88	--	--	3,479.33
			9/21/2020	50.92	--	--	3,479.29
			4/26/2021	50.88	--	--	3,479.33
			1/5/2022	50.95	--	--	3,479.26
			9/30/2024	Could Not Locate			
P-02	3,544.73	27.45	5/20/2013	22.70	--	--	3,522.03
			10/14/2013	20.92	--	--	3,523.81
			5/14/2014	22.15	--	--	3,522.58
			10/13/2014	18.80	--	--	3,525.93
			4/20/2015	21.14	--	--	3,523.59
			12/7/2015	20.55	--	--	3,524.18
			4/11/2016	21.44	--	--	3,523.29
			12/12/2016	21.06	--	--	3,523.67
			4/17/2017	21.09	--	--	3,523.64
			10/24/2017	21.58	--	--	3,523.15
			12/8/2017	21.87	--	--	3,522.86
			12/4/2018	21.70	--	--	3,523.03
			4/24/2019	22.24	--	--	3,522.49
			12/9/2019	20.65	--	--	3,524.08
			4/6/2020	21.79	--	--	3,522.94
			9/21/2020	22.28	--	--	3,522.45
			4/26/2021	22.54	--	--	3,522.19
			1/4/2022	21.51	--	--	3,523.22
			9/30/2024	21.92	--	--	3,522.81

ENSOLUM

TABLE 1
GROUNDWATER ELEVATION SUMMARY
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Top of Casing Elevation (feet AMSL)	Total Depth (feet bgs)	Date	Depth to Groundwater (feet BTOC)	Depth to PSH (feet BTOC)	PSH Thickness (feet)	Groundwater Elevation (feet AMSL)*
P-03	3,536.83	78.65	5/20/2013	72.72	--	--	3,464.11
			10/14/2013	56.39	--	--	3,480.44
			5/14/2014	73.91	--	--	3,462.92
			10/13/2014	40.70	--	--	3,496.13
			4/20/2015	56.65	--	--	3,480.18
			12/7/2015	44.93	--	--	3,491.90
			4/11/2016	52.22	--	--	3,484.61
			12/12/2016	40.50	--	--	3,496.33
			4/17/2017	69.50	--	--	3,467.33
			10/24/2017	78.82	--	--	3,458.01
			12/8/2017	75.03	--	--	3,461.80
			12/4/2018	74.39	--	--	3,462.44
			4/26/2019	74.36	--	--	3,462.47
			12/10/2019	73.82	--	--	3,463.01
			4/6/2020	74.45	--	--	3,462.38
			9/21/2020	74.67	--	--	3,462.16
			4/26/2021	74.79	--	--	3,462.04
			1/5/2022	66.26	--	--	3,470.57
			9/30/2024	Could Not Locate			
P-04	3,552.26	48.65	5/20/2013	DRY			
			10/14/2013	DRY			
			5/14/2014	56.80	--	--	3,495.46
			10/13/2014	59.30	--	--	3,492.96
			4/20/2015	60.40	--	--	3,491.86
			12/7/2015	DRY			
			4/11/2016	DRY			
			12/12/2016	DRY			
			4/17/2017	DRY			
			10/24/2017	DRY			
			12/8/2017	DRY			
			3/13/2018	DRY			
			12/4/2018	DRY			
			4/24/2019	DRY			
			12/10/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/26/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	Could Not Locate			
P-05	3,507.48	47.35	5/20/2013	47.34	--	--	3,460.14
			10/14/2013	47.30	--	--	3,460.18
			5/14/2014	47.30	--	--	3,460.18
			10/13/2014	47.30	--	--	3,460.18
			4/20/2015	47.00	--	--	3,460.48
			12/7/2015	47.14	--	--	3,460.34
			4/11/2016	47.30	--	--	3,460.18
			12/12/2016	47.35	--	--	3,460.13
			4/17/2017	47.33	--	--	3,460.15
			10/24/2017	DRY			
			12/8/2017	DRY			
			12/4/2018	47.34	--	--	3,460.14
			4/24/2019	DRY			
			12/10/2019	DRY			
			4/6/2020	DRY			
			9/21/2020	DRY			
			4/26/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	Could Not Locate			
AS-1	--	--	11/17/2017	62.44	62.40	0.04	--
			12/7/2017	63.66	63.55	0.11	--
			12/4/2018	61.13	59.28	1.85	--
			4/16/2020	H_2S PRESENT IN WELL			
			9/22/2020	H_2S PRESENT IN WELL			
			4/27/2021	DRY			
			1/4/2022	DRY			
			9/30/2024	62.56	62.47	0.09	--

Notes:

AMSL: Above mean sea level
bgs: Below ground surface
BTOC: Below top of casing
H_2S: Hydrogen sulfide gas
PSH: Phase separated hydrocarbons
--: Indicates no GWEL or PSH measured
** Groundwater corrected for PSH thickness assuming 0.70 specific gravity.*
*** Emulsion observed in well*
**** Anomalous groundwater measurement, not used for elevation isocontours*

ENSOLUM

TABLE 2
PSH THICKNESS OF SELECT MONITORING WELLS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Date	AS-01	EB-03	EB-08	MW-02-06	MW-02-09	MW-02-10	MW-02-11	MW-02-12	MW-02-13	MW-02-14	MW-02-15	MW-02-16	MW-03	MW-03-01	MW-03-02	MW-03-03	MW-03-04	MW-04	MW-06	MW-07	MW-09	MW-10	MW-11	MW-13	MW-14	MW-19	MW-20	MW-21	MW-23
02/12/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/13/2007	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.94	--	--	--	--	--	--	--	--	--
03/26/2007	--	0.31	--	--	--	--	--	0.40	--	--	--	--	--	--	--	0.01	0.13	--	--	--	--	--	--	--	--	--	--	--	--
03/27/2007	--	--	--	--	3.57	>10.52	--	--	0.98	0.38	--	--	--	--	--	--	--	--	1.35	--	0.37	--	--	--	--	--	--	--	--
06/18/2007	--	0.14	--	--	0.17	5.64	1.25	**	3.15	0.45	--	--	0.49	--	--	--	0.83	1.05	0.17	--	0.28	--	--	--	--	--	--	--	--
09/17/2007	--	0.35	--	--	3.06	6.28	1.20	**	3.13	0.49	--	--	1.07	--	**	--	1.16	*	0.07	--	0.49	--	--	--	--	--	--	--	--
12/10/2007	--	0.39	--	--	3.40	5.04	0.51	**	3.10	0.66	--	--	1.18	--	--	--	0.91	1.96	0.19	--	**	--	--	--	--	--	--	--	--
03/10/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/11/2008	--	2.52	--	--	0.82	1.92	3.00	**	2.21	0.48	--	--	2.64	--	**	--	0.97	2.37	0.91	--	1.63	--	--	--	--	--	--	--	--
07/31/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	25.42	18.88	--	--	--	--	--	--
09/15/2008	--	0.43	--	--	8.83	8.78	0.55	**	Sheen	0.56	--	--	3.05	15.49	**	0.01	0.79	5.09	13.39	0.11	0.23	0.66	19.27	--	0.29	--	--	--	--
03/09/2009	--	0.94	--	--	3.89	>8.30	**	**	3.17	0.28	--	--	2.67	10.69	**	Sheen	0.82	4.65	7.34	0.30	0.06	16.86	14.86	--	1.65	--	--	--	--
07/13/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	11.16	--	--	--	--	--	Sheen	--	--	--	--	1.19	--	--	--	--
07/14/2009	--	1.67	--	--	--	>8.78	--	**	--	--	--	--	--	--	**	--	0.83	5.80	--	--	0.09	5.61	15.40	--	--	5.35	17.29	0.20	--
09/14/2009	--	1.92	--	--	11.42	9.10	0.65	0.15	9.33	--	--	--	3.00	11.10	**	0.02	0.79	9.40	11.50	*	0.12	20.74	0.82	--	0.75	7.45	--	0.40	0.16
03/29/2010	--	3.02	--	0.23	3.11	5.11	0.63	0.10	3.64	1.15	--	--	3.17	4.31	0.19	0.19	0.77	0.19	10.23	0.44	0.25	10.60	7.91	--	0.01	4.10	Sheen	8.62	0.18
09/13/2010	--	0.64	--	1.80	2.22	>3.25	0.75	0.01	5.63	0.95	--	--	4.22	2.24	0.03	0.02	1.56	1.97	9.30	0.02	**	8.46	4.83	--	0.14	6.42	0.48	4.89	--
03/14/2011	--	--	--	0.51	--	--	0.49	--	--		--	--	--	--	0.04	0.01	--	--	--	0.01	0.22	--	--	--	--	--	--	--	--
03/15/2011	--	0.65	0.02	--	--	--	--	--	3.95	0.62	--	--	1.93	1.88	--	--	1.56	1.73	6.67	--	--	7.92	4.14	0.01	0.15	7.5	0.50	2.29	--
03/16/2011	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/11/2011	--	--	--	0.42	--	--	--	--	5.27		--	--	2.37	1.60	0.04	--	1.53	2.92	10.07	--	0.62	--	--	--	--	--	--	--	--
05/30/2012	--	--	2.45	0.25	2.95	7.38	0.11	--	6.33	0.62	--	--	0.38	1.68	0.10	--	0.52	0.45	8.87	--	0.32	8.15	2.50	--	--	4.14	0.52	1.07	--
09/24/2012	--	0.15	4.11	0.13	3.31	7.27	0.08	0.02	4.13	0.85	--	--	0.21	1.18	0.63	0.02	0.08	0.09	6.86	--	0.37	5.48	--	--	--				--
09/25/2012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.17	--	--	3.02	0.50	1.09	--
05/20/2013	--	0.04	2.40	0.05	4.45	>10.00	0.12	--	3.62	0.88	--	--	--	--	0.35	--	0.30	0.07	3.82	--	--	6.05	--	--	0.02	4.05	0.03	1.00	--
10/14/2013	--	--	2.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/15/2013	--	--	--	0.45	3.15	6.30	0.05	--	3.58	0.70	--	--	--	0.60	3.20	--	0.40	0.20	5.12	--	0.30	4.45	--	--	--	4.1	0.05	1.20	--
05/14/2014	--	0.04	2.35	0.35	4.55	4.55	0.05	--	1.47	0.60	--	--	0.02	1.50	0.60	--	0.90	0.50	2.30	--	0.82	1.60	0.68	7.54	0.05	10.55	0.50	1.27	--
10/13/2014	--	--	2.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.00	--	--	--	--
10/14/2014	--	--	--	0.45	4.08	8.18	0.06	--	5.85	1.90	--	--	--	0.08	0.80	--	0.45	0.25	4.10	--	2.05	3.70	0.20	--	--	3.6	--	1.12	--
04/20/2015	--	--	1.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/21/2015	--	--	--	0.30	3.88	5.65	--	--	1.80	0.75	--	--	--	0.55	0.20	--	0.20	0.65	2.10	--	2.10	2.90	0.38	--	--	6.45	--	1.05	--
12/04/2015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	--	--	--	--
12/07/2015	--	0.80	1.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.64	--	3.1	Sheen	1.00	--
12/08/2015	--	--	--	--	2.20	5.85	--	--	2.15	0.35	--	--	--	1.34	0.45	--	0.25	0.65	3.40	--	0.75	4.30	0.58	--	--	--	--	--	--
04/11/2016	--	1.1	1.09	--	1.46	>5.43	--	--	2.35	0.42	--	--	--	0.22	0.35	--	0.35	0.78	2.93	--	1.19	7.81	0.03	--	--	2.42	--	1.12	--
12/12/2016	--	0.40	1.20	0.01	--	>4.00	--	--	--	--	--	0.74	--	--	0.68	--	0.65	0.79	--	--				--	--	--	--	1.61	--
12/13/2016	--	--	--	--	2.95	--	--	--	1.72	0.59	0.10	--	--	0.10		--	--		2.53	--	1.46	2.21	Sheen	--	--	2.22	--	--	--
04/17/2017	--	0.50	1.12	0.01	2.80	>2.92	--	--	1.85	0.50	0.28	1.63	--	0.10	0.98	--	2.02	0.88	2.45	--	1.42	2.09	0.15	Dry	0.16	2.41	--	1.18	--
10/24/2017	--	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	Dry	0.11	--	--	--	--
10/25/2017	--	--	--	0.48	2.98	>1.55	--	--	0.76	0.48	0.20	1.74	--	0.25	0.24	--	1.68	0.77	1.24	--	1.79	1.93	--	--	--	1.45	--	1.60	--
11/17/2017	0.04	0.13	--	--	0.22	1.35	--	--	0.90	0.05	0.05	0.02	--	0.03	--	--	Sheen	0.06	0.13	--	0.84	0.23	--	--	--	0.07	--	--	--
12/08/2017	0.11	0.05	0.01	--	0.29	>1.95	--	--	0.07	0.03	0.31	0.01	--	0.07	--	--	--	Dry	0.01	--	1.54	--	--	Dry	0.12	0.13	--	0.01	--
03/13/2018	--	0.38	0.47	0.41	2.77	0.06	0.30	--	1.20	0.14	3.07	0.24	0.41	1.53	--	--	--	Dry	1.33	--	1.60	0.68	--	--	0.22	0.29	--	2.80	--
03/19/2018	--	--	--	--	0.86	0.07	0.52	--	0.52	0.08	2.60	0.20	--	0.27	--	--	--	Dry	1.39	--	1.68	0.24	--	Dry	--	0.21	--	0.35	--
08/05/2018	5.29	--	--	--	--	--	--	--	--	0.78	--	--	--	1.65	--	--	--	--	--	--	3.60	2.83	--		--	--	--	--	--
08/07/2018	--	--	--	--	0.30	--	--	--	0.30	--	1.70	0.30	--	--	--	--	--	--	0.70	--	--		--	--	--	--	--	--	--
08/23/2018	8.49	0.1	--	0.62	0.66	--	--	--	--	0.57	2.15	0.15	--	1.19	0.03	--	--	--	1.84	--	*	0.95	*	--	0.39	0.14	--	6.10	--
08/29/2018	5.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	0.29	*	--	--	--	--	--	--
09/05/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	*	**	--	--	--	--	--	--	--
09/13/2018	2.79	--	--	--	--	--	--	--	0.47	--	2.25	--	--	*	--	--	--	--	1.30	--	*	--	*	--	--	--	--	--	--
09/18/2019	1.42	--	--	--	0.59	--	--	--	0.45	0.00	2.34	--	--	*	--	--	--	--	1.25	--	0.23	--	*	--	--	--	--	--	--
09/27/2018	1.4	--	--	--	0.00	--	--	--	0.32	0.00	2.95	--	--	--	--	--	--	--	1.44	--	0.22	0.02	*	--	--	--	--	--	--
10/03/2018	1.45	--	--	--	0.32	--	--	--	0.34	0.17	3.10	--	--	--	--	--	--	--	1.4	--	--	--	--	--	--	--	--	--	--
10/09/2018	1.07	--	--	--	0.69	--	--	--	0.42	0.13	3.22	--	--	--	--	--	--	--	1.59	--	--	--	--	--	--	--	--	--	--
10/16/2018	2.69	--	--	--	0.00	--	--	--	0.30	0.79	2.68	--	--	--	--	--	--	--	1.11	--	--	--	--	--	--	--	--	--	--
11/01/2018	7.98	--	--	--	0.33	--	--	--	0.55	1.38	3.41	--	--	--	--	--	--	--	1.16	--	--	3.09	*	--	--	--	--	--	--
11/02/2018	--	--	--	--	--	--	--	--	--	0.18	--	--	--	--	--	--	--	--		--	--	3.09	--	--	--	--	--	--	--
11/08/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	3.09	*	--	--	--	--	--	--
11/09/2018	--	--	--	--	0.22	--	--	--	0.59	--	3.49	0.28	--	--	--	--	--	--	1.23	--	--	--	--	--	--	--	--	--	--
11/20/2018	--	--	--	--	--	--	--	--	--	--	0.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/21/2018	--	--	--	--	0.27	--	--	--	0.73	0.39	--	0.25	--	--	--	--	--	--	1.31	--	--	--	*	--	--	--	--	--	--
11/30/2018	--	--	--	--	0.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.09	*	--	--	--	--	--	--
12/03/2018	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Dry	2.22	0.16	--	--	--
12/04/2018	1.85	--	0.85	0.25	0.30	1.30	0.63	8.07	0.19	0.25	4.21	0.12	--	--	0.40	0.40	--	--	1.29	--	0.04	0.02	--	--	--	--	--	9.57	--
12/05/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/07/2018	--	--	--	--	0.30	--	--	--	--	--	--	--	--	***	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/21/2018	--	--	--	--	--	--	--	--	0.49	0.20	3.81	0.32	--	***	--	--	--	--	1.39	--	*	--	--	--	--	--	--	--	--
12/28/2018	--	--	--	--	--	--	--	--	0.52	0.92	3.85	0.36	--	--	--	--	--	--	1.38	--	*	--	--	--	--	--	--	--	--
01/04/2019	--	--	--	--	--	--	--	--	*	--	4.08	0.26	--	--	--	--	--	--	0.41	--	***	--	--	--	--	--	--	--	--
01/10/2019	--	--	--	--	--	--	--	--	--	--	3.90	--	--	--	--	--	--	--	0.11	--	***	--	--	--		0.16	--	--	--
01/11/2019	--	--	--	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/16/2019	--	--	--	--	--	--	--	--	**	--	*	--	--	--	--	--	--	--	0.11	--	***	***	--	--	--	--	--	--	--
01/24/2019	--	--	--	--	--	--	--	--	**	--	*	0.13	--	--	--	0.59	--	--	0.12	--	***		--	--	--	--	--	7.25	--
01/31/2019	--	--	--	--	--	--	--	--	0.31	--	*	0.42	--	--	--	--	--	--	0.27	--	***	***	--	--	--	--	--	--	--
02/06/2019	--	--	--	--	--	--	--	--	**	--		0.24	--	--	--	--	--	--	0.27	--	--	**	--	--	--	--	--	--	--
02/13/2019	--	--	--	--	--	Dry	0.63	--	**	0.07	**	0.26	--	--	--	--	--	**	0.15	--	--	***	--	--	--	--	--	--	--
02/20/2019	0.03	--	--	0.68	--	--	0.76	7.84	**	0.08	--	0.10	--	--	0.01	0.62	--	**	0.11	--	--	**	--	--	--	--	--	6.16	7.39
02/26/2019	--	--	--	--	--	--	--	--	**	0.02	--	--	--	--	--	--	--	--	--	--	--	**	--	--	--	--	--	--	--
03/15/2019	--	--	--	--	0.03	--	--	--	**	**	0.04	--	--	--	--	--	--	--	0.27	--	--	**	Dry	--	--	--	--	--	--
03/22/2019	0.01	--	--	--	0.11	--	0.48	6.35	0.13	**	0.07	--	--	--	--	--	--	--	0.47	--	--	**	Dry	--	--	--	--	--	--
04/23/2019	--	0.44	0.84	0.61	0.23	Dry	0.25	0.07	0.56	--	0.37	0.24	0.02	--	0.46	0.46	--	1.85	0.61	--	--	Dry	--	Dry	1.35	0.16	--	--	0.91

