IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA

UNITED STATES OF AMERICA, Plaintiff, v. CHAMELEON LLC and GARY V. LAYNE, Defendants.	Civil Action No. 3:23-cv-763

UNITED STATES' OPPOSITION TO
DEFENDANTS' MOTION TO STAY DISCOVERY

Defendants have, again, moved to stay discovery, this time without consulting the United States, in violation of Local Rule 37. Like their last motion to stay discovery, the sole basis for Defendants' request is the pendency of their Motion to Dismiss the Amended Complaint, ECF No. 63. In that Motion, they admit they filled wetlands without authorization from either state or federal permitting authorities but dispute that the wetlands fall under the protection of the federal Clean Water Act. They state that they seek a stay to avoid litigation expenses while the Motion is pending. Against Defendants' concern about expenses, the Court must weigh the substantial prejudice that a stay would inflict on the United States' ability to collect relevant evidence during the appropriate time of year, and the real, ongoing harm that Defendants' admittedly-unpermitted activities have inflicted on Wetland A and downstream tributaries—harms that will continue until Defendants' violations are resolved. Since filing the original Complaint in November 2023, the United States has been forthcoming and consistent in explaining to Defendants' counsel that on-the-ground evidence collection and field observation of vegetation, soils, and hydrology by

retained expert witnesses is time-sensitive: certain natural indicators of the presence and characterization of aquatic resources are best observed in the early spring. A year later, those considerations have not changed and the spring is again upon us in 2025.

Defendants' desire to avoid litigation costs—often of their own making as they litigate this case "to the hilt," Mot. at 1—cannot outweigh the prejudice to the United States and to the public interest that will result from further discovery delays. The Court should deny Defendants' motion to stay discovery.

BACKGROUND

I. Factual and Procedural Background

In 2018, Defendants—Chameleon, LLC, and its sole owner, Gary Layne—purchased an approximately 102-acre tract of forested and undeveloped land ("the Site") located immediately west of Interstate 95 in Ashland, Virginia. Am. Compl. ¶¶ 25-27, ECF No. 60. Beginning in early 2019, Defendants (and/or persons acting on their behalf) cleared and grubbed much of the Site, dug ditches and sidecasted the material, and installed culverts, surface impoundments, and drainage pipes. *Id.* ¶ 29. Those activities ultimately impacted most of the 102 acres, including approximately 21 acres of wetlands in three areas. *Id.* One of those areas, identified as Wetland A, comprises 17 of those 21 impacted wetland acres and is the subject of the United States' Amended Complaint. *Id.*

Hanover County and the Virginia Department of Forestry reported Defendants' wetland impacts to the Virginia Department of Environmental Quality ("VADEQ"), who in turn informed the United States Army Corps of Engineers (the "Corps"). *Id.* ¶¶ 34, 41. After repeatedly attempting to obtain information about the wetland impacts from Defendants without success, the Corps referred the matter to EPA. *Id.* ¶¶ 41-43. Both VADEQ and EPA ultimately had to obtain warrants to access and inspect the Site. *Id.* ¶¶ 35-36, 44-51. Even after VADEQ inspected

the Site and told Defendants to stop work, Defendants began new timber harvesting activities in additional areas of the Site, including additional grubbing. *Id.* ¶ 37. Defendants also caused additional unauthorized discharges to wetlands on Site after EPA's inspection. *Id.* ¶ 57. After Defendants refused to reach an administrative resolution with EPA (which would have involved significantly less transaction costs and time), the Agency referred the matter to the Department of Justice.[1]

After efforts to resolve the matter without litigation were unsuccessful, the United States filed its original Complaint on November 13, 2023. ECF No. 1. On February 20, 2024, Defendants moved to dismiss for lack of subject matter jurisdiction and failure to state a claim. ECF Nos. 11-12. Two weeks later, on March 8, 2024, the Court entered a scheduling order and initial pretrial order which required the parties to meet and confer pursuant to Federal Rule of Civil Procedure 26(f) and begin discovery. ECF Nos. 15, 15-1. The parties held their Rule 26(f) conference on March 12, 2024. Meanwhile, the United States filed its opposition to the first motion to dismiss, ECF No. 19, and the Court heard argument on the motion on April 4, 2024. ECF No. 24. The United States subsequently subpoenaed documents from third parties, Balzer and WSSI, who served as contractors for Defendants. ECF No. 46 at 1-2. Balzer and WSSI refused to produce the requested documents until Defendants reviewed them, which Defendants refused to do. *Id.* at 2. The United States and Defendants filed a proposed discovery schedule on

[1] Defendants have repeatedly implied that the United States' timing for prosecuting this case is somehow inappropriately slow—filing suit "nearly four years after it first became aware of potential CWA violations," Mot. at 3—or improperly quick—filing suit "even while the Government had a tolling agreement" in place, Mot. at 3. It cannot be both and in fact it is neither. As noted infra, EPA engaged with Defendants in an attempt to reach an administrative settlement before the Agency referred this matter to the Justice Department. Since that time, the United States has proceeded fairly and routinely in this case, obtaining a warrant for a site inspection, gathering additional evidence, seeking to resolve the matter without litigation, then filing suit when it became clear that Defendants were unwilling to settle on acceptable terms.

May 31, 2024, ECF No. 37, which this Court accepted and entered on June 6, 2024, ECF No. 39. The United States served its discovery requests on Defendants on June 17, 2024. Defendants filed a motion to stay discovery on June 18, 2024, ECF Nos. 41-42, and never responded in substance to the United States' discovery requests. The Court ultimately concluded that certain allegations in the original Complaint were legal conclusions and that the original Complaint did not contain sufficient factual detail to support those legal conclusions. *See United States v. Chameleon, LLC*, No. 3:23-CV-763–HEH, 2024 WL 3835077, at *6-7 (E.D. Va. Aug. 15, 2024). Following dismissal of the original Complaint with leave to amend, the Court denied as moot Defendants' motion to stay discovery. ECF No. 57.

The United States filed its Amended Complaint on November 15, 2024. ECF No. 60. Defendants moved to dismiss the Amended Complaint on January 2, 2025. ECF No. 63. The Court has not entered a Rule 16 order requiring the Parties to confer pursuant to Rule 26(f), nor are there any current discovery deadlines. Defendants filed another motion to stay discovery, ECF Nos. 68-69, on January 17, 2025, without ever consulting the United States.

II. Timing Considerations for Discovery

The change of seasons can affect the visibility of certain indicators of hydrology. In this part of Virginia, the water table is influenced by the seasons. During the winter and spring, when the temperature is usually lower, plants take up less water and the water table is higher. *See* Declaration of Katelyn Almeter dated July 2, 2024 (Almeter Decl.) (previously filed at ECF No. 45-1 and attached here as Exhibit A), ¶¶ 15-16. As the seasons progress and temperatures rise, plant activity increases (trees that were dormant take on leaves, certain vines and herbs appear, etc.). *Id.* Growing plants take up more water, reducing the surface and ground water levels. *Id.* While an inspector or expert can identify wetlands hydrology by certain characteristics even during times of year when plant activity is taking up more water, it is easier to observe certain

hydrologic characteristics before seasonal plant activity accelerates in warmer months. *Id.* ¶ 15. Thus, it is appropriate for the United States to obtain access to the Site for a full Site visit in early spring to allow its experts to observe the aquatic features on the Site.

In addition, wetland plant characteristics are most appropriately observed during the "growing season."[2] The lifecycle of many plants, including wetland plants, are influenced by the change in seasons, with leaves and certain herbs and vines appearing in spring and plants going dormant in colder months. *Id.* ¶ 14. In Hanover County, the "growing season" occurs conservatively between approximately April 7 and November 2. *Id.* ¶ 13. While it is not impossible to evaluate the plant community outside the growing season, that effort is more difficult because some plants are dormant in colder months and leaves and certain vines, herbs, etc., may be absent. *Id.* ¶ 14.

As is typical in wetland enforcement actions, the United States' experts would evaluate the presence of wetland indicators, including vegetation and hydrology, on the Site before rendering expert opinions. *See, e.g.*, *United States v. Fabian*, 522 F. Supp. 2d 1078, 1090 (N.D. Ind. 2007) (evaluating evidence of hydrology, vegetation, and soils to assess extent of wetland impacts, including considering where those indicators could be inferred given the disturbances on site). The United States hopes to complete fact discovery during the 2025 growing season. If the United States' experts cannot access the Site and complete data collection before November 2, 2025, at the latest, then the United States may need to seek to extend the discovery window

[2] *See* U.S. Army Corps of Eng's Wetland Delineation Manual (1987) at 9, https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4532/.

through part of the next growing season in 2026 to ensure the experts have an appropriate opportunity to collect data on which to base their opinions.[3]

Defendants' Motion to Dismiss the Amended Complaint—like their prior motion to dismiss and their expected defense on the merits—raises factual questions, including the extent of wetlands and whether those wetlands have a continuous surface connection to other waters of the United States. As the United States noted in its opposition to the Motion to Dismiss the Amended Complaint, the factual disputes introduced by Defendants are appropriately resolved after discovery. ECF No. 67 at 17-18. The presence and characteristics of hydrology and vegetation are key facts for identifying the presence and extent of wetlands and other aquatic resources. *See* Exhibit A, Almeter Decl., ¶ 12.

Because collecting on-the-ground samples and making related observations is time-sensitive, the United States has repeatedly requested access to the Chameleon Site to allow its experts to collect data to inform opinions central to the United States' case. The United States has made clear to Defendants since the outset of this case that it would need to conduct a site inspection pursuant to Federal Rule of Civil Procedure 34 to collect necessary, discoverable evidence on issues central to this case. Rule 34 site inspections are routinely requested and conducted in Clean Water Act civil enforcement matters and are necessary so that experts can observe the condition of the aquatic resources to inform their opinions. Because the Chameleon Site is so large (101.66 acres), and Defendants' impacts at the Site are so substantial (80 acres of land-clearing, grading, and ditching, including approximately 21 acres of impacts to wetlands, 17

[3] Defendants own the Site and can grant access to their own experts whenever they choose and as often as their experts wish. By contrast, the United States must seek permission for access for its experts, either from Defendants or this Court. Defendants should not be allowed to try to influence the outcome of the litigation by using their Site ownership to harmfully delay the United States' experts' evaluation.

acres of which are in Wetland A), the United States explained to Defendants from the outset of this case that its experts would need a five-day Site inspection during which the United States' experts would collect information necessary to inform their opinions about the existence and extent of aquatic resources on the Site.

Defendants previously agreed to allow the United States access to only some portions of the Site for just six hours on May 16, 2024. The United States used this short time to conduct a limited, preliminary assessment of some portions of the Site. While useful, that brief visit did not allow the United States' experts to complete a full Site inspection, collect wetland data points throughout Wetland A, or collect other critical information that would inform their opinions regarding the existence and extent of wetlands on the Site and their connection to Unnamed Tributary 1—in other words, the manner of expert analysis that is typical and appropriate from government experts and consultants in this type of Clean Water Act case.

LEGAL STANDARD

Local Rule 37(E) dictates that "[n]o motion concerning discovery matters may be filed until counsel shall have conferred in person or by telephone to explore with opposing counsel the possibility of resolving the discovery matters in controversy." E.D. Va. Loc. R. 37(E). This Court "will not consider any motion concerning discovery matters unless the motion is accompanied by a statement of counsel that a good faith effort has been made between counsel to resolve the discovery matters at issue." *Id.*

In deciding whether a stay is appropriate, the Court must weigh competing interests and consider the following factors: "(1) the interests of judicial economy; (2) hardship and equity to the moving party if the action is not stayed; [and] (3) potential prejudice to the non-moving party." *Scalable Insights, LLC v. Bihrle Applied Rsch., Inc.*, Civ. No. 4:23-58, 2023 WL

8539533, at *2 (E.D. Va. Aug. 1, 2023). Courts also consider the "interests of persons not party to the civil litigation, the public interest, the danger of discovery abuse." *Avalonbay Cmtys, Inc. v. San Jose Water Conservation Corp.*, Civ. No. 07-306, 2007 WL 2481291, at *1 (E.D. Va. Aug. 27, 2007), *aff'd,* 325 F. App'x 217 (4th Cir. 2009). Finally, when the basis for the motion to stay is the pendency of a dispositive motion, as is the case here, courts also consider whether there is an "immediate and clear possibility that [dismissal] will be granted." *Bennett v. Fastenal Co.*, No. 7:15-cv-00543, 2016 WL 10721816, at *1 (W.D. Va. Mar. 8, 2016). As detailed below, all these factors weigh against a stay.

ARGUMENT

This Court should deny Defendants' motion to stay discovery for two reasons. First, it is procedurally improper. Defendants never consulted the United States before filing their motion, contrary to the requirements of Local Rule 37. Second, Defendants have failed to demonstrate that their requested stay is justified. The Court should deny the motion in full. But even if the Court is inclined to grant Defendants some relief, it should limit the stay to allow the United States to conduct time-sensitive discovery on seasonally-influenced issues.