ENSOLUM

TABLE 2
PSH THICKNESS OF SELECT MONITORING WELLS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Date	AS-01	EB-03	EB-08	MW-02-06	MW-02-09	MW-02-10	MW-02-11	MW-02-12	MW-02-13	MW-02-14	MW-02-15	MW-02-16	MW-03	MW-03-01	MW-03-02	MW-03-03	MW-03-04	MW-04	MW-06	MW-07	MW-09	MW-10	MW-11	MW-13	MW-14	MW-19	MW-20	MW-21	MW-23
06/21/2019	--	--	--	--	0.4	--	--	--	1.85	0.70	--	--	--	--	--	--	--	--	0.80	--	--	Dry	--	--	--	0.1	--	--	--
06/30/2019	--	--	--	--	--	--	--	--	--	0.20	0.34	--	--	--	--	--	--	--	--	--	--	1.19	Dry	--	--	--	--	--	--
06/30/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	--	--	--	--	--	--	--	--
07/24/2019	--	0.49	0.98	1.00	1.17	Dry	Dry	--	1.62	1.17	0.48	0.26	0.2	--	--	--	--	0.35	0.93	--	--	0.09	Dry	--	2.39	--	--	*	*
08/30/2019	--	0.49	1.14	1.08	0.25	--	--	--	0.21	0.05	0.38	0.78	--	--	--	--	0.22	--	0.11	--	--	--	--	--	0.26	0.26	--	0.30	0.02
10/07/2019	--	--	0.46	--	0.7	--	--	--	0.03	0.00	--	Sheen	--	--	Sheen	--	--	--	0.19	--	0.01	Sheen	0.01	--	0.09	--	--	0.92	--
11/07/2019	--	0.02	0.01	--	0.25	--	--	--	0.36	0.01	0.23	0.01	0.01	--	0.62	--	--	--	0.01	--	--	0.01	Dry	--	6.02	--	--	7.38	0.01
11/22/2019	--	0.01	0.01	0.44	0.13	--	--	0.01	0.02	0.01	0.23	0.01	3.37	--	0.01	--	0.01	--	0.02	--	0.01	0.99	**	--	0.16	--	--	7.83	0.12
12/02/2019	--	Sheen	0.53	--	--	--	--	--	0.45	--	--	--	--	--	--	--	--	--	0.22	--	--	--	Dry	--	0.01	--	--	8.25	0.01
12/09/2019	--	0.08	0.18	--	0.25	Dry	1.46	0.03	0.01	0.01	0.92	--	--	--	0.40	0.40	--	0.26	0.01	--	--	Dry	--	Dry	0.2	--	--	0.27	0.10
01/03/2020	--	0.01	0.28	0.01	0.24	**	0.13	--	0.04	Sheen	0.16	Sheen	Sheen	Sheen	Sheen	0.34	--	0.26	0.11	--	Sheen	Sheen	Dry	--	0.08	Sheen	Sheen	0.64	0.1
02/11/2020	--	Sheen	Sheen	--	0.17	0.81	Dry	--	0.09	Sheen	0.21	Sheen	Sheen	Sheen	Sheen	--	0.01	Dry	0.18	--	Sheen	0.02	--	--	0.03	--	Sheen	0.22	0.07
03/19/2020	--	Sheen	0.2	Sheen	0.21	--	--	--	0.18	Sheen	0.22	Sheen	--	Sheen	--	Sheen	Sheen	Dry	0.97	--	--	***	--	--	0.11	--	--	0.91	0.15
04/16/2020	--	Sheen	0.14	--	0.11	0.46	Dry	--	--	--	0.23	--	--	0.04	--	Sheen	Sheen	Dry	0.13	--	--	***	Dry	--	0.74	--	--	--	Sheen
04/17/2020	--	--	--	--	--	--	--	0.07	0.08	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	0.26	--
05/01/2020	--	--	0.2	--	0.14	0.81	--	0.05	0.1	Sheen	0.12	--	--	Sheen	--	0.04	--	Dry	0.10	--	--	***	Dry	--	0.03	--	--	0.56	0.01
05/29/2020	--	0.06	0.06	--	0.33	0.21	--	0.22	0.06	--	0.08	--	--	--	--	0.01	--	****	--	--	--	0.02	Dry	--	0.33	--	--	0.1	0.09
06/05/2020	0.57	Sheen	0.03	--	0.19	0.29	--	0.21	0.02	--	Sheen	--	0.01	Sheen	--	Sheen	--	Dry	0.02	--	--	0.01	Dry	Dry	0.01	--	--	0.13	0.06
06/12/2020	0.46	0.04	0.09	--	0.21	0.34	Dry	0.08	0.01	Sheen	0.13	--	--	0.01	--	Sheen	--	Dry	0.04	--	--	0.02	Sheen	Dry	0.01	0.02	--	0.24	0.09
06/26/2020	0.17	--	0.06	--	0.09	0.05	--	Sheen	0.07	Sheen	0.08	--	0.04	--	Sheen	Sheen	--	Sludge	0.01	--	--	0.02	Sludge	Dry	0.01	0.02	--	0.07	0.02
07/10/2020	0.08	Sheen	0.02	--	0.14	0.11	Sludge	Sheen	0.13	Sheen	0.11	--	0.04	--	--	0.01	--	Sludge	0.04	--	Sheen	0.05	Dry	Dry	Sheen	0.02	--	0.17	Sheen
07/17/2020	Sheen	Sheen	Sheen	--	0.11	0.13	Sludge	0.06	0.13	--	0.07	--	0.03	--	--	Sheen	--	Sludge	0.05	--	Sheen	0.10	Dry	Dry	--	0.04	--	0.14	0.02
07/24/2020	0.02	0.05	--	--	0.14	0.17	Dry	0.04	0.13	Sheen	0.13	--	0.06	--	--	0.04	--	Dry	0.14	--	--	0.02	Dry	Dry	0.04	0.01	--	0.26	0.03
07/31/2020	0.05	--	0.05	0.01	0.16	0.19	Sludge	0.04	0.13	--	0.14	--	0.04	--	--	0.05	--	Sludge	0.20	--	--	0.06	Sludge	Dry	0.02	0.02	--	0.30	0.02
08/07/2020	0.05	--	0.01	--	0.11	0.24	Sludge	0.08	0.07	Sheen	0.11	--	0.04	--	0.01	0.08	--	Dry	0.21	--	--	0.13	Dry	Dry	0.01	0.01	--	0.15	0.03
08/14/2020	0.02	--	0.08	--	0.16	0.29	Dry	0.09	0.12	Sheen	0.09	--	0.03	--	--	0.10	--	Sludge	0.22	--	--	0.10	Sludge	Dry	0.02	Sheen	--	0.07	0.04
08/28/2020	Sheen	Sheen	0.12	--	0.18	0.32	Sludge	0.14	0.11	Sheen	0.15	--	0.05	--	--	0.18	--	Dry	0.14	--	Sheen	0.20	Dry	Dry	0.03	0.04	--	0.15	0.06
09/11/2020	Sheen	Sheen	0.11	--	0.18	0.33	Dry	0.17	0.1	Sheen	0.14	--	0.03	--	--	0.15	--	***	0.08	--	--	0.19	Dry	Dry	0.02	0.02	--	0.45	0.02
09/18/2020	Sheen	Sheen	0.12	--	0.18	0.43	Dry	0.19	0.02	0.01	0.13	--	0.02	--	--	0.18	--	Dry	0.11	--	--	0.17	Dry	Dry	0.02	***	--	0.59	0.03
09/21/2020	--	0.02	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Dry	Dry	0.15		--	--	--
09/22/2020	2.25	--	--	--	0.25	0.02	Dry	0.22	0.08	--	0.2	Sheen	Sheen	--	--	0.17	--	Dry	0.14	--	--	0.18	Dry	Dry		0.01	--	0.82	0.1
10/02/2020	Sheen	0.06	0.1	--	0.19	Dry	Dry	0.21	0.07	0.01	0.14	--	0.02	--	Sheen	0.22	--	Dry	0.08	--	--	0.16	Dry	Dry	0.02	0.02	--	0.84	0.01
10/23/2020	Dry	0.05	0.25	--	0.08	0.10	Sludge	0.01	0.06	0.02	0.17	--	0.31	--	Sheen	0.07	--	Dry	--	--	--	0.01	Dry	Dry		0.01	--	0.07	0.05
11/06/2020	Sheen	0.04	0.21	--	0.01	0.15	Sludge	0.02	--	0.02	0.19	--	0.29	--	Sheen	0.05	--	Dry	0.01	--	--	0.02	Dry	Dry	0.01	0.01	--	0.11	Sheen
11/20/2020	Dry	0.08	0.33	--	0.09	Dry	Sludge	0.03	--	0.02	0.18	--	0.21	--	0.01	0.05	--	Sludge	0.01	--	--	0.05	Dry	Dry	0.03	0.01	--	0.28	0.05
12/17/2020	Dry	0.1	0.24	--	0.06	Dry	Sludge	0.05	0.04	0.01	0.1	--	0.13	--	Sheen	0.06	--	Dry	--	--	--	0.02	Dry	Dry	0.11	Sheen	--	0.02	0.97
01/08/2021	Dry	0.15	0.39	--	0.01	Dry	Dry	0.02	--	0.29	0.12	--	0.09	--	0.01	0.09	--	Dry	0.01	--	--	0.03	Dry	Dry	Sheen	Sheen	--	0.23	0.01
01/22/2021	Dry	0.12	0.24	--	0.09	Dry	Dry	0.01	0.01	0.01	0.14	--	0.11	--	0.01	0.16	--	--	0.01	--	--	0.03	Dry	Dry	0.03	0.01	--	0.31	Sheen
02/22/2021	Dry	0.22	0.15	--	0.12	Dry	Dry	0.03	--	0.01	0.21	--	0.03	--	0.01	0.31	--	--	0.02	--	--	0.01	Dry	Dry	0.03	0.02	--	0.05	0.02
03/08/2021	Dry	0.23	0.15	--	0.13	Dry	Dry	0.01	0.01	0.01	0.23	--	0.15	--	0.01	0.31	--	--	0.01	--	--	0.02	Dry	Dry	0.05	0.02	--	0.01	0.01
03/19/2021	Dry	0.28	0.21	--	0.11	Dry	Dry	0.01	--	0.02	0.26	--	0.02	--	0.02	0.30	--	--	0.01	--	--	0.03	Dry	Dry	0.03	0.02	--	0.07	0.01
04/19/2021	Dry	0.25	0.02	--	0.16	Dry	Dry	0.04	--	0.03	0.32	--	0.11	--	0.02	0.36	--	Dry	0.03	--	--	0.04	Dry	Dry	0.07	0.07	--	0.24	0.03
04/27/2021	Dry	0.25	0.12	--	0.13	Dry	Dry	0.06	0.01	0.05	0.33	Sheen	0.16	--	0.01	0.46	--	Dry	0.02	--	--	--	Dry	Dry	0.06	0.02	--	0.28	0.08
05/27/2021	Dry	0.32	0.20	--	0.19	Dry	Dry	0.17	--	0.25	0.39	Sheen	0.17	--	1.02	0.54	--	Dry	0.03	--	0.02	0.01	Dry	Dry	0.07	0.06	--	0.14	--
07/23/2021	Dry	--	0.06	--	0.28	Dry	Dry	0.37	0.02	--	0.55	--	0.11	--	0.00	0.12	--	--	0.47	--	--	0.03	Dry	Dry	1.03	0.02	--	4.73	0.00
09/29/2021	0.00	--	0.00	--	0.41	Dry	Dry	0.08	0.01	--	0.36	0.04	0.07	Dry	0.36	--	--	0.24	0.25	--	--	0.21	Dry	Dry	0.35	--	--	6.56	0.01
01/4/2022	Dry	--	0.11	--	0.00	Dry	Dry	7.02	0.07	--	1.09	--	0.07	--	0.68	--	--	--	0.64	--	--	0.39	Dry	Dry	7.99	--	--	5.18	0.02
01/27/2022	Dry	--	0.41	--	0.46	Dry	Dry	0.27	0.06	--	0.15	--	0.08	--	0.63	--	--	--	0.43	--	--	0.33	Dry	Dry	0.22	--	--	0.56	0.04
03/10/2022	Dry	--	0.21	--	0.38	Dry	Dry	1.22	0.13	--	--	0.27	0.08	--	0.71	--	--	--	0.02	--	--	0.20	Dry	Dry	0.21	--	--	0.58	0.01
06/13/2022	Dry	--	0.60	Dry	**0.42	Dry	Dry	2.12	--	--	0.77	--	0.11	--	0.73	0.39	--	Dry	--		--	--	Dry	Dry	0.41	--	--	2.75	--
09/30/2024	0.09	CNL	CNL	--	0.38	Dry	Dry	5.26	0.01	0.26	1.32	1.07	--	--	0.92	0.57	--	Dry	0.03	--	0.10	0.04	Dry	CNL	CNL	--	--	4.22	--

Notes:

PSH: Phase separated hydrocarbons

--: No reading

**: Extraction*

***: Emulsion*

****: Hydrogen sulfide (H_2S) present - no reading*

*****: Well inaccessable - other remediation*

CNL: Could not locate

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		**0.010**	**0.75**	**0.75**	**0.62**
MW-02	5/22/2013	<0.0008	<0.002	<0.002	<0.003
	10/17/2013	0.0057	<0.002	<0.002	<0.003
	5/14/2014	Insufficient Water for Sample Collection			
	10/15/2014	<0.0008	<0.002	<0.002	<0.003
	4/23/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/13/2016	<0.002	<0.006	<0.006	<0.009
	12/14/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/18/2017	0.0038	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/25/2019	<0.0008	<0.00200	<0.00200	<0.00200
	12/11/2019	0.0016	<0.00600	<0.00600	<0.00600
	4/7/2020	Insufficient Water for Sample Collection			
	9/23/2020	0.0022	0.000417	<0.000600	<0.00030
	4/28/2021	<0.000300	<0.000300	<0.000600	<0.00030
	1/5/2022	0.0008	0.00052	<0.000600	<0.00030
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100
MW-03	5/23/2013	**1.30**	0.00501	0.318	0.271
	10/16/2013	**2.42**	<0.0200	0.0823	0.158
	5/14/2014	**PSH Present, No Sample Collected**			
	10/15/2014	**2.87**	<0.04	0.156	0.199
	4/22/2015	**2.52**	<0.006	0.273	0.296
	12/9/2015	**2.12**	<0.120	0.19	0.238
	4/13/2016	**1.90**	0.00332	0.191	0.286
	12/13/2016	**4.80**	<0.120	0.196	0.25
	4/18/2017	**5.28**	<0.120	0.208	0.246
	10/25/2017	**4.74**	<0.100	0.253	0.261
	3/20/2018	--	--	--	--
	12/6/2018	**1.11**	<0.300	<0.300	0.181
	4/25/2019	**1.12**	<0.100	<0.100	0.184
	12/11/2019	**0.562**	<0.300	<0.300	<0.300
	4/8/2020	**0.0569**	<0.0100	<0.00344	0.0204
	9/23/2020	**PSH Present, No Sample Collected**			
	4/28/2021	**PSH Present, No Sample Collected**			
	1/5/2022	**PSH Present, No Sample Collected**			
	10/1/2024	**0.511**	0.00304	0.000454	0.0102
MW-08	5/22/2013	0.00373	0.00218	<0.002	<0.003
	10/16/213	<0.0008	<0.002	<0.002	<0.003
	5/14/2014	<0.0008	<0.002	<0.002	<0.003
	10/15/2014	<0.0008	<0.002	<0.002	<0.003
	4/23/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/13/2016	0.00323	<0.006	<0.006	<0.009
	12/14/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/18/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/25/2019	<0.00800	<0.00200	<0.00200	<0.00200
	12/10/2019	<0.00200	<0.00600	<0.00600	<0.00600
	4/7/2020	<0.00100	<0.00200	<0.00100	<0.00100
	9/23/2020	0.0011	<0.000600	<0.000300	<0.000300
	4/28/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/4/2022	0.000880	<0.000600	0.000806	0.000783
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		0.010	0.75	0.75	0.62
MW-12	5/22/2013	**0.0495**	<0.002	<0.002	<0.003
	10/16/2013	**1.48**	<0.002	0.0385	0.0307
	5/14/2014	<0.0008	<0.002	<0.002	<0.003
	10/15/2014	**1.80**	<0.2	<0.2	<0.3
	4/22/2015	0.00162	<0.006	<0.006	<0.009
	12/9/2015	**0.0122**	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/14/2016	0.0014	<0.00600	<0.00600	<0.00600
	4/18/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/26/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/10/2019	**0.0308**	<0.00600	0.0427	0.0242
	4/8/2020	0.000563	<0.00200	0.000649	<0.00100
	9/23/2020	0.000332	<0.000600	<0.000300	<0.000300
	4/28/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/5/2022	<0.000300	<0.000600	<0.000300	<0.000300
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100
MW-15	5/21/2013	<0.0008	<0.002	<0.002	<0.003
	10/15/2013	<0.0008	<0.002	<0.002	<0.003
	5/14/2014	Insufficient Water for Sample Collection			
	10/14/2014	<0.002	<0.006	<0.006	<0.009
	4/21/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/13/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	0.00141	0.00813	<0.00600	<0.00600
	10/26/2017	0.00679	<0.00200	<0.00100	<0.00100
	3/20/2018	0.0014	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/25/2019	No Sample Collected			
	12/10/2019	No Sample Collected			
	4/7/2020	<0.00100	<0.00200	<0.00100	<0.00100
	9/22/2020	<0.000300	<0.000600	<0.000300	<0.000300
	4/27/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/4/2022	<0.000300	<0.000600	<0.000300	<0.000300
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100
MW-17	5/21/2013	**0.0427**	<0.002	<0.002	<0.003
	10/15/2013	<0.0008	<0.002	<0.002	<0.003
	5/14/2014	Insufficient Water for Sample Collection			
	10/14/2014	<0.002	<0.006	<0.006	0.0248
	4/21/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/13/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	0.00544	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00400	<0.0120	<0.0120	<0.0120
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/25/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/10/2019	<0.00200	<0.00600	<0.00600	<0.00600
	4/7/2020	<0.00100	<0.00200	0.000318	<0.00100
	9/22/2020	<0.000300	<0.000600	<0.000300	<0.000300
	4/27/2021	<0.000300	<0.000600	0.000389	<0.000300
	1/4/2022	0.000859	0.00129	0.000971	0.000358
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		**0.010**	**0.75**	**0.75**	**0.62**
MW-18	5/20/2013	<0.0008	<0.002	<0.002	<0.003
	10/15/2013	<0.0008	<0.002	<0.002	<0.003
	5/13/2014	<0.002	<0.002	<0.002	<0.003
	10/14/2014	<0.002	<0.006	<0.006	<0.009
	4/21/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/14/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/21/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/26/2019	Missed Sample			
	12/10/2019	<0.00200	<0.00600	<0.00600	<0.00600
	4/7/2020	<0.00100	<0.00200	<0.00100	<0.00200
	9/22/2020	<0.000300	<0.000600	<0.000300	<0.000300
	4/27/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/4/2022	<0.000300	<0.000600	<0.000300	<0.000300
	10/1/2024	Insufficient Water for Sample Collection			
MW-20	5/20/2013	**PSH Present, No Sample Collected**			
	10/15/2013	**PSH Present, No Sample Collected**			
	5/14/2014	**PSH Present, No Sample Collected**			
	10/15/2014	**2.84**	<0.04	0.104	<0.06
	4/22/2015	**0.665**	<0.150	<0.150	<0.225
	12/8/2015	**0.556**	<0.150	<0.150	<0.225
	4/12/2016	**0.471**	0.0247	0.0384	<0.09
	12/14/2016	**0.521**	0.0186	0.0248	0.0118
	4/18/2017	**0.152**	0.00686	0.0162	0.0121
	10/25/2017	**0.0349**	<0.00400	0.00172	0.00232
	3/20/2018	0.00863	<0.00600	<0.00600	<0.00600
	12/5/2018	0.00163	<0.00600	<0.00600	<0.00600
	4/26/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/11/2019	**0.0252**	<0.00600	0.0185	0.0106
	4/8/2020	0.00674	<0.00200	0.00215	0.000982
	9/23/2020	0.00063	<0.000600	<0.000300	<0.000300
	4/28/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/5/2022	<0.000300	<0.000600	<0.000300	<0.000300
	10/1/2024	Insufficient Water for Sample Collection			
MW-22	5/23/2013	**10.2**	<0.002	<0.002	<0.003
	10/16/2013	**5.48**	<0.002	<0.002	<0.003
	5/15/2014	**5.21**	<0.200	<0.200	<0.300
	10/15/2014	**8.81**	<0.2	0.27	<0.2
	4/22/2015	**4.48**	<1.2	<1.2	<1.8
	12/9/2015	**3.54**	<1.2	<1.2	<1.2
	4/13/2016	**17.7**	<0.6	0.36	<0.9
	12/13/2016	**5.88**	<0.600	<0.600	<0.600
	4/18/2017	**2.29**	<0.600	0.355	<0.600
	10/25/2017	**2.56**	<0.0400	0.269	0.112
	3/20/2018	**1.69**	<0.120	0.167	0.066
	12/5/2018	**1.63**	<0.120	0.374	0.140
	4/25/2019	**1.46**	<0.0400	0.193	0.0798
	12/11/2019	**1.13**	<0.120	0.277	0.120
	4/8/2020	**1.22**	<0.0400	0.280	0.139
	9/23/2020	**2.63**	<0.120	0.713	0.362
	6/15/2021	**5.63**	<0.120	0.320	0.217
	1/5/2022	**1.58**	<0.120	0.105	0.137
	10/1/2024	**0.826**	0.00146	0.0186	0.0448

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		**0.010**	**0.75**	**0.75**	**0.62**
MW-23	5/21/2013	**0.0234**	<0.002	<0.002	<0.003
	10/16/2013	0.00599	<0.002	<0.002	<0.003
	5/13/2014	**0.0875**	<0.002	<0.002	<0.003
	10/14/2014	**0.160**	<0.0060	0.00433	0.0409
	4/21/2015	**0.0645**	<0.006	0.00215	0.00304
	12/8/2015	0.009	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/13/2016	**0.0274**	<0.00600	<0.00600	<0.00600
	4/18/2017	**0.0443**	<0.00600	<0.00600	<0.00600
	10/26/2017	**0.318**	<0.00200	0.00598	0.0929
	3/20/2018	**0.899**	<0.0300	0.025	0.167
	12/5/2018	**0.0453**	<0.006	<0.006	0.0235
	4/26/2019	**0.653**	0.0355	0.343	0.287
	12/10/2019	**PSH Present, No Sample Collected**			
	4/7/2020	**2.64**	0.0236	0.779	0.542
	9/23/2020	**PSH Present, No Sample Collected**			
	4/27/2021	**PSH Present, No Sample Collected**			
	1/4/2022	**PSH Present, No Sample Collected**			
	10/1/2024	0.00613	<0.00100	0.000388	<0.0100
MW-24	5/20/2013	No Sample Collected			
	10/15/2013	No Sample Collected			
	5/14/2014	Insufficient Water for Sample Collection			
	10/14/2014	**1.04**	0.00282	0.707	0.447
	4/23/2015	**2.73**	<0.060	0.717	0.276
	12/8/2015	**2.14**	<0.120	0.743	0.354
	4/12/2016	**1.86**	<0.600	0.478	0.251
	12/13/2016	**1.62**	<0.00600	0.114	0.231
	4/18/2017	**1.98**	<0.120	0.241	0.244
	10/26/2017	**2.70**	<0.0400	0.0898	0.301
	3/20/2018	**4.20**	<0.300	**0.892**	0.427
	12/5/2018	**4.51**	<0.12	**1.19**	0.475
	4/25/2019	**PSH Present, No Sample Collected**			
	12/10/2019	**2.67**	<3.00	**0.898**	0.492
	4/7/2020	**2.73**	<0.100	**0.821**	0.331
	9/23/2020	**2.28**	<0.0120	0.367	0.169
	4/27/2021	**2.37**	<0.0120	0.18	0.0876
	1/4/2022	**2.33**	<0.0120	0.601	0.483
	10/1/2024	Insufficient Water for Sample Collection			
EB-02	5/20/2013	<0.0008	<0.002	<0.002	<0.003
	10/15/2013	<0.0008	<0.002	<0.002	<0.003
	5/13/2014	<0.0008	<0.002	<0.002	<0.003
	10/14/2014	<0.002	<0.006	<0.006	<0.009
	4/21/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/13/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/25/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/26/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/11/2019	0.00168	<0.00600	<0.00600	<0.00600
	4/7/2020	0.00598	<0.00200	0.00262	0.00105
	9/22/2020	<0.000300	<0.000600	<0.000300	<0.000300
	4/27/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/4/2022	<0.000300	<0.000600	<0.000300	<0.000300
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		**0.010**	**0.75**	**0.75**	**0.62**
EB-07	5/20/2013	<0.0002	<0.0007	<0.0003	<0.0009
	10/14/2013	Insufficient Water for Sample Collection			
	5/14/2014	Insufficient Water for Sample Collection			
	10/14/2014	<0.0002	<0.0007	<0.0003	<0.0009
	4/21/2015	<0.0002	<0.0007	<0.0003	<0.0009
	12/8/2015	Insufficient Water for Sample Collection			
	4/12/2016	Insufficient Water for Sample Collection			
	12/13/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/26/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/21/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	Insufficient Water for Sample Collection			
	4/26/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/10/2019	Dry			
	4/7/2020	Dry			
	9/22/2020	Dry			
	4/27/2021	Dry			
	1/4/2022	Dry			
	10/1/2024	Could Not Locate			
P-02	5/21/2013	0.00139	<0.002	<0.002	<0.003
	10/16/2013	**0.12200**	0.00816	<0.002	0.00343
	5/15/2014	**0.09920**	0.0118	0.00544	0.00447
	10/14/2014	**0.13100**	<0.006	0.168	0.191
	4/21/2015	<0.002	<0.006	<0.006	<0.009
	12/8/2015	<0.002	<0.006	<0.006	<0.009
	4/12/2016	<0.002	<0.006	<0.006	<0.009
	12/13/2016	<0.00200	<0.00600	<0.00600	<0.00600
	4/19/2017	<0.00200	<0.00600	<0.00600	<0.00600
	10/26/2017	<0.00100	<0.00200	<0.00100	<0.00100
	3/20/2018	<0.00200	<0.00600	<0.00600	<0.00600
	12/5/2018	<0.00200	<0.00600	<0.00600	<0.00600
	4/26/2019	<0.000800	<0.00200	<0.00200	<0.00200
	12/10/2019	<0.00200	<0.00600	<0.00600	0.00647
	4/7/2020	<0.00100	<0.00200	<0.00100	<0.00100
	9/22/2020	<0.000300	<0.000600	<0.000300	<0.000300
	4/27/2021	<0.000300	<0.000600	<0.000300	<0.000300
	1/4/2022	0.000645	<0.000600	<0.000300	0.00280
	10/1/2024	<0.00100	<0.00100	<0.00100	<0.0100

ENSOLUM

TABLE 3
GROUNDWATER ANALYTICAL RESULTS - BTEX
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)
WQCC Standards		**0.010**	**0.75**	**0.75**	**0.62**
P-05	5/20/2013	Insufficient Water for Sample Collection			
	10/14/2013	Insufficient Water for Sample Collection			
	5/14/2014	Insufficient Water for Sample Collection			
	10/13/2014	Insufficient Water for Sample Collection			
	4/20/2015	Insufficient Water for Sample Collection			
	12/8/2015	Insufficient Water for Sample Collection			
	4/12/2016	Insufficient Water for Sample Collection			
	12/13/2016	Insufficient Water for Sample Collection			
	4/19/2017	Dry			
	10/26/2017	Dry			
	3/20/2018	Dry			
	12/5/2018	Dry			
	4/26/2019	Dry			
	12/10/2019	Dry			
	4/7/2020	Dry			
	9/22/2020	Dry			
	4/27/2021	Dry			
	1/4/2022	Dry			
	10/1/2024	Could Not Locate			

Notes:

mg/L: Milligrams per liter

NMWQCC: New Mexico Water Quality Control Commission

PSH: Phase separated hydrocarbons

--: Not analyzed

<: Indicates result less than the stated laboratory reporting limit (RL)

*Concentrations in **bold** and shaded exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code*

ENSOLUM

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - INORGANICS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Alkalinity, Bicarbonate (mg/L)	Alkalinity, Carbonate (mg/L)	Alkalinity, Hydroxide (mg/L)	Alkalinity, Total (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
NMWQCC Standards		--	--	--	--	--	--	--	--	250	600	1,000
MW-02	5/22/2013	--	--	--	--	--	--	--	--	124	1,670	2,900
	10/17/2013	626	89.8	20.5	106	289	<25.0	<25.0	289	150	1,860	2,910
	5/14/2014	Insufficient Water for Sample										
	10/15/2014	643	75.5	18.9	120	234			234	112	1,560	2,960
	4/23/2015	521	105	20.3	120	227	<20.0	<20.0	227	136	1,800	2,750
	12/8/2015	540	114	20.8	120	276	<20.0	<20.0	276	125	1,650	3,020
	4/13/2016	580	76.9	21.2	114	204	<20.0	<20.0	204	113	1,740	3,060
	12/14/2016	577	79.0	10.7	87.8	206	<20.0	<20.0	206	103	1,670	2,770
	4/18/2017	603	80.5	11.9	109	216	<20.0	<20.0	216	170	1,790	2,770
	10/25/2017	584	140	9.33	96.3	114	<20.0	<20.0	114	107	1,810	3,190
	3/20/2018	645	138	10.5	110	--	--	--	--	122	1,870	3,080
	12/5/2018	570	158	11.0	97	112	<20.0	<20.0	112	97	2,020	3,100
	4/25/2019	561	133	10.3	102	154	<10.0	<10.0	154	111	1,850	3,190
	12/10/2019	449	606	9.10	108	<20.0	<20.0	<20.0	<20.0	173	5,200	7,390
	4/8/2020	Insufficient Water for Sample										
	4/28/2021	513	760	10.2	103	<10.0	<10.0	<10.0	<10.0	77.7	6,670	9,370
	10/1/2024	565	394	19.4	84.0	<4.00	<4.00	<4.00	<4.00	73.1	5,130	5,260
MW-03	5/23/2013	--	--	--	--	--	--	--	--	140	1,680	3,190
	10/16/2013	597	85.1	13.2	139	605	<50.0	<50.0	605	175	1,340	2,830
	5/15/2014	PSH Present, No Sample Collected										
	10/15/2014	588	92.2	15.4	147	663	<10.0	<10.0	663	132	1,180	2,860
	4/22/2015	428	98.0	11.3	110	563	<20.0	<20.0	563	118	1,110	2,460
	12/9/2015	475	92.7	12.3	112	627	<20.0	<20.0	627	104	1,220	2,640
	4/13/2016	481	95.1	12.4	107	585	<20.0	<20.0	585	123	1,270	3,020
	12/13/2016	573	61.7	17.6	110	699	<20.0	<20.0	699	119	1,310	2,960
	4/18/2017	585	62.6	15.8	115	586	<20.0	<20.0	586	95.2	1,300	2,530
	10/25/2017	612	64.4	14.9	105	612	<20.0	<20.0	612	89.7	1,380	2,920
	12/5/2018	615	79.0	12.0	107	507	<20.0	<20.0	507	105	1,690	3,030
	4/25/2019	574	81.7	11.9	109	369	<10.0	<10.0	369	113	1,500	3,010
	12/11/2019	701	86.9	12.2	114	815	<20.0	<20.0	815	114	1,480	3,480
	4/8/2020	686	72.8	12.4	111	656	<20.0	<20.0	656	99.6	1,400	3,030
	4/26/2021	PSH Present, No Sample Collected										
	10/1/2024	415	66.1	11.7	117	676	<4.00	<4.00	676	145	731	1,980
MW-08	5/22/2013	--	--	--	--	--	--	--	--	278	1,610	3,180
	10/16/2013	431	103	8.37	246	479	<12.5	<12.5	479	235	1,240	2,460
	5/14/2014	538	120	7.54	279	451	<10.0	<10.0	451	261	1,630	2,490
	10/15/2014	517	125	7.98	316	465	<10	<10	465	253	1,390	3,080
	4/23/2015	432	125	7.21	295	447	<20.0	<20.0	447	261	1,560	2,770
	12/8/2015	450	123	7.84	278	461	<20.0	<20.0	461	274	1,550	3,060
	4/13/2016	471	120	8.18	270	444	<20.0	<20.0	444	329	1,700	3,320
	12/14/2016	450	123	8.36	283	470	<20.0	<20.0	470	325	1,460	2,970
	4/18/2017	509	131	8.67	285	692	<20.0	<20.0	692	339	1,570	3,020
	10/25/2017	526	126	8.12	287	410	<20.0	<20.0	410	355	1,450	3,300
	3/20/2018	595	141	8.48	305	--	--	--	--	386	1,580	3,310
	12/5/2018	558	128	8.10	273	412	<20.0	<20.0	412	453	1,550	3,480
	4/25/2019	558	136	7.60	279	367	<20.0	<20.0	367	464	1,640	3,600
	12/10/2019	518	143	9.23	308	431	<20.0	<20.0	431	520	1,410	3,410
	4/7/2020	534	132	9.02	280	442	<20.0	<20.0	442	524	1,420	3,370
	4/28/2021	619	140	9.05	283	420	<10.0	<10.0	420	530	1,470	3,550
	10/1/2024	550	135	10.1	262	407	<4.00	<4.00	407	496	1,700	3,420
MW-12	5/22/2013	--	--	--	--	--	--	--	--	109	2,230	3,770
	10/16/2013	576	208	5.72	88.4	373	<12.5	<12.5	373	106	1,950	3,290
	5/14/2014	562	260	5.95	104	309	<10.0	<10.0	309	86.0	2,340	2,470
	10/15/2014	672	170	6.40	99.9	370	<10.0	<10.0	370	79.0	1,690	3,470
	4/22/2015	529	249	5.68	93.6	497	<20.0	<20.0	497	86.8	2,090	3,650
	12/9/2015	537	245	5.26	87.9	461	<20.0	<20.0	461	79.8	1,970	3,590
	4/12/2016	512	216	4.95	102	341	<20.0	<20.0	341	91.7	2,130	3,330
	12/14/2016	525	196	5.70	69.2	438	<20.0	<20.0	438	80.5	1,820	3,420
	4/18/2017	536	282	5.03	86.7	336	<20.0	<20.0	366	76.7	2,370	3,520
	10/25/2017	530	288	4.95	94.8	252	<20.0	<20.0	252	84.4	2,340	3,000
	3/20/2018	559	300	5.37	109	--	--	--	--	103	2,320	3,680
	12/5/2018	520	290	5.18	90	351	<20.0	<20.0	351	82.0	2,410	3,980
	4/26/2019	513	307	5.20	103	322	<10.0	<10.0	322	108	2,260	3,820
	12/10/2019	550	350	5.49	74.5	350	<20.0	<20.0	350	62.0	2,450	4,190
	4/8/2020	539	371	5.40	83.4	287	<20.0	<20.0	287	78.4	2,780	4,230
	4/8/2021	595	392	5.47	103	336	<10.0	<10.0	336	94.9	2,700	4,510
	10/1/2024	620	372	6.86	130	347	<4.00	<4.00	347	120	4,840	4,000
MW-15	5/21/2013	--	--	--	--	--	--	--	--	6,360	95,600	141,000
	10/15/2013	451	2,810	104	3,490	423	<25.0	<25.0	423	1,320	16,400	28,500
	5/14/2014	Insufficient Water For Sample Collection										
	10/14/2014	542	1,560	56.7	2,010	281	<20.0	<20.0	281	774	9,190	16,400
	4/21/2015	424	4,940	173	6,280	881	<20.0	<20.0	881	2,110	29,100	47,800
	12/8/2015	428	5,870	201	7,560	747	<20.0	<20.0	747	2,480	39,800	59,400
	4/12/2016	425	4,600	162	5,940	608	<20.0	<20.0	608	2,220	31,600	53,600
	12/13/2016	405	3,010	106	3,940	430	<20.0	<20.0	430	1,520	18,500	33,800
	4/19/2017	494	8,200	285	10,500	969	<20.0	<20.0	969	3,670	55,000	80,900
	10/26/2017	469	6,600	209	8,820	838	<20.0	<20.0	838	3,100	45,000	78,800
	3/20/2018	521	6,600	228	8,640	--	--	--	--	2,650	40,200	60,400
	12/5/2018	491	7,440	265	9,660	983	<20.0	<20.0	983	3,240	54,000	84,400
	4/25/2019	463	8,130	277	11,000	1,440	<10.0	<10.0	1,440	3,700	54,300	101,000
	12/10/2019	533	351	13	441	149	<20.0	<20.0	149	245	3,050	5,580
	4/7/2020	485	6,520	229	8,580	811	<20.0	<20.0	811	2,840	43,800	76,400
	4/27/2021	556	7,070	261	9,130	877	<10.0	<10.0	877	3,200	47,200	106,000
	10/1/2024	473	5,450	198	6,700	632	<4.00	<4.00	632	2,450	36,700	35,400

ENSOLUM

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - INORGANICS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Alkalinity, Bicarbonate (mg/L)	Alkalinity, Carbonate (mg/L)	Alkalinity, Hydroxide (mg/L)	Alkalinity, Total (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
NMWQCC Standards		--	--	--	--	--	--	--	--	250	600	1,000
MW-17	5/21/2013	--	--	--	--	--	--	--	--	158	1,810	3,290
	10/15/2013	612	118	9.29	140	334	<12.5	<12.5	334	170	1,590	2,910
	5/14/2014	Insufficient Water For Sample Collection										
	10/14/2014	650	144	8.75	140	316	<20.0	<20.0	316	148	1,670	4,310
	4/21/2015	517	156	7.41	140	328	<20.0	<20.0	328	166	1,790	3,070
	12/8/2015	497	189	7.42	128	314	<20.0	<20.0	314	133	1,980	3,220
	4/12/2016	541	165	7.45	124	319	<20.0	<20.0	319	153	1,990	3,210
	12/13/2016	504	191	7.13	118	306	<20.0	<20.0	306	146	1,910	3,260
	4/18/2017	531	298	7.28	117	268	<20.0	<20.0	268	275	2,630	3,510
	10/25/2017	498	361	7.37	103	245	<20.0	<20.0	245	110	2,580	6,520
	3/20/2018	497	457	8.18	103	--	--	--	--	100	2,870	4,450
	15/5/2018	457	448	7.08	91	254	<20.0	<20.0	254	109	2,890	4,560
	4/26/2019	452	488	7.04	103	257	<10.0	<10.0	257	94	3,050	4,940
	12/10/2019	497	514	7.87	116	246	<20.0	<20.0	246	91	2,770	4,930
	4/7/2020	496	474	8.36	118	253	<20.0	<20.0	253	115	3,230	5,030
	4/27/2021	539	439	7.48	99	252	<10.0	<10.0	252	99	2,960	4,550
	10/1/2024	525	455	8.04	102	280	<4.00	<4.00	280	97	2,970	4,410
MW-18	5/20/2013	--	--	--	--	--	--	--	--	734	1,610	3,660
	10/15/2013	724	136	4.73	69.4	121	<12.5	<12.5	121	606	1,470	3,130
	5/13/2014	763	140	5.18	68.6	155	<10.0	<10.0	155	585	1,580	2,490
	10/14/2014	750	138	4.71	56.6	199	<20.0	<20.0	199	408	1,470	3,850
	4/21/2015	679	151	4.70	78.1	131	<20.0	<20.0	131	691	1,550	3,830
	12/8/2015	638	137	4.34	57.2	202	<20.0	<20.0	202	385	1,720	3,100
	4/12/2016	654	131	4.46	62.7	159	<20.0	<20.0	159	584	1,690	3,630
	12/13/2016	669	137	4.46	72.2	140	<20.0	<20.0	140	617	1,530	4,190
	4/19/2017	729	143	4.45	70.5	154	<20.0	<20.0	154	644	1,750	3,580
	10/25/2017	676	133	4.51	59.7	158	<20.0	<20.0	158	429	1,590	3,220
	3/21/2018	866	167	5.12	102.0	--	--	--	--	576	1,590	3,190
	12/5/2018	701	131	4.42	58.7	184	<20.0	<20.0	184	578	1,660	3,160
	4/26/2019	PSH Present, No Sample Collected										
	12/10/2019	719	141	4.61	69.5	197	<20.0	<20.0	197	658	1,490	3,500
	4/7/2020	678	125	4.36	55.1	130	<20.0	<20.0	130	461	1,430	3,150
	4/27/2021	832	134	5.18	68.8	250	<10.0	<10.0	250	651	1,540	3,330
	10/1/2024	Insufficient Water For Sample Collection										
MW-20	5/20/2013	PSH Present, No Sample Collected										
	10/15/2013	PSH Present, No Sample Collected										
	5/13/2014	PSH Present, No Sample Collected										
	10/15/2014	666	130	10.50	274	624	<10	<10	624	196	1,680	3,830
	4/22/2015	537	138	5.07	279	558	<20.0	<20.0	558	165	1,900	3,470
	12/8/2015	556	137	5.23	270	553	<20.0	<20.0	553	136	2,020	3,280
	4/12/2016	560	129	5.17	261	523	<20.0	<20.0	523	148	2,150	3,750
	12/14/2016	549	132	5.17	264	519	<20.0	<20.0	519	160	1,900	3,350
	4/18/2017	592	137	4.97	279	502	<20.0	<20.0	502	150	1,760	3,370
	10/25/2017	580	130	4.99	268	499	<20.0	<20.0	499	172	1,850	3,500
	3/20/2018	646	155	6.11	319	--	--	--	--	144	2,050	3,550
	12/5/2018	572	133	10.40	244	181	<20.0	<20.0	181	191	2,320	3,780
	4/26/2019	539	138	5.58	290	282	<10.0	<10.0	282	152	2,100	3,780
	12/11/2019	576	145	10.70	237	369	<20.0	<20.0	369	183	1,990	3,650
	4/8/2020	616	115	10.70	208	443	<20.0	<20.0	443	160	1,950	3,480
	4/28/2021	642	131	5.57	275	456	<10.0	<10.0	456	159	1,920	3,500
	10/1/2024	Insufficient Water For Sample Collection										
MW-22	5/23/2013	--	--	--	--	--	--	--	--	76.3	1,790	3,450
	10/16/2013	652	157	4.84	63.7	578	<12.5	<12.5	578	72.9	1,630	3,120
	5/15/2014	692	179	5.20	71	637	<10.0	<10.0	637	54.6	1,870	2,060
	10/15/2014	707	195	5.07	72.2	626	<10.0	<10.0	626	57.7	1,580	3,640
	4/22/2015	564	178	4.06	52.7	563	<20.0	<20.0	563	43.4	1,750	3,280
	12/9/2015	605	185	4.11	56.4	611	<20.0	<20.0	611	68.4	1,650	3,310
	4/13/2016	603	189	3.65	75.7	693	<20.0	<20.0	693	83.4	2,010	4,160
	12/13/2016	579	174	3.96	63.7	585	<20.0	<20.0	585	70.6	1,660	3,320
	4/18/2017	611	177	3.69	63.4	559	<20.0	<20.0	559	60.8	1,720	3,290
	10/25/2017	632	179	3.80	63.1	567	<20.0	<20.0	567	56.8	170	3,450
	3/20/2018	697	215	4.36	74.5	--	--	--	--	65.7	1,840	3,580
	12/5/2018	633	195	4.27	64	594	<20.0	<20.0	594	63.3	1,860	3,470
	4/25/2019	594	208	4.28	66.6	550	<10.0	<10.0	550	65.0	1,870	3,840
	12/11/2019	611	230	4.83	70.7	549	<20.0	<20.0	549	106	1,930	3,740
	4/8/2020	621	217	5.39	63.9	572	<20.0	<20.0	572	75.2	2,080	3,630
	4/27/2021	Insufficient Water For Sample Collection										
	10/1/2024	640	301	7.18	105	663	<4.00	<4.00	663	108	2,370	3,930
MW-23	5/21/2013	--	--	--	--	--	--	--	--	326	1,750	3,700
	10/16/2013	591	129	6.36	169	548	<50.0	<50.0	548	333	1,630	3,070
	5/13/2014	650	138	7.38	191	454	<10.0	<10.0	545	262	1,780	2,520
	10/14/2014	743	167	8.46	210	622	<10.0	<10.0	622	237	1,610	4,070
	4/21/2015	565	163	7.00	205	577	<20.0	<20.0	577	245	1,780	7,420
	12/8/2015	586	138	6.78	178	499	<20.0	<20.0	499	198	1,840	2,410
	4/12/2016	630	134	6.85	178	538	<10.0	<10.0	538	219	1,840	3,350
	12/13/2016	564	128	6.80	160	541	<20	<20	541	246	1,690	3,300
	4/19/2017	627	142	6.40	181	531	<20	<20	531	206	1,600	3,170
	10/26/2017	664	160	6.9	169	653	<20.0	<20.0	653	225	1,790	3,930
	3/20/2018	757	157	7.7	186	--	--	--	--	180	1,720	3,700
	12/5/2018	628	151	7.0	160	489	<20.0	<20.0	489	179	1,940	3,490
	4/26/2019	621	174	7.9	169	436	<10.0	<10.0	436	169	2,080	3,880
	12/10/2019	PSH Present, No Sample Collected										
	4/7/2020	654	190	9.0	158	563	<20.0	<20.0	563	183	2,040	3,840
	4/26/2021	PSH Present, No Sample Collected										
	10/1/2024	610	265	7.45	121	176	<4.00	<4.00	176	167	2,360	3,570