I. Defendants' Motion Does Not Comply with Local Rule 37.

Defendants' motion fails to comply with this Court's local rules. Local Rule 37(E) dictates that counsel "shall confer to decrease, in every way possible the filing of unnecessary discovery motions" and "[n]o motion concerning discovery matters may be filed until counsel shall have conferred in person or by telephone to explore with opposing counsel the possibility of resolving the discovery matters in controversy." E.D. Va. Loc. R. 37(E). The Rule further states that this Court "will not consider any motion concerning discovery matters unless the motion is accompanied by a statement of counsel that a good faith effort has been made between counsel to resolve the discovery matters at issue." *Id.*

Defendants' counsel never contacted the United States about their motion. They filed it on the Friday evening before a holiday weekend without saying a word to United States' counsel. Defendants' counsel never made *any* effort to resolve their discovery concerns with the United States. Because of this failure, their motion does not—and could not—contain any certification that counsel made "a good faith effort to . . . . resolve the discovery matters at issue." *Id.* The Court should thus "not consider" their motion at all. *Id.*

Defendants may argue, in their reply, that Local Rule 37 does not apply to their motion because they view it as a motion to stay proceedings generally—not as a discovery motion. That argument is inconsistent with Defendants' past practice. Defendants conferred with the United States prior to filing their last motion to stay discovery, and they notified the Court of that meet-and-confer in their motion. ECF No. 42 at 11. The argument is also meritless. Defendants are plainly not seeking to stay all proceedings because they want this Court to address their Motion to Dismiss the Amended Complaint. They seek only to stay discovery while their Motion to Dismiss is pending. The text of Local Rule 37 does not exempt such motions. The plain text of Local Rule 37(E) broadly covers "*any* motion *concerning discovery matters*." E.D. Va. Loc. R. 37(E) (emphasis added). Thus, this Court has applied the rule to a broad range of discovery-related motions. *See, e.g.*, *Ricks v. Huynh*, No. 2:20CV292, 2021 WL 2014795, at *5 (E.D. Va. May 20, 2021), *aff'd*, No. 21-1703, 2022 WL 203747 (4th Cir. Jan. 24, 2022) (denying motion to permit late designation of expert witness because of failure to comply with Local Rule 37(E)); *Allen v. Cogent Commc'ns, Inc.*, No. 1:14CV459 JCC/TRJ, 2015 WL 236628, at *1 (E.D. Va. Jan. 15, 2015) (denying motion to dismiss certain plaintiffs who failed to appear for depositions in part because movants failed to comply with Local Rule 37(E)); *Kolon Indus., Inc. v. E.I. Dupont De Nemours & Co.*, No. 3:11CV622, 2012 WL 12894840, at *1 (E.D. Va. Feb. 23,

2012) (denying motion for sanctions for failure to respond to certain discovery requests because the motion failed to comply with Local Rule 37(E)).

Defendants' failure to comply with Local Rule 37(E) in filing their motion to stay discovery should bar them from obtaining any relief here. Local Rule 37(E) exists for a reason. "Unnecessary discovery disputes requiring court intervention waste attorney time, cost their clients extra fees, and waste judicial resources." *Jenkins v. Wal-Mart Stores, Inc.*, 2021 WL 1256907, at *3 (E.D. Va. Apr. 5, 2021). Defendants' disregard of this Court's procedures should not be rewarded with a stay of their discovery obligations.

II. Defendants Fail to Show that a Stay Is Justified.

The Court should also deny Defendants' motion on its merits. Defendants fail to meet their burden to establish the existence of "clear and convincing circumstances" justifying a stay of discovery. *Williford v. Armstrong World Indus., Inc.*, 715 F.2d 124, 127 (4th Cir. 1983). To the contrary, a consideration of the relevant factors here weighs in favor of denying the stay. First, a stay would be contrary to judicial economy. Second, a stay could significantly prejudice the United States by interfering with its ability to observe seasonally-influenced features on the Site. Third, a stay will unnecessarily delay the ultimate resolution of this matter and thus restoration of the aquatic resources on the Chameleon Site, thereby extending the harm to the Site's resources and to downstream tributaries. That prejudice substantially outweighs Defendants' concern with litigation costs.

A. A Stay Is Contrary to the Interests of Judicial Economy.

Staying discovery would undermine the interests of judicial economy because there is not an "immediate and clear possibility that dismissal" will be granted. *Bennett*, 2016 WL 10721816, at *1. This Court has already held that the types of factual disputes Defendants rely upon are not

an appropriate basis for a motion to dismiss. *Chameleon*, 2024 WL 3835077, at *5 ("At this stage, it is inappropriate for the Court to resolve these factual disputes."). As stated in the United States' opposition to the motion to dismiss, a Rule 12(b)(6) motion "does not resolve contests surrounding facts, the merits of a claim, or the applicability of defenses." *Tobey*, 706 F.3d at 387. The arguments Defendants raise in their second motion to dismiss constitute a classic factual inquiry "best conducted with the benefit of discovery," not when evaluating the sufficiency of the Amended Complaint. *Robertson v. Sea Pines Real Est. Cos.*, 679 F.3d 278, 292 (4th Cir. 2012). As this Court previously explained, "Defendants essentially ask the Court to determine what the maps show, a question better left for summary judgment." *Chameleon*, 2024 WL 3835077, at *5. This Court should again "decline to grant Defendants' Motion on these grounds." *Id*. Defendants' arguments cannot be squared with federal pleading standards and this Court's prior opinion. *See* ECF No. 67 at 17-18. Accordingly, staying discovery because of Defendants' meritless motion would undermine judicial economy by unnecessarily delaying this case.

The fact that other courts in this Circuit have granted some motions to stay during the pendency of a motion to dismiss is unpersuasive. The opposite is also true. *See, e.g.*, *Slip. Op., Meade v. Hicks,* Civ. No. 21-222 (E.D. Va. Feb. 2, 2022) (denying stay motion pending resolution of motion to dismiss) (Hudson, J.); *Scalable Insights,* 2023 WL 8539533, at *2 (same); *Navient Sols., LLC v. Law Offs. of Jeffrey Lohman, P.C.*, Civ No. 19-461, 2020 WL 8254469, at *1 (E.D. Va. Apr. 7, 2020) (same). Issuing a stay is "dependent upon the circumstances of the particular case." *Nken v. Holder*, 556 U.S. 418, 433 (2009); *accord United States v. A.T. Massey Coal Co.*, Civ. No. 2:07-0299, 2007 WL 3051449, at *2 (S.D. W. Va. Oct. 18, 2007) (holding that the decision to stay discovery pending a dispositive motion requires a

"case-by-case analysis" because the "inquiry is necessarily fact-specific and depends on the particular circumstances and posture of each case."). The circumstances of this case—where Defendants' motion to dismiss is facially flawed—do not warrant a stay.

B. Staying Discovery Will Prejudice the United States' Ability to Timely Collect Evidence.

Staying discovery would prejudice the United States because the United States' experts may lose the ability to observe and take samples from the Chameleon Site during the appropriate time period for doing so. *See* Background Section II *supra*.

Courts often deny stay motions where there is a threat that discoverable evidence will be lost. *See, e.g.*, *Avalonbay Comtys.,* 2007 WL 2481291, at *4 (denying stay where defendants could not "guarantee that evidence will not be lost" during the pendency); *City of Charleston v. Brabham Oil Co., Inc.*, Civ. No. 2:20-03579, 2023 WL 4361234, at *2 (D.S.C. July 6, 2023) (denying a stay where plaintiff would "risk losing discoverable evidence"); *Drolett v. Robinson*, Civ. No. 1:20-213, 2021 WL 737135, at *4 (W.D.N.C. Feb. 25, 2021) (denying stay where "[d]elay may increase the risk that . . . relevant evidence will be lost").

Here, staying discovery presents the risk that the United States will lose access to evidence until the 2026 growing season. For the reasons explained in Background Section II above, the United States' experts should have the opportunity to observe the Site's hydrology and vegetation in the impacted and unimpacted areas of the Site during the early part of the growing season—which is typically the month of April in Hanover County—this year. In typical circumstances, wetland identification considers the presence of three parameters: (1) hydrophytic vegetation, (2) hydric soils, and (3) hydrology. Exhibit A, Almeter Decl., ¶ 12; *see* 33 C.F.R. § 328.3(c)(1). As discussed above, the ability to observe two of these parameters—vegetation and hydrology—is influenced by the changing seasons, and hydrology is most readily observable

during early spring, especially where a Site has been disturbed. *Id.* If discovery in this case is stayed and the United States' experts are unable to inspect the Site during the 2025 growing season (particularly during early spring), there is a risk that the United States' experts will be unreasonably barred from collecting and observing relevant and discoverable evidence integral to forming their opinions. Defendants should not be allowed to use the pendency of their meritless motion to dismiss to delay time-sensitive discovery in their favor.

Defendants do not dispute the seasonality of discoverable evidence here, but they assert that a Site visit is unnecessary because EPA visited the Site in April 2021 and conducted a thorough inspection. While the April 2021 inspection was thorough, the United States has sought and is entitled to Site access as part of this litigation for three reasons. First, the earlier Site inspection occurred *four years ago*. Pursuant to Rule 34(a)(2), the United States has a right to assess the current condition of the Site as it prepares for trial. Second, the United States has alleged that work—and violations of federal law—continued at the Site after EPA's April 2021 inspection. *See* Am. Compl. ¶ 57. Finally, while EPA inspectors were on Site in April 2021, the United States' experts were not. Although the United States' experts were given access for about six hours to conduct a limited, preliminary investigation of some portions of the Site in mid-May 2024, a complete Site inspection by the experts early in the growing season remains necessary.

Defendants assert that a stay will not prejudice the United States because it is likely to be brief. But neither Defendants nor the United States can know for sure, and Defendants have not committed to any concrete end date to a stay.

Defendants also assert that the United States cannot claim prejudice because three years elapsed between when EPA learned of Defendants' violations and when the United States filed suit. That argument is disingenuous. As detailed in Background Section I above, after learning of

the violations, the United States diligently worked to resolve the Clean Water Act violations at the Site short of litigation, both administratively and through settlement negotiations. In 2020, the Corps and EPA sent multiple letters to Defendants, many unanswered, regarding the alleged violations and requesting information. *See* Am. Compl. ¶¶ 41-50. EPA was then forced to obtain a warrant to inspect the Site. *Id.* ¶ 51. After the inspection, EPA gave Defendants the opportunity to confer about the violations, and only after that opportunity failed to resolve the matter, EPA issued a unilateral administrative order to Defendants at the end of 2021. Exhibit A, Almeter Decl., ¶ 10. And it was only after attempts to resolve the matter informally and administratively were unsuccessful that EPA referred the matter to the U.S. Department of Justice. Even then, the United States once again engaged Defendants in settlement negotiations before filing the Complaint, though those negotiations proved fruitless. The Court should reject Defendants' attempt to prejudice the United States' case because of our reasonable efforts to resolve this matter through administrative action and settlement negotiations—efforts Defendants themselves spurned.

C. A Stay Is Contrary to the Public Interest Because it Will Delay Wetland Restoration and Cause Continued Harm to Downstream Waters.

A stay would also harm the public interest. Defendants admit that they have impacted wetlands at the Site, even though they assert that the wetlands are protected only by state law. *See* ECF No. 69 at 2 n.2. Indeed, Defendants' activities have obliterated headwater wetlands that provide functional services to the ecosystem, including maintaining and improving water quality. *See* Exhibit A, Almeter Decl., ¶ 18.

In addition, Defendants' activities have exposed or introduced damaging soil compounds that are actively undermining downstream water quality. During the May 2024 site inspection,

the United States' expert on soils, Professor Lee Daniels, Ph.D, determined that Defendants' ditching in the wetlands and spreading the excavated soil overtop the wetlands created acid sulfate soil conditions. *See* Declaration of Lee Daniels, dated July 2, 2024, ("Daniels Decl.") (previously filed at ECF No. 45-19 and attached here as Exhibit B), ¶ 13. The acid sulfate soils, which have a very low pH, are inhibiting and will continue to inhibit the re-growth of vegetation of the Site. *Id.* ¶¶ 18, 21. The continuing inhibition of vegetation has, in turn, caused and will continue to cause an increased sediment runoff downstream. *Id.* Because the acid sulfate soils running through and off the Site have low pH—a measure of acidity or alkalinity—and high-iron levels, this can lead to downstream wetlands (including unimpacted wetlands remaining on the Site) and streams having elevated iron levels and decreased pH. *Id.* ¶¶ 18, 19. Those impacts are significant stressors to biota such as fish and macroinvertebrates in the streams. *Id.* ¶ 19. The exposed acid sulfate soils at the Chameleon Site will continue to inhibit vegetation growth and contribute to degradation of downstream waters until actively remedied. *Id.* ¶ 21.

Because staying discovery will delay the remedy sought in this case, a stay would allow these environmental harms to continue, contrary to the public interest. *See Massey Coal Co.*, 2007 WL 3051449, at *3 (denying a stay motion and considering the potential ongoing Clean Water Act violations as a factor weighing against a stay). That harm outweighs the discovery expenses Defendants may incur absent a stay.

D. The Unlikely Potential for Defendants to Avoid Costs Does Not Outweigh the Prejudice to the United States and the Harm to the Environment.

The United States does not dispute that discovery can be costly. But, as noted above, there is little likelihood of Defendants prevailing on their flawed motion to dismiss, so Defendants will incur discovery costs regardless of a stay. Moreover, Defendants' incurrence of

litigation costs does not outweigh the prejudice to the United States and the public interest described above.

Courts often give litigation costs little weight compared to other considerations, such as evidentiary concerns. For example, in *City of Annapolis, Maryland v. BP P.L.C.*, Civ. No. 21-00772, 2022 WL 4548226, *4 (D. Md. Sept. 29, 2022) *aff'd sub nom. Anne Arundel Cnty*. v. *BP P.L.C.*, 94 F.4th 343 (4th Cir. 2024), the court denied a motion to stay pending a petition for certiorari, rejecting the defendants' claim that there would be irreparable injury because of the risk of unnecessary litigation. The court noted that there was a risk of losing discoverable evidence with delay and that public interest weighed in favor of moving the case forward. *Id.* As against those concerns, the court explained that "mere injuries, however substantial, in terms of money, time and energy necessarily expended in the absence of a stay, are not enough." *Id*. (quoting *Long v. Robinson*, 432 F.2d 977, 980 (4th Cir. 1970)). It is precisely for these same reasons that the Court should deny Defendants' motion to stay here.