ENSOLUM

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - INORGANICS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Alkalinity, Bicarbonate (mg/L)	Alkalinity, Carbonate (mg/L)	Alkalinity, Hydroxide (mg/L)	Alkalinity, Total (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
NMWQCC Standards		--	--	--	--	--	--	--	--	250	600	1,000
MW-24	5/21/2013	No Sample Collected										
	10/16/2013	No Sample Collected										
	5/13/2014	Insufficient Water For Sample Collection										
	10/14/2014	682	405	7.21	78.6	781	<10.0	<10.0	781	79.2	2,080	4,740
	4/23/2015	592	304	3.8	83.4	1,370	<20.0	<20.0	1,370	90.1	2,050	3,440
	12/8/2015	578	293	3.61	73.7	817	<20.0	<20.0	817	84.9	2,100	2,960
	4/12/2016	598	280	3.77	72	805	<20.0	<20.0	805	88.7	2,110	3,720
	12/13/2016	586	280	3.82	69.2	776	<20.0	<20.0	776	92.3	1,910	3,960
	4/19/2017	589	306	4.37	86.3	731	<20.0	<20.0	731	107	2,020	3,770
	10/26/2017	649	291	3.78	81.1	803	<20.0	<20.0	803	89.2	2,060	4,010
	3/20/2018	668	291	2.90	86.0	--	--	--	--	84.0	1,760	3,990
	12/5/2018	580	270	2.73	87.4	987	<20.0	<20.0	287	93.0	1,820	3,670
	4/26/2019	No Sample Collected										
	12/10/2019	618	309	3.93	82.0	781	<20.0	<20.0	298	103	2,050	4,000
	4/7/2020	649	314	3.51	80.9	857	<20.0	<20.0	857	92.6	2,080	4,190
	4/27/2021	575	751	8.29	82.7	702	<10.0	<10.0	702	87.0	3,650	6,220
	10/1/2024	Insufficient Water For Sample Collection										
EB-02	5/20/2013	--	--	--	--	--	--	--	--	124	2,140	3,680
	10/15/2013	550	263	10.3	151	336	<12.5	<12.5	336	108	2,200	3,340
	5/13/2014	582	262	12	159	344	<10.0	<10.0	344	105	2,400	2,600
	10/14/2014	596	298	10.8	166	335	<20.0	<20.0	335	102	2,100	4,210
	4/21/2015	494	259	10.4	170	345	<20.0	<20.0	345	108	2,250	4,190
	12/8/2015	498	293	9.57	157	302	<20.0	<20.0	302	83.5	2,850	3,990
	4/12/2016	507	254	10.4	161	332	<20.0	<20.0	332	100	2,420	3,810
	12/13/2016	481	313	9.19	150	300	<20.0	<20.0	300	98.4	2,620	4,290
	4/19/2017	559	257	11.40	184	313	<20.0	<20.0	313	117	2,560	3,990
	10/25/2017	541	285	9.87	164	290	<20.0	<20.0	290	97.7	2,430	4,120
	3/20/2018	594	338	10.9	183	--	--	--	--	106	2,530	4,020
	12/5/2018	522	308	9.00	156	298	<20.0	<20.1	298	99.0	2,430	3,960
	4/26/2019	511	314	9.14	163	286	<10.0	<10.1	286	104	2,390	4,110
	12/11/2019	528	288	10.2	177	286	<20.0	<20.0	286	140	2,360	4,220
	4/7/2020	537	294	9.79	161	284	<20.0	<20.1	284	110	2,590	4,040
	4/27/2021	572	298	9.81	161	281	<10.0	<10.1	281	114	2,440	4,130
	10/1/2024	565	334	11.7	177	258	<4.00	<4.00	258	103	2,650	3,960
EB-07	5/20/2013	--	--	--	--	--	--	--	--	140	1,910	3,510
	10/15/2013	Insufficient Water for Sample Collection										
	5/13/2014	Insufficient Water for Sample Collection										
	10/14/2014	733	111	4.28	147	379	<20.0	<20.0	379	234	1,630	3,640
	4/21/2015	574	117	3.57	123	365	<20.0	<20.0	365	209	1,690	3,480
	12/8/2015	Insufficient Water for Sample Collection										
	4/12/2016	Insufficient Water for Sample Collection										
	12/13/2016	564	109	3.18	95.6	254	<20	<20	254	184	1,630	3,480
	4/19/2017	594	117	3.03	102	231	<20.0	<20.0	231	148	1,660	2,850
	10/26/2017	601	128	3.34	97.0	231	<20.0	<20.0	231	159	1,720	3,120
	3/21/2018	629	126	3.24	101	--	--	--	--	132	1,740	2,970
	4/26/2019	549	173	3.50	97.5	259	<10.0	<10.0	259	158	1,890	3,820
	12/10/2019	Insufficient Water for Sample Collection										
	4/7/2020	Insufficient Water for Sample Collection										
	4/26/2021	DRY										
	10/1/2024	Could Not Locate										
P-02	5/21/2013	--	--	--	--	--	--	--	--	75.4	2,020	3,540
	10/16/2013	584	202	5.22	43.8	429	<12.5	<12.5	429	60.4	1,750	2,880
	5/15/2014	628	235	4.41	50.3	585	<10.0	<10.0	585	109	1,890	2,300
	10/14/2014	652	203	5.43	38.2	474	<20.0	<20.0	474	45.2	1,730	3,670
	4/21/2015	549	203	4.60	40.3	458	<20.0	<20.0	458	67.8	1,860	3,360
	12/8/2015	567	189	4.47	43.6	395	<20.0	<20.0	395	74.2	1,930	3,030
	4/12/2016	540	184	4.26	45.1	350	<20.0	<20.0	350	94.0	2,090	3,420
	12/13/2016	570	212	4.53	58.1	348	<20.0	<20.0	348	96.2	1,850	3,340
	4/19/2017	563	215	4.20	58.1	322	<20.0	<20.0	322	70.5	1,950	2,990
	10/26/2017	584	227	4.62	61.5	342	<20.0	<20.0	342	82.1	2,050	3,790
	3/20/2018	627	282	4.72	74.9	--	--	--	--	84.3	2,150	3,770
	12/5/2018	556	248	4.96	60.4	396	<20.0	<20.0	396	80.2	2,020	3,550
	4/26/2019	546	254	4.58	62.1	369	<10.0	<10.0	369	77.0	2,110	3,640
	12/10/2019	584	212	4.73	53.9	373	<20.0	<20.0	373	111	1,810	3,490
	4/7/2020	581	232	4.67	59.2	384	<20.0	<20.0	384	86.0	2,350	3,620
	4/27/2021	638	237	4.87	60.0	412	<10.0	<10.0	412	75.0	2,030	3,440
	10/1/2024	655	231	5.52	71.7	345	<4.00	<4.00	345	106	2,010	3,310

ENSOLUM

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - INORGANICS
Empire Abo Gas Plant
AKA Energy Group, LLC
Eddy County, New Mexico

Well Identification	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Alkalinity, Bicarbonate (mg/L)	Alkalinity, Carbonate (mg/L)	Alkalinity, Hydroxide (mg/L)	Alkalinity, Total (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Total Dissolved Solids (mg/L)
NMWQCC Standards		--	--	--	--	--	--	--	--	250	600	1,000
P-05	5/21/2013	Insufficient Water for Sample Collection										
	10/16/2013	Insufficient Water for Sample Collection										
	5/13/2014	Insufficient Water for Sample Collection										
	10/14/2014	Insufficient Water for Sample Collection										
	4/21/2015	Insufficient Water for Sample Collection										
	12/8/2015	Insufficient Water for Sample Collection										
	4/12/2016	Insufficient Water for Sample Collection										
	12/13/2016	Insufficient Water for Sample Collection										
	4/19/2017	Insufficient Water for Sample Collection										
	10/26/2017	Insufficient Water for Sample Collection										
	3/20/2018	Insufficient Water for Sample Collection										
	12/5/2018	Insufficient Water for Sample Collection										
	4/26/2019	Insufficient Water for Sample Collection										
	12/10/2019	Insufficient Water for Sample Collection										
	4/7/2020	Insufficient Water for Sample Collection										
	9/22/2020	Insufficient Water for Sample Collection										
	4/27/2021	Insufficient Water for Sample Collection										
	10/1/2024	Could Not Locate										

Notes:

mg/L: Milligrams per liter

NMWQCC: New Mexico Water Quality Control Commission

PSH: Phase separated hydrocarbons

--: Not analyzed

<: Indicates result less than the stated laboratory reporting limit (RL)

*Concentrations in **bold** and shaded exceed the New Mexico Water Quality Control Commission Standards, 20.6.2 of the New Mexico Administrative Code*

ENSOLUM

APPENDIX A

Groundwater Sampling Field Forms

Client: Kinetik
Project Name: Empire Abo Plant
Project Location: Eddy Co NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 37.38
Screen Interval:
Sample Tubing Intake Depth: Bottom of Well
Geologist:

Soil Boring / Monitor Well Number: MW-02
Project #: 072107007
Type of Water Quality Meter: Aqua TROLL 500
Date Calibrated:
Other Notes:

Monitor Well Detail	Tubing Placement	GW Depth (static)	After Purge
	Bottom of Well	34.12	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1605		23.29	4.10	2.49	-60.9	9.35	34.25
1620		22.56	4.11	2.42	150.6	9.38	34.43
1625		22.01	4.11	2.71	315.2	9.28	34.54
1630		22.08	4.11	2.85	360.9	9.22	34.61
1635		21.94	4.11	2.95	390.2	9.18	34.68
1640		21.87	4.12	2.98	399.	9.18	34.76
1645		21.83	4.12	2.95	381.0	9.20	34.77

Comments:

NR = Not Recorded

Start @ 1610

Sample @ 1645

Total Purge

10 L

Collect DUP-01

@ 1200

ENSOLUM

Client: Kinetik
Project Name: Empire Abo Plant
Project Location: Eddy Co. NM
Project Manager: Bryan Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 90.70
Screen Interval:
Sample Tubing Intake Depth: Bottom of Well
Geologist: SD

Soil Boring / Monitor Well Number: MW-3
Project #: 02A2107007
Type of Water Quality Meter: Aqua TROLL 500
Date Calibrated:
Other Notes:

Monitor Well Detail	Tubing Placement	GW Depth (static)	After Purge
	Bottom of Well	88.96	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1720		23.94	6.41	.98	-289.2	3.33	88.42
1725		22.70	6.99	.37	-347.3	2.88	88.59
1730		22.43	7.04	.30	-349.6	2.83	88.78
1735		22.43	7.07	.28	-355.3	2.75	88.97

Comments:

NR = Not Recorded

Start @ 1711

Sample @ 1740

ENSOLUM

Client: Kinetiz
Project Name: Empire Abo Plant
Project Location: Eddy Co NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10/1/24
Total Depth of Monitor Well: ~~88.95~~
Screen Interval:
Sample Tubing Intake Depth: 83'
Geologist: SAD, ~~MS~~ US

Soil Boring / Monitor Well Number: MW-08
Project #: 07A2107007
Type of Water Quality Meter: Aqua Troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail

Tubing Placement	GW Depth (static)	After Purge
83.00	76.60	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1535		24.99	7.07	2.85	-219.4	4.42	
1540		22.75	7.03	0.41	-237.9	4.42	77.32
1545		22.43	7.05	0.30	-239.4	4.42	77.53
1550		22.28	7.05	0.33	-237.4	4.42	78.72

Comments:

NR = Not Recorded

Start @ 1530

Collect sample @ 1555

Total Purge 3.5L

ENSOLUM

Client: Kinetic
Project Name: Empire Abo Plant
Project Location: Eddy Co NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10/1/24
Total Depth of Monitor Well: 74.11
Screen Interval:
Sample Tubing Intake Depth: 71'
Geologist: SAD, US

Soil Boring / Monitor Well Number: MW-12
Project #: 07A2107007
Type of Water Quality Meter: Aqua troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail

71' Tubing Placement	62.32 GW Depth (static)	After Purge

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1445		21.95	6.99	1.73	-262.7	4.31	68.75
1450		21.47	6.99	3.79	-258.6	4.30	68.93
1455		21.12	6.98	.69	-253.3	4.27	69.02
1500		21.50	6.99	.83	-244.5	4.23	69.12
1505		21.41	6.99	.86	-240.8	4.24	69.35

Comments:

NR = Not Recorded

Sample @ 1510

Total Purge

3.5L

ENSOLUM

Client: Kinetic
Project Name: Empire Abo Plant
Project Location: Eddy Co NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 80.20
Screen Interval:
Sample Tubing Intake Depth: 74'
Geologist: SAD, US

Soil Boring / Monitor Well Number: MW-15
Project #: 07A2107007
Type of Water Quality Meter: Aqua troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail

Tubing Placement	GW Depth (static)	After Purge
74'	67.58	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1320		21.01	8.31	3.66	25.9	36.39	68.14
1325		21.09	8.33	3.63	34.8	36.35	68.34
1330		21.12	8.34	3.63	41.1	36.24	68.60

Comments:

NR = Not Recorded

Sample collected @ 1335

Total Purge 4L

ENSOLUM

Kinetic

Client: Empire Abo Plant
Project Name:
Project Location: Eddy Co. NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 101.60
Screen Interval:
Sample Tubing Intake Depth: Bottom of Well
Geologist: SAD

Soil Boring / Monitor Well Number: MW-17
Project #: 07A2107007
Type of Water Quality Meter: AquaTROLL 500
Date Calibrated:
Other Notes:

Meniscus Well Detail

Tubing Placement	GW Depth (static)	After Purge
Bottom of Well	98.39	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
850		20.03	7.61	1.14	-16.7	4.44	98.90
855		20.36	7.54	1.15	2.9	4.40	99.10
900		20.29	7.52	2.36	9.5	4.36	99.33
905		20.38	7.50	2.49	12.6	4.35	99.52
910		20.47	7.49	2.56	18.7	4.34	

Comments:

NR = Not Recorded

Start @ 837

Sample @ 915

Total Purge

2.5L

ENSOLUM

Client: Kenetik
Project Name: Empire Abo Plant
Project Location: Eddy Co. NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 41.07
Screen Interval:
Sample Tubing Intake Depth: 32.5'
Geologist: SHD

Soil Boring / Monitor Well Number: mw-22
Project #: 07A2107007
Type of Water Quality Meter: Aqua Troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail	Tubing Placement	GW Depth (static)	After Purge
	32.50	23.95	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1400		22.08	7.22	.20	-341.5	4.27	24.14
1405		21.97	7.25	.18	-370.0	4.27	24.15
1410		21.85	7.24	.22	-363.1	4.24	24.15

Comments:

NR = Not Recorded

Start @ 1353

Sample @ 1415

Total Purge

2.52

ENSOLUM

Client: Kinetic
Project Name: Empire Abo Plant
Project Location: Eddy Co. NM.
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 85.74
Screen Interval:
Sample Tubing Intake Depth: Bottom of well
Geologist: SAD, US

Soil Boring / Monitor Well Number: MW-23
Project #: 07A1007007
Type of Water Quality Meter: Aqua Troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail

Tubing Placement	GW Depth (static)	After Purge
Bottom of Well	82.67	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1050		21.46	6.64	.27	-85.5	3.97	83.16
1055		21.00	6.60	.26	-71.2	3.96	83.32
1100		21.22	6.55	.26	-55.0	3.95	83.56
1105		21.17	6.42	.32	-34.3	3.91	83.76
1110		21.03	6.310	.42	-15.8	3.90	84.01
1115		21.13	6.35	.42	-7.1	3.90	84.16
1120		21.15	6.33	.42	-1.2	3.9	84.35

Comments:

NR = Not Recorded

Start @ 1039

Sample @ 1125

Total Purge

6.5L

ENSOLUM

Client: Kinetic
Project Name: Empire Abo Plant
Project Location: Eddy Co. NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 57.47
Screen Interval:
Sample Tubing Intake Depth: 52'
Geologist: SAD, US

Soil Boring / Monitor Well Number: EB-02
Project #: 07A207007
Type of Water Quality Meter: Aqua Troll 500
Date Calibrated:
Other Notes:

Monitor Well Detail

Tubing Placement: ▽ 46.29 ; -51.88
GW Depth (static): 46.29
After Purge:

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1200		24.56	7.13	3.32	-42.2	4.18	46.32
1205		22.25	7.58	6.91	-35.3	4.27	46.32
1220		21.32	7.48	3.44	24.2	4.20	46.31
1225		21.26	7.47	3.58	33.8	4.17	46.32
1230		21.17	7.42	3.22	45.9	4.14	46.32
1235		21.03	7.38	2.75	54.0	4.09	46.32
1240		21.11	7.36	2.44	61.2	4.06	46.32

Comments:

NR = Not Recorded

Start @ 1155

Checked bladder @ 1210

Sample @ 1245

Collect MS MSD @ EB-02

Total purge 10L

ENSOLUM

57.49

Client: Kinetic
Project Name: Empire Abo Plant
Project Location: Eddy Co NM
Project Manager: Stuart Hyde

LOW-FLOW GROUNDWATER SAMPLING FORM

SAMPLING INFORMATION

Date Completed: 10-1-24
Total Depth of Monitor Well: 27.45
Screen Interval:
Sample Tubing Intake Depth: 25'
Geologist: SAD

Soil Boring / Monitor Well Number: P-02
Project #: 07A2107007
Type of Water Quality Meter: Aqua TROLL 500
Date Calibrated:
Other Notes:

Monitor Well Detail

Tubing Placement	GW Depth (static)	After Purge
25.00	21.92	

Time (minutes)	Purge Rate (L/min)	Temp. (°C)	pH (unitless)	DO (mg/L)	ORP (mV)	Cond. (mS/cm)	GW Depth (feet)
1000		21.58	7.33	3.61	-147.3	3.51	22.00
1005		20.79	7.25	2.15	-160.4	3.48	21.98
1010		20.62	7.25	2.06	-159.6	3.50	21.98
1015		20.74	7.24	2.19	-155.7	3.50	21.98

Comments:

NR = Not Recorded

Start 955

Sample @ 1020

Total Purge

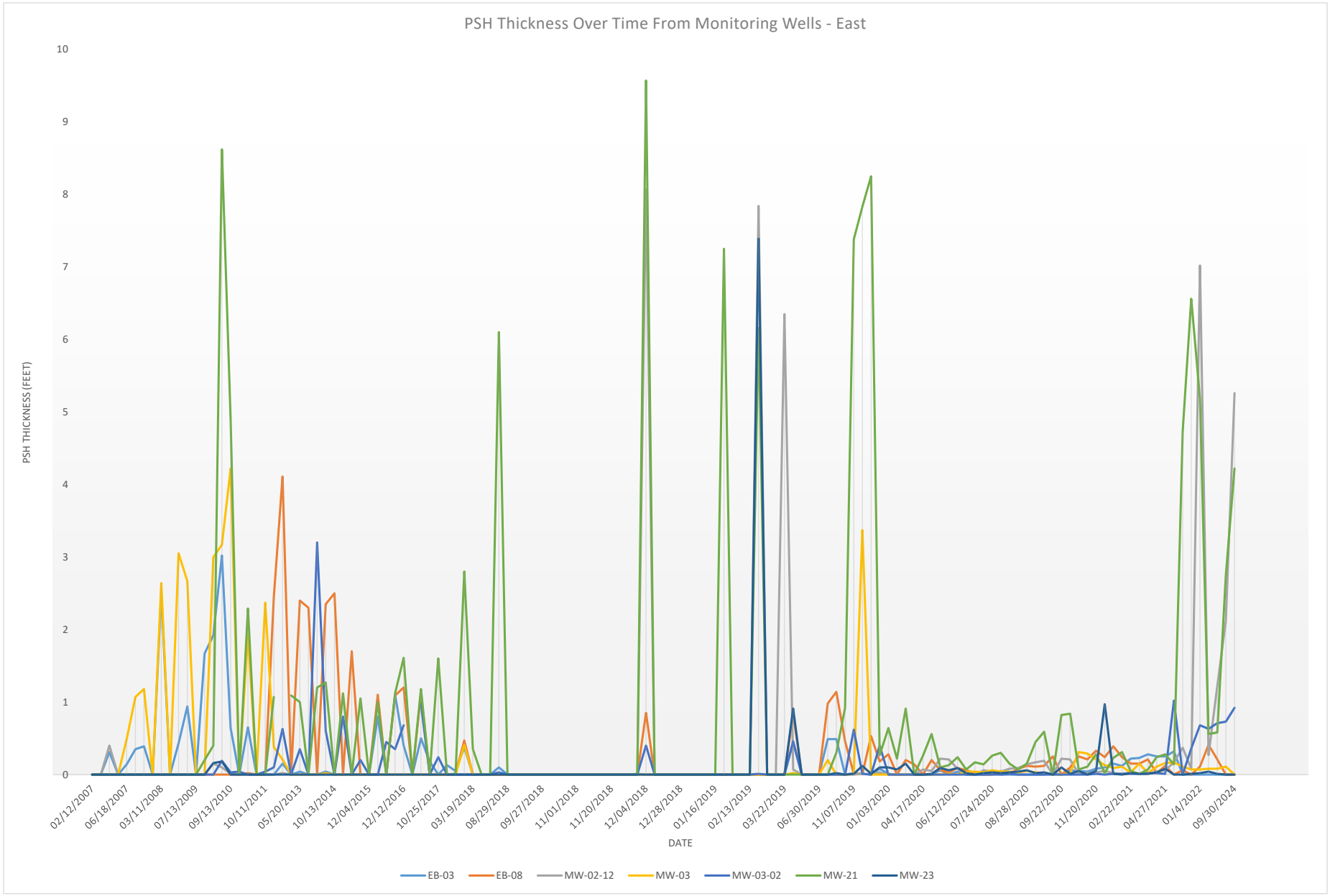
3.25L

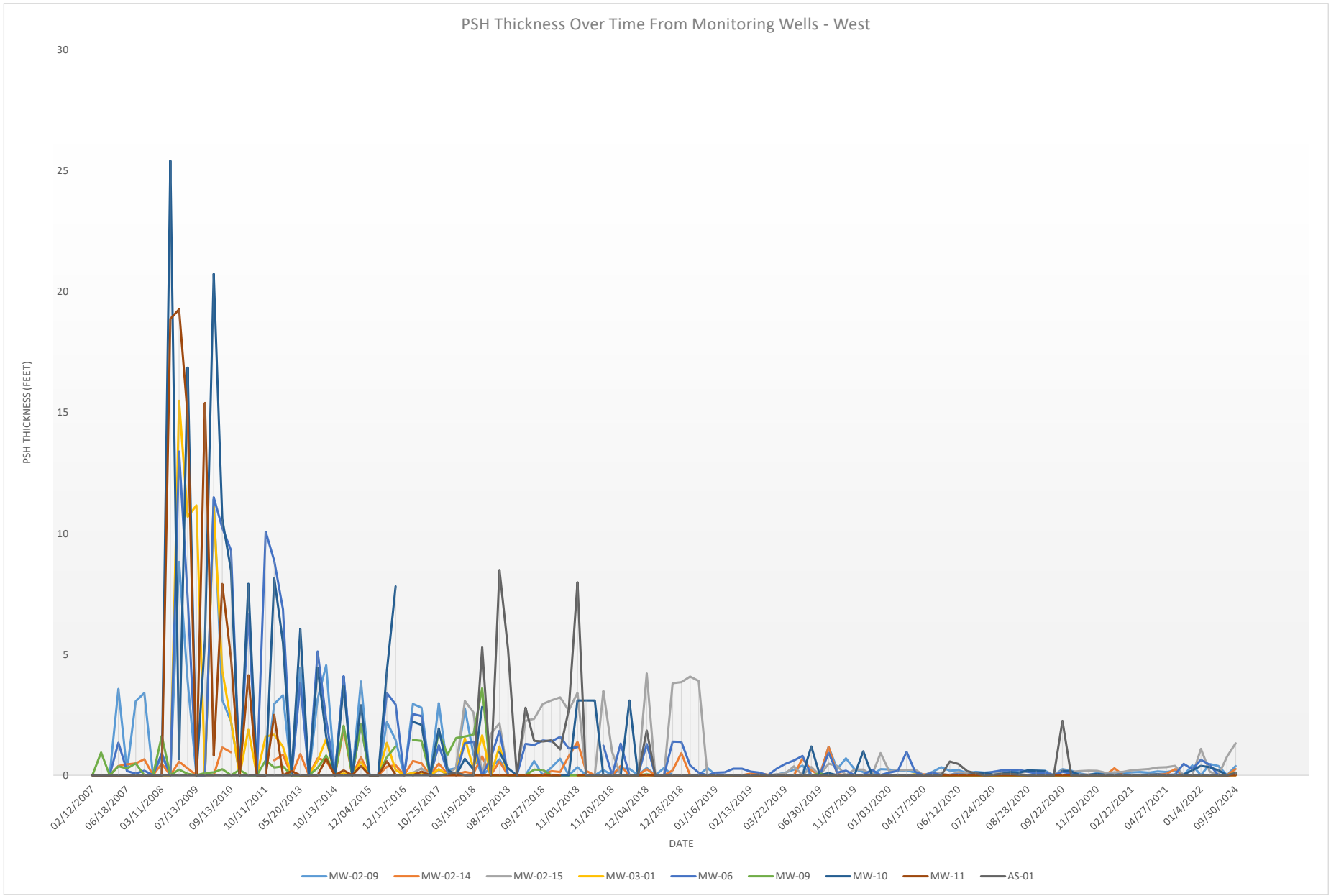
ENSOLUM

ENSOLUM

APPENDIX B

PSH Thickness Over Time Graphs


PSH Thickness Over Time From Monitoring Wells - East
PSH THICKNESS (FEET)
10
9
8
7
6
5
4
3
2
1
0
02/12/2007
06/18/2007
03/11/2008
07/13/2009
09/13/2010
10/11/2011
05/20/2013
10/13/2014
12/04/2015
12/12/2016
10/25/2017
03/19/2018
08/29/2018
09/27/2018
11/01/2018
11/20/2018
12/04/2018
12/28/2018
01/16/2019
02/13/2019
03/22/2019
06/30/2019
11/07/2019
01/03/2020
04/17/2020
06/12/2020
07/24/2020
08/28/2020
09/22/2020
11/20/2020
02/22/2021
04/27/2021
01/4/2022
09/30/2024
DATE
EB-03
EB-08
MW-02-12
MW-03
MW-03-02
MW-21
MW-23


PSH Thickness Over Time From Monitoring Wells - West
PSH THICKNESS (FEET)
30
25
20
15
10
5
0
02/12/2007
06/18/2007
03/11/2008
07/13/2009
09/13/2010
10/11/2011
05/20/2013
10/13/2014
12/04/2015
12/12/2016
10/25/2017
03/19/2018
08/29/2018
09/27/2018
11/01/2018
11/20/2018
12/04/2018
12/28/2018
01/16/2019
02/13/2019
03/22/2019
06/30/2019
11/07/2019
01/03/2020
04/17/2020
06/12/2020
07/24/2020
08/28/2020
09/22/2020
11/20/2020
02/22/2021
04/27/2021
01/4/2022
09/30/2024
DATE
MW-02-09
MW-02-14
MW-02-15
MW-03-01
MW-06
MW-09
MW-10
MW-11
AS-01

ENSOLUM

APPENDIX C

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Stuart Hyde
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/4/2024 4:36:38 PM Revision 2

JOB DESCRIPTION

EMPIRE ABO PLANT
Eddy Co NM

JOB NUMBER

890-7181-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

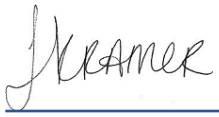
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
12/4/2024 4:36:38 PM
Revision 2

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Laboratory Job ID: 890-7181-1
SDG: Eddy Co NM

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Qualifiers

GC/MS VOA

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.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
U	Indicates the analyte was analyzed for but not detected.

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)

Definitions/Glossary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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

Case Narrative

Client: Ensolum Job ID: 890-7181-1
Project: EMPIRE ABO PLANT

Job ID: 890-7181-1 Eurofins Carlsbad

Job Narrative
890-7181-1

REVISION

The report being provided is a revision of the original report sent on 10/10/2024. The report (revision 2) is being revised due to Per client email, requesting nitrate be removed. was not requested.

Report revision history
Revision 1 - 10/21/2024 - Reason - Per client email, requesting Alkalinity.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/2/2024 9:26 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 time was -1.4°C.

GC/MS VOA
Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW - 03 (890-7181-2), MW - 22 (890-7181-7) and (890-7181-E-2 MS). Elevated reporting limits (RLs) are provided.

Method 8260D: Surrogate recovery for the following sample was outside control limits: (CCVIS 860-191681/2). Dibromofluoromethane (Surr) is not associated with any target analytes.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-191229 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW - 17 (890-7181-6), MW - 23 (890-7181-8), PO - 02 (890-7181-10) and DUP - 01 (890-7181-12). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-191233 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW - 02 (890-7181-1), MW - 12 (890-7181-4), EB - 02 (890-7181-9) and EB - 02 MS/MSD (890-7181-11). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-191233 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 860-191230 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-

Case Narrative

Client: Ensolum Job ID: 890-7181-1
Project: EMPIRE ABO PLANT

Job ID: 890-7181-1 (Continued) Eurofins Carlsbad

homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFMS: The following samples were diluted due to the abundance of non-target analytes: MW - 17 (890-7181-6), MW - 23 (890-7181-8), PO - 02 (890-7181-10) and DUP - 01 (890-7181-12). Elevated reporting limits (RLs) are provided.

Method 300_ORGFMS: The following samples were analyzed outside of analytical holding time due to <EXPLANATION_REQUIRED>: MW - 17 (890-7181-6), MW - 23 (890-7181-8), PO - 02 (890-7181-10) and DUP - 01 (890-7181-12).

Method 300_ORGFMS: The following samples were diluted due to the abundance of non-target analytes: MW - 03 (890-7181-2), MW - 08 (890-7181-3), MW - 12 (890-7181-4) and MW - 22 (890-7181-7). Elevated reporting limits (RLs) are provided.

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

Metals
Method 200.7 - Dissolved: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-191705 and 860-191803 and analytical batch 860-192184 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 200.7 - Dissolved: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW - 02 (890-7181-1), MW - 03 (890-7181-2), MW - 08 (890-7181-3), MW - 12 (890-7181-4), MW - 15 (890-7181-5), MW - 17 (890-7181-6), MW - 22 (890-7181-7), MW - 23 (890-7181-8), EB - 02 (890-7181-9), PO - 02 (890-7181-10), EB - 02 MS/MSD (890-7181-11) and DUP - 01 (890-7181-12). Elevated reporting limits (RLs) are provided.

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

General Chemistry
Method 2320B: Sample pH are below the lowest alkalinity endpoint of pH 4.5.

MW - 02 (890-7181-1)

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

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 02

Date Collected: 10/01/24 16:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 04:24	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 04:24	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 04:24	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:24	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 04:24	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*10/05/24 04:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*10/05/24 04:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*		*10/05/24 04:24*	*1*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*		*10/05/24 04:24*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 04:24*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 04:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/05/24 04:24*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/05/24 04:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:24	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.1**		2.50	1.25	mg/L			10/03/24 13:45	5
Fluoride	**19.9**		2.50	0.500	mg/L			10/03/24 13:45	5

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**5130**		25.0	10.0	mg/L			10/03/24 13:51	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**84.0**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:00	1
Potassium	**19.4**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:00	1
SiO2	**23.3**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:00	1
Calcium	**565**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:12	50
Magnesium	**394**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:12	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 14:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 14:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 14:31	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 14:31	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 14:31	1
Specific Conductance (SM 2510B)	**5290**		10.0	10.0	umho/cm @ 25C			10/06/24 19:08	1
Total Dissolved Solids (SM 2540C)	**5260**		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	**4.5**	**HF**			SU			10/06/24 19:08	1
Temperature (SM 4500 H+ B)	**16.6**	**HF**			Degrees C			10/06/24 19:08	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 03
Date Collected: 10/01/24 17:30
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	0.00304		0.00100	0.000475	mg/L			10/05/24 08:51	1
Ethylbenzene	0.000454	J	0.00100	0.000385	mg/L			10/05/24 08:51	1
m,p-Xylenes	0.00886	J	0.0100	0.00124	mg/L			10/05/24 08:51	1
o-Xylene	0.00133		0.00100	0.000502	mg/L			10/05/24 08:51	1
Xylenes, Total	0.0102		0.0100	0.00124	mg/L			10/05/24 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*63 - 144*		*10/05/24 08:51*	*1*
4-Bromofluorobenzene (Surr)	*108*		*74 - 124*		*10/05/24 08:51*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 08:51*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/05/24 08:51*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.511		0.0100	0.00460	mg/L			10/05/24 17:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 144*		*10/05/24 17:04*	*10*
4-Bromofluorobenzene (Surr)	*102*		*74 - 124*		*10/05/24 17:04*	*10*
Dibromofluoromethane (Surr)	*94*		*75 - 131*		*10/05/24 17:04*	*10*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/05/24 17:04*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.525		0.0100	0.00124	mg/L			10/05/24 17:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	145		50.0	25.0	mg/L			10/03/24 13:32	100
Fluoride	<50.0	U	50.0	10.0	mg/L			10/03/24 13:32	100
Sulfate	731		50.0	20.0	mg/L			10/03/24 13:32	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	117		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:01	1
Potassium	11.7		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:01	1
SiO2	62.3		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:01	1
Calcium	415		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:13	50
Magnesium	66.1		0.200	0.0428	mg/L		10/07/24 09:00	10/07/24 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	676		4.00	4.00	mg/L			10/14/24 18:58	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	676		4.00	4.00	mg/L			10/14/24 18:58	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:58	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:58	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:58	1
Specific Conductance (SM 2510B)	2820		10.0	10.0	umho/cm @ 25C			10/06/24 21:10	1
Total Dissolved Solids (SM 2540C)	1980		20.0	20.0	mg/L			10/04/24 10:41	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 03

Date Collected: 10/01/24 17:30
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-2

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**7.2**	**HF**			SU			10/06/24 21:10	1
Temperature (SM 4500 H+ B)	**19.0**	**HF**			Degrees C			10/06/24 21:10	1

Client Sample ID: MW - 08

Date Collected: 10/01/24 15:55
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-3

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 04:44	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 04:44	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 04:44	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:44	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 04:44	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 144*		*10/05/24 04:44*	*1*
4-Bromofluorobenzene (Surr)	*112*		*74 - 124*		*10/05/24 04:44*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 04:44*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/05/24 04:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:44	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**496**		2.50	1.25	mg/L			10/03/24 13:07	5
Fluoride	<2.50	U	2.50	0.500	mg/L			10/03/24 13:07	5
Sulfate	**1700**		2.50	1.00	mg/L			10/03/24 13:07	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**262**		25.0	7.59	mg/L		10/07/24 09:00	10/07/24 15:18	50
Potassium	**10.1**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:03	1
SiO2	**29.1**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:03	1
Calcium	**550**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:18	50
Magnesium	**135**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:18	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**407**		4.00	4.00	mg/L			10/14/24 23:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**407**		4.00	4.00	mg/L			10/14/24 23:36	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:36	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:36	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:36	1
Specific Conductance (SM 2510B)	**4640**		10.0	10.0	umho/cm @ 25C			10/06/24 19:10	1
Total Dissolved Solids (SM 2540C)	**3420**		40.0	40.0	mg/L			10/04/24 10:41	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 08

Date Collected: 10/01/24 15:55
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-3

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SM 4500 H+ B)	**6.2**	**HF**			SU			10/06/24 19:10	1
Temperature (SM 4500 H+ B)	**16.3**	**HF**			Degrees C			10/06/24 19:10	1

Client Sample ID: MW - 12

Date Collected: 10/01/24 15:10
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 05:46	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 05:46	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 05:46	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 05:46	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 05:46	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*10/05/24 05:46*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 05:46*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*10/05/24 05:46*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/05/24 05:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 05:46	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		2.50	1.25	mg/L			10/03/24 14:47	5
Fluoride	<2.50	U	2.50	0.500	mg/L			10/03/24 14:47	5

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**4840**		25.0	10.0	mg/L			10/03/24 14:54	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**130**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:05	1
Potassium	**6.86**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:05	1
SiO2	**27.8**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:05	1
Calcium	**620**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:20	50
Magnesium	**372**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:20	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**347**		4.00	4.00	mg/L			10/14/24 22:52	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**347**		4.00	4.00	mg/L			10/14/24 22:52	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:52	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:52	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:52	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 12

Date Collected: 10/01/24 15:10
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-4

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	4340		10.0	10.0	umho/cm @ 25C			10/06/24 19:04	1
Total Dissolved Solids (SM 2540C)	4000		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	6.8	HF			SU			10/06/24 19:04	1
Temperature (SM 4500 H+ B)	16.5	HF			Degrees C			10/06/24 19:04	1

Client Sample ID: MW - 15

Date Collected: 10/01/24 13:35
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-5

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 06:06	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 06:06	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 06:06	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:06	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 06:06	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 144*		*10/05/24 06:06*	*1*
4-Bromofluorobenzene (Surr)	*114*		*74 - 124*		*10/05/24 06:06*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*10/05/24 06:06*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*10/05/24 06:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:06	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2450		50.0	25.0	mg/L			10/03/24 14:22	100
Fluoride	<50.0	U	50.0	10.0	mg/L			10/03/24 14:22	100
Sulfate	36700		50.0	20.0	mg/L			10/03/24 14:22	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	6700		25.0	7.59	mg/L		10/07/24 09:00	10/07/24 15:39	50
Potassium	198		25.0	4.57	mg/L		10/07/24 09:00	10/07/24 15:39	50
SiO2	24.2		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:25	1
Calcium	473		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:39	50
Magnesium	5450		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:39	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	632		4.00	4.00	mg/L			10/15/24 00:23	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	632		4.00	4.00	mg/L			10/15/24 00:23	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:23	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:23	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:23	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 15

Date Collected: 10/01/24 13:35
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-5

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance (SM 2510B)	42100		10.0	10.0	umho/cm @ 25C			10/07/24 20:55	1
Total Dissolved Solids (SM 2540C)	35400		200	200	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	7.6	HF			SU			10/08/24 20:34	1
Temperature (SM 4500 H+ B)	18.8	HF			Degrees C			10/08/24 20:34	1

Client Sample ID: MW - 17

Date Collected: 10/01/24 09:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-6

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 06:27	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 06:27	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 06:27	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:27	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 06:27	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 144*		*10/05/24 06:27*	*1*
4-Bromofluorobenzene (Surr)	*106*		*74 - 124*		*10/05/24 06:27*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 131*		*10/05/24 06:27*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/05/24 06:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.4		2.50	1.25	mg/L			10/03/24 18:13	5
Fluoride	0.972	J	2.50	0.500	mg/L			10/03/24 18:13	5

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2970		25.0	10.0	mg/L			10/03/24 18:20	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	102		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:27	1
Potassium	8.04		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:27	1
SiO2	19.1		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:27	1
Calcium	525		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:41	50
Magnesium	455		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:41	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	280		4.00	4.00	mg/L			10/14/24 22:43	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	280		4.00	4.00	mg/L			10/14/24 22:43	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 17

Date Collected: 10/01/24 09:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-6
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:43	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:43	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 22:43	1
Specific Conductance (SM 2510B)	**4410**		10.0	10.0	umho/cm @ 25C			10/06/24 20:39	1
Total Dissolved Solids (SM 2540C)	**4410**		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	**7.0**	**HF**			SU			10/06/24 20:39	1
Temperature (SM 4500 H+ B)	**18.2**	**HF**			Degrees C			10/06/24 20:39	1

Client Sample ID: MW - 22

Date Collected: 10/01/24 14:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	**0.00146**		0.00100	0.000475	mg/L			10/05/24 09:11	1
Ethylbenzene	**0.0186**		0.00100	0.000385	mg/L			10/05/24 09:11	1
m,p-Xylenes	**0.0448**		0.0100	0.00124	mg/L			10/05/24 09:11	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 09:11	1
Xylenes, Total	**0.0448**		0.0100	0.00124	mg/L			10/05/24 09:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*63 - 144*		*10/05/24 09:11*	*1*
4-Bromofluorobenzene (Surr)	*114*		*74 - 124*		*10/05/24 09:11*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*10/05/24 09:11*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/05/24 09:11*	*1*

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.826**		0.0200	0.00919	mg/L			10/05/24 17:25	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 144*		*10/05/24 17:25*	*20*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*		*10/05/24 17:25*	*20*
Dibromofluoromethane (Surr)	*94*		*75 - 131*		*10/05/24 17:25*	*20*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/05/24 17:25*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.891**		0.0100	0.00124	mg/L			10/05/24 17:25	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**108**		25.0	12.5	mg/L			10/03/24 14:10	50
Fluoride	<25.0	U	25.0	5.00	mg/L			10/03/24 14:10	50
Sulfate	**2370**		25.0	10.0	mg/L			10/03/24 14:10	50

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**105**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:29	1
Potassium	**7.18**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:29	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 22
Date Collected: 10/01/24 14:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-7
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2	107		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:29	1
Calcium	640		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:46	50
Magnesium	301		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:46	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	663		4.00	4.00	mg/L			10/14/24 23:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	663		4.00	4.00	mg/L			10/14/24 23:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:26	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:26	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 23:26	1
Specific Conductance (SM 2510B)	3790		10.0	10.0	umho/cm @ 25C			10/06/24 20:37	1
Total Dissolved Solids (SM 2540C)	3930		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	7.0	HF			SU			10/06/24 20:37	1
Temperature (SM 4500 H+ B)	17.9	HF			Degrees C			10/06/24 20:37	1

Client Sample ID: MW - 23
Date Collected: 10/01/24 11:25
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00613		0.00100	0.000460	mg/L			10/05/24 06:47	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 06:47	1
Ethylbenzene	0.000388	J	0.00100	0.000385	mg/L			10/05/24 06:47	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:47	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 06:47	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 06:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*10/05/24 06:47*	*1*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*		*10/05/24 06:47*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 131*		*10/05/24 06:47*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/05/24 06:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00652	J	0.0100	0.00124	mg/L			10/05/24 06:47	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167		2.50	1.25	mg/L			10/03/24 17:43	5
Fluoride	1.53	J	2.50	0.500	mg/L			10/03/24 17:43	5
Sulfate	2360		2.50	1.00	mg/L			10/03/24 17:43	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	121		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:30	1
Potassium	7.45		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:30	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 23
Date Collected: 10/01/24 11:25
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-8
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
SiO2	52.2		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:30	1
Calcium	610		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:48	50
Magnesium	265		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:48	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	176		4.00	4.00	mg/L			10/14/24 20:05	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	176		4.00	4.00	mg/L			10/14/24 20:05	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:05	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:05	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:05	1
Specific Conductance (SM 2510B)	4210		10.0	10.0	umho/cm @ 25C			10/06/24 20:19	1
Total Dissolved Solids (SM 2540C)	3570		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	6.4	HF			SU			10/06/24 20:19	1
Temperature (SM 4500 H+ B)	18.7	HF			Degrees C			10/06/24 20:19	1