Moreover, Defendants' motion to stay is premised on their assumption that they will prevail on their Motion to Dismiss the Amended Complaint. For all the reasons set forth in the opposition to that motion, the United States disagrees. Even assuming solely for the sake of argument that Defendants' Motion to Dismiss the Amended Complaint is granted, however, the United States also has argued that leave to amend should be granted, as requested in the United States' response to the motion. *See* ECF No. 67 at 30. Courts have denied motions to stay where the opportunity to amend, which should be freely given, could renew the action. *See Massey Coal Co.*, 2007 WL 3051449, at *3 (denying motion to stay where dismissal was sought "primarily upon the basis that the government's allegations are insufficient" and noting that "the allegations might be supplemented by amendment."); *see also Foman v. Davis*, 371 U.S. 178,

182, (1962) ("[L]eave to amend shall be freely given[.]"); *Wallace v. City of Hampton*, No. 2:15CV126, 2015 WL 13856526, at *1 (E.D. Va. Aug. 25, 2015) ("[I]nherent in [a] dismissal [without prejudice] is an opportunity for the Plaintiff to renew the action with a new Complaint."). Should that come to pass, the United States would file a second amended complaint to address any deficiencies the Court might identify and the same basic discovery would proceed. Thus, a favorable decision on Defendants' motion to dismiss would not necessarily resolve the need for discovery but would just delay it. As explained above, further delays in resolving Defendants' significant environmental violations are against the public interest.

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In sum, because Defendants failed to comply with Local Rule 37 and have not demonstrated that a stay is warranted, the Court should deny Defendants' motion for a stay of discovery.

III. Alternatively, the Court Should Allow Limited Discovery to Proceed.

If this Court is nevertheless inclined to grant a stay of discovery, the United States requests that the Court limit such a stay and allow time-sensitive discovery to proceed. Specifically, the United States seeks: (1) Site access pursuant to Federal Rule of Civil Procedure 34(a)(2) so that its experts can observe conditions on the Site no later than the end of April 2025; and (2) to serve limited written discovery—three interrogatories and three document requests on Defendants—to inform the United States' experts' Site inspection. The proposed limited discovery is attached as Exhibit C.

As detailed above, some wetland hydrology indicators are most readily observed during the early part of the growing season, which is early spring for Hanover County. *See* Exhibit A, Almeter Decl., ¶ 15. When a site has been heavily disturbed, as this Site has, it is useful to

inspect a site during those times that the indicators are most readily visible—i.e., for hydrology indicators, during the wet portion of the growing season. *Id.* ¶ 17. In their Motion to Dismiss, Defendants ask the Court to make a factual determination that Unnamed Tributary 1 does not have relatively permanent flow as it leaves the Site and that no continuous surface connection exists between the impacted wetlands and that unnamed tributary. The United States disagrees with Defendants' assertions and has pled facts that demonstrate both the relative permanence of Unnamed Tributary 1 and its continuous surface connection to the wetlands based on the evidence currently available. Notwithstanding, pursuant to the Federal Rules governing discovery, the United States is entitled to collect additional evidence to meet its burden at trial. A stay of discovery through the early part of the growing season would prejudice the United States' experts' ability to collect this seasonally-influenced evidence.

Thus, if the Court is inclined to stay some discovery during the pendency of the Motion to Dismiss, the United States requests that the Court allow the United States to have its experts access and inspect the Site no later than the last week of April 2025. The United States also requests to serve limited written discovery on Defendants' seeking descriptions and documents regarding the condition of the Site prior to and after Defendants' unauthorized work, descriptions and documents related to Defendants' work at the Site, and descriptions of the fill material placed within wetlands at the Site. This information is needed by the United States' experts to prepare for the requested Site inspection. The information should be readily available to Defendants and, if provided cooperatively and without unnecessary motions practice, producing it to the United States would involve minimal cost and inconvenience to Defendants.

After Defendants filed their motion to stay discovery, the United States offered this alternative relief to Defendants as a compromise. Defendants rejected it. If the Court is inclined

to grant them any relief, the United States requests it grant a limited stay as we outline here so that the United States may collect time-sensitive data from the Site, thereby reducing the stay's prejudice to the United States.

CONCLUSION

Defendants have ignored the Local Rules and failed to meet their burden to establish that a stay is warranted. The motion should be denied. If the Court is inclined to grant some relief, the United States respectfully requests that it allow time-sensitive discovery to proceed.

Respectfully requested,

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Dated: January 31, 2025

CERTIFICATE OF SERVICE

I hereby certify that, on January 31, 2025, I filed the foregoing electronically, which sent a notice of electronic filing to all counsel of record in this matter.

/s/ *Laura J. Brown*
LAURA J. BROWN

EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division

UNITED STATES OF AMERICA, Plaintiff, v. CHAMELEON LLC and GARY V. LAYNE, Defendants.	Civil Action No. 3:23-cv-763

DECLARATION OF KATELYN ALMETER

Pursuant to 28 U.S.C. § 1746, I, KATELYN ALMETER, hereby declare as follows:

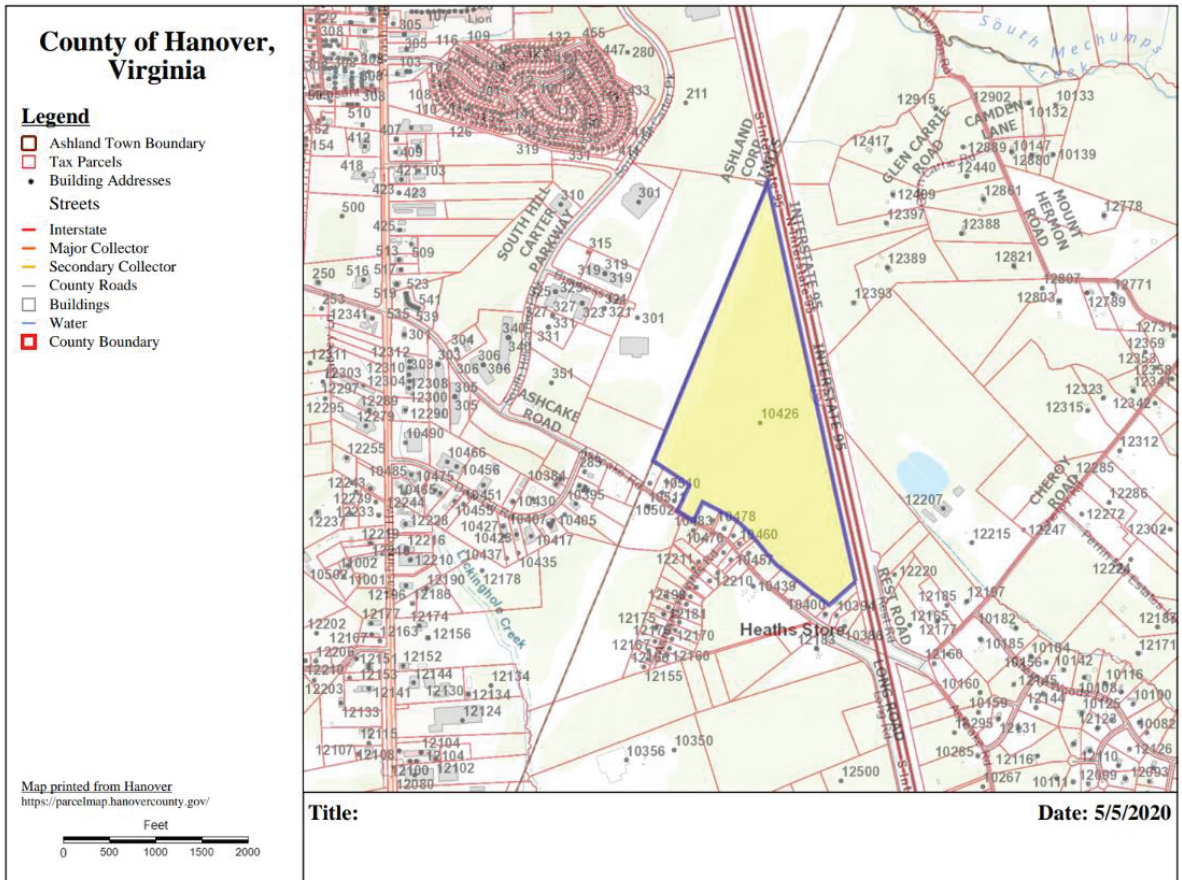
1. I am an Environmental Scientist and Inspector in the Safe Drinking Water Act & Wetlands Section in the Water Branch of the Enforcement and Compliance Assurance Division ("ECAD"), U.S. Environmental Protection Agency Region III ("EPA"). I hold a Bachelor of Arts degree in Environmental Science. I have been employed by EPA since May 2015.

2. My job responsibilities at EPA include conducting site inspections and case development under Section 308 and 404 of the Clean Water Act ("CWA") to identify and assess aquatic resources, conduct delineations to document the presence of wetland soils, wetland vegetation, and hydrology, and collect evidence to support enforcement matters. I also use remote-sensing, digital and geo-spatial tools to interpret aerial photography, datasets, maps, and project plans. Applying my technical expertise, I support EPA CWA enforcement actions and assist in the drafting and preparation of various enforcement documents, including administrative orders and consent decrees.

3. I submit this sworn Declaration in support of the United States' Response to Defendants' Motion to Stay Discovery in the matter of *United States v. Chameleon, LLC, et al.*, Civil Action No. 3:23-cv-00763 (E.D. Va.).

4. On March 22, 2020, I was assigned to investigate potential CWA violations at a 101.66-acre site owned by Chameleon LLC and Gary V. Layne and located at 10426 Ashcake Road, Ashland, Hanover County, Virginia, (hereafter the "Site") following the referral from the U.S. Army Corps of Engineers, Norfolk District. *See* Compl. Ex. 1, ECF No. 5-1. The Site is also identified as parcel #7789-45-3668 with the Hanover County Parcel Viewer. To the best of my knowledge, Chameleon LLC is a company owned and controlled by Mr. Gary V. Layne of 15250 Lazy Creek Road, Beaverdam, Virginia.

Figure A



5. On October 31, 2019, I received information via email regarding the Site from the Virginia Department of Environmental Quality ("VADEQ"), including a copy of an Inspection Report for an August 30, 2019 inspection conducted by VADEQ. On February 10, 2020, I received a copy of the October 9, 2019 Notice of Violation issued by VADEQ. I also received letters from the U.S. Army Corps of Engineers dated January 7, 2020, and February 21, 2020, which stated that they were notified of work in wetlands at the Site by VADEQ, that there was no corresponding authorization by their office for such work, that it potentially constituted a violation of the CWA, and which requested that Mr. Layne contact their office via the point of contact provided.

6. I have knowledge of the Site, including the site conditions, topography, presence and location of aquatic resources, and earth-moving and ditching activities from conducting a three-day inspection of the Site from April 12, 2021 to April 14, 2021. During the inspection, I walked the Site and the unnamed tributaries as far as possible and collected data, including photographs, videos, GPS data, soil samples, flora and fauna observations, as well as stream and water table data. I observed and documented Site conditions, including aquatic features like the disturbed wetlands identified in the Complaint, unimpacted wetlands (including unimpacted wetland areas contiguous with the disturbed wetlands), and four tributaries connecting to the wetlands on the Site.

7. I also have knowledge of the Site from conducting a limited inspection of the Site on May 16, 2024. During this limited inspection, I observed and documented Site and tributary conditions.

8. I also have knowledge of the Site from preliminary data gathering and reviewing remote-sensing and other data sources available for the Site, such as aerial photography, U.S.

Geological Survey maps, the U.S. Fish & Wildlife's National Wetlands Inventory, the U.S. Department of Agriculture's Soil Survey, National Hydrography Dataset elevation data (including hillshade), and National Oceanic & Atmospheric Administration precipitation and temperature data. These publicly available, remote-sensing and desktop resources and tools are used by wetlands scientists for preliminary data gathering and as resources to support and assist in planning for site-specific field data collection and providing landscape context to the on-site observations. There is no single resource that identifies all aquatic features nationwide, but an approach using the weight of evidence from the best available sources of information, in combination with field-verification and additional site-specific data collection, is a robust approach to wetland determinations consistent with standard practice.

9. I also have knowledge of reaches of the downstream connecting tributaries based on my inspections of those reaches during the previously mentioned April 2021 inspection and additional on-site and off-site visits on April 25, 2024, April 26, 2024, May 16, 2024, and May 17, 2024. During my inspections of those reaches, I observed the stream channels (including, geomorphic, hydrologic, and biologic indicators), took photos and videos, and conducted field-based streamflow duration assessments.

10. Following the April 12 to April 14, 2021 inspection, I was directly involved in the continued correspondence and communications with Defendants, including, but not limited to:

a. Issuance of the inspection report and Notice of Potential Violation and Opportunity to Confer Letter on May 27, 2021;

b. The subsequent meetings conducted via telephone or video conferencing with Defendants to discuss the matter including, EPA's inspection observations, impacts to wetlands on-site, and attempts to negotiate an Administrative Order on

Consent, including on June 29, 2021; July 22, 2021; August 17, 2021; August 24, 2021; September 14, 2021;

c. Review of the Technical Memorandum prepared by Defendants' first stream and wetland consultant, Wetland Studies and Solutions, Inc., and issuance of EPA's response in November 2021;

d. Issuance of the Unilateral Administrative Order on November 23, 2021; and

e. Review of Defendants' response to the UAO, including review of wetland delineation reports and proposed restoration plans and issuance of EPA's responses between January 2022 through March 2023.

SEASONALITY OF WETLANDS AND STREAMS DATA

11. As an Inspector with EPA credentials for Section 404 of the CWA, I consider seasonality when collecting wetlands- and streams-related data.

12. Wetland identification and delineation relies on the three-parameter approach, which relies on evaluating the presence of: (1) hydrophytic vegetative community, (2) hydric soils, and (3) hydrology. The 1987 Corps of Engineer Wetland Delineation Manual[1] makes clear in Part II, paragraphs 26.b.(1) and 26.b(3), that two of those factors—vegetation and hydrology—are influenced, in part, by the growing season, among other factors. The Regional Supplement expands on this, stating that the "[b]eginning and ending dates of the growing season may be needed to evaluate certain wetland indicators, such as visual observation of flooding, ponding, or shallow water tables on potential wetland sites."

[1] U.S. Army Corps of Engineers, Corps of Engineers Wetlands Delineation Manual (1987), https://perma.cc/A9PC-QCWZ.

13. The growing season—defined in the Corps Manual as the portion of the year when soil temperatures at 19.7 inches below the soil surface are higher than biologic zero (5°C)—can be different in any given year. Accordingly, data such as a Climate Analysis for Wetlands Tables ("WETs table"), created by the Natural Resources Conservation Service, can be an important reference guide. According to the most recent WETs table for Hanover County, Virginia, conservatively the growing season typically occurs between April 7th and November 2nd.

14. Vegetation is most visible during the growing season when plants are not dormant. Additionally, the general environmental diagnostic condition for a wetland (or hydrophytic) vegetative community is tied to the growing season, making it a consideration for the timing of when wetland delineation work is typically conducted. For instance, the lifecycle of many plants and plant communities, including wetlands plants and plant communities, are influenced by the change in seasons when such things as leaves and certain herbs and vines appear in spring and when plants go dormant in colder months.

15. The Atlantic & Gulf Coast Regional Supplement to the Corps Wetlands Delineation Manual ("Regional Supplement"), at page 77, explains that "[s]ome hydrology indicators are naturally temporary or seasonal," and, as an example, notes that "indicators involving direct observation of surface water or saturated soils often are present only during the normal wet portion of the growing season and may be absent during the dry season or during drier than normal years."[2] In other words, some hydrology indicators are most visible during the wet portion of the growing season, which would be early Spring for Hanover County, Virginia.

[2] U.S. Army Corps of Engineers, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0) (Nov. 2010), https://perma.cc/25GQ-AC5E.

16. Furthermore, during seasons where the temperature is lower, there is lower plant activity, which means that plants take up less water and the water table rises, contributing flow to many streams. As the seasons progress and temperatures rise, plant activity increases (trees that were dormant take on leaves, certain vines and herbs appear, etc.). Growing plants take up more water (through a process known as evapotranspiration), reducing the surface and ground water contribution to stream flow.

17. As an EPA Inspector, when evaluating vegetation and hydrology, I also consider the effects of the heavily disturbed conditions at the Site, meaning the land-clearing, earth-moving, grading, and ditching that I observed at the Site. Indicators that are used for wetland identification and delineation can be disturbed, disrupted, or removed during those types of activities in wetlands. Given the level of disturbance on the Site, some wetlands indicators might be harder to observe. This is because the activities conducted at the Site could have removed or destroyed them, such as removal of the vegetation or construction of drainage ditches to remove or alter hydrology. When a site has been heavily disturbed, as this Site has, it is useful to conduct field work on-site during those times that the indicators are most visible—i.e., the wet portion of the growing season for hydrology and the growing season for vegetation—as it helps off-set some of the challenges created by the disruption or destruction of other indicators.

TIMING CONCERNS FOR RESOLVING THE VIOLATIONS

18. The impacts to the wetlands at the Site began in 2019 and have been in place now for several years. While these impacts remain in place, the wetlands are impaired or unable to provide their full functional role in maintaining and improving water quality. That functional loss increases the longer the wetland areas remain unrestored or unmitigated.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that to the best of my knowledge the foregoing is true and correct.

Executed this _2nd_ day of _July__, 2024.

KATELYN ALMETER

Digitally signed by KATELYN ALMETER
Date: 2024.07.02 11:22:25 -04'00'

Katelyn Almeter
Inspector
U.S. Environmental Protection Agency
Region III

EXHIBIT 19

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division

UNITED STATES OF AMERICA, Plaintiff, v. CHAMELEON LLC and GARY V. LAYNE, Defendants.	)	Civil Action No. 3:23-cv-763

DECLARATION OF W. LEE DANIELS

Pursuant to 28 U.S.C. § 1746, I, W. LEE DANIELS, hereby declare as follows:

1. I am the T.B. Hutcheson Jr. Professor Emeritus in the School of Plant and Environmental Sciences at Virginia Polytechnic Institute and State University ("Virginia Tech"). At Virginia Tech, the primary focus of my 40+ year career has been research and teaching focused on the recognition and remediation of anthropogenic disturbance on soil and water quality, particularly mining and construction impacts to upland and wetland environments.

2. I obtained a B.S. in Forestry in 1978, an M.S. in Agronomy in 1980 and a Ph.D. in Agronomy (Soil Science) in 1985. All degrees were granted by Virginia Tech.

3. I am a Licensed Professional Soil Scientist (LPSS) in the Commonwealth of Virginia and a Fellow of the Soil Science Society of America (limited to 0.5% of active members).

4. I have actively studied the prediction, occurrence and remediation of acid sulfate soil conditions in Virginia since the late 1990's. I am the major contributor to the current

Virginia Department of Environmental Quality Stormwater Manual (2024) guidance on this topic.

5. I have been retained as an expert witness for the United States in the matter of *United States v. Chameleon, LLC, et al.*, Civil Action No. 3:23-cv-00763 (E.D. Va.) ("the *Chameleon* case").

6. I understand that, in the *Chameleon* case, the United States alleges that Chameleon LLC and Gary V. Layne ("Defendants") violated the Clean Water Act by discharging dredged and/or fill material to wetlands on property owned by Defendants, located at 10426 Ashcake Road in Ashland, Hanover County, Virginia ("the Site").

7. I submit this sworn Declaration in support of the United States' Response to Defendants' Motion to Stay Discovery in the *Chameleon* case.

8. I have knowledge of the Site, including soil morphological and chemical properties, from conducting a limited, initial inspection of the Site on May 16, 2024. During this inspection, I described and sampled two soil profiles, designated as CH 5 and CH 6 in the data attached to this declaration as Exhibit A,[1] in detail in denuded areas along with a general composite (n = 10) sample of the exposed surface soil (0-4") within an approximate 50-foot radius of each auger boring. Before I arrived to the Site on May 16, my associate, Angela Whitehead, collected two additional bulk soil samples from locations designated as CH 1 and CH 2 in Exhibit A. On April 30, 2024, I directed Angela Whitehead to collect a surface water grab sample from the first downstream pool below the culvert beneath Ashcake Road in Unnamed Tributary 1 (UNT 1) and a separate culvert discharge from a similar sized unnamed tributary approximately ½ mile due East of the Site adjacent to 12342 Cheroy Road. On May 16,

[1] The sample locations are shown in Exhibit B.

2024, I collected a surface water quality grab sample from an existing pond in the center of the Site, approximately 300 feet to the south of my second detailed auger observation (CH 6) and soil sampling.

9. I also have knowledge of the Site from preliminary data gathering and reviewing other data sources available for the Site, including review of original site inspection files by USEPA and VA DEQ, GoogleEarth[tm], and personal visits to the Ashcake Road public right-of-way on multiple dates between July 2023 and April 2024.

ACID SULFATE SOILS AND THE SITE

10. Acid sulfate soil conditions (pH < 4.0) result from the anthropogenic disturbance of naturally occurring soil and geologic materials that contain sulfides that have been protected from oxidation over time due to depth of burial from the surface and/or saturation to exclude oxygen. Once exposed by construction, ditching or other disturbances, the potential acid sulfate soil materials quickly oxidize in the presence of water to form sulfuric acid (H_2SO_4) and a range of iron (Fe) and other metal (Al, Mn, etc.) oxyhydroxides.

11. Soil and water conditions < pH 4.0 are extremely toxic to plant materials, soil quality biota and most aquatic organisms due to metal toxicities (Al, Fe, Mn and others) and release of soluble salts (primarily sulfates).

12. Pre-disturbance, stable sulfidic materials are designated as "potential acid sulfate soils." Once they are disturbed and exposed to surface weathering conditions, they become "active," and soil and water pH values quickly drop below 4.0 (frequently to < 3.0). Active acid sulfate soil conditions are associated with (a) presence of red iron-oxide metal floccules in receiving water and coatings on exposed mineral soil/rock/stream surfaces and vegetation, (b) dead/dying vegetation and/or lack of plant invasion, and (c) degradation of engineered

infrastructure (concrete/galvanized/ductile iron). Once the complex set of active oxidation and metal hydrolysis reactions have concluded (typically months to years), the soil pH can slowly rise again to approach 4.0 due to the very strong buffering of aluminum (Al) species released by the acid weathering reactions. At this point, the soil is considered to be "post-active" and it typically retains high amounts of complex iron-oxyhydroxides, but the majority of the original sulfur leaches from the soils as mobile and soluble sulfates.

13. Based on my experience in recognition and remediation of acid sulfate soil conditions at over 30 different sites around the Commonwealth of Virginia, I conclude that large areas of the Site have been negatively affected by acid sulfate soil processes since the original land-clearing and disturbance, beginning in 2019, particularly the removal of potential acid sulfate soil materials from deeper ditches and ponds followed by their placement as fill to raise elevations across various portions of the Site. This finding is corroborated by a combination of evidence including:

- A complete lack of vegetation over multiple denuded areas on the Site (Image 1, below).
- Saturated paste extract soil pH of < 4.0 for the surface bulk samples (Exhibit A) as determined by the Virginia Tech Soil & Water Quality Laboratory.
- 1:1 soil:water pH values of 3.9 and 4.0 for those same samples from an independent commercial lab (Exhibit A; Pace Analytical/ Beaver WV).
- pH_{Fox} (following peroxide oxidation) values of 2.25 and 2.56 respectively for the two bulk surface samples (CH 5 and 6) (Exhibit A).
- Presence of Jarosite ($KFe_3(SO_4)_2(OH)_6$) coatings/mottles (Image 2, below) on exposed intact subsoil materials in eroded gully adjacent to boring CH 6. Jarosite

is a diagnostic indicator of sulfide oxidation, only precipitates/forms when the pH drops below 3.9 and is diagnostic of active or post-active acid sulfate soil conditions, particularly when found in combination with pHfox values < 3.0.[2]

- Very high levels of dilute double acid (Mehlich I) extractable iron in affected subsoil materials at CH 1, CH 2, and CH 5 (Exhibit A).
- Very high levels of total iron (8.5 mg/L) in the discharge pool at UNT 1 on Ashcake Road as sampled on April 30 and on the Site in the central pond (2.9 mg/L) sampled on May 16. The pH of both of those samples was 4.8 and 4.2, respectively (Exhibits C & D, respectively). Current DEQ water quality criteria (public consumption) for total iron is 0.3 mg/L and the surface water quality minimum for regulated discharge is 6.0.
- Occurrence of extensive iron-oxide floc coatings on living vegetation, litter and streambank materials above (N) of the Ashcake Road public right-of-way and instream and on rock fragments in the receiving reach of UNT 1 below Ashcake Road. This was observed on > 5 individual dates between July 2023 and April of 2024.

[2] AGI (Australian Government Initiative), 2018. National Acid Sulfate Soils Guidance. National Acid Sulfate Soils Sampling and Identification Manual. Appendix A: Soil Field Tests. https://www.waterquality.gov.au/sites/default/files/documents/sampling-identification-methods.pdf

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Image 1. Denuded/bare soil area associated with auger soil boring and description CH 5. The bulk surface sample (0-4") was taken from 10 random locations within 50 feet of the auger boring in the center of the image. The described surface soil was comprised of approximately one foot of mixed fill materials, not compacted and the presence of woody debris indicates that some native topsoil materials had been applied along with other cut/fill materials.

Image 2. Close up of exposed native subsoil materials (Btg) exposed in shallow gully (approximately 24") below regraded surface at boring location CH 6. The yellow precipitate coatings are interpreted to be jarosite and consistent with observations/occurrences I have noted at numerous acid sulfate soil locations. The auger boring was initiated from the bottom of the gully while the "bulk composite sample" was taken from the surrounding regraded soil surface that was similar in appearance to Image 1 above.

14. Based on my observations and expertise, I suspected that acid sulfate materials had been exposed on site due to (a) the large and continuing extent of denuded/bare areas across the Site over extended periods of time, (b) the known occurrence of well-documented acid-forming strata around the general area, and (c) my personal observation and sampling of active acid-sulfate materials in exposed ditch lines at the nearby Hanover Airport.

15. Natural conditions where 1:1 soil:water pH values in Virginia under pH 4.1 are exceedingly rare. In my 40 years of experience analyzing and interpreting soil data from across the state, we only observe pH values of 4.0 or lower in acid sulfate soil affected areas or in very rocky/sandy soils under long-term coniferous/ericaceous vegetation at high elevations in western Virginia exposed to acid-deposition processes. Additionally, I have worked on thousands of acres of sand mining operations in the Coastal Plain of Virginia since the early 1990's that generate relatively low pH (~4.2 to 5.0) surface soil conditions with very low plant available nutrients that are usually left denuded for up to three years before final closure within external stormwater control. Even without liming and fertilization, these areas become invaded with common acid-tolerant grasses and forbs and usually support some limited living (albeit sparse) vegetation within 18 months of dewatering and final grading.

16. Based on my observations and expertise, it is my opinion that potential acid sulfate soil materials were excavated from lower elevation and predominantly reduced/saturated subsoil zones and then graded out over large areas of the Site. This opinion is based on the lines of evidence detailed in Paragraph 13 above.

17. Based on my observations and expertise, I believe that potential acid sulfate soil materials still exist in the lower ditch elevations and/or beneath intact undisturbed soils at the Site. If these remaining intact materials are now exposed to more extensive oxidation due to the

lowering of the groundwater hydroperiod due to ditching, additional oxidation and production of acidic reaction products should be expected over time that will continue to contribute to low pH and metal contributions in local groundwater and to surface water during ditch/pond discharge events.