Client Sample ID: EB - 02
Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 03:22	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 03:22	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 03:22	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:22	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 03:22	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*10/05/24 03:22*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 03:22*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 03:22*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/05/24 03:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:22	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		0.500	0.250	mg/L			10/03/24 12:27	1
Fluoride	0.660		0.500	0.100	mg/L			10/03/24 12:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2650		5.00	2.00	mg/L			10/03/24 12:33	10

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: EB - 02

Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-9
Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**177**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:32	1
Potassium	**11.7**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:32	1
SiO2	**28.5**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:32	1
Calcium	**565**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:49	50
Magnesium	**334**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:49	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**258**		4.00	4.00	mg/L			10/15/24 00:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**258**		4.00	4.00	mg/L			10/15/24 00:31	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:31	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:31	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/15/24 00:31	1
Specific Conductance (SM 2510B)	**4450**		10.0	10.0	umho/cm @ 25C			10/06/24 21:30	1
Total Dissolved Solids (SM 2540C)	**3960**		40.0	40.0	mg/L			10/04/24 10:41	1
pH (SM 4500 H+ B)	**6.3**	**HF**			SU			10/06/24 21:30	1
Temperature (SM 4500 H+ B)	**19.0**	**HF**			Degrees C			10/06/24 21:30	1

Client Sample ID: PO - 02

Date Collected: 10/01/24 10:20
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 07:08	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 07:08	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 07:08	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:08	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 07:08	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*63 - 144*		*10/05/24 07:08*	*1*
4-Bromofluorobenzene (Surr)	*113*		*74 - 124*		*10/05/24 07:08*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 131*		*10/05/24 07:08*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/05/24 07:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:08	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**106**		2.50	1.25	mg/L			10/03/24 17:28	5
Fluoride	**0.518**	**J**	2.50	0.500	mg/L			10/03/24 17:28	5
Sulfate	**2010**		2.50	1.00	mg/L			10/03/24 17:28	5

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: PO - 02

Date Collected: 10/01/24 10:20
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-10

Matrix: Water

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**71.7**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:34	1
Potassium	**5.52**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:34	1
SiO2	**61.0**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:34	1
Calcium	**655**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:51	50
Magnesium	**231**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:51	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**345**		4.00	4.00	mg/L			10/14/24 20:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**345**		4.00	4.00	mg/L			10/14/24 20:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:14	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:14	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 20:14	1
Specific Conductance (SM 2510B)	**3620**		10.0	10.0	umho/cm @ 25C			10/09/24 19:37	1
Total Dissolved Solids (SM 2540C)	**3310**		40.0	40.0	mg/L			10/07/24 09:35	1
pH (SM 4500 H+ B)	**7.3**	**HF**			SU			10/08/24 20:28	1
Temperature (SM 4500 H+ B)	**19.1**	**HF**			Degrees C			10/08/24 20:28	1

Client Sample ID: EB - 02 MS/MSD

Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 03:43	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 03:43	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 03:43	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:43	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 03:43	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*10/05/24 03:43*	*1*
4-Bromofluorobenzene (Surr)	*113*		*74 - 124*		*10/05/24 03:43*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 131*		*10/05/24 03:43*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*10/05/24 03:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:43	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**103**		0.500	0.250	mg/L			10/03/24 12:15	1
Fluoride	**0.664**		0.500	0.100	mg/L			10/03/24 12:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**2630**		5.00	2.00	mg/L			10/03/24 12:21	10

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: EB - 02 MS/MSD

Lab Sample ID: 890-7181-11
Matrix: Water
Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**172**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:36	1
Potassium	**11.4**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:36	1
SiO2	**27.8**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:36	1
Calcium	**565**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:53	50
Magnesium	**333**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:53	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**254**		4.00	4.00	mg/L			10/14/24 18:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**254**		4.00	4.00	mg/L			10/14/24 18:47	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:47	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:47	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 18:47	1
Specific Conductance (SM 2510B)	**4420**		10.0	10.0	umho/cm @ 25C			10/06/24 20:22	1
Total Dissolved Solids (SM 2540C)	**3860**		40.0	40.0	mg/L			10/07/24 09:35	1
pH (SM 4500 H+ B)	**6.9**	**HF**			SU			10/06/24 20:22	1
Temperature (SM 4500 H+ B)	**18.3**	**HF**			Degrees C			10/06/24 20:22	1

Client Sample ID: DUP - 01

Lab Sample ID: 890-7181-12
Matrix: Water
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 09:26

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 07:28	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 07:28	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 07:28	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:28	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 07:28	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 144*		*10/05/24 07:28*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 07:28*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 131*		*10/05/24 07:28*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*10/05/24 07:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 07:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.9**		2.50	1.25	mg/L			10/03/24 17:58	5
Fluoride	**13.6**		2.50	0.500	mg/L			10/03/24 17:58	5

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3790**		25.0	10.0	mg/L			10/03/24 18:05	50

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: DUP - 01

Lab Sample ID: 890-7181-12
Matrix: Water
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 09:26

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**82.6**		0.500	0.152	mg/L		10/07/24 09:00	10/07/24 15:37	1
Potassium	**18.3**		0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 15:37	1
SiO2	**22.7**		1.07	0.471	mg/L		10/07/24 09:00	10/07/24 15:37	1
Calcium	**590**		10.0	5.76	mg/L		10/07/24 09:00	10/07/24 15:54	50
Magnesium	**303**		10.0	2.14	mg/L		10/07/24 09:00	10/07/24 15:54	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 19:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 19:48	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 19:48	1
Hydroxide Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 19:48	1
Phenolphthalein Alkalinity (SM 2320B)	<4.00	U	4.00	4.00	mg/L			10/14/24 19:48	1
Specific Conductance (SM 2510B)	**4780**		10.0	10.0	umho/cm @ 25C			10/06/24 21:28	1
Total Dissolved Solids (SM 2540C)	**4690**		40.0	40.0	mg/L			10/07/24 09:35	1
pH (SM 4500 H+ B)	**4.7**	**HF**			SU			10/06/24 21:28	1
Temperature (SM 4500 H+ B)	**19.0**	**HF**			Degrees C			10/06/24 21:28	1

Client Sample ID: RB - 01

Lab Sample ID: 890-7181-13
Matrix: Water
Date Collected: 10/01/24 00:00
Date Received: 10/02/24 09:26

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 04:03	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 04:03	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 04:03	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:03	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 04:03	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 144*		*10/05/24 04:03*	*1*
4-Bromofluorobenzene (Surr)	*109*		*74 - 124*		*10/05/24 04:03*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 04:03*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*10/05/24 04:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 04:03	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 890-7181-14
Matrix: Water
Date Collected: 10/01/24 00:00
Date Received: 10/02/24 09:26

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 03:02	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 03:02	1

Client Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: TRIP BLANK
Date Collected: 10/01/24 00:00
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-14
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 03:02	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:02	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 03:02	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*10/05/24 03:02*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 03:02*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 131*		*10/05/24 03:02*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/05/24 03:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 03:02	1

Surrogate Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(63-144)	(74-124)	(75-131)	(80-120)
890-7181-13	RB - 01	103	109	104	106
890-7181-14	TRIP BLANK	100	110	104	103
890-7181-E-1 MS	Matrix Spike	100	105	97	102
LCS 860-191564/3	Lab Control Sample	98	105	101	100
LCSD 860-191564/4	Lab Control Sample Dup	99	107	98	98
MB 860-191564/11	Method Blank	100	110	101	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		DCA	DCA	BFB	BFB	DBFM	DBFM	TOL	TOL
Lab Sample ID	Client Sample ID	(63-144)	(63-144)	(74-124)	(74-124)	(75-131)	(75-131)	(80-120)	(80-120)
890-7181-1	MW - 02	103	103	107	107	104	104	104	104
890-7181-2	MW - 03	113	113	108	108	104	104	103	103
890-7181-2 - DL	MW - 03	94	94	102	102	94	94	97	97
890-7181-2 MS - DL	MW - 03	96	96	100	100	98	98	98	98
890-7181-3	MW - 08	102	102	112	112	104	104	105	105
890-7181-4	MW - 12	104	104	110	110	108	108	105	105
890-7181-5	MW - 15	107	107	114	114	108	108	108	108
890-7181-6	MW - 17	104	104	106	106	105	105	105	105
890-7181-7	MW - 22	117	117	114	114	102	102	106	106
890-7181-7 - DL	MW - 22	96	96	105	105	94	94	98	98
890-7181-8	MW - 23	103	103	107	107	106	106	105	105
890-7181-9	EB - 02	100	100	110	110	104	104	104	104
890-7181-10	PO - 02	106	106	113	113	109	109	103	103
890-7181-11	EB - 02 MS/MSD	100	100	113	113	102	102	105	105
890-7181-12	DUP - 01	107	107	110	110	108	108	107	107
890-7181-E-1 MS	MW - 02	100	100	105	105	97	97	102	102
LCS 860-191563/3	Lab Control Sample	98	98	105	105	101	101	100	100
LCS 860-191681/3	Lab Control Sample	80	80	103	103	79	79	101	101
LCSD 860-191563/4	Lab Control Sample Dup	99	99	107	107	98	98	98	98
LCSD 860-191681/4	Lab Control Sample Dup	80	80	105	105	76	76	100	100
MB 860-191563/11	Method Blank	100	100	110	110	101	101	102	102
MB 860-191681/9	Method Blank	88	88	107	107	82	82	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-191564/11
Matrix: Water
Analysis Batch: 191564

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 02:41	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 02:41	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 02:41	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 02:41	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 02:41	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 02:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*10/05/24 02:41*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 02:41*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*10/05/24 02:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/05/24 02:41*	*1*

Lab Sample ID: LCS 860-191564/3
Matrix: Water
Analysis Batch: 191564

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04560		mg/L		91	75 - 125
Toluene	0.0500	0.04693		mg/L		94	75 - 130
Ethylbenzene	0.0500	0.05069		mg/L		101	75 - 125
m,p-Xylenes	0.0500	0.05166		mg/L		103	75 - 125
o-Xylene	0.0500	0.04774		mg/L		95	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
Dibromofluoromethane (Surr)	*101*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 860-191564/4
Matrix: Water
Analysis Batch: 191564

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04547		mg/L		91	75 - 125	0	25
Toluene	0.0500	0.04507		mg/L		90	75 - 130	4	25
Ethylbenzene	0.0500	0.04833		mg/L		97	75 - 125	5	25
m,p-Xylenes	0.0500	0.05046		mg/L		101	75 - 125	2	25
o-Xylene	0.0500	0.04597		mg/L		92	75 - 125	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 890-7181-E-1 MS
Matrix: Water
Analysis Batch: 191564

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000460	U	0.0500	0.03887		mg/L		78	66 - 142
Toluene	<0.000475	U	0.0500	0.04201		mg/L		84	59 - 139
Ethylbenzene	<0.000385	U	0.0500	0.04660		mg/L		93	75 - 125
m,p-Xylenes	<0.00124	U	0.0500	0.04728		mg/L		95	75 - 125
o-Xylene	<0.000502	U	0.0500	0.04430		mg/L		89	75 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 860-191563/11
Matrix: Water
Analysis Batch: 191563

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 02:41	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 02:41	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 02:41	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 02:41	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 02:41	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 02:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*		*10/05/24 02:41*	*1*
4-Bromofluorobenzene (Surr)	*110*		*74 - 124*		*10/05/24 02:41*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 131*		*10/05/24 02:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*10/05/24 02:41*	*1*

Lab Sample ID: LCS 860-191563/3
Matrix: Water
Analysis Batch: 191563

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04560		mg/L		91	75 - 125
Toluene	0.0500	0.04693		mg/L		94	75 - 130
Ethylbenzene	0.0500	0.05069		mg/L		101	75 - 125
m,p-Xylenes	0.0500	0.05166		mg/L		103	75 - 125
o-Xylene	0.0500	0.04581		mg/L		92	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 144*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
Dibromofluoromethane (Surr)	*101*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: LCSD 860-191563/4
Matrix: Water
Analysis Batch: 191563

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.0500	0.04547		mg/L		91	75 - 125	0	25
Toluene			0.0500	0.04507		mg/L		90	75 - 130	4	25
Ethylbenzene			0.0500	0.04833		mg/L		97	75 - 125	5	25
m,p-Xylenes			0.0500	0.05046		mg/L		101	75 - 125	2	25
o-Xylene			0.0500	0.04403		mg/L		88	75 - 125	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 144*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*
Dibromofluoromethane (Surr)	*98*		*75 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 890-7181-E-1 MS
Matrix: Water
Analysis Batch: 191563

Client Sample ID: MW - 02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00100	U	0.0500	0.03887		mg/L		78	66 - 142
Toluene	<0.00100	U	0.0500	0.04201		mg/L		84	59 - 139
Ethylbenzene	<0.00100	U	0.0500	0.04660		mg/L		93	75 - 125
m,p-Xylenes	<0.0100	U	0.0500	0.04728		mg/L		95	75 - 125
o-Xylene	<0.00100	U	0.0500	0.04237		mg/L		85	75 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 144*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
Dibromofluoromethane (Surr)	*97*		*75 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 860-191681/9
Matrix: Water
Analysis Batch: 191681

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00100	U	0.00100	0.000460	mg/L			10/05/24 14:04	1
Toluene	<0.00100	U	0.00100	0.000475	mg/L			10/05/24 14:04	1
Ethylbenzene	<0.00100	U	0.00100	0.000385	mg/L			10/05/24 14:04	1
m,p-Xylenes	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 14:04	1
o-Xylene	<0.00100	U	0.00100	0.000502	mg/L			10/05/24 14:04	1
Xylenes, Total	<0.0100	U	0.0100	0.00124	mg/L			10/05/24 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*63 - 144*		*10/05/24 14:04*	*1*
4-Bromofluorobenzene (Surr)	*107*		*74 - 124*		*10/05/24 14:04*	*1*
Dibromofluoromethane (Surr)	*82*		*75 - 131*		*10/05/24 14:04*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/05/24 14:04*	*1*

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 860-191681/3
Matrix: Water
Analysis Batch: 191681

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.0500	0.04620		mg/L		92	75 - 125		
Toluene			0.0500	0.05036		mg/L		101	75 - 130		
Ethylbenzene			0.0500	0.05344		mg/L		107	75 - 125		
m,p-Xylenes			0.0500	0.05129		mg/L		103	75 - 125		
o-Xylene			0.0500	0.05557		mg/L		111	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*63 - 144*
4-Bromofluorobenzene (Surr)	*103*		*74 - 124*
Dibromofluoromethane (Surr)	*79*		*75 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 860-191681/4
Matrix: Water
Analysis Batch: 191681

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.0500	0.04392		mg/L		88	75 - 125	5	25
Toluene			0.0500	0.04905		mg/L		98	75 - 130	3	25
Ethylbenzene			0.0500	0.05184		mg/L		104	75 - 125	3	25
m,p-Xylenes			0.0500	0.04973		mg/L		99	75 - 125	3	25
o-Xylene			0.0500	0.05333		mg/L		107	75 - 125	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*80*		*63 - 144*
4-Bromofluorobenzene (Surr)	*105*		*74 - 124*
Dibromofluoromethane (Surr)	*76*		*75 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS - DL

Lab Sample ID: 890-7181-2 MS
Matrix: Water
Analysis Batch: 191681

Client Sample ID: MW - 03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene - DL	0.511		0.500	0.9345		mg/L		85	66 - 142		
Toluene - DL	<0.00475	U	0.500	0.4749		mg/L		95	59 - 139		
Ethylbenzene - DL	<0.00385	U	0.500	0.5155		mg/L		103	75 - 125		
m,p-Xylenes - DL	<0.0124	U	0.500	0.5112		mg/L		102	75 - 125		
o-Xylene - DL	<0.00502	U	0.500	0.5439		mg/L		109	75 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr) - DL	*96*		*63 - 144*
4-Bromofluorobenzene (Surr) - DL	*100*		*74 - 124*

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 8260D - Volatile Organic Compounds by GC/MS - DL (Continued)

Lab Sample ID: 890-7181-2 MS
Matrix: Water
Analysis Batch: 191681

Client Sample ID: MW - 03
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr) - DL	*98*		*75 - 131*
Toluene-d8 (Surr) - DL	*98*		*80 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-191229/3
Matrix: Water
Analysis Batch: 191229

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			10/03/24 16:04	1
Fluoride	<0.500	U	0.500	0.100	mg/L			10/03/24 16:04	1
Sulfate	<0.500	U	0.500	0.200	mg/L			10/03/24 16:04	1

Lab Sample ID: LCS 860-191229/4
Matrix: Water
Analysis Batch: 191229

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.01		mg/L		100	90 - 110
Fluoride	10.0	9.783		mg/L		98	90 - 110
Sulfate	10.0	10.08		mg/L		101	90 - 110

Lab Sample ID: LCSD 860-191229/5
Matrix: Water
Analysis Batch: 191229

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.01		mg/L		100	90 - 110	0	20
Fluoride	10.0	9.785		mg/L		98	90 - 110	0	20
Sulfate	10.0	10.07		mg/L		101	90 - 110	0	20

Lab Sample ID: LLCS 860-191229/7
Matrix: Water
Analysis Batch: 191229

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.4602	J	mg/L		92	50 - 150
Fluoride	0.500	0.4735	J	mg/L		95	50 - 150
Sulfate	0.500	0.5226		mg/L		105	50 - 150

Lab Sample ID: 890-7185-CU-1 MS
Matrix: Water
Analysis Batch: 191229

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	89.6		10.0	96.93	4	mg/L		73	90 - 110
Fluoride	<0.500	U	10.0	10.43		mg/L		104	90 - 110
Sulfate	7.14		10.0	17.75		mg/L		106	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-7185-CU-1 MSD
Matrix: Water
Analysis Batch: 191229

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	89.6		10.0	96.93	4	mg/L		73	90 - 110	0	15
Fluoride	<0.500	U	10.0	10.43		mg/L		104	90 - 110	0	15
Sulfate	7.14		10.0	17.74		mg/L		106	90 - 110	0	15

Lab Sample ID: MB 860-191233/3
Matrix: Water
Analysis Batch: 191233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500	0.250	mg/L			10/03/24 10:28	1
Fluoride	<0.500	U	0.500	0.100	mg/L			10/03/24 10:28	1
Sulfate	<0.500	U	0.500	0.200	mg/L			10/03/24 10:28	1

Lab Sample ID: LCS 860-191233/4
Matrix: Water
Analysis Batch: 191233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10.0	10.29		mg/L		103	90 - 110
Fluoride	10.0	10.34		mg/L		103	90 - 110
Sulfate	10.0	10.48		mg/L		105	90 - 110

Lab Sample ID: LCSD 860-191233/5
Matrix: Water
Analysis Batch: 191233

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10.0	10.31		mg/L		103	90 - 110	0	20
Fluoride	10.0	10.30		mg/L		103	90 - 110	0	20
Sulfate	10.0	10.35		mg/L		104	90 - 110	1	20

Lab Sample ID: LLCS 860-191233/7
Matrix: Water
Analysis Batch: 191233

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.5559		mg/L		111	50 - 150
Fluoride	0.500	0.4971	J	mg/L		99	50 - 150
Sulfate	0.500	0.6264		mg/L		125	50 - 150

Lab Sample ID: 880-48783-D-1 MS
Matrix: Water
Analysis Batch: 191233

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	76.2		10.0	86.24	4	mg/L		100	90 - 110
Fluoride	1.64	F1	10.0	7.379	F1	mg/L		57	90 - 110
Sulfate	301		10.0	305.9	4	mg/L		48	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-48783-D-1 MSD
Matrix: Water
Analysis Batch: 191233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	76.2		10.0	86.24	4	mg/L		100	90 - 110	0	15
Fluoride	1.64	F1	10.0	7.360	F1	mg/L		57	90 - 110	0	15
Sulfate	301		10.0	306.3	4	mg/L		52	90 - 110	0	15

Lab Sample ID: 885-13026-A-3 MS
Matrix: Water
Analysis Batch: 191233

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	223		50.0	270.4	4	mg/L		95	90 - 110
Fluoride	0.553	J	50.0	52.49		mg/L		104	90 - 110
Sulfate	492		50.0	527.9	4	mg/L		72	90 - 110

Lab Sample ID: 885-13026-A-3 MSD
Matrix: Water
Analysis Batch: 191233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	223		50.0	270.5	4	mg/L		95	90 - 110	0	15
Fluoride	0.553	J	50.0	52.54		mg/L		104	90 - 110	0	15
Sulfate	492		50.0	528.4	4	mg/L		73	90 - 110	0	15

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: LLCS 860-191803/4-A
Matrix: Water
Analysis Batch: 192184

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 191803

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	0.500	0.4800	J	mg/L		96	50 - 150
Potassium	0.500	0.4830	J	mg/L		97	50 - 150
SiO2	1.07	1.053	J	mg/L		98	50 - 150
Calcium	0.200	0.2010		mg/L		101	50 - 150
Magnesium	0.200	0.2010		mg/L		101	50 - 150

Lab Sample ID: MB 860-191705/23-B
Matrix: Water
Analysis Batch: 192184

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 191803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<0.500	U	0.500	0.152	mg/L		10/07/24 09:00	10/07/24 14:39	1
Potassium	<0.500	U	0.500	0.0914	mg/L		10/07/24 09:00	10/07/24 14:39	1
SiO2	<1.07	U	1.07	0.471	mg/L		10/07/24 09:00	10/07/24 14:39	1
Calcium	<0.200	U	0.200	0.115	mg/L		10/07/24 09:00	10/07/24 14:39	1
Magnesium	<0.200	U	0.200	0.0428	mg/L		10/07/24 09:00	10/07/24 14:39	1

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 860-191705/24-B
Matrix: Water
Analysis Batch: 192184

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 191803

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sodium			25.0	24.60		mg/L		98	85 - 115		
Potassium			10.0	9.840		mg/L		98	85 - 115		
SiO2			21.4	22.04		mg/L		103	85 - 115		
Calcium			25.0	25.30		mg/L		101	85 - 115		
Magnesium			25.0	24.80		mg/L		99	85 - 115		

Lab Sample ID: LCSD 860-191705/25-B
Matrix: Water
Analysis Batch: 192184

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 191803

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium			25.0	24.70		mg/L		99	85 - 115	0	20
Potassium			10.0	9.920		mg/L		99	85 - 115	1	20
SiO2			21.4	22.26		mg/L		104	85 - 115	1	20
Calcium			25.0	25.30		mg/L		101	85 - 115	0	20
Magnesium			25.0	24.80		mg/L		99	85 - 115	0	20

Lab Sample ID: 890-7181-4 MS
Matrix: Water
Analysis Batch: 192184

Client Sample ID: MW - 12
Prep Type: Dissolved
Prep Batch: 191803

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sodium	130		25.0	153.0	4	mg/L		92	70 - 130		
Potassium	6.86		10.0	18.80		mg/L		119	70 - 130		
SiO2	27.8		21.4	50.93		mg/L		108	70 - 130		
Calcium	570	E	25.0	577.0	E 4	mg/L		28	70 - 130		
Magnesium	374	E	25.0	382.0	E 4	mg/L		32	70 - 130		

Lab Sample ID: 890-7181-4 MSD
Matrix: Water
Analysis Batch: 192184

Client Sample ID: MW - 12
Prep Type: Dissolved
Prep Batch: 191803

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	130		25.0	151.0	4	mg/L		84	70 - 130	1	20
Potassium	6.86		10.0	18.60		mg/L		117	70 - 130	1	20
SiO2	27.8		21.4	50.29		mg/L		105	70 - 130	1	20
Calcium	570	E	25.0	568.0	E 4	mg/L		-8	70 - 130	2	20
Magnesium	374	E	25.0	376.0	E 4	mg/L		8	70 - 130	2	20

Lab Sample ID: MB 860-191705/23-C
Matrix: Water
Analysis Batch: 192184

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 191855

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	<0.500	U	0.500	0.152	mg/L		10/07/24 09:30	10/07/24 17:56	1
Potassium	<0.500	U	0.500	0.0914	mg/L		10/07/24 09:30	10/07/24 17:56	1
SiO2	<1.07	U	1.07	0.471	mg/L		10/07/24 09:30	10/07/24 17:56	1
Calcium	<0.200	U	0.200	0.115	mg/L		10/07/24 09:30	10/07/24 17:56	1
Magnesium	<0.200	U	0.200	0.0428	mg/L		10/07/24 09:30	10/07/24 17:56	1

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 860-193615/3
Matrix: Water
Analysis Batch: 193615

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 17:30	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/14/24 17:30	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/14/24 17:30	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 17:30	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 17:30	1

Lab Sample ID: MB 860-193615/34
Matrix: Water
Analysis Batch: 193615

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 21:45	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/14/24 21:45	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/14/24 21:45	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 21:45	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00	mg/L			10/14/24 21:45	1

Lab Sample ID: LCS 860-193615/35
Matrix: Water
Analysis Batch: 193615

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	238.6		mg/L		95	85 - 115

Lab Sample ID: LCS 860-193615/4
Matrix: Water
Analysis Batch: 193615

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	250	251.7		mg/L		101	85 - 115

Lab Sample ID: LCSD 860-193615/36
Matrix: Water
Analysis Batch: 193615

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	232.5		mg/L		93	85 - 115	3	20

Lab Sample ID: LCSD 860-193615/5
Matrix: Water
Analysis Batch: 193615

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	250	256.8		mg/L		103	85 - 115	2	20

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 860-83071-A-2 DU
Matrix: Water
Analysis Batch: 193615

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	544			544.5		mg/L				0.1	20
Bicarbonate Alkalinity as CaCO3	544			544.5		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	<4.00	U		<4.00	U	mg/L				NC	20
Hydroxide Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20
Phenolphthalein Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20

Lab Sample ID: 870-30766-D-1 DU
Matrix: Water
Analysis Batch: 193615

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	107			105.1		mg/L				2	20
Bicarbonate Alkalinity as CaCO3	107			105.1		mg/L				2	20
Carbonate Alkalinity as CaCO3	<4.00	U		<4.00	U	mg/L				NC	20
Hydroxide Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20
Phenolphthalein Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20

Lab Sample ID: MB 860-193770/3
Matrix: Water
Analysis Batch: 193770

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.00	U	4.00	4.00	mg/L			10/15/24 13:07	1
Bicarbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/15/24 13:07	1
Carbonate Alkalinity as CaCO3	<4.00	U	4.00	4.00	mg/L			10/15/24 13:07	1
Hydroxide Alkalinity	<4.00	U	4.00	4.00	mg/L			10/15/24 13:07	1
Phenolphthalein Alkalinity	<4.00	U	4.00	4.00	mg/L			10/15/24 13:07	1

Lab Sample ID: LCS 860-193770/4
Matrix: Water
Analysis Batch: 193770

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			250	232.9		mg/L		93	85 - 115		

Lab Sample ID: LCSD 860-193770/5
Matrix: Water
Analysis Batch: 193770

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity			250	233.2		mg/L		93	85 - 115	0	20

Lab Sample ID: 890-7226-AO-3 DU
Matrix: Water
Analysis Batch: 193770

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	<4.00	U		<4.00	U	mg/L				NC	20
Bicarbonate Alkalinity as CaCO3	<4.00	U		<4.00	U	mg/L				NC	20
Carbonate Alkalinity as CaCO3	<4.00	U		<4.00	U	mg/L				NC	20

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 890-7226-AO-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 193770

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hydroxide Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20
Phenolphthalein Alkalinity	<4.00	U	<4.00	U	mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-191914/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<10.0	U	10.0	10.0	umho/cm @ 25C			10/06/24 18:57	1

Lab Sample ID: MB 860-191914/82 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<10.0	U	10.0	10.0	umho/cm @ 25C			10/06/24 21:27	1

Lab Sample ID: 890-7181-1 DU — **Client Sample ID: MW - 02**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	5290		5310		umho/cm @ 25C		0.3	20

Lab Sample ID: 890-7181-3 DU — **Client Sample ID: MW - 08**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	4640		4645		umho/cm @ 25C		0	20

Lab Sample ID: 890-7181-6 DU — **Client Sample ID: MW - 17**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	4410		4804		umho/cm @ 25C		9	20

Lab Sample ID: 890-7181-7 DU — **Client Sample ID: MW - 22**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 191914

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	3790		4402		umho/cm @ 25C		15	20

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: 890-7181-8 DU
Matrix: Water
Analysis Batch: 191914

Client Sample ID: MW - 23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	4210			4184		umho/cm @ 25C				0.7	20

Lab Sample ID: 890-7181-11 DU
Matrix: Water
Analysis Batch: 191914

Client Sample ID: EB - 02 MS/MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	4420			4424		umho/cm @ 25C				0.07	20

Lab Sample ID: 890-7181-B-4 DU
Matrix: Water
Analysis Batch: 191914

Client Sample ID: 890-7181-B-4 DU
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	4800			4336		umho/cm @ 25C				10	20

Lab Sample ID: 880-49061-G-3 DU
Matrix: Water
Analysis Batch: 192278

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	234000			233800		umho/cm @ 25C				0.1	20

Lab Sample ID: MB 860-192756/2
Matrix: Water
Analysis Batch: 192756

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<10.0	U	10.0	10.0	umho/cm @ 25C			10/09/24 18:40	1

Lab Sample ID: 860-84325-A-5 DU
Matrix: Water
Analysis Batch: 192756

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	1950			1953		umho/cm @ 25C				0.3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-191497/1
Matrix: Water
Analysis Batch: 191497

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	5.00	mg/L			10/04/24 10:40	1

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 860-191497/2
Matrix: Water
Analysis Batch: 191497

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	971.0		mg/L		97	80 - 120		

Lab Sample ID: 880-49141-L-1 DU
Matrix: Water
Analysis Batch: 191497

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	4860			5012		mg/L				3	10

Lab Sample ID: 880-49142-D-1 DU
Matrix: Water
Analysis Batch: 191497

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	2600			2536		mg/L				3	10

Lab Sample ID: MB 860-191833/1
Matrix: Water
Analysis Batch: 191833

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	5.00	mg/L			10/07/24 09:35	1

Lab Sample ID: LCS 860-191833/2
Matrix: Water
Analysis Batch: 191833

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			1000	1000		mg/L		100	80 - 120		

Lab Sample ID: 885-13175-A-1 DU
Matrix: Water
Analysis Batch: 191833

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	558			540.0		mg/L				3	10

Method: SM 4500 H+ B - pH

Lab Sample ID: 890-7181-1 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	4.5	HF		4.4		SU				3	20
Temperature	16.6	HF		16.2		Degrees C				2	20

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: 890-7181-3 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 08
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.2	HF	6.5		SU		5	20
Temperature	16.3	HF	16.7		Degrees C		2	20

Lab Sample ID: 890-7181-6 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.0	HF	7.3		SU		4	20
Temperature	18.2	HF	18.0		Degrees C		1	20

Lab Sample ID: 890-7181-7 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.0	HF	7.0		SU		0.3	20
Temperature	17.9	HF	17.9		Degrees C		0	20

Lab Sample ID: 890-7181-8 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.4	HF	6.3		SU		2	20
Temperature	18.7	HF	18.3		Degrees C		2	20

Lab Sample ID: 890-7181-10 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: PO - 02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.9	HF	6.9		SU		12	20
Temperature	18.4	HF	18.0		Degrees C		2	20

Lab Sample ID: 890-7181-11 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: EB - 02 MS/MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.9	HF	7.0		SU		2	20
Temperature	18.3	HF	18.5		Degrees C		1	20

Lab Sample ID: 890-7181-B-4 DU
Matrix: Water
Analysis Batch: 191915

Client Sample ID: MW - 12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.3	HF	6.8		SU		8	20
Temperature	17.7	HF	17.0		Degrees C		4	20

QC Sample Results

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method: SM 4500 H+ B - pH

Lab Sample ID: 880-49452-B-1 DU
Matrix: Water
Analysis Batch: 192562

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	6.5			6.5		SU				0.2	20
Temperature	18.7			18.6		Degrees C				0.5	20

Lab Sample ID: 880-49276-A-1 DU
Matrix: Water
Analysis Batch: 192746

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	7.1			7.0		SU				2	20
Temperature	17.3			16.0		Degrees C				8	20

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

GC/MS VOA

Analysis Batch: 191563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	8260D	
890-7181-2	MW - 03	Total/NA	Water	8260D	
890-7181-3	MW - 08	Total/NA	Water	8260D	
890-7181-4	MW - 12	Total/NA	Water	8260D	
890-7181-5	MW - 15	Total/NA	Water	8260D	
890-7181-6	MW - 17	Total/NA	Water	8260D	
890-7181-7	MW - 22	Total/NA	Water	8260D	
890-7181-8	MW - 23	Total/NA	Water	8260D	
890-7181-9	EB - 02	Total/NA	Water	8260D	
890-7181-10	PO - 02	Total/NA	Water	8260D	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	8260D	
890-7181-12	DUP - 01	Total/NA	Water	8260D	
MB 860-191563/11	Method Blank	Total/NA	Water	8260D	
LCS 860-191563/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 860-191563/4	Lab Control Sample Dup	Total/NA	Water	8260D	
890-7181-E-1 MS	MW - 02	Total/NA	Water	8260D	

Analysis Batch: 191564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	8260D	
890-7181-13	RB - 01	Total/NA	Water	8260C	
890-7181-14	TRIP BLANK	Total/NA	Water	8260C	
MB 860-191564/11	Method Blank	Total/NA	Water	8260C	
LCS 860-191564/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 860-191564/4	Lab Control Sample Dup	Total/NA	Water	8260C	
890-7181-E-1 MS	Matrix Spike	Total/NA	Water	8260C	

Analysis Batch: 191681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-2 - DL	MW - 03	Total/NA	Water	8260D	
890-7181-7 - DL	MW - 22	Total/NA	Water	8260D	
MB 860-191681/9	Method Blank	Total/NA	Water	8260D	
LCS 860-191681/3	Lab Control Sample	Total/NA	Water	8260D	
LCSD 860-191681/4	Lab Control Sample Dup	Total/NA	Water	8260D	
890-7181-2 MS - DL	MW - 03	Total/NA	Water	8260D	

Analysis Batch: 192271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	Total BTEX	
890-7181-2	MW - 03	Total/NA	Water	Total BTEX	
890-7181-3	MW - 08	Total/NA	Water	Total BTEX	
890-7181-4	MW - 12	Total/NA	Water	Total BTEX	
890-7181-5	MW - 15	Total/NA	Water	Total BTEX	
890-7181-6	MW - 17	Total/NA	Water	Total BTEX	
890-7181-7	MW - 22	Total/NA	Water	Total BTEX	
890-7181-8	MW - 23	Total/NA	Water	Total BTEX	
890-7181-9	EB - 02	Total/NA	Water	Total BTEX	
890-7181-10	PO - 02	Total/NA	Water	Total BTEX	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	Total BTEX	
890-7181-12	DUP - 01	Total/NA	Water	Total BTEX	
890-7181-13	RB - 01	Total/NA	Water	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

GC/MS VOA (Continued)

Analysis Batch: 192271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-14	TRIP BLANK	Total/NA	Water	Total BTEX	

HPLC/IC

Analysis Batch: 191229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-6	MW - 17	Total/NA	Water	300.0	
890-7181-6 - DL	MW - 17	Total/NA	Water	300.0	
890-7181-8	MW - 23	Total/NA	Water	300.0	
890-7181-10	PO - 02	Total/NA	Water	300.0	
890-7181-12	DUP - 01	Total/NA	Water	300.0	
890-7181-12 - DL	DUP - 01	Total/NA	Water	300.0	
MB 860-191229/3	Method Blank	Total/NA	Water	300.0	
LCS 860-191229/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-191229/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-191229/7	Lab Control Sample	Total/NA	Water	300.0	
890-7185-CU-1 MS	Matrix Spike	Total/NA	Water	300.0	
890-7185-CU-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 191233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	300.0	
890-7181-1 - DL	MW - 02	Total/NA	Water	300.0	
890-7181-2	MW - 03	Total/NA	Water	300.0	
890-7181-3	MW - 08	Total/NA	Water	300.0	
890-7181-4	MW - 12	Total/NA	Water	300.0	
890-7181-4 - DL	MW - 12	Total/NA	Water	300.0	
890-7181-5	MW - 15	Total/NA	Water	300.0	
890-7181-7	MW - 22	Total/NA	Water	300.0	
890-7181-9	EB - 02	Total/NA	Water	300.0	
890-7181-9 - DL	EB - 02	Total/NA	Water	300.0	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	300.0	
890-7181-11 - DL	EB - 02 MS/MSD	Total/NA	Water	300.0	
MB 860-191233/3	Method Blank	Total/NA	Water	300.0	
LCS 860-191233/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 860-191233/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LLCS 860-191233/7	Lab Control Sample	Total/NA	Water	300.0	
880-48783-D-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-48783-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
885-13026-A-3 MS	Matrix Spike	Total/NA	Water	300.0	
885-13026-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Filtration Batch: 191705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Dissolved	Water	Filtration	
890-7181-2	MW - 03	Dissolved	Water	Filtration	
890-7181-3	MW - 08	Dissolved	Water	Filtration	
890-7181-4	MW - 12	Dissolved	Water	Filtration	
890-7181-5	MW - 15	Dissolved	Water	Filtration	
890-7181-6	MW - 17	Dissolved	Water	Filtration	

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Metals (Continued)

Filtration Batch: 191705 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-7	MW - 22	Dissolved	Water	Filtration	
890-7181-8	MW - 23	Dissolved	Water	Filtration	
890-7181-9	EB - 02	Dissolved	Water	Filtration	
890-7181-10	PO - 02	Dissolved	Water	Filtration	
890-7181-11	EB - 02 MS/MSD	Dissolved	Water	Filtration	
890-7181-12	DUP - 01	Dissolved	Water	Filtration	
MB 860-191705/23-B	Method Blank	Dissolved	Water	Filtration	
MB 860-191705/23-C	Method Blank	Dissolved	Water	Filtration	
LCS 860-191705/24-B	Lab Control Sample	Dissolved	Water	Filtration	
LCSD 860-191705/25-B	Lab Control Sample Dup	Dissolved	Water	Filtration	
890-7181-4 MS	MW - 12	Dissolved	Water	Filtration	
890-7181-4 MSD	MW - 12	Dissolved	Water	Filtration	

Prep Batch: 191803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Dissolved	Water	200.7	191705
890-7181-2	MW - 03	Dissolved	Water	200.7	191705
890-7181-3	MW - 08	Dissolved	Water	200.7	191705
890-7181-4	MW - 12	Dissolved	Water	200.7	191705
890-7181-5	MW - 15	Dissolved	Water	200.7	191705
890-7181-6	MW - 17	Dissolved	Water	200.7	191705
890-7181-7	MW - 22	Dissolved	Water	200.7	191705
890-7181-8	MW - 23	Dissolved	Water	200.7	191705
890-7181-9	EB - 02	Dissolved	Water	200.7	191705
890-7181-10	PO - 02	Dissolved	Water	200.7	191705
890-7181-11	EB - 02 MS/MSD	Dissolved	Water	200.7	191705
890-7181-12	DUP - 01	Dissolved	Water	200.7	191705
MB 860-191705/23-B	Method Blank	Dissolved	Water	200.7	191705
LCS 860-191705/24-B	Lab Control Sample	Dissolved	Water	200.7	191705
LCSD 860-191705/25-B	Lab Control Sample Dup	Dissolved	Water	200.7	191705
LLCS 860-191803/4-A	Lab Control Sample	Total Recoverable	Water	200.7	
890-7181-4 MS	MW - 12	Dissolved	Water	200.7	191705
890-7181-4 MSD	MW - 12	Dissolved	Water	200.7	191705

Prep Batch: 191855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-191705/23-C	Method Blank	Dissolved	Water	3010A	191705

Analysis Batch: 192184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-1	MW - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-2	MW - 03	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-2	MW - 03	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-3	MW - 08	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-3	MW - 08	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-4	MW - 12	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-4	MW - 12	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-5	MW - 15	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-5	MW - 15	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-6	MW - 17	Dissolved	Water	200.7 Rev 4.4	191803

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Metals (Continued)

Analysis Batch: 192184 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-6	MW - 17	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-7	MW - 22	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-7	MW - 22	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-8	MW - 23	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-8	MW - 23	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-9	EB - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-9	EB - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-10	PO - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-10	PO - 02	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-11	EB - 02 MS/MSD	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-11	EB - 02 MS/MSD	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-12	DUP - 01	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-12	DUP - 01	Dissolved	Water	200.7 Rev 4.4	191803
MB 860-191705/23-B	Method Blank	Dissolved	Water	200.7 Rev 4.4	191803
MB 860-191705/23-C	Method Blank	Dissolved	Water	200.7 Rev 4.4	191855
LCS 860-191705/24-B	Lab Control Sample	Dissolved	Water	200.7 Rev 4.4	191803
LCSD 860-191705/25-B	Lab Control Sample Dup	Dissolved	Water	200.7 Rev 4.4	191803
LLCS 860-191803/4-A	Lab Control Sample	Total Recoverable	Water	200.7 Rev 4.4	191803
890-7181-4 MS	MW - 12	Dissolved	Water	200.7 Rev 4.4	191803
890-7181-4 MSD	MW - 12	Dissolved	Water	200.7 Rev 4.4	191803

General Chemistry

Analysis Batch: 191497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	SM 2540C	
890-7181-2	MW - 03	Total/NA	Water	SM 2540C	
890-7181-3	MW - 08	Total/NA	Water	SM 2540C	
890-7181-4	MW - 12	Total/NA	Water	SM 2540C	
890-7181-5	MW - 15	Total/NA	Water	SM 2540C	
890-7181-6	MW - 17	Total/NA	Water	SM 2540C	
890-7181-7	MW - 22	Total/NA	Water	SM 2540C	
890-7181-8	MW - 23	Total/NA	Water	SM 2540C	
890-7181-9	EB - 02	Total/NA	Water	SM 2540C	
MB 860-191497/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-191497/2	Lab Control Sample	Total/NA	Water	SM 2540C	
880-49141-L-1 DU	Duplicate	Total/NA	Water	SM 2540C	
880-49142-D-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 191833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-10	PO - 02	Total/NA	Water	SM 2540C	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	SM 2540C	
890-7181-12	DUP - 01	Total/NA	Water	SM 2540C	
MB 860-191833/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-191833/2	Lab Control Sample	Total/NA	Water	SM 2540C	
885-13175-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 191914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	SM 2510B	

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

General Chemistry (Continued)