TIMING CONCERNS FOR RESOLVING THE VIOLATIONS

18. Occurrence of acid sulfate soils on site generates very low soil/water pH values and limits or prevents establishment of vegetation via natural succession or intentional revegetation practice. When large areas of an acid sulfate soil's surface remain denuded/bare, regardless of their relatively low slope gradient and lack of significant compaction, this leads to extensive losses of pH 4.0 sediments and metals (Fe, Al, Mn, etc.) during storm events.

19. Significant loadings of acidic metal rich waters and sediments into wetlands, like the intact remaining wetlands above Ashcake Road in UNT 1, degrade their ecological functions over time. Similarly, release of low pH and high metals water to receiving streams are a significant stressor on native biota such as fish and macroinvertebrates.

20. Acid-sulfate soils can be remediated via application and incorporation of large amounts of agricultural limestone coupled with appropriate organic amendments and fertilization. Where site remediation/restoration will necessarily disturb additional potential acid sulfate soil materials, liming rates must be determined by appropriate USEPA acid-base-accounting protocols.

21. Based on my expertise, it is my opinion that, without active intervention, the Site may remain denuded/barren for years, if not decades. Failure to immediately stabilize and revegetate the Site will lead to continued unattenuated erosion and rilling and peak flow discharge of acidic sediments during storm events.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that to the best of my knowledge the foregoing is true and correct.

Executed this 2nd day of July, 2024.

W. Lee Daniels, PhD
Owner, TerraScience LLC
Blacksburg, Virginia

EXHIBIT A

TerraScience
Chameleon
Ashland Ashcake Road
May 16 2024

		FIZZ		SAT PASTE	
Sample Name	Lab ID	HCl	H2O2	pH	SC (dS/M)
CH fill hole #1 12-17"	CH-01	0	M	4.76	0.147
CH hole #2 36-44"	CH-02	0	L	4.41	0.049
CH 5 Above fill	CH-03	0	L	4.75	0.131
CH 5 below fill	CH-04	0	L	4.37	0.101
CH 5 Auger bottom 46-54"	CH-05	0	L	4.17	0.092
CH 6 Auger 0-6"	CH-06	0	L	4.12	0.112
CH 6 Auger 24-30"	CH-07	0	L	4.24	0.087
CH 6 Auger 42-50"	CH-08	0	L	4.19	0.096
CH 6 Bulk Bare Surface	CH-09	0	L	3.87	0.494
CH 5 Bare Bulk Surface	CH-10	0	L	3.98	0.131

Sample Name	Lab ID	1:1 pH Air-dried, #10 sieve	pH_FOX_ H2O2 pH = 5.63 Air-dried, #10 sieve
CH fill hole #1 12-17"	CH-01	4.32	3.42
CH hole #2 36-44"	CH-02	4.49	3.19
CH 5 Above fill	CH-03	4.46	2.34
CH 5 below fill	CH-04	4.59	2.77
CH 5 Auger bottom 46-54"	CH-05	4.42	3.22
CH 6 Auger 0-6"	CH-06	4.42	3.63
CH 6 Auger 24-30"	CH-07	4.47	4.12
CH 6 Auger 42-50"	CH-08	4.43	4.26
CH6 Bulk Bare Surface	CH-09	4.07	2.25
CH 5 Bare Bulk Surface	CH-10	4.12	2.56

Sample Name	Lab ID	pH	BpH	P ppm	K ppm	Ca ppm	Mg ppm	Zn ppm	Mn ppm	Cu ppm	Fe ppm	B ppm	CEC meq/100g	% Acidity	% Base Sa	% Ca Sat	% Mg Sat	% K Sat	P Rating	K Rating	Ca Rating	Mg Rating
CH fill hole #1 12-17"	CH-01	4.4	4.82	1	26	77	40	0.8	2.2	0.4	524	0.1	10.1	92.4	7.6	3.8	3.2	0.7	L-	L	L-	M-
CH hole #2 36-44"	CH-02	4.6	4.23	1	21	39	20	0.6	0.5	1.3	186	0.1	13.3	96.9	3.1	1.4	1.2	0.4	L-	L	L-	L
CH 5 Above fill	CH-03	4.53	5.25	3	31	62	20	0.6	1	0.3	241.6	0.1	7.4	92.6	7.4	4.2	2.2	1.1	L	L+	L-	L
CH 5 below fill	CH-04	4.57	5.42	2	10	37	9	0.3	0.2	0.2	317.2	0.1	6.1	95.4	4.6	3	1.2	0.4	L-	L	L-	L-
CH 5 Auger bottom 46-54"	CH-05	4.37	5.1	1	11	39	10	0.3	0.2	0.2	66	0.1	8	96.3	3.7	2.4	1	0.3	L-	L	L-	L-
CH 6 Auger 0-6"	CH-06	4.4	4.84	1	17	36	15	0.2	0.2	0.2	20.3	0.1	9.6	96.5	3.5	1.8	1.2	0.5	L-	L	L-	L
CH 6 Auger 24-30"	CH-07	4.46	4.99	1	11	35	17	0.2	0.1	0.2	7.1	0.1	8.7	96.1	3.9	2	1.6	0.3	L-	L	L-	L
CH 6 Auger 42-50"	CH-08	4.5	5.34	1	10	41	19	0.2	0.2	0.3	8.5	0.1	6.7	94.3	5.7	3	2.3	0.4	L-	L	L-	L
CH 6 Bulk Bare Surface	CH-09	4.18	5.56	2	16	61	17	0.4	1.1	0.1	98	0.1	5.5	91.2	8.8	5.5	2.5	0.7	L	L	L-	L
CH 5 Bare Bulk Surface	CH-10	4.18	5.11	2	19	50	12	0.5	0.6	0.2	77.2	0.1	8	95.1	4.9	3.1	1.2	0.6	L-	L	L-	L-

Approved By: T.A. Keeney, Research Soil Scientist

600 / 2-78-054; Field and Laboratory Methods Applicable to Overburden and Minesoils

Client Sample Number	*Client* Sample Identification	Description	*Munsell* Soil Color			*Reaction* to HCl	*Total* % Sulfur	Calcium Carbonate Equivalent in Tons / 1000 Tons of Material				*Paste* pH (SU)
								Potential Acidity	*Neutralization* Potential	Net Neutralizers DEFICIENCY	Net Neutralizers EXCESS	
CH fill hole #1 12-17"	CH 01	CH fill hole	2.5	YR	6/4	0	0.02	0.59	1.00		0.41	4.2
CH hole #2 36-44"	CH 02	CH hole #2	2.5	YR	7/3	0	0.02	0.53	0.25	0.28		4.3
CH 5 Above fill	CH 03	CH 5 Above	2.5	YR	7/3	0	0.01	0.41	0.75		0.34	4.4
CH 5 below fill	CH 04	CH 5 below	2.5	YR	7/3	0	0.02	0.50	0.50	0.00		4.4
CH 5 Auger bottom 46-54"	CH 05	CH 5 Auger	2.5	YR	7/3	0	0.02	0.59	0.25	0.34		4.2
CH 6 Auger 0-6"	CH 06	CH 6 Auger	2.5	YR	7/4	0	0.02	0.59	0.75		0.16	4.3
CH 6 Auger 24-30"	CH 07	CH 6 Auger	2.5	YR	7/4	0	0.01	0.28	0.25	0.03		4.3
CH 6 Auger 42-50"	CH 08	CH 6 Auger	2.5	YR	7/2	0	0.01	0.16	0.50		0.34	4.3
CH6 Bulk Bare Surface	CH 09	CH6 Bulk B	2.5	YR	7/2	0	0.01	0.25	1.00		0.75	3.9
CH5 Bare Bulk Surface	CH 10	CH 4 Bare B	2.5	YR	7/2	0	0.02	0.66	0.50	0.16		4.0

Chain of Custody

Sampler Name: W. Lee Daniels/TerraScience

Project Name Chameleon (CH)

Project Location Ashland Ashcake Road

Total # Samples 10

Date	Water	Soil	Other:	Sample ID	Analysis Name/Method: #10 sieve and #80 sieve	Sat Paste pH / EC	ABA	STL Routine	H2O2 and HCL fizz	Particle Size Analysis	Lab Use Only: Sample Processed (Date) Water: Filtered	Soil: Dried/ Ground	Other	Lab ID Number
5/16/2024		X		CH fill hole #1 12-17"							N/A			
		x		CH hole #2 36-44"										
		x		CH 5 Above fill										
		x		CH 5 below fill										
		x		CH 5 Auger bottom 46-54"										
		x		CH 6 Auger 0-6"										
		x		CH 6 Auger 24-30"										
		x		CH 6 Auger 42-50"										
		x		CH 6 Bulk Bare Surface										
		x		CH 4 Bare Bulk Surface										

Special Instructions: Run pH/SC and H2O2 test first; then consult with WLD; all get STL regardless

Sampled By: Signature W. Lee Daniels/Angie Whitehead Date: 5/16/2024

Organization: TerraScience

Shipped By: Signature W. Lee Daniels Date: 5/24/2024

Organization: TerraScience

Received By: Signature Date:

Organization: Virginia Tech SPES Central Soil and Water Lab

EXHIBIT B

Soil Boring Locations

May 16, 2024

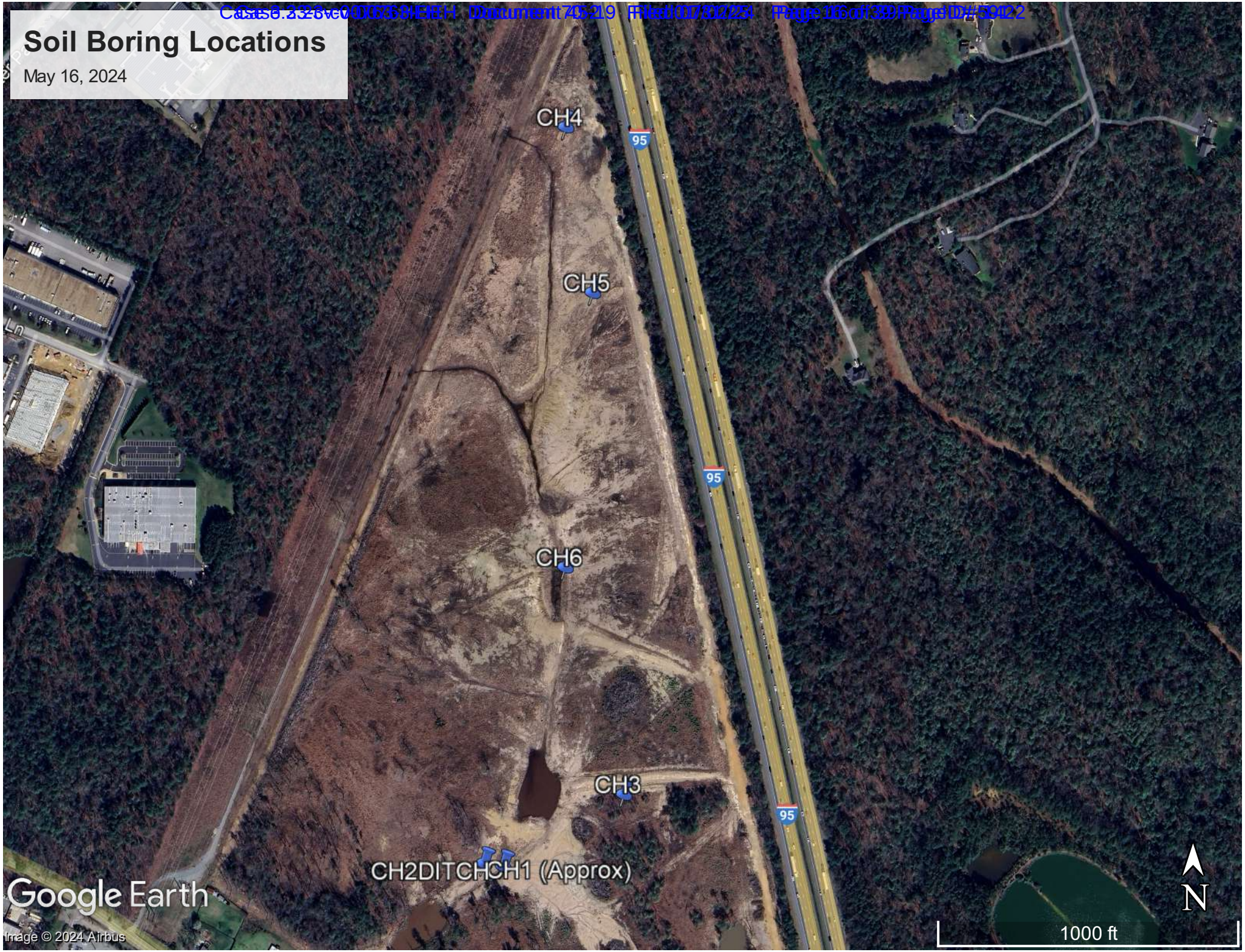

EXHIBIT C

ENTHALPY ANALYTICAL

1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Laboratory Order ID 24E0031

Client Name:	TerraScience LLC 909 Allendale Ct Blacksburg, VA 24060	Date Received:	April 30, 2024 11:43
		Date Issued:	May 14, 2024 16:35
		Project Number:	[none]
Submitted To:	Walter Lee Daniels	Purchase Order:	
Client Site I.D.:	Chameleon		

Enclosed are the results of analyses for samples received by the laboratory on 04/30/2024 11:43. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Ginny Thrasher

Ginny Thrasher
Project Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

NELAP ACCREDITED TNI LABORATORY
TNI Accredited
VELAP ID 460021

1941 Reymet Road ● Richmond, Virginia 23230 ● Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	May 14, 2024 16:35
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 24E0031

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Unit 1	24E0031-01	Ground Water	04/30/2024 10:10	04/30/2024 11:43
Field Blank	24E0031-02	Ground Water	04/30/2024 10:15	04/30/2024 11:43
Site A	24E0031-03	Ground Water	04/30/2024 10:55	04/30/2024 11:43

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	May 14, 2024 16:35
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Laboratory Order ID: 24E0031

Analytical Results

Sample I.D. Unit 1 **Laboratory Sample ID:** 24E0031-01

Grab Date/Time: 04/30/2024 10:10

Field Residual Cl: **Field pH:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Aluminum	01	SW6010D	**2.65 mg/L**		0.100	1	05/01/24 17:00	05/02/24 12:04	ACM
Arsenic	01	SW6010D	<0.0200 mg/L		0.0200	1	05/01/24 17:00	05/02/24 12:04	ACM
Copper	01	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:04	ACM
Iron	01	SW6010D	**8.57 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:04	ACM
Manganese	01	SW6010D	**0.0812 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:04	ACM
Selenium	01	SW6010D	<0.0500 mg/L		0.0500	1	05/01/24 17:00	05/02/24 12:04	ACM
Zinc	01	SW6010D	**0.0221 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:04	ACM
Ion Chromatography Analyses									
Sulfate	01	SW9056A	<1.00 mg/L		1.00	1	05/03/24 16:00	05/04/24 04:59	EJP
Wet Chemistry Analysis									
pH	01	SM4500-HB-2011	**4.8 SU**	H	--	1	05/06/24 13:08	05/06/24 13:08	KJM
Specific Conductance	01	SM2510B-2011	**57.8 umhos/cm**		3.0	1	05/03/24 13:56	05/03/24 13:56	BKR

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	May 14, 2024 16:35
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Laboratory Order ID: 24E0031

Analytical Results

Sample I.D. Field Blank **Laboratory Sample ID:** 24E0031-02

Grab Date/Time: 04/30/2024 10:15

Field Residual Cl: **Field pH:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Aluminum	02	SW6010D	<0.100 mg/L		0.100	1	05/01/24 17:00	05/02/24 12:06	ACM
Arsenic	02	SW6010D	<0.0200 mg/L		0.0200	1	05/01/24 17:00	05/02/24 12:06	ACM
Copper	02	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:06	ACM
Iron	02	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:06	ACM
Manganese	02	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:06	ACM
Selenium	02	SW6010D	<0.0500 mg/L		0.0500	1	05/01/24 17:00	05/02/24 12:06	ACM
Zinc	02	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:06	ACM
Ion Chromatography Analyses									
Sulfate	02	SW9056A	<1.00 mg/L		1.00	1	05/03/24 16:00	05/04/24 05:22	EJP
Wet Chemistry Analysis									
pH	02	SM4500-HB-2011	**4.1 SU**	H	--	1	05/06/24 13:08	05/06/24 13:08	KJM
Specific Conductance	02	SM2510B-2011	<3.0 umhos/cm		3.0	1	05/03/24 13:58	05/03/24 13:58	BKR

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	May 14, 2024 16:35
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Laboratory Order ID: 24E0031

Analytical Results

Sample I.D. Site A **Laboratory Sample ID:** 24E0031-03

Grab Date/Time: 04/30/2024 10:55

Field Residual Cl: **Field pH:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Aluminum	03	SW6010D	**0.871 mg/L**		0.100	1	05/01/24 17:00	05/02/24 12:08	ACM
Arsenic	03	SW6010D	<0.0200 mg/L		0.0200	1	05/01/24 17:00	05/02/24 12:08	ACM
Copper	03	SW6010D	<0.0100 mg/L		0.0100	1	05/01/24 17:00	05/02/24 12:08	ACM
Iron	03	SW6010D	**2.25 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:08	ACM
Manganese	03	SW6010D	**0.107 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:08	ACM
Selenium	03	SW6010D	<0.0500 mg/L		0.0500	1	05/01/24 17:00	05/02/24 12:08	ACM
Zinc	03	SW6010D	**0.0108 mg/L**		0.0100	1	05/01/24 17:00	05/02/24 12:08	ACM
Ion Chromatography Analyses									
Sulfate	03RE1	SW9056A	**2.22 mg/L**		1.00	1	05/03/24 16:00	05/04/24 05:46	EJP
Wet Chemistry Analysis									
pH	03	SM4500-HB-2011	**5.0 SU**	H	--	1	05/06/24 13:08	05/06/24 13:08	KJM
Specific Conductance	03	SM2510B-2011	**48.5 umhos/cm**		3.0	1	05/03/24 14:00	05/03/24 14:00	BKR

EXHIBIT D

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Laboratory Order ID 24E1159

Client Name:	TerraScience LLC 909 Allendale Ct Blacksburg, VA 24060	Date Received:	May 17, 2024 8:02
		Date Issued:	June 3, 2024 17:41
		Project Number:	[none]
Submitted To:	Walter Lee Daniels	Purchase Order:	
Client Site I.D.:	Chameleon		

Enclosed are the results of analyses for samples received by the laboratory on 05/17/2024 08:02. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

Keith Sprouse
Laboratory Manager

End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

TNI Accredited
VELAP ID 460021

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

ANALYTICAL REPORT FOR SAMPLES

Laboratory Order ID 24E1159

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CH Pond	24E1159-01	Ground Water	05/16/2024 18:30	05/17/2024 08:02
Field Blank	24E1159-02	Ground Water	05/16/2024 18:30	05/17/2024 08:02

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Laboratory Order ID: 24E1159

Analytical Results

Sample I.D. CH Pond **Laboratory Sample ID:** 24E1159-01

Grab Date/Time: 05/16/2024 18:30

Field Residual Cl: **Field pH:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Aluminum	01	SW6010D	**1.05 mg/L**		0.100	1	05/21/24 10:30	05/22/24 10:28	ACM
Arsenic	01	SW6010D	<0.0200 mg/L		0.0200	1	05/21/24 10:30	05/22/24 10:28	ACM
Copper	01	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:28	ACM
Iron	01	SW6010D	**2.93 mg/L**		0.0100	1	05/21/24 10:30	05/22/24 10:28	ACM
Manganese	01	SW6010D	**0.0330 mg/L**		0.0100	1	05/21/24 10:30	05/22/24 10:28	ACM
Selenium	01	SW6010D	<0.0500 mg/L		0.0500	1	05/21/24 10:30	05/22/24 10:28	ACM
Zinc	01	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:28	ACM
Ion Chromatography Analyses									
Sulfate	01	SW9056A	**1.75 mg/L**		1.00	1	06/03/24 14:17	06/03/24 14:17	ATG
Wet Chemistry Analysis									
pH	01	SM4500-HB-2011	**4.2 SU**	H	--	1	05/28/24 17:19	05/28/24 17:19	SPH
Specific Conductance	01	SM2510B-2011	**27.9 umhos/cm**		3.0	1	05/29/24 14:42	05/29/24 14:42	KJM

ENTHALPY ANALYTICAL

1941 Reymet Road ● Richmond, Virginia 23230 ● Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Laboratory Order ID: 24E1159

Analytical Results

Sample I.D. Field Blank **Laboratory Sample ID:** 24E1159-02

Grab Date/Time: 05/16/2024 18:30

Field Residual Cl: **Field pH:**

Parameter	Samp ID	Method	Result	Qual	Reporting Limit	D.F.	Sample Prep Date/Time	Analysis Date/Time	Analyst
Metals (Total) by EPA 6000/7000 Series Methods									
Aluminum	02	SW6010D	<0.100 mg/L		0.100	1	05/21/24 10:30	05/22/24 10:33	ACM
Arsenic	02	SW6010D	<0.0200 mg/L		0.0200	1	05/21/24 10:30	05/22/24 10:33	ACM
Copper	02	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:33	ACM
Iron	02	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:33	ACM
Manganese	02	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:33	ACM
Selenium	02	SW6010D	<0.0500 mg/L		0.0500	1	05/21/24 10:30	05/22/24 10:33	ACM
Zinc	02	SW6010D	<0.0100 mg/L		0.0100	1	05/21/24 10:30	05/22/24 10:33	ACM
Ion Chromatography Analyses									
Sulfate	02	SW9056A	<1.00 mg/L		1.00	1	06/03/24 10:54	06/03/24 10:54	ATG
Wet Chemistry Analysis									
pH	02	SM4500-HB-2011	**4.6 SU**	H	--	1	05/28/24 17:19	05/28/24 17:19	SPH
Specific Conductance	02	SM2510B-2011	<3.0 umhos/cm		3.0	1	05/29/24 14:42	05/29/24 14:42	KJM

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods		**Preparation Method:**	**EPA200.7/R4.4**		
24E1159-01	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
24E1159-02	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Ion Chromatography Analyses		**Preparation Method:**	**No Prep IC**		
24E1159-01	1.00 mL / 1.00 mL	SW9056A	BHE0970	SHF0037	AE40335
24E1159-02	1.00 mL / 1.00 mL	SW9056A	BHE0970	SHF0049	AD40323

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis		**Preparation Method:**	**No Prep Wet Chem**		
24E1159-01	1.00 mL / 1.00 mL	SM4500-HB-2011	BHE1070	SHE1043	
24E1159-02	1.00 mL / 1.00 mL	SM4500-HB-2011	BHE1070	SHE1043	
Wet Chemistry Analysis		**Preparation Method:**	**No Prep Wet Chem**		
24E1159-01	1.00 mL / 1.00 mL	SM2510B-2011	BHE1114	SHE1079	
24E1159-02	1.00 mL / 1.00 mL	SM2510B-2011	BHE1114	SHE1079	

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC 909 Allendale Ct Blacksburg VA, 24060	Date Issued:	June 03, 2024 17:41
		Project Number:	[none]
		Purchase Order:	
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

QC Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Metals (Total) by EPA 6000/7000 Series Methods			**Preparation Method:**	**EPA200.7/R4.4**	
BHE0797-BLK1	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
BHE0797-BS1	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
BHE0797-MS1	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
BHE0797-MS2	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
BHE0797-MSD1	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276
BHE0797-MSD2	50.0 mL / 50.0 mL	SW6010D	BHE0797	SHE0843	AE40276

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Ion Chromatography Analyses			**Preparation Method:**	**No Prep IC**	
BHE0970-BLK1	1.00 mL / 1.00 mL	SW9056A	BHE0970	SHE1002	AE40228
BHE0970-BS1	1.00 mL / 1.00 mL	SW9056A	BHE0970	SHE1002	AE40228
BHE0970-MS1	4.50 mL / 5.00 mL	SW9056A	BHE0970	SHE1002	AE40228
BHE0970-MS2	4.50 mL / 5.00 mL	SW9056A	BHE0970	SHF0049	AD40323
BHE0970-MS3	0.450 mL / 5.00 mL	SW9056A	BHE0970	SHE1002	AE40228
BHE0970-MSD1	4.50 mL / 5.00 mL	SW9056A	BHE0970	SHE1002	AE40228
BHE0970-MSD2	4.50 mL / 5.00 mL	SW9056A	BHE0970	SHF0049	AD40323
BHE0970-MSD3	0.450 mL / 5.00 mL	SW9056A	BHE0970	SHE1002	AE40228

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
Wet Chemistry Analysis			**Preparation Method:**	**No Prep Wet Chem**	
BHE1070-DUP1	1.00 mL / 1.00 mL	SM4500-HB-2011	BHE1070	SHE1043	
BHE1114-BS1	1.00 mL / 1.00 mL	SM2510B-2011	BHE1114	SHE1079	
BHE1114-DUP1	1.00 mL / 1.00 mL	SM2510B-2011	BHE1114	SHE1079	
BHE1114-DUP2	1.00 mL / 1.00 mL	SM2510B-2011	BHE1114	SHE1079	

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC 909 Allendale Ct Blacksburg VA, 24060	Date Issued: Project Number: Purchase Order:	June 03, 2024 17:41 [none]
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

ENTHALPY ANALYTICAL

1941 Reymet Road ● Richmond, Virginia 23230 ● Tel: (804)-358-8295 Fax: (804)-358-8297

Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Enthalpy Analytical

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHE0797 - EPA200.7/R4.4										
Blank (BHE0797-BLK1)				Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	<0.100 mg/L	0.100	mg/L							
Arsenic	<0.0200 mg/L	0.0200	mg/L							
Copper	<0.0100 mg/L	0.0100	mg/L							
Iron	<0.0100 mg/L	0.0100	mg/L							
Manganese	<0.0100 mg/L	0.0100	mg/L							
Selenium	<0.0500 mg/L	0.0500	mg/L							
Zinc	<0.0100 mg/L	0.0100	mg/L							
LCS (BHE0797-BS1)				Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	0.520 mg/L	0.100	mg/L	0.500	mg/L	104	80-120			
Arsenic	0.506 mg/L	0.0200	mg/L	0.500	mg/L	101	80-120			
Copper	0.528 mg/L	0.0100	mg/L	0.500	mg/L	106	80-120			
Iron	0.513 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
Manganese	0.517 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
Selenium	0.529 mg/L	0.0500	mg/L	0.500	mg/L	106	80-120			
Zinc	0.517 mg/L	0.0100	mg/L	0.500	mg/L	103	80-120			
Matrix Spike (BHE0797-MS1)		**Source: 24E1141-04**		Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	0.547 mg/L	0.100	mg/L	0.500	<0.100 mg/L	109	75-125			
Arsenic	0.519 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	104	75-125			
Copper	0.509 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	102	75-125			
Iron	0.562 mg/L	0.0100	mg/L	0.500	0.0412 mg/L	104	75-125			
Manganese	0.536 mg/L	0.0100	mg/L	0.500	0.0116 mg/L	105	75-125			
Selenium	0.533 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	107	75-125			
Zinc	0.551 mg/L	0.0100	mg/L	0.500	0.0262 mg/L	105	75-125			
Matrix Spike (BHE0797-MS2)		**Source: 24E1146-01**		Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	0.547 mg/L	0.100	mg/L	0.500	<0.100 mg/L	109	75-125			
Arsenic	0.515 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	103	75-125			
Copper	0.538 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	108	75-125			
Iron	0.529 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	106	75-125			
Manganese	0.530 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	106	75-125			
Selenium	0.544 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	109	75-125			