Analysis Batch: 191914 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-2	MW - 03	Total/NA	Water	SM 2510B	
890-7181-3	MW - 08	Total/NA	Water	SM 2510B	
890-7181-4	MW - 12	Total/NA	Water	SM 2510B	
890-7181-6	MW - 17	Total/NA	Water	SM 2510B	
890-7181-7	MW - 22	Total/NA	Water	SM 2510B	
890-7181-8	MW - 23	Total/NA	Water	SM 2510B	
890-7181-9	EB - 02	Total/NA	Water	SM 2510B	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	SM 2510B	
890-7181-12	DUP - 01	Total/NA	Water	SM 2510B	
MB 860-191914/3	Method Blank	Total/NA	Water	SM 2510B	
MB 860-191914/82	Method Blank	Total/NA	Water	SM 2510B	
LCS 860-191914/4	Lab Control Sample	Total/NA	Water	SM 2510B	
LCS 860-191914/83	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 860-191914/5	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
LCSD 860-191914/84	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
LLCS 860-191914/6	Lab Control Sample	Total/NA	Water	SM 2510B	
890-7181-1 DU	MW - 02	Total/NA	Water	SM 2510B	
890-7181-3 DU	MW - 08	Total/NA	Water	SM 2510B	
890-7181-6 DU	MW - 17	Total/NA	Water	SM 2510B	
890-7181-7 DU	MW - 22	Total/NA	Water	SM 2510B	
890-7181-8 DU	MW - 23	Total/NA	Water	SM 2510B	
890-7181-11 DU	EB - 02 MS/MSD	Total/NA	Water	SM 2510B	
890-7181-B-4 DU	890-7181-B-4 DU	Total/NA	Water	SM 2510B	

Analysis Batch: 191915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	SM 4500 H+ B	
890-7181-2	MW - 03	Total/NA	Water	SM 4500 H+ B	
890-7181-3	MW - 08	Total/NA	Water	SM 4500 H+ B	
890-7181-4	MW - 12	Total/NA	Water	SM 4500 H+ B	
890-7181-6	MW - 17	Total/NA	Water	SM 4500 H+ B	
890-7181-7	MW - 22	Total/NA	Water	SM 4500 H+ B	
890-7181-8	MW - 23	Total/NA	Water	SM 4500 H+ B	
890-7181-9	EB - 02	Total/NA	Water	SM 4500 H+ B	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	SM 4500 H+ B	
890-7181-12	DUP - 01	Total/NA	Water	SM 4500 H+ B	
890-7181-1 DU	MW - 02	Total/NA	Water	SM 4500 H+ B	
890-7181-3 DU	MW - 08	Total/NA	Water	SM 4500 H+ B	
890-7181-6 DU	MW - 17	Total/NA	Water	SM 4500 H+ B	
890-7181-7 DU	MW - 22	Total/NA	Water	SM 4500 H+ B	
890-7181-8 DU	MW - 23	Total/NA	Water	SM 4500 H+ B	
890-7181-10 DU	PO - 02	Total/NA	Water	SM 4500 H+ B	
890-7181-11 DU	EB - 02 MS/MSD	Total/NA	Water	SM 4500 H+ B	
890-7181-B-4 DU	MW - 12	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 192278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-5	MW - 15	Total/NA	Water	SM 2510B	
LCS 860-192278/3	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 860-192278/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
LLCS 860-192278/5	Lab Control Sample	Total/NA	Water	SM 2510B	

QC Association Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

General Chemistry (Continued)

Analysis Batch: 192278 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49061-G-3 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 192562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-5	MW - 15	Total/NA	Water	SM 4500 H+ B	
890-7181-10	PO - 02	Total/NA	Water	SM 4500 H+ B	
880-49452-B-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 192746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-10	PO - 02	Total/NA	Water	SM 4500 H+ B	
880-49276-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 192756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-10	PO - 02	Total/NA	Water	SM 2510B	
MB 860-192756/2	Method Blank	Total/NA	Water	SM 2510B	
LCS 860-192756/3	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 860-192756/4	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
LLCS 860-192756/5	Lab Control Sample	Total/NA	Water	SM 2510B	
860-84325-A-5 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 193615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-2	MW - 03	Total/NA	Water	SM 2320B	
890-7181-3	MW - 08	Total/NA	Water	SM 2320B	
890-7181-4	MW - 12	Total/NA	Water	SM 2320B	
890-7181-5	MW - 15	Total/NA	Water	SM 2320B	
890-7181-6	MW - 17	Total/NA	Water	SM 2320B	
890-7181-7	MW - 22	Total/NA	Water	SM 2320B	
890-7181-8	MW - 23	Total/NA	Water	SM 2320B	
890-7181-9	EB - 02	Total/NA	Water	SM 2320B	
890-7181-10	PO - 02	Total/NA	Water	SM 2320B	
890-7181-11	EB - 02 MS/MSD	Total/NA	Water	SM 2320B	
890-7181-12	DUP - 01	Total/NA	Water	SM 2320B	
MB 860-193615/3	Method Blank	Total/NA	Water	SM 2320B	
MB 860-193615/34	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-193615/35	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 860-193615/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-193615/36	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LCSD 860-193615/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
860-83071-A-2 DU	Duplicate	Total/NA	Water	SM 2320B	
870-30766-D-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 193770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7181-1	MW - 02	Total/NA	Water	SM 2320B	
MB 860-193770/3	Method Blank	Total/NA	Water	SM 2320B	
LCS 860-193770/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 860-193770/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
890-7226-AO-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 02

Date Collected: 10/01/24 16:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 04:24	KLV	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	191564	10/05/24 04:24	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 04:24	KLV	EET HOU
Total/NA	Analysis	300.0		5			191233	10/03/24 13:45	WP	EET HOU
Total/NA	Analysis	300.0	DL	50			191233	10/03/24 13:51	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:00	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:12	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193770	10/15/24 14:31	CT	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 19:08	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 19:08	RY	EET HOU

Client Sample ID: MW - 03

Date Collected: 10/01/24 17:30
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 08:51	KLV	EET HOU
Total/NA	Analysis	8260D	DL	10	5 mL	5 mL	191681	10/05/24 17:04	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 17:04	KLV	EET HOU
Total/NA	Analysis	300.0		100			191233	10/03/24 13:32	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:01	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:13	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 18:58	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 21:10	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	50 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 21:10	RY	EET HOU

Client Sample ID: MW - 08

Date Collected: 10/01/24 15:55
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 04:44	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 04:44	KLV	EET HOU

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 08
Date Collected: 10/01/24 15:55
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5			191233	10/03/24 13:07	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:03	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:18	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 23:36	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 19:10	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 19:10	RY	EET HOU

Client Sample ID: MW - 12
Date Collected: 10/01/24 15:10
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 05:46	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 05:46	KLV	EET HOU
Total/NA	Analysis	300.0		5			191233	10/03/24 14:47	WP	EET HOU
Total/NA	Analysis	300.0	DL	50			191233	10/03/24 14:54	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:05	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:20	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 22:52	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 19:04	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 19:04	RY	EET HOU

Client Sample ID: MW - 15
Date Collected: 10/01/24 13:35
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 06:06	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 06:06	KLV	EET HOU
Total/NA	Analysis	300.0		100			191233	10/03/24 14:22	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:25	DP	EET HOU

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 15
Date Collected: 10/01/24 13:35
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:39	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/15/24 00:23	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			192278	10/07/24 20:55	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	5 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			192562	10/08/24 20:34	MR	EET HOU

Client Sample ID: MW - 17
Date Collected: 10/01/24 09:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 06:27	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 06:27	KLV	EET HOU
Total/NA	Analysis	300.0		5			191229	10/03/24 18:13	A1S	EET HOU
Total/NA	Analysis	300.0	DL	50			191229	10/03/24 18:20	A1S	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:27	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:41	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 22:43	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 20:39	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 20:39	RY	EET HOU

Client Sample ID: MW - 22
Date Collected: 10/01/24 14:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 09:11	KLV	EET HOU
Total/NA	Analysis	8260D	DL	20	5 mL	5 mL	191681	10/05/24 17:25	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 17:25	KLV	EET HOU
Total/NA	Analysis	300.0		50			191233	10/03/24 14:10	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:29	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:46	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 23:26	MR	EET HOU

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: MW - 22
Date Collected: 10/01/24 14:15
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 20:37	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 20:37	RY	EET HOU

Client Sample ID: MW - 23
Date Collected: 10/01/24 11:25
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 06:47	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 06:47	KLV	EET HOU
Total/NA	Analysis	300.0		5			191229	10/03/24 17:43	A1S	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:30	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:48	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 20:05	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 20:19	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 20:19	RY	EET HOU

Client Sample ID: EB - 02
Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 03:22	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 03:22	KLV	EET HOU
Total/NA	Analysis	300.0		1			191233	10/03/24 12:27	WP	EET HOU
Total/NA	Analysis	300.0	DL	10			191233	10/03/24 12:33	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:32	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:49	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/15/24 00:31	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 21:30	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191497	10/04/24 10:41	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 21:30	RY	EET HOU

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: PO - 02
Date Collected: 10/01/24 10:20
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 07:08	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 07:08	KLV	EET HOU
Total/NA	Analysis	300.0		5			191229	10/03/24 17:28	A1S	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:34	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:51	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 20:14	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			192756	10/09/24 19:37	MR	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191833	10/07/24 09:35	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			192562	10/08/24 20:28	MR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			192746	10/09/24 19:37	MR	EET HOU

Client Sample ID: EB - 02 MS/MSD
Date Collected: 10/01/24 12:45
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 03:43	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 03:43	KLV	EET HOU
Total/NA	Analysis	300.0		1			191233	10/03/24 12:15	WP	EET HOU
Total/NA	Analysis	300.0	DL	10			191233	10/03/24 12:21	WP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:36	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:53	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 18:47	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 20:22	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191833	10/07/24 09:35	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 20:22	RY	EET HOU

Client Sample ID: DUP - 01
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	191563	10/05/24 07:28	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 07:28	KLV	EET HOU
Total/NA	Analysis	300.0		5			191229	10/03/24 17:58	A1S	EET HOU

Lab Chronicle

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Client Sample ID: DUP - 01
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0	DL	50			191229	10/03/24 18:05	A1S	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		1			192184	10/07/24 15:37	DP	EET HOU
Dissolved	Filtration	Filtration			250 mL	250 mL	191705	10/06/24 07:16	AGR	EET HOU
Dissolved	Prep	200.7			50 mL	50 mL	191803	10/07/24 09:00	MD	EET HOU
Dissolved	Analysis	200.7 Rev 4.4		50			192184	10/07/24 15:54	DP	EET HOU
Total/NA	Analysis	SM 2320B		1			193615	10/14/24 19:48	MR	EET HOU
Total/NA	Analysis	SM 2510B		1			191914	10/06/24 21:28	RY	EET HOU
Total/NA	Analysis	SM 2540C		1	25 mL	200 mL	191833	10/07/24 09:35	TR	EET HOU
Total/NA	Analysis	SM 4500 H+ B		1			191915	10/06/24 21:28	RY	EET HOU

Client Sample ID: RB - 01
Date Collected: 10/01/24 00:00
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	191564	10/05/24 04:03	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 04:03	KLV	EET HOU

Client Sample ID: TRIP BLANK
Date Collected: 10/01/24 00:00
Date Received: 10/02/24 09:26

Lab Sample ID: 890-7181-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	5 mL	5 mL	191564	10/05/24 03:02	KLV	EET HOU
Total/NA	Analysis	Total BTEX		1			192271	10/05/24 03:02	KLV	EET HOU

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Laboratory: Eurofins Houston

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215	06-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity
SM 2320B		Water	Phenolphthalein Alkalinity
SM 4500 H+ B		Water	Temperature
Total BTEX		Water	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
8260D	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
200.7 Rev 4.4	Metals (ICP)	EPA	EET HOU
SM 2320B	Alkalinity	SM	EET HOU
SM 2510B	Conductivity, Specific Conductance	SM	EET HOU
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU
SM 4500 H+ B	pH	SM	EET HOU
200.7	Preparation, Total Recoverable Metals	EPA	EET HOU
5030C	Purge and Trap	SW846	EET HOU
Filtration	Sample Filtration	None	EET HOU

Protocol References:

EPA = US Environmental Protection Agency
None = None
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.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Ensolum
Project/Site: EMPIRE ABO PLANT

Job ID: 890-7181-1
SDG: Eddy Co NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7181-1	MW - 02	Water	10/01/24 16:45	10/02/24 09:26
890-7181-2	MW - 03	Water	10/01/24 17:30	10/02/24 09:26
890-7181-3	MW - 08	Water	10/01/24 15:55	10/02/24 09:26
890-7181-4	MW - 12	Water	10/01/24 15:10	10/02/24 09:26
890-7181-5	MW - 15	Water	10/01/24 13:35	10/02/24 09:26
890-7181-6	MW - 17	Water	10/01/24 09:15	10/02/24 09:26
890-7181-7	MW - 22	Water	10/01/24 14:15	10/02/24 09:26
890-7181-8	MW - 23	Water	10/01/24 11:25	10/02/24 09:26
890-7181-9	EB - 02	Water	10/01/24 12:45	10/02/24 09:26
890-7181-10	PO - 02	Water	10/01/24 10:20	10/02/24 09:26
890-7181-11	EB - 02 MS/MSD	Water	10/01/24 12:45	10/02/24 09:26
890-7181-12	DUP - 01	Water	10/01/24 12:00	10/02/24 09:26
890-7181-13	RB - 01	Water	10/01/24 00:00	10/02/24 09:26
890-7181-14	TRIP BLANK	Water	10/01/24 00:00	10/02/24 09:26

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 1 of 2

Project Manager:	Bruce Hyde	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	600 Maclenfield #400	Address:	
City, State ZIP:	MIDLAND TX 79701	City, State ZIP:	
Phone:	432 230 3344	Email:	shyde@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Empire Abo Plant	Turn Around	
Project Number:	07A2107007	☑ Routine ☐ Rush	
Project Location:	Eddy Co NM	Due Date:	
Sampler's Name:	Shane Dillon	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	07A2107007		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TNM00
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-1.6
Total Containers:		Corrected Temperature:	-1.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	VOC 8260D	Cations SW6020B	Anions M300B	TDS 2540C	Sample Comments
MW-02	GW	10-1-24	1645		G	7		X	X	X	X	
MW-03	GW	10-1-24	1730		G	7		X	X	X	X	
MW-08	GW	10-1-24	1555		G	7		X	X	X	X	
MW-12	GW	10-1-24	1510		G	7		X	X	X	X	
MW-15	GW	10-1-24	1335		G	7		X	X	X	X	
MW-17	GW	10-1-24	0915		G	7		X	X	X	X	
MW-22	GW	10-1-24	1415		G	7		X	X	X	X	
MW-23	GW	10-1-24	1125		G	7		X	X	X	X	
EB-02	GW	10-1-24	1245		G	7		X	X	X	X	
PO-02	GW	10-1-24	1020		G	7		X	X	X	X	

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
PO_4: HP
SO_4: NABIS
S_2O_3: $NaSO_3$
cetate+NaOH: Zn
H+Ascorbic Acid: SAPC

890-7181 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Shane Hyde	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	600 Marienfeld 400	Address:	
City, State ZIP:	MIDLAND TX 79701	City, State ZIP:	
Phone:	432 230 3344	Email:	

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Empire Abo Plant	Turn Around	
Project Number:	07A2107007	☒ Routine ☐ Rush	
Project Location:	Eddy Co NM	Due Date:	
Sampler's Name:	Shane Diller	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	07A2107007		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	INM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	-1.6
Total Containers:		Corrected Temperature:	-1.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: VOC 8260D	Cations: SW6020D	Anions: M2320C	TDS	Sample Comments
EB-02 MS/MSD	GW	10-1-24	1245	-	G	7	X	X	X	X	
DUP-01	GW	10-1-24	1200	-	G	7	X	X	X	X	
RB-01	GW	10-1-24		-	G	3	X				
Trip Blank	W					6	X				

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: NaSO$_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

AVE 15

10-1-24

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10/2 926	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-4005.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 890-7181 1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/8/2024			Preservation Codes:
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: EMPIRE ABO PLANT	Project #: 89000091			
Site:	SSOW#:			Other

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	Perform MS/MSD (Yes or No)	8260D/5030C BTEX	Total_BTEX	200.7/200.7_P TR Cations	2510B/ Specific Conductance	2540C_Calcd/ Solids, Total Dissolved (TDS)	300_ORGFM_28D/ Chloride, Fluoride, Sulfate	300_ORGFMS/ Nitrate and Nitrite as N	SM4500_H+/ pH and Temperature	8260C/5030C BTEX					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
MW 02 (890-7181-1)	10/1/24	16:45 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 03 (890-7181-2)	10/1/24	17:30 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 08 (890-7181-3)	10/1/24	15:55 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 12 (890-7181-4)	10/1/24	15:10 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 15 (890-7181-5)	10/1/24	13:35 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 17 (890-7181-6)	10/1/24	09:15 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW 22 (890-7181 7)	10/1/24	14.15 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
MW - 23 (890-7181-8)	10/1/24	11:25 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
EB - 02 (890-7181-9)	10/1/24	12:45 Mountain	G	Water			X	X	X	X	X	X	X	X						7	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/1/24 0927	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.8° IR-368

Ver: 05/06/2024

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-4005.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 890-7181-1
Address: 4145 Greenbriar Dr	Due Date Requested: 10/8/2024			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: EMPIRE ABO PLANT	Project #: 89000091			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

Other

Sample Identification - Client ID (Lab ID)	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)	Perform MS/MSD (Yes or No)	8260D/5030C BTEX	Total_BTEX	200.7/200.7_P TR Cations	2510B/ Specific Conductance	2540C_Calcd/ Solids, Total Dissolved (TDS)	300_ORGFM_28D/ Chloride, Fluoride, Sulfate	300_ORGFMS/ Nitrate and Nitrite as N	SM4500_H+/ pH and Temperature	8260C/5030C BTEX					Total Number of containers	Special Instructions/Note:
			Preservation Code:																		
PO 02 (890-7181-10)	10/1/24	10:20 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
EB 02 MS/MSD (890-7181 11)	10/1/24	12:45 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
DUP 01 (890-7181-12)	10/1/24	12:00 Mountain	G	Water			X	X	X	X	X	X	X	X						7	
RB 01 (890-7181-13)	10/1/24	Mountain	G	Water				X							X					3	
TRIP BLANK (890-7181 14)	10/1/24	Mountain	G	Water				X							X					6	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/3/24 0927	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

Eurofins Eaton Analytical South Bend
110 S Hill Street
South Bend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Petersen, Anne	Carrier Tracking No(s):	COC No: 810-46792.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Anne.Petersen@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas; TCEQ Water Supply - Texas		Job #: 810-122673-1
Address: 4145 Greenbriar Dr	Due Date Requested: 12/5/2024	Analysis Requested		Preservation Codes:
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: Liberty Hill DPR Project	Project #: 81008926			
Site:	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	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)	Perform MS/MSD (Yes or No)	351.2/351.2_Prep Total Kjeldahl Nitrogen (TKN)	353.2	353.2_Nitrite	Nitrate_Calc	2320B	180.1	SM5210B_Calc/BOD_Prep BOD, 5-Day	HACH8000_NP	Total Number of containers	Special Instructions/Note:
			Preservation Code:													
MBR Train 1 Filtrate (810-122673-1)	10/2/24	12:23 Central	G	Water			X	X	X	X	X	X	X	X	5	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ______ *Months*

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/3/24 0920	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.4c IR Frou368 CF=-0.1°

Ver: 05/06/2024

110 S Hill Street
South Bend, IN 46617
Phone: 574-233-4777 Fax: 574-233-8207

Chain of Custody Record

Client Information	Sampler: Abigail Hall	Lab PM: Petersen, Anne	Carrier Tracking No(s):	COC No: 810-45475-14225.1
Client Contact: Jeff Meadows	Phone: 210-6675718	E-Mail: Anne.Petersen@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: Garver LLC	PWSID:			Job #:
Address: 285 SE Inner Loop #110	Due Date Requested:			
City: Georgetown	TAT Requested (days):			
State, Zip: TX, 78626	Compliance Project: Δ Yes Δ No			
Phone: 214-451-2956(Tel)	PO #: Purchase Order not required			
Email: jdmeadows@garverusa.com	WO #:			
Project Name: Liberty Hill DPR Project	Project #: 81008926			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
S H2SO4
N None
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwater, Ssolid, Owaste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	351.2, 353.2	HACH8000_NP Local Method	180.1, 2320B	353.2_Nitrite Local Method	Nitrate_Calc Local Method	SM5210B_Calc BOD, 5-Day	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	S	S	N	N	N	N	X	
MBR Train 1 Filtrate	10/2/24	12 23	G	Water	4	4	✓	✓	✓	✓	X	✓		

Temp: 5.4° IR ID:HOU-368
C/F:-0.1
Corrected Temp: 5.3°

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ 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:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 10/3/24 0927	Company EF

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 10/08/2024

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7181-1
SDG Number: Eddy Co NM

Login Number: 7181
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

Question	Answer	Comment
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	
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.	N/A	Refer to Job Narrative for details.
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").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7181-1
SDG Number: Eddy Co NM

Login Number: 7181
List Number: 2
Creator: Grandits, Corey

List Source: Eurofins Houston
List Creation: 10/03/24 11:36 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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 <6mm (1/4").	True	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 548472

CONDITIONS

Operator:	OGRID:
Aka Energy Group, LLC 125 Mercado St, Suite 201 Durango, CO 80301	330743
	Action Number: 548472
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Pursuant to 19.15.30 NMAC AKA Energy Group must update the Stage 2 Abatement plan no later than May 5, 2026, that meets all of the requirements of 19.15.30.13 NMAC.	2/4/2026
shanna.smith	Transition from submitting annual monitoring and sampling reports to submitting quarterly monitoring and sampling reports.	2/4/2026
shanna.smith	Clarify why all site wells are not gauged and/or sampled on a schedule.	2/4/2026
shanna.smith	The release has not been fully delineated. Responsible party must fully delineate the site.	2/4/2026
shanna.smith	Monthly LNAPL recovery will commence until future remediation plans are approved in Stage 2 Abatement Plan.	2/4/2026