ENTHALPY ANALYTICAL

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC	Date Issued:	June 03, 2024 17:41
	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Metals (Total) by EPA 6000/7000 Series Methods - Quality Control

Enthalpy Analytical

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHE0797 - EPA200.7/R4.4										
Matrix Spike (BHE0797-MS2)	**Source: 24E1146-01**			Prepared: 05/21/2024 Analyzed: 05/22/2024						
Zinc	0.727 mg/L	0.0100	mg/L	0.500	0.190 mg/L	107	75-125			
Matrix Spike Dup (BHE0797-MSD1)	**Source: 24E1141-04**			Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	0.537 mg/L	0.100	mg/L	0.500	<0.100 mg/L	107	75-125	1.83	20	
Arsenic	0.517 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	103	75-125	0.347	20	
Copper	0.503 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	101	75-125	1.21	20	
Iron	0.549 mg/L	0.0100	mg/L	0.500	0.0412 mg/L	102	75-125	2.27	20	
Manganese	0.523 mg/L	0.0100	mg/L	0.500	0.0116 mg/L	102	75-125	2.44	20	
Selenium	0.537 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	107	75-125	0.766	20	
Zinc	0.523 mg/L	0.0100	mg/L	0.500	0.0262 mg/L	99.3	75-125	5.25	20	
Matrix Spike Dup (BHE0797-MSD2)	**Source: 24E1146-01**			Prepared: 05/21/2024 Analyzed: 05/22/2024						
Aluminum	0.535 mg/L	0.100	mg/L	0.500	<0.100 mg/L	107	75-125	2.35	20	
Arsenic	0.507 mg/L	0.0200	mg/L	0.500	<0.0200 mg/L	101	75-125	1.43	20	
Copper	0.527 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	105	75-125	2.16	20	
Iron	0.514 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	103	75-125	2.88	20	
Manganese	0.515 mg/L	0.0100	mg/L	0.500	<0.0100 mg/L	103	75-125	2.89	20	
Selenium	0.531 mg/L	0.0500	mg/L	0.500	<0.0500 mg/L	106	75-125	2.35	20	
Zinc	0.703 mg/L	0.0100	mg/L	0.500	0.190 mg/L	103	75-125	3.27	20	

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Certificate of Analysis

Final Report

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	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Ion Chromatography Analyses - Quality Control

Enthalpy Analytical

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHE0970 - No Prep IC										
Blank (BHE0970-BLK1)				Prepared & Analyzed: 05/23/2024						
Sulfate	<1.00 mg/L	1.00	mg/L							
LCS (BHE0970-BS1)				Prepared & Analyzed: 05/23/2024						
Sulfate	21.2 mg/L	1	mg/L	20.0	mg/L	106	90-110			
Matrix Spike (BHE0970-MS1)		Source: 24E1054-07		Prepared & Analyzed: 05/24/2024						
Sulfate	21.7 mg/L	1.00	mg/L	11.1	<1.00 mg/L	195	90-110			M
Matrix Spike (BHE0970-MS2)		Source: 24E1159-02		Prepared & Analyzed: 06/03/2024						
Sulfate	10.1 mg/L	1.00	mg/L	11.1	<1.00 mg/L	91.3	90-110			
Matrix Spike (BHE0970-MS3)		Source: 24E1054-07RE1		Prepared & Analyzed: 05/24/2024						
Sulfate	116 mg/L	1.00	mg/L	111	<1.00 mg/L	104	90-110			
Matrix Spike Dup (BHE0970-MSD1)		Source: 24E1054-07		Prepared & Analyzed: 05/24/2024						
Sulfate	22.7 mg/L	1.00	mg/L	11.1	<1.00 mg/L	204	90-110	4.46	15	M
Matrix Spike Dup (BHE0970-MSD2)		Source: 24E1159-02		Prepared & Analyzed: 06/03/2024						
Sulfate	10.2 mg/L	1.00	mg/L	11.1	<1.00 mg/L	91.4	90-110	0.0602	15	
Matrix Spike Dup (BHE0970-MSD3)		Source: 24E1054-07RE1		Prepared & Analyzed: 05/24/2024						
Sulfate	118 mg/L	1.00	mg/L	111	<1.00 mg/L	106	90-110	1.74	15	

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Certificate of Analysis

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	909 Allendale Ct	Project Number:	[none]
		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Wet Chemistry Analysis - Quality Control

Enthalpy Analytical

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch BHE1070 - No Prep Wet Chem										
Duplicate (BHE1070-DUP1)		**Source: 24E1144-01**		Prepared & Analyzed: 05/28/2024						
pH	6.5 SU	0.0	SU		6.6 SU			1.38	20	
Batch BHE1114 - No Prep Wet Chem										
LCS (BHE1114-BS1)				Prepared & Analyzed: 05/29/2024						
Specific Conductance	1040 umhos/cm	3	umhos/cm	998	umhos/cm	105	90-110			
Duplicate (BHE1114-DUP1)		**Source: 24E1159-02**		Prepared & Analyzed: 05/29/2024						
Specific Conductance	<3.0 umhos/cm	3.0	umhos/cm		<3.0 umhos/cm			NA	20	
Duplicate (BHE1114-DUP2)		**Source: 24E1468-03**		Prepared & Analyzed: 05/29/2024						
Specific Conductance	94.9 umhos/cm	3.0	umhos/cm		94.3 umhos/cm			0.634	20	

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Certificate of Analysis

Final Report

Client Name:	TerraScience LLC 909 Allendale Ct Blacksburg VA, 24060	Date Issued: Project Number: Purchase Order:	June 03, 2024 17:41 [none]
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Certified Analyses included in this Report

Analyte	Certifications
SM2510B-2011 in Non-Potable Water	
Specific Conductance	VELAP,NCDEQ,WVDEP
SW6010D in Non-Potable Water	
Aluminum	VELAP,WVDEP,NCDEQ
Arsenic	VELAP,WVDEP,NCDEQ
Copper	VELAP,WVDEP,NCDEQ
Iron	VELAP,WVDEP,NCDEQ
Manganese	VELAP,WVDEP,PADEP
Selenium	VELAP,WVDEP
Zinc	VELAP,WVDEP
SW9056A in Non-Potable Water	
Sulfate	VELAP,NCDEQ

Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2024
NCDEQ	North Carolina DEQ	495	12/31/2024
NCDOH	North Carolina Department of Health	51714	07/31/2024
PADEP	NELAP-Pennsylvania Certificate #009	68-03503	10/31/2024
SCDHEC	South Carolina Dept of Health and Environmental	93016	06/14/2024
TXCEQ	Texas Comm on Environmental Quality #T10470	T104704576	05/31/2024
VELAP	NELAP-Virginia Certificate #12806	460021	06/14/2024
WVDEP	West Virginia DEP	350	11/30/2024

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Certificate of Analysis

Final Report

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	909 Allendale Ct	Project Number:	[none]
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	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Summary of Data Qualifiers

H	Analysis was performed outside of the method prescribed holding time.
M	Matrix spike recovery is outside established acceptance limits
RPD	Relative Percent Difference
Qual	Qualifers
-RE	Denotes sample was re-analyzed
D.F.	Dilution Factor. Please also see the Preparation Factor in the Analysis Summary section.
TIC	Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
PCBs, Total	Total PCBs are defined as the sum of detected Aroclors 1016, 1221, 1232, 1248, 1254, 1260, 1262, and 1268.

Chain of Custody
Effective: Jan 31, 2024

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1941 REYMET ROAD
RICHMOND, VIRGINIA 23237
(804) 358-8295 PHONE
(804)358-8297 FAX

CHAIN OF CUSTODY

PAGE __ OF __

COMPANY NAME: TERRASCIENCE LLC	INVOICE TO: SAME	PROJECT NAME/Quote #: DOJ | EPA
CONTACT: W. LEE DANIELS	INVOICE CONTACT:	SITE NAME: CHAMELEON
ADDRESS: 909 ALLENDALE CT	INVOICE ADDRESS: BLACKSBURG VA 24060	PROJECT NUMBER:
PHONE #: 540-230-2848	INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL: WLEEDANIELS@GMAIL.COM	Pretreatment Program:
Is sample for compliance reporting? YES (NO)	Regulatory State:	Is sample from a chlorinated supply? YES (NO) PWS I.D. #:
SAMPLER NAME (PRINT): W. LEE DANIELS	SAMPLER SIGNATURE: W. Lee Daniels	Turn Around Time: Circle (10) 5 Days or _Day(s)

Matrix Codes: WW=Waste Water/Storm Water GW=Ground Water DW=Drinking Water S=Soil/Solids OR=Organic A=Air WP=Wipe OT=Other_____

LAB USE ONLY

Cooler Temp

Therm ID: _____

Observed Temp °C _____

Correction Factor °C _____

Corrected Temp °C _____

CLIENT SAMPLE I.D.	Grab	Composite	Field Filtered (Dissolved Metals)	Composite Start Date	Composite Start Time	Grab Date or Composite Stop Date	Grab Time or Composite Stop Time	Time Preserved	Matrix (See Codes)	Number of Containers	ANALYSIS: TOTAL Se, Zn Ag, As, Cu, Fe, Mn	ANALYSIS: SULFATE	ANALYSIS: pH | SC	COMMENTS
1) CH POND	X					5/16	18:30	18:30	GW	3	X	X	X	
2) FIELD BLANK	X					5/16	18:30	16:30	GW	3	X	X	X	
3)														(4)
4)														Sealed 771
5)														
6)														
7)														
8)														
9)														
10)														

Preservative Codes: N=Nitric Acid C=Hydrochloric Acid S=Sulfuric Acid H=Sodium Hydroxide A=Ascorbic Acid Z=Zinc Acetate T=Sodium Thiosulfate M=Methanol

PLEASE NOTE PRESERVATIVE(S), INTERFERENCE CHECKS or PUMP RATE (L/min)

Observed Temp °C: 5.9
Correction Factor °C: 0.0
Corrected Temp °C: 5.9

RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME
W. Lee Daniels	16:02 5/17	[illegible]	5/17/24 0802
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME
RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME

QC Data Package
Level III ☐
Level IV ☐

Custody Seals used and intact? (Y/N) Y

Received on ice? (Y/N) Y

LAB USE ONLY

24E1159
2024 EPA DOJ Wetland Impact Pr(
Recd: 05/17/2024 Due: 06/03/2024

v130325002

EA COC_v240131.xls

Page 14 of 16

Sample Preservation Log
Form #: F1301
Rev # 15.0
Effective: July 13, 2023
Page 1 of 1

ENTHALPY ANALYTICAL

24E1159

Sample Preservation Log

Order ID: _____ Date Performed: 5-20-24 Analyst Performing Check: RCT

Sample ID	Container ID	Metals			Cyanide			Sulfide			Ammonia			TKN			Phos, Tot			NO3+NO2			DRO			Pesticide (8081/608/508) PCB DW only			SVOC (525/8270/625)			CrVI * **		Pest/PCB (508) / SVOC(525)								
		pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH	Received Res. Cl		final + or -	Received Res. Cl		final + or -	Received pH	Final pH	pH as Received		Final pH	pH as Received		Final pH	pH as Received		Final pH
		< 2	Other		> 12	Other		> 9	Other		< 2	Other		< 2	Other		< 2	Other		< 2	Other		< 2	Other		+	-		+	-				< 2	Other			Other			Other	
01	PX	\																																						
02	PX	\																																						

NaOH ID: _____ HNO3 ID: _____ CrVI preserved date/time: _____ Analyst Initials: _____

pH must be adjusted between 9.3 - 9.7

H_2SO_4 ID: _____ $Na_2S_2O_3$ ID: _____ Ammonia Buffer Sol'n ID: _____

HCL ID: _____ Na_2SO_3 ID: _____ 5N NaOH ID: _____

**W.Va only certifies DISS CrVI and not T CrVI as an approved analyte under 40CFR136 for waste water.

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Certificate of Analysis

Final Report

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		Purchase Order:	
	Blacksburg VA, 24060		
Submitted To:	Walter Lee Daniels		
Client Site I.D.:	Chameleon		

Sample Conditions Checklist

Samples Received at:	**5.90°C**
How were samples received?	Walk In
Were Custody Seals used? If so, were they received intact?	Yes
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	No
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis. In addition, field parameters are always received outside holding time and will be marked accordingly.	Yes

pH to be run out of hold as it is a field parameter. HEG 5/20/24 1042

Samples to be labeled per color due to the samples not being labeled per W Lee Daniels. HEG 5/20/24 1328

EXHIBIT C

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA

UNITED STATES OF AMERICA, Plaintiff, v. CHAMELEON LLC and GARY V. LAYNE, Defendants.	Civil Action No. 3:23-cv-763

UNITED STATES' REQUEST FOR ENTRY ON LAND

The United States, pursuant to Rule 34(a)(2) of the Federal Rules of Civil Procedure, request that Defendants Chameleon LLC and Gary V. Layne provide the United States access to the property located at 10426 Ashcake Road in Ashland, Hanover County, Virginia, for purposes of inspecting, measuring, and photographing the property. The United States requests that this access be provided beginning at 9 a.m. on April 7, 2025 through April 11, 2025.[1]

A. The Property to Be Inspected

The property to be inspected includes the area identified in the real property records of Hanover County as parcel ID # 7789-45-3668, as depicted in Exhibit 1 to the Amended Complaint filed in this matter ("Site").

B. The Purpose of the Site Visit

The purpose of the visit is to allow the United States to inspect, measure, and photograph, test, and/or sample the land, soil, water, aquatic organisms, and/or vegetation at the Site.

C. The Activities to Be Undertaken on the Site

[1]To the extent Defendants have a scheduling conflict, the United States alternatively proposes April 14-18, 2025.

The activities to be undertaken during the inspection include work associated with observation and analysis of the wetland area identified on Exhibit 1 to the Amended Complaint and its connections to Unnamed Tributary 1 at the Site. Specifically, these activities may include (but are not limited to):

(1) Assessment of the Site's hydrology at various points within the Site;

(2) Assessment of the soil profile at various points within the Site using a soil auger or soil probe;

(3) Assessment of the vegetation and plant life at various points within the Site;

(4) Visual examination (including photography and/or video) of the Site;

(5) Assessment of Unnamed Tributary 1, including channel characteristics, presence of high-water marks, rack lines, riparian vegetation, aquatic organisms (including benthic macroinvertebrates), and hydric soil conditions;

(6) Collection of water, soil, aquatic organism, and/or vegetation samples for off-Site analysis; and

(7) Assessment (including measurement) of the Site's drainage current and previously existing drainage and/or water retention features including ditches, ponds, tile, and culverts.

GPS location and photographs will be recorded for all observations.

D. Protocols for Sample and Data Sharing

The United States will provide portions of any samples collected to Defendants' representatives at the time such samples are collected. The United States will also provide photographs, GPS points, and any measurements or data sheets completed during the inspection to Defendants' counsel within fourteen business days of the inspection. To the extent any

samples are taken for off-site analysis, the United States will provide any lab testing results to Defendants' counsel within fourteen business days of receiving the results.

E. The Persons to Be Involved in the Inspection

The United States expects that its consultants, EPA inspector(s), and counsel for the United States will participate in the inspection.

F. The Dates of Inspection

The United States intends to begin its inspection at approximately 9 am on April 7, 2025 and continue through April 11, 2025, if needed.

/s/ Laura J. Brown
LAURA J. BROWN (PA Bar No. 208171)
SARAH A. BUCKLEY (VA Bar No. 87350)
AMANDA V. LINEBERRY (Va. Bar No. 94862
U.S. Department of Justice
Environment and Natural Resources Division
Environmental Defense Section
P.O. Box 7611
Washington, DC 20044
Phone (202)514-3376
Phone: (202) 616-7554 (Buckley)
Phone: (202) 616-5376 (Lineberry)
Laura.j.s.Brown@usdoj.gov
Sarah.Buckley@usdoj.gov
Amanda.Lineberry@usdoj.gov

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA

UNITED STATES OF AMERICA, Plaintiff, v. CHAMELEON LLC and GARY V. LAYNE, Defendants.	Civil Action No. 3:23-cv-763

THE UNITED STATES' FIRST INTERROGATORIES AND REQUESTS FOR PRODUCTION TO DEFENDANT CHAMELEON LLC

The United States, pursuant to Rules 26 and 34 of the Federal Rules of Civil Procedure, requests that Defendant Chameleon LLC answer each of the following interrogatories and produce for inspection and copying or provide a copy of all documents requested for production below to the offices of the United States Department of Justice, Environmental Defense Section, 150 M Street NE, Washington, DC 20002, or at such other place or by such other manner as may be mutually agreed upon by counsel for the parties within 30 days of service.

DEFINITIONS

Unless otherwise indicated, the following definitions apply to these Interrogatories and Requests:

1. "And" and "Or" shall be construed conjunctively or disjunctively as necessary to make the request inclusive rather than exclusive.

2. "Communicate" or "Communication" shall mean all forms of informational exchange, whether oral or written or in electronic form, between two or more persons.

3. "Amended Complaint" shall mean the complaint filed by the United States on November 15, 2024, in the Eastern District of Virginia, Civil Action No. 3:23-cv-763, ECF No. 60.

4. "Defendants" means the Defendants in this litigation, collectively and individually; any or all of any Defendant's officers, directors, employees, partners, corporate parent, subsidiaries, or affiliates; or any Person(s) acting on one or more Defendant's behalf or under one or more Defendant's direction, such as an agent, representative, counsel, or assignee.

5. "Documents" shall have the broadest possible meaning given by the Federal Rules of Civil Procedure, including but not limited to each original and its non-identical copy of all writings, papers, handwritten notes, text messages, drawings, graphs, charts, photographs, sound and video recordings, images, other data or data compilations, and every other device or medium on or through which information of any type is transmitted, recorded or preserved. "Document" includes drafts and final versions, as well as all copies containing annotations, marginalia, or other information not contained on the original. "Documents" also specifically includes all electronically stored information and associated metadata, including, but not limited to, documents or files maintained on any form of electronic file storage device, such as a flash drive, external hard drive, CD, DVD, cellular phone, cloud-based storage platform, or other electronic information storage device. All stipulations between the parties regarding production of documents, including electronically stored information, shall apply to these Requests.

6. "Person" shall have the definition set forth in 33 U.S.C. § 1362(5) and includes all present and former officers, directors, agents, salespeople, representatives, employees, affiliates, subsidiaries, members, trustees, beneficiaries, or others acting or purporting to act on behalf of such person.

7. "Relate to" or "Relates to" or "Relating to" shall mean consist of, constitute, refer to, reflect, or be in any way logically or factually connected with the matter discussed.

8. "Site" shall mean the approximate 101.66-acre property located at 10426 Ashcake Road in Ashland, Hanover County, Virginia, identified in the real property records of Hanover County as parcel ID # 7789-45-3668, and depicted in Exhibit 1 to the Amended Complaint, ECF No. 60-1.

9. "Site Conditions" shall mean any and all past or present physical, hydrological, hydraulic, aquatic, drainage, precipitation, topographic, soil, biological (such as plant or animal), chemical, geochemical, or geomorphological features, characteristics or conditions, and any and all man-made features that relate to the Site.

10. The term "Waters of the United States" is used as that term is used in 33 U.S.C. § 1362(7) and 40 C.F.R. § 230.3(s) (2014), consistent with *Sackett v. EPA*, 598 U.S. 651, 678 (2023).[2] 33 U.S.C. § 1362(7) defines "navigable waters" as "the waters of the United States, including the territorial seas."

11. "Wetlands" shall mean those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined in 40 C.F.R. §§ 122.2, 232.2 and 33 C.F.R. § 328.3(b).

12. "Work Activity" shall mean any proposed activity or activity actually carried out on any portion of the Site with the effect or purpose of disturbing soils, water, or vegetation on

[2] The amended regulations defining "waters of the United States"—40 C.F.R. § 120.2(a) (2023); 33 C.F.R. § 328.3(a) (2023)—are currently enjoined in Virginia. *See West Virginia v. EPA*, 669 F. Supp. 3d 781, 789, 819 (D.N.D. 2023) (enjoining the 2023 rule as to Virginia and 23 other states). Because of the injunction, EPA and the Corps are currently applying the "pre-2015" regulatory definition, consistent with the Supreme Court's decision in *Sackett*, in Virginia. *See* EPA, Pre-2015 Regulatory Regime (updated Mar. 18, 2024), https://www.epa.gov/wotus/pre-2015-regulatory-regime.

the Site, including without limitation, earthmoving, land clearing, leveling, grading, grubbing, spreading, scraping, surveying, channelizing, excavating, digging, mining of sand and/or gravel, ditching, surveying, side-casting, filling, deep-ripping, dredging, plowing, seeding, tilling, planting, harvesting (including timber), cutting of brush and trees, vegetation removal, draining, and any depositing, distributing, moving, placing, stockpiling of soil, dirt, brush, stumps, trees, other vegetation, tires, debris, dredge spoil, rock, concrete, sand and/or any dredged or fill material or pollutant. The terms "dredged material," "fill material," and "pollutant" are used herein as those term s are defined in 33 U.S.C. § 1362(6), 40 C.F.R. § 232.2, and 33 C.F.R. § 323.2(c). "Work Activity" shall also include the installation of culverts, surface impoundments, drainage pipes, or other water management features, as well as the application or use of pesticides or herbicides (chemical or organic) or other chemicals on or in soils, plants, or waters at or near the Site.

13. "You" or "Your" shall mean and include Chameleon LLC; any business entity or trust owned, controlled or operated by Chameleon LLC; and any individual or entity acting on behalf of Chameleon LLC, including officers, directors, employees, partners, corporate parents, subsidiaries, or affiliates, or any Person(s) acting on its behalf or under its direction, such as an agent, representative, counsel, assignee, or consultant.

14. Unless otherwise specified herein, any other terms used in these Requests shall have the same meaning ascribed to them under the Clean Water Act ("CWA"), 33 U.S.C. §§ 1251 et seq.

INTERROGATORIES

INSTRUCTIONS

1. Scope. These Interrogatories relate to all information in Your possession, custody or control, including that of Your officers, employees, consultants, contractors, attorneys, or other agents.

2. Complete Responses. Each Interrogatory is to be answered to the fullest extent possible. Each answer shall include an explanation of the extent, if any, to which Your answer is incomplete, limited or qualified.

3. Ambiguity. If, in responding to these Interrogatories, You deem any request or definition to be ambiguous, please set forth the matter deemed ambiguous and the construction used in responding.

4. Production of Documents. Any Document cited in or produced in response to these Interrogatories shall be produced as it is kept in the usual course of business or shall be organized and labeled to correspond with the interrogatory or parts thereof.

5. Objections/Privilege Assertions. If you object to the production of any requested Documents or information, identify in response to these Interrogatories the Document by author, date, subject, and recipients of the original and all copies of the Document and specify the basis for the objection or claim of privilege.

6. Deletions from Document(s). Where anything has been deleted from a Document identified or produced in response to an Interrogatory, specify: (1) the nature of the deleted material; (2) the reason for the deletion; and (3) the identity of the person responsible for the deletion.

7. Singular/Plural. Words used in the plural herein shall also be taken to mean and include the singular.

8. Verb Tense. All verbs used herein shall be construed to include all tenses.

9. Supplemental Responses. The obligations imposed upon Defendants by Federal Rules of Civil Procedure 26 and 33 are hereby incorporated, including but not limited to the duty to supplement imposed by Federal Rule of Civil Procedure 26(e).

10. Timeframe. Unless otherwise indicated in a specific Interrogatory the applicable timeframe is January 1, 2018, to present.

Interrogatory No. 1. Describe the Site Conditions of each parcel of property that composes the Site at the time You acquired any interest in such property and prior to beginning any Work Activity on the Site, including, but not limited to, the presence of Wetland features or other aquatic features—including wetlands, streams, water impoundments, ditches or other conveyances, whether natural or manmade and without regard to whether those features are Waters of the United States.

Interrogatory No. 2. Please Describe in chronological order the location, purpose, and duration (start and end dates) of each Work Activity conducted by You or on Your behalf at the Site, including but not limited to each action taken by You or on Your behalf to remove vegetation, place fill material (including dirt, sand, clay, etc.), install pipes, construct ditches and/or ponds, fill ditches and/or ponds, and/or minimize or change the presence or flow of surface or groundwater on any portion of the Site and including but not limited to a description of the equipment used to conduct each Work Activity

Interrogatory No. 3. Please Describe all materials, including fill material, that were used in connection with each Work Activity conducted by You or on Your behalf at the Site, and

Describe: (a) where the materials were obtained, (b) the volume of materials used, (c) the composition of the materials, and (d) the cost of the materials.

REQUESTS FOR PRODUCTION

INSTRUCTIONS

A. Documents No Longer in Possession. If any Document(s) requested was (were), but no longer is (are) in Your possession, custody, or control, state:

i. what was done with the Document(s);

ii. when such Document(s) was (were) made;

iii. the identity and address of the current custodian of the Document(s);

iv. the current location of the Document(s);

v. the identity of the Person(s) who made the decision to transfer or dispose of the Document(s); and

vi. the reason for the transfer or disposition.

B. Deletions from Document(s). Where anything has been deleted from a Document identified or produced in response to a Request for Production, specify: (1) the nature of the deleted material; (2) the reason for the deletion; and (3) the identity of the Person responsible for the deletion.

C. Objections/Privilege Assertions. If you object to answering any request based on any privilege claim, specify the objection and the privilege claim and disclose the portion not covered by the claim.

D. Singular/Plural. Words used in the plural herein shall also be taken to mean and include the singular.

E. Verb Tense. All verbs used herein shall be construed to include all tenses.

F. Supplemental Responses. The obligations imposed upon Defendants by Federal Rules of Civil Procedure 26 and 34 are hereby incorporated, including but not limited to the duty to supplement imposed by Federal Rule of Civil Procedure 26(e).

G. Timeframe. Unless otherwise indicated in a specific request for production the applicable timeframe of these requests is January 1, 2018, to the present.

REQUESTS

Request for Production No. 1. All Documents that are photographs or contain photographs of the Site and/or the aquatic features—including wetlands, streams, water impoundments, ditches or other conveyances, whether natural or manmade and without regard to whether those features are Waters of the United States—described in the Amended Complaint, including, for example, ground-level photographs, aerial photographs, satellite imagery, and videotapes, video footage, and similar recordings taken before, during, or after any Work Activity performed by You or somebody acting on Your behalf.

Request for Production No. 2 All Documents that are maps or drawings (including but not limited to surveys, design drawings, plans, topographic maps, etc.) or that contain maps or drawings (including but not limited to surveys, design drawings, plans, topographic maps, etc.) depicting the Site before, during, or after any Work Activity performed by You or somebody acting on Your behalf.

Request for Production No. 3 All Documents that Relate to the actions described in response to Interrogatory No. 2.

/s/ Laura J. Brown
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